32-34 Georges Bay Esplanade St Helens Tasmania 7216 T: 03 6376 7900 ABN 96 017 131 248



Development Applications

Notice is hereby given under Section 57(3) of the Land Use Planning & Approvals Act 1993 that an application has been made to the Break O' Day Council for a permit for the use or development of land as follows:

DA Number DA 2025 / 00156 **Applicant** Spectura Studio

Proposal Residential - Construction of Dwelling with attached Deck Location Lot 1 Medeas Cove Esplanade, St Helens (CT65155/1)

Plans and documents can be inspected at the Council Office by appointment, 32 - 34 Georges Bay Esplanade, St Helens during normal office hours or online at www.bodc.tas.gov.au.

Representations must be submitted in writing to the General Manager, Break O'Day Council, 32 -34 Georges Bay Esplanade, St Helens 7216 or emailed to admin@bodc.tas.gov.au, and referenced with the Application Number in accordance with section 57(5) of the abovementioned Act during the fourteen (14) day advertised period commencing on Saturday 22nd November, 2025 until 5pm Friday 5th December, 2025.

John Brown **GENERAL MANAGER**

SHEET No.	DRAWING TITLE	ISSUE	DATE
A00	COVER SHEET	В	7/11/2025 5:31 AM
A01	SITE PLAN	В	7/11/2025 5:31 AM
A02	FLOOR PLAN	А	3/09/2025 8:31 AM
A03	ELEVATIONS	А	3/09/2025 8:31 AM

	SHEET No.	DRAWING TITLE	ISSUE	DATE
	A04	DOOR / WINDOW SCHEDULE	А	3/09/2025 8:31 AM
	A05	ENERGY EFFICIENCY MODEL	А	3/09/2025 8:31 AM
	A06	FINISHES	А	3/09/2025 8:31 AM
	A07	Code Overlay	В	7/11/2025 5:31 AM

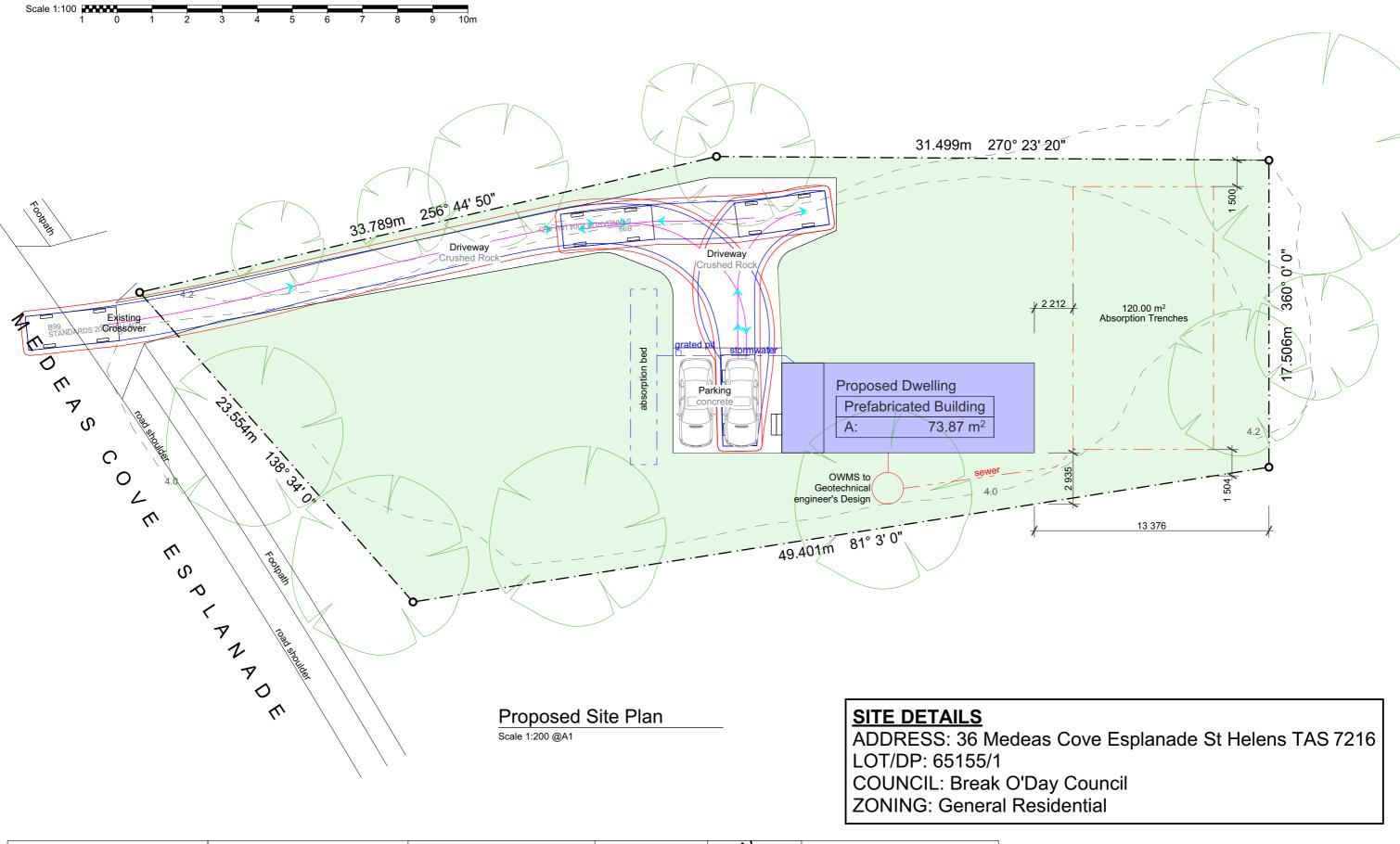
Development Application Issue: B - LGA RFI

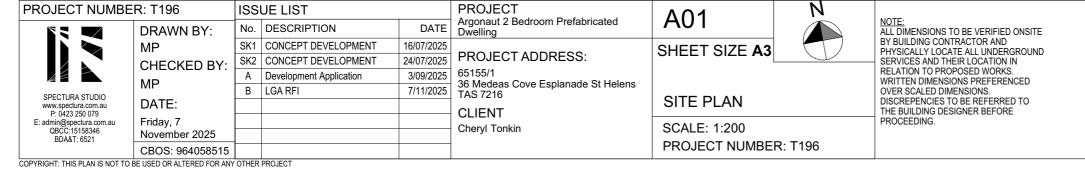
Issue: B - LGA RFI Friday, 7 November 2025



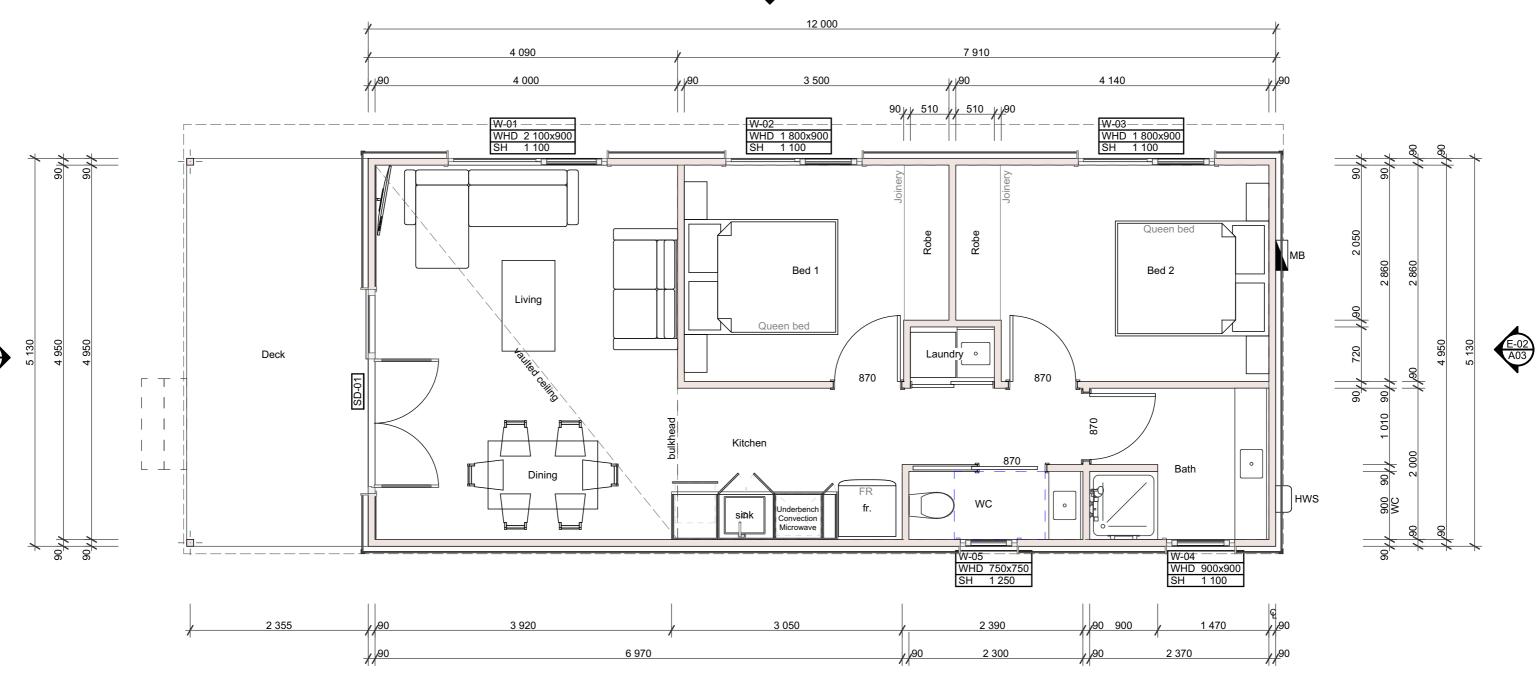


Proposed Dwelling





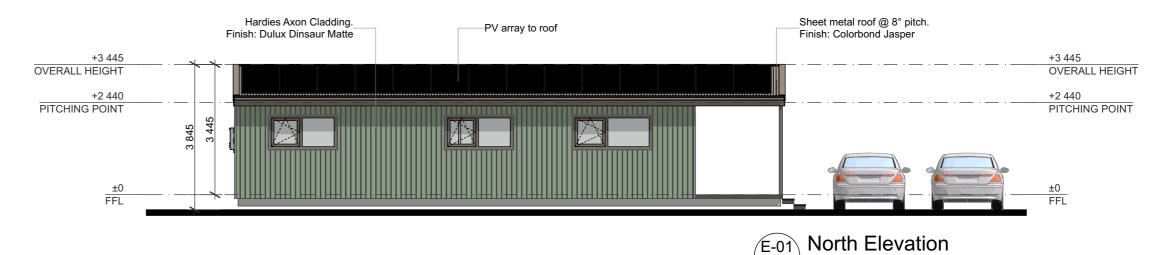




Proposed Floor Plan

Scale 1:50 @A3

PROJECT NUMBER: T196		1.0002 2.01			PROJECT	A02	
	DRAWN BY:	No.	DESCRIPTION	DATE	Argonaut 2 Bedroom Prefabricated Dwelling	AUZ	NOTE: ALL DIMENSIONS TO BE VERIFIED ONSITE
	MP	SK1	CONCEPT DEVELOPMENT	16/07/2025		SHEET SIZE A3	BY BUILDING CONTRACTOR AND PHYSICALLY LOCATE ALL UNDERGROUND
	CHECKED BY:	SK2	CONCEPT DEVELOPMENT	24/07/2025	PROJECT ADDRESS:	OTTEET SIZE 710	SERVICES AND THEIR LOCATION IN
	MP	Α	Development Application	3/09/2025	65155/1 36 Medeas Cove Esplanade St Helens		RELATION TO PROPOSED WORKS. WRITTEN DIMENSIONS PREFERENCED
SPECTURA STUDIO www.spectura.com.au P: 0423 250 079 E: admin@spectura.com.au	DATE:				TAS 7216	FLOOR PLAN	OVER SCALED DIMENSIONS. DISCREPENCIES TO BE REFERRED TO THE BUILDING DESIGNER BEFORE
	Friday, 7 November 2025				Cheryl Tonkin	SCALE: 1:50	PROCEEDING.
	CBOS: 964058515					PROJECT NUMBER: T196	



A02

Scale 1:100 @A3

South Elevation

Scale 1:100 @A3

NOTE: ALL DIMENSIONS TO BE VERIFIED ONSITE BY BUILDING CONTRACTOR AND PHYSICALLY LOCATE ALL UNDERGROUND SERVICES AND THEIR LOCATION IN RELATION TO PROPOSED WORKS. WRITTEN DIMENSIONS PREFERENCED OVER SCALED DIMENSIONS. DISCREPENCIES TO BE REFERRED TO THE BUILDING DESIGNER BEFORE PROCEEDING.

ISSUE LIST

	No.	DESCRIPTION	DATE
	SK1	CONCEPT DEVELOPMENT	16/07/20 25
SIUDIO.	SK2	CONCEPT DEVELOPMENT	24/07/20 25
r SPECTURA	Α	Development Application	3/09/202 5
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FROJECT

Argonaut 2 Bedroom Prefabricated Dwelling

៉្នា PROJECT ADDRESS:

65155/1 36 Medeas Cove Esplanade St Helens TAS

E CLIENT Cheryl Tonkin

SHEET SIZE A3

A03

COPYRIGHT: THIS PLAN IS NOT TO BE USE

ELEVATIONS

∯ SCALE: 1:100

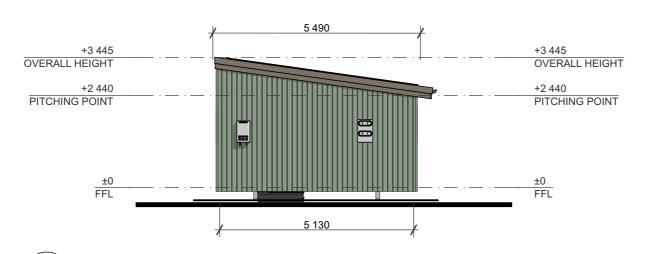
PROJECT NUMBER: T196

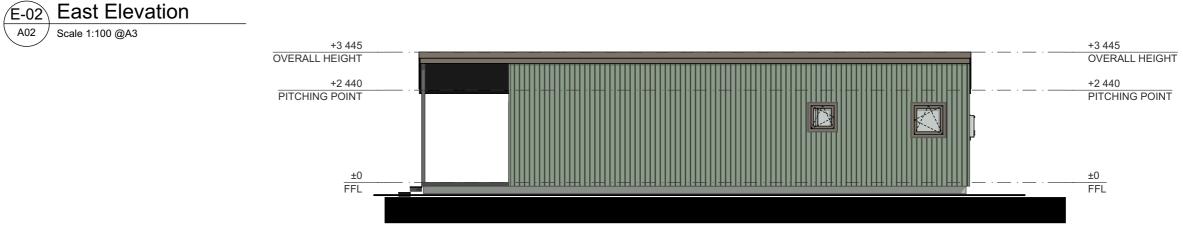


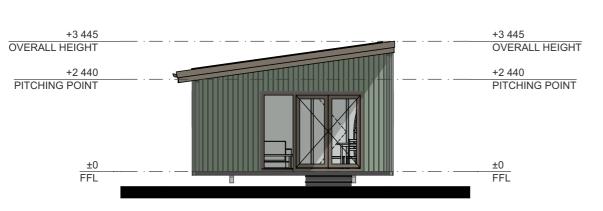
SPECTURA STUDIO www.spectura.com.au P: 0423 250 079 E: admin@spectura.com.au QBCC:15158346 BDA&T: 6521

DRAWN BY: MP CHECKED BY: MP DATE: Friday, 7











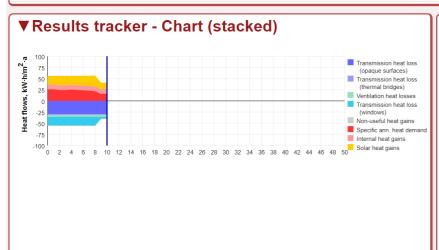
GLAZING SCHEDU							
WINDOW ID	SD-01	W-01	W-02	W-03	W-04		W-05
NOMINAL HEIGHT		900	900	900	900	750	
NOMINAL WIDTH	2 700	2 100	1 800	1 800	900	750	
HEAD HEIGHT	2 100	2 100	2 100	2 100	2 100	2 100	
FRAME	U-PVC	U-PVC	U-PVC	U-PVC	U-PVC	U-PVC	
GLAZING	Triple Glazed : <u0.6 :="" th="" ~g0.5<=""><th>Triple Glazed : <u0.6 :="" th="" ~g0.5<=""><th></th></u0.6></th></u0.6></th></u0.6></th></u0.6></th></u0.6></th></u0.6>	Triple Glazed : <u0.6 :="" th="" ~g0.5<=""><th>Triple Glazed : <u0.6 :="" th="" ~g0.5<=""><th></th></u0.6></th></u0.6></th></u0.6></th></u0.6></th></u0.6>	Triple Glazed : <u0.6 :="" th="" ~g0.5<=""><th>Triple Glazed : <u0.6 :="" th="" ~g0.5<=""><th>Triple Glazed : <u0.6 :="" th="" ~g0.5<=""><th>Triple Glazed : <u0.6 :="" th="" ~g0.5<=""><th></th></u0.6></th></u0.6></th></u0.6></th></u0.6>	Triple Glazed : <u0.6 :="" th="" ~g0.5<=""><th>Triple Glazed : <u0.6 :="" th="" ~g0.5<=""><th>Triple Glazed : <u0.6 :="" th="" ~g0.5<=""><th></th></u0.6></th></u0.6></th></u0.6>	Triple Glazed : <u0.6 :="" th="" ~g0.5<=""><th>Triple Glazed : <u0.6 :="" th="" ~g0.5<=""><th></th></u0.6></th></u0.6>	Triple Glazed : <u0.6 :="" th="" ~g0.5<=""><th></th></u0.6>	
WINDOW AREA	5.67	1.89	1.62	1.62	0.81	0.56	12.17 m²
ELEVATION VIEW (internal)	2 700	2 100	1 800	1 800	900	750	
DETAILS	Double door plus sidelight. Central leaf to house door furniture. Lockable	Tilt/turn + Fixed Window	Tilt/turn + Fixed Window	Tilt/turn + Fixed Window	Tilt/Turn	Tilt/Turn	

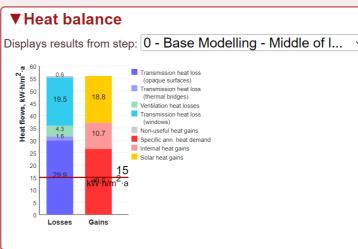
Note:
External windows and glazed doors to comply with AS2047:2014 - Windows & external glazed doors in buildings

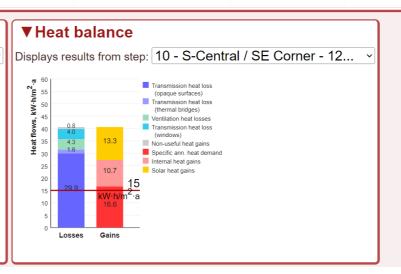
Note:
Glazing to comply with AS1288-2021 - Glass in Buildings

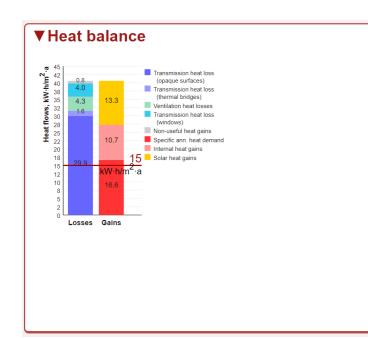
PROJECT NUMBER: T196		1.0002 2.01			PROJECT	A04		
	DRAWN BY:	No.	DESCRIPTION	DATE	Argonaut 2 Bedroom Prefabricated Dwelling	A04		NOTE: ALL DIMENSIONS TO BE VERIFIED ONSITE
	MP	SK1	CONCEPT DEVELOPMENT	16/07/2025	DD0 1507 ADDD500	SHEET SIZE A3		BY BUILDING CONTRACTOR AND PHYSICALLY LOCATE ALL UNDERGROUND
	CHECKED BY:	SK2	CONCEPT DEVELOPMENT	24/07/2025	PROJECT ADDRESS:	OTTLET GIZE 710		SERVICES AND THEIR LOCATION IN
	MP	Α	Development Application	3/09/2025	65155/1 36 Medeas Cove Esplanade St Helens	DOOR / WINDO)\//	RELATION TO PROPOSED WORKS. WRITTEN DIMENSIONS PREFERENCED
SPECTURA STUDIO www.spectura.com.au P: 0423 250 079 E: admin@spectura.com.au QBCC:15163346 BDA&T: 6521	DATE:				TAS 7216	SCHEDULE) V V	OVER SCALED DIMENSIONS. DISCREPENCIES TO BE REFERRED TO THE BUILDING DESIGNER BEFORE
	Friday, 7 November 2025				Cheryl Tonkin	SCALE:		PROCEEDING.
	CBOS: 964058515				1	PROJECT NUMBE	R: T196	

▼Results tracker - Data table expand columns >> Transmission heat loss Solar heat gains Internal heat gains Specific ann. heat step comment (kW·h/m²·a) 19.52 1.62 18.82 26.46 AU1061a × 0 Base Modelling - Middle of lot - Aligned with North East boundary (12° east) 29.94 4.26 10.65 × 1 Middle Of Lot - Aligned with North 29.94 19.52 1.62 4.26 19.36 10.65 25.98 AU1061a 1.57 × 2 SE Corner - Aligned with Boundary 29.94 19.52 4.26 21.14 10.65 24.37 AU1061a 29.94 19.52 1.57 4.26 21.12 10.65 24.39 AU1061a × 3 SE Corner - Aligned with North 29.94 19.52 1.57 4.26 19.67 10.65 25.65 AU1061a × 4 SE Corner - 12° West 19.52 1.57 24.64 AU1061a × 5 SE Corner - 24° East 29.94 4.26 20.82 10.65 29.94 19.52 1.57 23.90 AU1061a × 6 S-Central / SE Corner - 24° East 4.26 21.68 10.65 AU1061a × 7 S-Central / SE Corner - 12° East 29.94 19.52 1.57 4.26 22.32 10.65 23.36 19.52 × 8 S-Central / SE Corner - 12° East - Tapered Verandah 29.94 1.57 4.26 24.24 10.65 21.76 AU1061a 4.02 × 9 S-Central / SE Corner - 12° East - Tapered Verandah - Triple Glazed Windows 29 94 1.57 4.26 14.53 10.65 15.61 AU1061a 4.02 × 10 S-Central / SE Corner - 12° East - Non-tapered Verandah - Triple Glazed Windows 29 94 1.57 4.26 13.29 10.65 16.63 AU1061a



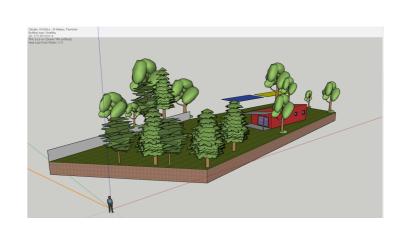






▼ Project overview		
Climate	AU1061a - St Helens, Tasmania	<u>change</u>
Building type	Dwelling	<u>change</u>
Annual heat demand (Q _h)	16.6 kW⋅h/m²⋅a	<u>details</u>
Treated Floor Area (TFA)	61.6 m ² (Drawn TFA surfaces)	<u>details</u>
Thermal envelope area	229 m ²	<u>details</u>
Heat Loss Form Factor	3.71	
Projected building footprint	68.8 m ²	
Number of windows	6	<u>details</u>
Number of thermal surfaces	6	<u>details</u>
Number of thermal bridges	11	<u>details</u>
Thermal envelope checks		
The thermal envelope appears to be complete!		
WARNING! The Projected Building Footprint area appears to be too large!		
Render mode	Render by Area Group	

PROJECT NUMBE	ER: T196	ISS	UE LIST		PROJECT	A05		
	DRAWN BY:	No.	DESCRIPTION	DATE	Argonaut 2 Bedroom Prefabricated Dwelling	A05		NOTE: ALL DIMENSIONS TO BE VERIFIED ONSITE
	MP	SK1	CONCEPT DEVELOPMENT	16/07/2025		SHEET SIZE A3		BY BUILDING CONTRACTOR AND PHYSICALLY LOCATE ALL UNDERGROUND
	CHECKED BY:	SK2	CONCEPT DEVELOPMENT	24/07/2025	PROJECT ADDRESS:	OTTLET GIZE A		SERVICES AND THEIR LOCATION IN
	MP	Α	Development Application	3/09/2025	65155/1 36 Medeas Cove Esplanade St Helens	ENERGY EFFIC	IENICV	RELATION TO PROPOSED WORKS. WRITTEN DIMENSIONS PREFERENCED
SPECTURA STUDIO	1	TAS 7216			ILING	OVER SCALED DIMENSIONS.		
www.spectura.com.au P: 0423 250 079	DATE:				CLIENT	MODELLING		DISCREPENCIES TO BE REFERRED TO THE BUILDING DESIGNER BEFORE
E: admin@spectura.com.au	Friday, 7				Cheryl Tonkin	SCALE:		PROCEEDING.
QBCC:15158346 BDA&T: 6521	November 2025				Onery Torikin		D. T400	
(CBOS: 964058515					PROJECT NUMBER	K: 1796	



Finishes Legend

Dulux

Dinosaur A272 / S23C5

Dulux Dinosaur Matte

Cladding (Hardies Axon Grain 133) Cladding trims



Colorbond Jasper

Roof sheeting (Custom Orb) Flashings Gutter Fascia Window frames to match

Dulux^{*}

Namadji[®] GR22 / SN4G8

Dulux Namadji Low Sheen Window External Sills/Reveals **Posts** Decking perimeter

Eave/verandah lining



FRC Minimesh / Heel Guard

Deck area (minimesh or heel guard soft on feet) Steps

ISSUE LIST

No. DESCRIPTION DATE 24/07/20 CONCEPT DEVELOPMENT 3/09/202 **Development Application**

ALL DIMENSIONS TO BE VERIFIED ONSITE BY BUILDING CONTRACTOR

AND PHYSICALLY LOCATE ALL UNDERGROUND SERVICES AND

WRITTEN DIMENSIONS
PREFERENCED OVER SCALED

PROPOSED WORKS.

DIMENSIONS.

PROCEEDING.

THEIR LOCATION IN RELATION TO

DISCREPENCIES TO BE REFERRED TO THE BUILDING DESIGNER BEFORE

PROJECT

Argonaut 2 Bedroom Prefabricated Dwelling

B PROJECT ADDRESS:

ଞ୍ଚିତ୍ର ପ୍ରଥି 36 Medeas Cove Esplanade St Helens TAS ଅଧି 7216

I CLIENT Cheryl Tonkin

SHEET SIZE A3

A06

FINISHES

Y SCALE:

PROJECT NUMBER: T196



SPECTURA STUDIO www.spectura.com.au P: 0423 250 079

DRAWN BY: MP CHECKED BY: MP

DATE: Friday, 7 November 2025 CBOS: 964058515





PROJECT NUMBER: T196		1.0002 2.01		PROJECT	A07	Ν			
DRA DRA	DRAWN BY:	No.	No. DESCRIPTION DATE		Argonaut 2 Bedroom Prefabricated Dwelling	AUI		NOTE: ALL DIMENSIONS TO BE VERIFIED ONSITE	
	MP	В	LGA RFI	7/	/11/2025	PROJECT ADDRESS:	SHEET SIZE A3		BY BUILDING CONTRACTOR AND PHYSICALLY LOCATE ALL UNDERGROUND
	CHECKED BY:					65155/1	_		SERVICES AND THEIR LOCATION IN RELATION TO PROPOSED WORKS.
	MP					36 Medeas Cove Esplanade St Helens TAS 7216			WRITTEN DIMENSIONS PREFERENCED OVER SCALED DIMENSIONS.
SPECTURA STUDIO www.spectura.com.au	DATE:					CLIENT Cheryl Tonkin	Code Overlay		DISCREPENCIES TO BE REFERRED TO THE BUILDING DESIGNER BEFORE PROCEEDING.
P: 0423 250 079 E: admin@spectura.com.au QBCC:15158346 BDA&T: 6521	Friday, 7 November 2025						SCALE: 1:200		
	CBOS: 964058515						PROJECT NUMBER: T1	R: T196	

Proposed Single Dwelling

36 Medeas Cove Esplanade St Helens TAS 7216



September 2025

Revision to address LGA RFI - 07/11/25



SPECTURA STUDIO

6 Sunrise Court Scamander info@spectura.com.au 0423 250 079 www.spectura.com.au



Subject site & locality

1.0 Introduction

This planning scheme response supports the development application for the proposed single dwelling, to be located at 36 Medeas Cove Esplanade, St Helens. The proposed development is situated within the General Residential Zone as defined in the Tasmanian Planning Scheme - State Planning Provisions (SPP).

This document's coverage is for the Performance Criteria clauses in the SPP relevant to the related Development Application.

2.0 Project Description

The project involves the construction/installation of a single dwelling on a currently vacant lot.

3.0 Planning Assessment

The following planning items listed rely on performance criteria. If a clause is not listed below, it is due to the proposed development being seen as meeting planning scheme provisions by means of the acceptable solutions relating to that clause.

3.2 Compliance with Overlay Codes

C2.0 Parking and Sustainable Transport Code

C2.6.1 – Construction of Parking Areas

- A1 All parking, access ways, manoeuvring and circulation spaces must:
- (a) be constructed with a durable all-weather pavement;
- (b) be drained to the public stormwater system, or contain stormwater on the site; and
- (c) excluding all uses in the Rural Zone, Agriculture Zone, Landscape Conservation Zone, Environmental Management Zone, Recreation Zone and Open Space Zone, be surfaced by a spray seal, asphalt, concrete, pavers or equivalent material to restrict abrasion from traffic and minimise entry of water to the pavement.
- **P1** All parking, access ways, manoeuvring and circulation spaces must be readily identifiable and constructed so that they are useable in all weather conditions, having regard to:
 - (a) the nature of the use;
 - (b) the topography of the land;
 - (c) the drainage system available;
 - (d) the likelihood of transporting sediment or debris from the site onto a road or public place;
 - (e) the likelihood of generating dust; and
 - (f) the nature of the proposed surfacing.

Response:

The proposed car park is to be concrete, with parking access (driveway) to be crushed rock (gravel) which is viewed as a durable all-weather pavement when constructed correctly. In response to P1:

- (a) The use as a residence is low impact and low traffic, a gravel driveway is seen as an appropriate provision.
- (b) The proposed driveway is set out over relatively flat land. The driveway grade is to be in compliance with AS2890 / LGAT Standard Drawings for urban driveways which will allow for appropriate settlement and usage with the designated pavement.
- (c) The permeable nature of the proposed driveway allows for sufficient drainage to take place, with minimal change to existing conditions.
- (d) The topography of the site slopes away from the road, with ample space for provision of drainage/catchment of sediment/debris on-site, with the proposed location of the driveway seen as a stable and sufficient substrate for a crushed rock driveway, with sediment transportation onto the road not anticipated.
- (e) The low traffic use of the driveway is not seen as causing an impact in regard to dust generation As is seen in the adjacent driveways in Medeas Cove Esplanade.
- (f) As also seen with precedence in Medeas Cove Esplanade gravel driveways and parking spaces are an appropriate surface capable of handling the traffic anticipated from a single dwelling.

Revision 07/11/25

C7.0 Natural Assets Code

Waterway and Coastal Protection Area

Addressed via development standards for building and works in the following subsection.

C7.6 Development Standards for Buildings and Works

C7.6.1 Buildings and works within a waterway and coastal protection area or a future coastal refugia area

Δ1

Buildings and works within a waterway and coastal protection area must:

- (a) be within a building area on a sealed plan approved under this planning scheme;
- (b) in relation to a Class 4 watercourse, be for a crossing or bridge not more than 5m in width; or
- (c) if within the spatial extent of tidal waters, be an extension to an existing boat ramp, car park, jetty, marina, marine farming shore facility or slipway that is not more than 20% of the area of the facility existing at the effective date.

Response:

- a) The proposed development is within the building area on the sealed plan.
- **b)** N/A
- c) N/A

A2

Buildings and works within a future coastal refugia area must be located within a building area on a sealed plan approved under this planning scheme.

Response:

N/A

А3

Development within a waterway and coastal protection area or a future coastal refugia area must not involve a new stormwater point discharge into a watercourse, wetland or lake.

Response:

There is no new stormwater point discharge into watercourse, wetland or lake proposed.

Α4

Dredging or reclamation must not occur within a waterway and coastal protection area or a future coastal refugia area.

Response:

N/A

Α5

Coastal protection works or watercourse erosion or inundation protection works must not occur within a waterway and coastal protection area or a future coastal refugia area.

Response:

N/A

BRE-S2.7 Development Standards for Buildings and Works

BRE-S2.7.1 Stormwater Management

Objective: That development provides for adequate stormwater management.

A1

Development must be:

- (a) capable of connecting to the public stormwater system; or
- (b) permitted by the General Manager to discharge stormwater to a system other than the public stormwater system.

Performance criteria solution required.

Р1

Development must be capable of accommodating an on-site stormwater management system adequate for the development, having regard to:

- (c) topography of the site;
- (d) the size and shape of the site;
- (e) soil conditions;
- (f) any existing buildings and any constraints imposed by existing development on the site;
- (g) any area of the site covered by impervious surfaces;
- (h) any watercourses on the land;
- (i) stormwater quality and quantity management targets identified in the State Stormwater Strategy 2010; and
- (j) any advice from a suitably qualified person on the seasonal water table at the site, risks of inundation, land instability or coastal erosion.

A stormwater report prepared by Geo-Environmental Solutions factoring in and addressing the above performance criteria has been included as a response to Break O'Day Council's RFI regarding Stormwater Management.

4.0 Conclusion

The proposed residential development at 36 Medeas Cove Esplanade is seen as complying with the relevant provisions of the Tasmanian Planning Scheme for the General Residential Zone and applicable Code Overlays. The design and layout of the site have been carefully considered to ensure compatibility with the surrounding area and to meet the objectives of the zone.

We respectfully request that the planning authority grant approval for this development application.

Thank you,

Matthew Purves Spectura Studio

CBOS Tas: 964058515



18 November 2025

Alex McKinlay Planning Officer Break O'Day Council 32-34 Georges Bay Esplanade ST HELENS TAS 7216

By email: alexander.mckinlay@bodc.tas.gov.au

Dear Sir

Response to Further Information Request – Council Ref. DA 2025/00156

The following is provided to you on behalf of the applicant – Matthew Purves – and in response to the Planning Authority's Request for Further Information (RFI) pertaining to the abovementioned application. The subject RFI requires provision of further information in relation to one (2) item. These items – and respective responses to each – are reproduced below:

Item 1

Please be advised that assessment is required against P1.1 of clause C7.6.1 Buildings and works within a waterway and coastal protection area or a future coastal refugia area as the subject site does not contain a building area ('means any area shown on a plan to indicate where all buildings will be located on a lot') on the sealed plan. This is particularly evident due to the lack of a designated building area on the folio plan associated with the property. Accordingly, it is requested that an amended planning scheme is provided which addresses the criterion outlined within the performance criteria where relevant.

Applicant response:

The proposed dwelling and associated works at 36 Medeas Cove, Esplanade have been designed in a way that ensures any potential impacts on natural assets within the identified Waterway and Coastal Protection Area are avoided or minimised to the greatest extent possible. The site itself is a previously cleared, grassed residential lot with no riparian, littoral or wetland vegetation present. As a result, the proposal does not involve disturbance of any coastal, waterway or foreshore features and sits comfortably within an already-established residential streetscape.

Stormwater will be managed entirely on-site through a purpose-designed soakage trench system. The Stormwater Assessment prepared by Geo-Environmental Solutions confirms that the soil profile comprises permeable, non-dispersive sandy sediments, and that stormwater from the roof and hardstand areas can be fully intercepted, detained and absorbed without any point discharge to Medeas Cove or nearby wetlands. The system is sized for both minor and major storm events and ensures post-development runoff does not exceed pre-development levels. This approach eliminates the risk of erosion, sedimentation, runoff concentration or unnecessary modification to natural drainage patterns. Because no new discharge points are created, natural hydrological flows, including diffuse overland flow, remain unaltered.



Given the absence of any watercourse, streambank, in-stream habitat or tidal interface within the works area, none of the proposed activities affect natural channels, fish habitat, bank stability or coastal processes such as wave action or sand movement. No infilling of low-lying areas is proposed, and no dredging, reclamation or erosion-protection works are required. The lightweight prefabricated dwelling requires minimal excavation and no cut-and-fill shaping, further reducing ground disturbance. The small footprint, simple rectangular form and the flat nature of the land allow the building to sit naturally within the site without altering levels or creating impediments to natural drainage.

Grouping the dwelling within the established building area avoids unnecessary sprawl of built form within the overlay and ensures new development is consolidated alongside existing residential use. This reduces the likelihood of future shoreline alteration or the need for protective works to safeguard property, as the structure is positioned in a stable, elevated landward portion of the lot, away from the active coastal zone.

Overall, the design approach aligns with the environmental best-practice principles in both the Wetlands and Waterways Works Manual and the Tasmanian Coastal Works Manual. By avoiding disturbance of natural features, containing all stormwater on-site, limiting ground disturbance and ensuring the dwelling fits the landform, the proposal satisfies the requirements of P1.1 of Clause C7.6.1 of the Tasmanian Planning Scheme – Break O'Day and demonstrates that the development will not cause adverse impacts on natural assets or coastal ecological processes.

We trust this further information sufficiently responds to the Planning Authority's RFI and will enable assessment of the application to continue.

Yours faithfully

Planning Ahead Tasmania

Rohan Willis

Principal Consultant

STORMWATER ASSESSMENT

36 Medeas Cove Esplanade St Helens October 2025



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Investigation Details

Client: Spectura Studio

Site Address: 36 Medeas Cove Esplanade, St Helens

Date of Inspection: 31/07/2025

Proposed Works: New house

Investigation Method: Geoprobe 540UD - Direct Push

Inspected by: C. Cooper

Site Details

Certificate of Title (CT): 65155/1

Title Area: Approx. 1164 m²

Applicable Planning Overlays: Airport obstacle limitation area, Waterway and Coastal

Protection Areas

Slope & Aspect: Flat with no dominant aspect

Vegetation: Grass

Background Information

Geology Map: MRT

Geological Unit: Tertiary Sediments

Climate: Annual rainfall 700mm

Water Connection: Mains

Sewer Connection: Unserviced

Testing and Classification: Onsite Stormwater Retention



Investigation

A number of bore holes were completed to identify the distribution and variation of the soil materials at the site, bore hole locations are indicated on the site plan. See soil profile conditions presented below.

Soil Profile Summary

BH 1 Depth (m)	BH 2 Depth (m)	BH 3 Depth (m)	uscs	Description
0.00-0.40	0.00-0.60	0.00-0.40	SW	SILTY SAND : dark grey, grey, slightly moist, dense, gravels
0.40-0.80	0.60-0.70	0.40-0.70	SC	CLAYEY SAND: brown, slightly moist, stiff, trace gravels
0.80-2.20	0.70-1.80	0.70-0.80	SW	SILTY SAND: light brown, slightly moist, dense, trace clay
2.20-3.0+	1.80-2.0+		SC	CLAYEY SAND: brown, light brown, slightly moist, very dense, no refusal

Soil Conditions

The soil on site has developed from Tertiary sediments. and consists of sandy topsoil overlying clayey sand subsoils. The soil has an estimated permeability of approximately 3m/day

GES have identified the following at the site:

- The site has a <5% grade and presents a low risk to slope stability and landslip.
- There are no proposals for cuts or changes of grade which may impact on any proposed onsite stormwater absorption.
- The soil onsite has been identified as comprising of sands overlying sandy clay subsoils. No soil dispersion
 was identified.
- No evidence of a water table was observed at the time of the investigation
- There is a low risk of the natural soils being impacted by contamination
- Bedrock was not encountered

Soil Dispersion

The soil is non-dispersive.



Existing Conditions and Assumptions

The site covers an area of approximately 1164m² with a total run-off area of 116m² consisting of approx. 80m² of roof area and 36m² of concrete hardstand.

There is no public stormwater system that the property can connect to, and it is therefore it is proposed that stormwater from the site would be routed through the proposed conventional underground drainage system comprising of Grated Sumps and PVC Pipes, coupled with soakage trench elements for on-site detention.

The stormwater management report is prepared in accordance with the design criteria listed below:

- The stormwater drainage system is designed using Bureau of Meteorology (BOM) published rainfall Intensity Frequency Duration (IFD) data as a minor / major system to accommodate the 5% AEP / 20 min storm events.
- The flow rate of stormwater leaving the site shall be designed so that it does not exceed the predeveloped flow rate for both the minor and major rain events.
- The total site discharges are modelled as described in *Storm Drainage Design in Small Urban Catchments*, a handbook for Australian practice by *Australian Rainfall and Runoff (ARR2019)*, Book 9 Runoff in Urban Areas.

Detention Calculations

Detention calculations area provided in Appendix A

Summary and Conclusions

- Detention design to be adopted as per design and documentation.
- The designed solution complies with the performance solution design check carried out.
- The 15m² base (10m x 1.5m), 1.0m deep soakage trench is designed over a 20-minute storm duration for proposed development.
- DN100 slotted PVC pipe with geotextile covering on top of aggregate to be installed within the soakage trench.

It is also recommended that regular inspection and maintenance is conducted to ensure the stormwater system is operating without obstruction. A schematic of recommended checks is attached.



GES Stormwater Maintenance Plan Checklist

Indicative	Inspection and criteria	Maintenance activities
frequency		(where required)
Annual	Check whether any tree branches overhang the roof or are likely to grow to overhang the roof	If safe and where permitted, consider pruning back any overhanging branches
	Check that access covers to storage tanks are closed	Secure any open access covers to prevent risk of entry
	Check that screens on inlets, overflows and other openings do not have holes and are securely fastened	Repair any defective screens to keep out mosquitoes
	Inspect tank water for presence of rats, birds, frogs, lizards or other vermin or insects	Remove any infestations, identify point of entry and close vermin and insect-proof mesh
	Inspect tank water for presence of mosquito larvae (inspect more frequently in sub-tropical and tropical northern Australia, based on local requirements)	Identify point of entry and close with insect-proof mesh with holes no greater than 1.6 mm in diameter
	Inspect gutters for leaf accumulation and ponding	Clean leaves from gutters-remove more regularly if required. If water is ponding, repair gutter to ensure water flows to downpipe
	Check signage at external roof water taps and that any removable handle taps are being properly used	Replace or repair the missing or damaged signage and fittings
	Check plumbing and pump connections are watertight/without leakage	Repair any leaks as necessary
	Check suction strainers, in-line strainers and pump location for debris	Clean suction strainers, in-line strainers or debris from pump location
	Check pump installation is adequate for reliable ongoing operation	Modify and repair as required
	Check first flush diverter, if present	Clean first flush diverter, repair and replace if necessary
	Check health of absorption trench area and surrounding grass or plants	Investigate any adverse impacts observed that might be due to irrigation
	Check condition of roof and coatings	Investigate and resolve any apparent changes to roof condition, such as loss of material coatings
Triennial	Drain, clean out and check the condition of the tank walls and roof to ensure no holes have arisen due to tank deterioration	Repair any tank defects



	Check sediment levels in the tank	Organise a suitable contractor to remove accumulated sediment if levels are approaching those that may block tank outlets
	Undertake a systematic review of operational control of risks to the system	Identify the reason for any problems during inspections and take actions to prevent failures occurring in future
	System	prevent fanares occurring in rature
After 20 years and then every 5 years	Monitor the effectiveness of the stormwater absorption area to assess for any clogging due to algal growth, or blocking due to tree roots/grass growth/trench failure.	Clean or replace clogged equipment
Ongoing	Inspect and follow up on any complaints or concerns raised that could indicate problems with the system	Repair or replace any problems that are notified



APPENDIX A: STORMWATER DETENTION CALCULATIONS

STORAGE T	RENCH			
Hydrology				
Total Catchment A	rea	116	m^2	
Runoff Coefficient		0.969		
Annunal Recurrence	ce Interval (ARI)	20	yr	
Ground Conditions				
Hydraulic conducti	vity (K)	3	m/day	
		2.080 mm/min		
Adjusted Rate (15%	6 clogging factor)	1.768	mm/min	
Trench Design				
Length		10	m	
Width		1.5	m	
Depth		1	m	
Infiltration Area		15	m^2	
Porosity		0.35	%	
Trench Storage		5.25	m^3	
		5250		
Final Check				
Criteria	Requirement	Design	Check	
Detention reqd	2460	5250	OK	



Location

Label: 36 Medeas Cove Esplanade St Helens

Easting: 603990 **Northing:** 5424950

Zone: 55

Latitude: Nearest grid cell: 41.3125 (S)
Longitude:Nearest grid cell: 148.2375 (E)

IFD Design Rainfall Intensity (mm/h)

Issued: 20 October 2025

Rainfall intensity for Durations, Exceedance per Year (EY), and Annual Exceedance Probabilities (AEP), FAQ for New ARR probability terminology

Table Chart Unit: mm/h ✔

	Annual Exceedance Probability (AEP)						
Duration	63.2%	50%#	20%*	10%	5%	2%	1%
1 min	96.3	109	151	182	214	261	300
2 min	80.9	90.8	123	145	167	194	215
3 min	72.5	81.6	111	131	152	179	200
4 <u>min</u>	66.2	74.6	102	122	142	169	191
5 min	61.1	68.9	94.8	114	133	160	182
10 <u>min</u>	45.2	51.0	71.0	86.1	102	125	145
15 <u>min</u>	36.7	41.4	57.7	70.0	83.1	102	119
20 <u>min</u>	31.4	35.4	49.2	59.6	70.7	86.9	101
25 <u>min</u>	27.7	31.2	43.3	52.4	61.9	75.8	87.4
30 <u>min</u>	25.0	28.2	38.9	47.0	55.4	67.5	77.5
45 <u>min</u>	19.8	22.4	30.7	36.8	43.0	51.8	58.9
1 hour	16.9	19.0	26.0	31.0	36.0	42.9	48.4
1.5 hour	13.5	15.2	20.7	24.5	28.3	33.3	37.2
2 hour	11.6	13.1	17.7	20.9	24.0	28.0	31.1
3 hour	9.35	10.6	14.4	16.9	19.3	22.4	24.8
4.5 hour	7.57	8.59	11.7	13.8	15.7	18.3	20.2
6 hour	6.50	7.40	10.2	12.0	13.7	16.0	17.7
9 hour	5.19	5.95	8.26	9.79	11.3	13.2	14.8
12 hour	4.39	5.04	7.07	8.43	9.75	11.6	13.0
18 hour	3.39	3.91	5.56	6.71	7.84	9.42	10.7
24 hour	2.78	3.21	4.61	5.60	6.61	8.01	9.14
30 hour	2.36	2.73	3.94	4.81	5.71	6.97	7.99
36 hour	2.05	2.37	3.44	4.22	5.03	6.16	7.08
48 hour	1.62	1.87	2.73	3.37	4.04	4.97	5.73
72 hour	1.14	1.32	1.92	2.38	2.87	3.53	4.07
96 hour	0.889	1.02	1.49	1.84	2.21	2.70	3.11
120 hour	0.734	0.844	1.22	1.50	1.80	2.18	2.49
144 hour	0.633	0.726	1.04	1.27	1.52	1.83	2.08
168 hour	0.563	0.645	0.918	1.12	1.32	1.58	1.79

Note:

[#] The 50% AEP IFD does not correspond to the 2 year Average Recurrence Interval (ARI) IFD. Rather it corresponds to the 1.44 ARI.

^{*} The 20% AEP IFD does not correspond to the 5 year Average Recurrence Interval (ARI) IFD. Rather it corresponds to the 4.48 ARI.



Stormwater Detention

Designed: 20/10/2025

Geo-Environmental Solutions

36 Medeas Cove Esplanade St Helens

STORMWATER DETENTION V5.05

Location: St Helens

Site: 116m² with tc = 20 and tcs = 15 mins.

PSD: AEP of 5%, Above ground PSD = 0.67L/s

Storage: AEP of 5%, Above ground volume = 2.05m³

Design Criteria (Custom AEP IFD data used)

Location = St Helens

Method = E (A)RI 2001,A(E)P 2019

PSD annual exceedance probabiliy (APE) = 5 % Storage annual exceedance probabiliy (APE) = 5 %

Storage method = A (A)bove,(P)ipe,(U)nderground,(C)ustom

Site Geometry

Site area (As) = 116 m² = 0.0116 Ha

Pre-development coefficient (Cp) = 0.30 Post development coefficient (Cw) = 1.00

Total catchment (tc) = 20 minutes
Upstream catchment to site (tcs) = 15 minutes

Coefficient Calculations

Pre-development Zone Area (m²) C Area * C Concrete 0 0.90 0

Roof 0 1.00 0 Gravel 0 0.50 0 Garden 116 0.30 35 Total 116 m^2 35

 $Cp = \Sigma Area*C/Total = 0.300$

Post development

Zone	Area (m²)	С	Area * C
Concrete	36	0.90	32
Roof	80	1.00	80
Gravel	0	0.50	0
Garden	0	0.30	0
Total	116	m²	112

 $Cw = \Sigma Area*C/Total = 0.969$

Permissible Site Discharge (PSD) (AEP of 5%)

PSD Intensity (I) = 66.5 mm/hr For catchment tc = 20 mins.

Pre-development (Qp = Cp*I*As/0.36) = 0.64 L/s

Peak post development (Qa = 2*Cw*I*As/0.36) = 4.29 L/s = $(0.064 \times I)$ Eq. 2.24

0.670 L/s

Storage method = A (A)bove,(P)ipe,(U)nderground,(C)ustom

Permissible site discharge (Qu = PSD) = 0.670 L/s

Above ground - Eq 3.8

0 = PSD² - 2*Qa/tc*(0.667*tc*Qp/Qa + 0.75*tc+0.25*tcs)*PSD + 2*Qa*Qp

Taking x as = PSD and solving

a = 1.0 b = -8.9 c = 5.5 $PSD = -b \pm V(b^2-4ac)/(2a)$

Below ground pipe - Eq 3.3

 $Qp = PSD*[1.6*tcs/{tc*(1-2*PSD/(3*Qa))}-0.6*tcs^{2-67}/{tc*(1-2*PSDp/(3*Qa))}^{2-67}]$ = 0.64

PSD = 0.666 L/s

Below ground rectangular tank - Eq 3.4

t = tcs/(tc*(1-2*PSD/(3*Qa))) = 0.834

 $Qp = PSD^*[0.005-0.455*t+5.228*t^2-1.045*t^3-7.199*t^4+4.519*t^5]$

= 0.64 PSD = 0.646 L/s



Designed: 20/10/2025

36 Medeas Cove Esplanade St Helens

STORMWATER DETENTION V5.05

Geo-Environmental Solutions

Design Storage Capacity (AEP of 5%)

 $\begin{tabular}{lll} Above ground (Vs) &= & [0.5*Qa*td-[(0.875*PSD*td)(1-0.917*PSD/Qa)+(0.427*td*PSD^2/Qa)]]*60/10^3 m^3 & Eq 4.23 \\ Below ground pipe (Vs) &= & [(0.5*Qa-0.637*PSD+0.089*PSD^2/Qa)*td]*60/10^3 m^3 & Eq 4.8 \\ Below ground rect. tank (Vs) &= & [(0.5*Qa-0.572*PSD+0.048*PSD^2/Qa)*td]*60/10^3 m^3 & Eq 4.13 \\ \end{tabular}$

td (mins)	l (mm/hr)	Qa (L/s)	Above Vs (m³)	Pipe Vs (m³)	B/G Vs (m³)
5	125.6	8.1	1.04		
13	84.5	5.4	1.69		
17	73.1	4.7	1.84		
21	64.6	4.2	1.94		
25	58.1	3.7	1.99		
29	52.8	3.4	2.03		
33	48.6	3.1	2.04		
37	45.0	2.9	2.05		
41	42.0	2.7	2.04		
45	39.4	2.5	2.02		

Table 1 - Storage as function of time for AEP of 5%

	td	I	Qa	Vs
Туре	(mins)	(mm/hr)	(L/s)	(m³)
Above	36.0	45.8	3.0	2.05
Pipe				
B/ground				

Table 2 - Storage requirements for AEP of 5%

Frequency of operation of Above Ground storage

Qop2 =	0.75 Cl 2.4.5.1	
Qp2 =Qop2*Qp1 (where Qp1=PSD) =	0.50 L/s at which time above ground storage occu	rs
$I = 360*Qp2/(2*Cw*As*10^3) =$	7.8 mm/h	Eq 4.24

Period of Storage

Time to Fill:

Above ground (tf) = $td*(1-0.92*PSD/Qa)$	Eq 4.27
Below ground pipe (tf) = $td*(1-2*PSD/(3*Qa))$	Eq 3.2
Below ground rect. tank (tf) = $td*(1-2*PSD/(3*Qa))$	Eq 3.2

Time to empty:

Above ground (te) = $(Vs+0.33*PSD^2*td/Qa*60/10^3)*(1.14/PSD)*(10^3/60)$	Eq 4.28
Below ground pipe (te) = $1.464/PSD*(Vs+0.333*PSD^2*td/Qa*60/10^3)*(10^3/60)$	Eq 4.32
Below ground rect. tank (te) = $2.653/PSD*(Vs+0.333*PSD^2*td/Qa*60/10^3)*(10^3/60)$	Eq 4.36

Storage period (Ps = tf + te) Eq 4.26

	td	Qa	Vs	tf	te	Ps
Туре	(mins)	(L/s)	(L/s)	(mins)	(mins)	(mins)
Above	36.0	3.0	2.0	28.5	61.1	89.6
Pipe						
B/ground						

Table 3 - Period of Storage requirements for AEP of 5%

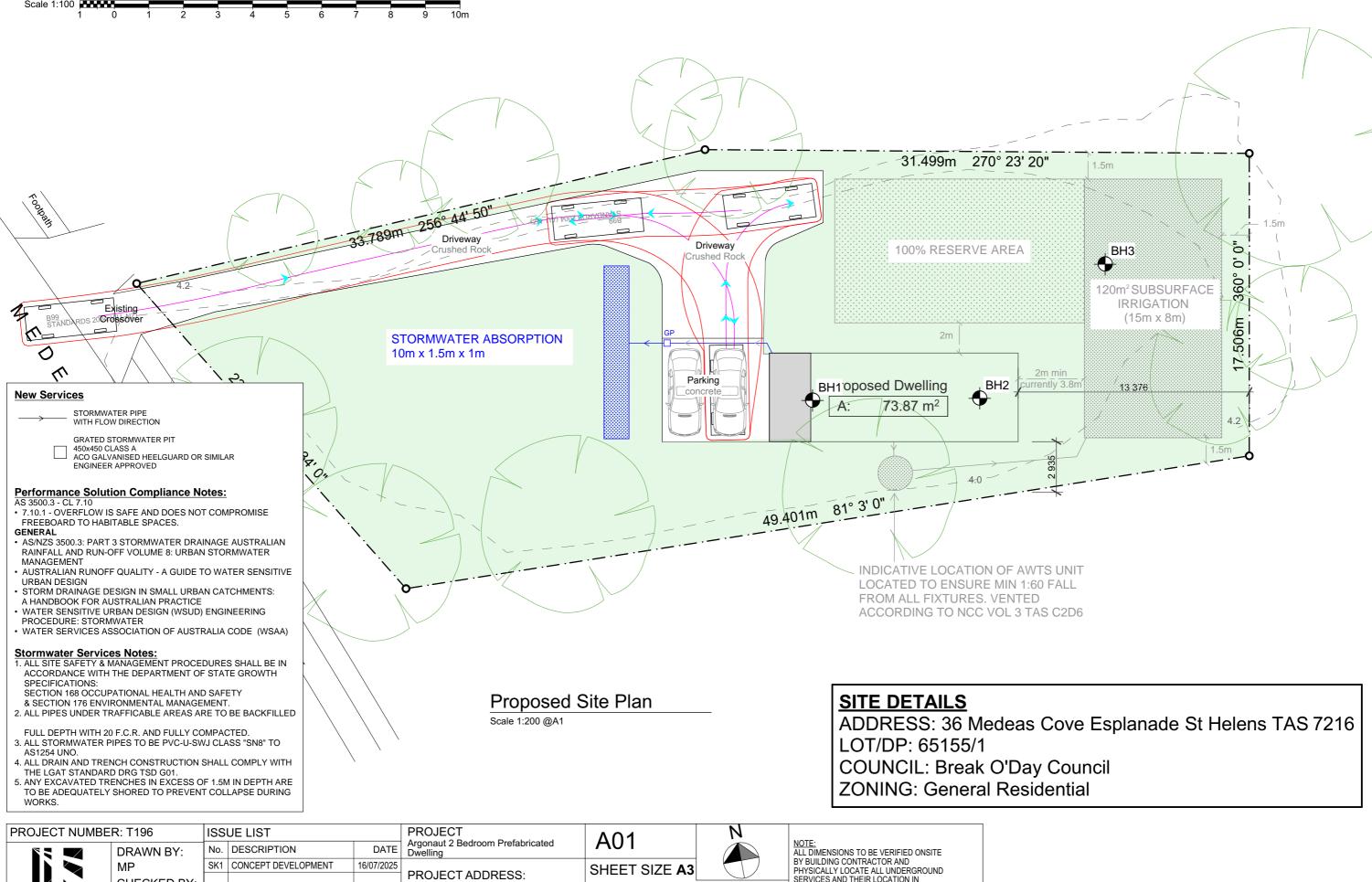
Orifice

Permissible site discharge (Qu=PSD) = 0.67 L/s (Above ground storage)
Orifice coefficient (CD) = 0.61 For sharp circular orificeGravitational acceration (g) = 9.81 m/s^2 Maximum storage depth above orifice (H) = 400 mm

Orifice flow (Q) = CD*Ao*v(2*g*H)

Therefore:

Orifice area (Ao) = 392 mm² Orifice diameter (D = $\sqrt{(4*Ao/\pi)}$) = 22.4 mm



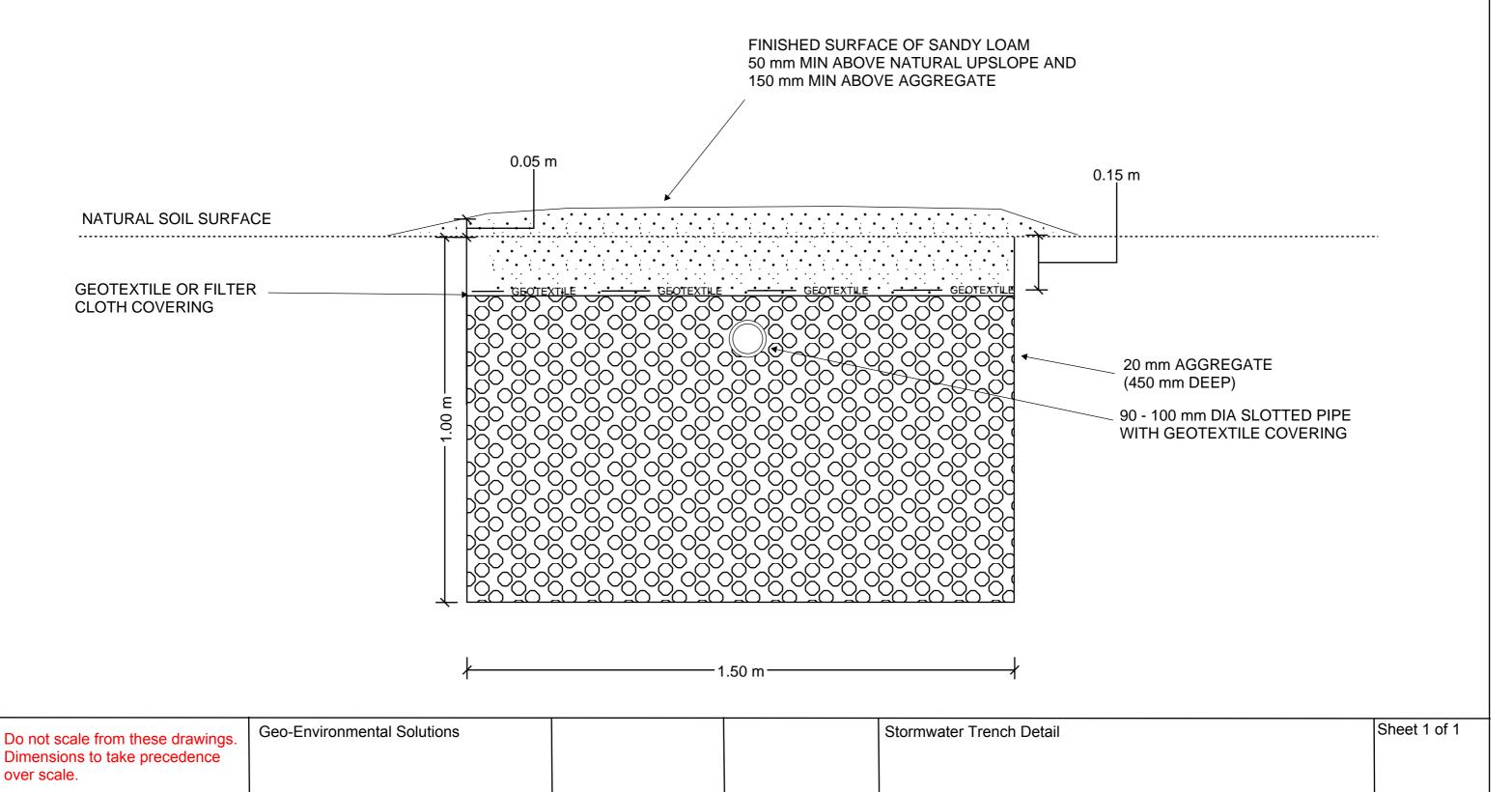
PROJECT NUMBE	:R: 1196	ISS	UE LIST		PROJECT	A01	1/1	
	DRAWN BY:	No.	DESCRIPTION	DATE	Argonaut 2 Bedroom Prefabricated Dwelling	AUI		NOTE: ALL DIMENSIONS TO BE VERIFIED ONSITE
	MP	SK1	CONCEPT DEVELOPMENT	16/07/2025	PROJECT ADDRESS:	SHEET SIZE A3		BY BUILDING CONTRACTOR AND PHYSICALLY LOCATE ALL UNDERGROUND
	CHECKED BY:				65155/1			SERVICES AND THEIR LOCATION IN RELATION TO PROPOSED WORKS.
	MP				36 Medeas Cove Esplanade St Helens			WRITTEN DIMENSIONS PREFERENCED OVER SCALED DIMENSIONS.
SPECTURA STUDIO www.spectura.com.au P: 0423 250 079	DATE:				TAS 7216 CLIENT	SITE PLAN		DISCREPENCIES TO BE REFERRED TO THE BUILDING DESIGNER BEFORE
E: admin@spectura.com.au QBCC:15158346 BDA&T: 6521	Wednesday, 16 July 2025				Cheryl Tonkin	SCALE: 1:200		PROCEEDING.
	CBOS: 964058515					PROJECT NUMBER	R: T196	

Design notes:

- 1. Absorption trench dimensions of up to 20m long by 1.0m deep by 1.5m wide total storage volume calculated at average 35% porosity.
- 2.Base of trenches to be excavated level and smearing and compaction avoided.
- 3.90-100mm slotted pipe should be placed in the top 100mm of the 20mm aggregate
- 4.Geotextile or filter cloth to be placed over the pipe to prevent clogging of the pipes and aggregate
- 5.All works on site to comply with AS3500 and Tasmanian Plumbing code.



29 Kirksway Place, Battery Point
T| 62231839 E| office@geosolutions.net.au



CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94 Section 106 Section 129 Section 155

To:	Spectura Studio			Owner name	25	
	6 Sunrise Court			Address	Form 35	
	Scamander	721	15	Suburb/postcode		
Decimon detail						
Designer detail	S:					
Name:	Vinamra Gupta			Category:	Civil Engineer	
Business name:	Geo-Environmental Solutions	3		Phone No:	03 6223 1839	
Business address:	29 Kirksway Place					
	Battery Point	700	4	Fax No:	N/A	
Licence No:	685982720 Email ad	ddress: office@)geos	olutions.net.au		
Details of the p	roposed work:					
Owner/Applicant	Spectura Studio			Designer's proje reference No.	^{ct} J11972	
Address:	36 Medeas Cove Esplar	nade		Lot No:	65155/1	
	St Helens	721	16]		
Type of work:	Building wo	rk	ı	Plumbing work	X (X all applicable)	
Description of wor					ew building / alteration /	
Description of the	Design Work (Scope, limitat	tions or exclus	sions)	re- w. stc on ma ba	dition / repair / removal / erection ater / sewerage / ormwater / -site wastewater anagement system / ckflow prevention / other) certificates)	
Certificate Type:	Certificate			sponsible Practitioner		
	☐ Building design		-	chitect or Buildir		
	☐ Structural design		Eng	gineer or Civil E	Designer	
	☐ Fire Safety design		Fire	re Engineer		
	☑ Civil design		Civ	vil Engineer or Civil Designer		
	☐ Hydraulic design		Bui	uilding Services Designer		
☐ Fire service design Bui				uilding Services Designer		
	☐ Electrical design Bui				Designer	
				uilding Service Designer		
	<u> </u>				Architect, Building neer	
	☐ Other (specify)					
Deemed-to-Satisfy:	Performance	Soluti	on: X the	appropriate box)		
Other details:		1				
Onsite stormwater i	retention					
Design documents provided:						

The following documents are provided with this Certificate – Document description: Date: Oct-25 Drawing numbers: Prepared by: Geo-Environmental Solutions Prepared by: Schedules: Date: Specifications: Prepared by: Geo-Environmental Solutions Date: Oct-25 Computations: Prepared by: Date: Performance solution proposals: Prepared by: Geo-Environmental Solutions Date: Oct-25 Onsite stormwater retention Test reports: Prepared by: Geo-Environmental Solutions Date: Oct-25 Standards, codes or guidelines relied on in design process: AS3500 (Parts 0-5)-2013 Plumbing and drainage set. Any other relevant documentation: Stormwater Assessment - 36 Medeas Cove Esplanade St Helens - Oct-25

Attribution as designer:

I Vinamra Gupta, am responsible for the design of that part of the work as described in this certificate;

The documentation relating to the design includes sufficient information for the assessment of the work in accordance with the Building Act 2016 and sufficient detail for the builder or plumber to carry out the work in accordance with the documents and the Act;

This certificate confirms compliance and is evidence of suitability of this design with the requirements of the National Construction Code.

Name: (print) Signed Date 20/10/2025 Designer: Vinamra Gupta Licence No: 685982720

Assessment of	Certifiable	Works:	(TasWater)
ASSESSIIICIIL VI	Oci uliable	WOINS.	i i asvvatei i

Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable.

If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.

TasWater must then be contacted to determine if the proposed works are Certifiable Works.							
I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:							
x The works wil	The works will not increase the demand for water supplied by TasWater						
	The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater's sewerage infrastructure						
	The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure						
The works will not damage or interfere with TasWater's works							
The works will not adversely affect TasWater's operations							
The work are not within 2m of TasWater's infrastructure and are outside any TasWater easement							
x I have checked the LISTMap to confirm the location of TasWater infrastructure							
x If the property is connected to TasWater's water system, a water meter is in place, or has been applied for to TasWater.							
Certification:							
I Vinamra Gupta							
Designer:	Name: (print)	1		Signed]	Date 20/10/2025	
Designer.	Vinamra Gupta		Vupta	_		20/10/2025	