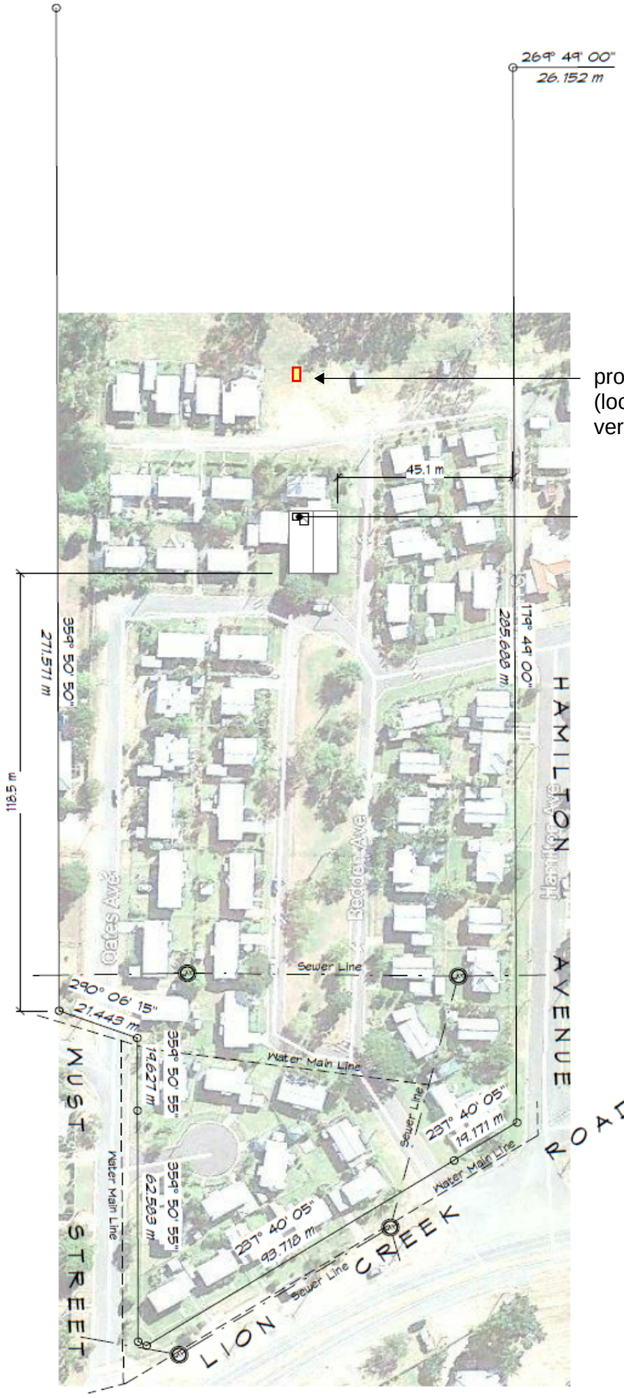
ROCKHAMPTON REGIONAL COUNCIL

APPROVED PLANS

These plans are approved subject to the current conditions of approval associated with

Development Permit No.: D/159-2024

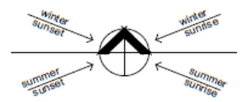
Dated: 31 January 2025

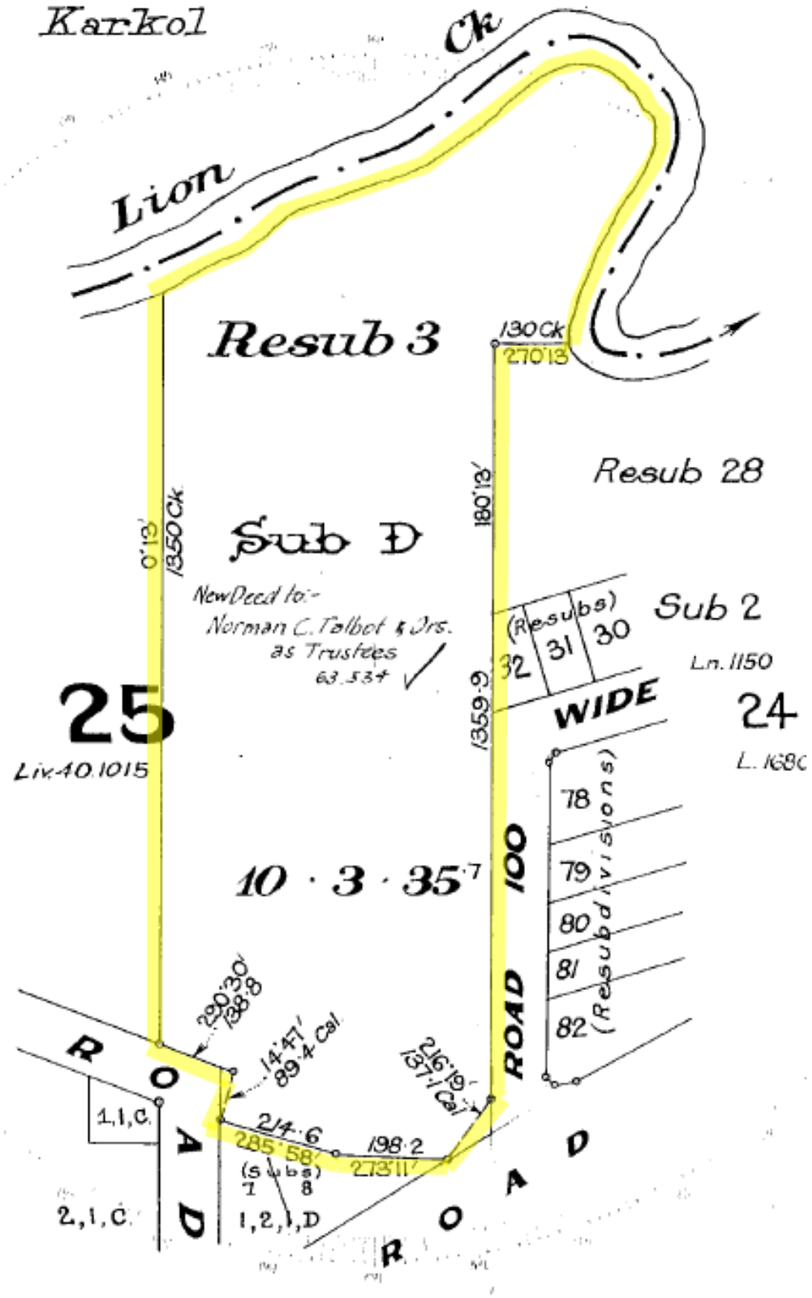


1 Site Plan
1 : 1000

R.P.D.

Lot Number :	7 & 9; 25
Reg./Survey Plan Number :	RP 609044; RP26 373
Parish :	ROCKHAMPTON
County :	LIVINGSTONE
Area :	44 407 sqm





REVISIONS

No.	DESCRIPTION	DATE

PRINT DATE : 9/09/20243:37:41

Rufus Design Group
STYLE • QUALITY • INNOVATION

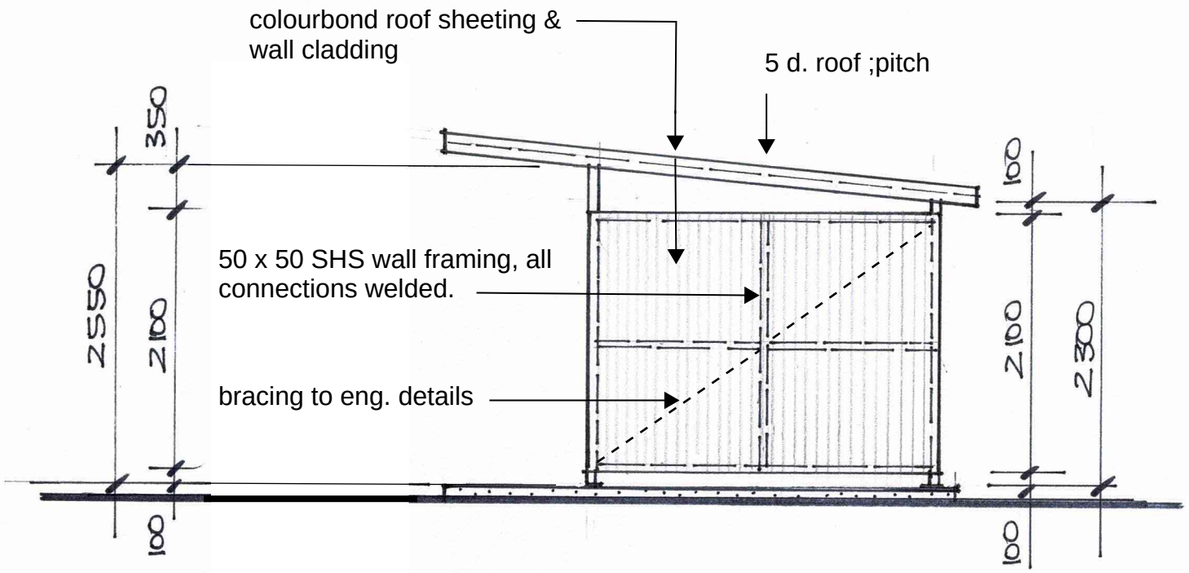
Building Design Queensland
BDQ member
QBCC licence 1180286
www.rufusdesigngroup.com
mailbox@rufusdesigngroup.com
(07) 4928 8011

PROPOSED AMENITIES

FOR TALBOT ESTATE
AT 224-230a LION CREEK ROAD
WANDAL

Sheet title
SITE PLAN

P manager TJR	Wind C2	Project number - Sheet 240702 - 01
Drawn TJR	Sheet size A3	
Checked	Sheet no 01 of 03	REVISION 01a



SIDE ELEVATION

ROCKHAMPTON REGIONAL COUNCIL

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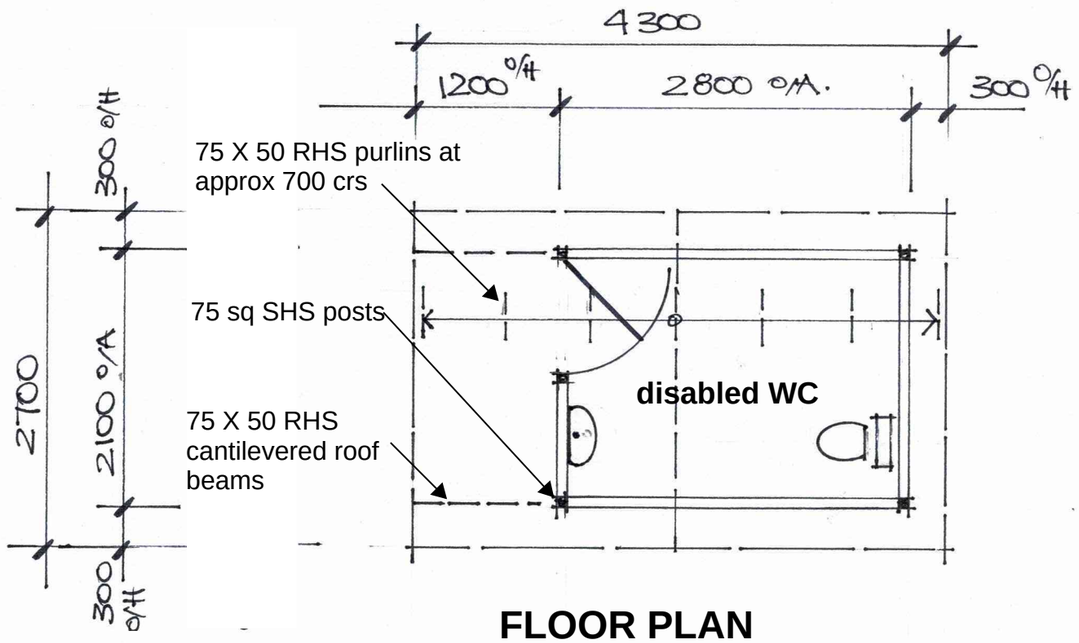
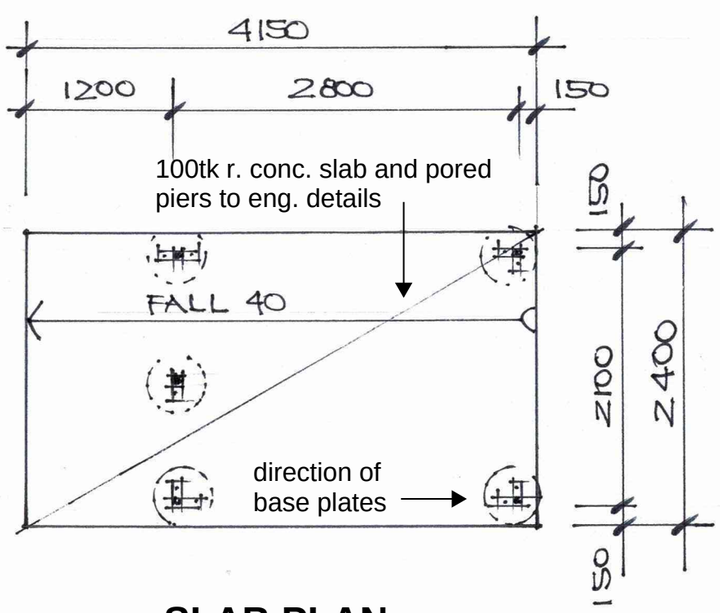
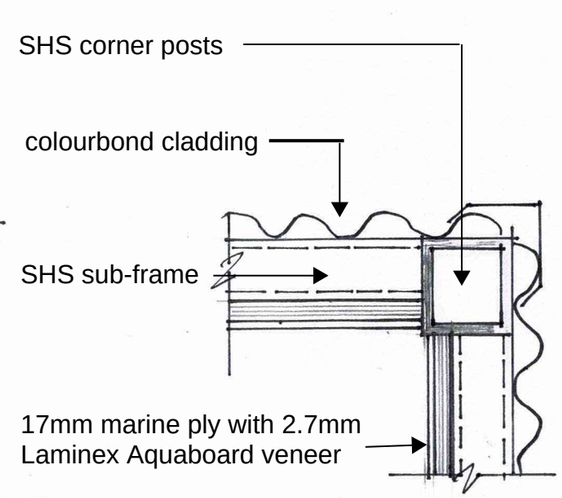


FLOOR PLAN



SLAB PLAN



WALL DETAIL

REVISIONS

No.	DESCRIPTION	DATE

PRINT DATE : 9/09/20243:39:19

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PROPOSED AMENITIES

FOR TALBOT ESTATE
AT 224-230a LION CREEK ROAD
WANDAL

Sheet title
FLOOR, SLAB, & WALL DETAIL PLAN

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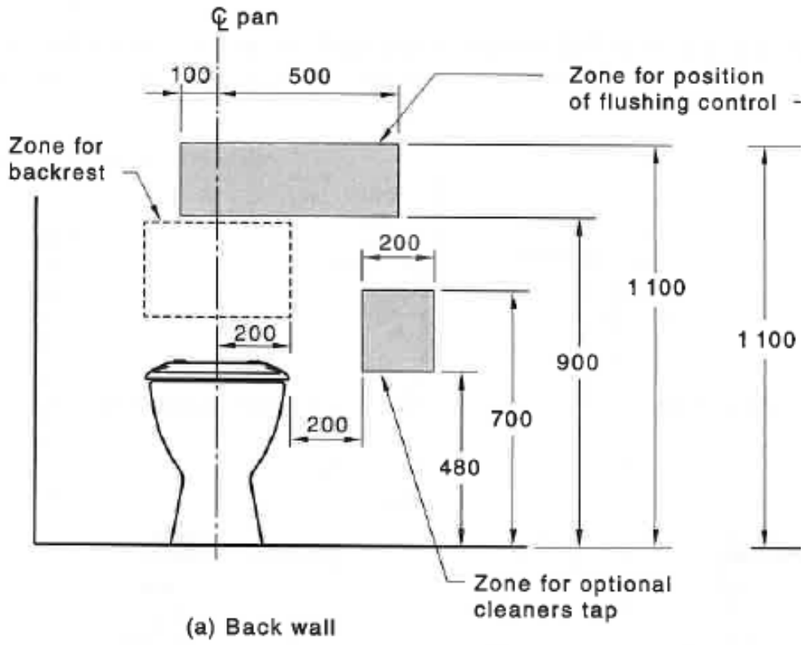
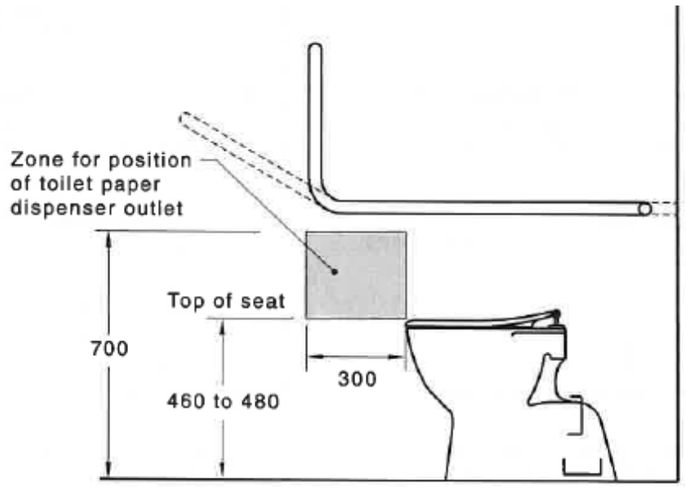
TJR	C2	240702 - 02
Drawn: TJR	Sheet size: A3	
Checked	Sheet no: 02 of 03	REVISION 01a



(a) Back wall



ROCKHAMPTON REGIONAL COUNCIL

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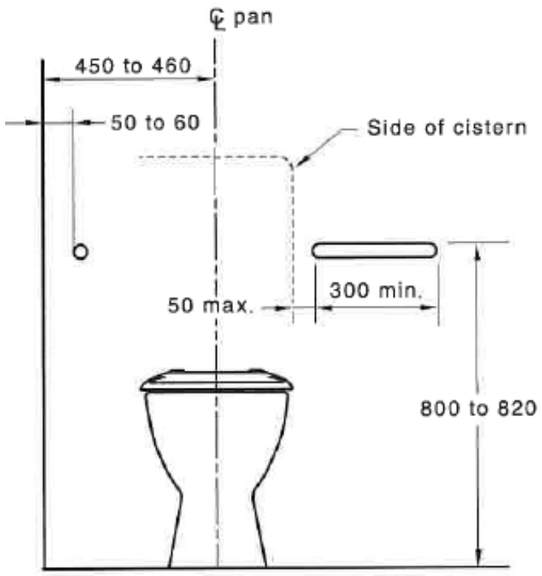
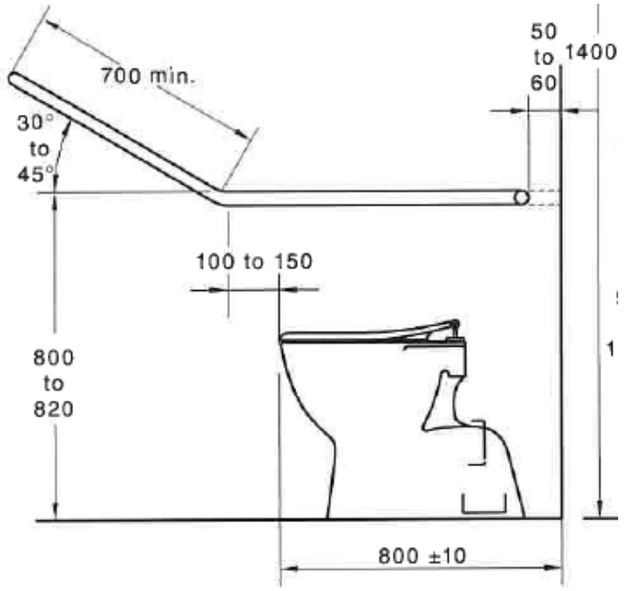
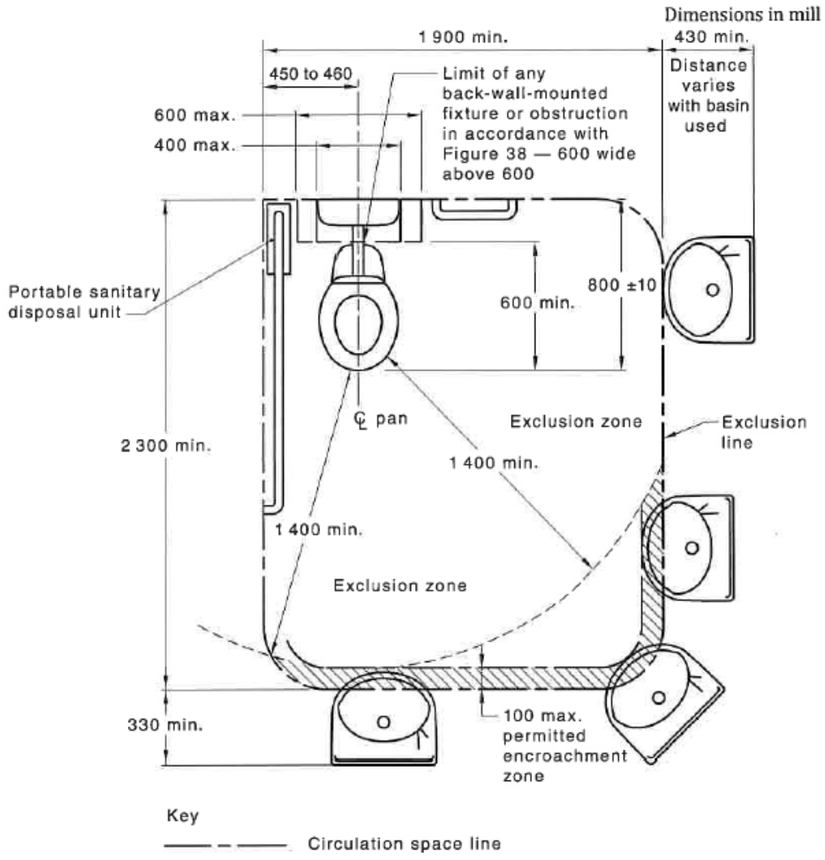
Dated: 31 January 2025







REVISIONS

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PROPOSED AMENITIES

FOR TALBOT ESTATE
AT 224-230a LION CREEK ROAD
WANDAL

Sheet title
DETAILS

P manager	Wind	Project number - Sheet
TJR	C2	240702 - 03
Drawn: TJR	Sheet size: A3	
Checked	Sheet no: 03 of 03	REVISION 01a

2024

DILEIGH

CIVIL / STRUCTURAL DESIGN & PROJECT MANAGEMENT

ROCKHAMPTON REGIONAL COUNCIL

APPROVED PLANS

These plans are approved subject to the current conditions of approval associated with

Development Permit No.: D/159-2024

Dated: 31 January 2025

224 – 230A LION CREEK ROAD, WANDAL QLD 4700

FLOOD IMPACT STATEMENT

FOR TALBOT ESTATE INC.

D24.257-RP01

Document History & Status

ISSUE	DATE	ISSUED TO	DESCRIPTION	BY	APPROVED
A	03.10.12024	Rufus Design Group	Original	ASH	TL

Prepared By

Andrew Heit
Civil Engineer

Reviewed By

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RPEQ 19272

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Australia

Telephone: +61 7 4911 2553
Email: reception@dieligh.com.au

Date: 3/10/2024
Reference: D24.202-RP01

Contents

1. Introduction

This statement was prepared for Brad Keyworth on behalf of Rufus Design Group who are acting on behalf of Talbot Estate Inc. in support of a proposed development on Lot 3 LN1478 at 224 – 230A Lion Creek Road, Wandal QLD 4701. This report should be read in conjunction with the overall building works application for an amenities building.

This statement was prepared with reference to pre-lodgement advice received from Rockhampton Regional Council (RRC), dated the 5 September 2024.

2. Site Location

The proposed site is for a new amenities building located on L3 LN1478 directly north of existing residential buildings for aged pensioners. The site is situated in a relatively flat, open and grassed area and is intended to provide facilities to those using the green space.

Using the approximate location provided the Rockhampton Regional Council (RRC) Interactive Mapping Tool was used to determine the Planning Scheme Overlays. Results from the investigation identified the site was within the Flood Hazard overlay triggering a request to RRC for further information.

Figure 1 - Proposed Location (Near Map 06/24)

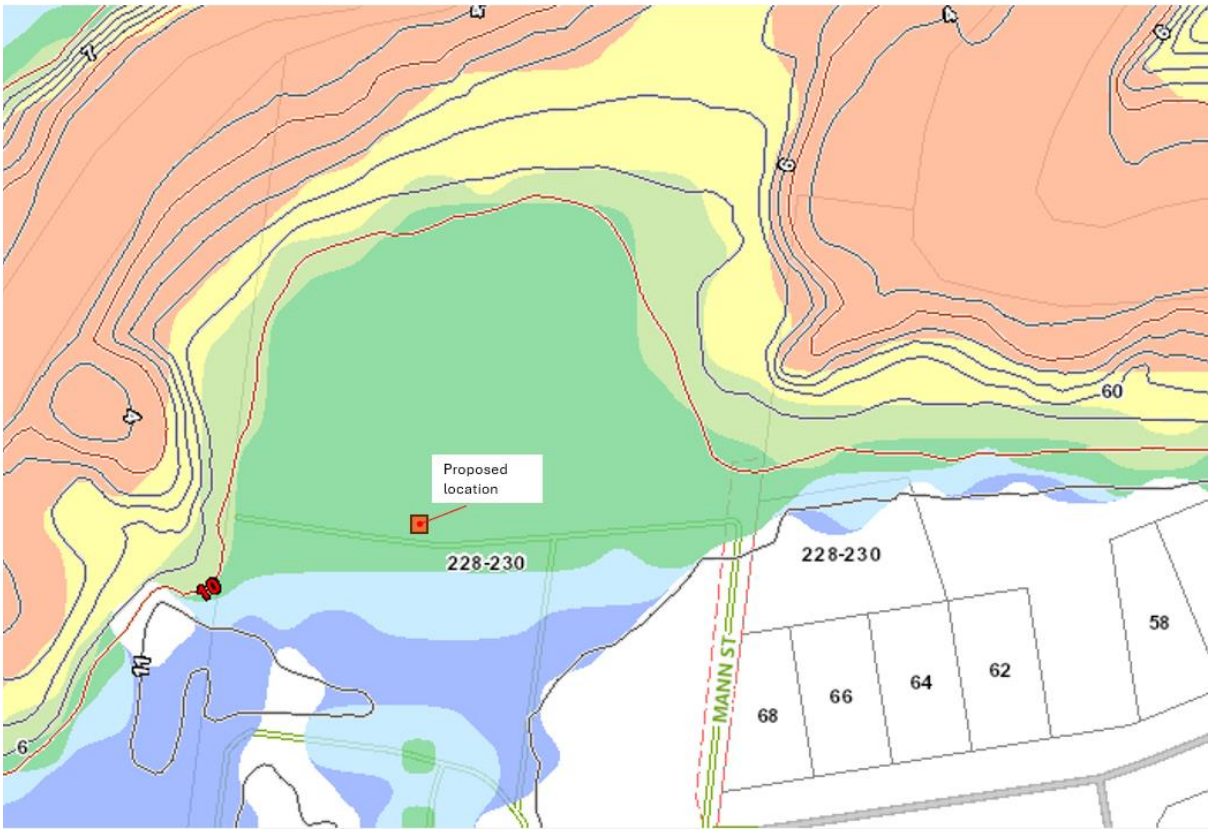


Figure 2 - Proposed Location RRC Fitzroy River Flood Map

3. Flood Information Request

A formal request to RRC was submitted to obtain the expected maximum flood level at the proposed location. The information request confirmed that the site was in three flood areas a riverine, creek and local catchment and that the defined flood level was a 1% Annual Exceedance Probability (1% AEP). The know flood levels for the proposed locations are shown in Table 1.

Type	Water Surface Level (RL)	Velocity (m/sec)
Riverine	11.05	0.60
Creek and Local Catchment	10.79	1.69

Table 1 – Flood Search results from RRC

The proposed location is approximately RL10.3 and is classified as a H3 (High) Hazard Area. For a 1% AEP storm event, the building may be inundated by approximately 0.75m. The full Flood Search results can be found in Appendix A

4. Planning Scheme Analysis

Utilising the flood search results the Rockhampton Regional Planning Scheme (2015) – Version 4.4 was consulted to identify possible acceptable outcomes, benchmarks and guidance. Section 8.2.8 Flood hazard overlay code Table 8.2.8.3.1 Development outcomes for

assessable development and requirements for accepted development do not provide an acceptable outcome for new development and as such a building works application will be required.

Acceptable outcomes AO4.1.2 provides guidance for the replacement and alteration of non-residential buildings or structures and includes the notes:

AO4.1.2
Where involving the replacement or alteration to an existing non-residential building or structure:

1. *there is no increase in the existing or previous buildings' gross floor area; and*
2. *the finished floor level of any replacement or alteration to an existing building is constructed a minimum of 500 millimetres above the defined flood level.*

5. Proposed Building

The proposed Parkland amenities building is consistent with the existing use and ancillary to the existing buildings within the premises. It will be a free-standing simply supported structure on four posts, located on relatively flat ground. The underside of the floor will be approximately 75mm off the ground. Refer to sketches provided by the client in Appendix D.

The predicted maximum velocity, produced by creek flooding, is 1.69m/s. The proposed building will be constructed with durable materials that are flood resistant and designed to withstand the relatively low water velocities.

6. Potential Impacts

The highest predicted water velocity is 1.69m/s for creek flooding. The proposed amenities building will have a relatively small footprint and will be located on the edge of the flood waters, away from the main creek flows. Creek flooding is likely to occur during large storm events and the runoff into exceeds the creek's capacity, breaking the banks. The flows would be from the west to east and discharge into the Fitzroy River. This suggests that there will be no buildings or properties downstream of the proposed amenities building. It is very unlikely that such a small building will adversely impact the creek flood waters or the surrounding properties.

For riverine flooding, the water is expected to back up into the creek, hence the lower velocities of 0.6m/s. With such low velocities and small building footprint, the proposed amenities building is not expected to cause nuisance to surrounding properties.

As the building is expected to be inundated during flood events, the plumbing can include valves to prevent flood waters overloading the sewer network. This should be considered as part of the building design.

It should be noted that analysis of the building structure and the forces experienced in a flood event is outside of the scope of this statement.

7. Conclusion

The proposed amenities building is intended for use by the patrons of an aged care facility. The location and height of the building was chosen to best suit the elderly residents using outdoor facilities and open spaces, and allow for equitable access. Although the planning scheme provides an acceptable outcome whereby the building floor level is raised to provide 300mm freeboard above the flood levels, this is not practical for an outdoor amenities building that serves the an aged care facility where the expected users are elderly with mobility aids. The proposed building is considered fit for purpose.

The building is not expected to have any significant negative impacts on the flood waters, or the surrounding properties. During times of flood, the plumbing may be closed off via valves to prevent surcharging and polluting the flood waters with raw sewage.

Andrew Heit and Tony Lau

Appendix A – Flood Seach Results

Rockhampton Regional Council Flood Search Property Report

Property Address:	228-230 Lion Creek Road, Wandal QLD 4700
Lot Details:	Lot 3 on LN1478
Date of Issue:	5 September 2024

Rockhampton Regional Council

Flood Search Property Report Overview

It is possible for one or more sources of flooding to occur, especially where a property is near a creek or waterway. These flooding sources can include riverine, creek and overland flow flooding which can each behave differently and impact how a building or development is designed. All flood hazard triggers should be considered when designing and planning with flooding in mind.

The Rockhampton Regional Council Flood Search Report is provided to support planning and development, in accordance with the current version of the Rockhampton Region Planning Scheme 2015.

This report summaries flood information for this property to inform and supplement the application of the Council's planning scheme Flood Hazard overlay code, floodplain planning provisions, and the applicable flood planning levels. The contents of this report have been derived from Council's flood studies and flood modelling and should be considered alongwith all other applicable planning and development requirements. Flood studies and associated modelling assist Council to better understand flooding in the Rockhampton region and implement plans to avoid and mitigate its impacts on the community.

Flood modelling of the Fitzroy River has been progressively refined over a long period of time. The flood modelling addresses riverine impacts on Rockhampton City and surrounding areas, including Alton Downs, Pink Lily, Nine Mile, Fairy Bower, Midgee and Port Curtis. Local Creek and Catchment Flood Studies provide Council with information on flood behaviour of the creeks, and how they are expected to respond during varying intensities and durations of rainfall events.

Understanding your flood risk can help you prepare for flooding at your home or business. The information provided in this report utilises information from the most up to date flood studies available to Council at the date of issue of this report. All reasonable steps have been undertaken to ensure the information presented in this report is accurate at the time of generation. Changes to the topography and condition of the local creeks and waterways may have an impact on flooding. Over time, Council may undertake further technical studies to maintain the understanding of flooding across the city and update the information available.

Copies of Council's current Flood Studies are available on Council's website at www.rrc.qld.gov.au

What is flood modelling?

Flood modelling uses sophisticated computer software to estimate how rainfall of various intensities and duration produce stormwater flows along creek and river catchments.

Flood modelling is used to estimate:

- The inundation extents of the areas that may be flooded;
- The peak depths of flood waters; and
- The hazard related to the depth of water or how quickly the water flows (velocity).

Flood modelling estimates a range of design floods based on a statistical analysis of rainfall information provided by the Bureau of Meteorology. This information is used to establish the likelihood of a rainfall or flood event.

When reading this report, please consider:

- If a property is identified as being at risk of being affected by Fitzroy River and/ or Local Creek Catchment flooding, the highest maximum flood heights should be used to establish minimum building and development levels. For large property parcels - there may be a significant difference between the minimum and maximum flood heights for a particular flood type. In these situations, you may need to seek further advice from Council regarding the flood height that is appropriate for the exact location of the proposed building or development.
- The flood maps included with this report display the flood inundation extent only. All maps generated from the Flood Studies are available on Council's website.
- The flood maps provided depict the flood inundation extents under existing climate and catchment conditions.
- If preparing a new building and/or development application, it is recommended that you confirm all flood related provisions within Council's Planning Scheme relevant to the property.

Property Details

Address: **228-230 Lion Creek Road, Wandal QLD 4700**
Lot and plan: Lot 3 on LN1478

Property Ground Levels:

Property ground levels can be found on the attached property flood report. The ground level data has been sourced from Aerial LiDAR survey, and as such, these levels are approximate.

Should the extent of flooding at a property need to be more accurately predicted, then individual property level information (e.g. surveyed site levels, and building floor levels) could be utilised in conjunction with Council's flood information. Council does not undertake this level of investigation or survey on behalf of property owners.

For your information:
AHD (Australian Height Datum) is the National Mapping Datum used throughout Australia. The level of 0.0m AHD is approximately mean sea level.
Elevation Data Source: The digital elevation model used in the flood modelling is generated on a regional scale and utilises ground level elevations from aerial laser surveys performed in2016. The survey data used to determine the extent and depth of potential inundation is captured and updated periodically and may not reflect inundation of land that has recently been modified, such as a new subdivision that has changed the existing landform.

Flood Information

Riverine Flood: Affected

The property is identified as being at risk of flooding from the Fitzroy River. A property flood report displaying the 1% AEP (Annual Exceedance Probability) flood extent on the property is attached. Planning and development must consider risk to people and property, natural floodplain characteristics, and flood free/low flood hazard access outcomes during a river flood event.

For your information:
AEP (Annual Exceedance Probability) is the probability of a flood event of a given size occurring or being exceeded in any one year. Information in relation to more or less likely floods and the full flood plain extent can be accessed on Council's website.

Creek Catchment Flood: Affected

The property is identified as being at risk of flooding from Creek Flooding. A property flood report displaying the 1% AEP (Annual Exceedance Probability) flood extent on the property is attached. Planning and development must consider risk to people and property, natural floodplain characteristics, and flood free/low flood hazard access outcomes during a creek flood event.

For your information:
AEP (Annual Exceedance Probability) is the probability of a flood event of a given size occurring or being exceeded in any one year. Information in relation to more or less likely floods and the full flood plain extent can be accessed on Council's website.

Local Storm Event / Overland Flood: Affected

The property is identified as being at risk of flooding from Local Storm Events / Overland Flow flooding. The attached map displays the 1% AEP flood extent on the property due to the Local Storm Event / Overland Flow Flooding. Planning and development must consider risk to people and property, natural floodplain characteristics, and flood free/low flood hazard access outcomes during local storm and overland flow flood events.

For your information:
AEP (Annual Exceedance Probability) is the probability of a flood event of a given size occurring or being exceeded in any one year. Information in relation to more or less likely floods and the full flood plain extent can be accessed on Council's website.

Flood Report
LN1478/3 - 228-230 Lion Creek Road Wandal QLD 4700

REPORT DATE	5 September 2024

PROPERTY DETAILS			
Address	228-230 Lion Creek Road Wandal QLD 4700		
Parcel ID	LN1478/3	Assessment	106406
Land use	Homes for Aged		
Riverine catchment	Fitzroy River Flood Study		
Creek Catchment	Wandal & West Rockhampton Local Catchment Study 2018		
Mitigation Area	N/A		
Horizontal Datum	MGA Z56, GDA 2020		
Elevation / WSL	mAHD		
Velocity	m/sec		
Ground elevation (min)	3.00		
Ground Elevation (max)	11.39		

No additional comments for this property.

RIVERINE

	WATER SURFACE LEVEL	VELOCITY
LEVELS	MAX	MAX
1% AEP	11.05	0.60
5% AEP	9.79	0.27
10% AEP	9.14	0.65

CREEK \ LOCAL CATCHMENT

	WATER SURFACE LEVEL	VELOCITY
LEVELS	MAX	MAX
1% AEP	10.79	1.69
5% AEP	10.69	0.60
10% AEP	10.68	0.61

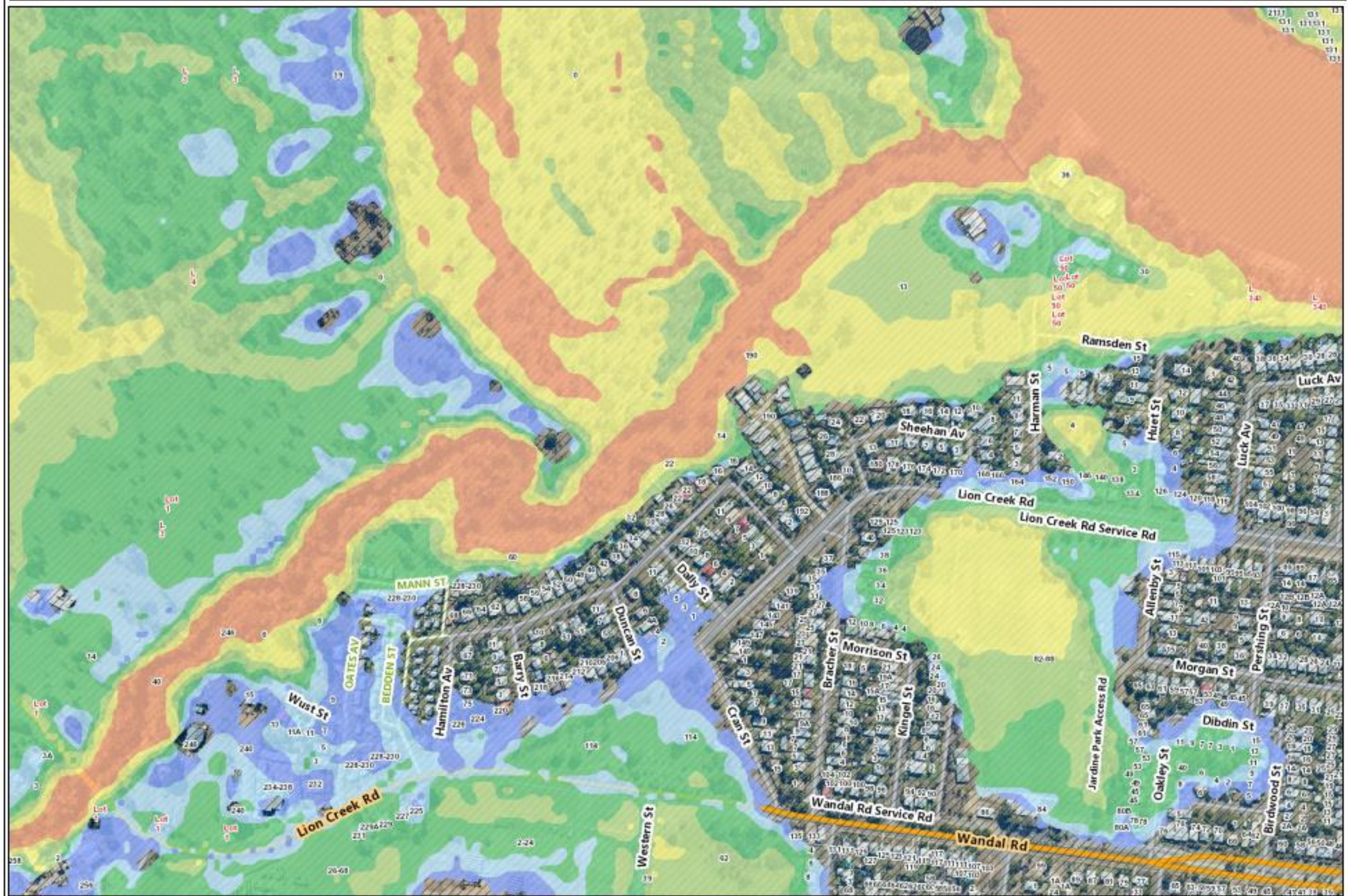
Appendix B – Flood Hazard Overlays

TextBox3

Spatial reference:
GDA2020_MGA_Zone_56

A3 Page scale at 1: 4,642.93

Printed from RRPS on: 25/08/24



Legend

- Development Information
- Fitzroy River Flood
  - H1 (Low)
  - H2 (Medium)
  - H3 (High)
  - H4 (High)
  - H5 (Extreme)
  - H6 (Extreme)
- Fitzroy River Flood Study Extent
- Floodplain Investigation Area
- North Rockhampton Flood Management Area
- Roads2
  - Main roads
  - Major council roads
  - Standard council roads
  - Access roads
  - Private roads
- Image
  - Red: Band_1
  - Green: Band_2
  - Blue: Band_3
- Image
  - Red: Band_1
  - Green: Band_2
  - Blue: Band_3

GDA 2020

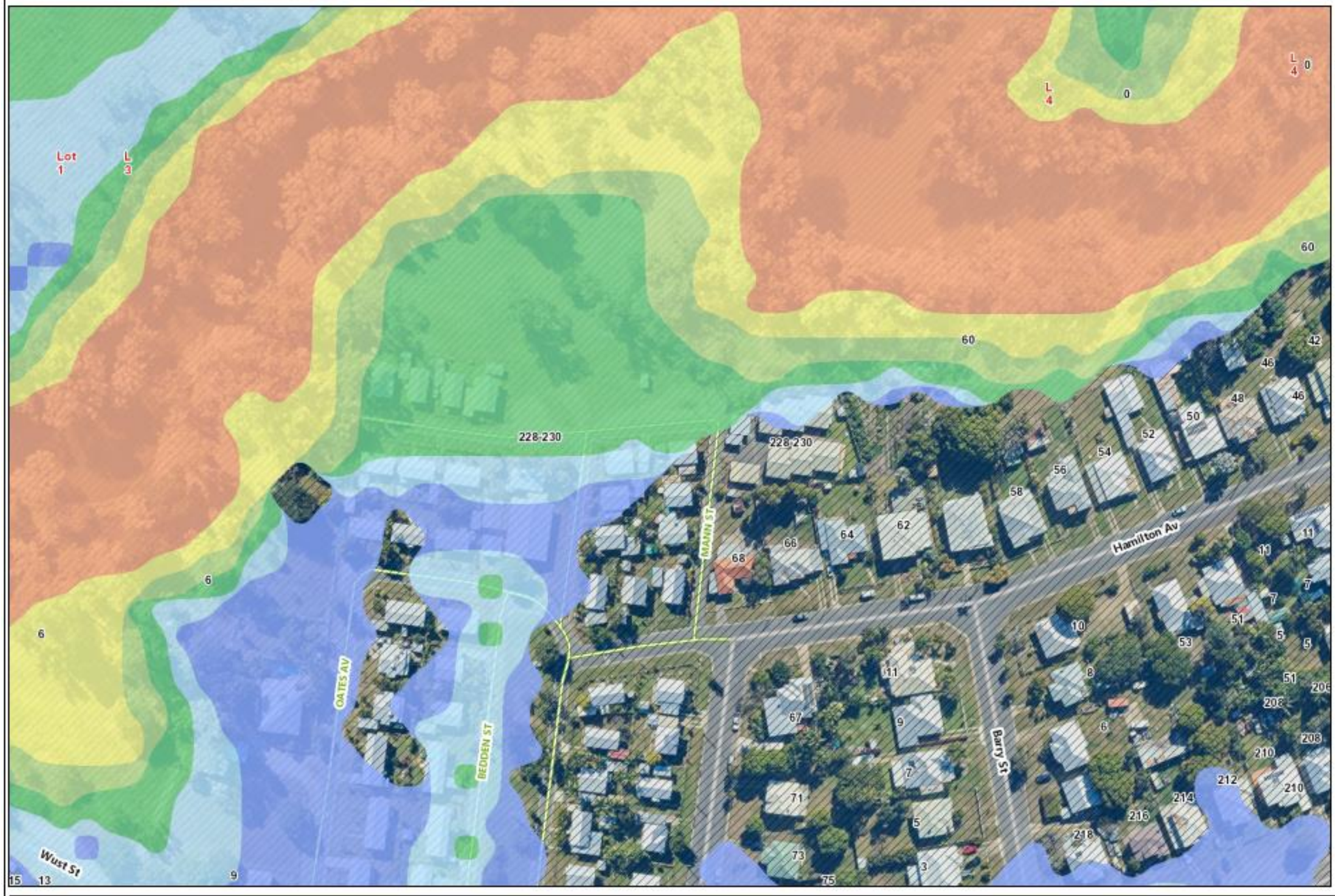
Rockhampton Regional Council

TextBox3

Spatial reference:
GDA2020_MGA_Zone_56

A3 Page scale at 1: 1,160.73

Printed from RRPS on: 25/08/24



Legend

- Development Information
- Fitzroy River Flood
  - H1 (Low)
  - H2 (Medium)
  - H3 (High)
  - H4 (High)
  - H5 (Extreme)
  - H6 (Extreme)
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- Floodplain Investigation Area
- North Rockhampton Flood Management Area
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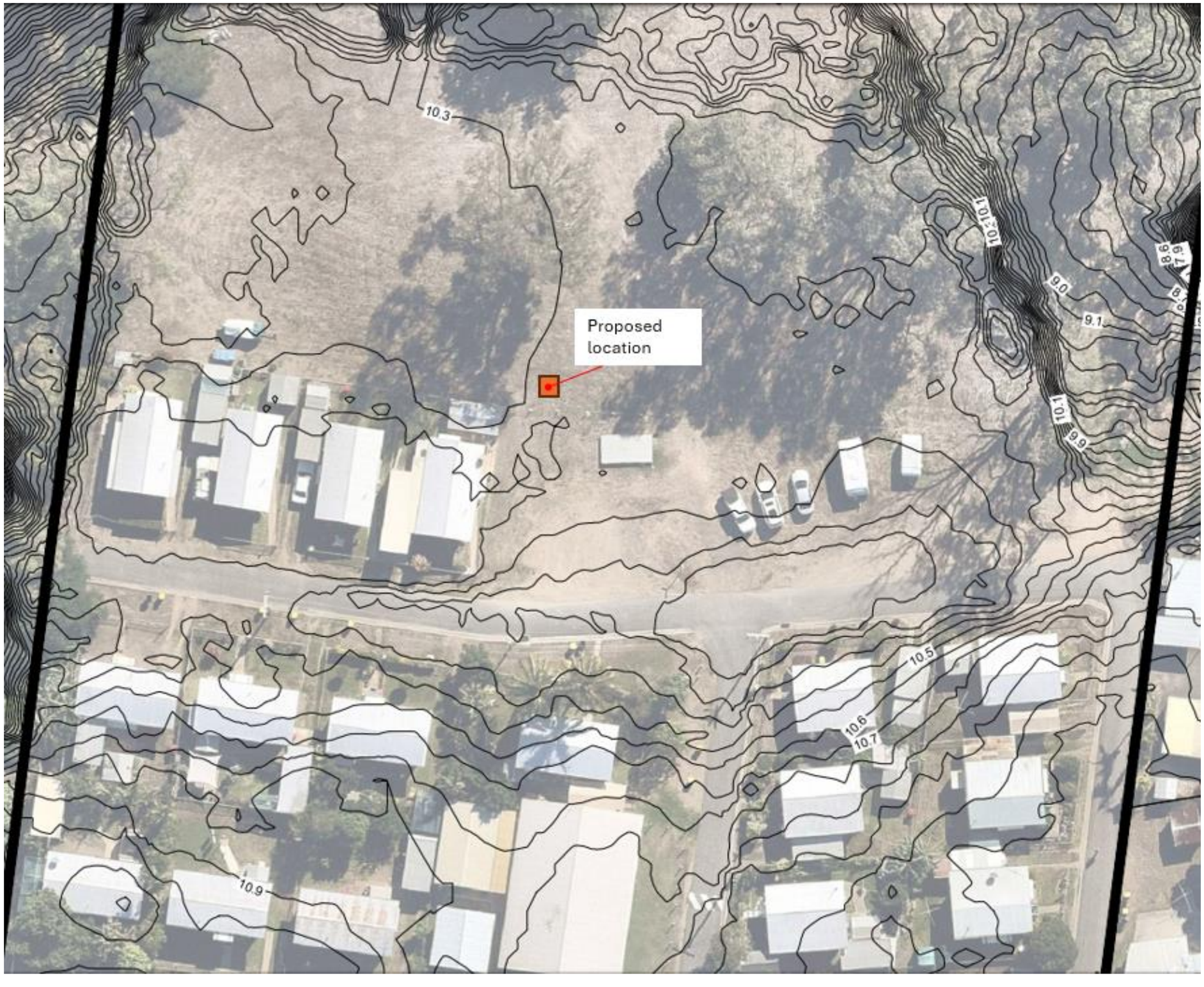
  - Major council roads
  - Standard council roads
  - Access roads
  - Private roads
- Image
  - Red: Band_1
  - Green: Band_2
  - Blue: Band_3
- Image
  - Red: Band_1
  - Green: Band_2
  - Blue: Band_3

GDA 2020

Rockhampton Regional Council

Appendix C – Contour Map


Proposed location
10.3
10.2
10.1
9.0
9.1
10.1
9.9
8.6
7.9
10.5
10.6
10.7
10.9

Appendix D – Proposed Location and Design

HAMILTON A

MANN ST

45 44 43 16 35A 46 42 38 35

(IXG)1.5.3

180'E

106'E

PROPOSED TOILET

BEDDEN AVE.

"TALBOT ESTATE"

36

(IXG)1.5.3

55 55A 55B 55C 55D

MANN ST.

47 39 48 40 49 41

32 31

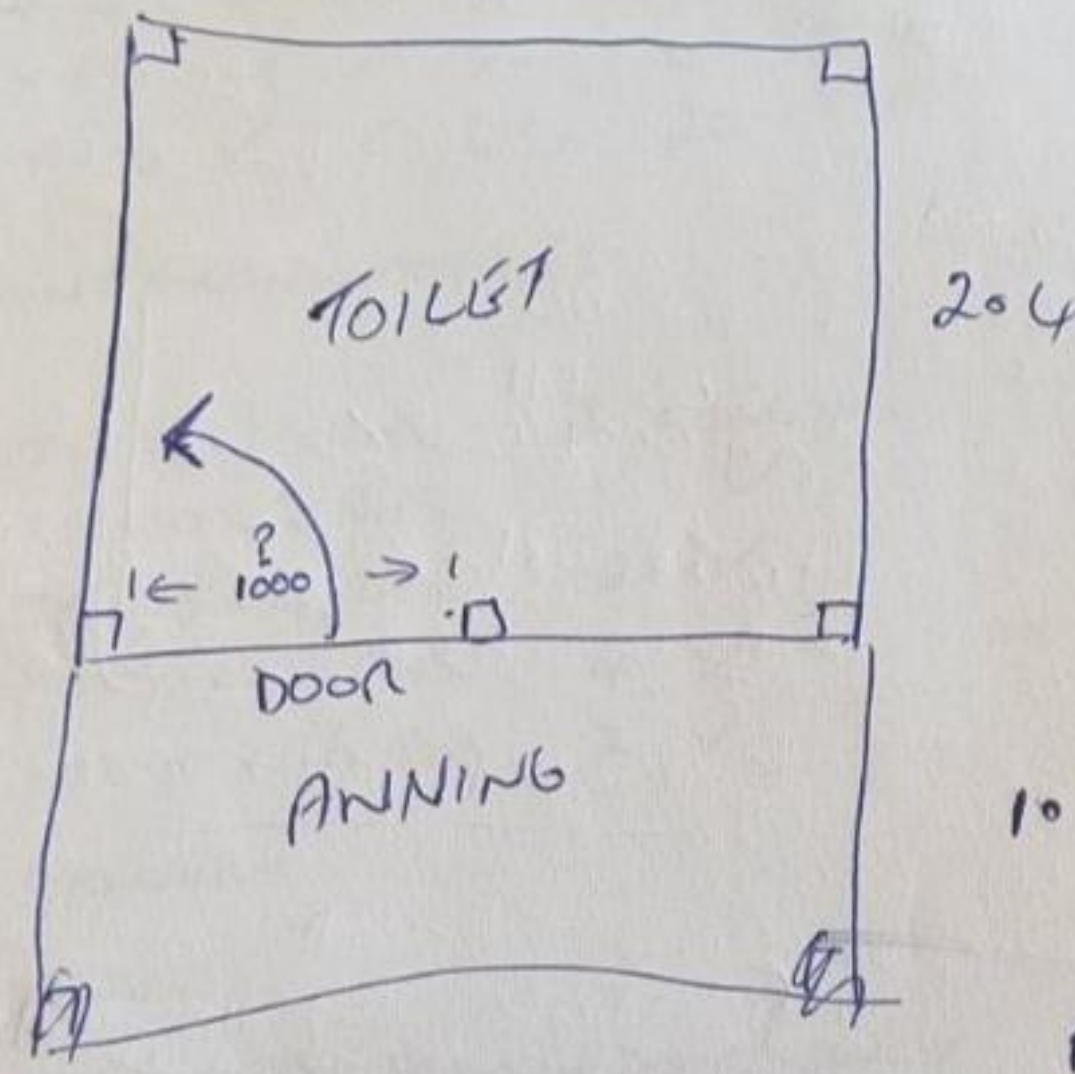
(IXG)1.5.

Note :- Refer I.B 422A p 39 for Spot levels above Taken on 29 6 67
Refer I.B 430A p 13 for Spot levels at roads now Taken on 31 8 68

13-3-23

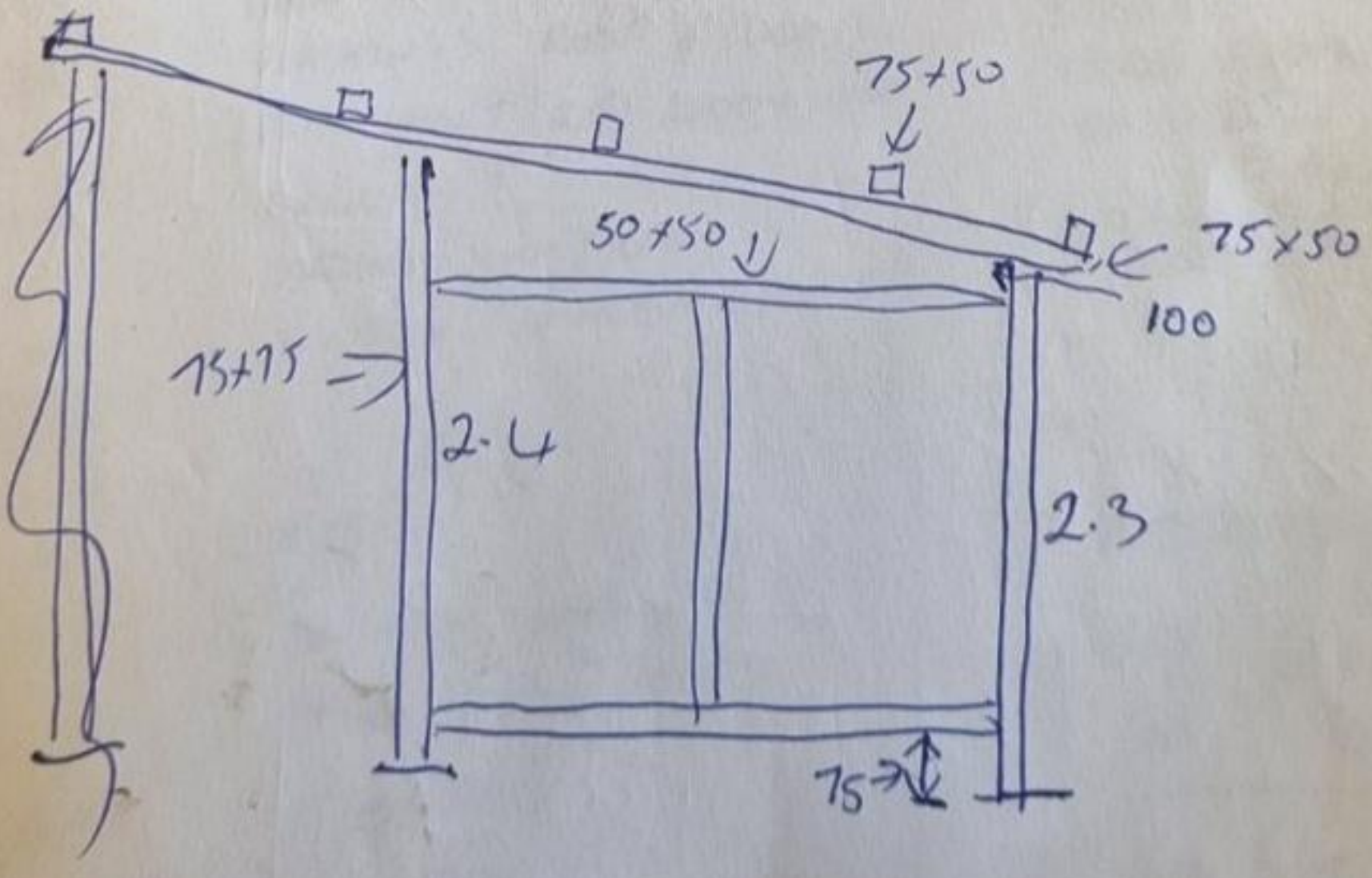
TALBOT LESTATE

TOILET BLOCK



ROOF 3.9 LONG
x 3.0 WIDE

ROOF 300
OVERHANG
ALL ROUND



IRON TO ROOF
MESH BOTTOM S/S 75MM

FULLY SHEETED
+ MESH