# DEVELOPMENT APPLICATION

## PDPLANPMTD-2026/060828

**PROPOSAL:** Dwelling

**LOCATION:** 6 Lelia Court, Oakdowns

**RELEVANT PLANNING SCHEME:** Tasmanian Planning Scheme - Clarence

**ADVERTISING EXPIRY DATE:** 13/05/2026 00:00:00

The relevant plans and documents can be inspected at the Council offices, 38 Bligh Street, Rosny Park, during normal office hours until 13/05/2026 00:00:00. In addition to legislative requirements, plans and documents can also be viewed at www.ccc.tas.gov.au during these times.

Any person may make representations about the application to the Chief Executive Officer, by writing to PO Box 96, Rosny Park, 7018 or by electronic mail to clarence@ccc.tas.gov.au. Representations must be received by Council on or before 13/05/2026 00:00:00.

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

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

**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

# Planning Application

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

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

Proposal: New Dwelling

Location: 6 Lelia Court, Oakdowns

**Personal Information Removed**

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

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

Sally DeLittle

Current use of site: Vacant

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

**Declaration**

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

**Acknowledgement**

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

**Personal Information Removed**

# Planning Application checklist

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

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

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

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

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

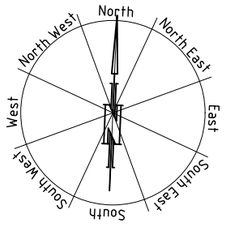
- Main utility service connection points and easements.
- Proposed subdivision lot boundaries.

☐ Where it is proposed to erect buildings, detailed plans with dimensions at a scale of 1:100 or 1:200 showing:
- Internal layout of each building on the site.
- Private open space for each dwelling.
- External storage spaces.
- Car parking space location and layout.
- Major elevations of every building to be erected.
- Shadow diagrams of the proposed buildings and adjacent structures demonstrating the extent of shading of adjacent private open spaces and external windows of buildings on adjacent sites.
- Relationship of the elevations to natural ground level, showing any proposed cut or fill.
- Materials and colours to be used on rooves and external walls.

☐ Where it is proposed to erect buildings, a plan of the proposed landscaping showing:
- Planting concepts.
- Paving materials and drainage treatments and lighting for vehicle areas and footpaths.
- Plantings proposed for screening from adjacent sites or public places.

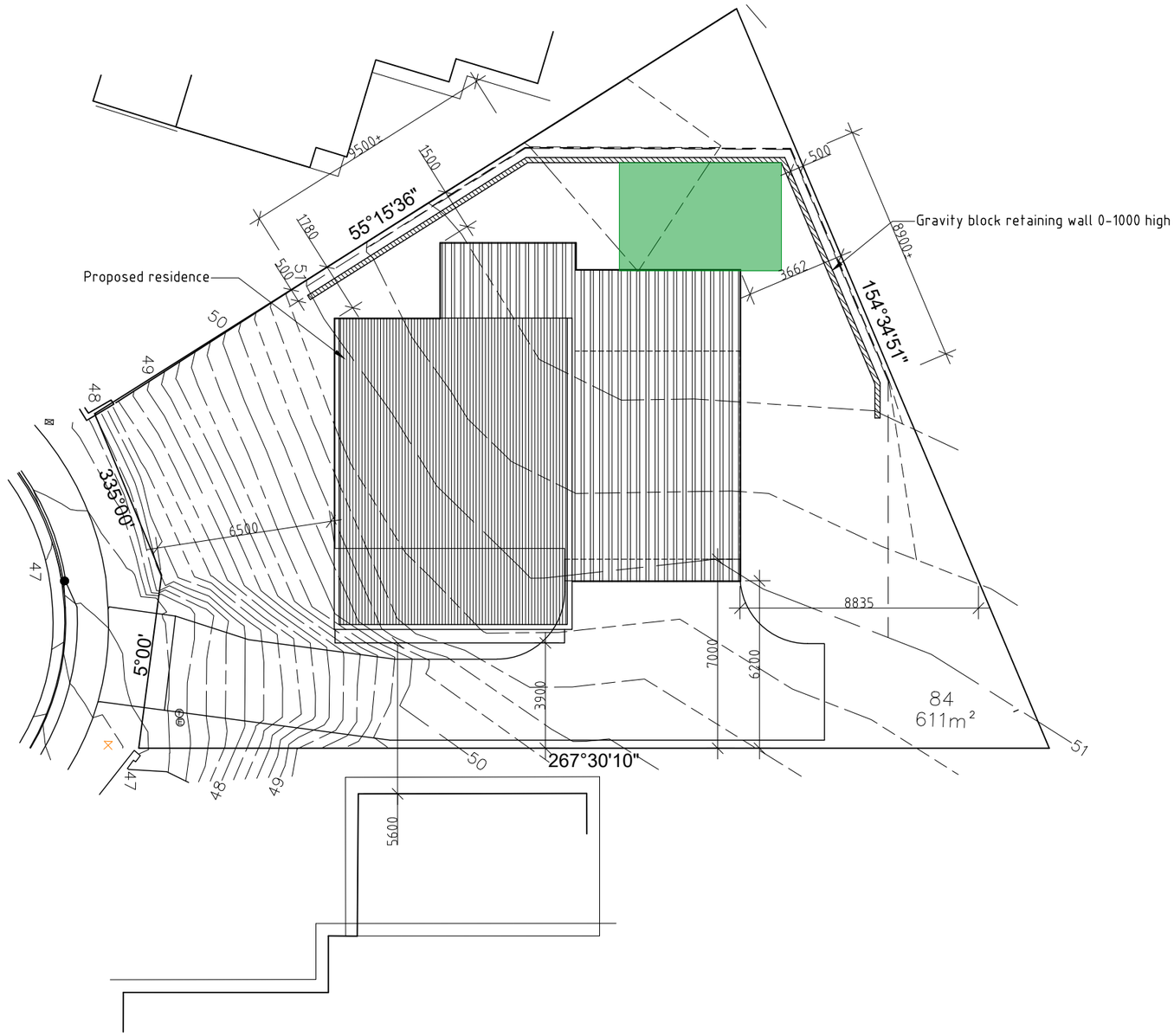
☐ Any additional reports, plans or other information required by the relevant zone or code.

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




CONTENTS:






DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION

PROPOSED RESIDENCE FOR
MR A CLARKE AT
6 LELIA COURT OAKDOWNS 7019

SITE PLAN

SCALE 1:200
0 2000 4000

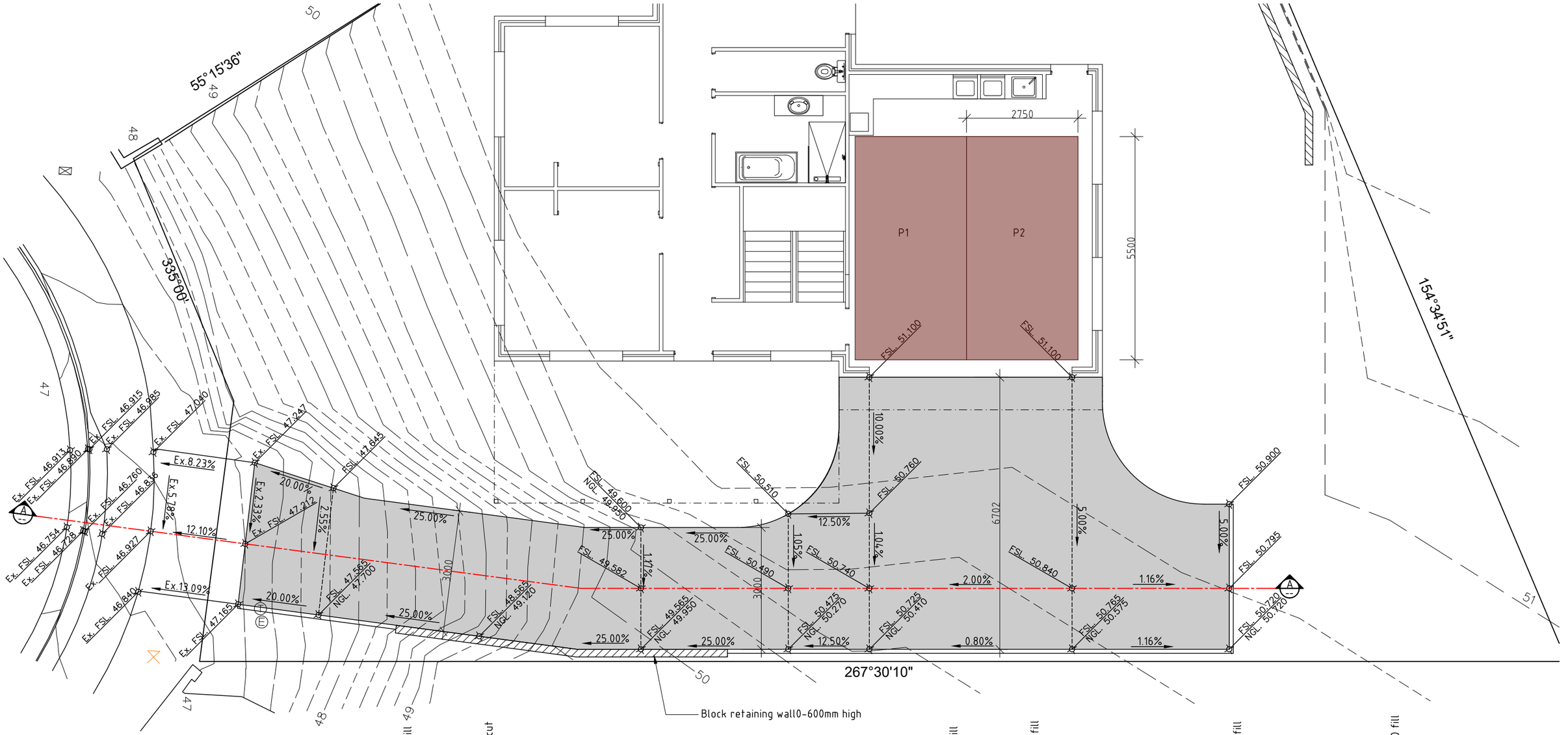
AMENDED

DATE
02/03/2026

DRAWING NO.
01 OF 11

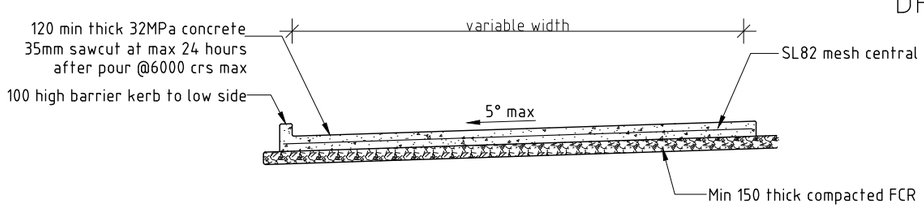
DRAWN BY G. Tilley
email: gtilley7@bigpond.com
phone ph 0400 671 582

Certified: G. Tilley Accreditation No.CC6210H




## DRIVEWAY LONG SECTION (SECTION A-A)

SCALE 1:100




## DRIVEWAY CROSS SECTION (TYPICAL)

SCALE 1:50

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PROPOSED RESIDENCE FOR
MR A CLARKE AT
6 LELIA COURT OAKDOWNS 7019

DRIVEWAY PLAN & LONG SECTION

DATE
02/03/2026

DRAWN BY G. Tilley
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SCALE 1:100
0 1000 2000

AMENDED

DRAWING NO.
02 OF 11

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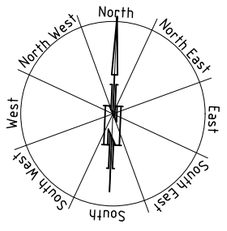


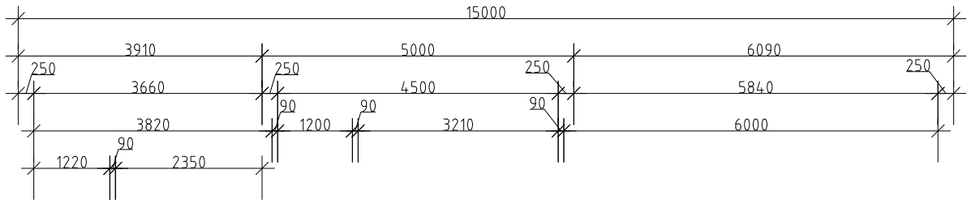






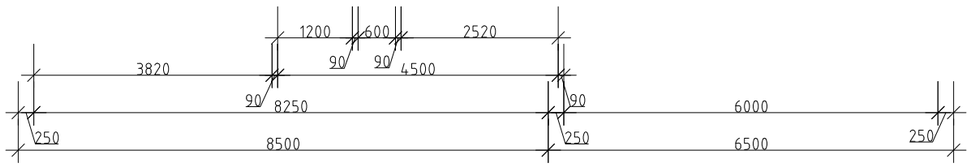


| AREAS | |
|---|---|
| Lower level | 137.18m² |
| Upper level | 160.26m² |
| Total | 297.44m² |
| Deck | 34.00m² |

DEVELOPMENT DRAWINGS ONLY
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PROPOSED RESIDENCE FOR
MR A CLARKE AT
6 LELIA COURT OAKDOWNS 7019

LOWER LEVEL PLAN

SCALE 1:100
0 1000 2000

AMENDED

DATE
02/ 03/ 2026

DRAWING NO.
03 OF 11

email: qltilley7@bigpond.com
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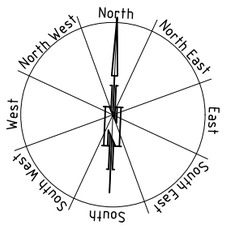


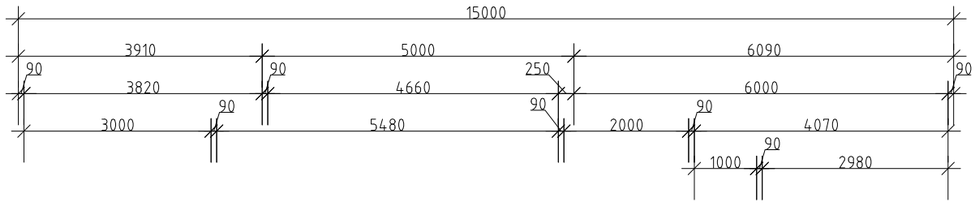



| AREAS | |
|---|---|
| Lower level | 137.18m² |
| Upper level | 160.26m² |
| Total | 297.44m² |
| Deck | 34.00m² |

DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION

PROPOSED RESIDENCE FOR
MR A CLARKE AT
6 LELIA COURT OAKDOWNS 7019

UPPER LEVEL PLAN

SCALE 1:100
0 1000 2000

AMENDED

DATE
02/03/2026

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04 OF 11

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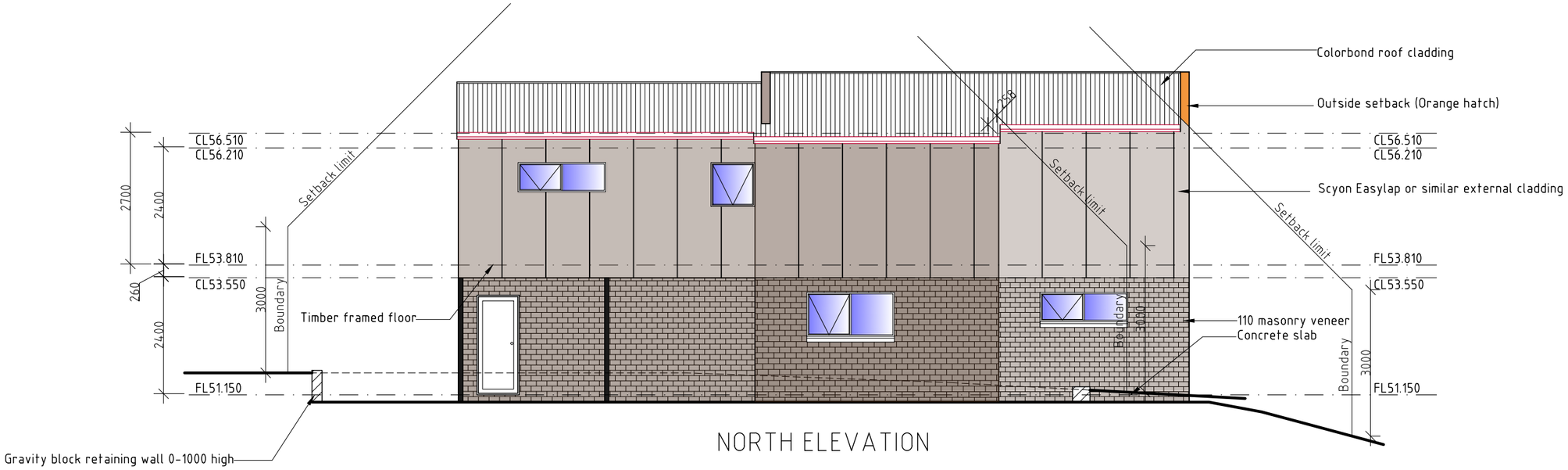


NORTH ELEVATION


SOUTH ELEVATION

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NOT FOR CONSTRUCTION

PROPOSED RESIDENCE FOR
MR A CLARKE AT
6 LELIA COURT OAKDOWNS 7019

ELEVATIONS

SCALE 1:100
0 1000 2000

AMENDED

DATE
02/ 03/ 2026

DRAWING NO.
05 OF 11

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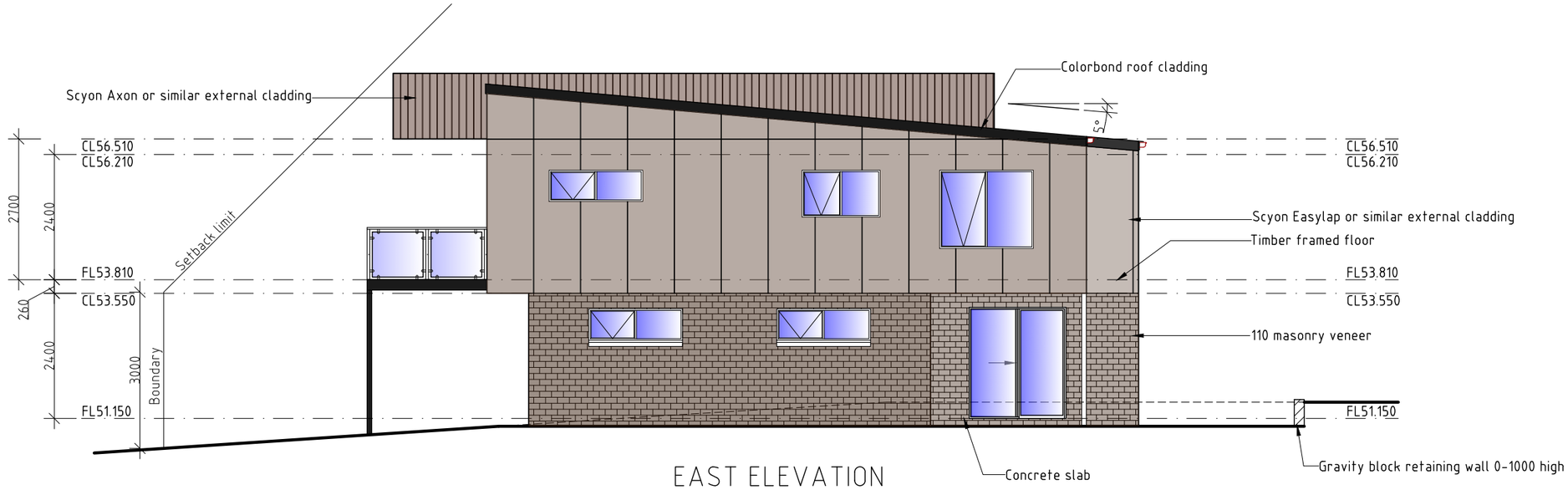
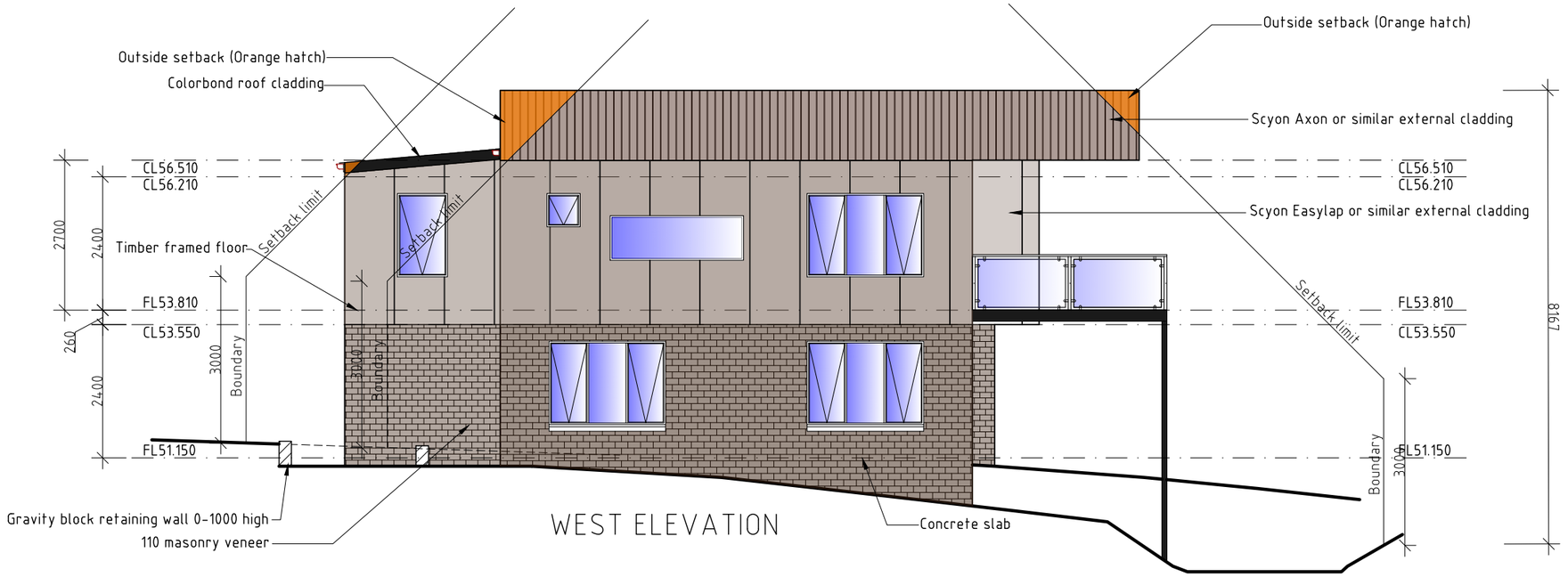



EAST ELEVATION




WEST ELEVATION

DEVELOPMENT DRAWINGS ONLY
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PROPOSED RESIDENCE FOR
MR A CLARKE AT
6 LELIA COURT OAKDOWNS 7019

ELEVATIONS

SCALE 1:100
0 1000 2000

AMENDED

DATE
02/03/2026

DRAWING NO.
06 OF 11

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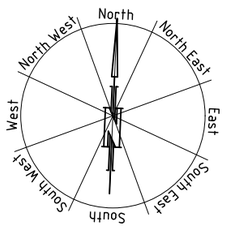


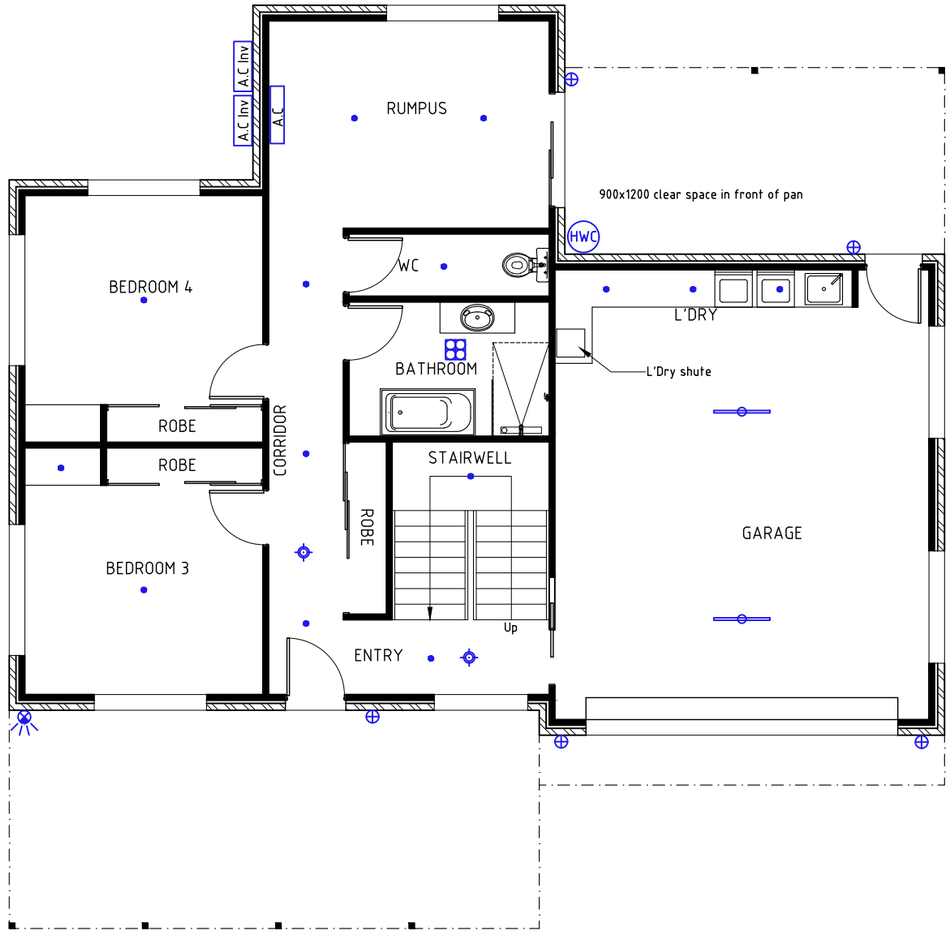


# LOWER LEVEL REFLECTED CEILING PLAN

- Downlight point
  Recessed downlights to be MARTEC, GENISIS
  Fully sealed recessed downlight 100° beam or similar
- Surface mounted batten light fitting
  with 12 watt LED globe
- Surface mounted 28 watt fluorescent light fitting
- Combination light, fan & heat lamp unit
  4/200 watt heat lamps (not included in calculation)
- Up/down exterior wall light 12 watt LED,
  1800mm above FL.
- Surface or wall mounted external security sensor
  light with 20 watt LED globes
- RH Range hood

For dimmer switch location, refer to lighting calculations.
External lights to be controlled by daylight sensor, or have an average light source efficacy of not less than 40 Lumens/watt.
All Bathroom fans to be fitted with backdraught dampers/shutters, and to be ducted directly to outdoor air.
See attached Lighting calculation.

- Interconnected photoelectric smoke alarms.
- Light switch
- Waterproof power point
- Single power point
- Double power point
- TV connection point
- Telephone/internet connection point
- A.C Wall mounted reverse cycle heat pump, indoor unit. Size based off 6kW system
- A.C Inv Ground based reverse cycle heat pump outdoor unit. Size based off 6kW system.
- HWC HWC

| ROOM | AREA m² |
|---|---|
| Garage & L'Dry | 43.26 |
| Entry | 5.40 |
| Corridor | 7.54 |
| Bedroom 3 | 13.54 |
| Bedroom 4 | 13.54 |
| Stairwell | 7.18 |
| Bathroom | 6.91 |
| WC | 3.21 |
| Rumpus | 14.96 |

ROOF VENTILATION

SUPPLY
Continuous gap at eaves it:
25mm for <16° pitch
10mm for >16° pitch

EXHAUST
Continuous gap at ridge is min.
5mm for all roof pitches.

Refer to ABCB Housing Provisions Table 10.8.3 for alternative.

NOTE: Glazier to verify all glass prior to manufacture of glazing Units

Glazing compliance certificate to be provided by glass supplier

| AREAS | |
|---|---|
| Lower level | 137.18m² |
| Upper level | 160.26m² |
| Total | 297.44m² |
| Deck | 34.00m² |

DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION

PROPOSED RESIDENCE FOR
MR A CLARKE AT
6 LELIA COURT OAKDOWNS 7019

LOWER LEVEL REFLECTED CEILING PLAN

DATE
02/ 03/ 2026

DRAWN BY G. Tilley
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SCALE 1:100
0 1000 2000

AMENDED

DRAWING NO.
07 OF 11

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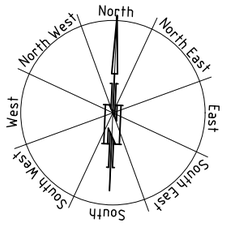


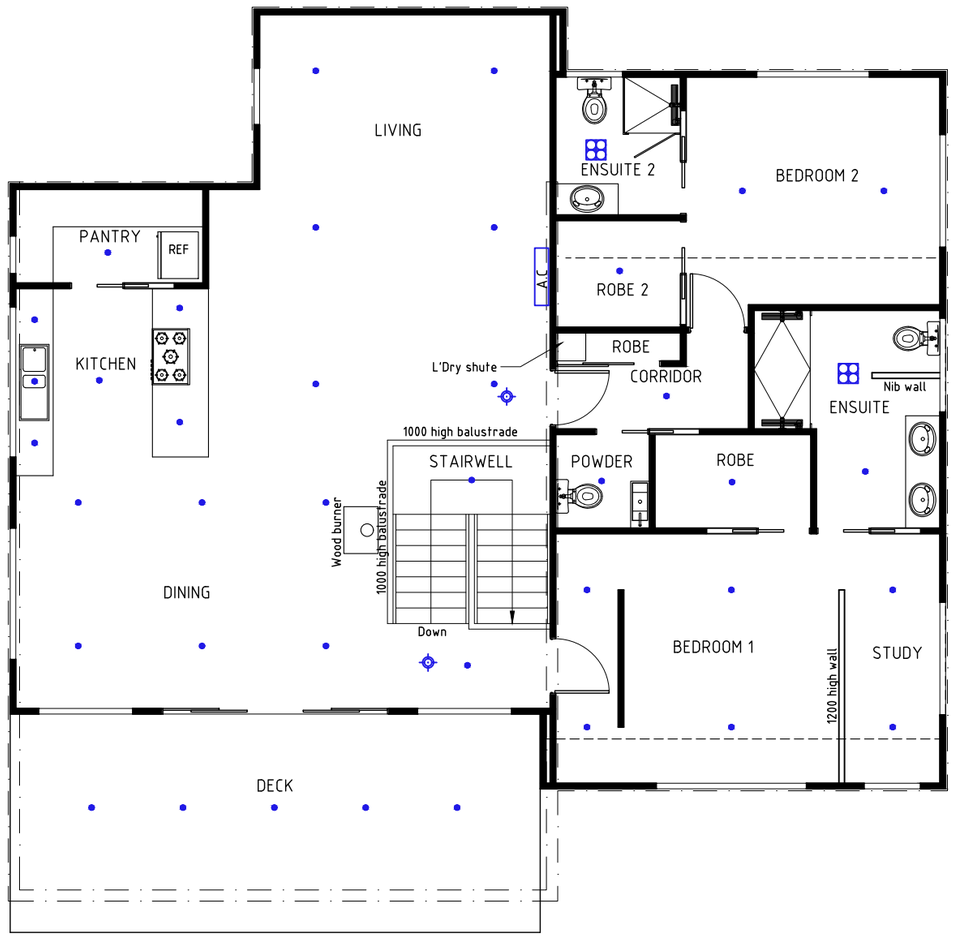


Downlight point
Recessed downlights to be MARTEC, GENISIS
Fully sealed recessed downlight 100° beam or similar

Surface mounted batten light fitting
with 12 watt LED globe

Surface mounted 28 watt fluorescent light fitting

Combination light, fan & heat lamp unit
4/200 watt heat lamps (not included in calculation)

Up/down exterior wall light 12 watt LED,
1800mm above FL.

Surface or wall mounted external security sensor
light with 20 watt LED globes

RH Range hood

For dimmer switch location, refer to lighting calculations.
External lights to be controlled by daylight sensor, or have an average light source efficacy of not less than 40 Lumens/watt.
All Bathroom fans to be fitted with backdraught dampers/shutters, and to be ducted directly to outdoor air.
See attached Lighting calculation.

Interconnected photoelectric
smoke alarms.

Light switch

Waterproof power point

Single power point

Double power point

TV connection point

Telephone/internet connection point

A.C Wall mounted reverse cycle heat pump, indoor unit. Size based off 6kW system

A.C Inv Ground based reverse cycle heat pump outdoor unit. Size based off 6kW system.

HWC HWC

| ROOM | AREA $m^2$ |
|---|---|
| Kitchen, Dining Living | 72.25 |
| Pantry | 4.50 |
| Bedroom1 & Study | 24.64 |
| Robe | 3.75 |
| Ensuite | 8.81 |
| Corridor | 3.63 |
| Powder | 2.25 |
| Bedroom 2 | 15.21 |
| Robe 2 | 3.42 |
| Ensuite 2 | 4.42 |
| Deck | 29.75 |

# UPPER LEVEL REFLECTED CEILING PLAN

ROOF VENTILATION

SUPPLY
Continuous gap at eaves it:
25mm for <16° pitch
10mm for >16° pitch

EXHAUST
Continuous gap at ridge is min.
5mm for all roof pitches.

Refer to ABCB Housing Provisions Table 10.8.3 for alternative.

NOTE: Glazier to verify all glass prior to manufacture of glazing Units

Glazing compliance certificate to be provided by glass supplier

AREAS
Lower level 137.18$m^2$
Upper level 160.26$m^2$
Total 297.44$m^2$
Deck 34.00$m^2$

DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION

PROPOSED RESIDENCE FOR
MR A CLARKE AT
6 LELIA COURT OAKDOWNS 7019

UPPER LEVEL REFLECTED CEILING PLAN

DATE 02/ 03/ 2026

DRAWN BY G. Tilley
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SCALE 1:100
0 1000 2000

AMENDED

DRAWING NO. 08 OF 11

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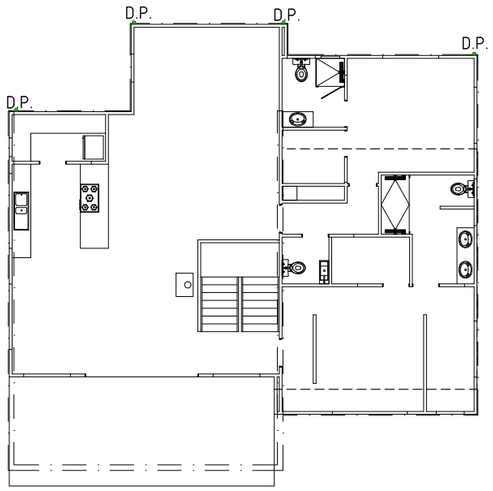
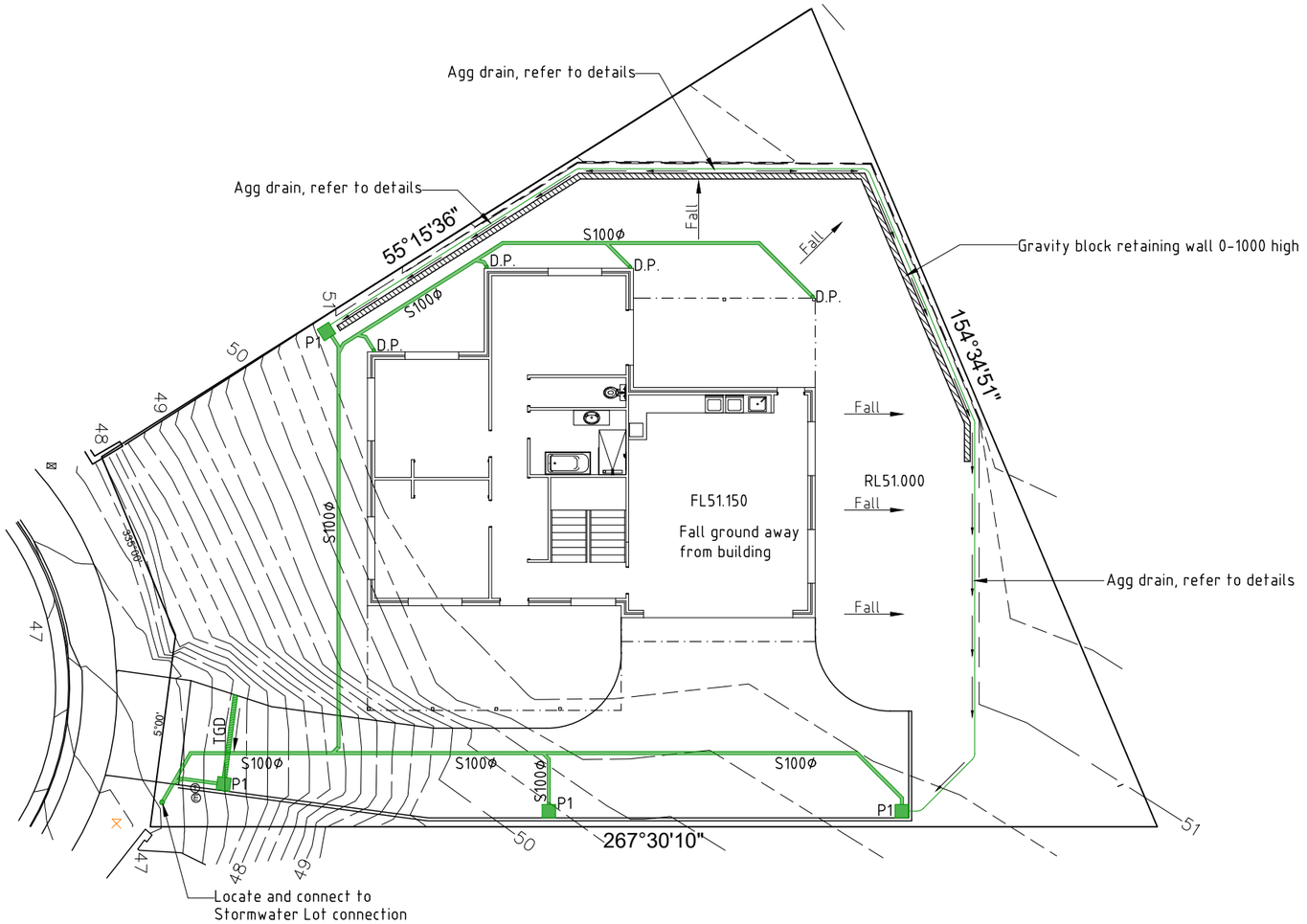
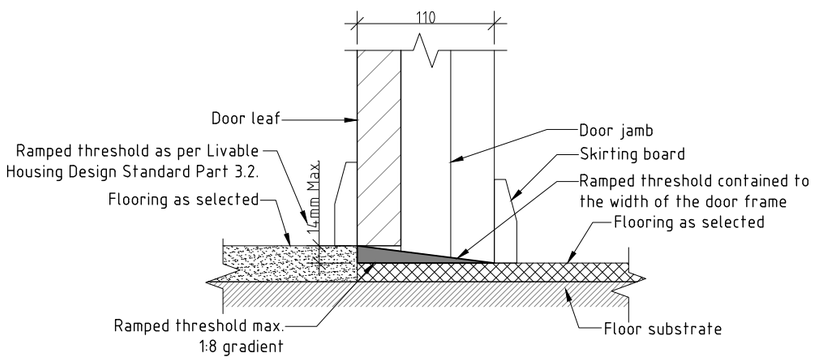


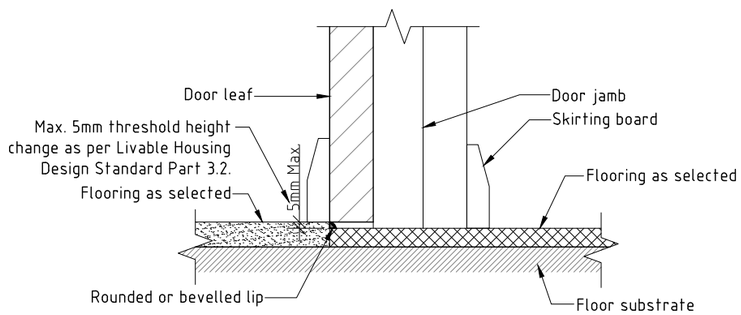

UPPER LEVEL STORMWATER CONCEPT PLAN




LOWER LEVEL STORMWATER CONCEPT PLAN




INTERNAL DOOR WITH RAMPED THRESHOLD
Scale 1:5




INTERNAL DOOR THRESHOLD
FLOORING - MAX. 5mm HIGH
Scale 1:5

TGD Trafficable grate drain
P1 450x450 Trafficable pit. Each grate pit to be fitted with SPEL Environmental Stormsack water quality improvement device. Designed & installed in accordance with manufacturers instructions

Agg drains to be installed prior to slab/footings preparation. Evidence of the agg drainage installation to be supplied to the Engineer.

Plumber to confirm the location of existing on-site services prior to commencement of any excavations

S100ø 100uPVC sewerage 1.67% min. fall

100ø 100uPVC stormwater 1:100 min. fall

100x100 cast in kerb to downslope of driveway perimeter I.O. at each intersection & bend

DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION

PROPOSED RESIDENCE FOR
MR A CLARKE AT
6 LELIA COURT OAKDOWNS 7019

STORMWATER CONCEPT PLAN

DATE 02/03/2026

DRAWN BY G. Tilley
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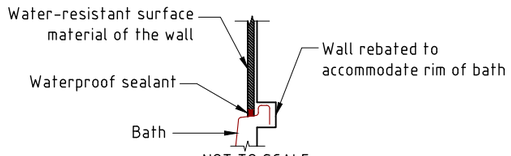
phone ph 0400 671 582

SCALE 1:200
0 2000 4000

AMENDED

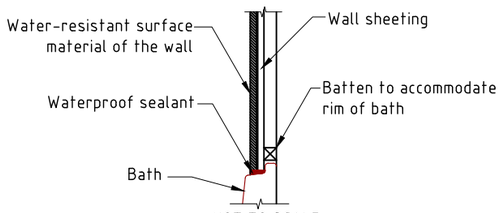
DRAWING NO. 09 OF 11

Certified: G. Tilley Accreditation No.CC620H



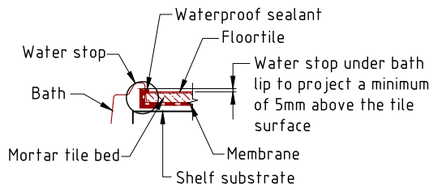

NOT TO SCALE

BATH/WALL JUNCTION - RECESSED



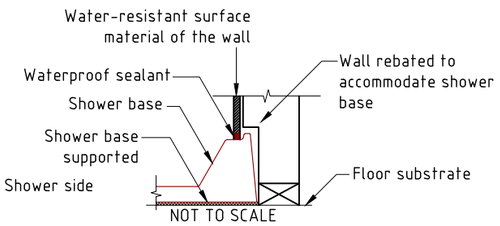

NOT TO SCALE

BATH/WALL JUNCTION - BATTENED



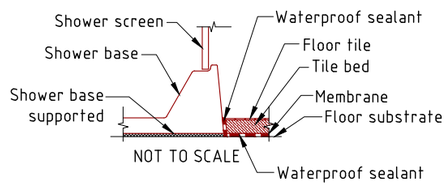

NOT TO SCALE

BATH/SHELF JUNCTION




NOT TO SCALE

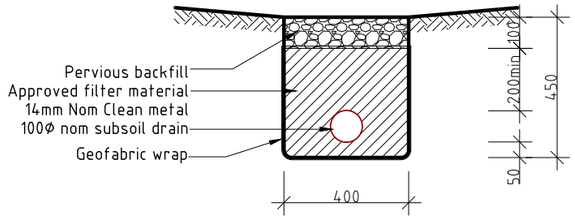
TYPICAL PREFORMED SHOWER BASE WALL/FLOOR JUNCTION




NOT TO SCALE

TYPICAL PREFORMED SHOWER BASE/FLOOR JUNCTION ON TIMBER FLOORS, INCLUDING PARTICLEBOARD, PLYWOOD AND OTHER TIMBER MATERIALS

NOTE: All materials and construction to comply with AS3500.3.2021

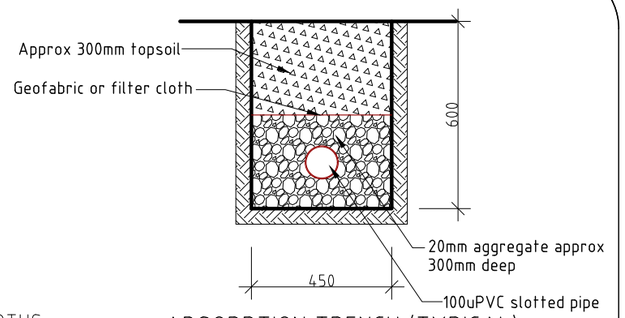



AGG DRAIN DETAIL (TYPICAL)

Scale 1:20

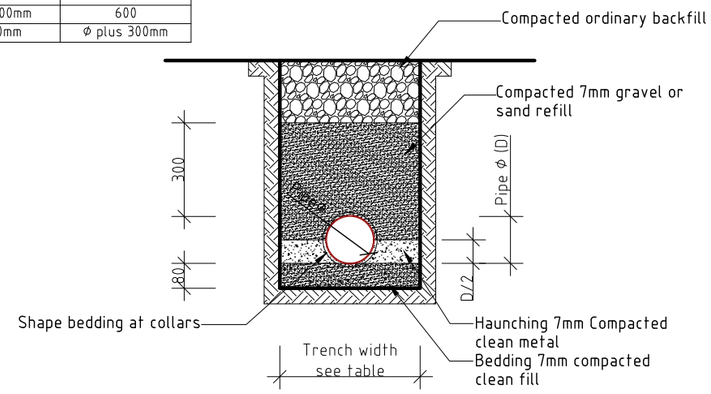
TRENCH WIDTHS

| Pipe diameter | Min. trench width |
|---|---|
| Less than 50mm | 250 |
| 75-100mm | 450 |
| 150-300mm | 600 |
| >300mm | Ø plus 300mm |



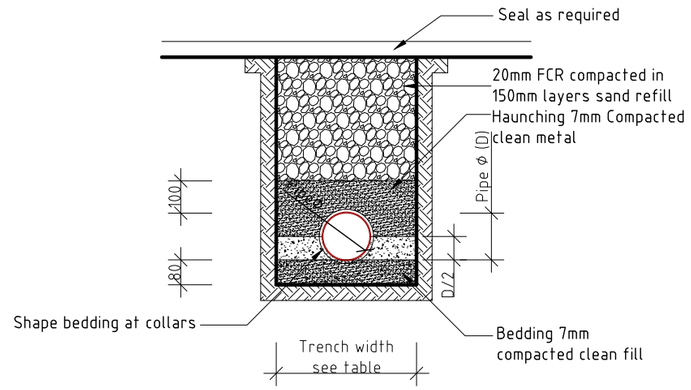

ABSORPTION TRENCH (TYPICAL)

Scale 1:20




PIPE TRENCH DETAIL TO NON-TRAFFICABLE AREAS (TYPICAL)

Scale 1:20




PIPE TRENCH DETAIL TO TRAFFICABLE AREAS (TYPICAL)

Scale 1:20

Surface drainage to conform with NCC Vol. 2 Part H2D2.
NOTE: 50mm fall required over first 1m from building.

IMPORTANT NOTICE FOR ATTENTION OF OWNER:
The owners attention is drawn to the fact that foundations and associated drainage in all sites requires continuing maintenance to assist footing performance. Advice for foundation maintenance is contained in the CSRIO Building Technology File 18 and it is the owners responsibility to maintain the site in accordance with that document.

DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION

PROPOSED RESIDENCE FOR
MR A CLARKE AT
6 LELIA COURT OAKDOWNS 7019

PLUMBING DETAILS

DATE
02/03/2026

DRAWN BY G. Tilley
email: gltilley7@bigpond.com
phone ph 0400 671 582

SCALE 1:20
0 200 400

AMENDED

DRAWING NO.
10 OF 11

Certified: G. Tilley Accreditation No.CC6201H

## WET AREAS TO COMPLY WITH NCC VOL. 2 PART H4D2, ABCB HOUSING PROVISIONS PART 10.2 AND AS 3740

WATERPROOFING OF ENCLOSED & UNENCLOSED SHOWERS:
FLOOR: Waterproof entire floor if no preformed shower base provided
WALLS: Waterproof to not less than 1800mm above the floor substrate
WALL JUNCTIONS AND JOINTS: Waterproof internal and external corners and horizontal joints within a height of 1800mm above the floor level with not less than 40mm width either side of the junction
WALL/FLOOR JUNCTIONS: Waterproof internal and external corners and joints
PENETRATIONS: Waterproof all penetrations

AREAS OUTSIDE THE SHOWER ON CONCRETE SLAB OR FC FLOORING:
FLOORS: Entire floor to be water resistant
WALLS/FLOOR JUNCTIONS: Waterproof all wall/floor junctions and where a flashing is used, the horizontal leg must be not less than 40mm

AREAS OUTSIDE THE SHOWER ON TIMBER FLOOR:
FLOORS: Waterproof entire floor
WALL/FLOOR JUNCTIONS: Waterproof all wall/floor junctions and where a flashing is used, the horizontal leg must be not less than 40mm.

AREAS ADJACENT TO NON-FREESTANDING BATHS AND SPAS (without showers):
FLOOR: Water resistant to entire floor on concrete or FC flooring; or Waterproof to entire floor on timber floor.
WALLS: Water resistant walls to a height of not less than 150mm above the vessels, for the full extent, where the vessel is within 75mm of a wall.
WALL JUNCTIONS AND JOINTS:Water resistant within 150mm above the vessel for the extent of the vessel to a width of 40mm either side of the junction
WALL/FLOOR JUNCTIONS: Waterproof for the extent of the vessel

AREAS ADJACENT TO INSERTED BATHS AND SPAS (without showers):
FLOOR: Water resistant to entire floor on concrete or FC flooring; or Waterproof to entire floor on timber floor.
HORIZONTAL SURFACES: Waterproof shelf adjoining bath or spa and include a waterstop under the vessel lip
WALLS: Waterproof walls to not less than 150mm above the lip of the vessel
WALL JUNCTIONS AND JOINTS: Waterproof junctions within 150mm of vessel to a width of 40mm either side of the junction
WALL/FLOOR JUNCTIONS: Waterproof wall/floor junctions 25mm above finished floor level
PENETRATIONS: Waterproof penetrations where they occur in horizontal surfaces, seal penetrations where they occur in vertical surfaces

OTHER AREAS (LAUNDRIES AND WCs):
FLOOR: Water resistant floor to entire room
WALLS: Water resistant wall to a height of not less than 150mm above the vessel for the extent of the vessel, where the vessel is within 75mm of wall
WALL JUNCTIONS AND JOINTS: Waterproof junctions where a vessel is fixed to a wall
WALL/FLOOR JUNCTIONS: Water resistant wall/floor junctions with horizontal leg not less than 40mm where flashing used
PENETRATIONS: Waterproof penetrations where they occur in surfaces required to be waterproof or water resistant.

WATERPROOFING SYSTEMS:
Waterproofing systems to be in accordance with ABCB Housing Provisions Part 10.2.6.

FALLS TO WET AREA FLOORS:
Where a floor waste is installed the continuous fall of a floor plane to the waste must be no less than 1:80 and no more than 1:50.

STEPDOWN SHOWERS:
Where stepdown showers are used, the shower area must be stepped down a minimum of 25mm below the finished floor level outside the shower. Refer to ABCB Housing Provisions Part 10.2.15 & relevant figures for details.

HOB CONSTRUCTION:
Shower hobs are to be constructed in accordance with ABCB Housing Provisions Part 10.2.16.

ENCLOSED SHOWERS WITH LEVEL THRESHOLD:
Enclosed showers with a level threshold must be provided with a waterstop in accordance with ABCB Housing Provisions Part 10.2.17 & relevant figures.

UNENCLOSED SHOWERS:
Unenclosed showers are to have a waterstop min. 1500mm from the shower rose with the vertical leg finishing flush with the top surface of the floor. Waterproof all all joins and junctions. Waterproof entire bathroom floor where unenclosed showers are installed. Refer to ABCB Housing Provisions Part 10.2.18 & relevant figures for details.

PENETRATIONS:
All penetrations in showers and wet areas must be waterproofed in accordance with ABCB Housing Provisions part 10.2.23.

FLASHINGS/JUNCTIONS:
All flashings and junctions in wet areas to be installed in accordance with ABCB Housing Provisions Part 10.2.24 & relevant figures.

SHOWER SCREENS:
1900H Semi-frameless shower screens to comply with ABCB Housing Provisions Table 8.4.6 & AS 1288:2021. Minimum 6mm toughened safety organic coated glass, labelled to comply with industry standards. Install shower screens in accordance with ABCB Housing Provisions Part 10.2.32.

HYDRAULIC NOTES:
1. All plumbing shall be in accordance with the Tasmanian Plumbing Regulations, AS 3500 and to the local authority approval.
2. The location of the existing services where shown are approximate only and shall be confirmed on site where possible. Determine location of existing power, Telstra, water and drainage services prior to commencing new work.
3. Conceal all pipework in ceiling space, ducts, cavities, wall chases, cupboards etc. unless otherwise approved.
4. Refer to designers drawings and fixture and equipment technical specifications for pipework connections.

5. Make good all disturbed surfaces to match existing.
6. Remove all excess soil and surplus materials from site.
7. All plumbing to be installed by a licensed plumber.

Install inspection openings at major bends for stormwater and all low points of downpipes.
All plumbing & drainage to be in accordance with local Council requirements.
Provide surface drain to back of bulk excavation to drain leveled pad prior to commencing footing excavation.
Stormwater line (100mm uPVC)
Sewer line (100mm uPVC)

SERVICES
The heated water system must be designed & installed with Part B2 of NCC Vol. 3 - Plumbing Code of Australia
Thermal insulation for heated water piping must:
a) be protected against the effects of weather and sunlight; and
b) be able to withstand the temperatures within the piping; and
c) use thermal insulation in accordance with AS/NZS 4859.1

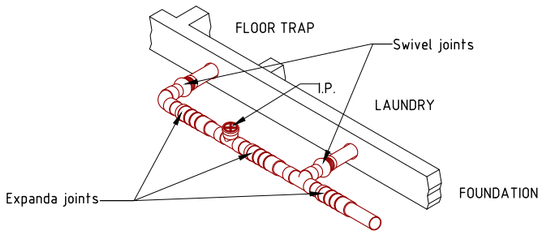
Heated water piping that is not within a conditioned space must be thermally insulated as follows:
1. Internal piping:
   a) All flow and return internal piping that is -
      (i) within an unventilated wall spaces
      (ii) within an internal floor between storeys; or
      (iii) between ceiling and insulation and a ceiling
   Must have a minimum R-value of 0.2 (ie. 9mm of closed cell polymer insulation)
2. Piping located within a ventilated wall space, an enclosed building subfloor or a roof space:
   a) All flow and return piping
   b) Cold water supply piping and Relief valve piping within 500mm of the connection to central water heating system
   Must have a minimum R-value of 0.45 (ie. 19mm of closed cell polymer insulation)
3. Piping located outside the building or in an unenclosed building sub-floor or roof space
   a) All flow and return piping.
   b) Cold water supply piping and Relief valve piping within 500mm of the connection to central water heating system
   Must have a minimum R-value of 0.6 (ie. 25mm of closed cell polymer insulation)
   Piping within an insulated timber framed wall, such as that passing through a wall stud, is considered to comply with the above insulation requirements.

| Hot & Cold Water Nominal Diameters | |
|---|---|
| Branch off takes | Min. DN20 |
| Max. off take length 6m | DN18 |
| Max. off take length 3m | DN15 |
| Max. off take length 1m | DN10 |

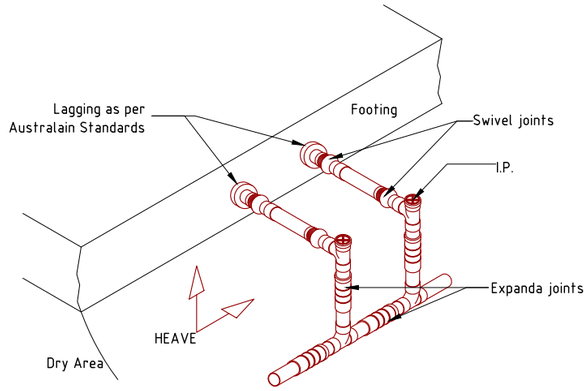
### Insulation Schedule

| Heated Water Pipes Type | Size Range | Insulation |
|---|---|---|
| Circulating Line | 32-40 | 25mm Rockwool with foil wrap |
| Branch Line | 20-25 | 19mm Bradflex |
| Offtake | 18 | 13mm Bradflex |
| Cold Water Pipes Exposed Type | Size Range | Insulation |
| All | >20 | 13mm Bradflex |
| Other Cold Water Pipes Type | Size Range | Insulation |
| All | All | Not required |

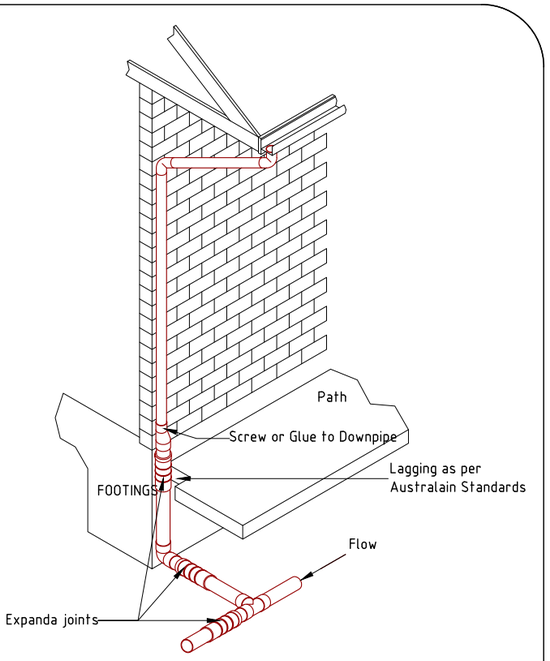
NOTE: Water pipes associated directly with plan equipment shall be insulated in accordance with the manufacturers instructions for a typical installation

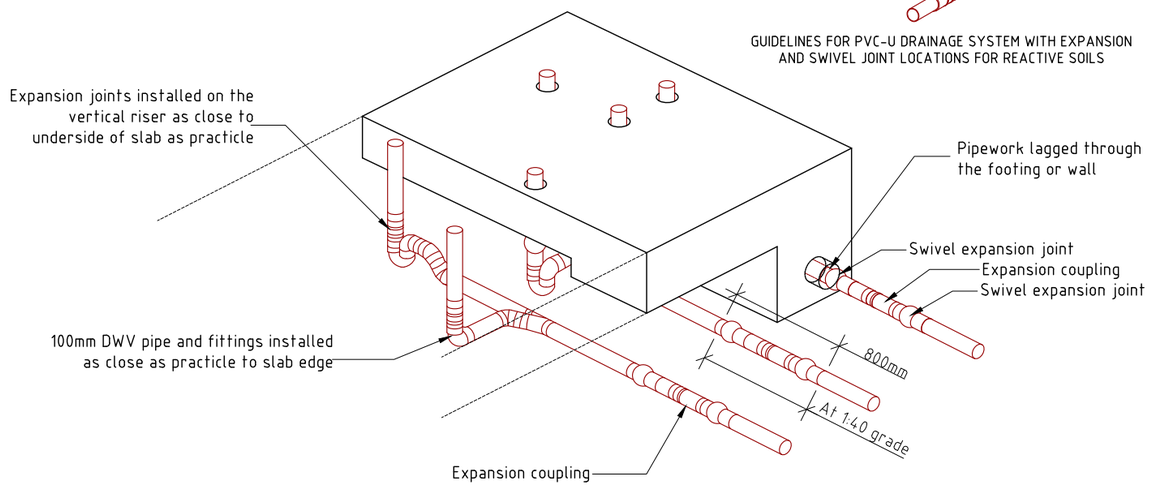



GUIDELINES FOR PVC-U DRAINAGE SYSTEM WITH EXPANSION AND SWIVEL JOINT LOCATIONS FOR REACTIVE SOILS



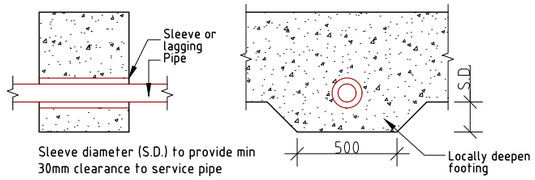

GUIDELINES FOR PVC-U DRAINAGE SYSTEM WITH EXPANSION AND SWIVEL JOINT LOCATIONS FOR REACTIVE SOILS




Note 1: Drain grade should be 1:40 for the first 800mm external to slab
Note 2: Swivel expansion joints installed on grade should not be used to correct pipe misalignment
Note 3: Swivel expansion joints and expansion joints should be installed at 50% of their telescopic movement
Note 4: Expansion joints installed on vertical risers should have a minimum of 40mm telescoopic movement
FIGURE G.5(A)- POTENTIAL LOCATIONS OF BELOW GROUND SWIVEL & EXPANSION JOINTS FOR "H" CLASS SITES

Pipes through footings & slab beams should be lagged.
Slab beam depths & footing depths should also be increased as indicated below




FLEXIBLE CONNECTION FOR SERVICE PIPES PASSING THROUGH FOOTINGS
Scale 1:20

Surface drainage to conform with NCC Vol. 2 Part H2D2.
NOTE: 50mm fall required over first 1m from building.

IMPORTANT NOTICE FOR ATTENTION OF OWNER:
The owners attention is drawn to the fact that foundations and associated drainage in all sites requires continuing maintenance to assist footing performance. Advice for foundation maintenance is contained in the CSRIO Building Technology File 18 and it is the owners responsibility to maintain the site in accordance with that document.

DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION

PROPOSED RESIDENCE FOR
MR A CLARKE AT
6 LELIA COURT OAKDOWNS 7019

PLUMBING NOTES

SCALE N/A

AMENDED

DATE
02/03/2026

DRAWING NO.
11 OF 11

DRAWN BY G. Tilley
email: gtilley7@bigpond.com
phone ph 0400 671 582

Certified: G. Tilley Accreditation No.CC6201H

OWNER: HARALAMPOS LAMPRAKIS, ZACHARIAS LAMBRAKIS & NICKOLAS LAMBRAKIS

FOLIO REFERENCE: CT.177626-506

GRANTEE: PART OF 140 ACRES LOCATED TO EDWARD KIMBERLEY

## PLAN OF SURVEY

BY SURVEYOR TIMOTHY LEIGH GOWLLAND
ROGERSON AND BIRCH SURVEYORS
UNIT 1 – 2 KENNEDY DRIVE, CAMBRIDGE PARK
PH 6248-5898 MOB. 0419-594-966

## CITY OF CLARENCE

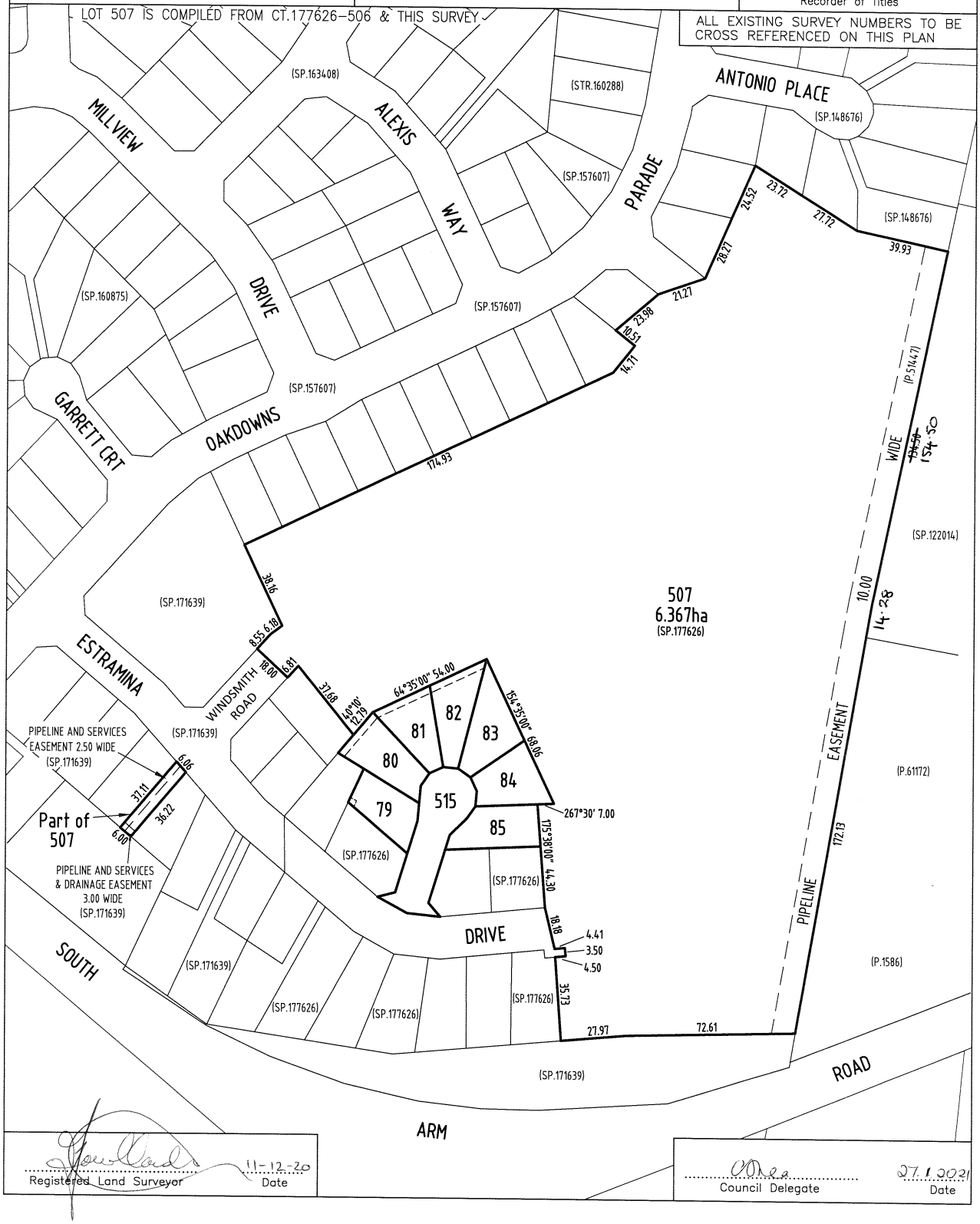
SCALE 1: 1500 LENGTHS IN METRES

REGISTERED NUMBER
**SP180502**

APPROVED
EFFECTIVE FROM 23 FEB 2021
Recorder of Titles

LOT 507 IS COMPILED FROM CT.177626-506 & THIS SURVEY

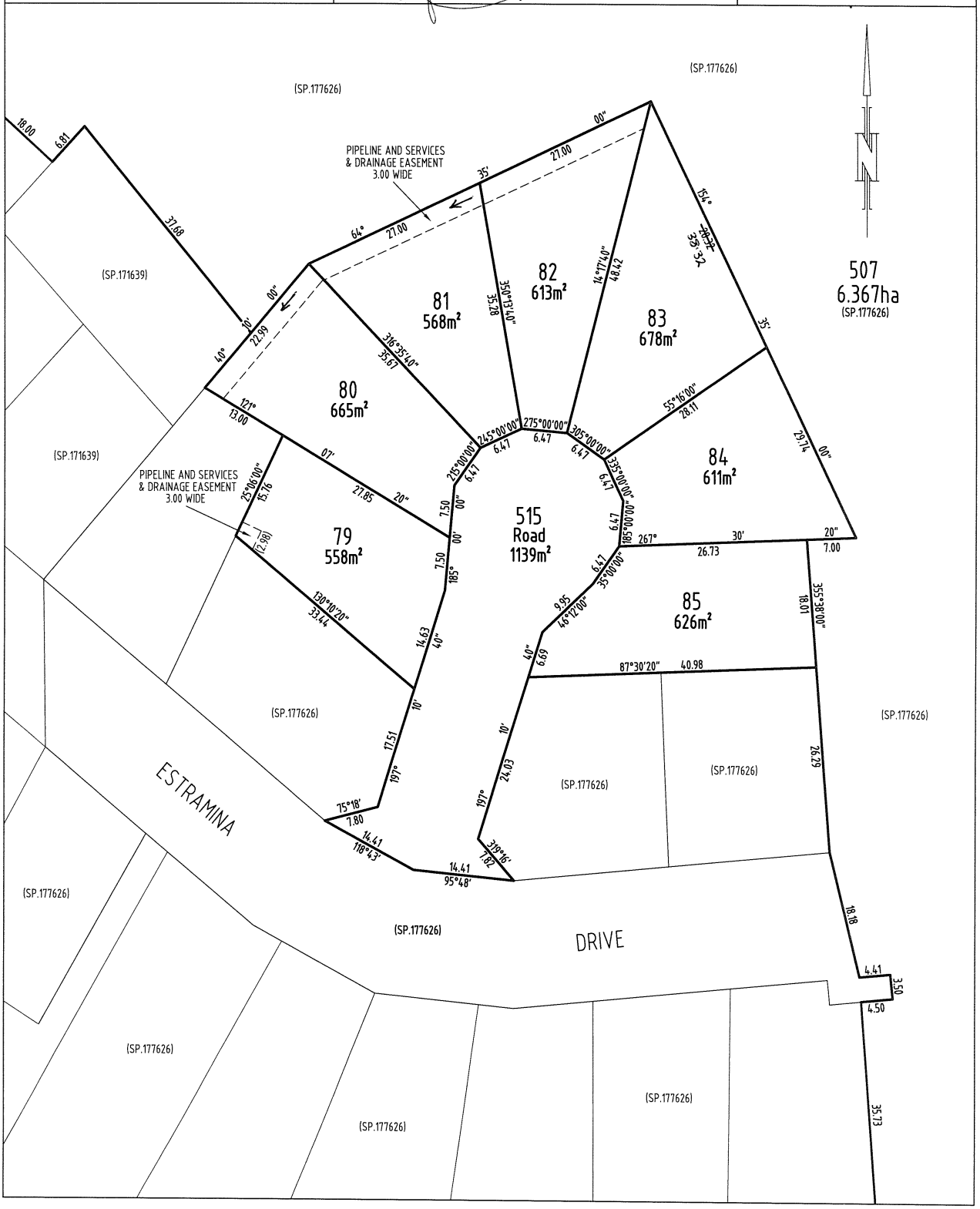
ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN




Registered Land Surveyor — 11-12-20 Date

Council Delegate — 27.1.2021 Date

| PLAN OF SURVEY<br>ANNEXURE SHEET<br>SHEET 1 OF 1 SHEETS | OWNERS: HARALAMPOS LAMPRAKIS, ZACHARIAS LAMBRAKIS & NICKOLAS LAMBRAKIS<br>FOLIO REFERENCE: CT.177626–506<br>SCALE 1:500 LENGTH IN METRES | Registered Number<br>SP 180502 |
|---|---|---|
| SIGNED FOR IDENTIFICATION PURPOSES<br>Council Delegate 27.1.2021 Date | THIS ANNEXURE SHEET FORMS PART OF THE ATTACHED INDEX PLAN.<br>Registered Land Surveyor 11-12-20 Date | APPROVED / EFFECTIVE FROM 23 FEB 2021<br>Recorder of Titles |



# RESULT OF SEARCH

RECORDER OF TITLES

*Issued Pursuant to the Land Titles Act 1980*

Tasmanian Government

SEARCH OF TORRENS TITLE

| VOLUME | FOLIO |
|---|---|
| 180502 | 84 |
| EDITION | DATE OF ISSUE |
| 3 | 05-July-2021 |

SEARCH DATE : 21-Apr-2026
SEARCH TIME : 04.15 pm

## DESCRIPTION OF LAND

City of CLARENCE
Lot 84 on Sealed Plan 180502
Derivation : Part of 140 Acres Located to Edward Kimberley
Prior CT 177626/506

## SCHEDULE 1

M892874 TRANSFER to EDWARD HENRY ROBERTS Registered 05-July-2021 at noon

## SCHEDULE 2

Reservations and conditions in the Crown Grant if any
SP180502 COVENANTS in Schedule of Easements
SP180502 FENCING COVENANT in Schedule of Easements
SP133940, SP141137, SP157607, SP160875, SP163408, SP171639 & SP177626 COVENANTS in Schedule of Easements
SP133940, SP141137, SP157607, SP160875, SP163408, SP171639 & SP177626 FENCING COVENANT in Schedule of Easements
E266685 MORTGAGE to Commonwealth Bank of Australia Registered 05-July-2021 at 12.01 pm

## UNREGISTERED DEALINGS AND NOTATIONS

N301556 PRIORITY NOTICE reserving priority for 90 days
D/MORTGAGE COMMONWEALTH BANK OF AUSTRALIA to EDWARD HENRY ROBERTS
TRANSFER EDWARD HENRY ROBERTS to ADAM JAMES CLARKE
MORTGAGE ADAM JAMES CLARKE to COMMONWEALTH BANK OF AUSTRALIA Lodged by PAGE SEAGER on 24-Nov-2025 BP: N301556
E449409 DISCHARGE OF MORTGAGE E266685 Lodged by DYE & DURHAM (CBA) on 17-Feb-2026 BP: E449409
E449412 MORTGAGE to Commonwealth Bank of Australia Lodged by DYE & DURHAM (CBA) on 17-Feb-2026 BP: E449409
N303575 TRANSFER to ADAM JAMES CLARKE Lodged by DYE & DURHAM (CBA) on 17-Feb-2026 BP: E449409

| SCHEDULE OF EASEMENTS | Registered Number |
|---|---|
| **NOTE:** THE SCHEDULE MUST BE SIGNED BY THE OWNERS & MORTGAGEES OF THE LAND AFFECTED. SIGNATURES MUST BE ATTESTED. | SP 180502 |



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.

## EASEMENTS

### Pipeline Right

Lot 507 on the plan is subject to a Pipeline Right in favour of the Tasmanian Water & Sewerage Corporation Pty Ltd (as successor to the Hobart Regional Water Board) its successors and assigns (hereinafter called 'TasWater') in the terms created by and more fully set forth in Transfer B500140 and subject to the provisions contained therein over the Pipeline Easement 10.00 wide on the plan.

### Drainage Easements

Lots ~~80~~ 79 to 82 inclusive and lot 507 on the plan are subject to a Drainage Easement (as defined) to the Clarence City Council over the Pipeline & Services & Drainage Easements 3.00 wide shown on the plan.

### Pipeline and Services Easements

Lot 507 ('the Lot') is subject to a PIPELINE AND SERVICES EASEMENT (as defined) in gross in favour of the Tasmanian Water and Sewerage Corporation Pty Limited, its successors and

(USE ANNEXURE PAGES FOR CONTINUATION)

| | |
|---|---|
| SUBDIVIDER: Haralampos Lambrakis, Zacharias Lambrakis and Nickolas Lambrakis<br>FOLIO REF: 177626/506<br>SOLICITOR & REFERENCE: David Wallace, Wallace Wilkinson & Webster | PLAN SEALED BY:<br>DATE: 27 January 2021<br>SD-2003/114<br>REF NO.<br>CShea<br>Council Delegate<br>Clare Shea |
| **NOTE:** The Council Delegate must sign the Certificate for the purposes of identification. | |

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| ANNEXURE TO SCHEDULE OF EASEMENTS<br>PAGE 2 OF 5 PAGES | Registered Number<br>SP 180502 |
|---|---|
| SUBDIVIDER: Haralampos Lambrakis, Zacharias Lambrakis and Nickolas Lambrakis<br>FOLIO REFERENCE: 177626-506 | |

assigns) ("TasWater") over the land marked "PIPELINE & SERVICES EASEMENT 2.50 WIDE" shown on the plan ('the Easement Land'). (SP171639)

Lots 79 to 82 inclusive and & Lot 507 ('the Lots') are subject to a PIPELINE AND SERVICES EASEMENT (as defined) in gross in favour of Tasmanian Water and Sewerage Corporation Pty Limited, its successors and assigns) ("TasWater") over the land marked "PIPELINE & SERVICES & DRAINAGE EASEMENT 3.00 WIDE" shown on the plan ("the Easement Land").

**COVENANTS**

The owner of each lot on the plan covenants with the Vendors and the owners for the time being of every other lot shown on the plan to the intent that the burden of this covenant may run with and bind the Covenantor's lot and every part thereof and that the benefit shall be annexed to and devolve with each and every part of every other lot shown on the plan to observe the following stipulations:

1. Not to remove any trees from the lot without the prior written consent of the Clarence City Council.

2. Not without the prior written consent of the Vendor to construct or allow to be constructed, any kit home or relocatable dwelling on such lot.

3. Not without the prior written consent of the Vendor to construct any walls of any residential building on such lot from any material except weatherboard, brick, finished rendered surface or masonry without the prior written consent of the Vendor, PROVIDED THAT the use of timber, non-brick or non-masonry materials not exceeding thirty percent (30%) of the total external wall area is permitted.

4. Not without the prior written consent of the Vendor to construct on any such lot, a dwelling with a liveable floor area of less than 150 square metres, (which area shall not include patios, verandas and carports) except if the dwelling is one of a greater number of multiple dwellings on that lot.

5. Not to use galvanised iron or other reflective materials in the construction of any dwelling nor any shed or outbuilding on a lot.

**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.

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| ANNEXURE TO SCHEDULE OF EASEMENTS<br>PAGE 3 OF 5 PAGES | Registered Number<br>SP 180502 |
|---|---|
| SUBDIVIDER: Haralampos Lambrakis, Zacharias Lambrakis and Nickolas Lambrakis<br>FOLIO REFERENCE: 177626-506 | |

6. Not to erect or permit to be erected or remain on a lot any hoarding or advertising sign whatsoever except for a "for sale" sign during the period the lot is for sale.

**FENCING COVENANT**

The Owner of each lot on the Plan covenants with the Vendors Haralampos Lampbrakis, Zacharias Lambrakis and Nickolas Lambrakis that the Vendors shall not be required to fence.

**DEFINITIONS**

**"Drainage Easement"** is defined as follows **:-**

means a right of drainage (including the right of construction of drains) for Clarence City Council with which the right shall be capable of enjoyment for the purpose of carrying away stormwater and other surplus water from any land over or under the land herein indicated as the land over which the right is to subsist, and through all sewers and drains which may hereafter be made or passing under, through, and along the last-mentioned land and the right for Clarence City Council and its employees, agents and contractors from time to time and at all times hereafter if it or they should think fit to enter into and upon the last-mentioned land and to inspect, repair, cleanse and amend any such sewer or drain without doing unnecessary damage to the said land.

"**Pipeline and Services Easement"** is defined as follows:-

**FIRSTLY, THE FULL AND FREE RIGHT AND LIBERTY** for TasWater and its employees, contractors, agents and all other persons duly authorised by it, at all times to:

(1) enter and remain upon the Easement Land with or without machinery, vehicles, plant and equipment;
(2) investigate, take soil, rock and other samples, survey, open and break up and excavate the Easement Land for any purpose or activity that TasWater is authorised to do or undertake;
(3) install, retain, operate, modify, relocate, maintain, inspect, cleanse, repair, remove and replace the Infrastructure;
(4) run and pass sewage, water and electricity through and along the Infrastructure;
(5) do all works reasonably required in connection with such activities or as may be authorised or required by any law:

**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.

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| ANNEXURE TO SCHEDULE OF EASEMENTS<br>PAGE 4 OF 5 PAGES | Registered Number<br>SP 180502 |
|---|---|
| SUBDIVIDER: Haralampos Lambrakis, Zacharias Lambrakis and Nickolas Lambrakis<br>FOLIO REFERENCE: 177626-506 | |

(a) without doing unnecessary damage to the Easement Land; and
(b) leaving the Easement Land in a clean and tidy condition;

(6) if the Easement Land is not directly accessible from a highway, then for the purpose of undertaking any of the preceding activities TasWater may with or without employees, contractors, agents and any other persons authorised by it, and with or without machinery, vehicles, plant and equipment enter the Lot from the highway at any vehicle entry and cross the Lot to the Easement Land; and

(7) use the Easement Land as a right of carriageway for the purpose of undertaking any of the preceding purposes on other land, TasWater reinstating any damage that it causes in doing so to any boundary fence of the Lot.

**SECONDLY,** the benefit of a covenant in gross for TasWater with the registered proprietor/s of the Easement Land and their successors and assigns not to erect any building, or place any structures, objects, vegetation, or remove any thing that supports, protects or covers any Infrastructure on or in the Easement Land, without the prior written consent of TasWater to the intent that the burden of the covenant may run with and bind the servient land and every part thereof and that the benefit thereof may be annexed to the easement herein described.

**Interpretation:**

"Infrastructure" means infrastructure owned or for which TasWater is responsible and includes but is not limited to:

(a) sewer pipes and water pipes and associated valves;
(b) telemetry and monitoring devices;
(c) inspection and access pits;
(d) electricity assets and other conducting media (excluding telemetry and monitoring devices);
(e) markers or signs indicating the location of the Easement Land or any other Infrastructure or any warnings or restrictions with respect to the Easement Land or any other Infrastructure;
(f) anything reasonably required to support, protect or cover any other Infrastructure;
(g) any other infrastructure whether of a similar nature or not to the preceding which is reasonably required for the piping of sewage or water, or the running of electricity, through the Easement Land or monitoring or managing that activity; and
(h) where the context permits, any part of the Infrastructure.

"TasWater" means Tasmanian Water & Sewerage Corporation Pty Ltd (ACN 162 220 653), its successors and assigns.

**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.

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| **ANNEXURE TO SCHEDULE OF EASEMENTS**<br>PAGE 5 OF 5 PAGES | Registered Number<br>SP 180502 |
|---|---|
| SUBDIVIDER: Haralampos Lambrakis, Zacharias Lambrakis and Nickolas Lambrakis<br>FOLIO REFERENCE: 177626-506 | |

**SIGNED** for and on behalf of **Haralampos Lambrakis, Zacharias Lambrakis and Nickolas Lambrakis** by their Attorney **David Russell Wallace** by virtue of Power of Attorney Number PA 114709 who hereby declares that he has received no notice of revocation of the said Power, in the presence of:

.....

Witness signature: P. Fletcher-Jones .....

Paula Fletcher-Jones
169 Liverpool Street, Hobart TAS 7000
Law Clerk

**SIGNED** for and on behalf of **MyState Bank Limited** ABN 89 067 729 195 by Rodney James Willis under Power No PA 107277 .....
(who declares that he has received no notice of revocation of the power)
in the presence of:

.....

Angela Carol Wright
Operations Consultant
137 Harrington st Hobart Tas 7000

.....

**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.

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# *AS2870:2011 SITE ASSESSMENT*

***6 Lelia Court***

***Oakdowns***

***March 2026***

GEO-ENVIRONMENTAL

SOLUTIONS

## Investigation Details

| | |
|---|---|
| **Client:** | Adam Clarke |
| **Site Address:** | 6 Lelia Court, Oakdowns |
| **Date of Inspection:** | 16/03/2026 |
| **Proposed Works:** | New house |
| **Investigation Method:** | Geoprobe 540UD - Direct Push |
| **Inspected by:** | C. Cooper |

## Site Details

| | |
|---|---|
| **Certificate of Title (CT):** | 180502/84 |
| **Title Area:** | Approx. 618.3m² m² |
| **Applicable Planning Overlays:** | Priority Vegetation , Airport obstacle limitation area |
| **Slope & Aspect:** | 3° S facing slope |
| **Vegetation:** | Grass & Weeds |

## Background Information

| | |
|---|---|
| **Geology Map:** | MRT |
| **Geological Unit:** | Jurassic Dolerite |
| **Climate:** | Annual rainfall 600mm |
| **Water Connection:** | Mains |
| **Sewer Connection:** | Serviced-Mains |
| **Testing and Classification:** | AS2870:2011, AS1726:2017 & AS4055:2021 |

## 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) | USCS | Description |
|---|---|---|---|
| 0.00-0.10 | 0.00-0.30 | SM | **Silty SAND**: with gravel, dark grey, brown, slightly moist, medium dense, |
| 0.10-0.50 | | CI | **Silty CLAY**: medium plasticity, grey, brown, slightly moist, stiff, |
| 0.50-0.70 | 0.30-0.40 | GC | **Clayey GRAVEL**: yellow, brown, slightly moist, very dense, refusal on rock/boulder. |

## Site Notes

Soils on the site are developing from Jurassic dolerite the clay fraction is likely to show moderate ground surface movement with moisture fluctuations.

## 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 M**

$y_s$ range: **20-40mm**

Notes: that is a moderately reactive clay.

## Wind Loading Classification

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

**Wind Classification: N3**

| | |
|---|---|
| Region: | A |
| Terrain Category: | 1.0 |
| Shielding Classification: | PS |
| Topographic Classification: | T2 |
| Wind Classification: | N3 |
| Design Wind Gust Speed – m/s ($V_{h,u}$): | 50 |

## Construction Notes & Recommendations

The site has been classified as **Class M** - Moderately reactive clay or silt site, which may experience moderate ground movement from moisture changes.

It is recommended the foundations be placed on the underlying bedrock to minimise the potential for significant foundation movement.

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.

I also recommend that during construction that I and/or the design engineer be notified of any major variation to the foundation conditions as predicted in this report.

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

*Director*

# Explanatory Notes

## 1 Scope of Works

The methods of description and classification of soils used in this report are based largely on Australian Standard 1726 – Geotechnical Site Investigations (AS1726:2017), with reference to Australian Standard 1289 – Methods for testing soils for engineering purposes (AS1289), for eventual Site Classification according to Australian Standard 2870 (AS2870:2011) – Residential Slabs and Footings and Australian Standard 1547 (AS1547:2012) On-site domestic wastewater management.

## 1.1 Site Classification AS2870:2011

Site classification with reference to the above Australian Standards are based on site reactivity.

| Class | Foundation Conditions | Characteristic Surface Movement |
|---|---|---|
| **A** | Most sand and rock sites with little or no ground movement from moisture changes. | **0mm** |
| **S** | Slightly reactive clay sites, which may experience only slight ground movement from moisture changes. | **0 – 20mm** |
| **M** | Moderately reactive clay or silt sites, which may experience moderate ground movement from moisture changes. | **20 – 40mm** |
| **H-1** | Highly reactive clay sites, which may experience high ground movement from moisture changes. | **40 – 60mm** |
| **H-2** | Highly reactive clay sites, which may experience very high ground movement from moisture changes. | **60 – 75mm** |
| **E** | Extremely reactive sites, which may experience extreme ground movement from moisture changes. | **>75mm** |

*Note: Soils where foundation performance may be significantly affected by factors other than reactive soil movement are classified as **Class P**.*

A site is classified as **Class P** when:

- The bearing capacity of the soil profile in the foundation zone is generally less than 100kpa
- If excessive foundation settlement may occur due to loading on the foundation.
- The site contains uncontrolled fill greater than 0.8m in depth for sandy sites and 0.4m in depth for other soil materials.
- The site is subject to mine subsistence, landslip, collapse activity or coastal erosion.
- The site is underlain by highly dispersive soils with significant potential for erosion
- If the site is subject to abnormal moisture conditions which can affect foundation performance

## 1.2 Soil Characterisation

This information explains the terms of phrase used within the soil description area of the report.

It includes terminology for cohesive and non-cohesive soils and includes information on how the Unified Soil Classification Scheme (USCS) codes are determined.

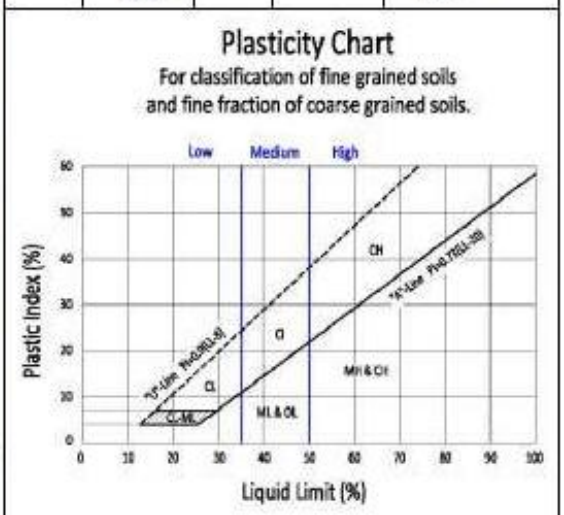
| **NON COHSIVE – SAND & GRAVEL** | | |
|---|---|---|
| **Consistency Description** | **Field Test** | **Dynamic Cone Penetrometer blows/100 mm** |
| Very loose (VL) | Easily penetrated with 13 mm reinforcing rod pushed by hand. | 0 - 1 |
| Loose (L) | Easily penetrated with 13 mm reinforcing rod pushed by hand. Can be excavated with a spade; 50 mm wooden peg can be easily driven. | 1 - 3 |
| Medium dense (MD) | Penetrated 300 mm with 13 mm reinforcing rod driven with 2 kg hammer, - hard shovelling. | 3 - 8 |
| Dense (D) | Penetrated 300 mm with 13 mm reinforcing rod driven with 2 kg hammer, requires pick for excavation: 50 mm wooden peg hard to drive. | 8 - 15 |
| Very dense (VD) | Penetrated only 25 - 50 mm with 13 mm reinforcing rod driven with 2 kg hammer. | >15 |

| **COHESIVE - SILT & CLAY** | | |
|---|---|---|
| **Consistency Description** | **Field Test** | **Indicative undrained shear strength kPa** |
| Very soft | Easily penetrated >40 mm by thumb. Exudes between thumb and fingers when squeezed in hand. | <12 |
| Soft | Easily penetrated 10 mm by thumb. Moulded by light finger pressure | >12 and <25 |
| Firm | Impression by thumb with moderate effort. Moulded by strong finger pressure | >25 and <50 |
| Stiff | Slight impression by thumb cannot be moulded with finger. | >50 and <100 |
| Very Stiff | Very tough. Readily indented by thumbnail. | >100 and <200 |
| Hard | Brittle. Indented with difficulty by thumbnail. | >200 |

## 1.3 USCS Material Descriptions

Soils for engineering purposes are the unconsolidated materials above bedrock, they can be residual, alluvial, colluvial or aeolian in origin.

| Major Divisions | | Particle size mm | USCS Group Symbol | Typical Names | Laboratory Classification | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | % < 0.075 mm (2) | Plasticity of fine fraction | $C_u = \frac{D_{60}}{D_{10}}$ | $C_c = \frac{(D_{30})^2}{(D_{10})(D_{60})}$ | NOTES |
| COARSE GRAINED SOILS (more than half of material less than 63 mm is larger than 0.075 mm) | BOULDERS | 200 | | | | | | | |
| | COBBLES | 63 | | | | | | | |
| | GRAVELS (more than half of coarse fraction is larger than 2.36 mm) | coarse 20<br>medium 6<br>fine 2.36 | GW | Well graded gravels and gravel-sand mixtures, little or no fines | 0-5 | — | >4 | Between 1 and 3 | (1) Identify fines by the method given for fine-grained soils.<br>(2) Borderline classifications occur when the percentage of fines (fraction smaller than 0.075 mm size) is greater than 5% and less than 12%. Borderline classifications require the use of SP-SM, GW-GC. |
| | | | GP | Poorly graded gravels and gravel-sand mixtures, little or no fines, uniform gravels | 0-5 | — | Fails to comply with above | | |
| | | | GM | Silty gravels, gravel-sand-silt mixtures (1) | 12-50 | Below 'A' line or PI<4 | — | — | |
| | | | GC | Clayey gravels, gravel-sand-clay mixtures (1) | 12-50 | Above 'A' line and PI>7 | — | — | |
| | SANDS (more than half of coarse fraction is smaller than 2.36 mm) | coarse 0.6<br>medium 0.2<br>fine 0.075 | SW | Well graded sands and gravelly sands, little or no fines | 0-5 | — | >6 | Between 1 and 3 | |
| | | | SP | Poorly graded sands and gravelly sands, little or no fines | 0-5 | — | Fails to comply with above | | |
| | | | SM | Silty sands, sand silt mixtures (1) | 12-50 | Below 'A' line or PI<4 | — | — | |
| | | | SC | Clayey sands, sand-clay mixtures (1) | 12-50 | Above 'A' line and PI>7 | — | — | |
| FINE GRAINED SOILS (more than half of material less than 63 mm is smaller than 0.075 mm | SILTS & CLAYS (Liquid Limit ≤50%) | | ML | Inorganic silts, very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity | Use the gradation curve of material passing 63 mm for classification of fractions according to the criteria given in 'Major Divisions' | | | | |
| | | | CL<br>CI | Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays | | | | | |
| | | | OL | Organic silts and clays of low plasticity | | | | | |
| | SILTS & CLAYS (Liquid Limit >50%) | | MH | Inorganic silts, mic- aceous or diato-maceous fine sands or silts, elastic silts | | | | | |
| | | | CH | Inorganic clays of high plasticity, fat clays | | | | | |
| | | | OH | Organic silts and clays of high plasticity | | | | | |
| | HIGHLY ORGANIC SOILS | | PT | Peat and other highly organic soils | | | | | |



Grain size analysis is performed by two processes depending on particle size. Sand silt and clay particles are assessed using a standardised hydrometer test, and coarse sand and larger is assessed through sieving by USCS certified sieves. For more detail see the following section.

| Soil Classification | Particle Size |
|---|---|
| Clay | Less than 0.002mm |
| Silt | 0.002 – 0.06mm |
| Fine/Medium Sand | 0.06 – 2.0mm |
| Coarse Sand | 2.0mm – 4.75mm |
| Gravel | 4.75mm – 60.00mm |

## 1.4 Bearing Capacities and DCP testing.

DCP and PSP weighted penetrometer tests – Dynamic Cone Penetrometer (DCP) and Perth Sand Penetrometer (PSP) tests are carried out by driving a rod into the ground with a falling weight hammer and measuring the blows for successive 100mm increments of penetration. Normally, there is a depth limitation of 1.2m but this may be extended in certain conditions by the use of extension rods. The methods for the two tests are quite similar.

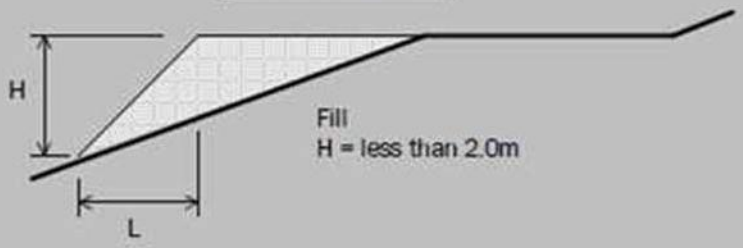
- Dynamic Cone Penetrometer – a 16mm rod with a 20mm diameter cone end is driven with a 9kg hammer dropping 510mm (AS 1289, Test 6.3.2).
- Perth Sand Penetrometer – a 16mm diameter flat-ended rod is driven with a 9kg hammer, dropping 600mm (AS 1289 Test 6.3.3). This test was developed for testing the density of sands and is mainly used in granular soils and filling.

Site Anomalies – During construction GES will need to be notified of any major variation to the foundation conditions as predicted in this report.

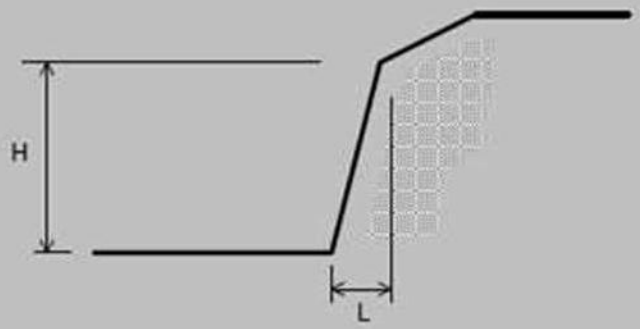
## *1.5* Batter Angles for Embankments *(Guide Only)*

Note : Retaining walls or other form of soil retaining methods must be adopted where the slope ratio is greater than that indicated in the table below :-

*FILL EMBANKMENTS*




*CUT EMBANKMENTS*




| MATERIAL TYPE (refer soils report) | | EMBANKMENT SLOPES (Height : Length) | |
|---|---|---|---|
| | | Compacted Fill | Cutting |
| Stable Rock (A*) | | 2 : 3 | 6 : 1 |
| Sand (A*) | | 1 : 2 | 2 : 3 |
| Silt (P*) | | 1 : 4 | 1 : 4 |
| Clay | Firm Clay | 1 : 2 | 1 : 1 |
| | Soft Clay | Not Suitable | 2 : 3 |
| Soft Soils (P*) | | Not Suitable | Not Suitable |

# Glossary of Terms

**Bearing Capacity** – Maximum bearing pressure that can be sustained by the foundation from the proposed footing system under service loads which should avoid failure or excessive settlement.

**Clay** – (Mineral particles less than 0.002mm in diameter). Fine grained cohesive soil with plastic properties when wet. Also includes sandy clays, silty clays, and gravelly clays.

**Dynamic Cone Penetrometer (DCP)** – Field equipment used to determine underlying soil strength and therefore bearing capacity (kPa) by measuring the penetration of the device into the soil after each hammer blow.

**Dispersive soil** – A soil that has the ability to pass rapidly into suspension in water.

**Footing** – Construction which transfers the load from the building to the foundation.

**Foundation** – Ground which supports the building

**Landslip** – Foundation condition on a sloping site where downhill foundation movement or failure is a design consideration.

**Qualified Engineer** – A professional engineer with academic qualifications in geotechnical or structural engineering who also has extensive experience in the design of the footing systems for houses or similar structures.

**Reactive Site** – Site consisting of clay soil which swells on wetting and shrinks on drying by an amount that can damage buildings on light strip footings or unstiffened slabs. Includes sites classified as S, M, H-1, H-2 & E in accordance with AS2870-2011.

**Sand** – (Mineral particles greater than 0.02mm in diameter). Granular non-cohesive, non-plastic soil that may contain fines including silt or clay up to 15%.

**Services** – Means all underground services to the site including but not limited to power, telephone, sewerage, water & storm water.

**Silt** – (Mineral particles 0.002 – 0.02mm in diameter). Fine grained non-cohesive soil, non-plastic when wet. Often confers a silky smoothness of field texture, regularly includes clay and sand to form clayey silts, sandy silts and gravelly silts.

**Site** – The site title, as denoted by address, lot number, or Certificate of Title (CT) number, or Property Identification Number (PID).

**Surface Movement (Ys)** – Design movement (mm) at the surface of a reactive site caused by moisture changes.

## Disclaimer

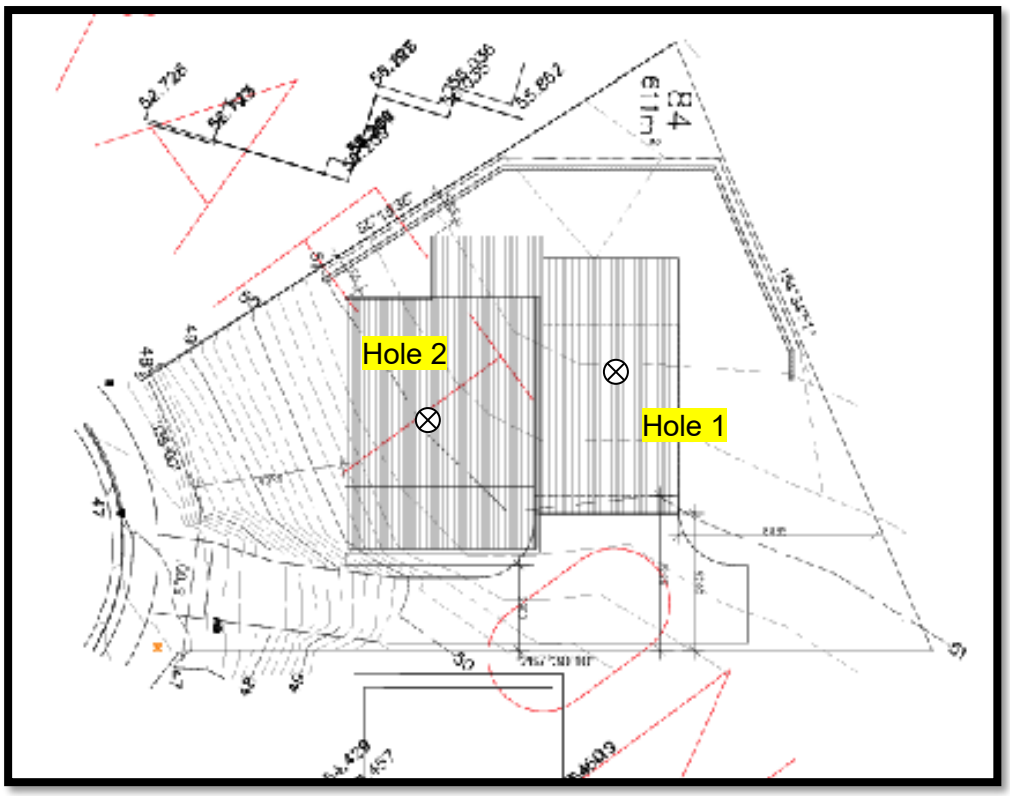
This Report has been prepared in accordance with the scope of services between Geo-Environmental Solutions Pty. Ltd. (GES) and the Client. To the best of GES's knowledge, the information presented herein represents the client's requirements at the time of printing of the Report. However, the passage of time, manifestation of latent conditions or impacts of future events may result in findings differing from that discussed in this Report. In preparing this Report, GES has relied upon data, surveys, analyses, designs, plans and other information provided by the Client and other individuals and organisations referenced herein. Except as otherwise stated in this Report, GES has not verified the accuracy or completeness of such data, surveys, analyses, designs, plans and other information.

The scope of this study does not allow for the review of every possible geotechnical parameter or the soil conditions over the whole area of the site. Soil and rock samples collected from the investigation area are assumed to be representative of the areas from where they were collected and not indicative of the entire site. The conclusions discussed within this report are based on observations and/or testing at these investigation points.

This report does not purport to provide legal advice. Readers of the report should engage professional legal practitioners for this purpose as required.

No responsibility is accepted for use of any part of this report in any other context or for any other purpose by a third party.

## Site Plan

## Appendix 2 – Site Photos

# CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

**Section 321**

**Form 55**

To: Adam Clarke *Owner /Agent*

21 Norma Street *Address*

Howrah 7018 *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: 6 Lelia Court

Oakdowns 7019

Lot No:

Certificate of title No: 180502/84

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<br>AS1726:2017 Geotechnical site investigations<br>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:* J12796

*Date:* 18/03/2026

# 6 Lelia Crt
# Oakdowns

## SunTracker - Shadow Diagrams

**Scale 1:200**

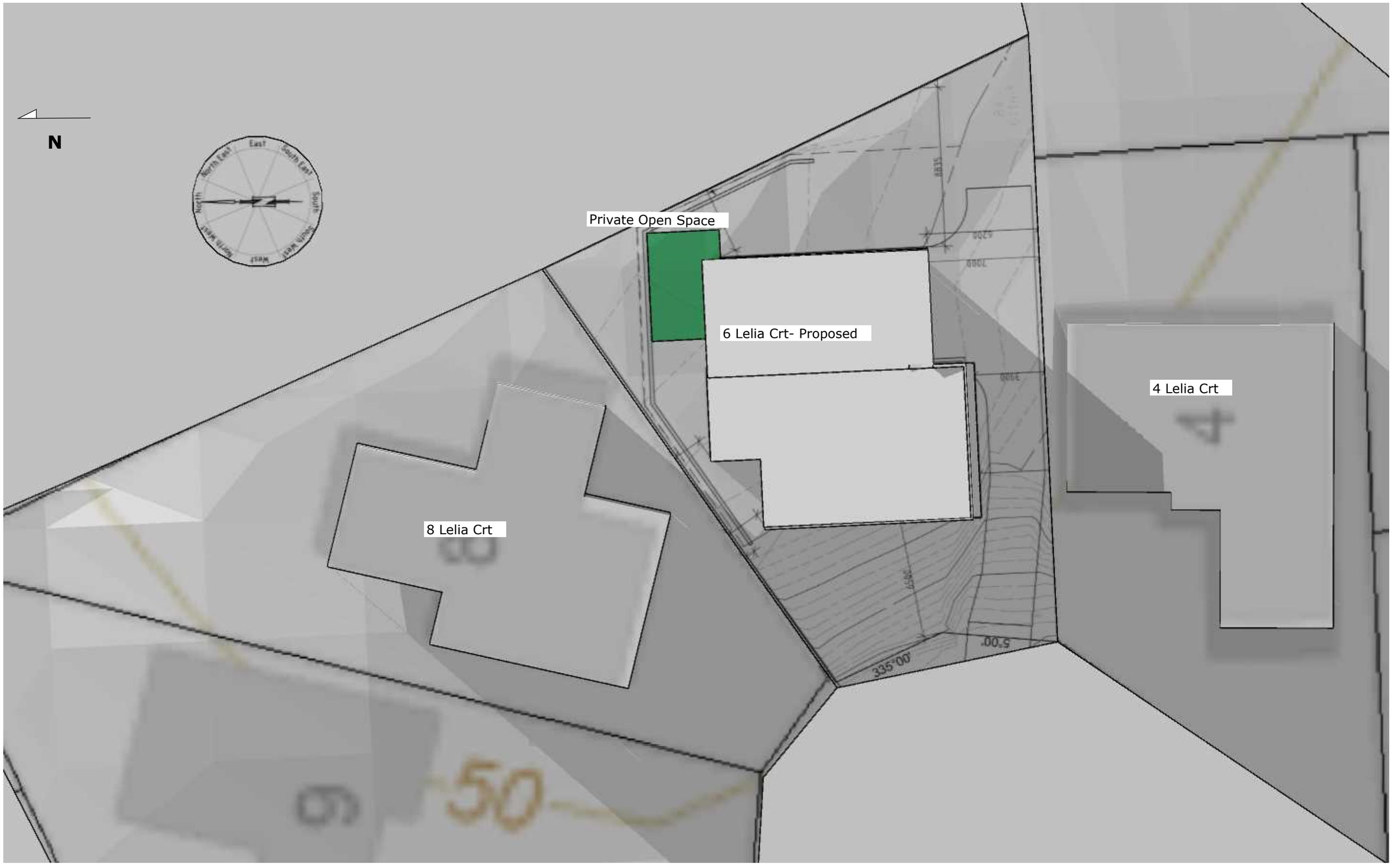
**Neighbouring Properties**

**8 & 4 Lelia Court**

**SunTracker - Shadow Diagrams**

**0900 - JUNE 21**

**1:200**




Shadowing by Sergei Nester www.viewbuild.com m: 0458 787 111

**SunTracker - Shadow Diagrams** **1200 - JUNE 21**


Shadowing by Sergei Nester www.viewbuild.com m: 0458 787 111

**SunTracker - Shadow Diagrams** **1300 - JUNE 21**

**SunTracker - Shadow Diagrams** **1500 - JUNE 21**


Shadowing by Sergei Nester www.viewbuild.com m: 0458 787 111