DEVELOPMENT APPLICATION

PDPLANPMTD-2025/053862

PROPOSAL: Dwelling

LOCATION: 11 Aqua Place, Seven Mile Beach

RELEVANT PLANNING SCHEME: Tasmanian Planning Scheme - Clarence

ADVERTISING EXPIRY DATE: 25 August 2025

The relevant plans and documents can be inspected at the Council offices, 38 Bligh Street, Rosny Park, during normal office hours until 25 August 2025. 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 25 August 2025.

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.

City of Clarence
38 Bligh St Rosny Park
PO Box 96
Rosny Park TAS, 7018

03 6217 9500
clarence@ccc.tas.gov.au
ccc.tas.gov.au

Application for Development / Use or Subdivision

Use this form to obtain planning approval for developing or using land, including subdividing it into smaller lots or lot consolidation.

Proposal: New dwelling

Location:

Personal Information Removed

Estimated cost of development:

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Is the property on the Tasmanian Heritage Register? Yes ☐ No ☒

If yes, we recommend you discuss your proposal with Heritage Tasmania prior to lodgement as 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:

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.

Applicant's signature: **Personal Information Removed**

Date: 10/7/25

Please refer to the development/use and subdivision checklist on the following pages to determine what documentation must be submitted with your application.

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Development/use or subdivision 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.

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- 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.

RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

SEARCH OF TORRENS TITLE

VOLUME	FOLIO
180356	1
EDITION	DATE OF ISSUE
2	26-Jun-2021

SEARCH DATE : 05-Jun-2025
SEARCH TIME : 12.30 PM

DESCRIPTION OF LAND

City of CLARENCE
Lot 1 on Sealed Plan 180356
Derivation : Part of 94A-OR-17P Gtd. to David Cyril Lewis
Prior CT 138559/100

SCHEDULE 1

M897800 TRANSFER to CARLEEN ROSE CHANDLER and DALE ANTHONY CHANDLER Registered 26-Jun-2021 at noon

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
SP180356 COVENANTS in Schedule of Easements
SP180356 FENCING COVENANT in Schedule of Easements
SP138559 COVENANTS in Schedule of Easements
SP138559 FENCING COVENANT in Schedule of Easements
SP138559 COUNCIL NOTIFICATION under Section 83(5) of the Local Government (Building and Miscellaneous Provisions) Act 1993.
112804 BOUNDARY FENCES CONDITION in Transfer
C431607 AGREEMENT pursuant to Section 71 of the Land Use Planning and Approvals Act 1993 Registered 24-Mar-2003 at noon

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

SCHEDULE OF EASEMENTS	Registered Number
NOTE: THE SCHEDULE MUST BE SIGNED BY THE OWNERS & MORTGAGEES OF THE LAND AFFECTED. SIGNATURES MUST BE ATTESTED.	SP 180356

EASEMENTS AND PROFITS

Each lot on the plan is together with:-
(1) such rights of drainage over the drainage easements shown on the plan (if any) as may be necessary to drain the stormwater and other surplus water from such lot; and
(2) any easements or profits a prendre described hereunder.
Each lot on the plan is subject to:-
(1) such rights of drainage over the drainage easements shown on the plan (if any) as passing through such lot as may be necessary to drain the stormwater and other surplus water from any other lot on the plan; and
(2) any easements or profits a prendre described hereunder.
The direction of the flow of water through the drainage easements shown on the plan is indicated by arrows.

COVENANTS

The owner of each lot on the Plan covenants with the Vendor, Acqua Property Holdings Pty Ltd ACN 636 483 406, and the owners for the time being of each and every lot shown on the Plan to the intent that the burden of these covenants shall run with and bind the covenantor's lot and every part thereof and the benefit thereof shall be annexed to and devolve with each and every part of every other lot shown on the Plan to observe the following covenants and stipulations:

1. Not to erect any building on the lot with outer walls of asbestos cement sheeting;

2. Not to erect any dwelling house or residential building on the lot using any roofing material or with roofs other than tiles, slate, shingles or colorbond iron;

3. Not to erect or place or suffer to be or remain on the lot any temporary building structure, transportable home or caravan except a shed or workshop used for the purpose of and in connection with and during and in the course of construction of a permanent building or buildings on the lot and not otherwise;

(USE ANNEXURE PAGES FOR CONTINUATION)

SUBDIVIDER: Acqua Property Holdings Pty Ltd FOLIO REF: CT 138559/100 SOLICITOR & REFERENCE: Ogilvie Jennings (AOK:202194)	PLAN SEALED BY: Clarence City Council DATE: 18 Dec 2020 SD-2018/57 REF NO. Council Delegate Clare Shea

NOTE: The Council Delegate must sign the Certificate for the purposes of identification.

ANNEXURE TO SCHEDULE OF EASEMENTS PAGE 2 OF 3 PAGES	Registered Number SP 180356
SUBDIVIDER: Acqua Property Holdings Pty Ltd FOLIO REFERENCE: CT 138559/100	

4. That no hoarding or structure or station for the purpose of exhibiting any advertisement, bill, poster or sign shall be created or placed or suffered to be upon any part of the lot (except any notice or advertisement in the usual form for the sale or letting of the lot any building erected thereon);

5. Not to affix or display on any structure, wall or fence upon the lot or any part thereof any posters, bills, hoardings or advertisements (except any notice or advertisement in the usual form for the sale or letting of the lot or any building erected thereon);

6. Not to erect or use on the lot any shop building or erection whatsoever for the purpose of selling offering or exposing for sale therein any articles, services, wares or merchandise whatsoever;

7. That the main building erected on any portion of the lot shall not be used for any purpose other than a private residential house;

8. That no engine or machinery worked or driven by steam, gas, electricity, petrol or other type of power and used for any business or trade operations shall be erected, affixed or placed on any part of the lot and no trade manufactory or business whatsoever shall be carried on or be permitted or allowed to be carried on any part of the lot;

9. Provided that they will not do or permit or suffer to be done in or upon any lot or any part thereof anything which will, may or shall be or become a nuisance, annoyance or disturbance to the said Acqua Property Holdings Pty Ltd or its Directors or successors in title or the owner or owners for the time being of the said lots.

PROVIDED THAT it is hereby declared that nothing herein obtained or implied shall prevent the said Acqua Property Holdings Pty Ltd or its directors from:

(a) Selling any lot free or exempt from any one or more of the restrictive covenants and stipulations contained in the covenants hereinbefore contained; and

NOTE: Every annexed page must be signed by the parties to the dealing or where the party is a corporate body be signed by the persons who have attested the affixing of the seal of that body to the dealing.

ANNEXURE TO SCHEDULE OF EASEMENTS PAGE 3 OF 3 PAGES	Registered Number SP 180356
SUBDIVIDER: Acqua Property Holdings Pty Ltd FOLIO REFERENCE: CT 138559/100	

(b) Modifying, waiving or releasing or allowing any departure from any of the said restrictive covenants in relation to any lot or portion of any lot.

FENCING COVENANT

The owners of the lots on the plan hereby covenants with the Vendor, Acqua Property Holdings Pty Ltd ACN 636 483 406, that the Vendor shall not be required to fence.

EXECUTED by **ACQUA PROPERTY HOLDINGS PTY LTD** the registered proprietor of the land contained in Certificate of Title Volume 138559 Folio 100 by its Sole Director / Sole Secretary in accordance with Section 127 of the Corporations Act 2001:

.....

James Andrew Polanowski, Sole Director / Sole Secretary

COVENANTS

Lots 1-15 and 100 on the plan which formerly comprised Lot 100 on Sealed Plan 138559 are each burdened by the restrictive covenants created by Sealed Plan No. 138559 in the following terms:

Not to remove any tree from the said lot without the consent of the City of Clarence.

NOTE: Every annexed page must be signed by the parties to the dealing or where the party is a corporate body be signed by the persons who have attested the affixing of the seal of that body to the dealing.

OWNER ACQUA PROPERTY HOLDINGS PTY LTD

FOLIO REFERENCE 138559/100

GRANTEE Part of 94Acs. Ords. 17Ps. Gtd. to David Cyril Lewis

PLAN OF SURVEY

BY SURVEYOR CRAIG BRADLEY ROGERSON
ROGERSON AND BIRCH SURVEYORS
UNIT 1 – 2 KENNEDY DRIVE, CAMBRIDGE PARK
PH 6248-5898 MOB. 0418-120-796

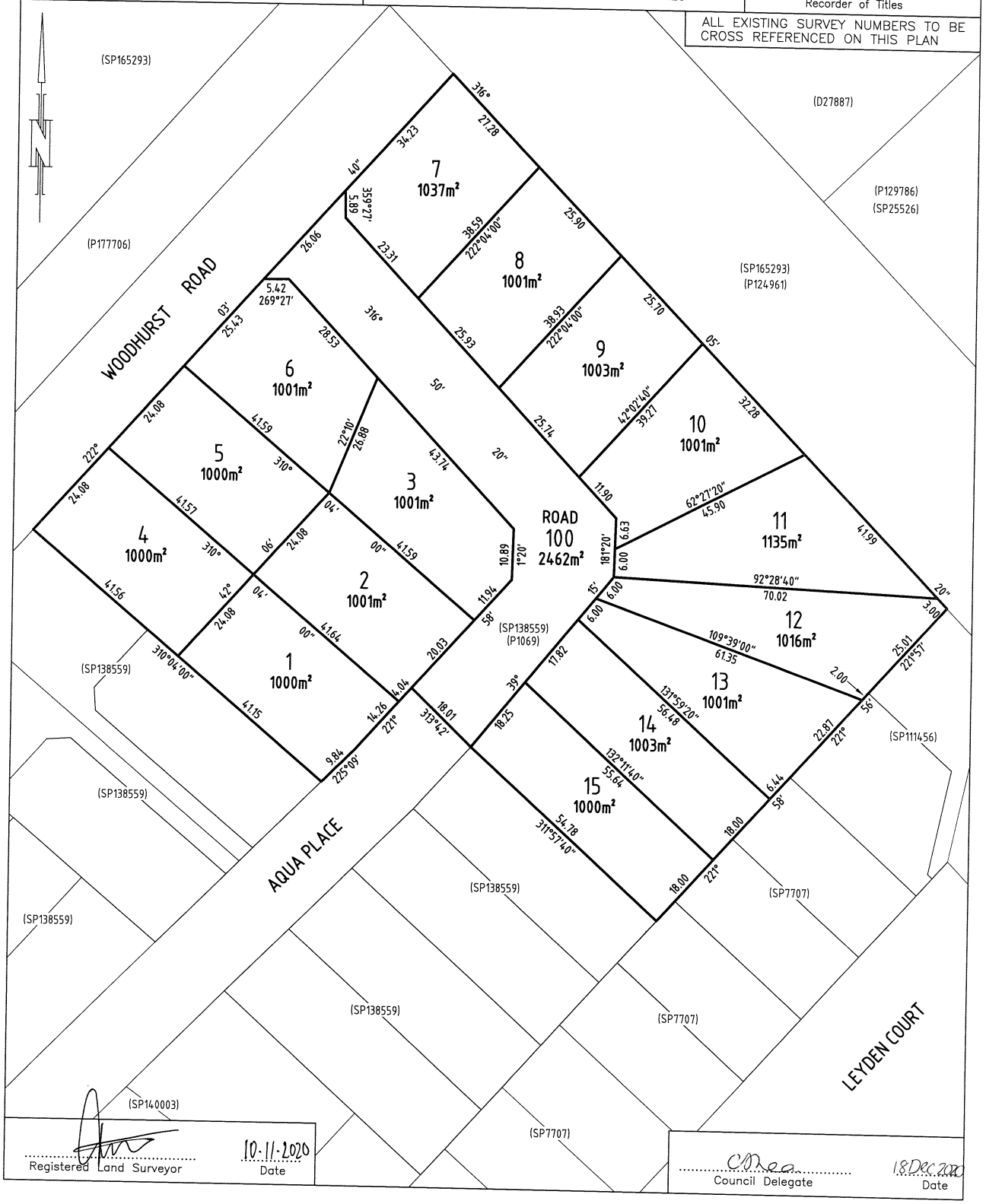
CITY OF CLARENCE

SCALE 1: 750 LENGTHS IN METRES

REGISTERED NUMBER
SP180356

APPROVED
EFFECTIVE FROM 11 JAN 2021
Recorder of Titles

ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN



Registered Land Surveyor — 10-11-2020 Date

Council Delegate — 18 Dec 2020 Date

SURVEY NOTES

SHEET 1 OF 3 SHEETS

Registered Number: SP 180356

CROSS REFERENCE PLAN NUMBERS USED AS PART OF THIS SURVEY

LENGTHS IN METRES

Owner: ACQUA PROPERTY HOLDINGS PTY LTD

Folio Reference: 138559/100

SURVEY CERTIFICATE

I, Craig Bradley Rogerson of Acton Park in Tasmania a Registered Land Surveyor HEREBY CERTIFY that:

(a) this survey is based upon the best evidence that the nature of the case admits.

(b) the survey notes have been truly compiled from surveys made by me or made under my supervision; and

(c) this survey and accompanying survey notes comply with the relevant legislation affecting surveys and are correct for the purpose required.

..... Signature Date 27/10/2020

Purpose of Survey: SUBDIVISION OF F.R.138559/100

Survey Commenced: 28–09–20	Survey Completed: 30–09–20	Surveyors Ref: ACQUA–01
Horizontal Datum: GDA94	Bearing Datum: MGA94	Combined Scale Factor: 0.99962078

MGA94 COORDINATE ORIGIN

SURCOM	Mark ID: SPM9549	E 541646.220	N 5254912.945	EPU ±0.04		
AUSPOS	Local coordinated mark:	E	N	EPU	Measurement Duration:	
NRTK	Local coordinated mark:	E	N	EPU	CORS provider:	

Single base station CORS CORS provider:	Local comparison information SURCOM Check Mark ID:	SURCOM: E	N		
		Measured: E	N		
		Δ E	Δ N		
	Local coordinated mark:	E	N	EPU	

MGA94 BEARING ORIGIN

MGA94 Bearing Calculation per SURCOM coordinates
SPM9549 E 541646.220 N 5254912.945
ST76 MT RUMNEY RT E 537067.438 N 5254564.392
CALC/OBS BEARING 265°38'49"

BOUNDARY REINSTATEMENT REPORT

(Where not documented in the body of these survey notes, describe all evidence, (including statements by interested parties), comparisons and other information relevant to the reinstatement of boundaries)

Notes

1. *This survey has been carried out using conventional total station techniques.*
2. *All boundaries are open unless otherwise stated.*
3. *Error of close 1:500,000 adjusted to zero*
4. *Abbreviation 'uf' signifies 'under fence'.*
5. *The estimated positional uncertainty of boundary corner coordinates shown within this survey is ±0.06m.*
6. *These survey notes are compiled from original survey notes and field survey by Registered Candidate Adam Duggan.*

SURVEY NOTES
ANNEXURE SHEET

SHEET 2 OF 3 SHEETS

CROSS REFERENCE PLAN NUMBERS USED AS PART OF THIS SURVEY

OWNER: ACQUA PROPERTY HOLDINGS PTY LTD

FOLIO REFERENCE: 138559/100

THIS ANNEXURE SHEET FORMS PART OF THE ATTACHED SURVEY NOTES.

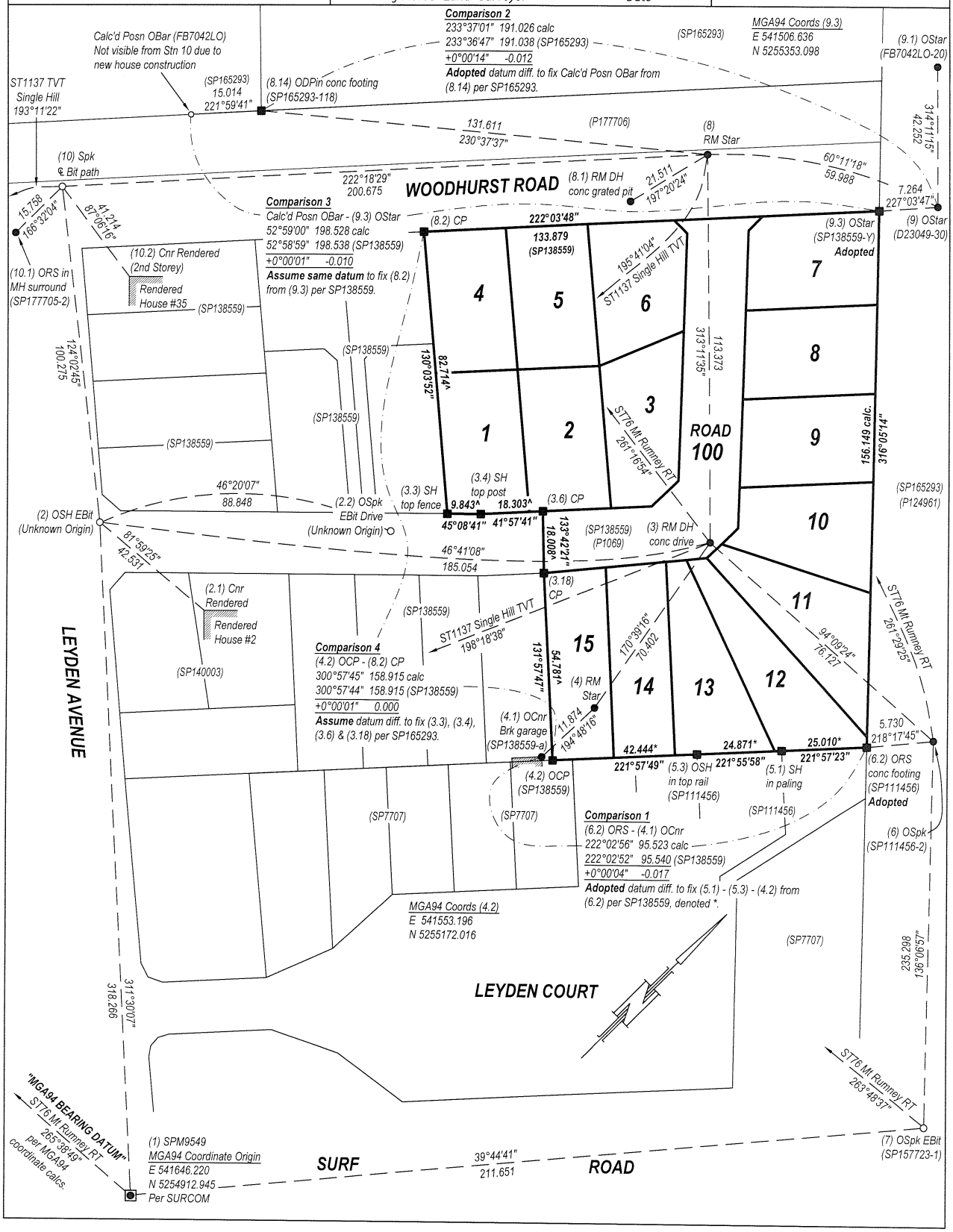
Registered Land Surveyor

27-10-2020
Date

Registered Number

SP 180356

LENGTHS IN METRES



SURVEY NOTES
ANNEXURE SHEET

SHEET 3 OF 3 SHEETS

CROSS REFERENCE PLAN NUMBERS USED AS PART OF THIS SURVEY

OWNER: ACQUA PROPERTY HOLDINGS PTY LTD

FOLIO REFERENCE: 138559/100

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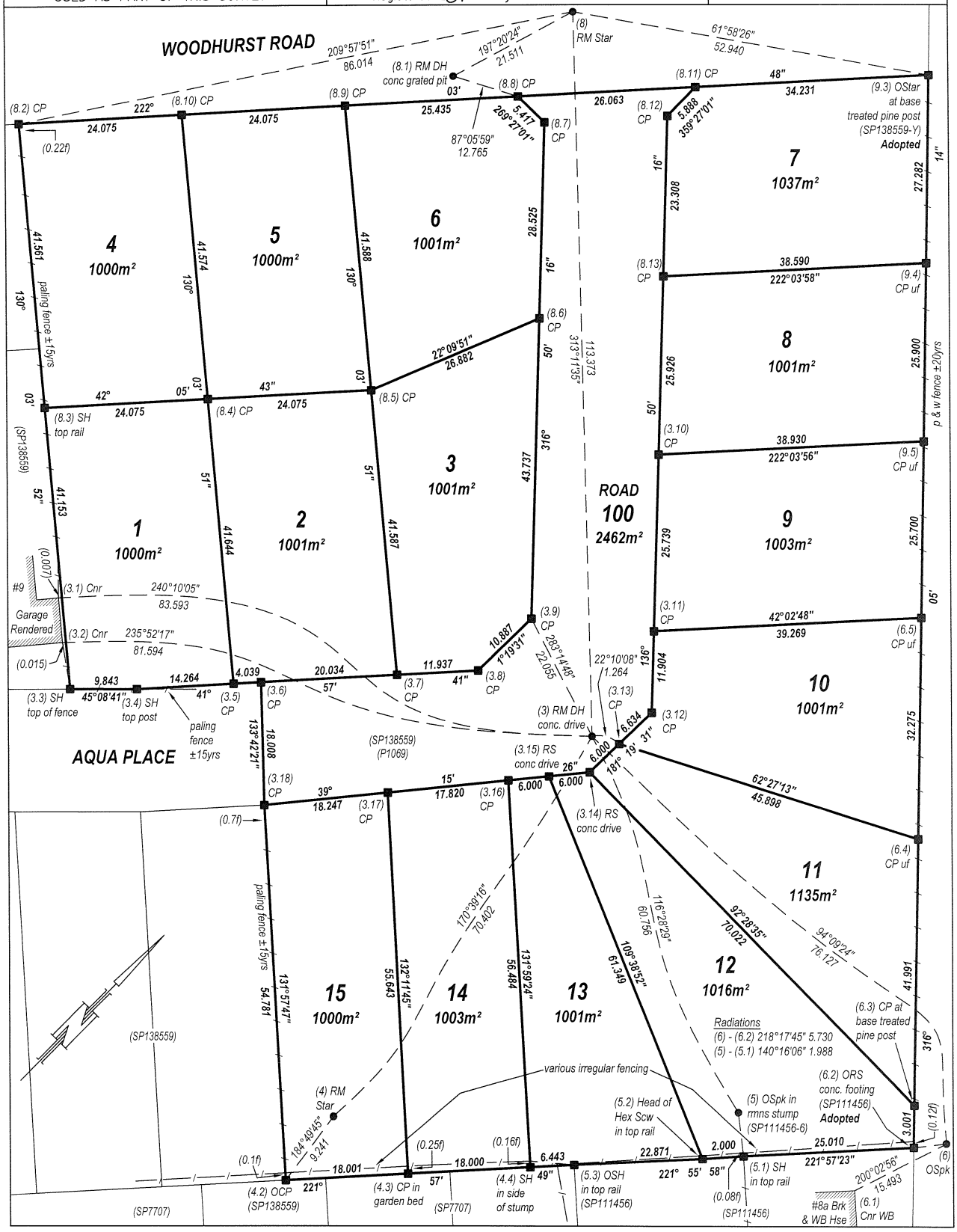
Registered Land Surveyor

27-10-2020
Date

Registered Number

SP 180356

LENGTHS IN METRES



Registered Number

SP 180356

COUNCIL APPROVAL

(Insert any qualification to the permit under section 83(5), section 109 or section 111 of the Local Government (Building & Miscellaneous Provisions) Act 1993)
The subdivision shown in this plan is approved

In witness whereof the common seal of

has been affixed, pursuant to a resolution of the Council of the said municipality

passed the 13 day of January 2020, in the presence of us

Member .....Clare Shea
Corporate Secretary
Clarence City Council
38 Bligh Street
Rosny Park 7018

Member .....

Council Delegate .....CShea.....

Council Reference SD-2018/57

NOMINATIONS

For the purpose of section 88 of the Local Government (Building & Miscellaneous Provisions) Act 1993

the owner has nominated

OGILVIE JENNINGS LAWYERS	Solicitor to act for the owner
ROGERSON & BIRCH SURVEYORS	Surveyor to act for the owner

OFFICE EXAMINATION: Indexed ✓ Computed MG 11/12/21 Examined MG 11/12/21

PROJECT: PROPOSED NEW DWELLING

ADDRESS: 11 AQUA PLACE SEVEN MILE BEACH 7170

TITLE REF: VOLUME 180356 FOLIO 1

BUILDING DESIGNER: SAM BURNETT CC6609

SOIL CLASSIFICATION: CLASS 'A' BY GEO-ENVIRONMENTAL SOLUTIONS

WIND CLASSIFICATION: N2 BY GEO-ENVIRONMENTAL SOLUTIONS

COSTAL VULNERABILITY REPORT: BY GEO-ENVIRONMENTAL SOLUTIONS

SEWER/STORM WATER REPORT: BY GEO-ENVIRONMENTAL SOLUTIONS

BAL RATING: BAL LOW BY JAKE BELL TAS BUSH FIRE CONSULTING

ZONING: LOW DENSITY RESIDENTIAL

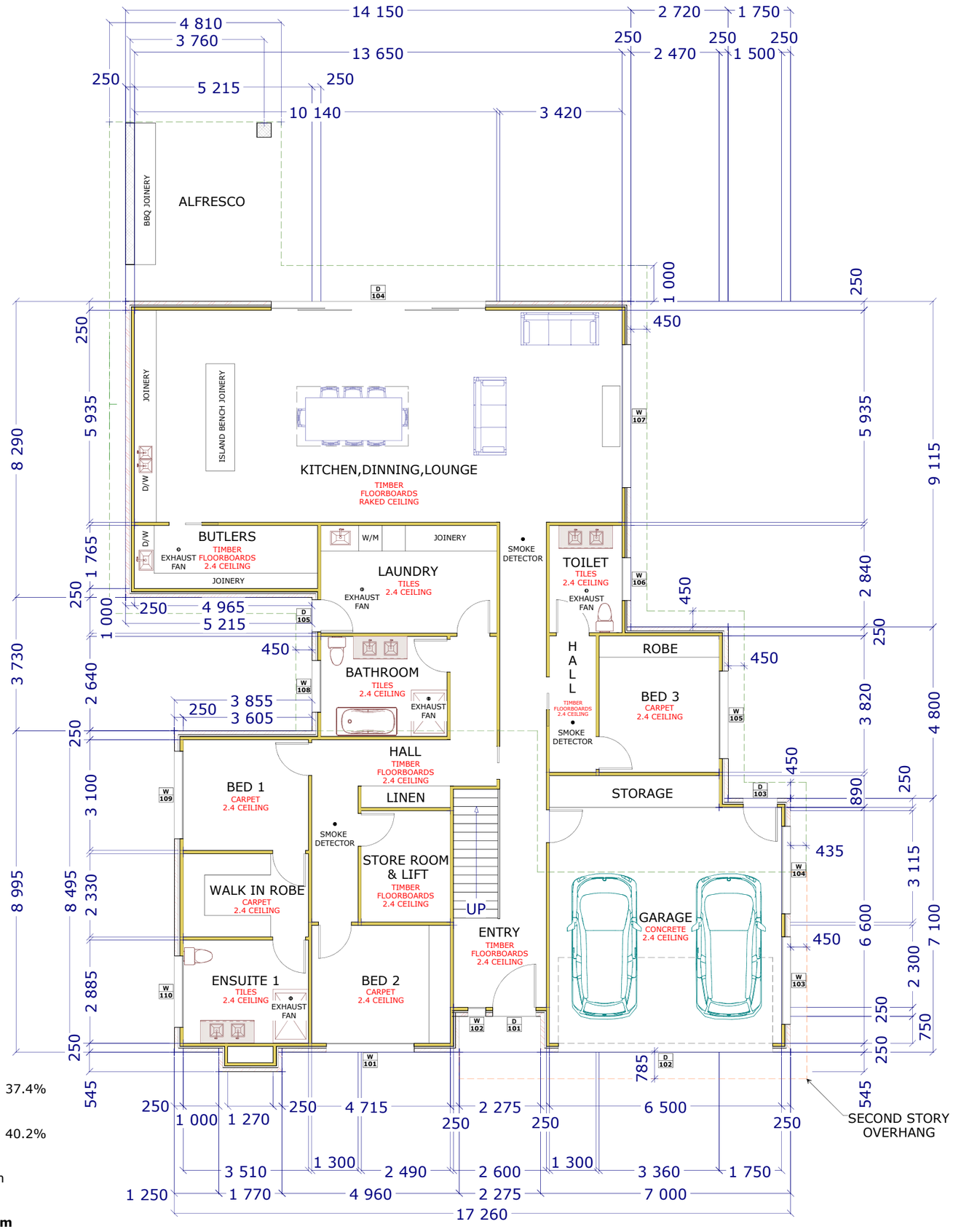
LAND AREA: 1000SQM

BUILDING CLASSIFICATION: 1A

DRAWING INDEX
DRAWINGS ARE A3 SIZE UNLESS NOTED OTHERWISE

2025-05-WD01	SITE PLAN
2025-05-WD02	FIRST FLOOR PLAN
2025-05-WD03	SECOND FLOOR PLAN
2025-05-WD04	NE/SE ELEVATION PLAN
2025-05-WD05	NW/SW ELEVATION PLAN
2025-05-WD06	PLUMBING PLAN
2025-05-WD07	SHADOW DIAGRAM PLAN
2025-05-WD08	WINDOW & DOOR SCHEDULE

TITLE REFERENCE.
VOLUME FOLIO
180356 1



AREA
LAND AREA: 1000sqm
SITE COVERAGE: 374sqm= 37.4%

AREA FREE FROM
IMPERVIOUS SURFACES: 402sqm= 40.2%

FLOOR AREA
FIRST FLOOR AREA: 294.8sqm
SECOND FLOOR AREA: 131sqm

TOTAL FLOOR AREA: 425.8sqm

CONSTRUCTION NOTES:

WALLS:
EXTERNAL:
RENDERED & FACE BRICK
NEWTECH WOOD OR SIMILAR SHIPLAP (SECOND FLOOR)
TO COMPLY BAL RATING AS3959

INTERNAL WALLS:
10mm PLASTERBOARD LINING ON 90X35mm MGP10 STUDWORK @450mm CTS,1 ROW NOGGIN 90X45,MGP10 TOP AND BOTTOM PLATES.LINTELS AND PLATES WHERE SHOWN ON DETAIL PLANS.

WET AREAS:
10mm WATER RESISTANT LININGS AND SUBSTRATES TO WET AREAS IN ACCORDANCE WITH B.C.A 3.8.1

FLASHINGS:
COLORBOND FLASHINGS AS REQUIRED
COLOUR TO BE SURFMIST

WINDOWS:
REFER TO WINDOW SCHEDULE

GLAZING:
REFER TO WINDOW SCHEDULE

ROOF:
COLORBOND SPANDECK SQAURE CORRUGATED IRON
ROOF WITH 4 DEGREE PITCH
COLOUR TO BE SURFMIST

CROSS VENTILATION TO ROOF CAVITY:
INSTALL ROOF VENTS TO EAVES AS PER CONDENSATION IN BUILDINGS -TASMANIAN DESIGNERS' GUIDE - VERSION 2
THE MINIMUM VENT AREA SHOULD BE: A) CEILING AREA/150 FOR <16° PITCH ROOF
75% OF VENTILATION SHOULD BE SUPPLY VENTS TO COMPLY WITH BAL RATING AS3959

CORNICE AND REVEALS:
SQUARE SET PLASTERBOARD

CEILINGS:
10mm PLASTERBOARD FITTED TO FURRING CHANNELS @450mm CTS AND/OR UNDERSIDE OF 450mm FLOOR JOISTS.

FLOOR:
SELECTED 10mm TILES TO BATHROOMS
10mm TIMBER FLOORBOARDS AND CARPET WHERE SHOWN.

ARCHITRAVE & SKIRTING
SQAURE SET PLASTER ARCHITRAVES AND 67X18mm BEVELED PAINTED SKIRTS.

INSULATION:
MIN R6.0 PINK BATTS TO CEILINGS
MIN R2.5 BATTS TO EXTERNAL WALLS
MIN R2.5 INSULATION IN INTERNAL WALLS BETWEEN GARAGE, LAUNDRY, WC BATHROOM AND REST OF HOUSE.

BAL RATING:
ALL CONSTRUCTION TO COMPLY WITH BAL RATING ASSESSMENT

WATERPROOF LININGS AND MEMBRANE TO ALL WET AREAS TO BCA 3.8.1

BUILDING DESIGNER:
SAM BURNETT

ACCREDITATION No:
CC6609

NORTH

NO.	REVISION

PROJECT

PROPOSED NEW DWELLING
11 AQUA PLACE
SEVENMILE BEACH
7170

SCALE: 1:125

DRAWN: DC
CHECKED: SB

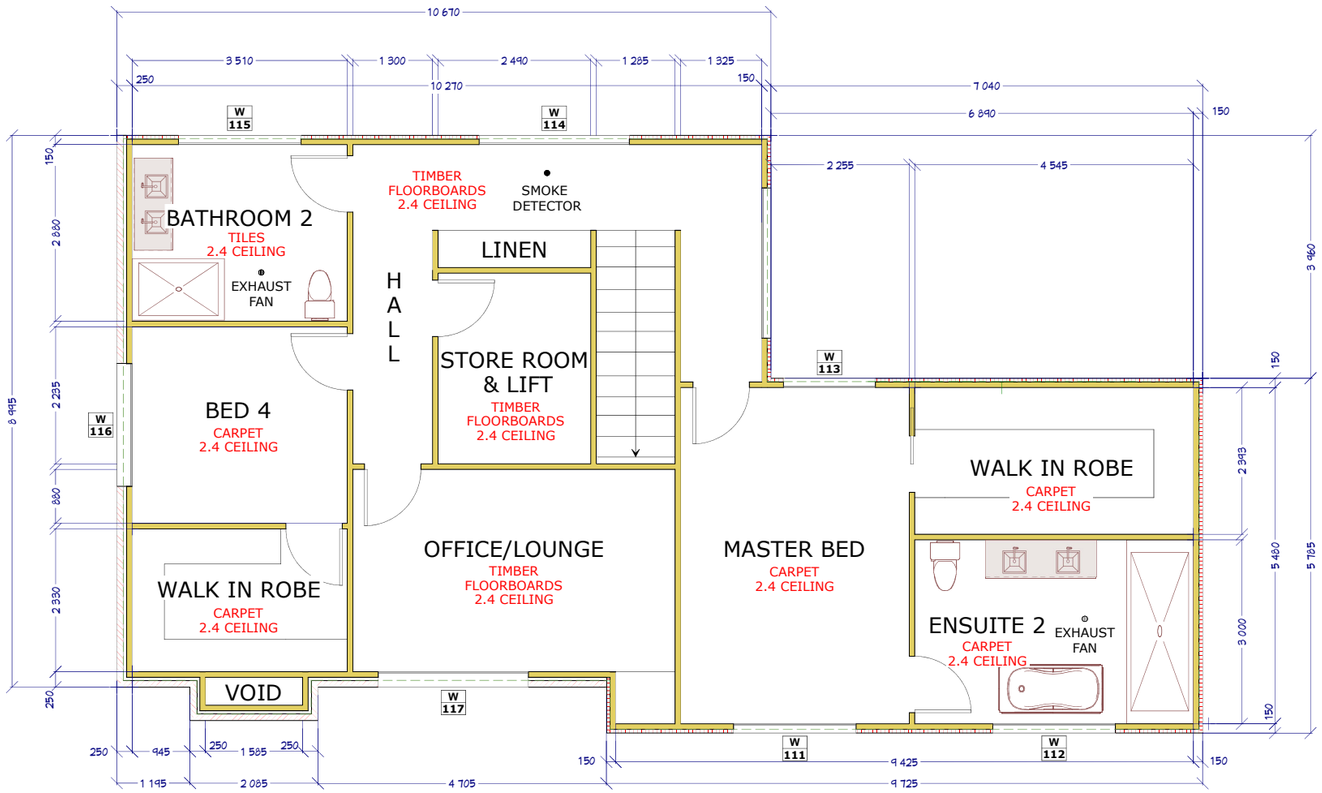
DATE: MAY 2025

FIRST FLOOR PLAN

DRAWING NUMBER 2025-05-WD02
REV

A3

TITLE REFERENCE.
VOLUME FOLIO
180356 1



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AREA FREE FROM
IMPERVIOUS SURFACES: 402sqm= 40.2%

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FIRST FLOOR AREA: 294.8sqm
SECOND FLOOR AREA: 131sqm

TOTAL FLOOR AREA: 425.8sqm

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WALLS:
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RENDERED & FACE BRICK
NEWTECH WOOD OR SIMILAR SHIPLAP
(SECOND FLOOR)
TO COMPLY BAL RATING AS3959

INTERNAL WALLS:
10mm PLASTERBOARD LINING ON
90X35mm MGP10 STUDWORK
@450mm CTS,1 ROW NOGGIN
90X45,MGP10 TOP AND BOTTOM
PLATES.LINTELS AND PLATES
WHERE SHOWN ON DETAIL PLANS.

WET AREAS:
10mm WATER RESISTANT LININGS
AND SUBSTRATES TO WET AREAS
IN ACCORDANCE WITH B.C.A 3.8.1

FLASHINGS:
COLORBOND FLASHINGS AS REQUIRED
COLOUR TO BE SURFMIST

WINDOWS:
REFER TO WINDOW SCHEDULE

GLAZING:
REFER TO WINDOW SCHEDULE

ROOF:
COLORBOND SPANDECK SQAURE
CORRUGATED IRON
ROOF WITH 4 DEGREE PITCH
COLOUR TO BE SURFMIST

CROSS VENTILATION TO ROOF CAVITY:
INSTALL ROOF VENTS TO EAVES AS PER
CONDENSATION IN BUILDINGS -TASMANIAN
DESIGNERS' GUIDE - VERSION 2
THE MINIMUM VENT AREA SHOULD BE: A)
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VENTS TO COMPLY WITH BAL RATING
AS3959

CORNICE AND REVEALS:
SQUARE SET PLASTERBOARD

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10mm PLASTERBOARD FITTED TO
FURRING CHANNELS @450mm
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ARCHITRAVE & SKIRTING
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MIN R2.5 BATTS TO EXTERNAL WALLS
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BATHROOM AND REST OF HOUSE.

BAL RATING:
ALL CONSTRUCTION TO COMPLY WITH BAL
RATING ASSESSMENT

WATERPROOF LININGS AND MEMBRANE TO ALL WET AREAS TO BCA 3.8.1

BUILDING DESIGNER:
SAM BURNETT

ACCREDITATION No:
CC6609

NORTH

NO.	REVISION

PROJECT

PROPOSED NEW DWELLING
11 AQUA PLACE
SEVENMILE BEACH
7170

SCALE: 1:100

DRAWN: DC
CHECKED: SB

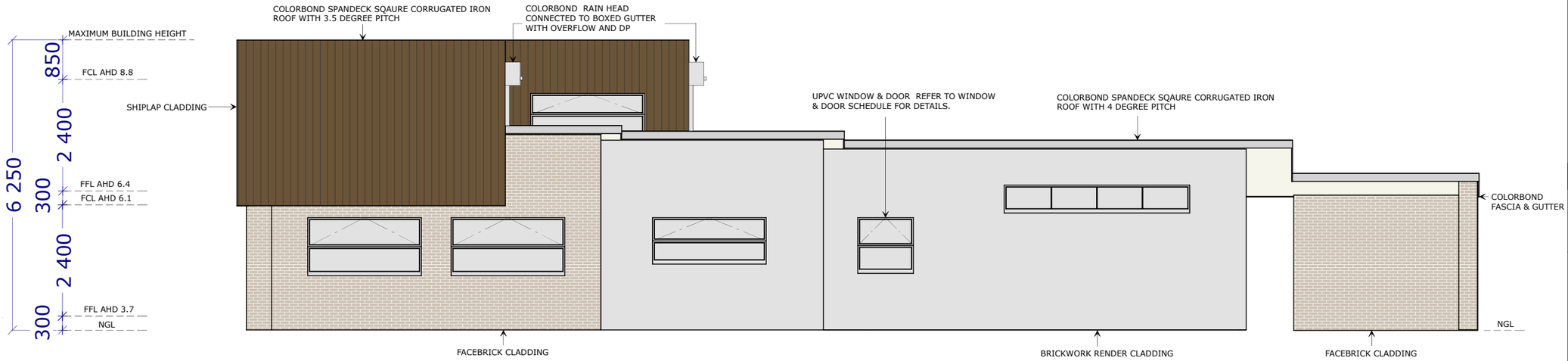
DATE: MAY 2025

SECOND FLOOR PLAN

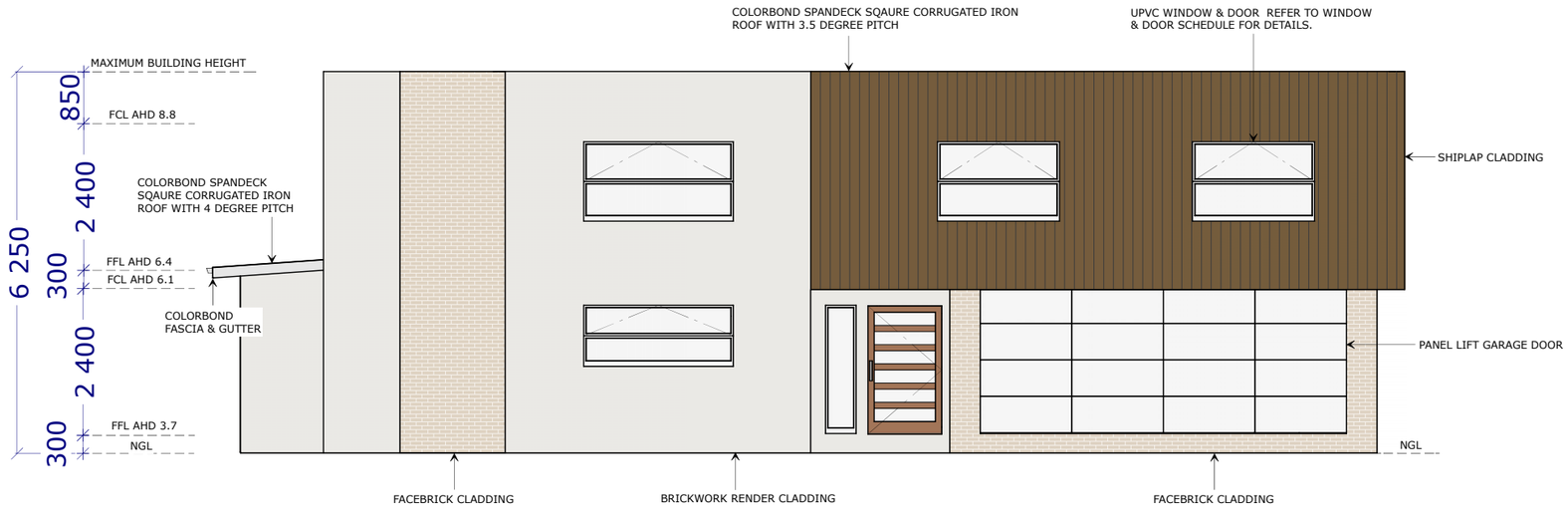
DRAWING NUMBER 2025-05-WD03
REV

A3

TITLE REFERENCE.
VOLUME FOLIO
180356 1



NORTH EAST ELEVATION



SOUTH EAST ELEVATION

AREA
LAND AREA: 1000sqm
SITE COVERAGE: 374sqm= 37.4%

AREA FREE FROM
IMPERVIOUS SURFACES: 402sqm= 40.2%

FLOOR AREA
FIRST FLOOR AREA: 294.8sqm
SECOND FLOOR AREA: 131sqm

TOTAL FLOOR AREA: 425.8sqm

BUILDING DESIGNER:
SAM BURNETT

ACCREDITATION No:
CC6609

NORTH

NO.	REVISION

PROJECT

PROPOSED NEW DWELLING
11 AQUA PLACE
SEVENMILE BEACH
7170

SCALE: 1:100

DRAWN: DC
CHECKED: SB

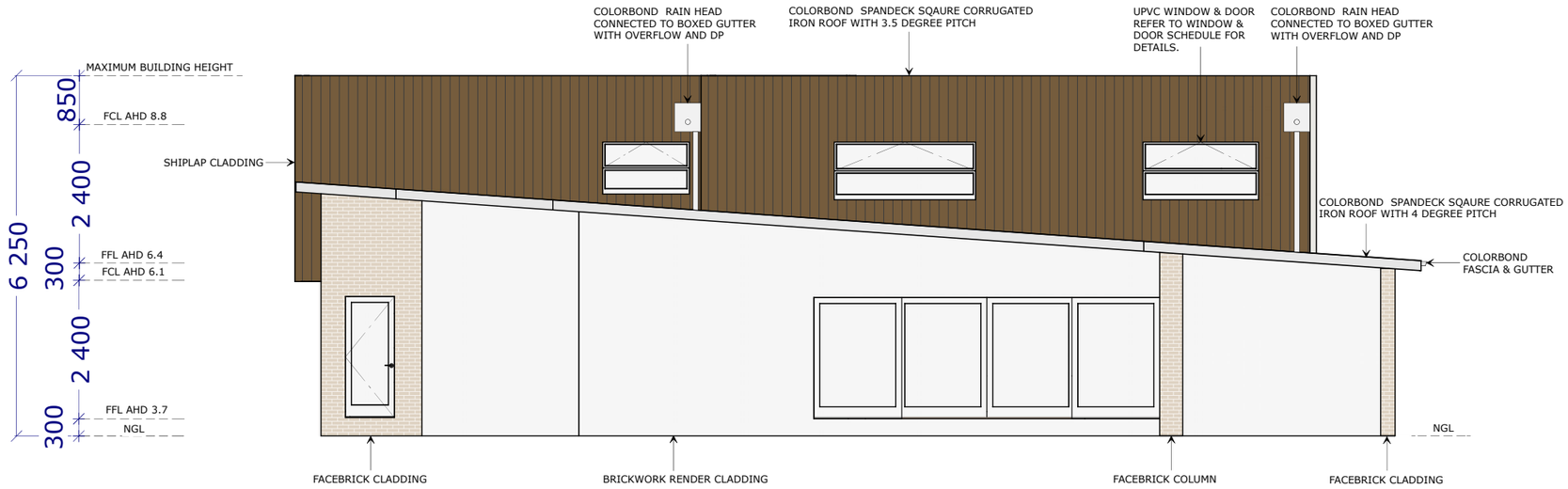
DATE: MAY 2025

NE & SE ELEVATION PLAN

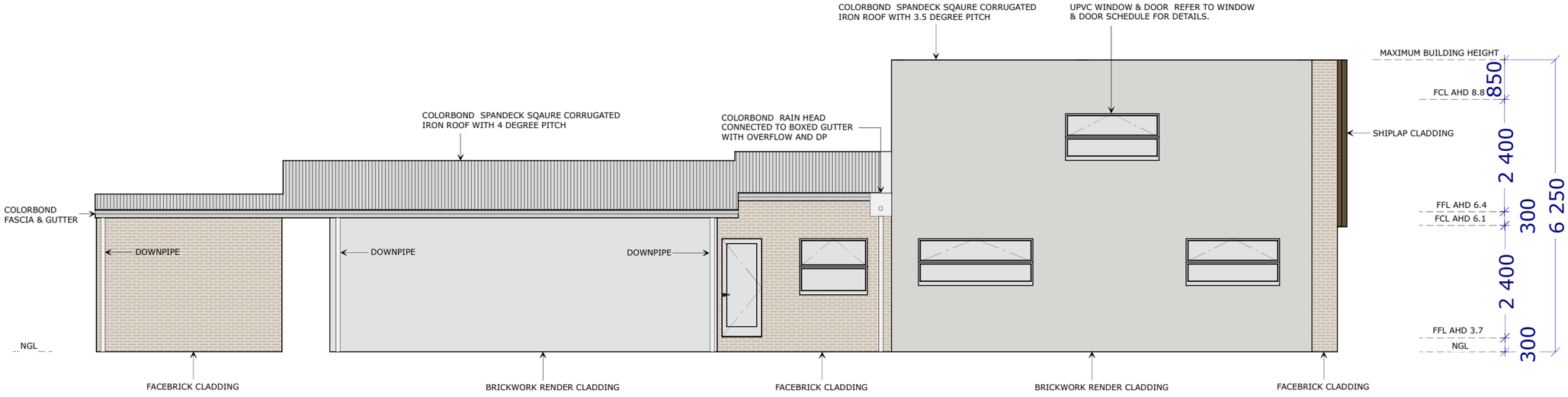
DRAWING NUMBER 2025-05-WD04
REV

A3

TITLE REFERENCE.
VOLUME FOLIO
180356 1



NORTH WEST ELEVATION



SOUTH WEST ELEVATION

AREA
LAND AREA: 1000sqm
SITE COVERAGE: 374sqm= 37.4%

AREA FREE FROM
IMPERVIOUS SURFACES: 402sqm= 40.2%

FLOOR AREA
FIRST FLOOR AREA: 294.8sqm
SECOND FLOOR AREA: 131sqm

TOTAL FLOOR AREA: 425.8sqm

BUILDING DESIGNER:
SAM BURNETT

ACCREDITATION No:
CC6609

NORTH

NO.	REVISION

PROJECT

PROPOSED NEW DWELLING
11 AQUA PLACE
SEVENMILE BEACH
7170

SCALE: 1:100

DRAWN: DC
CHECKED: SB

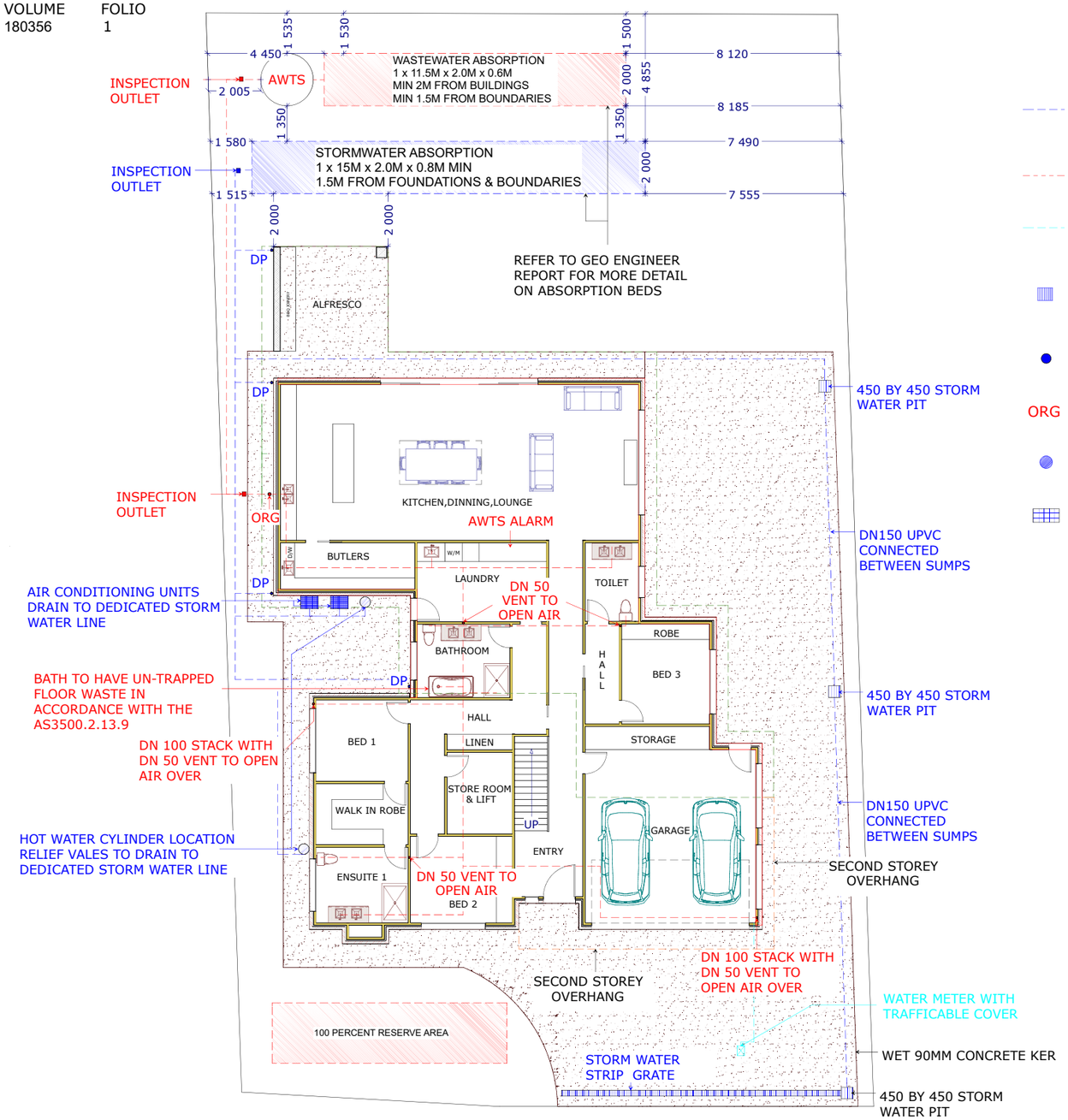
DATE: MAY 2025

NW & SW ELEVATION PLAN

DRAWING NUMBER 2025-05-WD05
REV

A3

TITLE REFERENCE.
VOLUME FOLIO
180356 1



SITE & FIRST FLOOR PLUMBING PLAN

AREA

LAND AREA:	1000sqm
SITE COVERAGE:	374sqm= 37.4%
AREA FREE FROM IMPERVIOUS SURFACES:	402sqm= 40.2%

FLOOR AREA

FIRST FLOOR AREA:	294.8sqm
SECOND FLOOR AREA:	131sqm
TOTAL FLOOR AREA:	**425.8sqm**

PIPE SIZE LEGEND:

- DN 100 UPVC STORMWATER DRAIN CONNECTED TO ON SITE BRANCH CONNECTION (BLUE)
- DN 100 UPVC VENTED SEWER DRAIN (RED) MIN FALL 1 IN 60
- DN 25 WATER LINE (LIGHT BLUE)
- 450 x 450 x 600 DEEP GRATED SUMP DN150 UPVC CONNECTED BETWEEN SUMPS
- DP - DN 90 UPVC DOWN PIPE
- ORG - OVERFLOW RELIEF GULLY WITH TAP OVER
- HOT WATER CYLINDER
- AIRCON OUTDOOR UNITS

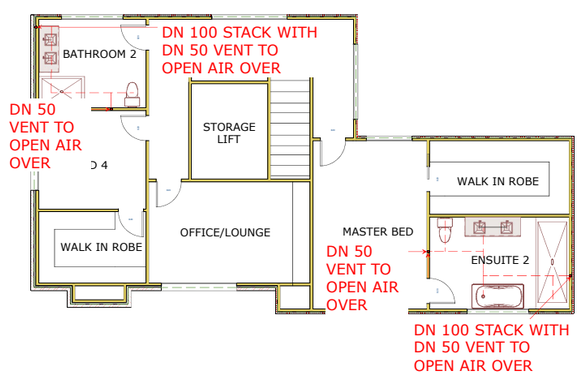
FIXTURE OUTLET SIZES:

W.C-DN100	SHOWER-DN50
SINK-DN50	TROUGH-DN50
BASIN-DN40	BATH-DN40

TOTAL ROOF SURFACE AREA : 374sqm

DRIVEWAY SURFACE AREA: 208.5sqm

TOTAL STORM WATER COLLECTION AREA: 582.5sqm



SECOND FLOOR PLUMBING PLAN

BUILDING DESIGNER:
SAM BURNETT

ACCREDITATION No:
CC6609

NORTH

NO.	REVISION

PROJECT

PROPOSED NEW DWELLING
11 AQUA PLACE
SEVENMILE BEACH
7170

SCALE: 1:200

DRAWN: DC
CHECKED: SB

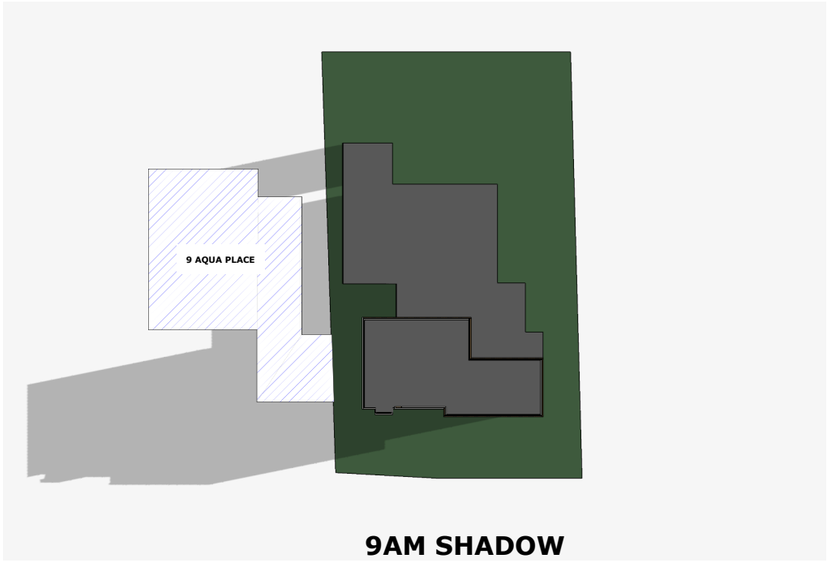
DATE: MAY 2025

PLUMBING PLAN

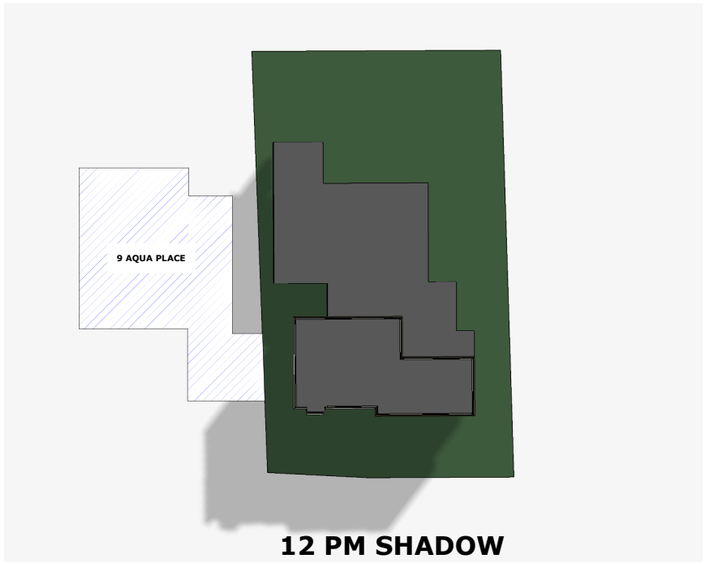
DRAWING NUMBER 2025-05-WD06
REV

A3

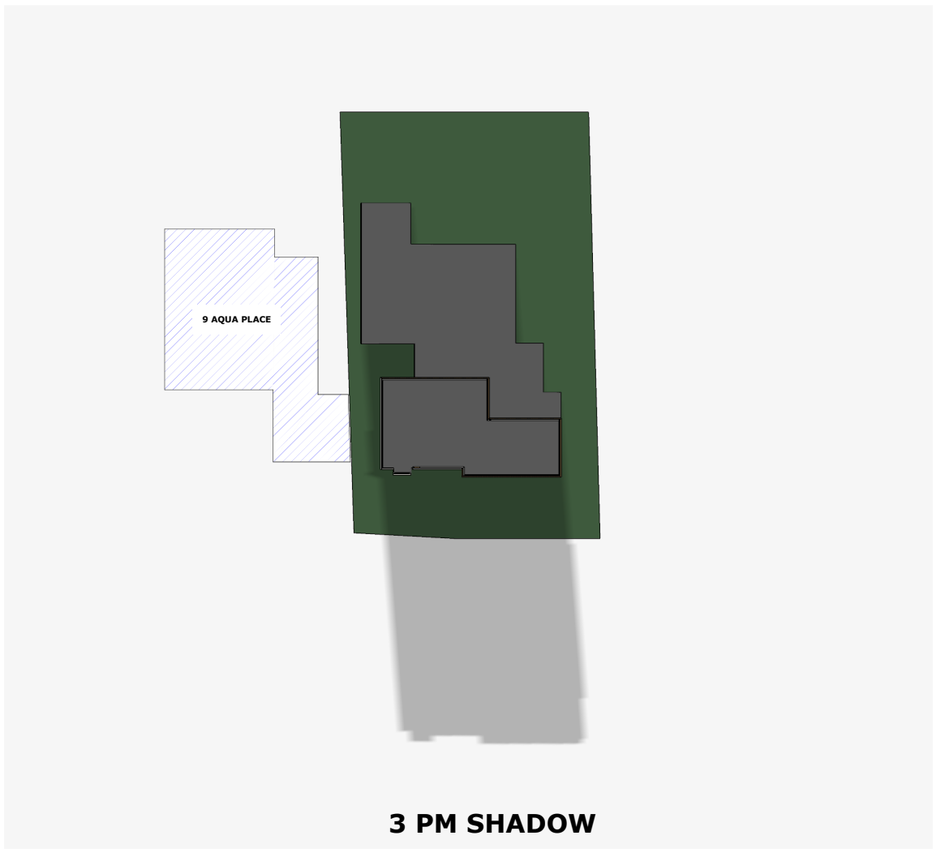
TITLE REFERENCE.
VOLUME FOLIO
180356 1



9AM SHADOW



12 PM SHADOW



3 PM SHADOW

AREA
LAND AREA: 1000sqm
SITE COVERAGE: 374sqm= 37.4%

AREA FREE FROM
IMPERVIOUS SURFACES: 402sqm= 40.2%

FLOOR AREA
FIRST FLOOR AREA: 294.8sqm
SECOND FLOOR AREA: 131sqm

TOTAL FLOOR AREA: 425.8sqm

JUNE 21ST
9AM-3PM SHADOW
LATITUDE: 42.85 S
LONGITUDE: 147.50 E

BUILDING DESIGNER:
SAM BURNETT

ACCREDITATION No:
CC6609

NORTH

NO.	REVISION

PROJECT

PROPOSED NEW DWELLING
11 AQUA PLACE
SEVENMILE BEACH
7170

SCALE: 1:600

DRAWN:	CHECKED:
DC	SB

DATE: MAY 2025

SHADOW DIAGRAM PLAN

DRAWING NUMBER	REV
2025-05-WD07	
	A3

WINDOW SCHEDULE

WINDOW NUMBER	LOCATION	SIZE (WxH)	SILL HEIGHT	OPENING TYPE	FRAME COLOUR	FRAME MATERIAL	GLASS TYPE	GLASS COLOUR	'U' VALUE	SHGC	SPECIAL NOTES
W101	BED 2	2450 x 1000	1100	AWNING	SURFMIST	UPVC	DBL GLAZED	CLEAR			
W102	ENTRY	500 x 1900	200	FIXED	SURFMIST	UPVC	DBL GLAZED	CLEAR			
W103	GARAGE	2450 x 1250	850	AWNING	SURFMIST	UPVC	DBL GLAZED	CLEAR			
W104	GARAGE	2450 x 1250	850	AWNING	SURFMIST	UPVC	DBL GLAZED	CLEAR			
W105	BED 3	2450 x 1000	1100	AWNING	SURFMIST	UPVC	DBL GLAZED	CLEAR			
W106	TOILET	1200 x 1200	900	AWNING	SURFMIST	UPVC	DBL GLAZED	WHITE			
W107	LOUNGE	4000 x 600	2200	FIXED	SURFMIST	UPVC	DBL GLAZED	CLEAR			
W108	BATHROOM	1450 x 1200	900	AWNING	SURFMIST	UPVC	DBL GLAZED	WHITE			
W109	BED 1	2450 x 1000	1100	AWNING	SURFMIST	UPVC	DBL GLAZED	CLEAR			
W110	ENSUITE	2000 x 1000	1100	AWNING	SURFMIST	UPVC	DBL GLAZED	WHITE			
W111	MASTER BED	2000 x 1300	800	AWNING	SURFMIST	UPVC	DBL GLAZED	CLEAR			
W112	ENSUITE 2	2000 x 1300	800	AWNING	SURFMIST	UPVC	DBL GLAZED	CLEAR			
W113	MASTER BED	1500 x 900	1200	AWNING	SURFMIST	UPVC	DBL GLAZED	CLEAR			
W114	HALL	2450 x 1350	750	AWNING	SURFMIST	UPVC	DBL GLAZED	CLEAR			
W115	BATHROOM 2	2000 x 1350	750	AWNING	SURFMIST	UPVC	DBL GLAZED	WHITE			
W116	BED 4	2000 x 1000	1100	AWNING	SURFMIST	UPVC	DBL GLAZED	CLEAR			
W117	OFFICE	2450 x 1300	800	AWNING	SURFMIST	UPVC	DBL GLAZED	CLEAR			

DOOR SCHEDULE

DOOR NUMBER	LOCATION	SIZE (WxH)	OPENING	FRAME COLOUR	FRAME MATERIAL	GLASS TYPE	GLASS COLOUR	'U' VALUE	SHGC	SPECIAL NOTES
D101	ENTRY	1210 x 2100	R/H SWING	BROWN	TIMBER	DBL GLAZED	WHITE			
D102	GARAGE	6000 x 2200	PANEL LIFT	SURFMIST	ALUMINIUM	N/A	N/A			
D103	GARAGE	950 x 2100	L/H SWING	SURFMIST	UPVC	DBL GLAZED	CLEAR			
D104	LOUNGE	6000 x 2100	TRACK SLIDER	SURFMIST	UPVC	DBL GLAZED	CLEAR			
D105	LAUNDRY	900 x 2100	R/H SWING	SURFMIST	UPVC	DBL GLAZED	CLEAR			

BUILDING DESIGNER:
SAM BURNETT

ACCREDITATION No:
CC6609

NORTH

NO.	REVISION

PROJECT

PROPOSED NEW DWELLING
11 AQUA PLACE
SEVENMILE BEACH
7170

SCALE: N/A

DRAWN: DC | **CHECKED:** SB

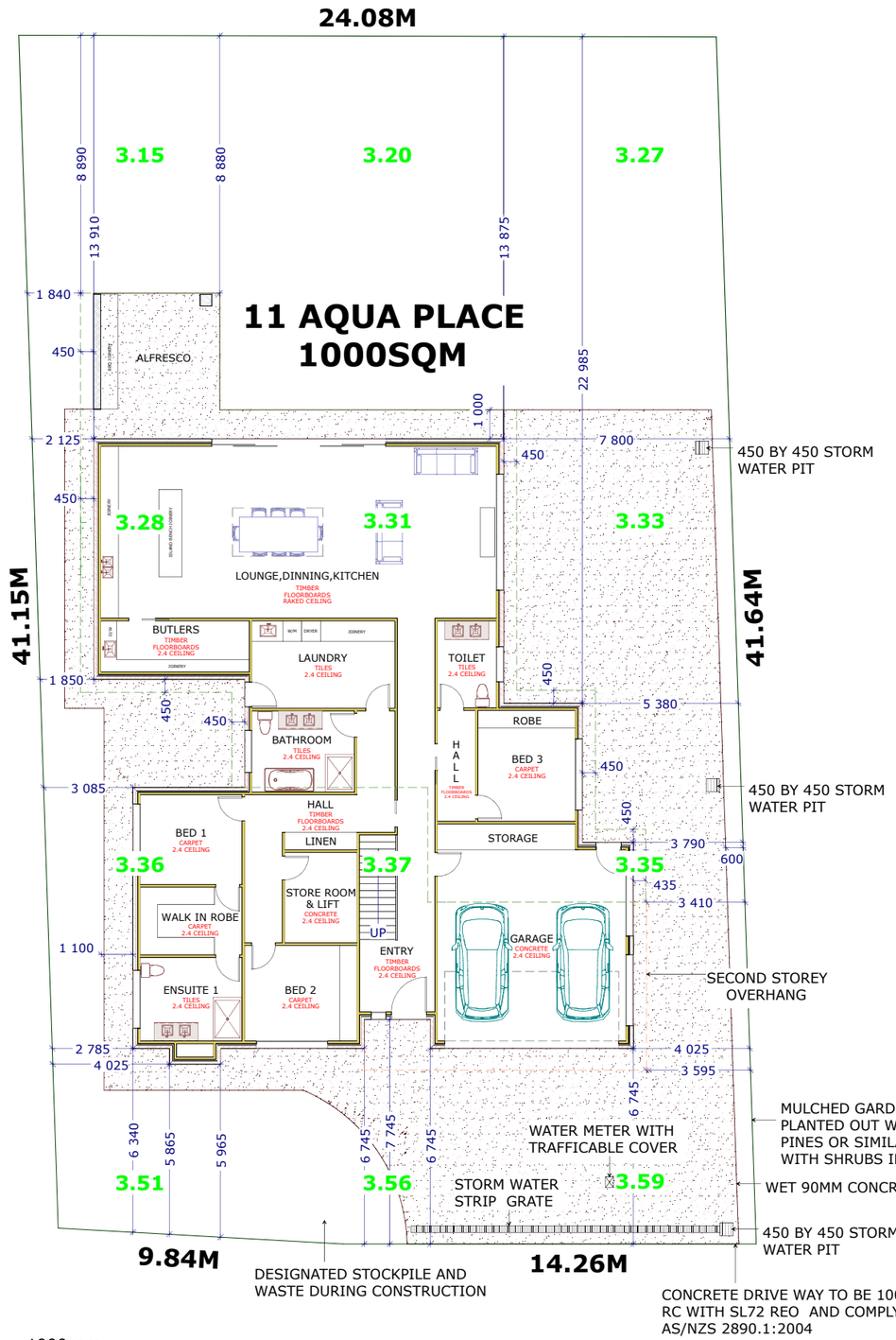
DATE: MAY 2025

WINDOW AND DOOR SCHEDULE PLAN

DRAWING NUMBER 2025-05-WD08 | **REV**

A3

TITLE REFERENCE.
VOLUME FOLIO
180356 1



AREA

LAND AREA:	1000sqm
SITE COVERAGE:	374sqm= 37.4%
AREA FREE FROM IMPERVIOUS SURFACES:	402sqm= 40.2%

FLOOR AREA

FIRST FLOOR AREA:	294.8sqm
SECOND FLOOR AREA:	131sqm
TOTAL FLOOR AREA:	**425.8sqm**

SITE ANALYSIS

CONSTRUCTION
PROPOSED NEW DWELLING AT 11 AQUA PLACE SEVENMILE BEACH 7170.

STOCKPILE AND WASTE
DESIGNATED STOCKPILE & WASTE DURING CONSTRUCTION.

SAFEGAURDING OF AIRPORTS CODE
THIS PROPERTY IS FOR RESIDENTIAL USE AND IS TO BE CONSTRUCTED AND COMPLY TO AS2021-2015 ACOUSTICS - AIRCRAFT NOISE INTRUSION - BUILDING SITING AND CONSTRUCTION.

COASTAL EROSION HAZARD
FINISHED FLOOR LEVEL TO BE ABOVE 3.2 AHD REFER TO GEO ENGINEER REPORT FOR MORE DETAIL.

SET BACKS
FRONT AND REAR SET BACKS COMPLY WITH 10.4.3 PERFORMANCE CRITERIA P1 & P2. THE FRONT AND SIDE SET BACKS OF THE DWELLING ARE COMPATIBLE WITH THE EXISTING ESTABLISHED PROPERTIES IN THE AREA. BOTH PROPERTIES EITHER SIDE OF THE DWELLING 9 & 13 AQUA PLACE HAVE SET BACKS OF LESS THAN 8M TO THERE FRONT BOUNDARIES AND LESS THAN 5M TO THERE SIDE BOUNDARIES.

SITE COVERAGE
SITE COVERAGE COMPLIES WITH 10.4.4 PERFORMANCE CRITERIA P1
THE EXISTING ESTABLISHED PROPERTIES IN THE AREA SUCH AS: 9,7,6 AQUA PLACE ARE OVER THE 30% SITE COVERAGE AND ARE CONSISTENT WITH THIS DWELLING. NO CONSTRAINTS ARE IMPOSED AND HAS CAPACITY TO ABSORB RUNOFF. THE DEVELOPMENT HAS AMPLE LANDSCAPING AND P.O.S TO THE REAR OF THE DWELLING. NO REMOVAL OF VEGETATION NEEDED DUE TO SITE COVERAGE.

VEGETATION
N/A

SUN/SHADOW/PRIVACY/VIEWS
THE PROPOSED DWELLING RECEIVES THE MINIMUM AMOUNT ON SUN TO PRIVATE OPEN SPACE AREAS AND WINDOWS. NO NEIGHBORING PROPERTY'S ARE EFFECTED BY OVER SHADOWING OR BLOCKING OF VIEWS AND THE DWELLING DOES NOT GIVE ANY UNREASONABLE LOSS OF AMENITY.

PLUMBING
SEWER TO BE CONNECTED TO AWTS WITH ABSORPTION TRENCH. STORM WATER TO BE CONNECTED TO ABSORPTION TRENCH. REFER TO PLUMBING PLAN AND GEO ENGINEER REPORT FOR MORE DETAIL.

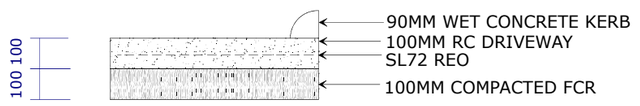
BAL RATING
BAL LOW REFER TO BAL RATING ASSESSMENT FOR MORE DETAIL.

NOTES

ALL CONSTRUCTION IS TO COMPLY WITH THE BUILDING CODE OF AUSTRALIA AND ALL RELEVANT AUSTRALIAN STANDARDS

CONSTRUCTION STANDARDS:
ALL WORKS SHOULD BE GENERALLY INLINE WITH THE PRACTICES SET OUT IN THE 'GUIDE TO STANDARDS AND TOLERANCES 2007'

NUMBERS IN GREEN ON SITE PLAN ARE CONTOUR ELEVATION HEIGHTS TO AHD



DRIVEWAY DETAIL
1:20

BUILDING DESIGNER:
SAM BURNETT

ACCREDITATION No:
CC6609

NORTH

NO.	REVISION

PROJECT

PROPOSED NEW DWELLING
11 AQUA PLACE
SEVENMILE BEACH
7170

SCALE: 1:200

DRAWN: DC
CHECKED: SB

DATE: MAY 2025

SITE PLAN

DRAWING NUMBER 2025-05-WD01
REV

A3

TAS BUSHFIRE CONSULTING

11 AQUA PLACE SEVEN MILE BEACH 7170

BUSHFIRE HAZARD REPORT

The information in this report is based on the instructions of AS 3959:2018 - Construction of Buildings in Bushfire Prone Areas and the Directors Determination – Bushfire Hazard Areas

Prepared by: Tas Bushfire Consulting
15/06/2025

CONTENTS

Associated Documents:

- Form 55

DISCLAIMER

Please remember that the measures contained in this report cannot guarantee that a building will survive in the event of a bushfire on every occasion. This is substantially due to the degree of vegetation management, the unpredictable nature and behaviour of fire and extreme weather conditions.

In preparation of this document, all reasonable steps have been taken to ensure that the information in this report is correct and accurately reflects, both the conditions of the considered allotment and its surroundings on the date of this assessment.

EXECUTIVE SUMMARY

This Bushfire Hazard report is prepared for the proposed dwelling at 11 Aqua Place Seven Mile Beach (C.T. 180356/1) as per the plans supplied by Sam Burnett Building Designer – May 2025 – Drawing No. 2025-05-WD01. This report is prepared as part of the documentation for Building Approval.

The property has been mapped as being bushfire prone being within the Bushfire-Prone Areas overlay of the Tasmanian Planning Scheme.

Using AS 3959:2018 simplified procedure, method 1, the bushfire attack level of the site has been assessed as **BAL Low**. No bushfire requirements are relevant in this proposal.

DESCRIPTION OF PROPOSAL

Location	11 Aqua Place Seven Mile Beach
Title reference	180356/1
Property ID	9494381
Lot size	1000m²
Zoning	Low Density
Council	Clarence
Development type	Proposed dwelling
Environs	Surrounded by mostly managed residential lots and low risk land. The site has been assessed as having no bushfire prone vegetation within 100m of the proposed building. Plantation forest at 100m to the North-West. There is a cleared fire break between the forest and Woodhurst Road. This land has been assessed as low risk. If this land was to go unmanaged it has the potential to become 'grassland' but separation from proposed dwelling exceeds minimum requirements, hence the 'low risk' assessment.

Assessed by:

Jake Bell
Tas Bushfire Consulting
M: 0407 167 231
E: admin@tasbushfire.com.au

Accredited person under part 4a of the Fire Service Act 1979
BFP-154

BUSHFIRE SITE ASSESSMENT

The lot and its surroundings were inspected. Please see table 1 below for results. These results were calculated on Tasmania's FDI of 50.

	North	East	South	West
Veg <100m	0-100m managed/low risk	0-100m managed/low risk	0-100m managed/low risk	0-100m managed/low risk
Slope (degrees over 100m)	Level/upslope	Level/upslope	Level/upslope	Level/upslope
Bushfire Attack Level	*LOW*	*LOW*	*LOW*	*LOW*

All land within 100m of the proposed dwelling has been assessed as managed or low risk.
There are no bushfire specific protection measures required, as per AS 3959:2018 requirements. The site has been assessed as **BAL Low**.

CONCLUSION

The proposed dwelling (as per plans supplied by Sam Burnett Building Designer – May 2025 – Drawing No. 2025-05-WD01) has been assessed and is considered to be BAL *Low* in accordance with all relevant Standards and Codes.

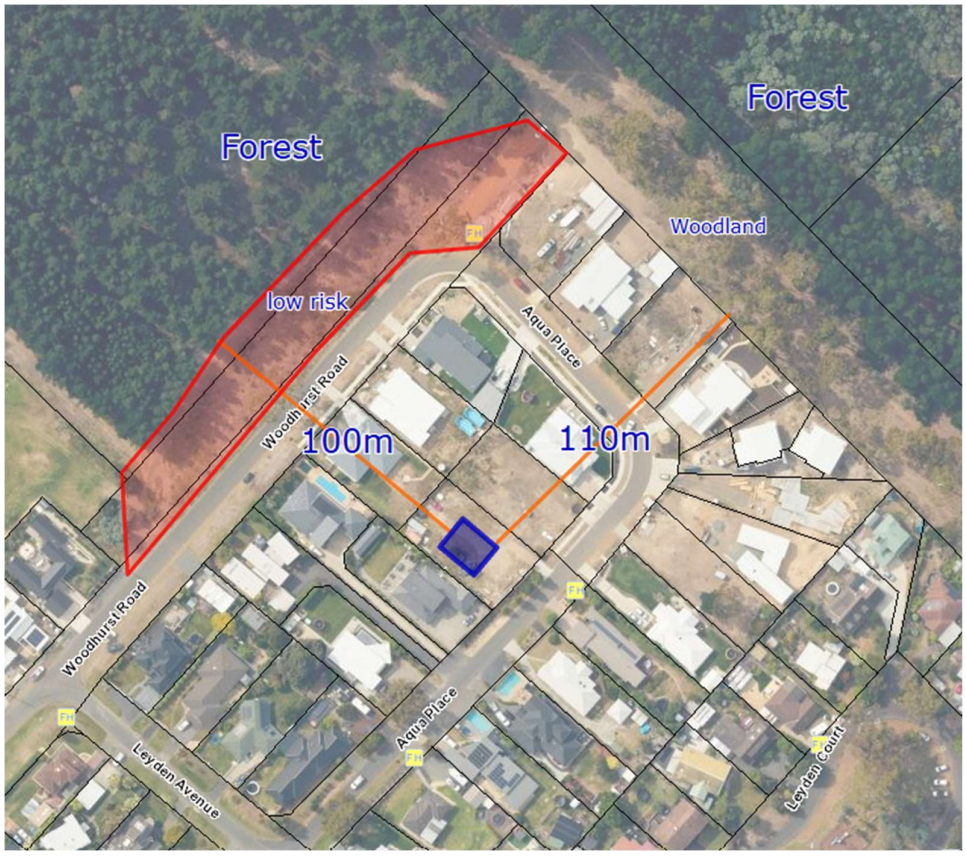
There are no specific bushfire design measures required for the proposed dwelling.

For other valuable resources regarding building for bushfires and bushfires in general see the Tasmanian fire service website: www.fire.tas.gov.au

REFERENCES

- Directors Determination – Bushfire Hazard Areas (v1.2)
- Standards Australia Limited. AS 3959:2018 – Construction of Buildings in Bushfire Prone Areas
- Tasmanian Planning Scheme
- Australian Building Codes Board. 2022 National Construction Code – volume two
- Tasmanian government DPIPWE - LISTmap & TASVEG 4.0 map

AERIAL IMAGERY & SITE PHOTO



Aerial view showing mostly developed and managed residential properties. There is a plantation forest to the North-West which was measured at approx. 100-101m from the proposed dwelling. There is a cleared fire break between the forest and Woodhurst Road (photo below). This fire break has the potential to become 'grassland' if left unmanaged but the existing separation (75m) from the proposed dwelling exceeds minimum requirements (50m) so this area has been assessed as posing an insufficient increase in risk.

CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

Form 55

To: Danny Chandler *Owner /Agent*

Address

Suburb/postcode

Qualified person details:

Qualified person: Jake Bell

Address: 369 Westbury Road

Prospect Vale 7250

Phone No: 0407 167 231

Fax No:

Licence No: BFP-154

Email address: admin@tasbushfire.com.au

Qualifications and Insurance details: Accredited to report on bushfire hazards under part IVA of the Fire Service Act 1979

(description from Column 3 of the Director's Determination - Certificates by Qualified Persons for Assessable Items

Speciality area of expertise: Analysis of hazards in bushfire-prone areas

(description from Column 4 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

Details of work:

Address: 11 Aqua Place

Seven Mile Beach 7170

Lot No: 1

Certificate of title No: 180356

The assessable item related to this certificate: Bushfire Hazard Report

(description of the assessable item being certified)
Assessable item includes –
- *a material;*
- *a design*
- *a form of construction*
- *a document*
- *testing of a component, building system or plumbing system*
- *an inspection, or assessment, performed*

Certificate details:

Certificate type: Bushfire Hazard

(description from Column 1 of Schedule 1 of the Director's Determination - Certificates by Qualified Persons for Assessable Items n)

This certificate is in relation to the above assessable item, at any stage, as part of - *(tick one)*

building work, plumbing work or plumbing installation or demolition work: X

or

a building, temporary structure or plumbing installation: ☐

In issuing this certificate the following matters are relevant –

Documents:	Bushfire Hazard Report (Dated 15/06/2025)
Relevant calculations:	
References:	Directors Determination – Bushfire Hazard Areas Bushfire Hazard Advisory Note #1

Substance of Certificate: (what it is that is being certified)

The Bushfire Attack Level is assessed for the site.
The site was assessed as having a Bushfire Attack Level of *Low.* There are no specific design measures required for any proposed work at this address.

Scope and/or Limitations

Site assessment is specific to the proposed site plan provided by Sam Burnett Building Designer – May 2025 – Drawing no. 2025-05-WD01. Any variation to this plan will require re-assessment.

I certify the matters described in this certificate.

	Signed:	*Certificate No:*	*Date:*
Qualified person:	Jake Bell	BFP-154	15/06/2025

STORMWATER ASSESSMENT

11 Aqua Place

Seven Mile Beach

July 2025

GES

GEO-ENVIRONMENTAL

SOLUTIONS

Investigation Details

Client:	Danny Chandler
Site Address:	11 Aqua Place, Seven Mile Beach
Date of Inspection:	17/06/2025
Proposed Works:	New house
Investigation Method:	Geoprobe 540UD - Direct Push
Inspected by:	C. Cooper

Site Details

Certificate of Title (CT):	180356/1
Title Area:	Approx. 1017 m²
Applicable Planning Overlays:	Bushfire-prone areas, Coastal Inundation Hazard, Airport obstacle limitation area, Airport noise exposure area
Slope & Aspect:	Flat with no dominant aspect
Vegetation:	Grass & Weeds
Ground Surface:	Disturbed

Background Information

Geology Map:	MRT 1:250000
Geological Unit:	Quaternary Sediments
Climate:	Annual rainfall 550mm
Water Connection:	Mains
Sewer Connection:	Unserviced-On-site required
Testing and Classification:	*AS2870:2011, AS1726:2017*

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
0.00-0.20	0.00-0.30	0.00-0.10	GW	**FILL: Gravelly SAND**: Brown, slightly moist, very dense
0.20-0.30	0.30-0.40	0.10-0.20	SP	**Silty SAND (SP)**: Dark grey, slightly, moist, loose.
0.30-1.60	0.40-1.40	0.20-0.90	SP	**Silty SAND (SP)**: Yellow-pale brown, slightly moist to moist, medium dense.
1.60-3.00	1.40-2.00	0.90-2.00	SP	**Silty SAND (SP)**: Grey-pale brown, wet, dense, water table encountered at 1.6m (BH1) 1.4m (BH2), 0.9m (BH3), no refusal.

Soil Conditions

The soils on site consist of deep sand deposits which have developed from Quaternary Sediments. A high permeability of approximately 1.5-5m/day is expected.

GES have identified the following at the site:

- The site has a flat slope with no dominant aspect and presents a low risk to slope stability and landslip
- There are no proposals for cuts or change of grade which will impact on any proposed onsite stormwater absorption,
- The site soils have been identified as comprising of silty sands.
- The water table at the proposed absorption trench site is estimated to be approximately 0.9 m below ground surface and will not restrict soil infiltration capacity
- There is a low risk of the natural soils being impacted by contamination;
- There is no evidence to suggest saline water intrusion at the site
- Bedrock was not encountered.

Soil Dispersion

The site soils have been identified as non-dispersive (Emerson class 8).

Existing Conditions and Assumptions

The site covers an area of approximately 1017m^2 with a proposed roof area of approx. 329m^2 in addition to a paved area of approximately 271m^2 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 drainage system comprising of Grated Sumps and PVC Pipes, coupled with discharged to the surface over grassed areas in order to provide minimum disturbance to the subsoils.

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 pre- developed 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 15m absorption trench is designed over a 20-minute storm duration for proposed development.

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 frequency	Inspection and criteria	Maintenance activities (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
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

STORAGE TRENCH

Hydrology		
Total Catchment Area	600	m^2
Runoff Coefficient	0.955	
Annunal Recurrence Interval (ARI)	20	yr
Ground Conditions		
Hydraulic conductivity (K)	5	m/day
	3.470	mm/min
Adjusted Rate (15% clogging factor)	2.950	mm/min
Trench Design		
Length	15	m
Width	2	m
Depth	0.8	m
Infiltration Area	30	m^2
Porosity	0.35	%
Trench Storage	8.40	m^3
	8400	L

Final Check			
Criteria	**Requirement**	**Design**	**Check**
Detention reqd	7250	8400	OK

STORM CHECK

Storm Duration	Intensity	Inflow Volume	Outflow Volume	Required Storage	Emptying time
	(mm/hr)	(m^3)	(L)	(L)	(hr)
1 min	**138**	1318	88	1229	0.23
2 min	**108**	2063	177	1886	0.36
3 min	**97.6**	2796	265	2531	0.48
4 min	**90.3**	3449	354	3096	0.58
5 min	**84.3**	4025	442	3583	0.67
10 min	**64**	6112	885	5227	0.98
15 min	**52.1**	7463	1327	6136	1.16
20 min	**44.4**	8480	1770	6711	1.26
25 min	**38.9**	9287	2212	7075	1.33
30 min	**34.8**	9970	2655	7316	1.38
45 min	**27**	11603	3982	7621	1.44
1 hour	**22.5**	12893	5309	7583	1.43
1.5 hour	**17.5**	15041	7964	7078	1.33
2 hour	**14.8**	16961	10618	6343	1.19
3 hour	**11.7**	20112	15927	4185	0.79
4.5 hour	**9.41**	24264	23891	373	0.07
6 hour	**8.1**	27848	31855	-	-
9 hour	**6.59**	33985	47782	-	-
12 hour	**5.68**	39056	63709	-	-
18 hour	**4.56**	47032	95564	-	-
24 hour	**3.86**	53083	127418	-	-
30 hour	**3.35**	57587	159273	-	-
36 hour	**2.97**	61265	191128	-	-
48 hour	**2.41**	66285	254837	-	-
72 hour	**1.74**	71785	382255	-	-
			Full volume	8400	1.44

Notes:

Inflow volume calculated using Equation 10.1 (WSUD Guidelines: Chapter 10)

Outflow volume calculated using Equation 10.2 (WSUD Guidelines: Chapter 10)

Required storage and emptying time is left blank when outflow volume exceeds inflow volume

Location

Label: Seven Mile Beach
Easting: 541474
Northing: 5255224
Zone: 55
Latitude: Nearest grid cell: 42.8625 (S)
Longitude: Nearest grid cell: 147.5125 (E)

IFD Design Rainfall Intensity (mm/h)

Issued: 27 June 2025

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

Table | Chart | Coefficients

Unit: mm/h

	Annual Exceedance Probability (AEP)						
Duration	**63.2%**	**50%#**	**20%***	**10%**	**5%**	**2%**	**1%**
1 min	62.2	70.2	97.1	117	138	168	193
2 min	52.9	59.2	79.7	94.1	108	125	138
3 min	46.9	52.6	71.2	84.5	97.6	114	127
4 min	42.4	47.7	65.1	77.6	90.3	107	121
5 min	38.8	43.8	60.1	72.0	84.3	101	115
10 min	28.3	32.0	44.6	54.0	64.0	78.7	91.0
15 min	23.0	26.0	36.2	43.9	52.1	64.3	74.5
20 min	19.7	22.2	30.9	37.4	44.4	54.5	63.0
25 min	17.4	19.6	27.2	32.9	38.9	47.5	54.8
30 min	15.7	17.7	24.5	29.5	34.8	42.3	48.6
45 min	12.5	14.1	19.3	23.1	27.0	32.4	36.8
1 hour	10.6	11.9	16.3	19.4	22.5	26.8	30.1
1.5 hour	8.48	9.53	12.9	15.2	17.5	20.6	22.9
2 hour	7.25	8.14	11.0	12.9	14.8	17.2	19.0
3 hour	5.82	6.55	8.79	10.3	11.7	13.5	14.9
4.5 hour	4.68	5.28	7.09	8.28	9.41	10.9	12.0
6 hour	4.00	4.53	6.11	7.13	8.10	9.39	10.3
9 hour	3.19	3.62	4.93	5.78	6.59	7.69	8.51
12 hour	2.70	3.07	4.22	4.96	5.68	6.67	7.43
18 hour	2.10	2.40	3.34	3.96	4.56	5.42	6.07
24 hour	1.73	1.99	2.80	3.33	3.86	4.61	5.20
30 hour	1.48	1.71	2.41	2.89	3.35	4.03	4.56
36 hour	1.30	1.50	2.12	2.55	2.97	3.58	4.06
48 hour	1.04	1.20	1.71	2.07	2.41	2.92	3.31
72 hour	0.749	0.863	1.23	1.49	1.74	2.10	2.39
96 hour	0.586	0.673	0.955	1.15	1.35	1.62	1.85
120 hour	0.482	0.553	0.779	0.934	1.10	1.31	1.49
144 hour	0.411	0.471	0.657	0.783	0.918	1.10	1.25
168 hour	0.359	0.411	0.569	0.672	0.788	0.942	1.07

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 V5.05

Geo-Environmental Solutions

Location: Seven Mile Beach
Site: 600m² with tc = 20 and tcs = 10 mins.
PSD: AEP of 5%, Underground rectangular tank PSD = 2.86L/s
Storage: AEP of 5%, Underground rectangular tank volume = 7.25m³

Design Criteria

(Custom AEP IFD data used)

Location =	Seven Mile Beach	
Method =	E	(A)RI 2001,A(E)P 2019
PSD annual exceedance probabiliy (APE) =	5	%
Storage annual exceedance probabiliy (APE) =	5	%
Storage method =	U	(A)bove,(P)ipe,(U)nderground,(C)ustom

Site Geometry

Site area (As) =	600	m²	=	0.06 Ha
Pre-development coefficient (Cp) =	0.30			
Post development coefficient (Cw) =	0.95			
Total catchment (tc) =	20	minutes		
Upstream catchment to site (tcs) =	10	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	600	0.30	180
Total	600 m²		180

Cp = ΣArea*C/Total = 0.300

Post development

Zone	Area (m²)	C	Area * C
Concrete	271	0.90	244
Roof	329	1.00	329
Gravel	0	0.50	0
Garden	0	0.30	0
Total	600 m²		573

Cw = ΣArea*C/Total = 0.955

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

PSD Intensity (I) =	44.4	mm/hr	For catchment tc = 20 mins.	
Pre-development (Qp = Cp*I*As/0.36) =	2.22	L/s		
Peak post development (Qa = 2*Cw*I*As/0.36) =	14.06	L/s	=(0.317 x I)	Eq. 2.24
Storage method =	U		(A)bove,(P)ipe,(U)nderground,(C)ustom	
Permissible site discharge (Qu = PSD) =	2.860	L/s		

Above ground - Eq 3.8

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

Taking x as = PSD and solving

a = 1.0 b = -27.6 c = 62.4

$PSD = -b \pm \sqrt{(b^2-4ac)}/(2a)$

PSD = 2.487 L/s

Below ground pipe - Eq 3.3

$Qp = PSD*[1.6*tcs/\{tc*(1-2*PSD/(3*Qa))\}-0.6*tcs^{2.67}/\{tc*(1-2*PSDp/(3*Qa))\}^{2.67}]$

= 2.22

PSD = 2.825 L/s

Below ground rectangular tank - Eq 3.4

t =tcs/(tc*(1-2*PSD/(3*Qa))) = 0.578

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

= 2.22

PSD = 2.860 L/s

Design Storage Capacity (AEP of 5%)

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

td (mins)	I (mm/hr)	Qa (L/s)	Above Vs (m^3)	Pipe Vs (m^3)	B/G Vs (m^3)
5	84.3	26.7			3.52
16	50.3	16.0			6.11
21	43.1	13.7			6.59
26	38.0	12.0			6.88
32	33.4	10.6			7.09
37	30.5	9.7			7.19
42	28.2	8.9			7.24
47	26.2	8.3			7.25
53	24.3	7.7			7.22
58	23.0	7.3			7.17

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

Type	td (mins)	I (mm/hr)	Qa (L/s)	Vs (m^3)
Above				
Pipe				
B/ground	46.0	26.6	8.4	**7.25**

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) = 1.87 L/s at which time above ground storage occurs

$I = 360*Qp2/(2*Cw*As*10^3)$ = 5.9 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

Type	td (mins)	Qa (L/s)	Vs (L/s)	tf (mins)	te (mins)	Ps (mins)
Above						
Pipe						
B/ground	46.0	8.4	7.2	35.6	125.9	161.5

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

Orifice

Permissible site discharge (Qu=PSD) = 2.86 L/s (Underground storage)

Orifice coefficient (CD) = 0.61 For sharp circular orifice

Gravitational acceration (g) = 9.81 m/s^2

Maximum storage depth above orifice (H) = 400 mm

Orifice flow (Q) = $CD*Ao*\sqrt{(2*g*H)}$

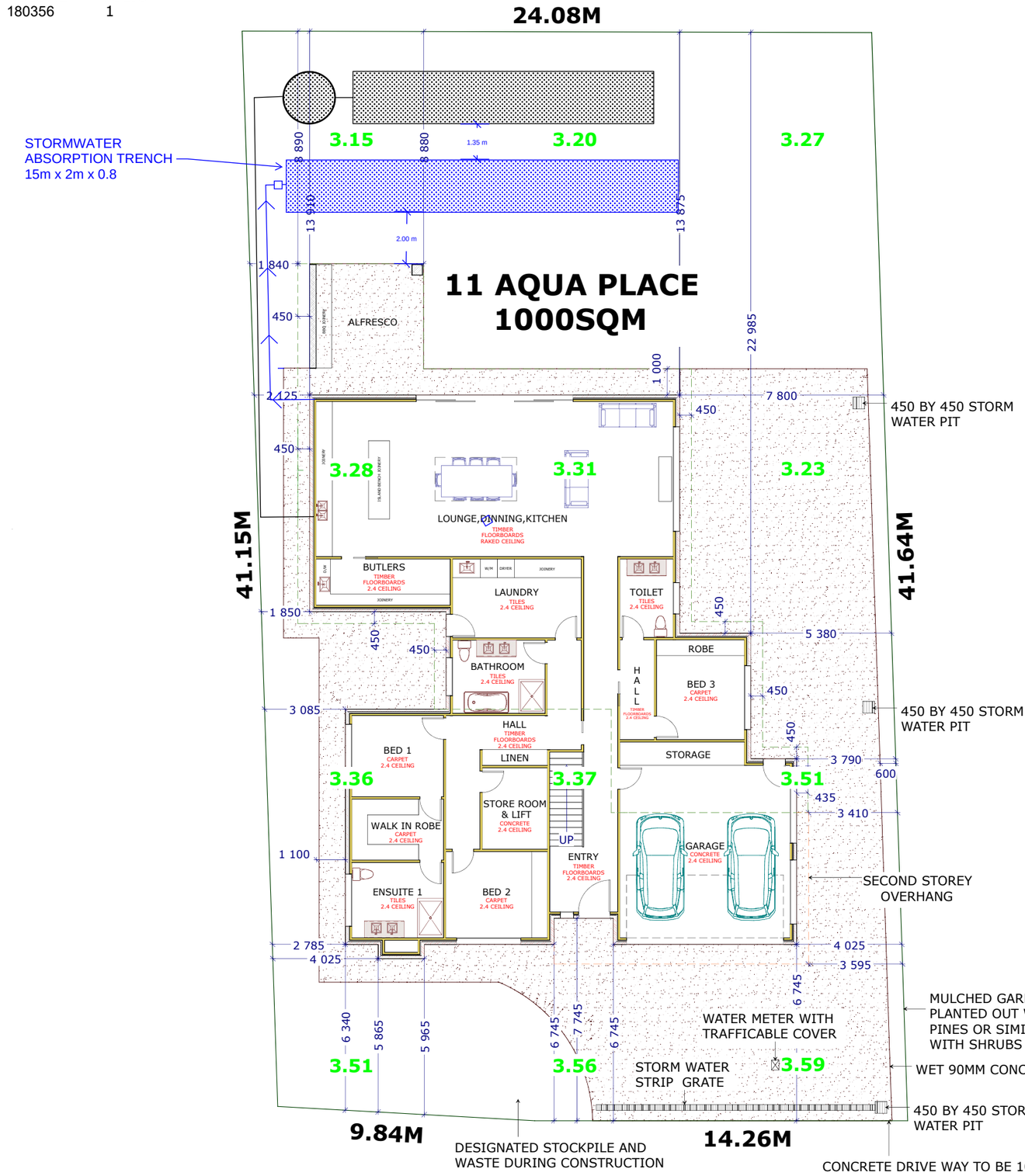
Therefore:

Orifice area (Ao) = 1674 mm^2

Orifice diameter ($D = \sqrt{(4*Ao/\pi)}$) = 46.2 mm

TITLE REFERENCE:
VOLUME FOLIO
180356 1

New Services



STORMWATER PIPE WITH FLOW DIRECTION

GRATED STORMWATER PIT
450x450 CLASS A
ACO GALVANISED HEELGUARD OR SIMILAR
ENGINEER APPROVED

Performance Solution Compliance Notes:

AS 3500.3 - CL 7.10

- 7.10.1 - OVERFLOW IS SAFE AND DOES NOT COMPROMISE FREEBOARD TO HABITABLE SPACES.

GENERAL

- AS/NZS 3500.3: PART 3 STORMWATER DRAINAGE AUSTRALIAN RAINFALL AND RUN-OFF VOLUME 8: URBAN STORMWATER MANAGEMENT
- AUSTRALIAN RUNOFF QUALITY - A GUIDE TO WATER SENSITIVE URBAN DESIGN
- STORM DRAINAGE DESIGN IN SMALL URBAN CATCHMENTS: A HANDBOOK FOR AUSTRALIAN PRACTICE
- WATER SENSITIVE URBAN DESIGN (WSUD) ENGINEERING PROCEDURE: STORMWATER
- WATER SERVICES ASSOCIATION OF AUSTRALIA CODE (WSAA)

Stormwater Services Notes:

1. ALL SITE SAFETY & MANAGEMENT PROCEDURES SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF STATE GROWTH SPECIFICATIONS:
   SECTION 168 OCCUPATIONAL HEALTH AND SAFETY
   & SECTION 176 ENVIRONMENTAL MANAGEMENT.
2. ALL PIPES UNDER TRAFFICABLE AREAS ARE TO BE BACKFILLED FULL DEPTH WITH 20 F.C.R. AND FULLY COMPACTED.
3. ALL STORMWATER PIPES TO BE PVC-U-SWJ CLASS "SN8" TO AS1254 UNO.
4. ALL DRAIN AND TRENCH CONSTRUCTION SHALL COMPLY WITH THE LGAT STANDARD DRG TSD G01.
5. ANY EXCAVATED TRENCHES IN EXCESS OF 1.5M IN DEPTH ARE TO BE ADEQUATELY SHORED TO PREVENT COLLAPSE DURING WORKS.

GES
GEO-ENVIRONMENTAL SOLUTIONS
29 Kirksway Place Battery Point
T| 62231839 E| office@geosolutions.net.au

Do not scale from these drawings. Dimensions to take precedence over scale.	Danny Chandler 11 Aqua Place Seven Mile Beach 7170:	C.T.: 180356/1 PID: 9494381	Date: 4/07/2025	On-Site Stormwater Management Plan	Drawing Number:	Sheet 1 of 1 Drawn by: LR

Design notes:

1.Absorption trench dimensions of up to 20m long by 0.8m deep by 2.0m 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.

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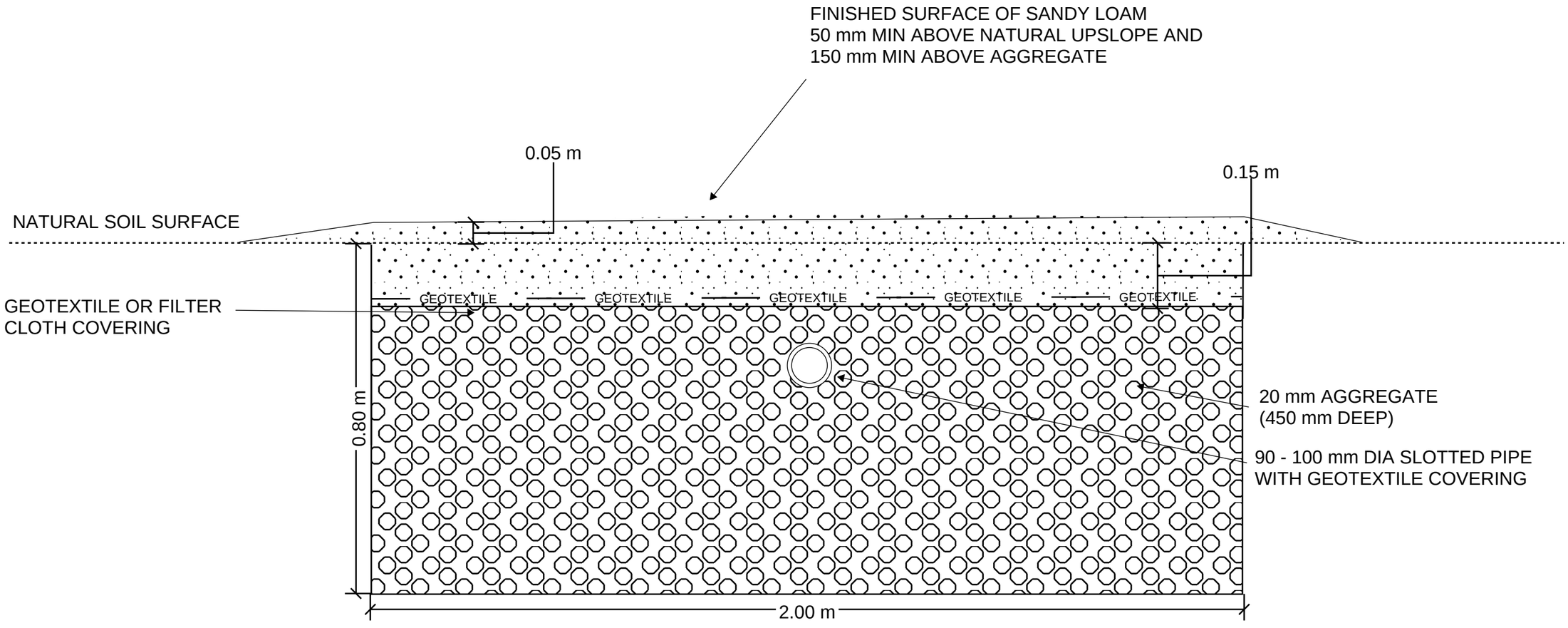

Do not scale from these drawings. Dimensions to take precedence over scale.	Geo-Environmental Solutions			Stormwater Trench Detail	Sheet 1 of 1

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94
Section 106
Section 129
Section 155

Form **35**

To: Danny Chandler *Owner name*
75 Lewisham Scenic Drive *Address*
Lewisham 7173 *Suburb/postcode*

Designer details:

Name: Vinamra Gupta
Category: Civil Engineer
Business name: Geo-Environmental Solutions
Phone No: 03 6223 1839
Business address: 29 Kirksway Place
Battery Point 7004
Fax No: N/A
Licence No: 685982720
Email address: office@geosolutions.net.au

Details of the proposed work:

Owner/Applicant Danny Chandler
Designer's project reference No. J11815
Address: 11 Aqua Place
Lot No: 180356/1
Seven Mile Beach 7170

Type of work: Building work ☐ Plumbing work ☒ *(X all applicable)*

Description of work:

On-Site stormwater system - design

(new building / alteration / addition / repair / removal / re-erection water / sewerage / stormwater / on-site wastewater management system / backflow prevention / other)

Description of the Design Work (Scope, limitations or exclusions): *(X all applicable certificates)*

Certificate Type:	Certificate	Responsible Practitioner
	☐ Building design	Architect or Building Designer
	☐ Structural design	Engineer or Civil Designer
	☐ Fire Safety design	Fire Engineer
	☒ Civil design	Civil Engineer or Civil Designer
	☐ Hydraulic design	Building Services Designer
	☐ Fire service design	Building Services Designer
	☐ Electrical design	Building Services Designer
	☐ Mechanical design	Building Service Designer
	☐ Plumbing design	Plumber-Certifier; Architect, Building Designer or Engineer
	☐ Other (specify)	

Deemed-to-Satisfy: ☐ Performance Solution: ☒ *(X the appropriate box)*

Other details:

Stormwater absorption trench

Design documents provided:

The following documents are provided with this Certificate –

Document description:

Drawing numbers:	Prepared by: Geo-Environmental Solutions	Date: Jul-25
Schedules:	Prepared by:	Date:
Specifications:	Prepared by: Geo-Environmental Solutions	Date: Jul-25
Computations:	Prepared by:	Date:
Performance solution proposals: Onsite stormwater retention	Prepared by: Geo-Environmental Solutions	Date: Jul-25
Test reports:	Prepared by: Geo-Environmental Solutions	Date: Jul-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 - 11 Aqua Place Seven Mile Beach - Jul-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*
Designer:	Vinamra Gupta		04/07/2025
Licence No:	685982720		

Assessment of Certifiable Works: (TasWater)

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 will not increase the demand for water supplied by TasWater
- [x] 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
- [x] The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure
- [x] The works will not damage or interfere with TasWater's works
- [x] The works will not adversely affect TasWater's operations
- [x] 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..... being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 2008,* that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

Note: the Guidelines for TasWater Certification of Certifiable Works Assessments are available at: www.taswater.com.au

	Name: (print)	*Signed*	*Date*
Designer:	Vinamra Gupta		04/07/2025

GEO-ENVIRONMENTAL ASSESSMENT

11 Aqua Place

Seven Mile Beach

June 2025

GES

GEO-ENVIRONMENTAL

SOLUTIONS

Investigation Details

Client:	Danny Chandler
Site Address:	11 Aqua Place, Seven Mile Beach
Date of Inspection:	17/06/2025
Proposed Works:	New house
Investigation Method:	Geoprobe 540UD - Direct Push
Inspected by:	C. Cooper

Site Details

Certificate of Title (CT):	180356/1
Title Area:	Approx. 1017 m²
Applicable Planning Overlays:	Bushfire-prone areas, Coastal Inundation Hazard, Airport obstacle limitation area, Airport noise exposure area
Slope & Aspect:	Flat with no dominant aspect
Vegetation:	Grass & Weeds
Ground Surface:	Disturbed

Background Information

Geology Map:	MRT 1:250000
Geological Unit:	Quaternary Sediments
Climate:	Annual rainfall 550mm
Water Connection:	Mains
Sewer Connection:	Unserviced-On-site required
Testing and Classification:	*AS2870:2011, AS1726:2017 & AS1547:2012*

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. Tests were conducted across the site to obtain bearing capacities of the material at the time of this investigation.

Soil Profile Summary

BH 1 Depth (m)	BH 2 Depth (m)	BH 3 Depth (m)	USCS	Description
0.00-0.20	0.00-0.30	0.00-0.10	GW	**FILL: Gravelly SAND**: Brown, slightly moist, very dense
0.20-0.30	0.30-0.40	0.10-0.20	SP	**Silty SAND (SP)**: Dark grey, slightly, moist, loose.
0.30-1.60	0.40-1.40	0.20-0.90	SP	**Silty SAND (SP)**: Yellow-pale brown, slightly moist to moist, medium dense.
1.60-3.00	1.40-2.00	0.90-2.00	SP	**Silty SAND (SP)**: Grey-pale brown, wet, dense, water table encountered at 1.6m (BH1) 1.4m (BH2), 0.9m (BH3), no refusal.

Site Notes

The soils on site consist of deep sand deposits which have developed from Quaternary Sediments.

Site Classification

The site has been assessed and classified in accordance with AS2870:2011 *"Residential Slabs and Footings".*

The site has been classified as:

Class A

Y_s range: **0mm**

Notes: The site has been classified as Class A, due to deep sand deposits.

Wind Loading Classification

According to *"AS4055:2021 - Wind Loads for Housing"* the house site is classified below:

Wind Classification:	**N2**
Region:	A
Terrain Category:	1.0
Shielding Classification:	PS
Topographic Classification:	T0
Wind Classification:	N2
Design Wind Gust Speed – m/s ($V_{h,u}$):	40

Wastewater Classification & Recommendations

According to AS1547-2012 (on-site waste-water management) the natural soil is classified as **Sand (category 1)**. The site is unsuited to the installation of a traditional septic tank and trenches due to the presence of a water table onsite. Secondary treatment of effluent will be required, and it is proposed to install a package treatment system (e.g. Econocycle, Envirocycle, Ozzikleen etc) with treated effluent disposed in a raised absorption bed. A Design Loading Rate (DLR) of 40L/m^2/day has been assigned for this site. The proposed four-bedroom dwelling has a calculated maximum wastewater output of 900L/day. This is based on a mains water supply and a maximum occupancy of 6 people (150L/day/person). With secondary treatment this will require an absorption area of at least 22.5m^2. For all calculations please refer to the Trench summary reports. Due to the highly permeable topsoils a cut-off drain will not be required. A 100% reserve area should be set aside for future wastewater requirements.

The following setback distances are required to comply with the Building Act 2016:

Upslope or level buildings:	3m
Downslope buildings:	2.25m
Upslope or level boundaries:	1.5m
Downslope boundaries:	2.5m
Downslope surface water:	100m

Compliance with Building Act 2016 Guidelines for On-site Wastewater Management Systems is outlined in the attached table.

During construction GES will need to be notified of any variation to the soil conditions or wastewater loading as outlined in this report.

Construction Notes & Recommendations

The site has been classified as **Class A** due to the presence deep sands.

It is recommended that all footings be founded in the natural material with bearing capacities >100kPa.

All earthworks on site must comply with AS3798:2007, and I further recommend that consideration be given to drainage and sediment control on site during and after construction. Care should also be taken to ensure there is adequate drainage in the construction area to avoid the potential for weak bearing and foundation settlement associated with excessive soil moisture.

During construction GES will need to be notified of any variation to the soil conditions or wastewater loading as outlined in this report.

Dr John Paul Cumming B.Agr.Sc (hons) PhD CPSS GAICD

Director

GES

Land suitability and system sizing for on-site wastewater management

Trench 3.0 (Australian Institute of Environmental Health)

Assessment Report

Site assessment for on-site waste water disposal

Assessment for	Danny Chandler	Assess. Date	27-Jun-25
		Ref. No.	
Assessed site(s)	11 Aqua Place, Seven Mile Beach	Site(s) inspected	17-Jun-25
Local authority	Clarence	Assessed by	JP Cumming

This report summarises wastewater volumes, climatic inputs for the site, soil characteristics and sustem sizing and design issues. Site Capability and Environmental sensitivity issues are reported separately, where 'Alert' columns flag factors with high (A) or very high (AA) limitations which probably require special consideration for system design(s). Blank spaces on this page indicate data have not been entered into TRENCH.

Wastewater Characteristics

Wastewater volume (L/day) used for this assessment = 900 (using the 'No. of bedrooms in a dwelling' method)

Septic tank wastewater volume (L/day) = 300

Sullage volume (L/day) = 600

Total nitrogen (kg/year) generated by wastewater = 2.7

Total phosphorus (kg/year) generated by wastewater = 1.9

Climatic assumptions for site (Evapotranspiration calculated using the crop factor method)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean rainfall (mm)	41	36	36	45	36	29	46	47	40	48	44	56
Adopted rainfall (R, mm)	41	36	36	45	36	29	46	47	40	48	44	56
Retained rain (Rr, mm)	37	32	32	41	32	26	41	42	36	43	40	50
Max. daily temp. (deg. C)												
Evapotrans (ET, mm)	130	110	91	63	42	29	32	42	63	84	105	126
Evapotr. less rain (mm)	**93**	**78**	**59**	**23**	**10**	**3**	**-10**	**0**	**27**	**41**	**65**	**76**

Annual evapotranspiration less retained rain (mm) = 463

Soil characterisitics

Texture = Sand Category = 1 Thick. (m) = 3

Adopted permeability (m/day) = 3 Adopted LTAR (L/sq m/day) = 40 Min depth (m) to water = 0.9

Proposed disposal and treatment methods

Proportion of wastewater to be retained on site:	All wastewater will be disposed of on the site
The preferred method of on-site primary treatment:	In a package treatment plant
The preferred method of on-site secondary treatment:	In-ground
The preferred type of in-ground secondary treatment:	Evapotranspiration bed(s)
The preferred type of above-ground secondary treatment:	None
Site modifications or specific designs:	Not needed

Suggested dimensions for on-site secondary treatment system

Total length (m) =	11
Width (m) =	2
Depth (m) =	0.6
Total disposal area (sq m) required =	23
comprising a Primary Area (sq m) of:	23
and a Secondary (backup) Area (sq m) of:	

Sufficient area is available on site

Comments

Using the DLR of 40L/m^2/day for the Category 1 soils on site, an absorption area of 22.5m^2 is required for secondary treated effluent.

GES

Land suitability and system sizing for on-site wastewater management

Trench 3.0 (Australian Institute of Environmental Health)

Site Capability Report

Site assessment for on-site waste water disposal

Assessment for	Danny Chandler	Assess. Date	27-Jun-25
		Ref. No.	
Assessed site(s)	11 Aqua Place, Seven Mile Beach	Site(s) inspected	17-Jun-25
Local authority	Clarence	Assessed by	JP Cumming

This report summarises data relating to the physical capability of the assessed site(s) to accept wastewater. Environmental sensitivity and system design issues are reported separately. The 'Alert' column flags factors with high (A) or very high (AA) site limitations which probably require special consideration in site acceptability or for system design(s). Blank spaces indicate data have not been entered into TRENCH.

Alert	Factor	Units	Value	Confid level	Limitation Trench	Limitation Amended	Remarks
	Expected design area	sq m	150	V. high	Very high	Moderate	Other factors lessen impact
AA	Density of disposal systems	/sq km	50	Mod.	Very high		
	Slope angle	degrees	1	High	Very low		
	Slope form	Straight simple		High	Low		
	Surface drainage	Good		High	Very low		
	Flood potential	Site floods 1 in 75-100 yrs		High	Low		
	Heavy rain events	Infrequent		High	Moderate		
	Aspect (Southern hemi.)	Faces NE or NW		V. high	Low		
	Frequency of strong winds	Common		High	Low		
	Wastewater volume	L/day	900	High	High	Moderate	Other factors lessen impact
	SAR of septic tank effluent		1.7	High	Low		
	SAR of sullage		2.6	High	Moderate		
	Soil thickness	m	3.0	V. high	Very low		
	Depth to bedrock	m	3.0	V. high	Very low		
	Surface rock outcrop	%	0	V. high	Very low		
	Cobbles in soil	%	0	V. high	Very low		
	Soil pH		5.5	High	Low		
	Soil bulk density	gm/cub. cm	1.4	High	Very low		
	Soil dispersion	Emerson No.	8	V. high	Very low		
	Adopted permeability	m/day	3	Mod.	Very high	Moderate	Other factors lessen impact
	Long Term Accept. Rate	L/day/sq m	40	High	Very high	Moderate	Other factors lessen impact

Comments

The site has the capability to accept onsite wastewater. Secondary treatment is required and will aid in the management of the inherent limitations of the site.

GES

Land suitability and system sizing for on-site wastewater management

Trench 3.0 (Australian Institute of Environmental Health)

Environmental Sensitivity Report

Site assessment for on-site waste water disposal

Assessment for	Danny Chandler	Assess. Date	27-Jun-25
		Ref. No.	
Assessed site(s)	11 Aqua Place, Seven Mile Beach	Site(s) inspected	17-Jun-25
Local authority	Clarence	Assessed by	JP Cumming

This report summarises data relating to the environmental sensitivity of the assessed site(s) in relation to applied wastewater. Physical capability and system design issues are reported separately. The 'Alert' column flags factors with high (A) or very high (AA) limitations which probably require special consideration in site acceptability or for system design(s). Blank spaces indicate data have not been entered into TRENCH.

Alert	Factor	Units	Value	Confid level	Limitation		Remarks
					Trench	Amended	
AA	Cation exchange capacity	mmol/100g	15	High	Very high		
A	Phos. adsorp. capacity	kg/cub m	0.2	High	High		
	Annual rainfall excess	mm	-463	High	Very low		
A	Min. depth to water table	m	0.9	High	High		
	Annual nutrient load	kg	4.6	High	Very low		
	G'water environ. value	Agric sensit/dom irrig		V. high	Moderate		
	Min. separation dist. required	m	3	High	Very low		
	Risk to adjacent bores						Factor not assessed
	Surf. water env. value	Agric sensit/dom drink		V. high	Moderate		
	Dist. to nearest surface water	m	550	V. high	Very low		
	Dist. to nearest other feature	m	1.5	V. high	Very high	Moderate	Other factors lessen impact
	Risk of slope instability		Very low	V. high	Very low		
	Distance to landslip	m	2800	V. high	Very low		

Comments

There is low risk of environmental degredation associated with the proposed wastewater system.

APPENDIX 1 - DCP Results Table

Dynamic Cone Penetration (DCP) Conversion to Californian Bearing Ratio
(ref: Australian Standard AS 1289.6.3.2 - 1997)

DCP Location BH1

Depth (mm)	DCP (Blows/100mm)	DCP (mm/Blow)	DCP Resistance (mPa)	Allowable Bearing Capacity (kPa)	CBR (Rounded Up)
0-100	8	12.5	2.5	278	17
100-200	10	10.0	3.1	347	22
200-300	3	33.3	0.9	104	6
300-400	4	25.0	1.3	139	8
400-500	4	25.0	1.3	139	8
500-600	5	20.0	1.6	174	10
600-700	5	20.0	1.6	174	10
700-800	5	20.0	1.6	174	10
800-900	6	16.7	1.9	208	13
900-1000	6	16.7	1.9	208	13
1000-1100	6	16.7	1.9	208	13
1100-1200	5	20.0	1.6	174	10
1200-1300	4	25.0	1.3	139	8
1300-1400	3	33.3	0.9	104	6
1400-1500	3	33.3	0.9	104	6
1500-1600	2	50.0	0.6	69	4
1600-1700	2	50.0	0.6	69	4
1700-1800	2	50.0	0.6	69	4
1800-1900	2	50.0	0.6	69	4
1900-2000	4	25.0	1.3	139	8
2000-2100	5	20.0	1.6	174	10
2100-2200	7	14.3	2.2	243	15
2200-2300	6	16.7	1.9	208	13
2300-2400	9	11.1	2.8	313	20
2400-2500	10	10.0	3.1	347	22

Demonstration of wastewater system consistency with the *Building Act 2016 Guidelines for On-site Wastewater*

Acceptable Solutions	**Performance Criteria**	**Compliance**
A1 Horizontal separation distance from a building to a land application area must comply with one of the following: a) be no less than 6m; or b) be no less than: (i) 3m from an upslope building or level building; (ii) If primary treated effluent to be no less than 4m plus 1m for every degree of average gradient from a downslope building; (iii) If secondary treated effluent and subsurface application, no less than 2m plus 0.25m for every degree of average gradient from a downslope building.	P1 a) The land application area is located so that (i) the risk of wastewater reducing the bearing capacity of a building's foundations is acceptably low.; and (ii) is setback a sufficient distance from a downslope excavation around or under a building to prevent inadequately treated wastewater seeping out of that excavation	Consistent with A1 (b) (i) Land application area will be located with a minimum separation distance of 3m from an upslope or level building. Consistent with A1 (b) (iii) Land application area will be located with a minimum separation distance of 2.25m from a downslope building.
A2 Horizontal separation distance from downslope surface water to a land application area must comply with (a) or (b) (a) be no less than 100m; or (b) be no less than the following: (i) if primary treated effluent 15m plus 7m for every degree of average gradient to downslope surface water; or (ii) if secondary treated effluent and subsurface application, 15m plus 2m for every degree of average gradient to down slope surface water.	P2 Horizontal separation distance from downslope surface water to a land application area must comply with all of the following: a) Setbacks must be consistent with AS/NZS 1547 Appendix R; b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable.	Consistent with A2 (a) Land application area will be located a minimum of 100m from downslope surface water

A3 Horizontal separation distance from a property boundary to a land application area must comply with either of the following: (a) be no less than 40m from a property boundary; or (b) be no less than: (i) 1.5m from an upslope or level property boundary; and (ii) If primary treated effluent 2m for every degree of average gradient from a downslope property boundary; or (iii) If secondary treated effluent and subsurface application, 1.5m plus 1m for every degree of average gradient from a downslope property boundary.	P3 Horizontal separation distance from a property boundary to a land application area must comply with all of the following: (a) Setback must be consistent with AS/NZS 1547 Appendix R; and (b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable.	Consistent with A3 (b) (i) Land application area will be located with a minimum separation distance of 1.5m from an upslope or level property boundary Consistent with A3 (b) (iii) Land application area will be located with a minimum separation distance of 2.5m from a downslope property boundary.
A4 Horizontal separation distance from a downslope bore, well or similar water supply to a land application area must be no less than 50m and not be within the zone of influence of the bore whether up or down gradient.	P4 Horizontal separation distance from a downslope bore, well or similar water supply to a land application area must comply with all of the following: (a) Setback must be consistent with AS/NZS 1547 Appendix R; and (b) A risk assessment completed in accordance with Appendix A of AS/NZS 1547 demonstrates that the risk is acceptable	Consistent with A4 No bore or well identified within 50m

A5 Vertical separation distance between groundwater and a land application area must be no less than: (a) 1.5m if primary treated effluent; or (b) 0.6m if secondary treated effluent	P5 Vertical separation distance between groundwater and a land application area must comply with the following: (a) Setback must be consistent with AS/NZS 1547 Appendix R; and (b) A risk assessment completed in accordance with Appendix A of AS/NZS 1547 that demonstrates that the risk is acceptable	Consistent with A5 (b) No groundwater encountered
A6 Vertical separation distance between a limiting layer and a land application area must be no less than: (a) 1.5m if primary treated effluent; or (b) 0.5m if secondary treated effluent	P6 Vertical setback must be consistent with AS/NZS1547 Appendix R.	Consistent with A5 (b)
A7 nil	P7 A wastewater treatment unit must be located a sufficient distance from buildings or neighbouring properties so that emissions (odour, noise or aerosols) from the unit do not create an environmental nuisance to the residents of those properties	Consistent

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AS1547:2012 – Loading Certificate – AWTS Design

This loading certificate sets out the design criteria and the limitations associated with use of the system.

Site Address: 11 Aqua Place, Seven Mile Beach

System Capacity: 6 persons @ 150L/person/day

Summary of Design Criteria

DLR: 40mm/day.

Absorption area: 22.5m^2

Reserve area location /use: Assigned

Water saving features fitted: Standard fixtures

Allowable variation from design flows: 1 event @ 200% daily loading per quarter

Typical loading change consequences: Expected to be minimal due to use of AWTS and large land area

Overloading consequences: Continued overloading may cause hydraulic failure of the absorption area and require upgrading/extension of the area. Risk considered acceptable due to monitoring through quarterly maintenance reports.

Underloading consequences: Lower than expected flows will have minimal consequences on system operation unless the house has long periods of non occupation. Under such circumstances additional maintenance of the system may be required. Long term under loading of the system may also result in vegetation die off in the absorption area and additional watering may be required. Risk considered acceptable due to monitoring through quarterly maintenance reports.

Lack of maintenance / monitoring consequences: Issues of underloading/overloading and condition of the irrigation area require monitoring and maintenance, if not completed system failure may result in unacceptable health and environmental risks. Monitoring and regulation by the permit authority required to ensure compliance.

Other considerations: Owners/occupiers must be made aware of the operational requirements and limitations of the system by the installer/maintenance contractor.

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94
Section 106
Section 129
Section 155

Form **35**

To: Danny Chandler *Owner name*
75 Lewisham Scenic Drive *Address*
Lewisham 7173 *Suburb/postcode*

Designer details:

Name: John-Paul Cumming
Category: Bld. Srvcs. Dsgnr. - Hydraulic
Business name: Geo-Environmental Solutions
Phone No: 03 6223 1839
Business address: 29 Kirksway Place
Battery Point 7004
Fax No: N/A
Licence No: CC774A
Email address: office@geosolutions.net.au

Details of the proposed work:

Owner/Applicant Danny Chandler
Designer's project reference No. J11815
Address: 11 Aqua Place
Lot No: 180356/1
Seven Mile Beach 7170

Type of work: Building work ☐ Plumbing work ☒ *(X all applicable)*

Description of work:

On-site wastewater management system - design

(new building / alteration / addition / repair / removal / re-erection water / sewerage / stormwater / on-site wastewater management system / backflow prevention / other)

Description of the Design Work (Scope, limitations or exclusions): *(X all applicable certificates)*

Certificate Type:	Certificate	Responsible Practitioner
	☐ Building design	Architect or Building Designer
	☐ Structural design	Engineer or Civil Designer
	☐ Fire Safety design	Fire Engineer
	☐ Civil design	Civil Engineer or Civil Designer
	☒ Hydraulic design	Building Services Designer
	☐ Fire service design	Building Services Designer
	☐ Electrical design	Building Services Designer
	☐ Mechanical design	Building Service Designer
	☐ Plumbing design	Plumber-Certifier; Architect, Building Designer or Engineer
	☐ Other (specify)	

Deemed-to-Satisfy: ☒ Performance Solution: ☐ *(X the appropriate box)*

Other details:

AWTS with modified absorption bed

Design documents provided:

The following documents are provided with this Certificate –

Document description:

Drawing numbers:	Prepared by: Geo-Environmental Solutions	Date: Jun-25
Schedules:	Prepared by:	Date:
Specifications:	Prepared by: Geo-Environmental Solutions	Date: Jun-25
Computations:	Prepared by:	Date:
Performance solution proposals:	Prepared by:	Date:
Test reports:	Prepared by: Geo-Environmental Solutions	Date: Jun-25

Standards, codes or guidelines relied on in design process:

AS1547:2012 On-site domestic wastewater management.

AS3500 (Parts 0-5)-2013 Plumbing and drainage set.

Any other relevant documentation:

Geo-Environmental Assessment - 11 Aqua Place Seven Mile Beach - Jun-25

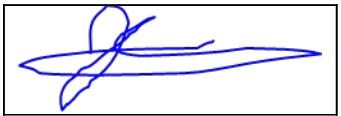
Geo-Environmental Assessment - 11 Aqua Place Seven Mile Beach - Jun-25

Attribution as designer:

I John-Paul Cumming, 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*
Designer:	John-Paul Cumming		27/06/2025
Licence No:	CC774A		

Assessment of Certifiable Works: (TasWater)

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.

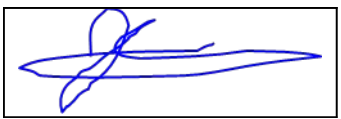
I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:

- [x] The works will not increase the demand for water supplied by TasWater
- [x] 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
- [x] The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure
- [x] The works will not damage or interfere with TasWater's works
- [x] The works will not adversely affect TasWater's operations
- [x] 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 ..... John-Paul Cumming..... being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 2008,* that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

Note: the Guidelines for TasWater Certification of Certifiable Works Assessments are available at: www.taswater.com.au

	Name: (print)	*Signed*	*Date*
Designer:	John-Paul Cumming		27/06/2025

CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

Form **55**

To: Danny Chandler *Owner /Agent*

75 Lewisham Scenic Drive *Address*

Lewisham 7173 *Suburb/postcode*

Qualified person details:

Qualified person: John-Paul Cumming

Address: 29 Kirksway Place

Battery Point 7004

Phone No: 03 6223 1839

Fax No:

Licence No: AO999

Email address: jcumming@geosolutions.net.au

Qualifications and Insurance details: Certified Professional Soil Scientist (CPSS stage 2)

(description from Column 3 of the Director's Determination - Certificates by Qualified Persons for Assessable Items

Speciality area of expertise: AS2870-2011 Foundation Classification

(description from Column 4 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

Details of work:

Address: 11 Aqua Place

Seven Mile Beach 7170

Lot No:

Certificate of title No: 180356/1

The assessable item related to this certificate: Classification of foundation Conditions according to AS2870-2011

(description of the assessable item being certified)
Assessable item includes –
- *a material;*
- *a design*
- *a form of construction*
- *a document*
- *testing of a component, building system or plumbing system*
- *an inspection, or assessment, performed*

Certificate details:

Certificate type: Foundation Classification

(description from Column 1 of Schedule 1 of the Director's Determination - Certificates by Qualified Persons for Assessable Items n)

This certificate is in relation to the above assessable item, at any stage, as part of - *(tick one)*

building work, plumbing work or plumbing installation or demolition work ☒

or

a building, temporary structure or plumbing installation: ☐

In issuing this certificate the following matters are relevant –

Documents:	The attached soil report for the address detailed above in 'details of work'
Relevant calculations:	Reference the above report.
References:	AS2870:2011 residential slabs and footings AS1726:2017 Geotechnical site investigations CSIRO Building technology file – 18.

Substance of Certificate: *(what it is that is being certified)*

Site Classification consistent with AS2870-2011.

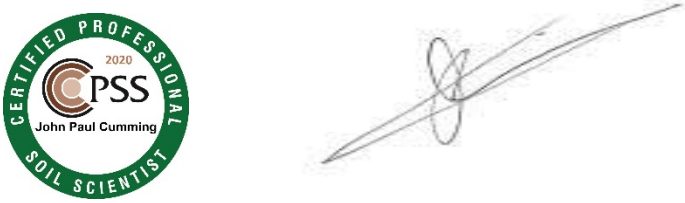
Scope and/or Limitations

The classification applies to the site as inspected and does not account for future alteration to foundation conditions as a result of earth works, drainage condition changes or variations in site maintenance.

I, John-Paul Cumming certify the matters described in this certificate.

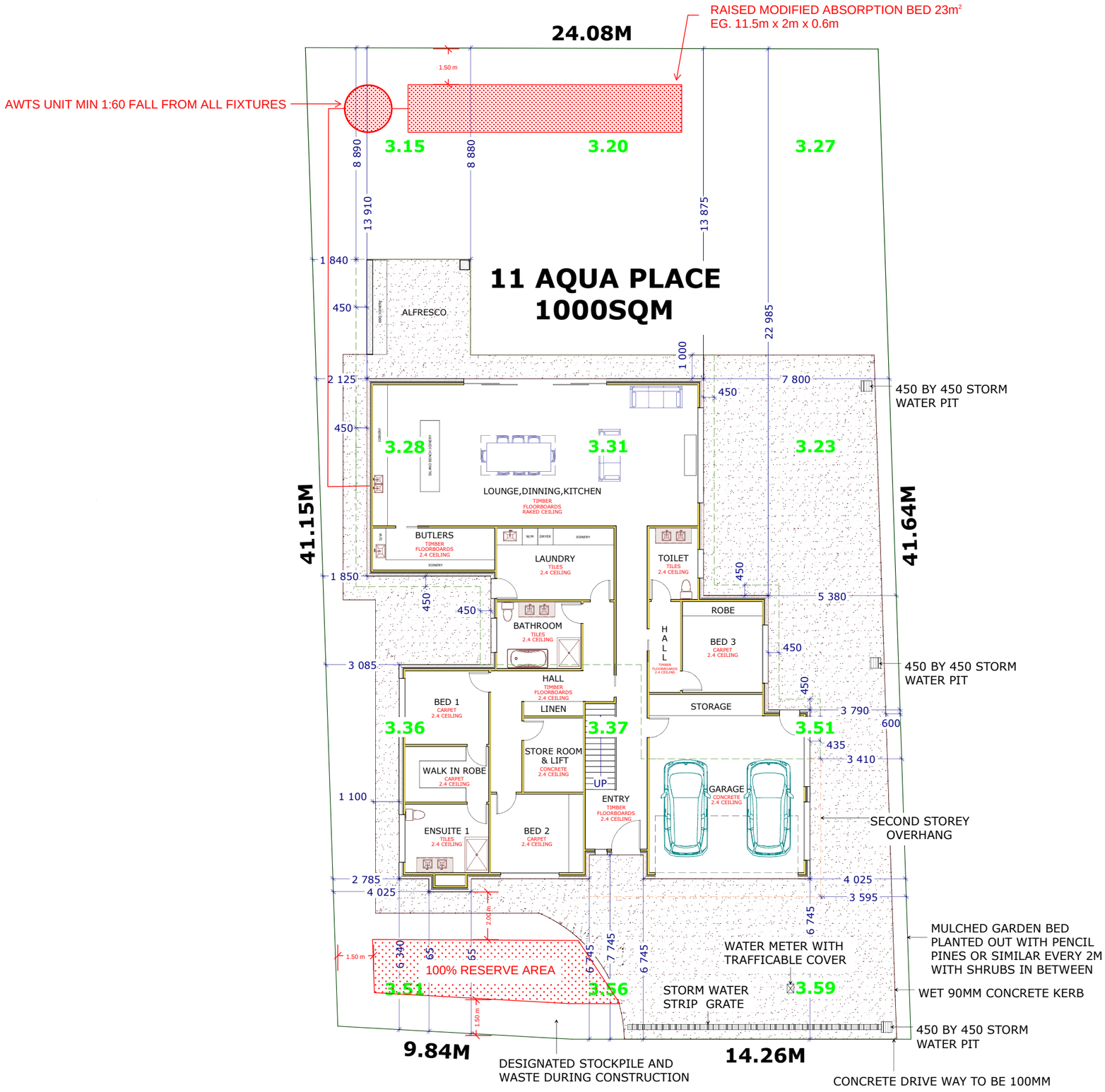
Qualified person:

Signed:



Certificate No: J11815

Date: 27/06/2025



Wastewater system:

AWTS unit vented according to
NCC vol 3 Tas H101.2
min 1:60 fall from all fixtures

Modified absorption bed - 23m²
e.g. 2m x 11.5m x 0.6m

Min 3m from upslope buildings
Min 2.25m from downslope buildings
Min 1.5m from upslope or level boundaries
Min 2.5m from downslope boundary
Min 100m from downslope surface water

Refer to GES report

GES
GEO-ENVIRONMENTAL
SOLUTIONS
29 Kirksway Place Battery Point
T| 62231839 E| office@geosolutions.net.au

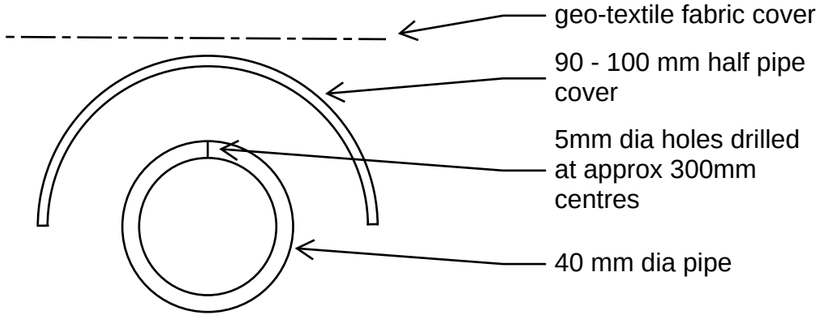
Dr. John Paul Cumming
Building Services Designer-
Hydraulic
CCC774A

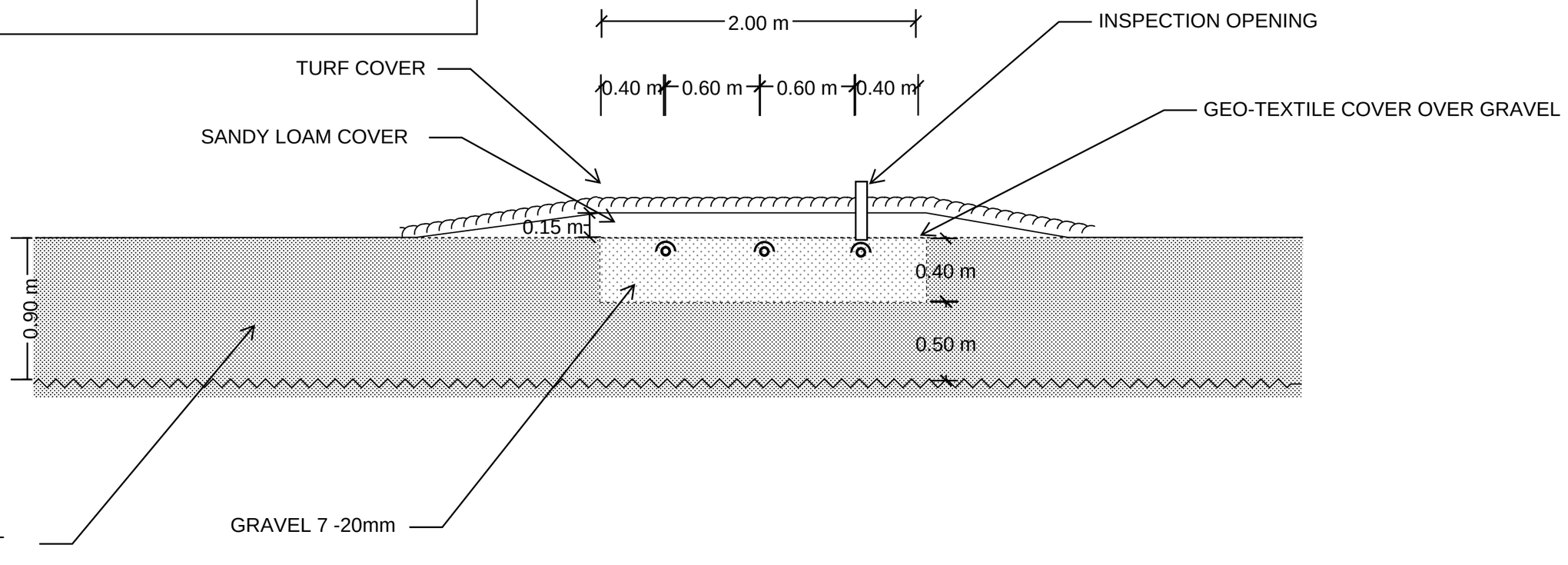
27/06/2025

Do not scale from these drawings. Dimensions to take precedence over scale.	Danny Chandler 11 Aqua Place Seven Mile Beach 7170:	C.T.: 180356/1 PID: 9494381	Date: 27/06/2025	On-Site Wastewater Management Plan	Drawing Number:	Sheet 1 of 1 Drawn by: LR

GES
GEO-ENVIRONMENTAL
SOLUTIONS
29 Kirksway Place, Battery Point
T| 62231839 E| office@geosolutions.net.au

Distribution pipe detail





Do not scale from these drawings. Dimensions to take precedence over scale.				On-site Wastewater Cross-Section	Sheet 1 of 2

Design notes:

1.Absorption bed dimensions of up to 15m long by 0.40m deep by 2.0m wide.

2. Base of bed to be excavated level min 200mm into natural soils and smearing and compaction avoided.

3. Lower 300mm of bed to be filled with 7-20mm clean washed gravel and drilled 40mm distribution pipes packed into upper 100mm of sand.

4. 40mm distribution pipes drilled with sufficient 5mm holes in the top of the pipe (approx spacing 300mm) to distribute the effluent and half circle 90-100mm UPVC pipe, un-perforated, laid over each 40mm perforated lateral to direct water jet downwards.

5. One 5 mm hole at centre of invert of each pipe to allow for drainage between pump cycles.

6. Geotextile or filter cloth to be placed over the distribution pipes to prevent clogging of the pipes and aggregate - the sides of the bed should also be lined.

7. Final finished surface with sandy loam to be a minimum of 150 mm above aggregate with turf cover or mulched with appropriate vegetation (eg native grasses and small shrubs at 1 plant per 1 m2)

8. The turf or vegetation is an essential component of the system and must be maintained with regular mowing and or trimming as appropriate

9. The distribution pipe grid must be absolutely level to allow even distribution of effluent around the absorption area – it is recommended that the level be verified by running water into the system before backfilling and commissioning the trench

10.All works on site to comply with AS3500 and Tasmanian Plumbing code.

The pump must be capable of delivering the total flow rate required for all laterals whilst providing a 1.5m residual head (ie squirt height) at the highest orifice (with no more than 15% variation in squirt height across the whole bed).

For beds with individual laterals, no more than 15m long, it is acceptable to adopt a flow rate of 4-5L/min/lineal metre. Total dynamic head (including friction loss) will need to be determined on a site-specific basis.

Individual flush points must be installed for each lateral. This may be a screw cap fitting on a 90 degree elbow level with the bed surface or a pressure controlled flush valve inside an irrigation control box.

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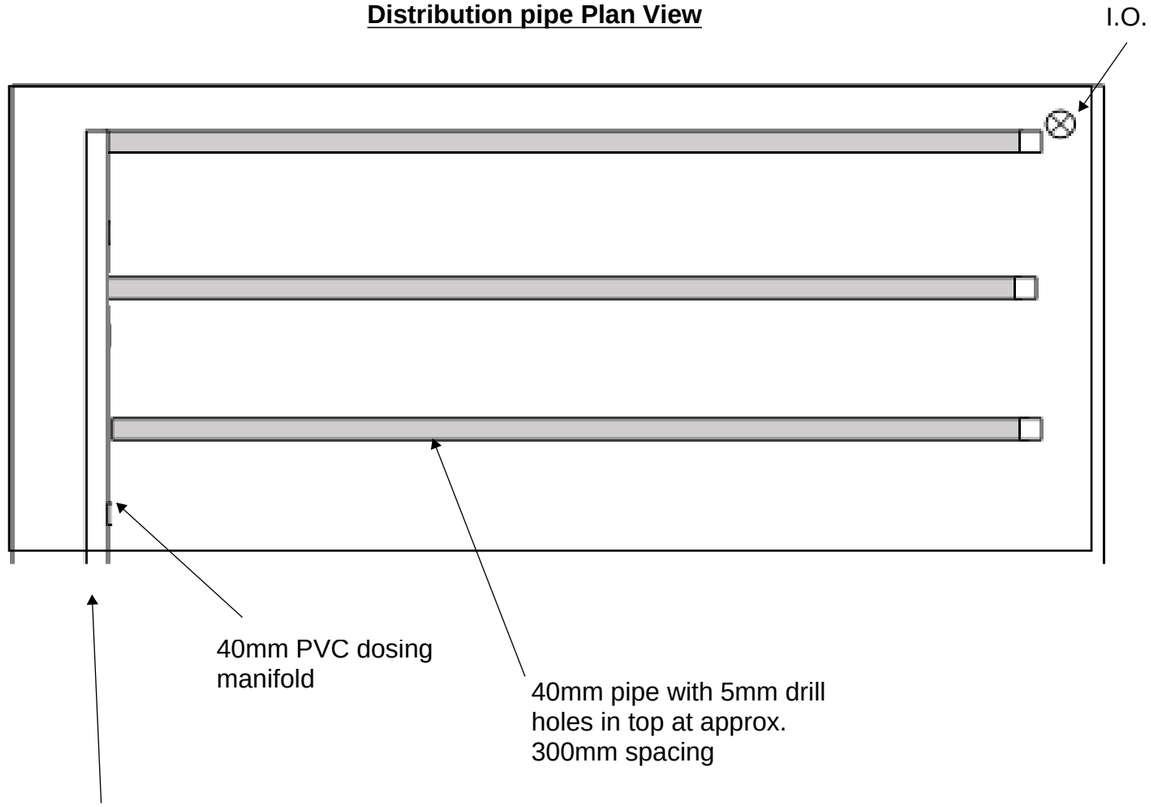
Distribution pipe Plan View



Do not scale from these drawings. Dimensions to take precedence over scale.				On-site Wastewater Design Notes	Sheet 2 of 2

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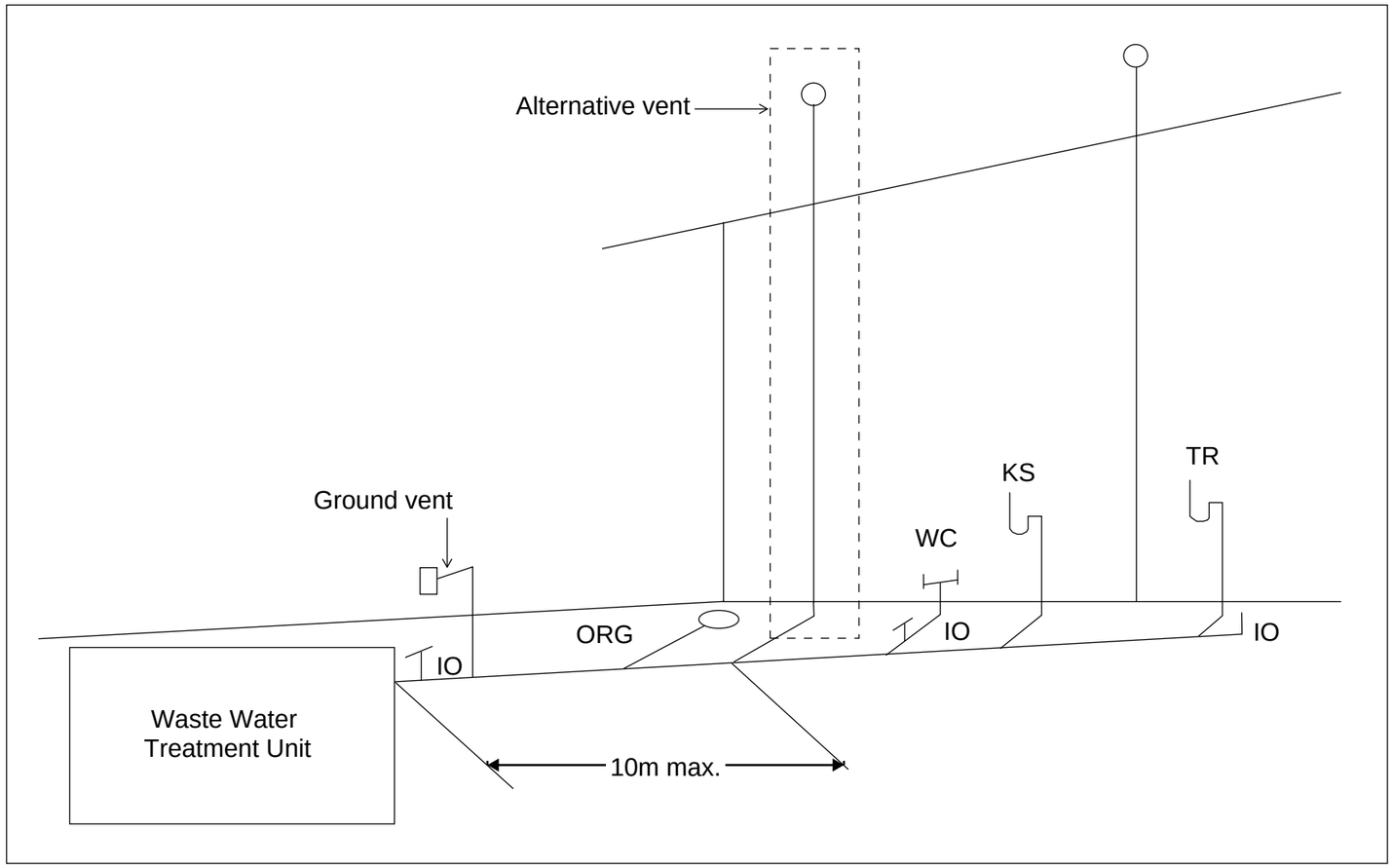

Tas Figure C2D6 Alternative Venting Arrangements

Vents must terminate in accordance with AS/NZS 3500.2

Alternative venting to be used by extending a vent to terminate as if an upstream vent, with the vent connection between the last sanitary fixture or sanitary appliance and the on-site wastewater management system. Use of a ground vent in not recommended

Inspection openings must be located at the inlet to an on-site wastewater management system treatment unit and the point of connection to the land application system and must terminate as close as practicable to the underside of an approved inspection opening cover installed at the finished surface level

Access openings providing access for desludging or maintenance of on-site wastewater management system treatment unites must terminate at or above finished surface level

Do not scale from these drawings. Dimensions to take precedence over scale.				Tas Figure C2D6 Alternative Venting Arrangements		Sheet 1 of 1