PUBLIC NOTIFICATION

Approval Sought:	Material Change of Use
Proposed Development:	Dwelling House
Where:	Lot 503 Nagle Drive, Norman Gardens
Lot Description:	Lot 503 on SP266441
Application Reference:	D/39-2024

Make a submission from:

9 September 2024 to 30 September 2024

You may make a submission to Rockhampton Regional Council

PO BOX 1860, Rockhampton QLD 4700
Email: enquiries@rrc.qld.gov.au
Phone: 07 4932 9000 or 1300 22 55 77

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GIDEON
TOWN PLANNING

PLANNING REPORT

MATERIAL CHANGE OF USE FOR A DWELLING HOUSE

503 NAGLE DRIVE, NORMAN GARDENS 4701

LOT 503 on SP266441

A B & D T HART

DOCUMENT CONTROL SHEET

Report Details	
Document Title:	Planning Report
Author:	L Saunders
Client:	A B & D T Hart
Reference:	GTP 2134

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Revision No	**Date**	**Author**	**Reviewer**
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1.0 INTRODUCTION

This Planning Report has been prepared on behalf of *A B & D T Hart* in support of a Development Application for a Material Change of Use for a Dwelling House at 503 Nagle Drive, Norman Gardens, formally known as Lot 503 SP266441.

In accordance with the *Rockhampton Planning Scheme 2015* and pursuant to the *Planning Act 2016*, the proposed development constitutes Assessable Development as the subject site is located within the Environmental Management and Conservation Zone, therefore requiring a Development Permit for Material Change of Use (Impact Assessment) for the Dwelling House.

The proposal is to establish two Building Location Envelopes (BLE) on the subject site, which will accommodate a dwelling house and ancillary shed.

It is considered that the proposal is consistent with the overall outcomes of the Environmental Management and Conservation Zone, based on the proposal:

- does not detract from the desired character and scenic amenity for the zone;
- is directly connected to the local road hierarchy network;
- is appropriately serviced by on-site infrastructure;
- incorporates measures (asset protection zones, fire resistant materials, etc.) to minimise the potential impacts from bushfire hazards; and
- protects significant natural features such as creeks, gullies, waterways, habitats and vegetation.

This report addresses the relevant Codes and Policies of the Planning Scheme and relevant State planning instruments. Supporting information is provided identifying compliance with the Acceptable Outcomes of the applicable Planning Scheme Codes and demonstrating planning merit for the proposed development.

The proposed development is considered to satisfy the relevant requirements of the regional, state, and local planning instruments. The development accords with the relevant Planning Scheme Codes and maintains the outcomes sought for the Environmental Management and Conservation Zone. It is considered that the proposal has merit and warrants favourable consideration by Council.

2.0 PROJECT OVERVIEW

2.1 Site Details

Property Address:	503 Nagle Drive, Norman Gardens
Property Description:	Lot 503 SP266441
Tenure:	Freehold
Encumbrances:	A SP326315 (6,020 m^2) H SP217335
Registered Owners	AB & DT Hart *(See Appendix B – Title Search)*
Total Site Area:	800,800m^2

2.2 Application Details

Applicant:	**AB & DT Hart** c/- Gideon Town Planning
Approval Type:	Development Permit for a Material Change of Use
Local Government Area:	Rockhampton Regional Council
Assessment Manager:	Rockhampton Regional Council
Planning Scheme:	Rockhampton Region Planning Scheme 2015
Zoning:	Environmental Management and Conservation Zone
Precinct:	N/A
Overlays:	• Airport Obstacle – Height limit 10m to 45m • Airport Environs Overlay – Wildlife Hazard Buffer – 13km • Biodiversity – MSES general • Biodiversity – MLES High • Biodiversity MSES – Wildlife Habitats • Biodiversity – Waterways • Bushfire – Very High, High & Buffer • Flood Hazard – Creek Catchment – Planning Area 1 & 2 • Extractive Resources – Separation Area • Road Hierarchy – Urban access place and Urban access street • Steep Land – 15-25%+
Level of Assessment:	Impact Assessment
Relevant Code:	<u>Development and zone codes:</u> • Environmental Management and Conservation Zone • Access, parking and transport code • Landscape code • Stormwater management code • Waste management code • Water and sewer code <u>Overlay Codes:</u> • Airport Environs Overlay Code • Biodiversity Overlay Code • Bushfire Hazard Overlay Code • Extractive Resources Overlay Code • Flood Hazard Overlay Code

	• Steep Land Overlay Code
Referral Agencies:	Not appliable
Regional Plan:	Central Queensland Regional Plan 2013

3.0 CHARACTERISTICS OF SITE AND SURROUNDING AREA

3.1 Site Details and Location

The subject site, lot 503 Nagle Drive (Lot 503 SP266441), is located along the outskirts of the residential suburb of Norman Gardens, approximately 6.5km from the Rockhampton CBD and is within the Environmental Management and Conservation Zone.

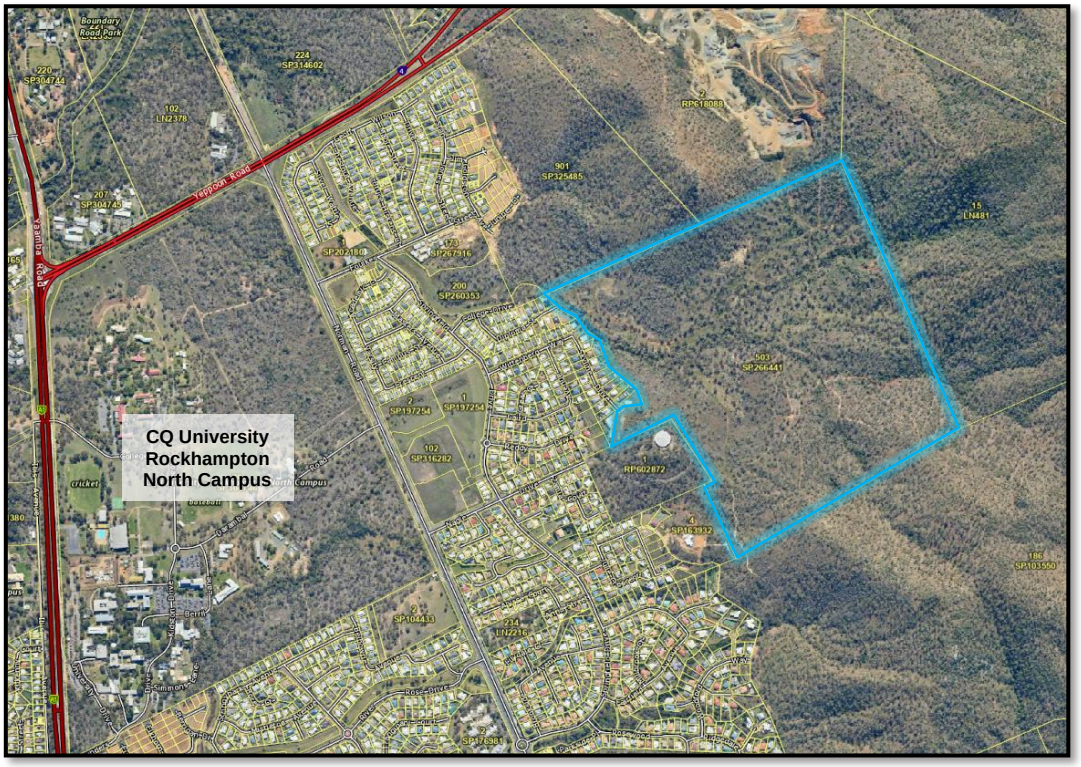

Figure 1 Site Context Map
Source: Queensland Globe

3.2 Site Characteristics

3.2.1 Area & Configuration

The subject site, with an irregular configuration, has a total site area of 80.08 ha.

3.2.2 Existing Improvement

The site is a vacant undeveloped lot.

3.2.3 Topography

The subject site has a natural downward slope from the northern, eastern and southern property boundaries to the central and western portions of the land. Some sections of land have a slope gradient exceeding 25%.

3.2.4 Vegetation

The subject site is traversed by an intermittent watercourse (dry at the time of survey) formed by two watercourses originating in the hills immediately to the east of the lot crossing the eastern lot boundary and converging in the middle third of the subject lot to form a watercourse that loops to exit the subject lot at its northwestern corner. There are three patches of non-remnant vegetation mapped within the property, but approximately 17-20% of the land was observed at survey to be sparsely vegetated.

3.2.5 Access

The subject site encounters three roads at the western property boundary, Diploma Street, Wittenberg Way, and Skyline Drive, identified as urban access streets and urban access places.

To the northwest of the site, a new residential subdivision, with an extension to Jim Goldston Avenue, will also provide future access opportunities.

3.2.6 Urban Services

Being located within the Environmental Management and Conservation Zone, connection to all urban services, such as stormwater and sewer, is not available. The proposed development will incorporate an on-site water supply and sewer system.

3.2.7 Easements

The following easements encumber the subject site:

- Easement A on SP326315, located in the northwestern property corner, burdening the land to Rockhampton Regional Council for overland flow/stormwater management.
- Easement B on SP217335, located in the southwestern property corner (Skyline Drive frontage), burdening the land to Rockhampton Regional Council for infrastructure purposes (sewer).
- Easement H on SP217335, located along the southwestern property boundary, burdening the land to Rockhampton Regional Council for infrastructure purposes (sewer).

3.3 Surrounding Area

The site is located along the outskirts of the residential suburb of Norman Gardens, situated within the Rockhampton Region Council Area. The site adjoins low-density residential lots and future residential development, consisting primarily of single-dwelling houses along the western boundary and northwestern boundaries. Rural land and an existing quarry are located to the north and eastern property boundary.

Figure 2 Zone
Source: RRC Mapping

4.0 DEVELOPMENT PROPOSAL

4.1 Proposal Description

The development proposal includes a dwelling house and ancillary buildings in the northwestern portion of the subject site. The proposal plans identify two designated building envelopes (BLEs) that will accommodate the development. Refer to *Appendix C - Proposal Plans*.

Figure 3 Proposal Plans
Source: Design + Architecture

The first BLE, measuring approximately 2,632m^2, will accommodate the future dwelling house. The dwelling will be constructed toward the northeast of the BLE, with setbacks of approximately 30m from the northern site boundary and 120m from the western site boundary.

The second BLE, measuring approximately 738m^2, will accommodate a future shed, ancillary to the dwelling house. The shed will be constructed in the centre of the BLE, with a setback of approximately 60m from the western site boundary.

The shape and location of both BLEs were chosen to ensure that they do not encroach upon the mapped Category B vegetation areas. Refer to drawing number *SK-003* within *Appendix C – Proposal Plans* for the location of the BLEs in relation to the State vegetation overlay.

The design and orientation of the dwelling and shed will take into consideration the potential restrictions of the land (topography and vegetation), bushfire hazards, and the surrounding residential amenity, ensuring there is little impact on existing vegetation located on-site.

The applicants' decision to locate the proposed development in the northwestern portion of non-regulated, non-endemic, historically cleared vegetation on the subject lot rather than upslope for better views and amenity was a conscious decision to limit, avoid and minimise adverse impacts on the remnant vegetation and essential habitat, and not to facilitate further fragmentation of the endemic vegetation and wildlife habitat on the subject lot.

4.1.1 Building Design

The proposed dwelling house will not exceed a height of 8.5m above ground level and will be constructed from materials responsive to the surrounding natural environment. The dwelling will be located more than 10 metres from retained vegetation strips and will adhere to the minimum required Asset Protection Zone distances outlined in the Bushfire Management Plan. These Asset Protection Zone distances are as follows:

- NE face (Uphill) – 8.2m
- NW & SE face (level) – 13.0m
- SW face (downhill) – 17.1m

All fencing and other garden structures will be constructed from non-flammable materials. It is anticipated that reasonable and relevant conditions will be imposed to guide and manage future buildings' design and built form.

4.1.2 Access and car parking

Vehicle access is proposed for the development via the extension of Jim Goldston Avenue (Stage 8 of Crestwood Estate), located in the northwestern corner of the subject site. The driveway will be appropriately sealed to allow vehicles to access the site safely and traverse the steep slope.

Refer to *Appendix F – Concept Civil Works*, that includes earthworks plans and road works (driveway) plans.

4.1.3 Services

Being located within the Environmental Management and Conservation Zone, connection to standard urban services such as stormwater and sewer is not possible. The proposed development will instead utilise on-site water, sewer and rainwater systems. The water supply will be adequate to provide for firefighting purposes. Connection to water and sewer services will be possible to connect later to Jim Goldston Avenue. Refer to *Appendix F – Concept Civil Works*.

4.1.4 Waste Management

The development will utilise standard council waste bins appropriately serviced by council waste services. Waste bins will be stored on-site towards the rear of the development with appropriate screening to maintain the surrounding amenity and character of the area.

5.0 REVIEW OF LEGISLATIVE REQUIREMENTS

5.1 Assessment Overview

5.1.1 Matters to be assessed

In accordance with the *Rockhampton Region Planning Scheme 2015* and in particular, in accordance with 5.4.4.1 Tables of Assessment and Assessment Benchmarks – Environmental Management and Conservation Zone the proposed development application for a Dwelling House is subject to **Impact Assessment**.

According to Section 45(5) of the Planning Act:
"(5) An impact assessment is an assessment that—

a) must be carried out—
- *i. against the assessment benchmarks in a categorising instrument for the development; and*
- *ii. having regard to any matters prescribed by regulation for this subparagraph; and*

b) may be carried out against, or having regard to, any other relevant matter, other than a person's personal circumstances, financial or otherwise."

Assessment benchmarks are described in Section 30 of the Planning Regulation 2017 ("Planning Regulation"):

(1) For section 45(5)(a)(i) of the Act, the impact assessment must be carried out against the assessment benchmarks for the development stated in schedules 9 and 10.

(2) Also, if the prescribed assessment manager is the local government, the impact assessment must be carried out against the following assessment benchmarks—

a) the assessment benchmarks stated in—
- *i. the regional plan for a region, to the extent the regional plan is not identified in the planning scheme as being appropriately integrated in the planning scheme; and*
- *ii. the State Planning Policy, part E, to the extent part E is not identified in the planning scheme as being appropriately integrated in the planning scheme; and*
- *iii. a temporary State planning policy applying to the premises;*

b) (b) if the development is not in a local government area—any local planning instrument for a local government area that may be materially affected by the development;

c) (c) if the local government is an infrastructure provider—the local government's LGIP

(3) However, an assessment manager may, in assessing development requiring impact assessment, consider an assessment benchmark only to the extent the assessment benchmark is relevant to the development."

The following sections include an assessment of the proposal against the relevant components of the *Rockhampton Region Planning Scheme 2015* and the relevant State Government planning instruments and legislative requirements.

5.2 Rockhampton Region Planning Scheme 2015

5.2.1 Planning Scheme Definitions

Under *the Rockhampton Region Planning Scheme 2015*, the proposal has been defined as:

Dwelling House means a residential use of premises involving –

a. 1 dwelling for a single household and any domestic outbuildings associated with the dwelling; or
b. 1 dwelling for a single household, a secondary dwelling, and any domestic outbuildings associated with either dwelling

The proposal, as described in section 4 is consistent with the above land use definitions.

5.2.2 Planning Scheme Zone

The subject site is located in the Environmental Management and Conservation Zone, under the *Rockhampton Region Planning Scheme 2015*.

5.2.3 Level of Assessment

As previously discussed, the proposed Dwelling House in accordance with 5.4.4.1 Tables of Assessment and Assessment Benchmarks in the *Rockhampton Region Planning Scheme 2015*, the proposed development application for a Dwelling House is subject to **Impact Assessment**.

5.2.4 Planning Scheme Overlays and Codes

The site is affected by the following overlays:

Table 1 Planning Scheme Overlays and Codes

Overlays	Relevant Code	Comment
• Airport Obstacle Limitations - 10m limit - 15m limit - 30m limit - 45m limit • Airport Wildlife Hazard Area – 13km buffer	Airport Environs Overlay Code	The proposed development, being a single-story dwelling house with a maximum height of 8.5m, will not impact the Airport Environs Overlays. Therefore, this overlay is not further addressed as part of this application.
• Biodiversity - MSES - MLES High - MSES Wildlife Habitat - Waterways	Biodiversity Overlay Code	The proposed development is consistent with the purpose of the Biodiversity Overlay Code. An assessment of the proposed development against the code is included in *Appendix G – Code Assessment RRPS 2015.*
• Bushfire Hazard - Very High - High - Buffer Area	Bushfire Hazard Overlay Code	The proposed development is consistent with the purpose of the Bushfire Hazard Overlay Code. An assessment of the proposed development against the code is included in *Appendix G – Code Assessment RRPS 2015.*
Extractive Resources – Separation Area	Extractive Resources Overlay Code	The subject site is located within the separation area of the extractive resources overlay. However, the proposed development is not located within the overlay area. Therefore, this overlay is not further addressed as part of this application.

Flood Hazard – Creek Catchment Planning Area 1 & 2	Flood Hazard Overlay Code	While the subject site contains a creek catchment flood area, the proposed development does not encroach or impact the mapped areas. Therefore, this overlay is not further addressed as part of this application.
• Steep Land - 15-20% slope - 20-25% slope - 25%+ slope	Steep Land Overlay Code	The proposed development is consistent with the purpose of the Steep Land Overlay Code. An assessment of the proposed development against the code is included in *Appendix G – Code Assessment RRPS 2015.*
Road Hierarchy – Urban Access Street & Urban Access Place	N/A	It is noted that the subject site meets with three roads along the western boundary. Diploma Street & Wittenberg Way are identified as Urban Access Street, and Skyline Drive is identified as an Urban Access Place under the Planning Scheme.

5.2.5 Other Planning Scheme Codes

The following other Planning Scheme Codes have been identified as being relevant to the assessment of proposed development:

Table 2 Other Planning Scheme Codes

Code	Comment
Environmental Management and Conservation Zone Code	The proposed development is consistent with the purpose of the Environmental Management and Conservation Zone Code. An assessment of the proposed development against the code is included in *Appendix G – Code Assessment*.
Access, Parking and transport Code	The proposed development is consistent with the purpose of the Access, Parking and Mobility Code. An assessment of the proposed development against the code is included in *Appendix G – Code Assessment.*
Landscape code	The proposed development is located within the Environmental Management and Conservation Zone, with extensive areas of vegetation used for conservation purposes. To the greatest extent possible, landscaping located on site will be retained throughout the development. It is therefore not deemed necessary to address the code in full.
Stormwater management code	The proposed dwelling will be connected to rainwater tanks. Given the size and location of the site, stormwater will be managed appropriately on-site. It is therefore not deemed necessary to address the code in full.
Waste management code	Given the small scale of the development, standard Council kerbside collection bins will be utilised for waste disposal. All bins will be stored on-site and will not be visible to public view. It is therefore not deemed necessary to address the code in full.
Water and sewer code	The proposed development is consistent with the purpose of the Water and Sewer Code. An assessment of the proposed development against the code is included in *Appendix G – Code Assessment.*

5.2.5.1 Environmental Management and Conservation Zone Code

The purpose of the environmental management and conservation zone code is to:

a) protect regionally significant environmental areas, such as national parks, resource reserves, conservation parks and world heritage areas;
b) protect other significant natural features such as creeks, gullies, waterways, wetlands, habitats, vegetation and bushland areas, in public or private ownership, from the negative impacts of development; and
c) provide for limited development to occur where it is compatible with the significant environmental values of the land and can be developed in a sustainable way.

The purpose of the environmental management and conservation zone code will be achieved through overall outcomes:

a) the conservation values of the land are maintained or enhanced;
b) areas within the zone remain undeveloped except for small-scale facilities that support conservation, small-scale rural living, low impact nature based recreational or eco-tourism uses and essential infrastructure where they are:
    i. compatible with maintaining environmental values;
    ii. located to avoid natural hazard constraints and do not expose property or people to an unacceptable level of risk; and
    iii. located to avoid visual impacts from public viewing places;
c) adverse impacts on ecological features, corridors and processes are avoided;
d) the scenic values and landscape character of the Mount Archer National Park, Goodedulla National Park and Bouldercombe Gorge Resource Reserve are protected from negative impacts of development;
e) emergency services, utility installations and infrastructure corridors (such as telecommunication or electricity and water supply corridors) are appropriate where the use does not detract from the scenic amenity and environmental importance of the area; and
f) land is retained in large holdings to limit development opportunities and no new lots are created.

The proposed development is deemed to be a compatible use within the environmental management and conservation zone. The proposed dwelling house is of an appropriate scale so as not to detract from the ecological features, corridors and processes on-site. The proposal does not impact the environmental management and conservation zone amenity or the character of the surrounding area.

The dwelling will be designed and constructed with appropriate materials to minimise the visual impact on the surrounding area. Additional landscaping will be established in areas where the dwelling is exposed to nearby roads and public viewer points.

The proposed dwelling house is located within proximity to other residential uses to ensure separation from environmental characteristics and constraints of the site. The shape and location of the BLEs were chosen to avoid impacts upon high value biodiversity areas. The dwelling will have access via the extension of Jim Goldston Avenue, connecting all vehicles to the local surrounding road network. This location for the access was chosen for its minimal impacts on watercourses and other environmental assets on-site.

The proposed dwelling house will be appropriately connected to on-site infrastructure, including water, sewer, and stormwater systems in the form of rainwater tanks.

5.2.6 Planning Scheme Policies

Any applicable Planning Scheme Policy will be addressed as considered necessary for the assessment of the proposed development.

5.2.7 Strategic Framework

The strategic framework themes and their strategic outcomes, as identified within Part 3 of the *Rockhampton Region Planning Scheme 2015* are applicable.

5.2.7.1 Settlement Pattern – Natural Conservation

Table 3 Settle Pattern

Element	***Comment***
Natural conservation, open space and natural corridor or link	The proposed development will not disturb the ecological and landscape values. The proposed dwelling house will be appropriately connected to on-site infrastructure.
Township	The development proposal does not relate to or impact this element.
Rural residential	The development proposal does not relate to or impact this element.
Rural	The development proposal does not relate to or impact this element.
Industrial	The development proposal does not relate to or impact this element.
Urban and new urban	The development proposal does not relate to or impact this element.
Future urban	The development proposal does not relate to or impact this element.
Urban Infill and intensification	The development proposal does not relate to or impact this element.
Centres	The proposal will not compromise the role and function of designated centres.
Specialised centres	The development proposal does not relate to or impact this element.
Specific Use	The development proposal does not relate to or impact this element.

5.2.7.2 Natural environment and hazards

Table 4 Natural Environment and Hazards

Element	**Comment**
Areas of environmental significance	The proposed development maintains and protects the areas of environmental significance, avoiding significant environmental impacts.
Natural hazards and climate change	The proposal safeguards people and damage to property is not increased. Similarly, natural processes, landform and vegetation is maintained.
Coastal environment	The development proposal does not relate to or impact this element.
Water resources, catchment management and healthy waters	The development proposal does not alter the natural drainage and flow rates. Development does not increase the risk of erosion.
Landscape and scenic amenity	The development proposal does not significantly impact the environment, topography, or landscape.
Air-noise and hazardous materials	The development proposal does not relate to or impact this element.
Waste	The development proposal does not generate solid or liquid waste that could impact the natural environment.

5.2.7.3 Community identity and diversity

Table 5 Community Identity and Diversity

Element	**Comment**
Housing diversity, safe communities and equitable access	The proposed dwelling house is of a scale and design that contributes to and enhances housing choice. The development proposal does not create social isolation or antisocial behaviour.
Community identity	The development proposal does not relate to or impact this element.
Heritage and character	The development proposal does not relate to or impact this element.
Sport and recreation and open space	The development proposal does not relate to or impact this element.
Social, arts and cultural infrastructure	The development proposal does not relate to or impact this element.

5.2.7.4 Access and Mobility

Table 6 Access and Mobility

Element	Comment
Public and active transport	The location of the development encourages active living and will not impact the safety and efficiency of the existing transport infrastructure. The development proposal does not impact this element.
Road network	The proposal will be serviced via an extension to Jim Goldston Avenue, classified as an urban access place and compatible to accommodate the traffic generated by the proposed land use. The development provides safe access during hazard events.
Rail network	The development proposal does not relate to or impact this element.
Freight network and key logistics hub	The development proposal does not relate to or impact this element.
Air transport	The development proposal does not relate to or impact this element.
Sea transport	The development proposal does not relate to or impact this element.

5.2.7.5 Infrastructure and Services

The proposed development is located within an urban area and will be appropriately connected to all general services and will be upgraded as deemed necessary.

Table 7 Infrastructure and Services

Element	Comment
Inter-regional networks	The development proposal does not impact this element.
Local area networks	The development proposal does not impact this element.

5.2.7.6 Natural Resources and Economic Development

Table 8 Natural Resources and Economic Development

Element	Comment
Protection of key assets	The development proposal does not impact this element.
Industrial development	The development proposal does not relate to or impact this element.
Rural land	The development proposal does not relate to or impact this element.
Extractive and mineral resources	The development proposal does not relate to or impact this element.
Forestry	The development proposal does not relate to or impact this element.
Marine resources	The development proposal does not relate to or impact this element.
Tourism	The development proposal does not relate to or impact this element.

The proposed development does not conflict with the Strategic Framework of the *Rockhampton Region Planning Scheme 2015*.

5.3 State Government Planning Framework

5.3.1 Central Queensland Regional Plan 2013

The subject site is identified as being within the Priority Living area (PLA) of the Central Queensland Regional Plan 2013 (CQRP). The PLA safeguards areas required for the growth of towns in the regions while providing for resource activities to locate within these areas where it meets communities' expectations as determined by the relevant local government.

The proposed development, being for a Dwelling House, does not conflict with and is considered to accord with the provisions of the CQRP.

5.3.2 State Planning Regulatory Provisions

The State Planning Policy (SPP) provides interim development assessment requirements that must be applied by a local government until the SPP has been appropriately integrated into the local planning scheme.

An amended SPP was released on 3rd July 2017. It is a State planning instrument made under Chapter 2, Part 2, Section 10 of the Planning Act.

As prescribed in section 26(2)(a)(ii) of the Planning Regulation, the SPP represents an assessment benchmark and the assessment manager must have regard to SPP if it is not identified as being appropriately reflected in the planning scheme.

The SPP is identified as being reflected in the *Rockhampton Region Planning Scheme 2015,* which is the relevant planning scheme in this instance. Since the commencement of the Planning Scheme, the July 2017 version of the SPP has taken effect. It is considered that the amendments in the July 2017 version of the SPP are not substantial and do not affect the State interests reflected in the Planning Scheme. The SPP is therefore not directly applicable to the development of the site.

The proposed development for a dwelling house is not considered to conflict with the *State Planning Policy 2017*.

6.0 REFERRALS

The Planning Regulation 2017 identifies triggers and thresholds for development, requiring referral to a State Agency. The proposed development does not trigger any referrals.

7.0 CONCLUSION

This Planning Report has been prepared on behalf of *A B & D T Hart* in support of a Development Application for a Material Change of Use for a Dwelling House at 503 Nagle Drive, Norman Gardens, formally known as Lot 503 SP266441.

In accordance with the *Rockhampton Planning Scheme 2015* and pursuant to the *Planning Act 2016*, the proposed development constitutes Assessable Development as the subject site is located within the Environmental Management and Conservation Zone, therefore requiring a Development Permit for Material Change of Use (Impact Assessment) for the Dwelling House.

It is considered that the proposal is consistent with the overall outcomes of the Environmental Management and Conservation Zone, based on the proposal:

- does not detract from the desired character and scenic amenity for the zone;
- is directly connected to the local road hierarchy network;
- is appropriately serviced by on-site infrastructure;
- incorporates measures (asset protection zones, fire resistant materials, etc.) to minimise the potential impacts from bushfire hazards; and
- protects significant natural features such as creeks, gullies, waterways, habitats and vegetation.

The proposed development is considered to satisfy the relevant requirements of the regional, state, and local planning instruments. The development accords with the relevant Planning Scheme Codes and maintains the outcomes sought for the Environmental Management and Conservation Zone. It is considered that the proposal has merit and warrants favourable consideration by Council.

APPENDIX A

DA FORM 1

APPENDIX B

TITLE SEARCH

APPENDIX C

PROPOSAL PLANS

APPENDIX D

ASSESSMENT & MITIGATION OF IMPACTS TO MES

APPENDIX E

BUSHFIRE MANAGEMENT PLAN

APPENDIX F

CONCEPT CIVIL WORKS

APPENDIX G

CODE ASSESSMENT RRPS 2015

APPENDIX H

OVERLAY MAPPING RRPS 2015

APPENDIX I

STATE MAPPING

DA Form 1 – Development application details

Approved form (version 1.4 effective 15 December 2023) made under section 282 of the Planning Act 2016.

This form **must** be used to make a development application **involving code assessment or impact assessment**, except when applying for development involving only building work.

For a development application involving **building work only**, use *DA Form 2 – Building work details*.

For a development application involving **building work associated with any other type of assessable development (i.e. material change of use, operational work or reconfiguring a lot)**, use this form (*DA Form 1*) **and** parts 4 to 6 of *DA Form 2 – Building work details.*

Unless stated otherwise, all parts of this form **must** be completed in full and all required supporting information **must** accompany the development application.

One or more additional pages may be attached as a schedule to this development application if there is insufficient space on the form to include all the necessary information.

This form and any other form relevant to the development application must be used to make a development application relating to strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994*, and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008.* For the purpose of assessing a development application relating to strategic port land and Brisbane core port land, any reference to a planning scheme is taken to mean a land use plan for the strategic port land, Brisbane port land use plan for Brisbane core port land, or a land use plan for airport land.

Note: *All terms used in this form have the meaning given under the Planning Act 2016, the Planning Regulation 2017, or the Development Assessment Rules (DA Rules).*

PART 1 – APPLICANT DETAILS

1) Applicant details	
Applicant name(s) (*individual or company full name*)	AB & DT Hart
Contact name *(only applicable for companies)*	C/- Gideon Town Planning
Postal address *(P.O. Box or street address)*	PO Box 450
Suburb	Rockhampton City
State	Queensland
Postcode	4700
Country	Australia
Contact number	07 4806 6959
Email address *(non-mandatory)*	info@gideontownplanning.com.au
Mobile number *(non-mandatory)*	
Fax number *(non-mandatory)*	
Applicant's reference number(s) *(if applicable)*	GTP 2134

2) Owner's consent
2.1) Is written consent of the owner required for this development application?
☐ Yes – the written consent of the owner(s) is attached to this development application ☒ No – proceed to 3)

PART 2 – LOCATION DETAILS

3) Location of the premises *(complete 3.1) or 3.2), and 3.3) as applicable)*

***Note**: Provide details below and attach a site plan for any or all premises part of the development application. For further information, see DA Forms Guide: Relevant plans.*

3.1) Street address and lot on plan

☒ Street address **AND** lot on plan (a*ll lots must be listed*), ***or***

☐ Street address **AND** lot on plan for an adjoining or adjacent property of the premises *(appropriate for development in water but adjoining or adjacent to land e.g. jetty, pontoon. All lots must be listed).*

a)	Unit No.	Street No.	Street Name and Type	Suburb
		503	Nagle Drive	Norman Gardens
	Postcode	Lot No.	Plan Type and Number *(e.g. RP, SP)*	Local Government Area(s)
	4701	503	SP266441	Rockhampton Regional Council
b)	Unit No.	Street No.	Street Name and Type	Suburb
	Postcode	Lot No.	Plan Type and Number *(e.g. RP, SP)*	Local Government Area(s)

3.2) Coordinates of premises *(appropriate for development in remote areas, over part of a lot or in water not adjoining or adjacent to land e.g. channel dredging in Moreton Bay)*

***Note**: Place each set of coordinates in a separate row.*

☐ Coordinates of premises by longitude and latitude

Longitude(s)	Latitude(s)	Datum	Local Government Area(s) *(if applicable)*
		☐ WGS84 ☐ GDA94 ☐ Other:	

☐ Coordinates of premises by easting and northing

Easting(s)	Northing(s)	Zone Ref.	Datum	Local Government Area(s) *(if applicable)*
		☐ 54 ☐ 55 ☐ 56	☐ WGS84 ☐ GDA94 ☐ Other:	

3.3) Additional premises

☐ Additional premises are relevant to this development application and the details of these premises have been attached in a schedule to this development application

☒ Not required

4) Identify any of the following that apply to the premises and provide any relevant details

☐ In or adjacent to a water body or watercourse or in or above an aquifer

Name of water body, watercourse or aquifer:

☐ On strategic port land under the *Transport Infrastructure Act 1994*

Lot on plan description of strategic port land:

Name of port authority for the lot:

☐ In a tidal area

Name of local government for the tidal area *(if applicable)*:

Name of port authority for tidal area *(if applicable)*:

☐ On airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*

Name of airport:

☐ Listed on the Environmental Management Register (EMR) under the *Environmental Protection Act 1994*	
EMR site identification:	
☐ Listed on the Contaminated Land Register (CLR) under the *Environmental Protection Act 1994*	
CLR site identification:	

5) Are there any existing easements over the premises?

Note: Easement uses vary throughout Queensland and are to be identified correctly and accurately. For further information on easements and how they may affect the proposed development, see DA Forms Guide.

☒ Yes – All easement locations, types and dimensions are included in plans submitted with this development application

☐ No

PART 3 – DEVELOPMENT DETAILS

Section 1 – Aspects of development

6.1) Provide details about the first development aspect

a) What is the type of development? *(tick only one box)*

☒ Material change of use ☐ Reconfiguring a lot ☐ Operational work ☐ Building work

b) What is the approval type? *(tick only one box)*

☒ Development permit ☐ Preliminary approval ☐ Preliminary approval that includes a variation approval

c) What is the level of assessment?

☐ Code assessment ☒ Impact assessment *(requires public notification)*

d) Provide a brief description of the proposal *(e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots)*:

Dwelling House

e) Relevant plans

***Note**: Relevant plans are required to be submitted for all aspects of this development application. For further information, see DA Forms guide: Relevant plans.*

☒ Relevant plans of the proposed development are attached to the development application

6.2) Provide details about the second development aspect

a) What is the type of development? *(tick only one box)*

☐ Material change of use ☐ Reconfiguring a lot ☐ Operational work ☐ Building work

b) What is the approval type? *(tick only one box)*

☐ Development permit ☐ Preliminary approval ☐ Preliminary approval that includes a variation approval

c) What is the level of assessment?

☐ Code assessment ☐ Impact assessment *(requires public notification)*

d) Provide a brief description of the proposal *(e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots)*:

e) Relevant plans

***Note**: Relevant plans are required to be submitted for all aspects of this development application. For further information, see DA Forms Guide: Relevant plans.*

☐ Relevant plans of the proposed development are attached to the development application

6.3) Additional aspects of development

☐ Additional aspects of development are relevant to this development application and the details for these aspects that would be required under Part 3 Section 1 of this form have been attached to this development application

☒ Not required

Section 2 – Further development details

7) Does the proposed development application involve any of the following?	
Material change of use	☒ Yes – complete division 1 if assessable against a local planning instrument
Reconfiguring a lot	☐ Yes – complete division 2
Operational work	☐ Yes – complete division 3
Building work	☐ Yes – complete *DA Form 2 – Building work details*

Division 1 – Material change of use

***Note**: This division is only required to be completed if any part of the development application involves a material change of use assessable against a local planning instrument.*

8.1) Describe the proposed material change of use			
Provide a general description of the proposed use	Provide the planning scheme definition *(include each definition in a new row)*	Number of dwelling units *(if applicable)*	Gross floor area (m^2) *(if applicable)*
Dwelling House	Dwelling House	1	n/a

8.2) Does the proposed use involve the use of existing buildings on the premises?
☐ Yes
☒ No

Division 2 – Reconfiguring a lot

***Note**: This division is only required to be completed if any part of the development application involves reconfiguring a lot.*

9.1) What is the total number of existing lots making up the premises?

9.2) What is the nature of the lot reconfiguration? *(tick all applicable boxes)*	
☐ Subdivision *(complete 10))*	☐ Dividing land into parts by agreement *(complete 11))*
☐ Boundary realignment *(complete 12))*	☐ Creating or changing an easement giving access to a lot from a constructed road *(complete 13))*

10) Subdivision				
10.1) For this development, how many lots are being created and what is the intended use of those lots:				
Intended use of lots created	Residential	Commercial	Industrial	Other, please specify:
Number of lots created				

10.2) Will the subdivision be staged?	
☐ Yes – provide additional details below ☐ No	
How many stages will the works include?	
What stage(s) will this development application apply to?	

11) Dividing land into parts by agreement – how many parts are being created and what is the intended use of the parts?				
Intended use of parts created	Residential	Commercial	Industrial	Other, please specify:
Number of parts created				

12) Boundary realignment			
12.1) What are the current and proposed areas for each lot comprising the premises?			
Current lot		Proposed lot	
Lot on plan description	Area (m^2)	Lot on plan description	Area (m^2)
12.2) What is the reason for the boundary realignment?			

13) What are the dimensions and nature of any existing easements being changed and/or any proposed easement? *(attach schedule if there are more than two easements)*				
Existing or proposed?	Width (m)	Length (m)	Purpose of the easement? *(e.g. pedestrian access)*	Identify the land/lot(s) benefitted by the easement

Division 3 – Operational work

***Note**: This division is only required to be completed if any part of the development application involves operational work.*

14.1) What is the nature of the operational work?		
☐ Road work	☐ Stormwater	☐ Water infrastructure
☐ Drainage work	☐ Earthworks	☐ Sewage infrastructure
☐ Landscaping	☐ Signage	☐ Clearing vegetation
☐ Other – please specify:		
14.2) Is the operational work necessary to facilitate the creation of new lots? *(e.g. subdivision)*		
☐ Yes – specify number of new lots:		
☐ No		
14.3) What is the monetary value of the proposed operational work? *(include GST, materials and labour)*		
$		

PART 4 – ASSESSMENT MANAGER DETAILS

15) Identify the assessment manager(s) who will be assessing this development application
Rockhampton Regional Council
16) Has the local government agreed to apply a superseded planning scheme for this development application?
☐ Yes – a copy of the decision notice is attached to this development application
☐ The local government is taken to have agreed to the superseded planning scheme request – relevant documents attached
☒ No

PART 5 – REFERRAL DETAILS

17) Does this development application include any aspects that have any referral requirements?
***Note**: A development application will require referral if prescribed by the* Planning Regulation 2017.

☒ No, there are no referral requirements relevant to any development aspects identified in this development application – proceed to Part 6

Matters requiring referral to the **Chief Executive of the *Planning Act 2016*:**

☐ Clearing native vegetation
☐ Contaminated land *(unexploded ordnance)*
☐ Environmentally relevant activities (ERA) *(only if the ERA has not been devolved to a local government)*
☐ Fisheries – aquaculture
☐ Fisheries – declared fish habitat area
☐ Fisheries – marine plants
☐ Fisheries – waterway barrier works
☐ Hazardous chemical facilities
☐ Heritage places – Queensland heritage place *(on or near a Queensland heritage place)*
☐ Infrastructure-related referrals – designated premises
☐ Infrastructure-related referrals – state transport infrastructure
☐ Infrastructure-related referrals – State transport corridor and future State transport corridor
☐ Infrastructure-related referrals – State-controlled transport tunnels and future state-controlled transport tunnels
☐ Infrastructure-related referrals – near a state-controlled road intersection
☐ Koala habitat in SEQ region – interfering with koala habitat in koala habitat areas outside koala priority areas
☐ Koala habitat in SEQ region – key resource areas
☐ Ports – Brisbane core port land – near a State transport corridor or future State transport corridor
☐ Ports – Brisbane core port land – environmentally relevant activity (ERA)
☐ Ports – Brisbane core port land – tidal works or work in a coastal management district
☐ Ports – Brisbane core port land – hazardous chemical facility
☐ Ports – Brisbane core port land – taking or interfering with water
☐ Ports – Brisbane core port land – referable dams
☐ Ports – Brisbane core port land – fisheries
☐ Ports – Land within Port of Brisbane's port limits *(below high-water mark)*
☐ SEQ development area
☐ SEQ regional landscape and rural production area or SEQ rural living area – tourist activity or sport and recreation activity
☐ SEQ regional landscape and rural production area or SEQ rural living area – community activity
☐ SEQ regional landscape and rural production area or SEQ rural living area – indoor recreation
☐ SEQ regional landscape and rural production area or SEQ rural living area – urban activity
☐ SEQ regional landscape and rural production area or SEQ rural living area – combined use
☐ SEQ northern inter-urban break – tourist activity or sport and recreation activity
☐ SEQ northern inter-urban break – community activity
☐ SEQ northern inter-urban break – indoor recreation
☐ SEQ northern inter-urban break – urban activity
☐ SEQ northern inter-urban break – combined use
☐ Tidal works or works in a coastal management district
☐ Reconfiguring a lot in a coastal management district or for a canal
☐ Erosion prone area in a coastal management district
☐ Urban design
☐ Water-related development – taking or interfering with water
☐ Water-related development – removing quarry material *(from a watercourse or lake)*
☐ Water-related development – referable dams
☐ Water-related development –levees *(category 3 levees only)*
☐ Wetland protection area

Matters requiring referral to the **local government:**

☐ Airport land

☐ Environmentally relevant activities (ERA) (*only if the ERA has been devolved to local government)*

☐ Heritage places – Local heritage places

Matters requiring referral to the **Chief Executive of the distribution entity or transmission entity:**

☐ Infrastructure-related referrals – Electricity infrastructure

Matters requiring referral to:

- The **Chief Executive of the holder of the licence**, if not an individual
- The **holder of the licence**, if the holder of the licence is an individual

☐ Infrastructure-related referrals – Oil and gas infrastructure

Matters requiring referral to the **Brisbane City Council:**

☐ Ports – Brisbane core port land

Matters requiring referral to the **Minister responsible for administering the *Transport Infrastructure Act 1994*:**

☐ Ports – Brisbane core port land *(where inconsistent with the Brisbane port LUP for transport reasons)*

☐ Ports – Strategic port land

Matters requiring referral to the **relevant port operator**, if applicant is not port operator**:**

☐ Ports – Land within Port of Brisbane's port limits *(below high-water mark)*

Matters requiring referral to the **Chief Executive of the relevant port authority:**

☐ Ports – Land within limits of another port *(below high-water mark)*

Matters requiring referral to the **Gold Coast Waterways Authority:**

☐ Tidal works or work in a coastal management district *(in Gold Coast waters)*

Matters requiring referral to the **Queensland Fire and Emergency Service:**

☐ Tidal works or work in a coastal management district *(involving a marina (more than six vessel berths))*

18) Has any referral agency provided a referral response for this development application?

☐ Yes – referral response(s) received and listed below are attached to this development application

☒ No

Referral requirement	Referral agency	Date of referral response

Identify and describe any changes made to the proposed development application that was the subject of the referral response and this development application, or include details in a schedule to this development application *(if applicable).*

PART 6 – INFORMATION REQUEST

19) Information request under Part 3 of the DA Rules

☒ I agree to receive an information request if determined necessary for this development application

☐ I do not agree to accept an information request for this development application

***Note**: By not agreeing to accept an information request I, the applicant, acknowledge:*

- *that this development application will be assessed and decided based on the information provided when making this development application and the assessment manager and any referral agencies relevant to the development application are not obligated under the DA Rules to accept any additional information provided by the applicant for the development application unless agreed to by the relevant parties*
- *Part 3 of the DA Rules will still apply if the application is an application listed under section 11.3 of the DA Rules.*

Further advice about information requests is contained in the DA Forms Guide.

PART 7 – FURTHER DETAILS

20) Are there any associated development applications or current approvals? *(e.g. a preliminary approval)*

☐ Yes – provide details below or include details in a schedule to this development application
☒ No

List of approval/development application references	Reference number	Date	Assessment manager
☐ Approval ☐ Development application			
☐ Approval ☐ Development application			

21) Has the portable long service leave levy been paid? *(only applicable to development applications involving building work or operational work)*

☐ Yes – a copy of the receipted QLeave form is attached to this development application
☐ No – I, the applicant will provide evidence that the portable long service leave levy has been paid before the assessment manager decides the development application. I acknowledge that the assessment manager may give a development approval only if I provide evidence that the portable long service leave levy has been paid
☒ Not applicable *(e.g. building and construction work is less than $150,000 excluding GST)*

Amount paid	Date paid (dd/mm/yy)	QLeave levy number (A, B or E)
$		

22) Is this development application in response to a show cause notice or required as a result of an enforcement notice?

☐ Yes – show cause or enforcement notice is attached
☒ No

23) Further legislative requirements

Environmentally relevant activities

23.1) Is this development application also taken to be an application for an environmental authority for an **Environmentally Relevant Activity (ERA)** under section 115 of the *Environmental Protection Act 1994*?

☐ Yes – the required attachment (form ESR/2015/1791) for an application for an environmental authority accompanies this development application, and details are provided in the table below
☒ No

***Note**: Application for an environmental authority can be found by searching "ESR/2015/1791" as a search term at www.qld.gov.au. An ERA requires an environmental authority to operate. See www.business.qld.gov.au for further information.*

Proposed ERA number:		Proposed ERA threshold:	
Proposed ERA name:			

☐ Multiple ERAs are applicable to this development application and the details have been attached in a schedule to this development application.

Hazardous chemical facilities

23.2) Is this development application for a **hazardous chemical facility**?

☐ Yes – *Form 69: Notification of a facility exceeding 10% of schedule 15 threshold* is attached to this development application
☒ No

***Note**: See www.business.qld.gov.au for further information about hazardous chemical notifications.*

Clearing native vegetation

23.3) Does this development application involve **clearing native vegetation** that requires written confirmation that the chief executive of the *Vegetation Management Act 1999* is satisfied the clearing is for a relevant purpose under section 22A of the *Vegetation Management Act 1999*?

☐ Yes – this development application includes written confirmation from the chief executive of the *Vegetation Management Act 1999* (s22A determination)

☒ No

***Note**: 1. Where a development application for operational work or material change of use requires a s22A determination and this is not included, the development application is prohibited development.*

2. See https://www.qld.gov.au/environment/land/vegetation/applying for further information on how to obtain a s22A determination.

Environmental offsets

23.4) Is this development application taken to be a prescribed activity that may have a significant residual impact on a **prescribed environmental matter** under the *Environmental Offsets Act 2014*?

☐ Yes – I acknowledge that an environmental offset must be provided for any prescribed activity assessed as having a significant residual impact on a prescribed environmental matter

☒ No

***Note**: The environmental offset section of the Queensland Government's website can be accessed at www.qld.gov.au for further information on environmental offsets.*

Koala habitat in SEQ Region

23.5) Does this development application involve a material change of use, reconfiguring a lot or operational work which is assessable development under Schedule 10, Part 10 of the Planning Regulation 2017?

☐ Yes – the development application involves premises in the koala habitat area in the koala priority area

☐ Yes – the development application involves premises in the koala habitat area outside the koala priority area

☒ No

***Note**: If a koala habitat area determination has been obtained for this premises and is current over the land, it should be provided as part of this development application. See koala habitat area guidance materials at www.des.qld.gov.au for further information.*

Water resources

23.6) Does this development application involve **taking or interfering with underground water through an artesian or subartesian bore, taking or interfering with water in a watercourse, lake or spring, or taking overland flow water under the *Water Act 2000***?

☐ Yes – the relevant template is completed and attached to this development application and I acknowledge that a relevant authorisation or licence under the *Water Act 2000* may be required prior to commencing development

☒ No

***Note**: Contact the Department of Natural Resources, Mines and Energy at www.dnrme.qld.gov.au for further information.*

DA templates are available from https://planning.dsdmip.qld.gov.au/. If the development application involves:

- *Taking or interfering with underground water through an artesian or subartesian bore: complete DA Form 1 Template 1*
- *Taking or interfering with water in a watercourse, lake or spring: complete DA Form1 Template 2*
- *Taking overland flow water: complete DA Form 1 Template 3.*

Waterway barrier works

23.7) Does this application involve **waterway barrier works?**

☐ Yes – the relevant template is completed and attached to this development application

☒ No

DA templates are available from https://planning.dsdmip.qld.gov.au/. For a development application involving waterway barrier works, complete DA Form 1 Template 4.

Marine activities

23.8) Does this development application involve **aquaculture, works within a declared fish habitat area or removal, disturbance or destruction of marine plants?**

☐ Yes – an associated *resource* allocation authority is attached to this development application, if required under the *Fisheries Act 1994*

☒ No

***Note**: See guidance materials at www.daf.qld.gov.au for further information.*

Quarry materials from a watercourse or lake

23.9) Does this development application involve the **removal of quarry materials from a watercourse or lake** under the *Water Act 2000?*

☐ Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development
☒ No

***Note**: Contact the Department of Natural Resources, Mines and Energy at www.dnrme.qld.gov.au and www.business.qld.gov.au for further information.*

Quarry materials from land under tidal waters

23.10) Does this development application involve the **removal of quarry materials from land under tidal water** under the *Coastal Protection and Management Act 1995?*

☐ Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development
☒ No

***Note**: Contact the Department of Environment and Science at www.des.qld.gov.au for further information.*

Referable dams

23.11) Does this development application involve a **referable dam** required to be failure impact assessed under section 343 of the *Water Supply (Safety and Reliability) Act 2008* (the Water Supply Act)?

☐ Yes – the 'Notice Accepting a Failure Impact Assessment' from the chief executive administering the Water Supply Act is attached to this development application
☒ No

***Note**: See guidance materials at www.dnrme.qld.gov.au for further information.*

Tidal work or development within a coastal management district

23.12) Does this development application involve **tidal work or development in a coastal management district**?

☐ Yes – the following is included with this development application:
- ☐ Evidence the proposal meets the code for assessable development that is prescribed tidal work *(only required if application involves prescribed tidal work)*
- ☐ A certificate of title

☒ No

***Note**: See guidance materials at www.des.qld.gov.au for further information.*

Queensland and local heritage places

23.13) Does this development application propose development on or adjoining a place entered in the **Queensland heritage register** or on a place entered in a local government's **Local Heritage Register**?

☐ Yes – details of the heritage place are provided in the table below
☒ No

***Note**: See guidance materials at www.des.qld.gov.au for information requirements regarding development of Queensland heritage places.*

Name of the heritage place:		Place ID:	

Brothels

23.14) Does this development application involve a **material change of use for a brothel**?

☐ Yes – this development application demonstrates how the proposal meets the code for a development application for a brothel under Schedule 3 of the *Prostitution Regulation 2014*
☒ No

Decision under section 62 of the *Transport Infrastructure Act 1994*

23.15) Does this development application involve new or changed access to a state-controlled road?

☐ Yes – this application will be taken to be an application for a decision under section 62 of the *Transport Infrastructure Act 1994* (subject to the conditions in section 75 of the *Transport Infrastructure Act 1994* being satisfied)
☒ No

Walkable neighbourhoods assessment benchmarks under Schedule 12A of the Planning Regulation

23.16) Does this development application involve reconfiguring a lot into 2 or more lots in certain residential zones (except rural residential zones), where at least one road is created or extended?

☐ Yes – Schedule 12A is applicable to the development application and the assessment benchmarks contained in schedule 12A have been considered

☒ No

***Note**: See guidance materials at www.planning.dsdmip.qld.gov.au for further information.*

PART 8 – CHECKLIST AND APPLICANT DECLARATION

24) Development application checklist	
I have identified the assessment manager in question 15 and all relevant referral requirement(s) in question 17 ***Note**: See the Planning Regulation 2017 for referral requirements*	☒ Yes
If building work is associated with the proposed development, Parts 4 to 6 of *DA Form 2 – Building work details* have been completed and attached to this development application	☐ Yes ☒ Not applicable
Supporting information addressing any applicable assessment benchmarks is with the development application ***Note**: This is a mandatory requirement and includes any relevant templates under question 23, a planning report and any technical reports required by the relevant categorising instruments (e.g. local government planning schemes, State Planning Policy, State Development Assessment Provisions). For further information, see DA Forms Guide: Planning Report Template.*	☒ Yes
Relevant plans of the development are attached to this development application ***Note**: Relevant plans are required to be submitted for all aspects of this development application. For further information, see DA Forms Guide: Relevant plans.*	☒ Yes
The portable long service leave levy for QLeave has been paid, or will be paid before a development permit is issued (*see 21*)	☐ Yes ☒ Not applicable

25) Applicant declaration

☒ By making this development application, I declare that all information in this development application is true and correct

☒ Where an email address is provided in Part 1 of this form, I consent to receive future electronic communications from the assessment manager and any referral agency for the development application where written information is required or permitted pursuant to sections 11 and 12 of the *Electronic Transactions Act 2001*

***Note**: It is unlawful to intentionally provide false or misleading information.*

Privacy – Personal information collected in this form will be used by the assessment manager and/or chosen assessment manager, any relevant referral agency and/or building certifier (including any professional advisers which may be engaged by those entities) while processing, assessing and deciding the development application. All information relating to this development application may be available for inspection and purchase, and/or published on the assessment manager's and/or referral agency's website.

Personal information will not be disclosed for a purpose unrelated to the *Planning Act 2016*, Planning Regulation 2017 and the DA Rules except where:

- such disclosure is in accordance with the provisions about public access to documents contained in the *Planning Act 2016* and the Planning Regulation 2017, and the access rules made under the *Planning Act 2016* and Planning Regulation 2017; or
- required by other legislation (including the *Right to Information Act 2009*); or
- otherwise required by law.

This information may be stored in relevant databases. The information collected will be retained as required by the *Public Records Act 2002.*

PART 9 – FOR COMPLETION OF THE ASSESSMENT MANAGER – FOR OFFICE USE ONLY

Date received: | | Reference number(s): | |

Notification of engagement of alternative assessment manager	
Prescribed assessment manager	
Name of chosen assessment manager	
Date chosen assessment manager engaged	
Contact number of chosen assessment manager	
Relevant licence number(s) of chosen assessment manager	

QLeave notification and payment *Note: For completion by assessment manager if applicable*			
Description of the work			
QLeave project number			
Amount paid ($)		Date paid (dd/mm/yy)	
Date receipted form sighted by assessment manager			
Name of officer who sighted the form			

Current Title Search

Queensland Titles Registry Pty Ltd
ABN 23 648 568 101

Title Reference:	**50955791**	**Search Date:**	28/03/2024 10:59
Date Title Created:	16/07/2014	**Request No:**	47549714
Previous Title:	50938446		

ESTATE AND LAND

Estate in Fee Simple

LOT 503 SURVEY PLAN 266441
Local Government: ROCKHAMPTON

REGISTERED OWNER

Dealing No: 719554439 07/08/2019

ANDREW BRUCE HART
DANIELLE THERESE HART — JOINT TENANTS

EASEMENTS, ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Crown by
Deed of Grant No. 10364140 (POR 184)
Deed of Grant No. 10526207 (POR 950)

2. EASEMENT IN GROSS No 712334549 09/04/2009 at 09:00
burdening the land
ROCKHAMPTON REGIONAL COUNCIL
over
EASEMENT B ON SP217335

3. EASEMENT IN GROSS No 712334573 09/04/2009 at 09:03
burdening the land
ROCKHAMPTON REGIONAL COUNCIL
over
EASEMENT H ON SP217335

4. MORTGAGE No 719554440 07/08/2019 at 15:14
THE CAPRICORNIAN LTD A.C.N. 087 650 940

5. EASEMENT IN GROSS No 721463726 07/02/2022 at 15:36
burdening the land
ROCKHAMPTON REGIONAL COUNCIL
over
EASEMENT A ON SP326315

ADMINISTRATIVE ADVICES

Dealing	Type	Lodgement Date	Status
712784274	VEG NOTICE VEGETATION MANAGEMENT ACT 1999	09/10/2009 14:52	CURRENT

UNREGISTERED DEALINGS

NIL

Caution - Charges do not necessarily appear in order of priority

** End of Current Title Search **

Requested by: D-ENQ TITLES QUEENSLAND

Current Title Search

Queensland Titles Registry Pty Ltd
ABN 23 648 568 101

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ESTATE AND LAND

Estate in Fee Simple

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burdening the land
ROCKHAMPTON REGIONAL COUNCIL
over
EASEMENT B ON SP217335

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burdening the land
ROCKHAMPTON REGIONAL COUNCIL
over
EASEMENT H ON SP217335

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THE CAPRICORNIAN LTD A.C.N. 087 650 940

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burdening the land
ROCKHAMPTON REGIONAL COUNCIL
over
EASEMENT A ON SP326315

ADMINISTRATIVE ADVICES

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UNREGISTERED DEALINGS

NIL

Caution - Charges do not necessarily appear in order of priority

** End of Current Title Search **

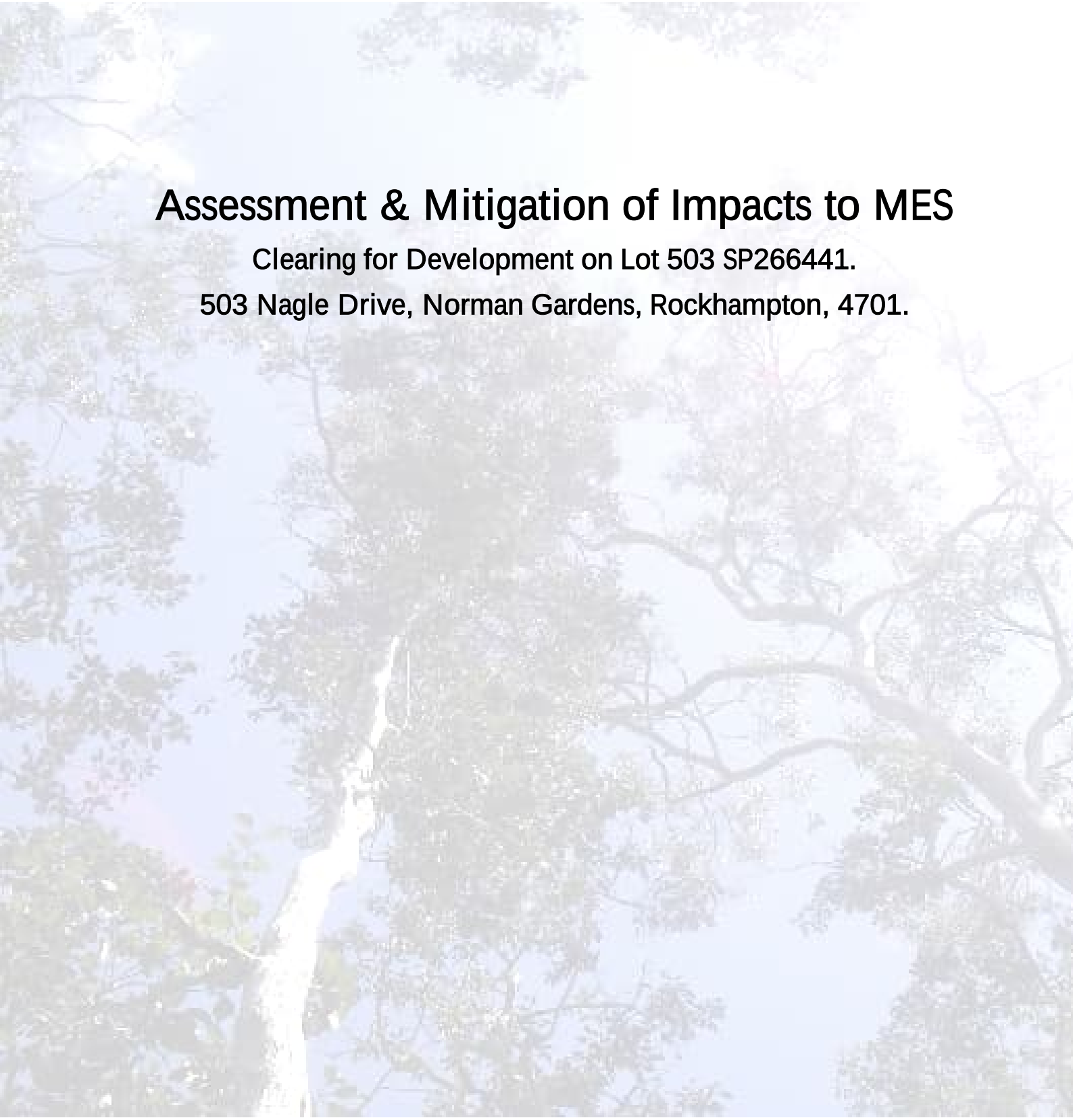
Requested by: D-ENQ TITLES QUEENSLAND

DENLEY ENVIRONMENTAL
PO Box 1988, Yeppoon QLD 4703
Ph: (07) 4939 8887
www.denley.com.au
mail@denley.com.au

Assessment & Mitigation of Impacts to MES

Clearing for Development on Lot 503 SP266441.

503 Nagle Drive, Norman Gardens, Rockhampton, 4701.



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503 Nagle Drive, Norman Gardens, Rockhampton, 4701

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V2	B. Heath, I. Denley	Daniel Hart; Gideon Town Planning	Electronic	7/07/2022

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1 Introduction

This assessment of potential environmental impacts to Matters of Environmental Significance is in relation to proposed development on the coastal property, Lot 503 SP8266441 located at 503 Nagle Drive, Norman Gardens, Rockhampton, 4701 (see Figure 1).

Figure 1. Satellite photograph showing regional location of Lot 503 at 503 Nagle Drive, Norman Gardens, Rockhampton, 4701.

The subject lot is broadly a square one, 80.02 ha, situated at the base of convergent ridges which rise to 140 – 200 m at the lot boundaries (see Figure 2). The western boundary includes the lowest elevation land on the subject lot (~50 m elevation) and abuts existing urban residential development (Skyline Drive) for most of its northern half. Currently, informal access to the lot is via a number of standard council roads and undeveloped easements along the northern half of the western lot boundary or via an access road off Nagle Drive to midway along the southern half of the western lot boundary (Rockhampton Region Planning Scheme Interactive Mapping accessed 01/04/2022.

However, the landholders advise formal access to the subject lot has been negotiated with the developers of Crestwood Estate. We understand access will be provided to the lot via an extension to Jim Goldston Avenue once stage 8 of Crestwood Estate is finalised. The approximate location of this access is shown in

The subject lot is traversed by an intermittent watercourse (dry at the time of survey) formed by two watercourses originating in the hills immediately to the east of the lot crossing the eastern lot boundary and converging in the middle third of the subject lot to form a watercourse that loops to exit the subject lot at its north-western corner (see Figure 2). There are three patches of non-remnant vegetation mapped (totalling 5.48 ha, Qld Dept Resources, 2022) for the subject lot but an approximated 17-20% of the land on the subject lot and contiguous with the north-western and western boundaries (see Figure 2) was observed at survey as sparsely vegetated and appeared to be regrowth from historical clearing post-mapping and forming clear demarcation between remnant and regrowth vegetation (see Figure 2). The subject lot is crossed by several two-wheeled vehicle dirt tracks that extend into neighbouring lots.

Figure 2. Satellite photograph of Lot 503 (black outline) showing topography, watercourse, vehicle tracks, and historically cleared area on north-western and western boundaries.

1.1 Development Intent

The owners wish to construct a primary dwelling and an associated outbuilding in the southwestern corner of an 80.02 ha lot: Lot 503 SP 266441 (see Figure 3). The proposed development is sited on the subject lot largely is on the basal rise (approximate average elevation 65 m) of a south-south-westerly-facing slope of westerly-running ridge that rises to around 100 m within the estimated impact area and to peaking at approximately 140 m on the western boundary of the subject lot. Most recent landholder information suggests the combined building footprint, clearing for construction and recommended Asset Protection Zone (APZ) will result in overall best estimated Building Location Envelope (BLE) clearing of 1.0 hectare of vegetation (see Figure 3). As mentioned above, there are three patches of non-remnant vegetation mapped (totalling 5.48 ha, Qld Dept Resources, 2022) for the subject lot, and the proposed BLE falls within the most north-westerly of these historically cleared portions of the subject lot (see Figure 3**,** Figure 4).

Figure 3. Satellite photograph of Lot 503 (black outline; 80.08 ha) marked with the proposed Building Location Envelope (BLE) for clearing (blue outline; 1 ha) and proposed access via an extension to Jim Goldston Avenue (white line).

Figure 4. Aerial photograph of the site looking westward to the proposed Building Location Envelope (BLE) on the northwesternmost corner of Lot 503. The proposed dwelling site is identified in this photograph by the low-density vegetation area found inside the corner of two 4-wheeled vehicle tracks: one approximately mid-photo running right to left parallel to the housing area and the other making a 90º angle at the right-hand end of the first and running away from the housing area.

2 Environment

2.1 MES

Matters of Environmental Significance relating to Lot 503 primarily involve regulated remnant vegetation (74.55 ha or 93.1% of the lot area) including remnant vegetation of concern (23.51 ha), remnant vegetation of least concern (51.04 ha), a second order watercourse, essential habitat for *Cycas ophiolitica* (cycad, Endangered) *and Geophaps scripta scripta (*squatter pigeon southern subspecies, Vulnerable), a 'High Risk' area for *Cycas ophiolitica* and connectivity/wildlife movement corridors (Qld Dept Resources, 2022).

2.1.1 MSES

MSES indicated on Lot 503 include:

- Regional Ecosystems (listed in decreasing order of concern status, then by decreasing area covered on the subject lot) (see Figure 5):
    - 11.11.10: *Eucalyptus melanophloia* woodland on deformed and metamorphosed sediments and interbedded volcanics (18.15 ha, of concern);
    - 11.3.4: *Eucalyptus tereticornis* and/or *Eucalyptus* spp. woodland on alluvial plains (5.36 ha, of concern);
    - 11.12.1: *Eucalyptus crebra* woodland on igneous rocks (28.83 ha, least concern);
    - 11.12.2: *Eucalyptus melanophloia* woodland on igneous rocks (9.37 ha, least concern);
    - 11.3.25: *Eucalyptus tereticornis* or *E. camaldulensis* woodland fringing drainage lines (5.5 ha, least concern);
    - 11.12.6: *Corymbia citriodora* open forest on igneous rocks (granite) (4.04 ha, least concern);
    - 11.12.4: Semi-evergreen vine thicket and microphyll vine forest on igneous rocks (1.83 ha, least concern); and
    - 11.12.3: *Eucalyptus crebra*, *E. tereticornis*, *Angophora leiocarpa* woodland on igneous rocks especially granite (1.47 ha, least concern).
- Essential habitat
    - Essential habitat for *Cycas ophiolitica* (seeFigure 5) and a 'High Risk' Area for threatened plants (*Cycas ophiolitica*) (see Figure 6
- Watercourses
    - A second order stream (see Figure 5).

All regional ecosystems mapped for the subject lot are of the regulated Category B remnant vegetation category (see Figure 7) covering 93.1% (74.5 ha) of the subject lot and with the remaining 6.9% (5.5 ha) mapped as unregulated Category X non-remnant vegetation.

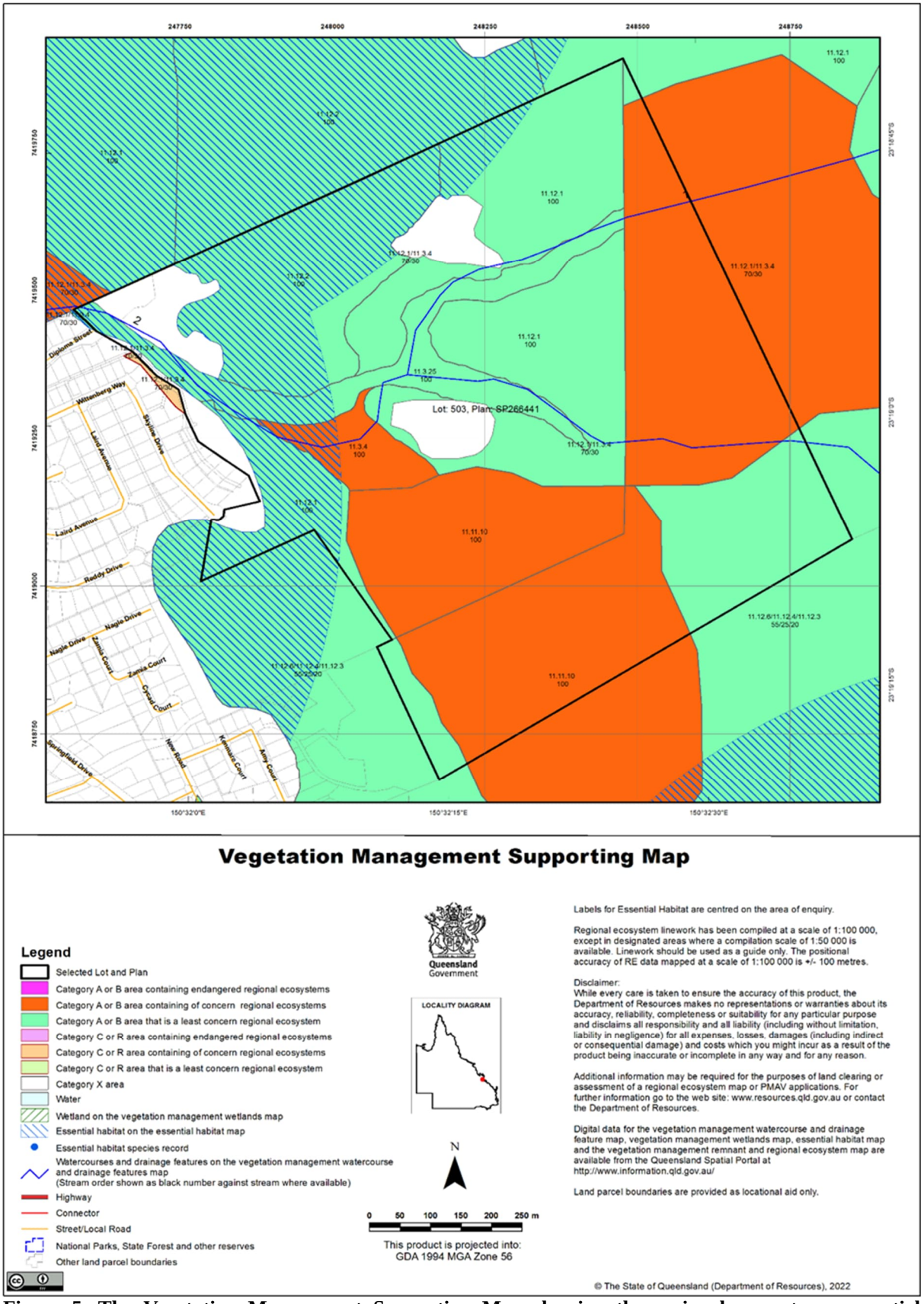

Figure 5. The Vegetation Management Supporting Map showing the regional ecosystems, essential habitat, and the second order watercourse on Lot 503 (black outline). Note the white areas on the map, especially that in the north-west corner of the subject lot, indicating Category X areas without remnant vegetation. (Qld Dept Resources, 2022)

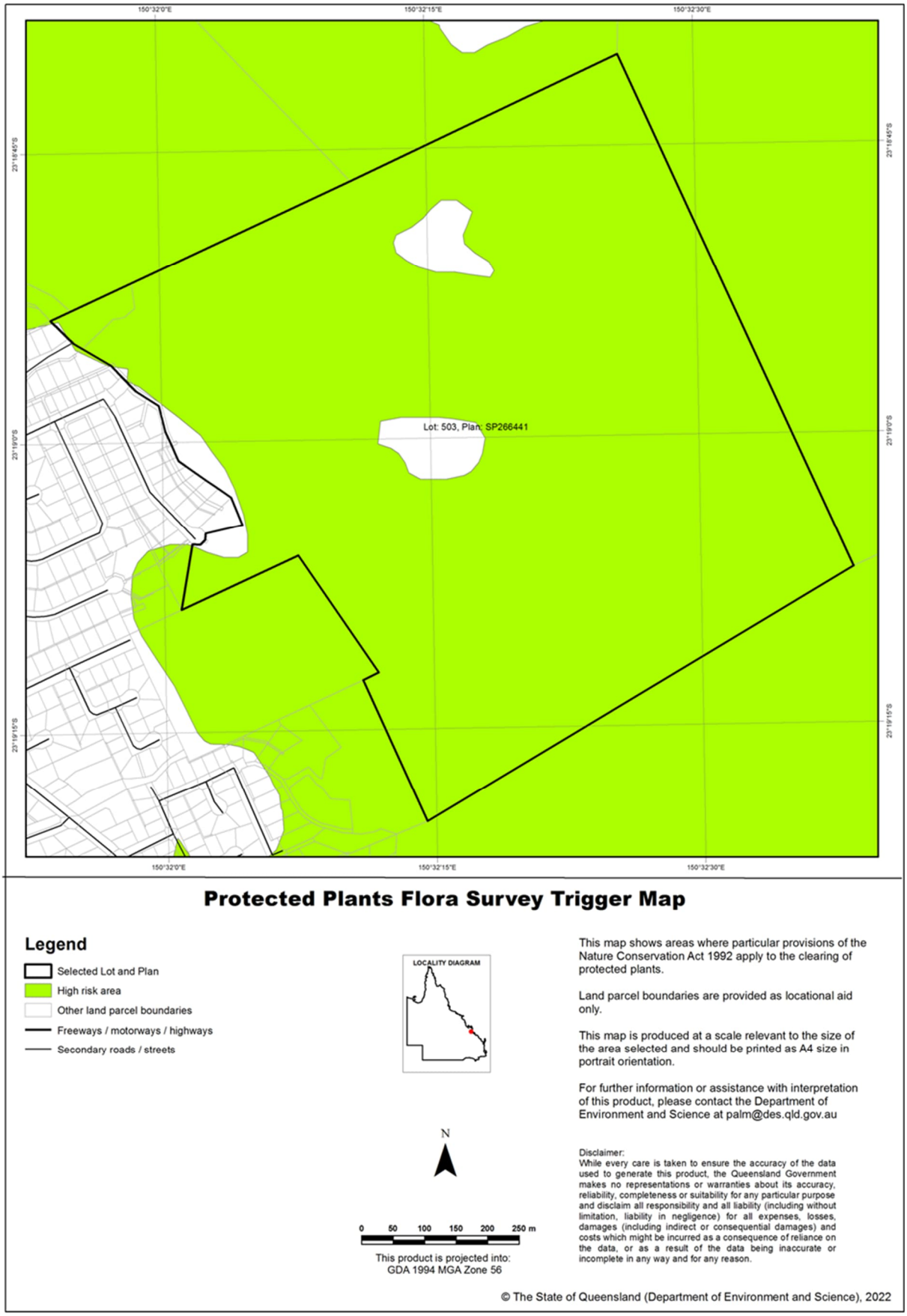

Figure 6. The Protected Plants Flora Survey Trigger Map for Lot 503 (black outline), indicating the subject lot is a High Risk area for the occurrence of protected plants (Qld Dept Resources, 2022), in this case, *Cycas ophiolitica*.

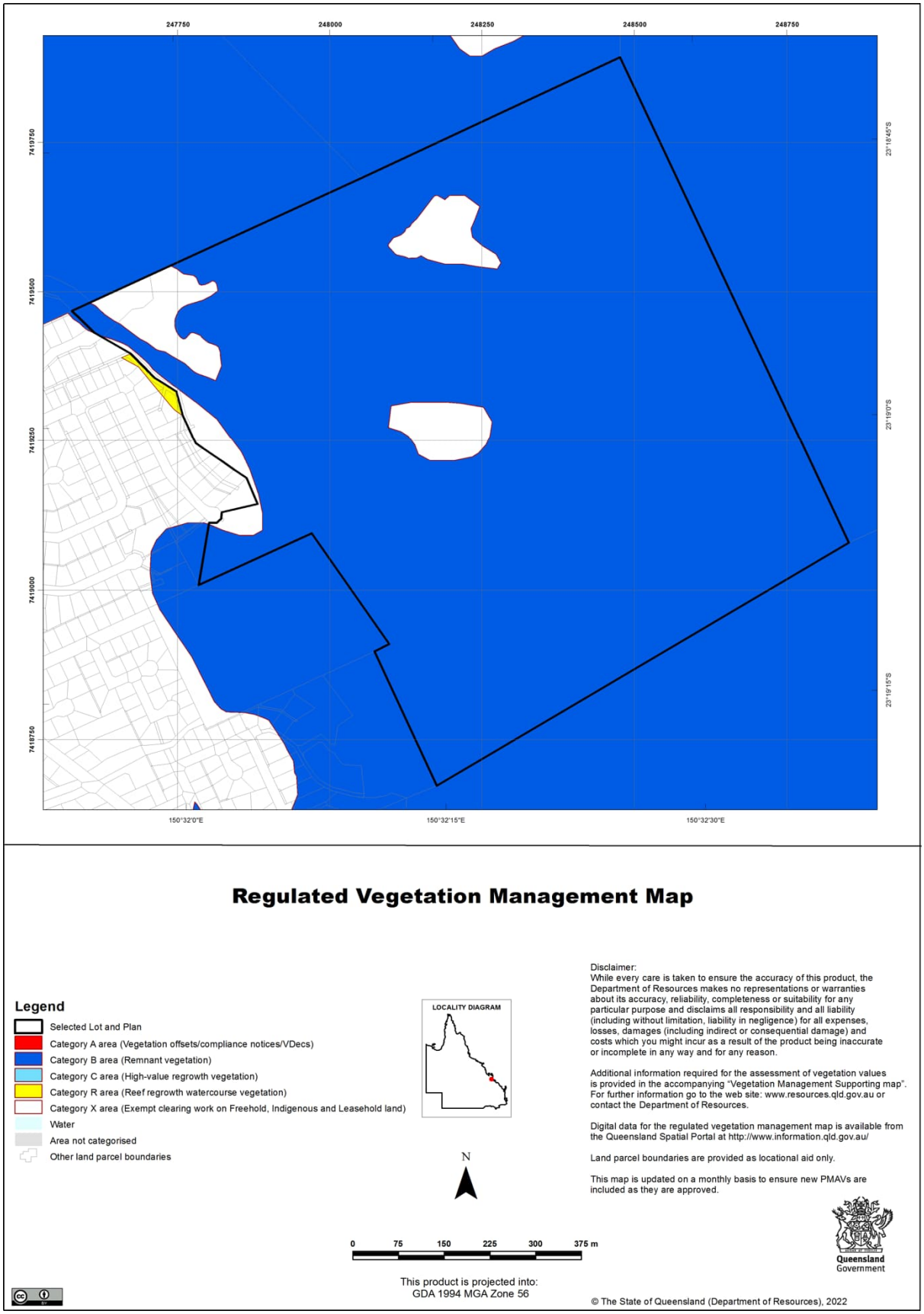

Figure 7. The Regulated Vegetation Management Map indicating the extent of mapped regulated Category B remnant vegetation (blue shading) and unregulated Category X vegetation (white areas) on Lot 503 (black outline). Note the Category X area in the north-west corner of the subject lot. (Qld Dept Resources, 2022)

2.1.2 MLES

MLES and other local values relevant to Lot 503 include the following:

- Biodiversity vegetation habitat (see Figure 8);
- A second order stream and associated buffer (25 m) (see Figure 9); and
- Habitat for endemic/iconic species (*Cycas ophiolitica*) (see Figure 10).

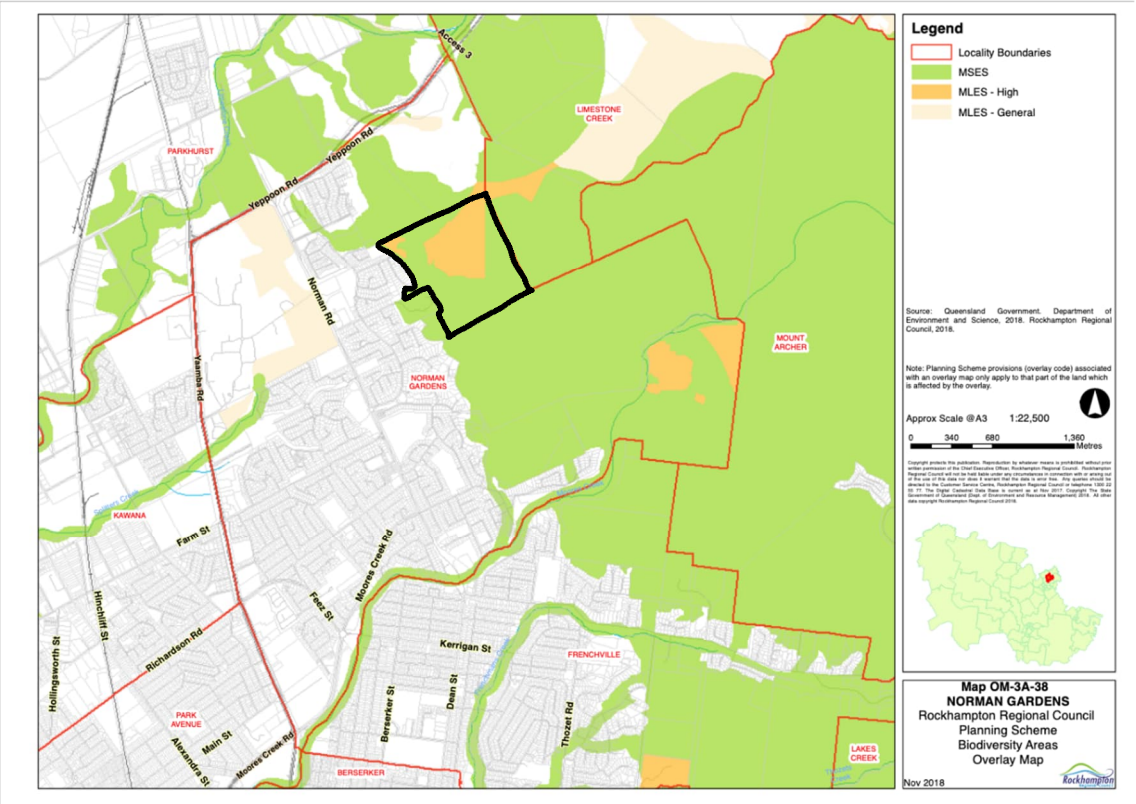

Figure 8. An extract of the Rockhampton Region Planning Scheme, Biodiversity Areas Overlay Map OM-3A-38 for Norman Gardens, showing the Matters of Local (High) Environmental Significance (orange shading) mapped for Lot 503 (black outline added). (Note green shading on the subject lot is Matters of State Environmental Significance.)

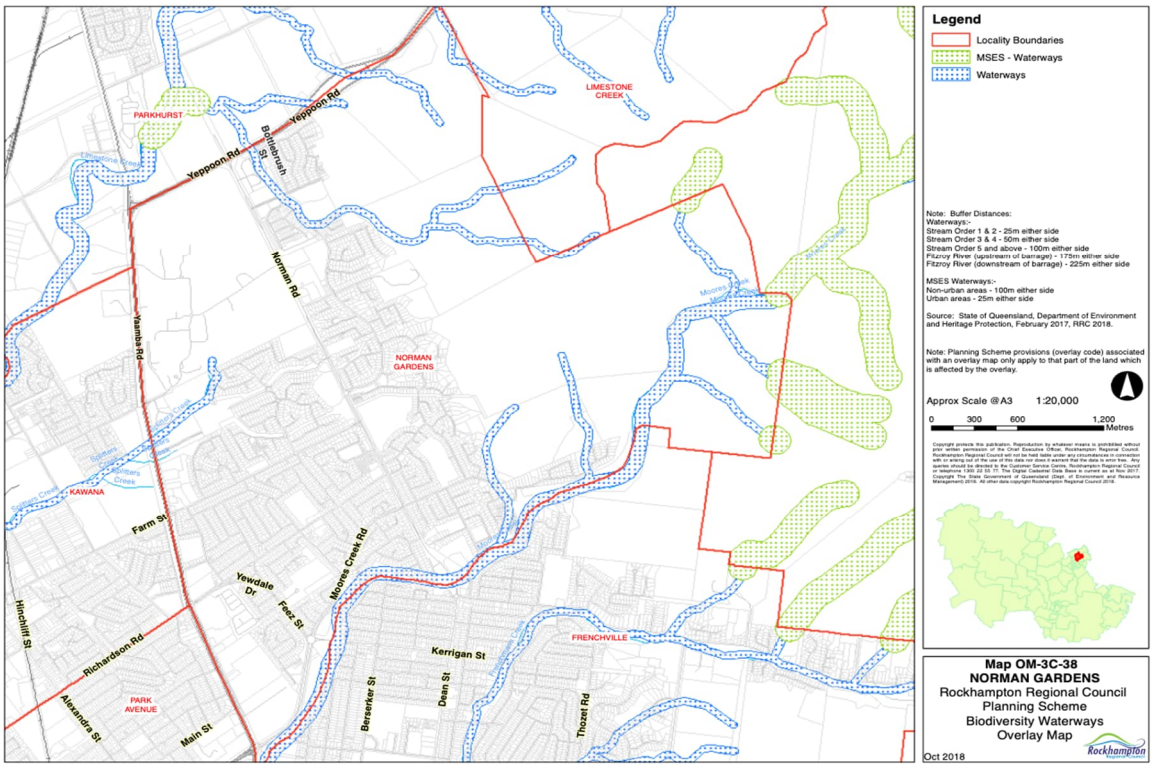

Figure 9. An extract of the Rockhampton Region Planning Scheme, Biodiversity Waterways Overlay Map OM-3C-38 for Norman Gardens, showing the Waterways (blue stipple) of local significance mapped for Lot 503 (black outline added).

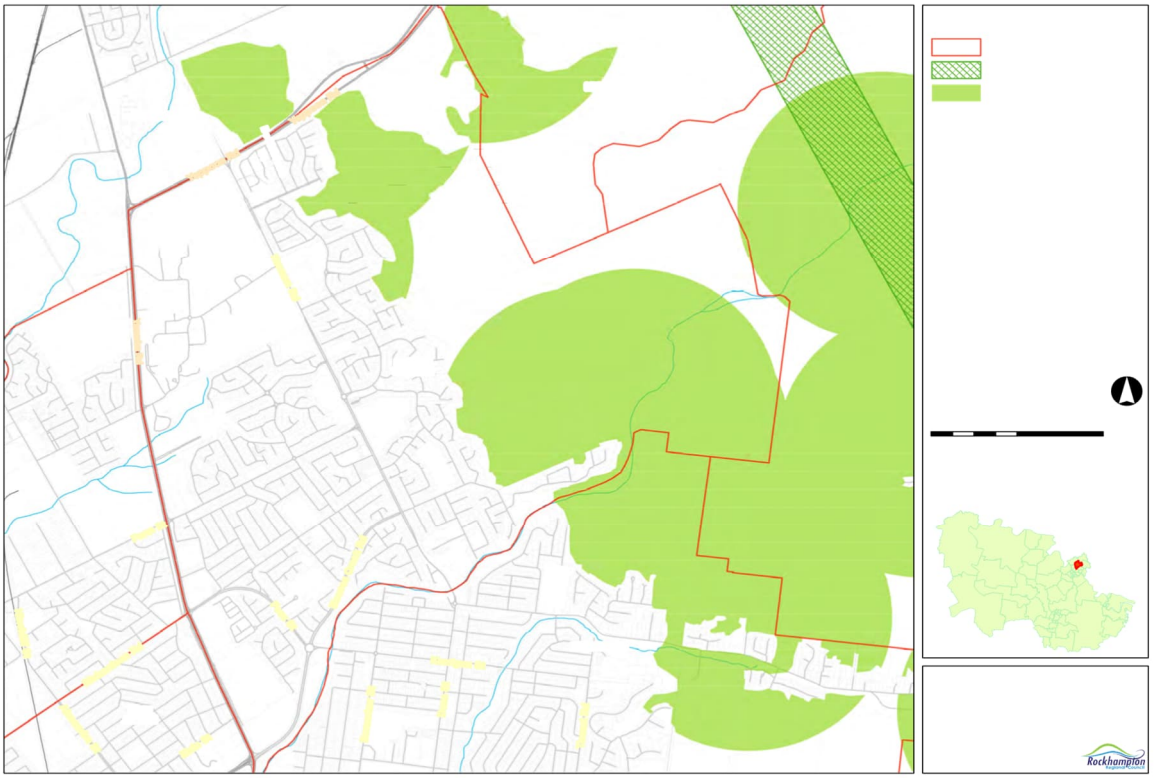

Figure 10. An extract of the Rockhampton Region Planning Scheme, Biodiversity Corridors and Wildlife Habitat Overlay Map OM-3B-38 for Norman Gardens, recognising the State Environmental Significance of Wildlife Habitats (green shading) mapped for Lot 503 (black outline added).

2.1.3 Site Vegetation

The proposed dwelling site sits within that vegetation area in the northwesternmost corner of the subject lot mapped as Category X non-remnant non-regulated vegetation of no VMA status (see Figure 5, Figure 7), a State mapping that overlies a small portion mapped by Rockhampton Regional Council as a matter of high local environmental significance (see Figure 8). At survey, this dwelling site vegetation was observed to have been shaped by historic clearing and consequently best represents regrowth vegetation comprised primarily of areas of grasses (largely exotics e.g., *Panicum* sp., *Melinis repens*, *Melinis minutiflora*) and exotic weeds (including *Lantana camara*, *Passiflora foetida*, *Cryptostegia grandiflora*), with several individual saplings and small mixed species tree groups of *Eucalyptus melanophloia* and *E. crebra* (see Figure 11). Elsewhere in the Category X area is similar but for the addition of the occasional retained mature specimen of *Eucalyptus tereticornis*. No *Cycas ophiolitica* plants nor evidence of the presence of *Geophaps scripta scripta* were found in this area of the subject lot.

Figure 11. Photograph taken on Lot 503 ~15 m inside westernmost portion of the proposed Building Location Envelope looking west-north-west at demarcation between remnant and regrowth vegetation on the subject lot.

Importantly, nearest the proposed dwelling site are two community types: rocky hillside ironbark woodlands (RE 11.12.1 and 11.12.2, of least concern) and creek-side vegetation (11.12.1/11.3.4 (of concern). There is a clearly distinguished boundary visible between the remnant vegetation and the grass-dominated regrowth on the historically cleared land that includes the proposed Building Location Envelope (BLE) – see Figure 11 and Figure 12.

Figure 12. Photograph taken on Lot 503 ~17 m outside of the easternmost portion of the proposed Building Location Envelope (BLE) from edge of remnant vegetation looking north-west over the BLE and regrowth vegetation.

Wrapping the site of the proposed Building Location Envelope (BLE) from the east to the south are grassy woodlands (of Least Concern) dominated by *Eucalyptus melanophloia* and *E. crebra*, respectively, merging indistinguishably as mapped (see Figure 5) and supporting the significant population of the protected plant, *Cycas ophiolitica*, found to the east and upslope of the proposed BLE on the subject lot (see Figure 12). Like the creek-side flat, this slope vegetation was weedy with *Lantana camara*, *Lantana montevidensis, Passiflora foetida* and *Macroptilium atropurpureum* in high abundance, as well as *Stachytarpheta jamaicensis*, *Bidens pilosa*, *Euphorbia cyathophora*, *Leucaena leucocephala* and *Ocimum basilicum* represented. Competing with the weeds were the dominant canopy trees *Eucalyptus melanophloia* and *E. crebra*, with *Corymbia trachyphloia* and occasional *C. intermedia*. The small tree/shrub layer comprised mostly *Cycas ophiolitica*, *Macrozamia moorei*, *Ficus opposita*, *Breynia oblongifolia*, and *Alphitonia petriei*, with occasional *Caesalpinia nitens* and *Denhamia* sp., while the ground layer (dominated by *Lantana montevidensis*) included *Cyperus laevis*, *Cyperus polystachyos*, *Cyanthillium cinereum*, *Zornia* sp. (probably *muriculata* species), *Arundinella nepalensis, Heteropogon contortus* and other grasses.

Figure 13. A photograph looking north-west across the *Eucalyptus melanophloia* dominated community that supports *Cycas ophiolitica* plants upslope of the proposed Building Location Envelope on Lot 503. Numerous *C. ophiolitica* specimens are visible including a large male specimen (RHS).

The vegetation along the alluvial soils of the creek bank is mapped as of concern as a mixed (70/30) *Eucalyptus crebra*/*E. tereticornis*, other *Eucalyptus* spp. woodland (see Figure 5) and separates the proposed building site from the western boundary of the subject lot. It does not support any C. *ophiolitica* nor were any *Geophaps scripta scripta* observed.

The dry rocky creek bed and banks (see Figure 14, Figure 15) were observed to support largely *Casuarina cunninghamiana (*probably subsp. *cunninghamiana*) with some *Melaleuca quinquenervia*, and nearby *Eucalyptus tereticornis*, with a ground cover of predominantly *Sida hackettiana* and *Phragmites* sp.. Scattered specimens of *Murdannia graminea*, and a single specimen each of *Livistona decora* and *Alchornea ilicifolia*, were observed. No *Cycas ophiolitica* plants were observed. Invasive weed abundance (especially *Lantana camara* and *Panicum* sp.) was high.

Figure 14. A photograph looking southwards along the second order creek (RHS) and over the associated riparian zone and alluvial flat on Lot 503. Note the high abundance of invasive lantana and grass.

Figure 15. Photograph of the intermittent second order rocky creek bed and associated vegetation.

Aside from additional areas of the communities mentioned above, furthest on the subject lot from the proposed Building Location Envelope (BLE), the vegetation communities most prevalent are a singular 5.36 ha patch of 11.3.4 (*Eucalyptus tereticornis* and/or *Eucalyptus* spp. woodland on alluvial plains, of concern) and an 18.15 ha area of 11.11.10 (*Eucalyptus melanophloia* woodland on deformed and metamorphosed sediments and interbedded volcanics, of concern) – see Figure 5. These communities were not surveyed due to their significant distance from the proposed BLE.

2.1.4 Second Order Stream

A second order stream is located on the subject lot, approaching the proposed Building Location Envelope from the south, and running north-westerly to parallel the western border of the BLE and then exits the subject lot at its north-western corner (see Figure 9, Figure 17). For the length of the western edge of the BLE, the stream centre, down slope from the BLE, is approximately 28.6 metres to the west of the BLE at the nearest point and 40 m to the west of the BLE at its furthest point. The BLE will be located outside of the east bank 25 m buffer zone (see Figure 9). The property access was initially proposed across the creek line however, the owners have since established an agreement with the Crestwood Estate developer to have access via an extension to Jim Goldston Ave (see Figure 16).

Figure 16. Satellite photograph showing the proposed development access for the Building Location Envelope on the north-western corner of Lot 503: via a proposed extension to Jim Goldston Avenue to be developed as part of the neighbouring Crestwood Estate stage 8 development.

2.1.5 Cycas ophiolitica

Approximately 65 individual Cycas ophiolitica plants were located during the floral survey (see Figure 17), including 6 pups.

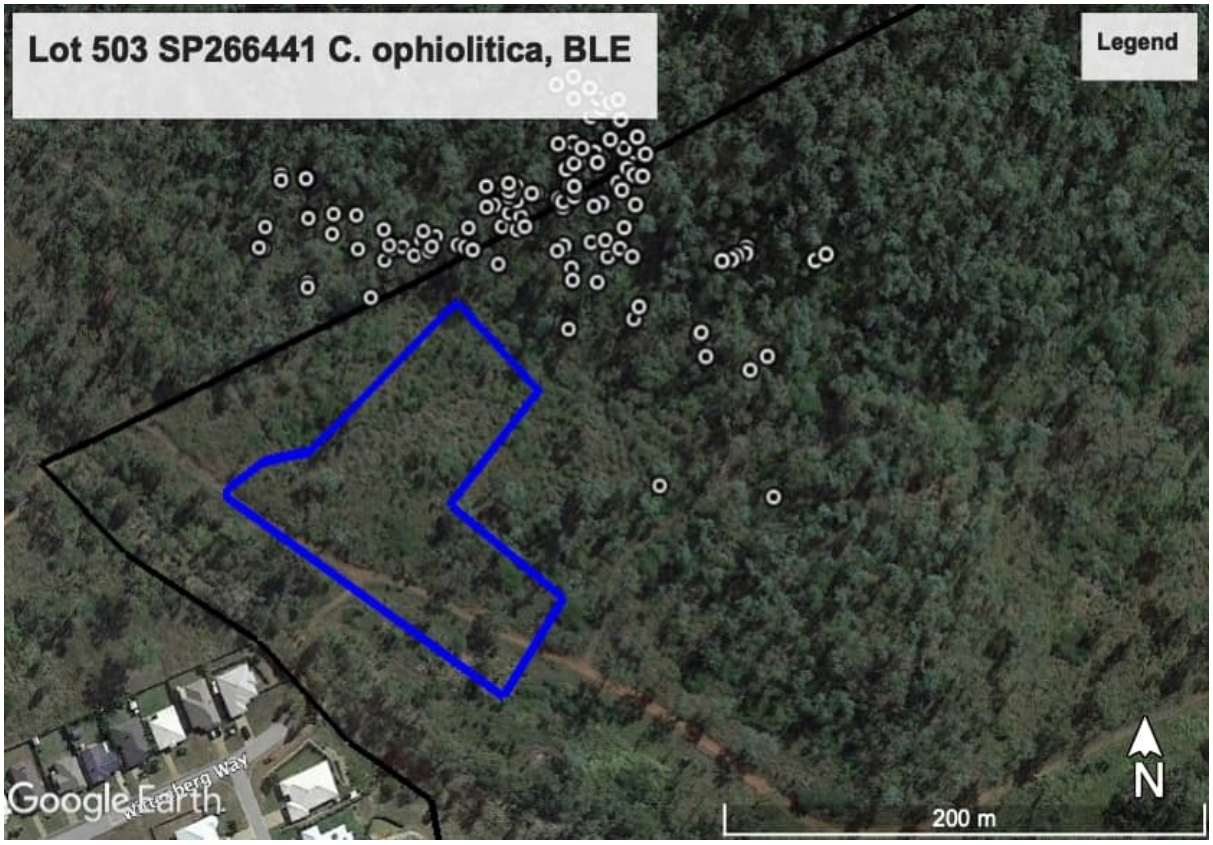

Figure 17. Satellite photograph of Lot 503 showing the proposed Building Location Envelope (BLE, blue outline) in the north-western corner of the subject lot (black outline) and the locations of *Cycas ophiolitica* plants (•) found during floral survey. Also see the second order stream running parallel between the western border of the BLE and the western boundary of the lot and exiting the subject lot at its north-western corner.

Trunk height (not including pups) ranged from zero (0) cm (emergent) to 248 cm. Including pups, most *C. ophiolitica* found were in the 0-50 cm trunk height class (25 individuals), and then the 51-100 cm trunk height class (20 individuals) (with 11 plants in the 101-150 cm class, 2 in the 151-200 cm class, and 1 in the 202-250 cm class). Male cones and ovules were observed (see Figure 18). The reported pups, the presence of mature and immature plants, and overall size range of *C. ophiolitica* plants located indicated a growing population with different age classes. The majority of *C. ophiolitica* plants found were suffering competition and overgrowth from invasive plants (see Figure 19).

Figure 18. Photographs of a mature male (left) and female (right) *Cycas ophiolitica* plant found on the subject lot.

Figure 19. The majority of *Cycas ophiolitica* plants found, like the two pictured, were suffering competition and overgrowth from invasive plant species.

The nearest *Cycas ophiolitica* plants to the proposed Building Location Envelope (BLE) are one plant 22.8 m to the north-west of the northern edge of the BLE (but this plant might be just outside of the subject lot boundary), two plants 21.3 m and 22.4 m off the northernmost corner of the BLE (but these plants might be just outside of the subject lot boundary), and two plants 19.6 m and 22.5 m to the north-east of the north-north-eastern edge of the BLE (see Figure 17). The *C. ophiolitica* plant nearest the southern section of the BLE is 55.4 m (from the south-eastern edge of the BLE).

2.1.6 Geophaps scripta scripta

Pigeon habitat is 'gravelly ridges, traprock and river flats' in 'grassy eucalypt woodlands' and 'dry eucalypt woodland...with sparse short grass, often on sandy areas near to permanent water', nesting 'on ground near or under grass tussock, log or low bush' (Qld Dept Resources, 2022). Whilst elements of this preferred habitat were present on the subject lot, no individuals of, nor any evidence of the presence, current or historic, of the presence of *Geophaps scripta scripta* were observed whilst surveying the subject lot.

3 Impacts

Clearing associated with the dwelling will be approximately 1 hectare (see Figure 3). The dwelling and shed will be located within and existing cleared area. The proposed access through the Crestwood Estate area along Jim Goldston Avenue will avoid impacts to the watercourse.

3.1 Habitat including old growth woodlands

There will not be direct impacts to old growth vegetation since the proposed Building Location Envelope (BLE) sits within an area of non-regulated, non-remnant vegetation mapped as Category X with no VMA status. Whilst the north-western edge of this area abuts the lot boundary, the remainder of the Category X border is contiguous with land mapped as essential habitat (for *Cycas ophiolitica* and *Geophaps scripta scripta*) and immediately to the west of the Category X area is mapped as regional ecosystem of concern 11.3.4 (mixed with 11.12.1, 30/70). Elsewhere on the subject lot beyond the area immediately around the proposed BLE is more essential habitat and regional ecosystem Of Concern. Whilst there will not be any direct effects of building activity on these areas of the lot, and the subject lot already is impacted significantly by historical clearing, invasive weeds, and historical fires, it is important the landholders avoid and minimise any and all further adverse impacts to the greatest possible extent to arrest ecological degradation on the subject lot. Landholders should work to retain all native vegetation and facilitate its natural regeneration and dispersal, thus preserving and enhancing the current ecological health and functioning, and ecological and biodiversity values of the vegetation and wildlife on the subject lot. The landholders' decision to site their proposed development in the north-westernmost patch of non-regulated, non-endemic, historically cleared vegetation on the subject lot, rather than upslope for the better views and amenity, was a conscious decision by them to limit, avoid and minimise adverse impacts on the remnant vegetation, and not to facilitate further fragmentation of the endemic vegetation and wildlife habitat on the subject lot. It is important the landholders manage the essential habitat and Of Concern regional ecosystems on the subject lot as important vegetation and resist seeing it as only a fire risk. To this end, it is optimal the landholders implement and maintain, for Lot 503, an adequate weed management strategy and a suitable fire management strategy for conservation purposes for each regional ecosystem on the lot and as recommended by Queensland Herbarium (2021).

3.2 Second order stream and associated buffer

The second order watercourse approaches the proposed Building Location Envelope (BLE) between the western border of the BLE and the western boundary of the subject lot and there the creek bed centre ranges 28.6-40.0 metres distance from the nearest edge of the BLE. Allowing for the prescribed minimum 25 m bank buffer, that western edge of the BLE would be 3.6-15.0 m from the eastern edge of the buffer zone. Whilst close, the BLE would not have any direct impacts on the watercourse. Nonetheless, the watercourse vegetation involves an Of Concern regional ecosystem: 11.3.4 (mixed in 11.12.1, of Least Concern, 30/70). At survey, this vegetation was impacted significantly by invasive weeds, and historical clearing and fire. To this end, it is optimal the landholders work to retain all native vegetation and facilitate its natural regeneration and dispersal, thus preserving and enhancing the current ecological health and functioning, and ecological and biodiversity values of the vegetation and wildlife in this section, and implement and maintain, for Lot 503, an adequate weed management strategy and a suitable fire management strategy for conservation purposes for each regional ecosystem on the lot and as recommended by Queensland Herbarium (2021).

3.3 Habitat Cycas ophiolitica

The nearest cycads are approximately 19.6-22.8 metres from the edge of proposed Building Location Envelope (BLE). There are no foreseeable direct or indirect impacts to *Cycas ophiolitica* from this proposed development. Whist the *C. ophiolitica* population found upslope of the proposed BLE was significant and showed evidence of addition through reproduction, there is no impediment to that population's growth and dispersal imposed by the proposed development. Nonetheless, the habitat supporting the *C. ophiolitica* population was impacted significantly by invasive weeds (and ultimately, its dispersal downslope is limited by historical clearing). Consequently, it is important the landholders work to retain all native vegetation and facilitate its natural regeneration and dispersal, thus preserving and enhancing the current ecological health and functioning, and ecological and biodiversity values of the vegetation on the subject lot. Further, it is important the landholders manage the *C. ophiolitica* habitat on the subject lot as important vegetation and resist seeing it as only a fire risk. To this end, it is optimal the landholders implement and maintain, for Lot 503, an adequate weed management strategy and a suitable fire management strategy for conservation purposes for the relevant regional ecosystem supporting the existing and future *C. ophiolitica* on the lot and as recommended by Queensland Herbarium (2021).

3.4 Habitat connectivity and wildlife corridors

No formally recognised wildlife corridor exists on Lot 503. While habitat will be lost, the proposed location is at the edge of existing clearing. The landholders' decision to site their proposed development in the north-westernmost patch of non-regulated, non-endemic, historically cleared vegetation on the subject lot, rather than upslope for the better views and amenity, was a conscious decision by them to limit, avoid and minimise adverse impacts on the remnant vegetation, and not to facilitate further fragmentation of the endemic vegetation and wildlife habitat on the subject lot. Consequently, the larger functional areas of remnant vegetation are conserved and remain available to enhance habitat connectivity over the area.

3.5 Impact management

3.5.1 Site alternatives

The landholders' decision to site their proposed development in the north-westernmost patch of non-regulated, non-endemic, historically cleared vegetation on the subject lot, rather than upslope for the better views and amenity, was a conscious decision by them to limit, avoid and minimise adverse impacts on the remnant vegetation and essential habitat, and not to facilitate further fragmentation of the endemic vegetation and wildlife habitat on the subject lot.

3.5.2 Habitat management

There will not be any direct effects of activity within the proposed Building Location Envelope (BLE) on surrounding essential habitat, regional ecosystems, the second order stream and associated buffer, *Cycas ophiolitica*, *Geophaps scripta scripta*, or habitat connectivity and wildlife corridors.

Currently the property is accessed via Wittenberg Way or College Street. Both these routes require crossing the watercourse. The arrangement to provide future primary access via an extension to Jim Goldston Avenue has significant benefits in avoiding impacts to the section of watercourse running through the subject property. If possible, an early change to an informal access along the proposed route of the Jim Goldston Avenue extension would facilitate earlier recovery of those current informal sections of creek crossing.

Given the subject lot already is impacted significantly by historical clearing, invasive weeds, and historical fires, it is important the landholders avoid and minimise any and all further adverse impacts to the greatest possible extent to arrest ecological degradation on the subject lot. Landholders should work to retain all native vegetation and facilitate its natural regeneration and dispersal, thus preserving and enhancing the current ecological health and functioning, and ecological and biodiversity values of the vegetation and wildlife on the subject lot. It is important the landholders manage the essential habitat and 'of concern' regional ecosystems on the subject lot as important vegetation and resist seeing it as only a fire risk. To this end, it is optimal the landholders implement and maintain, for Lot 503, an adequate weed management strategy and a suitable fire management strategy for conservation purposes for each regional ecosystem on the lot and as recommended by Queensland Herbarium (2021).

3.6 Offsetting Impacts

Because the proposed site of the development on Lot 503 is in the north-westernmost patch of non-regulated, non-endemic, historically cleared vegetation on the subject lot, the landholders have no desire to establish an offset area within Lot 503 at this point in time.

3.7 Fauna Management

Prior to clearing, the clearing area will be surveyed by a suitably experienced and licensed Spotter Catcher to inspect the area for the presence or evidence of native fauna. Evidence may include tree hollows, bird nests, arboreal fauna (tree scratches & scat at base of trees) etc.

Where fauna are present or there is evidence that fauna is likely to be present, a mitigation strategy on nest/fauna management will be formulated to provide methodology to the clearing contractors that ensures native fauna are not injured or killed in the process of clearing.

Any injury, death or interaction with fauna as a result of the clearing must be reported to the Department of Environment & Science.

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5 Appendix

5.1 Wildnet records for threatened flora within 2 kilometres of the centre of the dwelling location

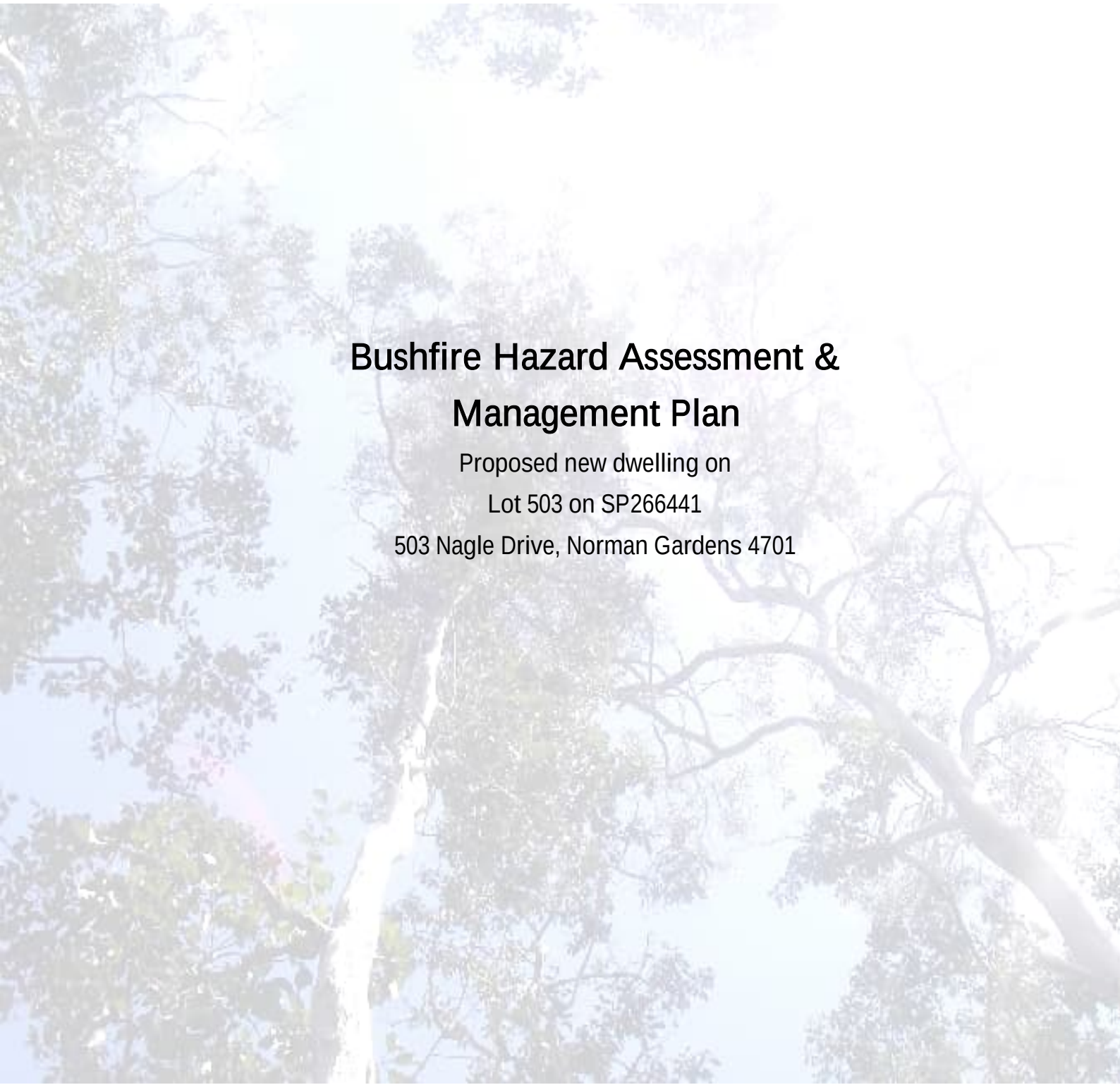
Queensland Government

WildNet species list

Search Criteria:	Species List for a Specified Point
	Species: Plants (including other non-animals such as fungi and protists)
	Type: Native
	Queensland status: Rare and threatened species
	Records: All
	Date: Since 1980
	Latitude: -23.3148
	Longitude: 150.5332
	Distance: 2
	Email: yelned@gmail.com
	Date submitted: Monday 07 Dec 2021 09:29:36
	Date extracted: Monday 07 Dec 2021 09:30:07

The number of records retrieved = 1

DENLEY ENVIRONMENTAL
PO Box 1988, Yeppoon QLD 4703
Ph: (07) 4939 8887
www.denley.com.au
mail@denley.com.au



Bushfire Hazard Assessment & Management Plan

Proposed new dwelling on

Lot 503 on SP266441

503 Nagle Drive, Norman Gardens 4701

Publication Details

Title: Bushfire Hazard Assessment & Management Plan. Proposed new dwelling on Lot 503 on SP266441. 503 Nagle Drive, Norman Gardens 4701.

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Acronyms and Abbreviations

APZ: Asset Protection Zone.

AS 3959: Australian Standard 3959: 2018 Construction of Buildings in Bushfire Prone Areas and amendments.

BAL: Bushfire Attack Level indicated in AS3959 for site specific factors.

BHA: Bushfire Hazard Assessment

BMP: Bushfire Management Plan

QFES: Queensland Fire and Emergency Services

QRFS: Queensland Rural Fire Service

RRC: Rockhampton Regional Council

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Property Information

Subject Lot	503SP266441
Owners	A & D Hart
Street Address	503 Nagle Drive, Norman Gardens 4701

Bushfire Hazard Assessment

1 Introduction

The purpose of the Bushfire Hazard Assessment is to determine the level of bushfire hazard with reference to:

a) The Rockhampton Regional Council Planning Scheme 2015 Bushfire hazard overlay code;
b) The Rockhampton Regional Council 8.2.4 Bushfire hazard overlay code;
c) The Australian Standard AS3959 Construction of buildings in bushfire-prone areas; and
d) Site specific factors that may influence standardised assessment methods.

The subject of this Bushfire Hazard Assessment and Management Plan is the proposed building location envelope and proposed dwelling on Lot 503 on SP266441(further referred to as Lot 503) located at 503 Nagle Drive, Norman Gardens 4701.

1.1 Site Location

503SP266441 is located at 503 Nagle Drive, Norman Gardens 4701. See **Figure 1** for the site location.

Figure 1. Site location of lot 503SP266441located at 503 Nagle Drive, Norman Gardens 4701.

1.2 Proposed Dwelling Location

The building location envelope to accommodate a dwelling and shed is shown in **Figure 2**. There were no plans or specific locations provided for the dwelling and shed at the time of writing however, indicative locations are provided in **Figure 3.**

The location of the dwelling was determined through the applicants' preferred dwelling location along with an assessment of bushfire hazard constraints provided in this BHA and BMP.

Figure 2. The proposed Building Location Envelope within Lot 503 SP266441 is outlined in blue.

1.3 Surrounding Landscapes

The BLE is located within a cleared area with grass to shrubby regrowth. A fringing bluegum/paperbark riparian forest is situated immediately west of the BLE. A shrubby ironbark and silver ironbark woodland is located on surrounding upper slopes. Tall weedy grasses and lantana are common in all areas. **Figure 2** shows aerial imagery of vegetation in the local area (Google Earth Feb 2022).

1.4 Weather

The following data was obtained from the Bureau of Meteorology (http://www.bom.gov.au/climate/averages/tables/cw_039083.shtml) for Rockhampton Aero Weather Station (Site number: 039083).

Table 1Monthly averages for maximum temperature, rainfall, and relative humidity for Rockhampton Aero.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Temperature Max (°C)	32.1	31.4	30.6	28.8	26.1	23.6	23.3	24.9	27.5	29.7	31.3	32.2
Rainfall (mm)	127.9	143.0	104.7	42.7	44.6	37.6	32.0	27.2	23.9	49.7	67.5	103.0
Relative humidity (%)	53	57	54	49	47	46	42	40	40	42	46	49

Hotter temperatures, low rainfall, low humidity, and warm, dry northerly winds coincide in the months of September through to December making this period the most likely time for uncontrolled wildfires to occur.

2 Materials & Methods

Construction requirements and minimum dwelling setback distances are given with reference to the AS3959: 2018 Method 2 BAL using online calculators provided by FPA Australia (http://www.fpaa.com.au/).

Vegetation structural descriptions and vegetation density scales (very sparse, sparse, medium, dense etc.) are from Melzer (2011) and the Regional Ecosystems Description Database.

Site fuel loads are estimated with reference to Hines et. al. (2010) and referenced against fuel loads given in the QFES (2020) SPP-Bushfire-APZ-Width-Calculator.

Vegetation heights are calculated using a Suunto clinometer. Degree of slope is calculated from one metre contours (QLD Data) where available or by Suunto Clinometer and cross checked with any available contour data. and degree of slope. Field data is recorded with Android software 'Open Data Kit' using an electronic version of the *fuel assessment field work form v3* (Hines *et. al.*, 2010).

The site specific hazard assessment is considered with respect to vegetation density, species, and extent and how natural or manmade features interact with the hazard to modify risk. This provides a measure on the level of risk presented to the dwelling from wildfires at a more detailed local scale.

3 Results

3.1 Site Selection

Factors determining the location of the dwelling include the degree and nature of nearby potential hazards and risks and the minimisation of impacts to areas of higher biodiversity within Lot 503.

Lot 503 is approximately 80 hectares. The owners (A & D Hart) have located the BLE on gentle slopes at the base of steeper slopes to the west of the lot in proximity tor existing development and access.

The proposed location of the BLE is an ideal location on the subject lot to minimise risk and hazard. The BLE is also located within an existing cleared area. The surrounding area contains many *Cycas ophiolitica*, an endangered cycad. There are no cycads within the BLE. Buildings will be no closer than 50 metres to the watercourse; and the proposed access will be through a neighbouring development (see the associated planning report), consequently avoiding the need to create a crossing over the watercourse.

3.1.1 Dwelling location

The applicants have indicated an indicative area for the dwelling and for a shed. These locations are shown in **Figure 3**.

Figure 3. Approximate locations for the dwelling and shed within the BLE

3.2 Site Vegetation

There are three vegetation types on and surrounding the BLE. These are; 1. cleared areas with weedy to shrubby regrowth; 2. Fringing riparian vegetation; and 3. Silver iron bark shrubby woodland. There is significant weed growth throughout. This is largely lantana and guinea grass.

3.2.1 Cleared areas with weedy to shrubby regrowth

Moderate to tall grasses with shrubby regrowth (mainly lantana) in previously cleared areas located within and surrounding the BLE. See **Figure 4.**

Figure 4. Vegetation within the BLE (Left) consists of moderate to tall grasses with shrubby regrowth. Right: weedy regrowth adjacent to the watercourse to the south of Lot 503.

3.2.2 Fringing Riparian Woodland

A narrow band of fringing riparian woodland consisting of bluegum in the canopy and paperbark in the secondary tree layer. Vegetation in the understorey consists of dry rainforest shrubs, lantana, and dense guinea grass. See **Figure 5**.

Figure 5. Fringing riparian woodland of bluegum and paperbark

3.2.3 Silver Ironbark Shrubby Woodland

A shrubby woodland of silver ironbark and narrow leaved ironbark on moderate slopes with a shrubby understorey dominated by lantana. Significant populations of an endangered cycad (*Cycas ophiolitica*) is present in places. See **Figure 6**.

Figure 6. Shrubby ironbark woodland on moderate slopes.

3.3 Slope and Aspect

The dwelling will be located on a southwest facing slope of approximately 7 degrees. Slope under the hazard is referred to as the *Effective Slope*; and the slope between the dwelling and the hazard is the *Site Slope.* Negative slope values are used in the BAL calculation where the slope rises above the dwelling (an upslope).

Table 2 provides the degree of slope in relation to a dwelling located within the BLE. One metre contours over the area is provided in **Figure 7.**

Table 2

Aspect	Site slope (degrees)	Effective slope (Degrees)
NE	-12	-17.4
NW & SE	0	0
SW	7.3	7

Figure 7. Location and degree of slope in relation to the proposed house site on Lot 503.

3.4 Fuel Hazard Ratings

Figure 8 shows vegetation as layers potential fuel (Hines *et. al.,* 2010). Each of these layers is attributed a fuel rating (t/ha). The total sum of surface, near-surface and elevated fuels it termed the *Total Surface Fuel Load.* This total is used in the BAL Method 2 calculation along with the *Overall Fuel Load* (surface total plus canopy). The SPP-Bushfire-APZ-Width-Calculator (QFES, 2020) provides these estimates for common Queensland vegetation types.

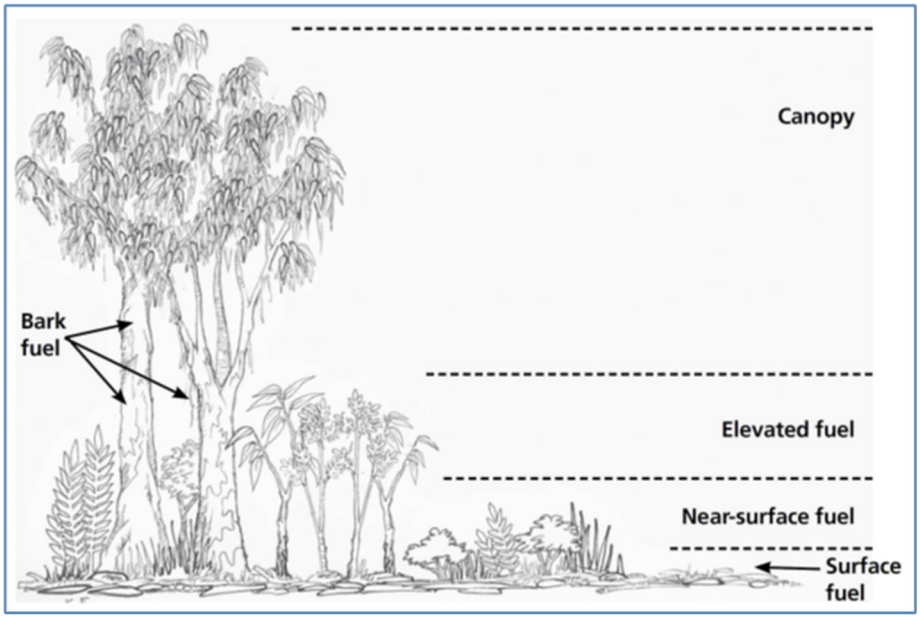

Figure 8. A diagram of various layers of vegetation hazard used in the BAL calculation for surface fuels (taken from Hines et. al., 2010).

The applicable QFES (2020) Queensland vegetation type for the site is moist to dry eucalypt woodland on coastal lowlands and ranges. **Table 3** provides predicted fuel loads for each layer. Total fuel loads for surface layers are 14.9 t/ha and an overall fuel load (surface + canopy) is 17.2 t/ha.

Table 3. Fuel loads for moist to dry eucalypt woodland on coastal lowlands and ranges taken from the SPP bushfire asset protection zone width calculator (QFES, 2020).

Layer	t/ha
Surface fuel load	11.40
Near surface fuel load	3.50
Bark fuel load	1.30
Elevated fuel load	1.00
Total overall fuel load	17.20
Total surface fuel load	14.90

3.5 Assessed Hazard and Associated APZ

The Bushfire Attack Level (BAL) was calculated using the AS3959: 2018 Method 2. The BAL level required is related to the distance between the hazard and the building, This distance is termed the Asset Protection Zone (APZ). The APZ is a fuel reduced zone between the asset and the hazard otherwise known as a firebreak.

A BAL and associated APZ was assessed for each aspect of the slope. As such the APZ distance will vary for the same BAL rating in accordance with the degree of slope.

The BAL considered most appropriate for a dwelling on Lot 503 is BAL-19. See **Table 4** for appropriate APZ distances for each aspect.

Table 4. Minimum APZ distances for BAL-19 for each aspect around a dwelling on Lot 503.

Aspect	Hazard location in relation to the dwelling	BAL-19 minimum APZ (metres)
NE	Uphill	8.2
NW & SE	Level (along the contour)	13.0
SW	Downhill	17.1

Bushfire Management Plan

1 Introduction

This Bushfire Management Plan has been developed with reference to:

a) The Rockhampton Regional Council Planning Scheme 2015 Bushfire hazard overlay code;
b) The Rockhampton Regional Council 8.2.4 Bushfire hazard overlay code;
c) The Australian Standard AS3959 Construction of buildings in bushfire-prone areas; and
d) Site specific factors that may influence standardised assessment methods.

The APZ (Asset Protection Zone) referenced in this BMP is a fuel reduced area surrounding the asset being protected. The APZ is often referred to as a buffer zone or bushfire break. Any vegetation or other combustible materials within the APZ must be maintained in a minimal fuel condition. See the **Appendix** for the AS3959: 2018 descriptions of Low Risk Vegetation and Minimal Fuel Condition

3.6 Purpose

The purpose of this Bushfire Management Plan is to reduce risks from bushfire hazard to a tolerable level of risk.

The aim of the Bushfire Management Plan is to provide appropriate construction standards, setbacks, hazard maintenance and recommendations based on the identified hazard components present at the time of survey. Conditions may change over time so that owners and occupiers should be prepared to increase risk reduction when required.

Owners and occupiers must bear in mind that implementation of the Bushfire Management Plan will assist in addressing and mitigating identified fire hazards on the subject site, however, the plan does not in itself prevent the loss of life or property. Owners and occupiers should consider additional mitigation measures such as those provided as recommendations in this Plan, up to date information available from fire emergency authorities and as advised by your local Rural Fire Service Warden.

3.7 Bushfire Survival Plan

To assist in mitigating risk, current and future occupants should develop a **Bushfire Survival Plan**. Leaving too late, when a fire is approaching is a common cause of fatalities during a bushfire event. The decision to stay when a fire is approaching involves activating the **Bushfire Survival Plan** and undertaking planned actions before, during, and after the fire. A Bushfire Survival Plan template and/or guidance material can be obtained from the Queensland Fire and Emergency Service.

3.8 Ongoing Risk Management

Occupiers should implement all practical measures to prevent the loss of life and property.

It is imperative that owners and occupiers maintain hazard reduction measures so that they are at hand and functional in a bushfire emergency.

At the start of the bushfire season, revisit your bushfire survival strategy and ensure all intended measures are in place and working. Fine fuels around the house and within the APZ are the greatest threat to a dwelling. Ensure these areas are fuel reduced. Check all hoses; water sources; pumps etc. are adequate and functional. Ensure driveways and fire trails are adequate and suitable for firefighting vehicles.

In case of fire, immediate contact should be made with the relevant fire authority and all directions and advice should be followed.

3.9 Responsible Agencies

The responsible Fire Authority is the Queensland Fire and Emergency Services (QFES). The Rural Division of the QFES is responsible for bushfires. The Urban Division of the QFES is responsible for structural fires.

The Local Authority is Rockhampton Regional Council. It is the responsibility of the Council and the building certifier to ensure that the measures outlined in this Management Plan are in place prior to the occupation of any buildings that are subject to this plan.

4 Site Description

The subject of the Bushfire Management Plan is the proposed new dwelling on 503SP266441 located at 503 503 Nagle Drive, Norman Gardens 4701.

2 Expected Fire Behavior

Warm, dry Northeast winds are common in late spring to early summer in the local area. This period and wind direction represents the highest risk of bushfire in the area.

Much of the vegetation to the south and west of the BLE has been cleared for residential development. These areas are either low hazard vegetation (residential areas) or narrow widths (the watercourse). The primary hazard in relation to ember attack and radiant heat is to the Northwest and Southeast (areas along the contour and level with the BLE).

There were significant areas of guinea grass and lantana in the area. Both species are highly fire prone in dry periods, produce significant heat and provide ideal conditions for spot fires. These weeds need to be regularly reduced or other means employed (i.e. revegetation) to reduce occurrence.

Likelihood of fire and fire intensity will depend on fuel accumulation. Fires are likely to be infrequent and usually burn only under severe conditions. Fires may be severe with flame lengths of 15 to 20 metres with little ember attack.

5 Construction Standards and Asset Protection Zones

1. BAL-19 is the minimum construction standard required for a dwelling on Lot 503.
2. The nearest surface of the dwelling must not be located closer to the hazard than the distance ranges indicated in
3. Table 5 and shown in Figure 9
4. The dwelling must be located so that clearing will not be required above the vehicle track located uphill from the BLE as indicated in Figure 9.
5. Adjacent structures on Lot 503 are to comply with Section 3.2.3 of the AS3959: 2018.
6. Tree canopy cover in the APZ will be less than 10%; and
7. The nearest canopy should be located no closer than 2 metres from any part of the roofline of the dwelling.

The installation of a rooftop or perimeter sprinkler system is strongly recommended. The associated pump should be able to be operated independently of the electricity grid. This may be petrol or diesel operated pump, or an electric pump powered by a generator.

Table 5. Construction Standards and associated fire break distances (APZ) for a dwelling located on Lot 503. The AS3959 construction standard correlates to the distance from hazardous vegetation to the nearest facing surface of the dwelling. Distance ranges are calculated using AS3959: BAL Method 2.

Aspect	Hazard location in relation to the dwelling	BAL-19 minimum APZ (metres)
NE	Uphill	8.2
NW & SE	Level (along the contour)	13.0
SW	Downhill	17.1

Figure 9. Minimum required APZ distances for each aspect around a dwelling. The distances are from the nearest facing surface of the dwelling to the hazard (woodland or unmanaged grass/shrubland). Additionally, the dwelling must not be in a location that would require clearing above the track shown in the image. There are a significant number of endangered cycads above the track.

6 Driveways & Tracks

6.1 Access

Access to the lot has been negotiated with developers of Crestwood Estate. We understand Access will be provided to the lot via an extension to Jim Goldston Avenue once stage 8 of Crestwood Estate is finalised. See **Figure 10.**

6.1.1 Access and driveways to the house site will:

1. Have a minimum cleared width of 6 metres, a minimum cleared height of 4.8 metres and a minimum formed width of 4 metres including any gates;
2. Have adequate drainage and erosion control devices to prevent soil erosion;
3. Have a gradient no greater than 12.5 per cent and a cross fall of no greater than ten (10) degrees;
4. Be constructed to a standard that is accessible to QFES fire fighting vehicles in all weather conditions and capable of accommodating a vehicle of 8 tonnes; and

5. Have a turning circle no further than 50 metres from the dwelling. This can be a turning circle with a minimum radius of 8m (including roll-over kerbs if they are provided). Other solutions using T or Y heads of specified dimensions are also appropriate. See **Figure 11** for example turnaround areas.

Figure 10. The approximate route of the proposed extension to Jim Goldston Avenue which will provide access to Lot 503.

6.2 Fire Trails

Lot 503 has several existing fire access trails across the property. Of particular interest to the safety of occupants and infrastructure are the sections of these trails that surround the BLE. These trails are highlighted in **Figure 12** should be maintained to the dimensions indicated below or as otherwise advised by the Rural Fire Brigade. For all other sections of these trails, the owners should contact the local Rural Fire Brigade to determine the most effective trails to maintain.

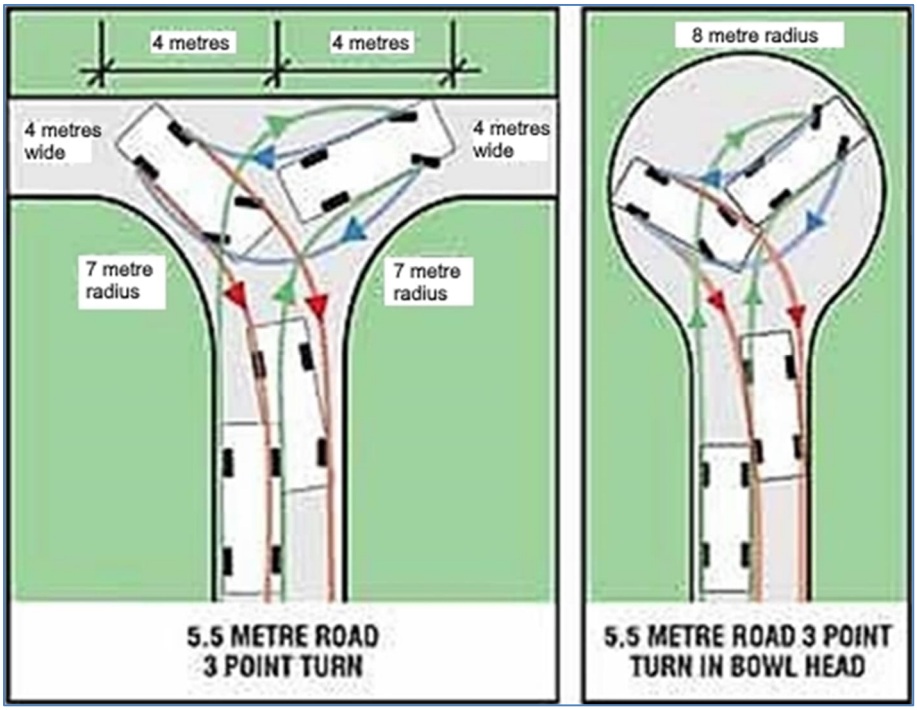

Figure 11. Example turnaround areas (Taken from Building Fire Safety Management Tool & Advisory Notes, State of Queensland (Queensland Fire and Emergency Services) 2015).

Figure 12. The network of fire trails across the property is evident in this aerial photo from 2008 (Google Earth). The sections of trails of particular importance regarding protection of infrastructure and life are highlighted in white.

6.2.1 The indicated fire access trails will:

1. Have a minimum formed width of four (4) metres;
2. Have a minimum of 4.8 metres vertical clearance above the road;
3. Have passing bays every 200 metres along the trail that are constructed from formed and compacted earth of 20 metres long and 6 metres wide;
4. Have access at each end of the perimeter road or the fire trail from a public road;
5. Have access points signed and direction of travel identified for the information of the rural fire brigade.

7 Water supply for firefighting purposes

The lot will have:

1. A dedicated on-site water storage for firefighting to be located within 10 metres of the dwelling that:
   1.1. Is constructed of non-combustible materials or is an underground tank;
   1.2. has a take-off connection from the building to the tank which is at a level that provides on-site water storage of not less than 20,000 litres;
   1.3. has a hardstand area allowing heavy rigid fire appliance access within six (6) metres of a tank; and
   1.4. has fire brigade tank fittings consisting of:
      1.4.1. fifty (50) millimetre ball valve and male camlock coupling for above ground tanks; and
      1.4.2. above ground water pipe fittings that are metal; or
      1.4.3. for underground tanks, an access hole of 200 millimetre diameter (minimum) to allow access for suction lines.

1.5. Are always accessible to any appliance from the Queensland Fire and Emergency Services;

2. Other accessible water sources (e.g. accessible dam, bore or swimming pool) are to be provided with all-weather access.

8 Landscaping

1. The dwelling should be located so that it is:
   a) 10 meters from any retained vegetation strips or small areas of vegetation;
   b) Retained trees in the APZ should provide a non-continuous canopy with a total canopy cover of less than 10%; and
   c) All dead and damaged timber is to be removed within the Setback Zone.
2. Lawns and Gardens within 10m width surrounding the dwelling are to be kept at no greater than 50mm in height;
3. Grassed areas and lawns for a further 10m are to be kept at no greater than 150mm;
4. The balance of the setback zone will be kept in a hazard reduced state: free of weeds (particularly lantana and guinea grass) and grasses at no greater than 200mm high: and
5. Landscaping trees within 10m of residences should be fire resistant species. No tree or shrub should be in contact with or overhang buildings.
6. All fencing and other garden structures within 10 metres of the dwelling will be constructed from non-combustible materials.

9 Purchaser/Resident Education and Awareness Programs

Each A & D Hart should be provided with a copy of this Fire Management Plan with an alert placed either on the title or Council rate searches that the Fire Management Plan is in existence and is to be made available to subsequent A & D Harts. The hazard ratings are to be placed on council plans and / or rate notices.

A & D Harts should read and be familiar with the information contained in this report. A & D Harts are responsible for maintenance of fire reduction measures on the site to reduce the risk of fire.

A & D Harts should establish a Fire Safety Plan and Emergency Evacuation Plan for the event of fire including all suitable evacuation routes from their land and dwelling for fire from all potential directions. In the event of a fire, dialling 000 obtains emergency assistance.

Bushfire Safety Plans should include a series of time actions:

1. out of season observations for general fire safety around your house and property;
2. at the start of the fire season;
3. when very high to catastrophic conditions are announced for your area
4. when a fire is near your area;
5. when QRFS provide a watch and act or elevated warnings; and
6. when you are told to leave

Examples of Fire Safety Plans include the *Rural Property Fire Management Guide* and *'Plan Act Survive' - Bushfire Survival Plan*.

Residents should maintain regular contact with the Fire Brigade for local information updates and check the Queensland Rural Fire Service website for any updated fire safety guides and further information.

Additional recommendations to reduce fire risk around the dwelling are provided in **Table 6**

Table 6. Hazard Reduction Measures: The following recommendations provide additional measures to reduce hazards around the dwelling

Category	Issue	Action
Buildings	Maintenance: Buildings and Grounds	• Clear overhanging trees and shrubs from dwellings and associated structures; • Point LPG gas tank relief valves away from dwellings; • Store flammable items away from dwellings (e.g. woodpiles, boxes, paper); • Secure roof and clean gutters of dry leaf debris to eliminate an ignition source for embers; • Clear fuels around the house for at least 20 metres; • Trim under fences and remove overgrown bushes and plants; • Ensure surrounding grassed areas are trimmed and well-watered; and • Install non-flammable gutter guards. • Ensure door mats and other flammable material is moved away from the building when a bushfire is imminent.
Water	Water Supply and firefighting equipment	• Water sources for firefighting may include an accessible dam or tank with fire brigade tank fittings, a swimming pool, bore water etc. These sources should be provided with all-weather access; • All structures should be provided with a garden hose with metal fittings attached to the water supply at all times. The hose should be of sufficient length to reach all sides of a building; and • Regularly check that firefighting equipment is operational. • Rooftop and perimeter sprinkler systems are very effective in reducing the risk of spot fires around a dwelling.
Hazard Reduction	Proximity of buildings to hazardous vegetation Hazard reduction:	• Trees should be located at a sufficient distance away from dwellings so that when fully mature, branches do not overhang the eaves of the house. • Create a fuel reduction zone adjacent to a dwelling. Remove hazardous vegetation. Do not cause erosion when reducing potential fuel loads in these areas. • Within the hazard reduction zones, hazardous understory vegetation (dry sclerophyll species) should be removed within the setback zone of all structures. These can be replaced with fire resistant species.
Landscaping	Growth of grasses and other fire prone vegetation in disturbed and cleared areas	• Remove hazardous grasses and undesirable regrowth from buffer areas; and • Maintain all safety buffer areas free of weeds and tall grasses to maximum heights set out in this Bushfire Management Plan.
	Landscaping species	• Many species of locally occurring dry rainforest species are highly effective at supressing the spread of fire. These are available from the Rockhampton Regional Council Nursery. • Avoid using palm trees and ferny leaved trees near the dwelling. These species are susceptible to burning.

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11 Appendix

11.1 AS3959 Low Risk Vegetation

The AS3959-2018 identifies the following circumstances are identified as Low Risk and excluded from a BAL Assessment (AS3959-2018):

2.2.3.2 Exclusions—Low threat vegetation and non-vegetated areas

The following vegetation shall be excluded from a BAL assessment:

a) Vegetation of any type that is more than 100 m from the site.

b) Single areas of vegetation less than 1 ha in area and not within 100 m of other areas of vegetation being classified vegetation.

c) Multiple areas of vegetation less than 0.25 ha in area and not within 20 m of the site, or each other or of other areas of vegetation being classified vegetation.

d) Strips of vegetation less than 20 m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20 m of the site or each other, or other areas of vegetation being classified vegetation.

e) Non-vegetated areas, that is, areas permanently cleared of vegetation, including waterways, exposed beaches, roads, footpaths, buildings, and rocky outcrops.

f) Vegetation regarded as low threat due to factors such as flammability, moisture content or fuel load. This includes grassland managed in a minimal fuel condition, mangroves, and other saline wetlands, maintained lawns, golf courses (such as playing areas and fairways), maintained public reserves and parklands, sporting fields, vineyards, orchards, banana plantations, market gardens (and other non-curing crops), cultivated gardens, commercial nurseries, nature strips and windbreaks.

NOTES:

1) 1 Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack (recognizable as short-cropped grass for example, to a nominal height of 100 mm).

2) 2 A windbreak is considered a single row of trees used as a screen or to reduce the effect of wind on the leeward side of the trees.

11.2 BAL Method 2 Results

Calculated March 30, 2022, 6:18 pm (MDc v.4.9)

503SP266441_NE

Minimum Distance Calculator - AS3959-2018 (Method 2)

Inputs		Outputs	
Fire Danger Index	40	Rate of spread	0.21 km/h
Vegetation classification	Woodland	Flame length	4.4 m
Understorey fuel load	15 t/ha	Flame angle	47 °, 56 °, 63 °, 68 °, 69 ° & 74 °
Total fuel load	25 t/ha	Elevation of receiver	2.5 m, 3.03 m, 3.72 m, 4.63 m, 5.22 m & 11.83 m
Vegetation height	n/a	Fire intensity	2,799 kW/m
Effective slope	-17.4 °	Transmissivity	0.893, 0.885, 0.874, 0.858, 0.849 & 0.775
Site slope	-12 °	Viewfactor	0.5823, 0.4235, 0.2854, 0.1905, 0.1544 & 0.0422
Flame width	100 m	Minimum distance to < 40 kW/m²	4.2 m
Windspeed	n/a	Minimum distance to < 29 kW/m²	5.6 m
Heat of combustion	18,600 kJ/kg	Minimum distance to < 19 kW/m²	8.199999999999999 m
Flame temperature	1,090 K	Minimum distance to < 12.5 kW/m²	12.1 m
		Minimum distance to < 10 kW/m²	14.8 m

Rate of Spread - Mcarthur, 1973 & Noble et al., 1980

Flame length - NSW Rural Fire Service, 2001 & Noble et al., 1980

Elevation of receiver - Douglas & Tan, 2005

Flame angle - Douglas & Tan, 2005

Radiant heat flux - Drysdale, 1999, Sullivan et al., 2003, Douglas & Tan, 2005

Calculated July 6, 2022, 9:40 pm (MDc v.4.9)

503SP266441_NW_SE

Minimum Distance Calculator - AS3959-2018 (Method 2)

Inputs		Outputs	
Fire Danger Index	40	Rate of spread	0.71 km/h
Vegetation classification	Woodland	Flame length	7.67 m
Understorey fuel load	15 t/ha	Flame angle	54 °, 64 °, 73 °, 78 °, 80 ° & 85 °
Total fuel load	25 t/ha	Elevation of receiver	3.1 m, 3.45 m, 3.67 m, 3.75 m, 3.78 m & 3.82 m
Vegetation height	n/a	Fire intensity	9,299 kW/m
Effective slope	0 °	Transmissivity	0.886, 0.874, 0.856, 0.835, 0.823 & 0.75
Site slope	0 °	Viewfactor	0.5905, 0.4357, 0.2914, 0.1962, 0.1595 & 0.0437
Flame width	100 m	Minimum distance to < 40 kW/m²	6.4 m
Windspeed	n/a	Minimum distance to < 29 kW/m²	8.699999999999999 m
Heat of combustion	18,600 kJ/kg	Minimum distance to < 19 kW/m²	13 m
Flame temperature	1,090 K	Minimum distance to < 12.5 kW/m²	19.2 m
		Minimum distance to < 10 kW/m²	23.3 m

Rate of Spread - Mcarthur, 1973 & Noble et al., 1980

Flame length - NSW Rural Fire Service, 2001 & Noble et al., 1980

Elevation of receiver - Douglas & Tan, 2005

Flame angle - Douglas & Tan, 2005

Radiant heat flux - Drysdale, 1999, Sullivan et al., 2003, Douglas & Tan, 2005

Calculated March 30, 2022, 6:20 pm (MDc v.4.9)

503SP266441_Sw

Minimum Distance Calculator - AS3959-2018 (Method 2)

Inputs		Outputs	
Fire Danger Index	40	Rate of spread	1.16 km/h
Vegetation classification	Woodland	Flame length	10.58 m
Understorey fuel load	15 t/ha	Flame angle	58.3 °, 70.3 °, 79.3 °, 84.3 °, 85.3 ° & 91.3 °
Total fuel load	25 t/ha	Elevation of receiver	3.42 m, 3.5 m, 2.99 m, 2.07 m, 1.43 m & 0 m
Vegetation height	n/a	Fire intensity	15,074 kW/m
Effective slope	7 °	Transmissivity	0.88, 0.865, 0.842, 0.8179999999999999, 0.805 & 0.738
Site slope	7.3 °	Viewfactor	0.5934, 0.4381, 0.2946, 0.2005, 0.1631 & 0.0445
Flame width	100 m	Minimum distance to < 40 kW/m²	8.300000000000001 m
Windspeed	n/a	Minimum distance to < 29 kW/m²	11.4 m
Heat of combustion	18,600 kJ/kg	Minimum distance to < 19 kW/m²	17.1 m
Flame temperature	1,090 K	Minimum distance to < 12.5 kW/m²	24.9 m
		Minimum distance to < 10 kW/m²	30 m

Rate of Spread - Mcarthur, 1973 & Noble et al., 1980

Flame length - NSW Rural Fire Service, 2001 & Noble et al., 1980

Elevation of receiver - Douglas & Tan, 2005

Flame angle - Douglas & Tan, 2005

Radiant heat flux - Drysdale, 1999, Sullivan et al., 2003, Douglas & Tan, 2005

ANDY & DANI HART

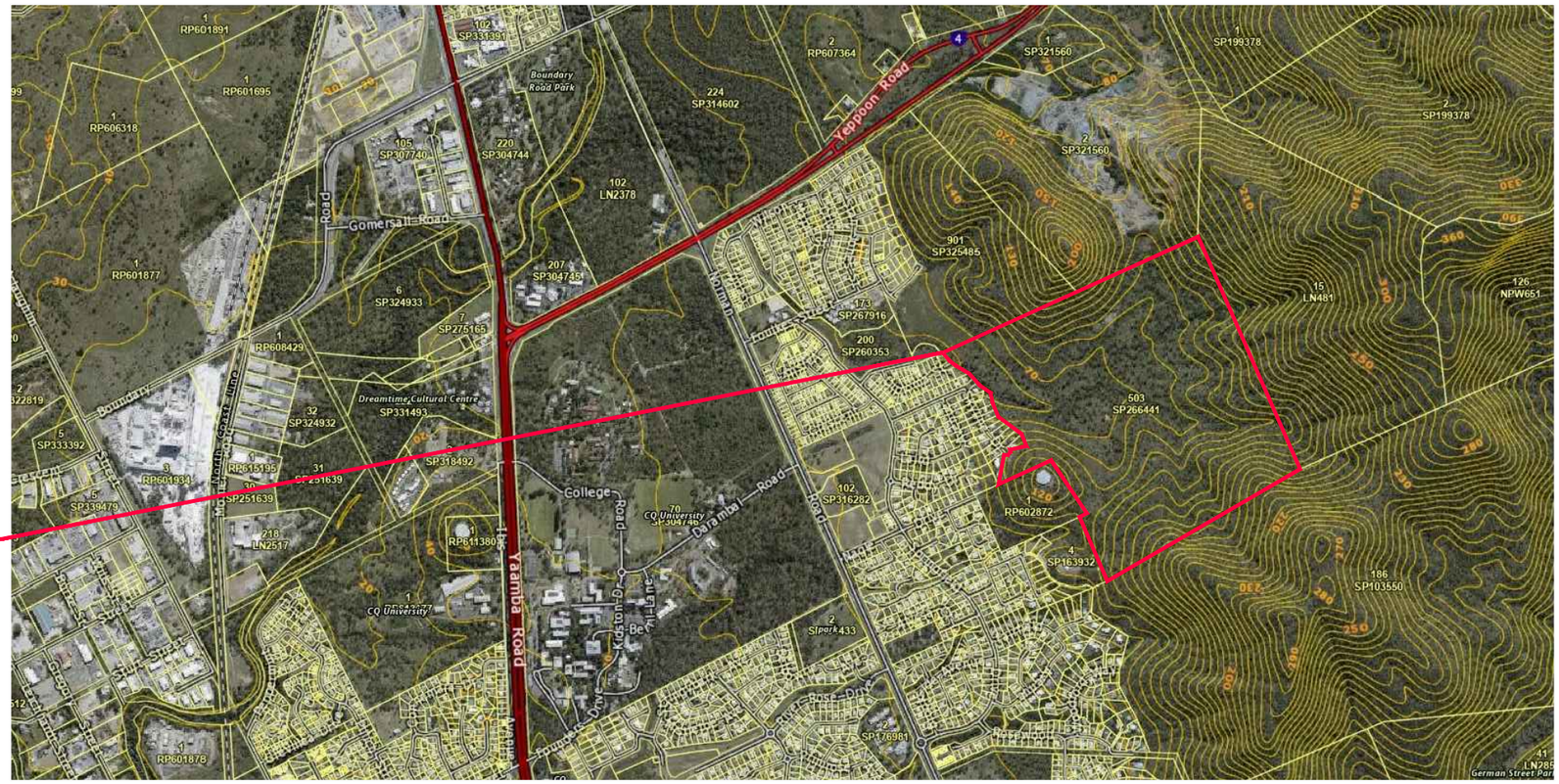
PROPOSED RESIDENCE

503 NAGLE DRIVE, NORMAN GARDENS

LOT 503, SP266441

ROCKHAMPTON, QUEENSLAND

PROJECT LOCATION



LOCALITY PLAN

DRAWING SCHEDULE

Dwg No.	Dwg Title
21-011/SK01	COVER SHEET / LOCALITY PLAN
21-011/SK02	EXISTING SITE PLAN
21-011/SK03	EARTHWORKS PLAN - 1
21-011/SK04	EARTHWORKS PLAN - 2
21-011/SK05	ROADWORKS PLAN - 1
21-011/SK06	ROADWORKS PLAN - 2
21-011/SK07	ROADWORKS LONGITUDINAL SECTION - 1
21-011/SK08	ROADWORKS LONGITUDINAL SECTION - 2
21-011/SK09	ROADWORKS CROSS SECTIONS - 1
21-011/SK10	ROADWORKS CROSS SECTIONS - 2
21-011/SK11	STORMWATER PLAN
21-011/SK12	STORMWATER CATCHMENT PLAN
21-011/SK13	STORMWATER CALCULATION PLAN
21-011/SK14	SEWER RETICULATION CONNECTION PLAN
21-011/SK15	WATER RETICULATION CONNECTION PLAN

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CIVILWORKS - MATERIAL CHANGE OF USE PLANS

Dwg No. 21-011/SK01 (A)

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N

SCALES

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REVISION / ISSUE REGISTER

No.	DATE	REMARKS
A	07/23	Preliminary

DESIGN		DRAWN	
RS		RS	

ANDY & DANI HART

PROPOSED RESIDENCE
503 NAGLE DRIVE
NORMAN GARDENS, QLD

EXISTING SITE PLAN

DWG No. 21-011/SK02 | A

DO NOT SCALE - IF IN DOUBT ASK

GENERAL

1. All dimensions on the job are in metres unless shown otherwise.
2. The contractor shall verify the locations of all existing services with the relevant authorities before commencing construction. Any costs associated with repairing damage to existing services shall be paid for by the contractor.
3. Dimensions, radii and levels refer to lip of, kerb and channel and are shown at tangent points and equally spaced points on single curves, unless noted otherwise.
4. All work shall be carried out in accordance with the local authority specifications and drawings unless directed otherwise.
5. All levels in this contract are AUSTRALIAN HEIGHT DATUM.
6. Levels for connection to existing works may be varied where necessary on site to achieve a satisfactorily smooth finish to the existing works.
7. All footpaths shall be topsoiled, turfed and hydro mulched as indicated on drawings.
8. All trees (except those on the fill and road works limits and those selected by the superintendent) to be retained.
9. Trees close to the road and sewers shall be determined on site by the superintendent for removal.
10. All materials shall be transported only on routes approved by council.
11. Method of disposal of all waste materials shall be to council's satisfaction.
12. All levels are dtm derived for layouts, longitudinal sections and cross sections. contractor to confirm on site before construction.
13. Developer to appoint contract for all fencing and landscaping if required.
14. All precast units are to be transported and installed as per manufacturers specifications and the structural integrity of each individual unit are in no way the responsibility of the consulting engineers.

EARTHWORKS

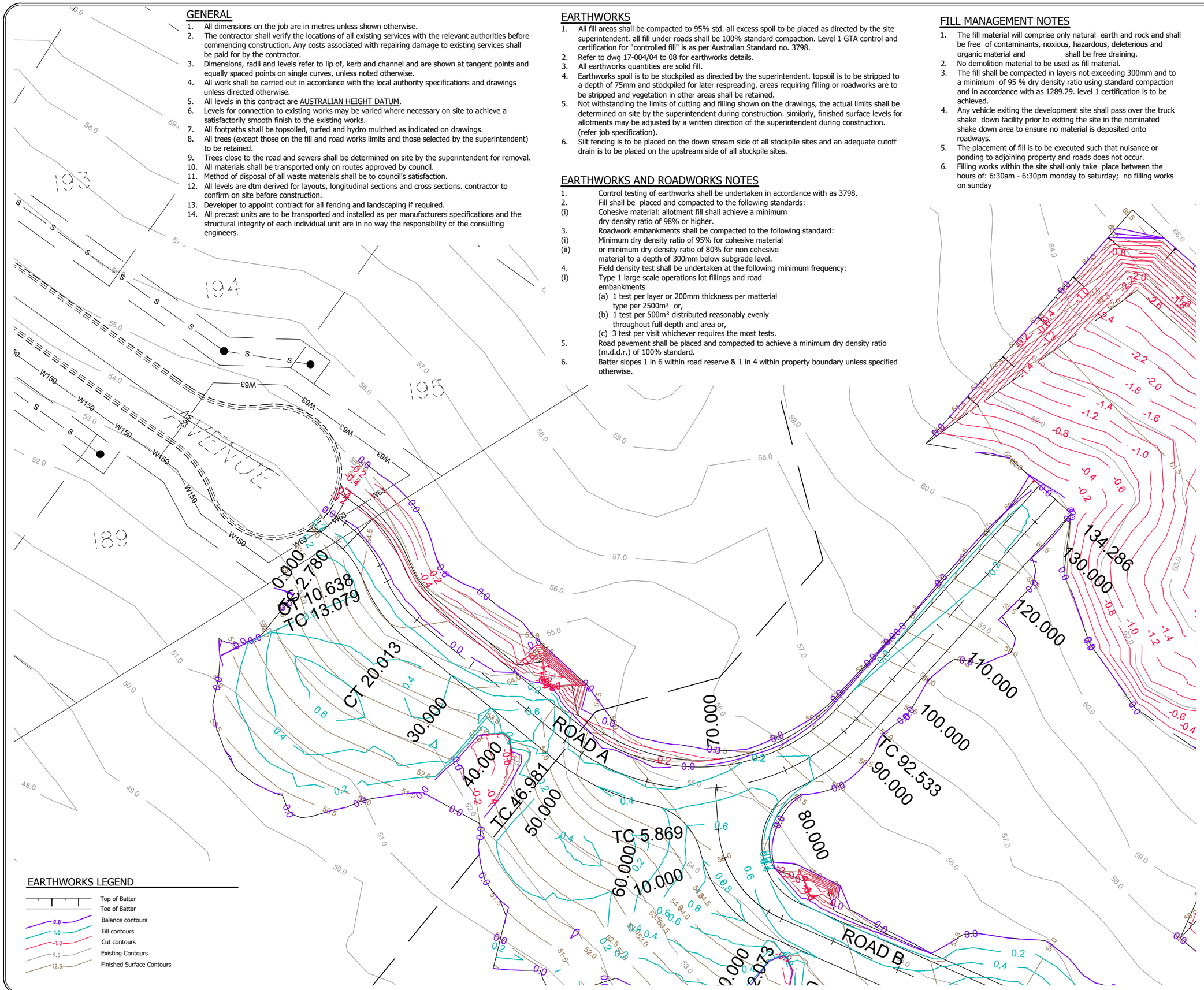
1. All fill areas shall be compacted to 95% std. all excess spoil to be placed as directed by the site superintendent. all fill under roads shall be 100% standard compaction. Level 1 GTA control and certification for "controlled fill" is as per Australian Standard no. 3798.
2. Refer to dwg 17-004/04 to 08 for earthworks details.
3. All earthworks quantities are solid fill.
4. Earthworks spoil is to be stockpiled as directed by the superintendent. topsoil is to be stripped to a depth of 75mm and stockpiled for later respreading. areas requiring filling or roadworks are to be stripped and vegetation in other areas shall be retained.
5. Not withstanding the limits of cutting and filling shown on the drawings, the actual limits shall be determined on site by the superintendent during construction. similarly, finished surface levels for allotments may be adjusted by a written direction of the superintendent during construction. (refer job specification).
6. Silt fencing is to be placed on the down stream side of all stockpile sites and an adequate cutoff drain is to be placed on the upstream side of all stockpile sites.

EARTHWORKS AND ROADWORKS NOTES

1. Control testing of earthworks shall be undertaken in accordance with as 3798.
2. Fill shall be placed and compacted to the following standards:
(i) Cohesive material: allotment fill shall achieve a minimum dry density ratio of 98% or higher.
3. Roadwork embankments shall be compacted to the following standard:
(i) Minimum dry density ratio of 95% for cohesive material
(ii) or minimum dry density ratio of 80% for non cohesive material to a depth of 300mm below subgrade level.
4. Field density test shall be undertaken at the following minimum frequency:
(i) Type 1 large scale operations lot fillings and road embankments
   (a) 1 test per layer or 200mm thickness per matterial type per 2500m² or,
   (b) 1 test per 500m³ distributed reasonably evenly throughout full depth and area or,
   (c) 3 test per visit whichever requires the most tests.
5. Road pavement shall be placed and compacted to achieve a minimum dry density ratio (m.d.d.r.) of 100% standard.
6. Batter slopes 1 in 6 within road reserve & 1 in 4 within property boundary unless specified otherwise.

FILL MANAGEMENT NOTES

1. The fill material will comprise only natural earth and rock and shall be free of contaminants, noxious, hazardous, deleterious and organic material and shall be free draining.
2. No demolition material to be used as fill material.
3. The fill shall be compacted in layers not exceeding 300mm and to a minimum of 95 % dry density ratio using standard compaction and in accordance with as 1289.29. level 1 certification is to be achieved.
4. Any vehicle exiting the development site shall pass over the truck shake down facility prior to exiting the site in the nominated shake down area to ensure no material is deposited onto roadways.
5. The placement of fill is to be executed such that nuisance or ponding to adjoining property and roads does not occur.
6. Filling works within the site shall only take place between the hours of: 6:30am - 6:30pm monday to saturday; no filling works on sunday



EARTHWORKS LEGEND

- Top of Batter
- Toe of Batter
- 0.0 Balance contours
- 1.0 Fill contours
- -1.0 Cut contours
- 9.0 Existing Contours
- 12.5 Finished Surface Contours

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N

SCALES

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REVISION / ISSUE REGISTER

No.	DATE	REMARKS
A	07/23	Preliminary

DESIGN		DRAWN	
RS		RS	

ANDY & DANI HART

PROPOSED RESIDENCE
503 NAGLE DRIVE
NORMAN GARDENS, QLD

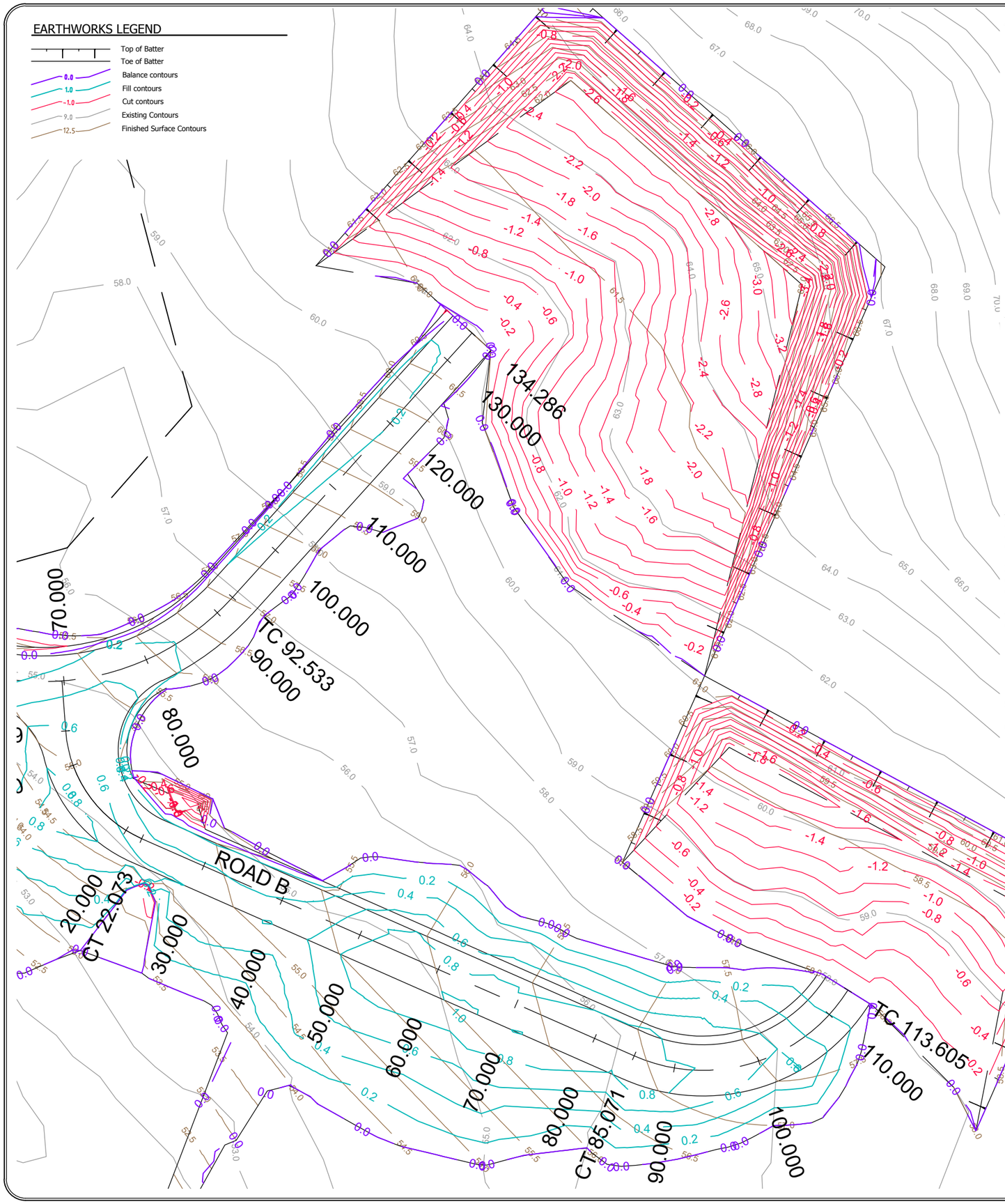
EARTHWORKS PLAN - 1

DWG No. 21-011/SK03 | A

DO NOT SCALE - IF IN DOUBT ASK

EARTHWORKS LEGEND

- Top of Batter
- Toe of Batter
- 0.0 — Balance contours
- 1.0 — Fill contours
- -1.0 — Cut contours
- 9.0 — Existing Contours
- 12.5 — Finished Surface Contours



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5. Road pavement shall be placed and compacted to achieve a minimum dry density ratio (m.d.d.r.) of 100% standard.
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SCALES

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REVISION / ISSUE REGISTER

No.	DATE	REMARKS
A	07/23	Preliminary

DESIGN		DRAWN	
RKS		RKS	

ANDY & DANI HART

PROPOSED RESIDENCE
503 NAGLE DRIVE
NORMAN GARDENS, QLD

EARTHWORKS PLAN - 2

DWG No. 21-011/SK04 | A

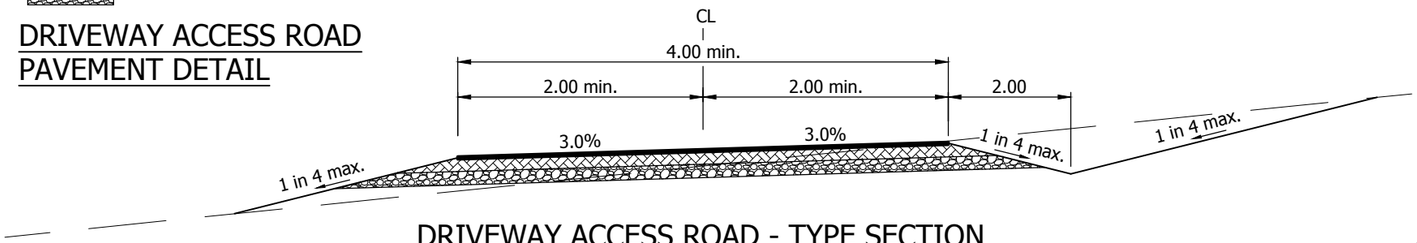
DO NOT SCALE - IF IN DOUBT ASK

2-COAT BITUMEN SEAL

125mm SUBBASE TYPE 2.3 CBR45

125mm SUBBASE TYPE 2.5 CBR15

DRIVEWAY ACCESS ROAD PAVEMENT DETAIL



DRIVEWAY ACCESS ROAD - TYPE SECTION

Scale 1:20

EARTHWORKS AND ROADWORKS NOTES

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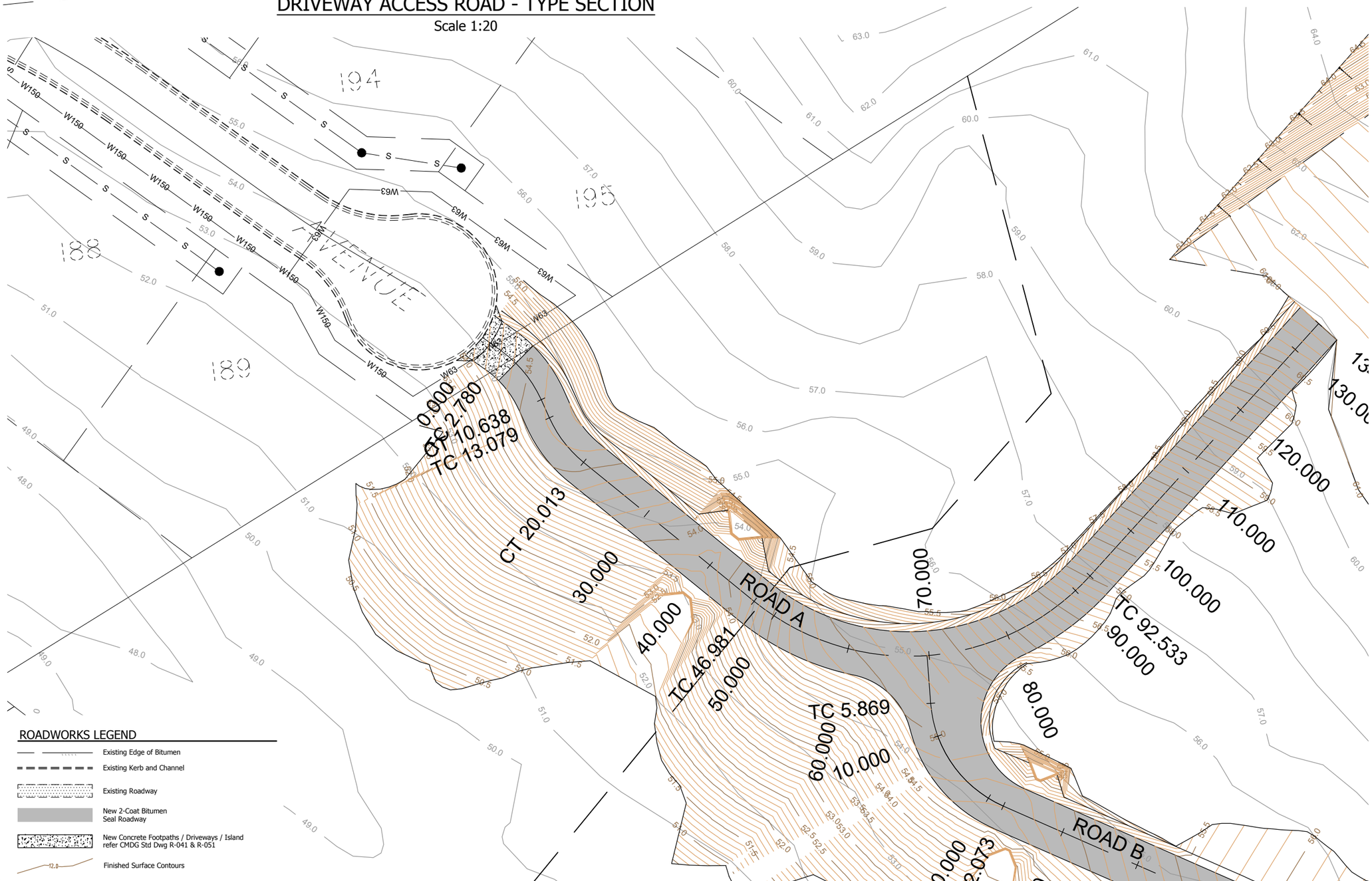

ROADWORKS LEGEND

- Existing Edge of Bitumen
- Existing Kerb and Channel
- Existing Roadway
- New 2-Coat Bitumen Seal Roadway
- New Concrete Footpaths / Driveways / Island refer CMDG Std Dwg R-041 & R-051
- Finished Surface Contours

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SCALES

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REVISION / ISSUE REGISTER

No.	DATE	REMARKS
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DESIGN		DRAWN	
RS		RS	

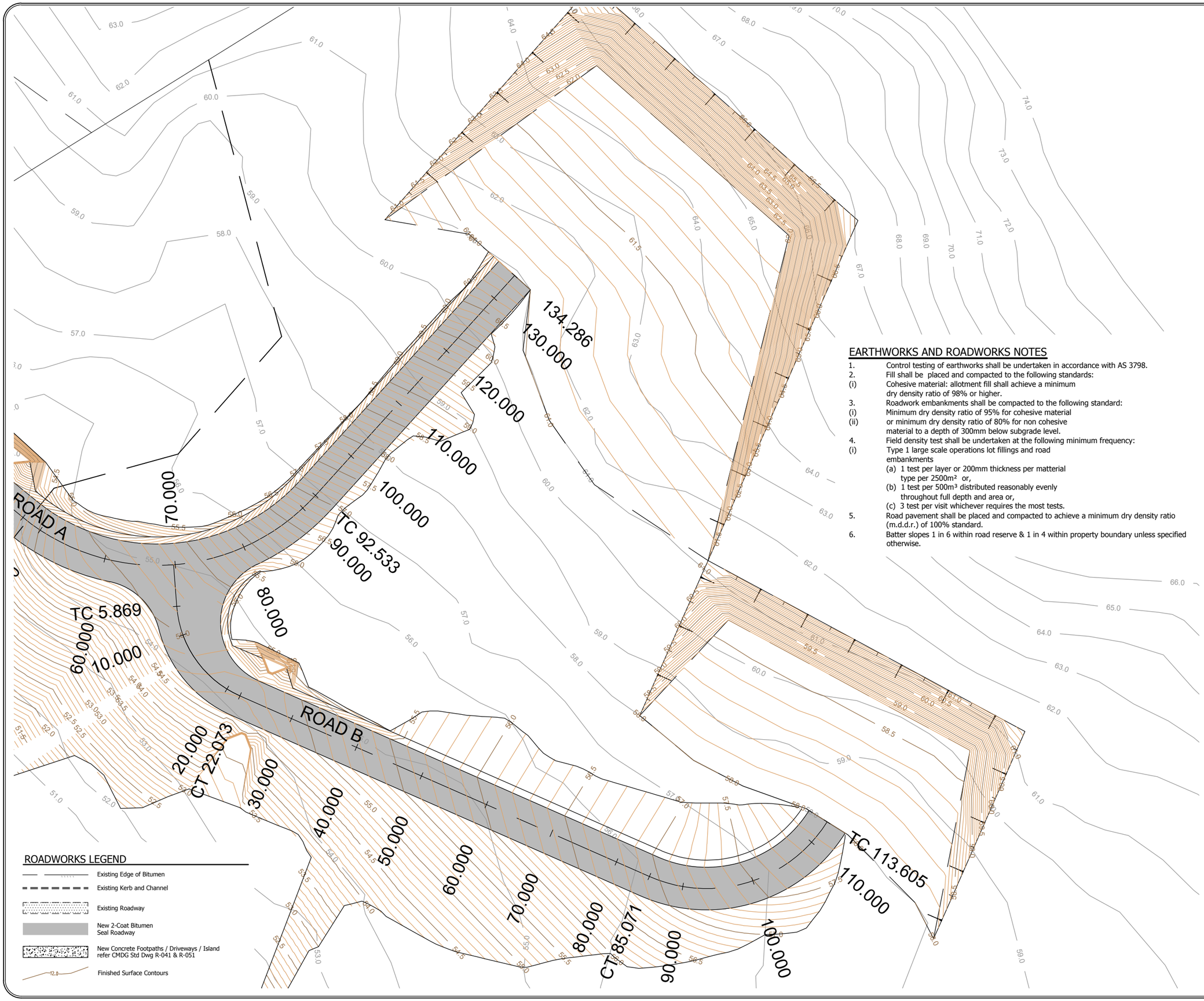
ANDY & DANI HART

PROPOSED RESIDENCE
503 NAGLE DRIVE
NORMAN GARDENS, QLD

ROADWORKS PLAN - 1

DWG No. 21-011/SK05 | A

DO NOT SCALE - IF IN DOUBT ASK



EARTHWORKS AND ROADWORKS NOTES

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SCALES

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REVISION / ISSUE REGISTER

No.	DATE	REMARKS
A	07/23	Preliminary

DESIGN		DRAWN	
RKS		RKS	

ANDY & DANI HART

PROPOSED RESIDENCE
503 NAGLE DRIVE
NORMAN GARDENS, QLD

ROADWORKS PLAN - 2

DWG No. 21-011/SK06 | A

DO NOT SCALE - IF IN DOUBT ASK

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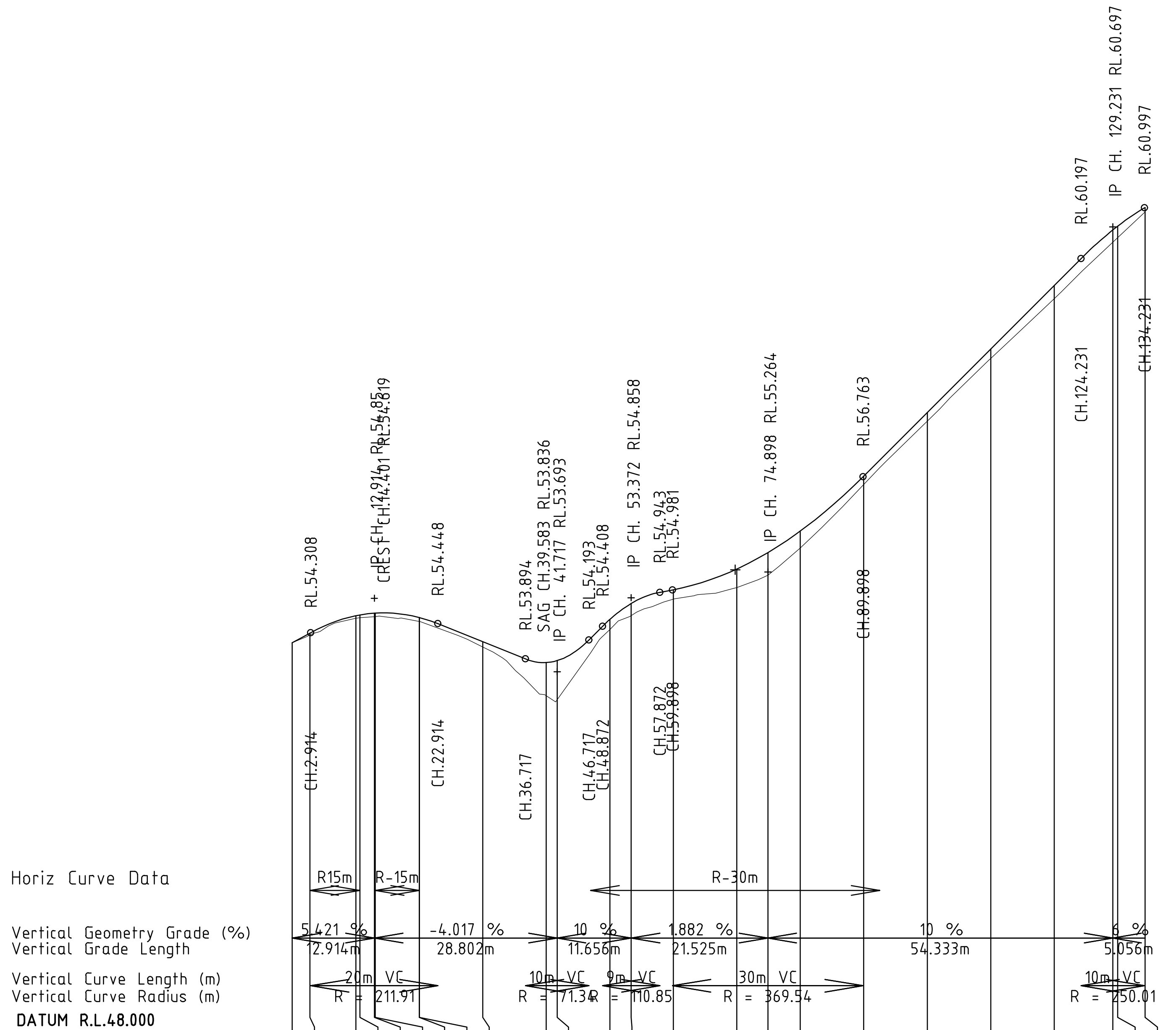

VOLUMES CUT					37				29				6			5		1		0		0		
VOLUMES FILL					124				168				88			32		22		25		18		
KERB LEVELS RHS	54.06	54.211	54.484	54.496	54.524	54.525	54.455	54.455	54.074	53.747	53.78	54.426	54.676	54.893	55.219	55.478	55.816	56.684	57.684	58.684	59.684	60.602	60.67	61
KERB LEVELS LHS	54.24	54.391	54.664	54.676	54.704	54.705	54.635	54.635	54.254	53.927	53.96	54.606	54.856	55.073	55.399	55.658	55.996	56.864	57.864	58.864	59.864	60.691	60.745	61
NAT. SURFACE ON ROAD CENTRELINE	54.150	54.271	54.537	54.543	54.559	54.560	54.485	54.485	54.082	53.313	53.253	54.355	54.574	54.835	55.018	55.208	55.641	56.639	57.637	58.623	59.566	60.455	60.527	60.931
CUT / FILL DEPTH	-0	0.029	0.037	0.043	0.055	0.055	0.061	0.06	0.081	0.524	0.616	0.16	0.194	0.148	0.291	0.36	0.266	0.135	0.136	0.15	0.208	0.192	0.18	0.069
DESIGN LEVELS ON ROAD CENTRELINE	54.150	54.301	54.574	54.586	54.614	54.615	54.545	54.545	54.164	53.837	53.868	54.516	54.767	54.983	55.309	55.568	55.906	56.774	57.774	58.774	59.774	60.647	60.707	61.000
CHAINAGE	0.000	2.780	10.000	10.638	12.914	13.079	20.000	20.013	30.000	40.000	41.717	50.000	53.372	60.000	70.000	74.898	80.000	90.000	100.000	110.000	120.000	129.231	130.000	134.286

LONGITUDINAL SECTION Road A

SCALES

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REVISION / ISSUE REGISTER

No.	DATE	REMARKS
A	07/23	Preliminary

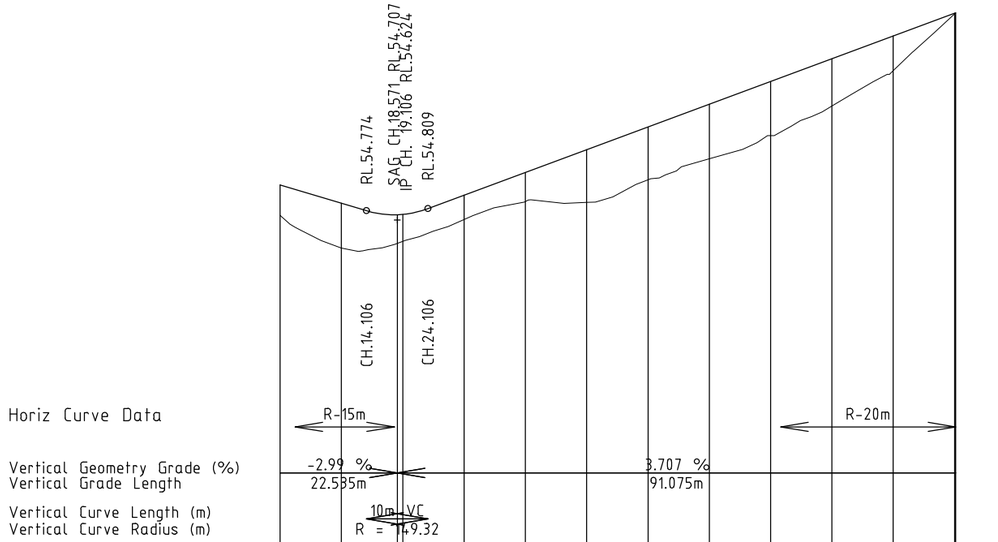
DESIGN		DRAWN	
RS		RS	

ANDY & DANI HART

PROPOSED RESIDENCE
503 NAGLE DRIVE
NORMAN GARDENS, QLD
ROADWORKS
LONG SECTION - 1

DWG No. 21-011/SK07 | A

DO NOT SCALE - IF IN DOUBT ASK



Horiz Curve Data

Vertical Geometry Grade (%)
Vertical Grade Length

Vertical Curve Length (m)
Vertical Curve Radius (m)

DATUM R.L.49.000

VOLUMES	CUT		0			1		0	0		0		0	
	FILL		97			110		302	309		213		35	
KERB LEVELS RHS			54.806	54.618	54.624	54.938	55.309	55.679	56.05	56.421	56.791	57.187	57.59	57.993
KERB LEVELS LHS						55.118	55.489	55.859	56.23	56.601	56.971	57.316	57.655	
NAT. SURFACE ON ROAD CENTRELINE	54.698	54.166	54.244	54.276	54.631	54.923	54.909	55.278	55.621	56.000	56.481	57.056	57.983	58.000
CUT / FILL DEPTH	0.497	0.73	0.464	0.438	0.397	0.475	0.86	0.862	0.89	0.881	0.771	0.566	0.01	0
DESIGN LEVELS ON ROAD CENTRELINE	55.195	54.896	54.708	54.714	55.028	55.399	55.769	56.140	56.511	56.881	57.252	57.623	57.993	58.000
CHAINAGE	0.000	10.000	19.106	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	110.181

LONGITUDINAL SECTION Road B

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N

SCALES

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PROPOSED RESIDENCE
503 NAGLE DRIVE
NORMAN GARDENS, QLD
ROADWORKS
LONG SECTION - 2

DWG No. 21-011/SK08 | A

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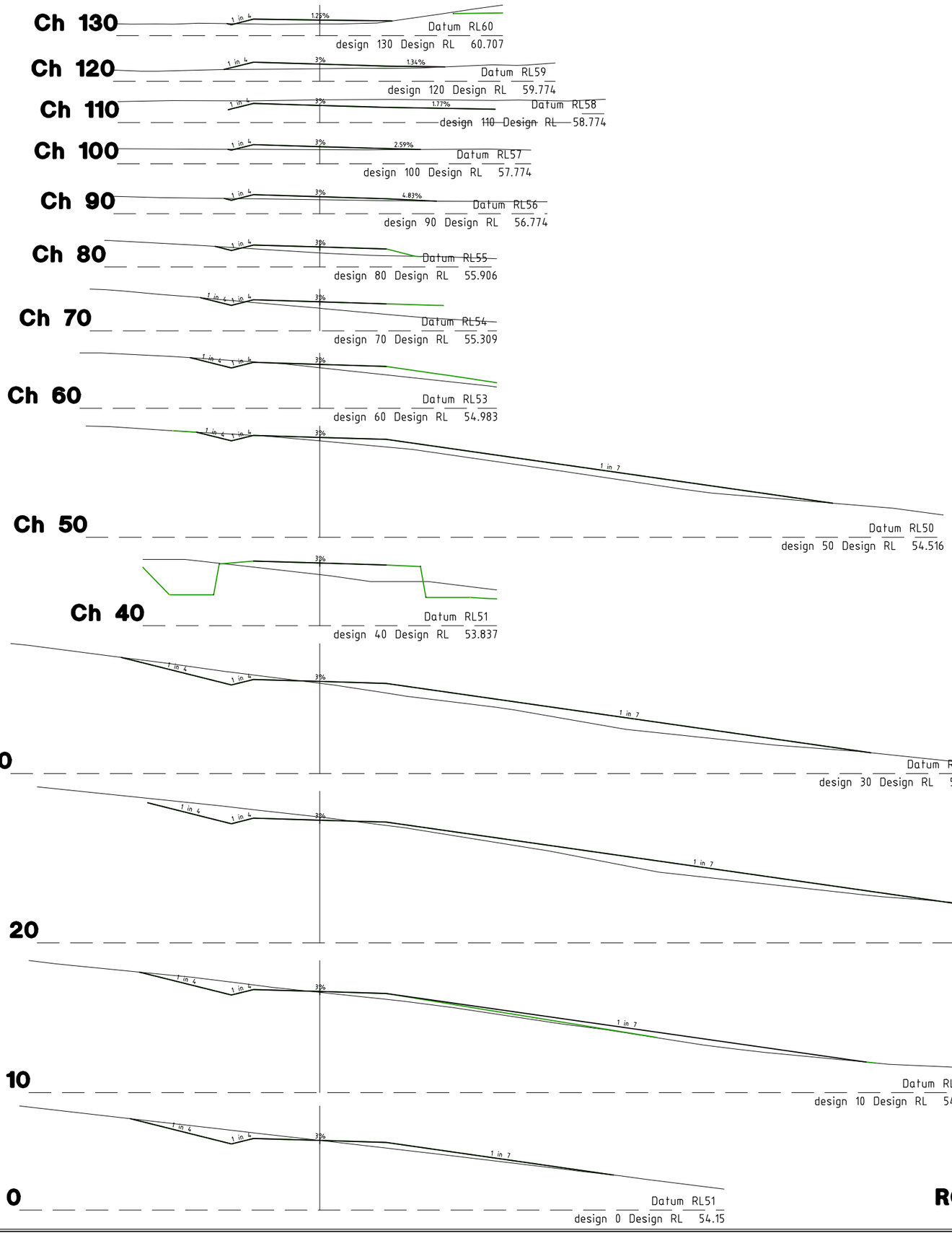

ROAD A CROSS SECTIONS

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REVISION / ISSUE REGISTER

No.	DATE	REMARKS
A	07/23	Preliminary

DESIGN		DRAWN	
RS		RS	

ANDY & DANI HART

PROPOSED RESIDENCE
503 NAGLE DRIVE
NORMAN GARDENS, QLD

ROADWORKS
CROSS SECTIONS - 1

DWG No. 21-011/SK09 | A

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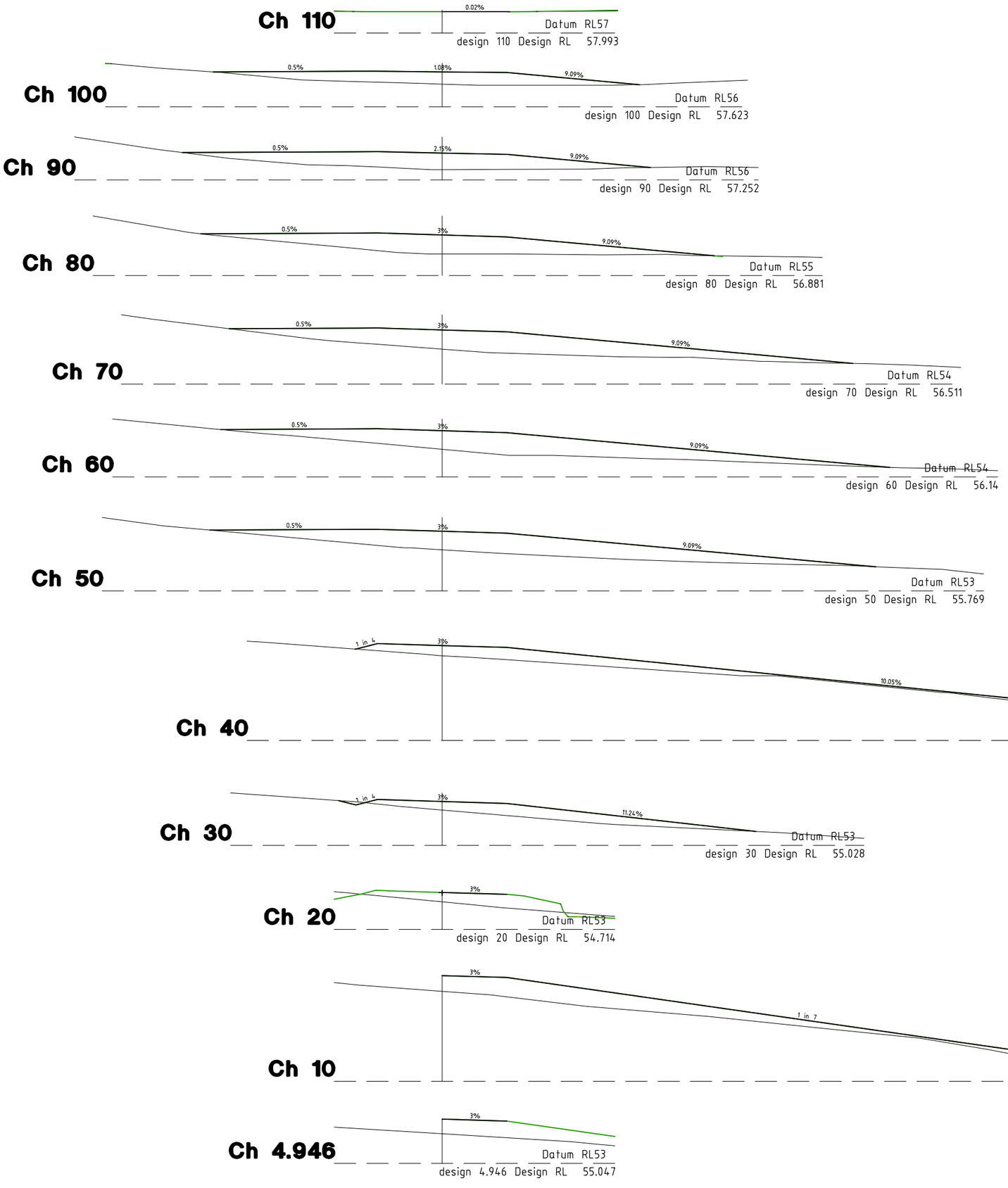

ROAD B CROSS SECTIONS

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DESIGN		DRAWN	
RS		RS	

ANDY & DANI HART

PROPOSED RESIDENCE
503 NAGLE DRIVE
NORMAN GARDENS, QLD

ROADWORKS
CROSS SECTIONS - 2

DWG No. 21-011/SK10 | A

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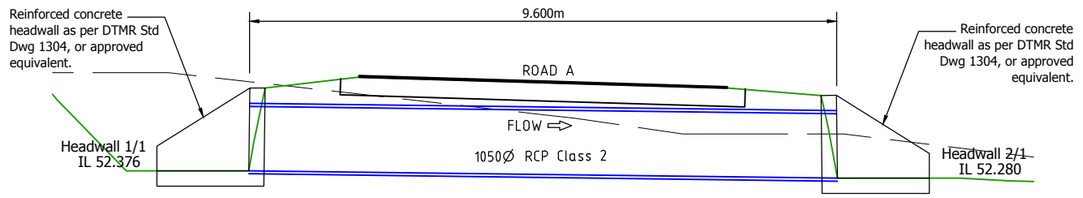

ROAD A CULVERT (TYP. SECTION)

STORMWATER DRAINAGE NOTES

1. Subsoil drains to be constructed in accordance with the local authority standard drawings.
2. Subsoil drains to be placed behind all kerb & channel unless noted otherwise. Mitre drains are to be placed as directed by the consulting engineer's superintendent. (subsoil drains and mitre drains adjacent to landscaped areas to be at a minimum depth of 1.0m unless noted otherwise.)
3. Maximum distance between cleanout points (including gully pits) to be 60m.
4. All gully pits shall be CM type unless shown otherwise.
5. All drainage pipes shall be class 2 R.C. pipes unless shown otherwise.
6. The levels and slopes shown on manhole covers are indicative only. The contractor shall finish manhole covers and surrounds to suit the finished level & slope at that location.

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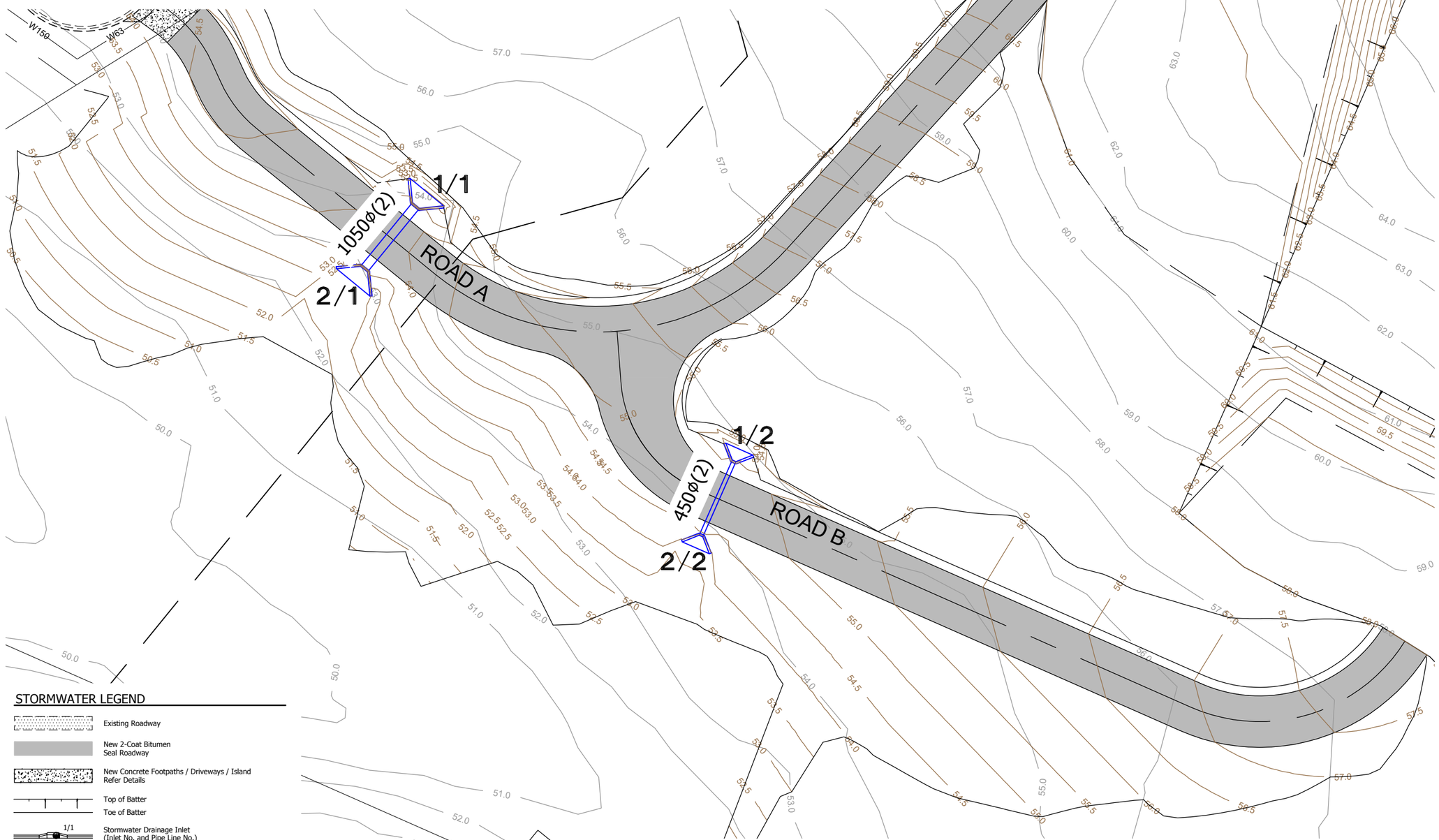
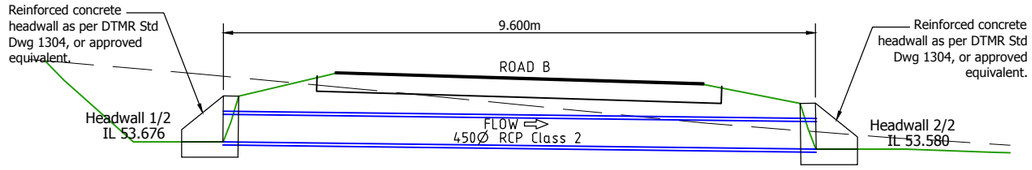


STORMWATER LEGEND

- Existing Roadway
- New 2-Coat Bitumen Seal Roadway
- New Concrete Footpaths / Driveways / Island Refer Details
- Top of Batter
- Toe of Batter
- 1/1 — Stormwater Drainage Inlet (Inlet No. and Pipe Line No.)
- 4/1 (450 (2) 375 (2)) — Stormwater Drainage Manhole / Pipe Size and Class (Manhole No. and Pipe Line No.)
- 8/1 (600 (2)) — Stormwater Drainage Headwall / Pipe Size and Class (Headwall No. and Pipe Line No.)
- 1/RW1 (150 (u) 225 (u)) — Roofwater Drainage Inlet / Pipe Size and Class (Inlet No. and Pipe Line No.)
- DS — Stormwater Subsoil Drainage Pipe with Cleanout Opening Refer Details and CMDG Std Dwg D-040.
- Stormwater Roofwater Kerb Adaptor Refer Details and CMDG Std Dwg R-061.
- Existing Contours
- Finished Surface Contours



ROAD B CULVERT (TYP. SECTION)

ANDY & DANI HART

PROPOSED RESIDENCE
503 NAGLE DRIVE
NORMAN GARDENS, QLD

STORMWATER PLAN

DWG No. 21-011/SK11 | A

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ANDY & DANI HART

PROPOSED RESIDENCE
503 NAGLE DRIVE
NORMAN GARDENS, QLD

STORMWATER CATCHMENT PLAN

DWG No. 21-011/SK12 | A

DO NOT SCALE - IF IN DOUBT ASK

ANDY & DANI HART RESIDENCE
503 NAGLE DRIVE
NORMAN GARDENS
Stormwater Drainage Calculations

Friend's Equation

Length (m)=	50	Overland Sheet Flow Length	**Catchment A**
n =	0.035	Surface Roughness (Horton's)	(Existing - Subject Site)
Slope (%)=	30		
t =	(107nL^0.333)/(S^0.2)		
t =	**7.0**	**Minutes**	
	2.0	**Minutes (Stream Flow @ 30% grade)**	
	9.0	**Minutes (incl. Stream Flow)**	
Length (m)=	50	Overland Sheet Flow Length	**Catchment B**
n =	0.035	Surface Roughness (Horton's)	(Existing - Subject Site)
Slope (%)=	30		
t =	(107nL^0.333)/(S^0.2)		
t =	**7.0**	**Minutes**	
	1.5	**Minutes (Stream Flow @ 30% grade)**	
	8.5	**Minutes (incl. Stream Flow)**	

4/08/2023 Job No: 21-011

ANDY & DANI HART RESIDENCE
503 NAGLE DRIVE
NORMAN GARDENS
Stormwater Drainage Calculations

Existing Undeveloped (Subject Site)

Catchment	Q_1 Rainfall Intensity (mm/hr)	C_1 runoff coefficient
A	85	0.56

Q1 Flow Rates (Q=FCIA)

Catchment	Area (m^2)	Flow (m^3/s)	Flow (L/s)
A	51960	**0.687**	**687**

Catchment	Q_2 Rainfall Intensity (mm/hr)	C_2 runoff coefficient
A	110	0.595

Q2 Flow Rates (Q=FCIA)

Catchment	Area (m^2)	Flow (m^3/s)	Flow (L/s)
A	51960	**0.945**	**945**

Catchment	Q_5 Rainfall Intensity (mm/hr)	C_5 runoff coefficient
A	143	0.665

Q5 Flow Rates (Q=FCIA)

Catchment	Area (m^2)	Flow (m^3/s)	Flow (L/s)
1	51960	**1.373**	**1373**

Catchment	Q_{10} Rainfall Intensity (mm/hr)	C_{10} runoff coefficient
A	163	0.7

Q10 Flow Rates (Q=FCIA)

Catchment	Area (m^2)	Flow (m^3/s)	Flow (L/s)
A	51960	**1.647**	**1647**

Catchment	Q_{20} Rainfall Intensity (mm/hr)	C_{20} runoff coefficient
A	190	0.735

Q20 Flow Rates (Q=FCIA)

Catchment	Area (m^2)	Flow (m^3/s)	Flow (L/s)
A	51960	**2.016**	**2016**

Catchment	Q_{50} Rainfall Intensity (mm/hr)	C_{50} runoff coefficient
A	228	0.805

Q50 Flow Rates (Q=FCIA)

Catchment	Area (m^2)	Flow (m^3/s)	Flow (L/s)
A	51960	**2.649**	**2649**

Catchment	Q_{100} Rainfall Intensity (mm/hr)	C_{100} runoff coefficient
1	258	0.84

Q100 Flow Rates (Q=FCIA)

Catchment	Area (m^2)	Flow (m^3/s)	Flow (L/s)
A	51960	**3.128**	**3128**

4/08/2023 Job No: 21-011

ANDY & DANI HART RESIDENCE
503 NAGLE DRIVE
NORMAN GARDENS
Stormwater Drainage Calculations

Existing Undeveloped (Subject Site)

Catchment	Q_1 Rainfall Intensity (mm/hr)	C_1 runoff coefficient
B	87	0.56

Q1 Flow Rates (Q=FCIA)

Catchment	Area (m^2)	Flow (m^3/s)	Flow (L/s)
1	20115	**0.272**	**272**

Catchment	Q_2 Rainfall Intensity (mm/hr)	C_2 runoff coefficient
B	112	0.595

Q2 Flow Rates (Q=FCIA)

Catchment	Area (m^2)	Flow (m^3/s)	Flow (L/s)
1	20115	**0.372**	**372**

Catchment	Q_5 Rainfall Intensity (mm/hr)	C_5 runoff coefficient
B	146	0.665

Q5 Flow Rates (Q=FCIA)

Catchment	Area (m^2)	Flow (m^3/s)	Flow (L/s)
1	20115	**0.542**	**542**

Catchment	Q_{10} Rainfall Intensity (mm/hr)	C_{10} runoff coefficient
B	167	0.7

Q10 Flow Rates (Q=FCIA)

Catchment	Area (m^2)	Flow (m^3/s)	Flow (L/s)
1	20115	**0.653**	**653**

Catchment	Q_{20} Rainfall Intensity (mm/hr)	C_{20} runoff coefficient
B	195	0.735

Q20 Flow Rates (Q=FCIA)

Catchment	Area (m^2)	Flow (m^3/s)	Flow (L/s)
1	20115	**0.801**	**801**

Catchment	Q_{50} Rainfall Intensity (mm/hr)	C_{50} runoff coefficient
B	233	0.805

Q50 Flow Rates (Q=FCIA)

Catchment	Area (m^2)	Flow (m^3/s)	Flow (L/s)
1	20115	**1.048**	**1048**

Catchment	Q_{100} Rainfall Intensity (mm/hr)	C_{100} runoff coefficient
B	264	0.84

Q100 Flow Rates (Q=FCIA)

Catchment	Area (m^2)	Flow (m^3/s)	Flow (L/s)
1	20115	**1.239**	**1239**

Culvert Report

Project filename: Andy & Dani.cst

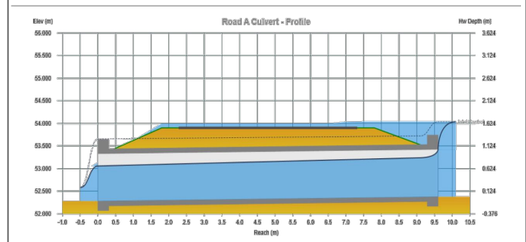
Culvert Studio v 2.0.0.28 — 08-04-2023

Road A Culvert — **Culvert 1**

CULVERT		EMBANKMENT	
Shape	= Circular	Top Width	= 6.000 m
Inlet Edge	= Square Edge/ Hdwall	Top Elevation	= 53.900 m
Material	= Concrete	Crest Length	= 10.000 m
Manning's n	= 0.012		
Rise	= 1050 mm	**DISCHARGE**	
Span	= 1050 mm	Method	= Qmin to Qmax
Invert Elev. Down	= 52.280 m	Q Min	= 3.128 cms
Length	= 9.6 m	Q Max	= 3.128 cms
Slope	= 0.010 m/m	Q Increment	= 1.000 cms
Invert Elev. Up	= 52.376 m		
No. Barrels	= 1	**TAILWATER**	
Plan Skew Angle	= 0 degrees	Tailwater Elevation	= 52.580 m

CALCULATION SAMPLE

Discharge			Velocity		Depth		HGL @ Hw/D = 1.582		
Total	Culvert	Over Top	Down	Up	Down	Up	Down	Up	Hw
(cms)	(cms)	(cms)	(m/s)	(m/s)	(mm)	(mm)	(m)	(m)	(m)
3.128	2.351	0.777	3.426	3.056	776	873	53.056	53.249	54.037



Culvert Report

Project filename: Andy & Dani.cst

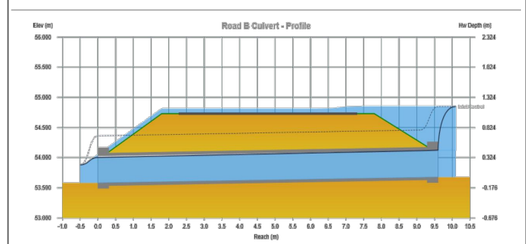
Culvert Studio v 2.0.0.28 — 08-04-2023

Road B Culvert — **Culvert 2**

CULVERT		EMBANKMENT	
Shape	= Circular	Top Width	= 6.000 m
Inlet Edge	= Square Edge/ Hdwall	Top Elevation	= 54.730 m
Material	= Concrete	Crest Length	= 10.000 m
Manning's n	= 0.012		
Rise	= 450 mm	**DISCHARGE**	
Span	= 450 mm	Method	= Qmin to Qmax
Invert Elev. Down	= 53.580 m	Q Min	= 1.239 cms
Length	= 9.6 m	Q Max	= 1.239 cms
Slope	= 0.010 m/m	Q Increment	= 1.000 cms
Invert Elev. Up	= 53.676 m		
No. Barrels	= 1	**TAILWATER**	
Plan Skew Angle	= 0 degrees	Tailwater Elevation	= 53.880 m

CALCULATION SAMPLE

Discharge			Velocity		Depth		HGL @ Hw/D = 2.607		
Total	Culvert	Over Top	Down	Up	Down	Up	Down	Up	Hw
(cms)	(cms)	(cms)	(m/s)	(m/s)	(mm)	(mm)	(m)	(m)	(m)
1.239	0.411	0.828	2.653	2.593	423	445	54.003	54.121	54.849



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ANDY & DANI HART

PROPOSED RESIDENCE
503 NAGLE DRIVE
NORMAN GARDENS, QLD
STORMWATER CALCULATIONS

DWG No. 21-011/SK13 | A

DO NOT SCALE - IF IN DOUBT ASK

SEWERAGE NOTES

1. This drawing is to be read in conjunction with Capricorn Municipal Development Guidelines Standard Drawings CMDG-S-001, CMDG-S-005, CMDG-S-011, CMDG-S-012, CMDG-S-020, CMDG-S-021, CMDG-S-022, CMDG-S-023, CMDG-S-024, CMDG-S-026, CMDG-S-027, CMDG-S-028, CMDG-S-030, CMDG-S-074 & CMDG-S-090
2. Sewerage Manholes are generally 2.0m off front, rear and side boundaries U.N.O. All sewer MH locations to be pegged in accordance with co-ordinate table prior to construction.
3. Connection to existing sewers to be carried out by Rockhampton Regional Council at the developers cost.
4. All new sewers to be 150 dia. uP.V.C. (SN8) unless shown otherwise.
5. Tops of manholes to be finished 75mm above finished surface level on uphill side of manhole.
6. Backfill road crossings with sand to not less than 100% of the standard max. dry density to AS 1289.
7. All sewer distances between MH's are shown center to center.
8. All manhole bases shall be "Complas - The Benchman" or approved equivalent by the Engineer.
9. All house connections over 2m deep shall have heavy duty reinforced fibreglass junctions.
10. The contractor shall establish the extent and location of all existing services within or adjacent to the works area. All services shall be protected against accidental damage during construction of the works. The contractor shall be responsible for all costs incurred by damage to existing services.
11. Where work abuts the existing the connection thereto shall be neat, smooth and workmanlike and to the Engineers Satisfaction.

SEWERAGE LEGEND

- Existing Roadway
- New 2-Coat Bitumen Seal Roadway
- Existing Sewer Main and Manhole
- Existing Sewer House Connection
- New Sewer Main and Manhole (Manhole No. and Sewer Line No.)
- New Sewer House Connection (Refer details and CMDG Std Dwg S-030)
- New Sewer Easement (Refer Surveyors Plans)
- Top of Batter
- Toe of Batter
- Existing Contours
- Finished Surface Contours

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ANDY & DANI HART

PROPOSED RESIDENCE
503 NAGLE DRIVE
NORMAN GARDENS, QLD

SEWER RETICULATION CONNECTION PLAN

DWG No. 21-011/SK14 | A

DO NOT SCALE - IF IN DOUBT ASK

WATER RETICULATION NOTES

1. All pipes are to be mPVC class 16 RRJ to AS 2977 unless noted otherwise and have a minimum 600mm cover.
2. Hydrant and valve installation to be in accordance with local authority standard drawings.
3. Reticulation mains to be laid 2.5m from the property boundary unless otherwise noted on the drawings.
4. For pipes to be laid on curves, the perferred maximum pipe joint deflection per joint shall be 1.5 degrees. (the absolute maximum deflection per joint shall be 3 degrees.)
5. Water conduit crossings shall be aligned from the common boundary of allotments served.
6. uPVC mains to be flushed and tested in accordance with the specification.
7. All valves and reducers at water main junctions shall be flange - flange jointed unless noted otherwise.
8. All bends, tees and deadends are to have thrust blocks as per local authority standard drawings and must be DICL socketed minimum Class 14.
9. For thrust block details, refer local authority std dwgs.
10. Conduits under roadways shall be 100mm diameter uPVC SN8 conduit sealed each end with heavy duty plastic tape. refer local authority std dwgs.
11. Service marker stake and brass indicator discs to be installed as per local authority std dwgs.
12. All fittings and elongated gibaults are to comprise stainless steel bolts.
13. Hydrant locations to be marked as per local authority std dwgs.
14. Water mains and service conduits to be laid in accordance with local authority std dwgs.
15. Marker tape (200mm with tracer wire for electro detection) shall be provided over all watermains and services.
16. End caps and fire hydrants to be provided for water mains at end of stages if stages completed separately, as per local authority guidelines.

WATER RETICULATION LEGEND

- Existing Roadway
- New 2-Coat Bitumen Seal Roadway
- W — Existing Water Reticulation Main
- W FH — Existing Water Fire Hydrant
- W SV — Existing Water Sluice Valve
- W200 — New 200mm dia. mPVC Class 16 Water Reticulation Main Refer CMDG Std Dwgs W-040 and W-041
- W150 — New 150mm dia. mPVC Class 16 Water Reticulation Main Refer CMDG Std Dwgs W-040 and W-041
- W100 — New 100mm dia. mPVC Class 16 Water Reticulation Main Refer CMDG Std Dwgs W-040 and W-041
- W63 — New 63mm dia. poly Class 12.5 Water Reticulation Main Refer CMDG Std Dwgs W-040 and W-041
- FH W — New Water Fire Hydrant Refer CMDG Std Dwg W-060, W-061, W-061A and W-062
- SV W — New Water Sluice Valve Refer CMDG Std Dwg W-060, W-061, W-061A and W-062
- WS WS — New Water Service Pipe and Enveloping Conduit Refer CMDG Std Dwg W-090, W-090A and W-091
- Top of Batter
- Toe of Batter
- Existing Contours
- Finished Surface Contours

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ANDY & DANI HART

PROPOSED RESIDENCE
503 NAGLE DRIVE
NORMAN GARDENS, QLD

WATER RETICULATION CONNECTION PLAN

DWG No. 21-011/SK15 | A

DO NOT SCALE - IF IN DOUBT ASK

6.5.1.3.1 Environmental management and conservation zone code

Performance Outcome	Acceptable outcome	Assessment
Land Use		
General		
PO1 Development is limited to uses which: a. facilitate conservation activities on the land; b. provide visitors with information or education directly connected to the values of the land; c. are ancillary to and directly support visitation to the land for conservation, recreation or eco-tourism purposes consistent with (a) and (b); d. comprise infrastructure that can not practicably be located elsewhere; e. do not include tourist park activities; and f. may include a caretaker's accommodation.	No acceptable outcome is nominated.	**Complies –** The proposal is for a dwelling house and ancillary buildings. By being located on site, similar to a caretaker accommodation, the owners can be present and actively undertake land management and conservation activities.
Dwelling House		
PO2 The development of a dwelling house only occurs when either replacing an existing dwelling house or where new buildings, associated structures and vehicle access meets the following: a. has sufficient land area to accommodate the use; b. does not impact upon environmental values; c. does not create a visual impact upon elevated areas; d. is not subject to constraints (including bushfire and landslide) and does not result in a risk to people and property; e. and has access to adequate infrastructure and services.	**AO2.1** AO2.1.1 The development for a dwelling house only occurs where there is an existing dwelling and it is replaced by a new dwelling house in a similar location or in an area which does not impact upon environmental values or expose property or people to an increased risk from naturally occurring events such as bushfire or landslide. OR AO2.1.2 The development for a dwelling house only occurs where the allotment has: a. an area of at least five (5) hectares; b. no existing dwelling house on the allotment; c. the dwelling house, associated structures, vehicle access and cleared areas resulting from the development are located outside of areas mapped as having matters of local or state environmental significance or where located within these areas it is clearly demonstrated by a suitably qualified person that there will be no impact on environmental values;	**Complies (2.1.2)–** a. the site has a total area of 80.08ha; b. no existing dwelling house is present; c. c. The proposed BLEs are located outside of mapped areas of State environmental significance. For commentary regarding the mapped areas of local environmental significance, refer to Appendix D—Assessment *& Mitigation of Impacts to MES.* d. the dwelling house and associated structures are located in an area that avoids

	d. the dwelling house, associated structures, vehicle access and other cleared areas (such as fire breaks, backyards and the like) are located to avoid visual impacts from public viewer places; Editor's note—Public viewer places includes major road corridors (including Fitzroy Bridge and Neville Hewitt Bridge), public lookouts, principal centre and Fitzroy River (including city riverfront areas). e. the dwelling house and vehicle access are located to avoid constraints such as very high and high bushfire areas, slope instability (areas over fifteen (15) per cent) and the like; and f. the dwelling house, carports and garages are located on part of the site that is reasonably and practicably accessible by a standard 2WD motor vehicle. Editor's note—Council may require a visual assessment to be undertaken in accordance with SC6.16 — Scenic amenity planning scheme policy.	visual impacts from public viewer places; e. the dwelling house and associated structures are sited to avoid bushfire and steep land areas. *Refer to Appendix E – Bushfire Management Plan.* f. the dwelling house and associated structures will have direct access via a driveway connecting to an extension of Jim Goldston Avenue. This driveway will be appropriately sealed to ensure safe traversal of the site is possible.
Built form		
PO3 The development incorporates design responses that minimise the visual impact on the surrounding landscape and environment.	No acceptable outcome is nominated. Editor's Note—Council may require a visual assessment to be undertaken in accordance with SC6.16 — Scenic amenity planning scheme policy.	**Complies –** The development will be sited in a location that minimises visual impact on the surrounding landscape and will be constructed from appropriate materials.
PO4 Development, including infrastructure, buildings and driveway access are: a. not visually intrusive, particularly from public open spaces, major tourist roads and other critical vantage points outside the site (for example look outs); and b. designed, constructed and decorated to blend with the surrounding area in terms of colour, texture and height.	No acceptable outcome is nominated. Editor's Note—Council may require a visual assessment to be undertaken in accordance with SC6.16 — Scenic amenity planning scheme policy.	**Complies –** The development is sited to avoid being visually intrusive to public locations and will be designed, constructed and decorated to blend in with the surrounding area.
Effects of development		
PO5	**AO5.1**	**Alternative solution –** the areas

Development avoids impacts on flora and fauna habitats and movement corridors.	Development does not involve any clearing of vegetation. **AND** **AO5.2** Dense planting is undertaken to screen all development from roads and adjoining lots. **AND** **AO5.3** Fencing within a designated ecological corridor must be wildlife-friendly. Editor's note—Refer to Land for Wildlife Queensland: Note G4 – Wildlife Friendly Fencing and Netting.	of local environmental significance which are proposed to be cleared have been proven to consist of regrowth vegetation from historic clearing. *Refer to Appendix D – Assessment & Mitigation of Impacts to MES.* **Complies –** planting will be undertaken to screen development. **Not applicable –** development is not within a designated wildlife corridor.
PO6 Development does not require the storage of dangerous or harmful chemicals or products that have the ability to harm the natural environment.	No acceptable outcome is nominated.	**Complies –** development does not involve the storage of dangerous goods.
Reconfiguring a lot		
PO7 The land is not further subdivided.	AO7.1 No new lots are created.	**Not applicable –** development does not involve reconfiguring a lot.

8.2.3.3.1 Biodiversity overlay code

Performance outcomes	Acceptable outcomes	
Matters of state or local (high) environmental significance		
PO1 Development is located, designed and operated to retain and protect significant natural assets, habitat and values to the greatest extent possible. Where this is not possible, impacts are minimised by: a. retaining native vegetation; b. allowing for the regeneration of native vegetation to the area, or rehabilitating with locally endemic plants in non-vegetated areas of the site; c. landscaping with locally native plants; d. locating and designing public access to avoid disturbance of ecological values; e. ensuring alterations to natural landforms, hydrology and drainage patterns do not significantly affect ecological values; and f. incorporating measures that avoid the disruption of threatened wildlife and their habitat by allowing for their safe movement through the site. Note—In areas where environmental values have been mapped but are no longer present a report certified by an appropriately qualified person that the development site does not contain any matters of environmental significance will be required. Note—An environmental offset is provided for any permanent, irreversible loss or reduction in matters of local (high) environmental significance caused by the development. An environmental offset is carried out as per the requirements of the Queensland Government's Environmental Offsets Policy, as amended from time to time.	No acceptable outcome is nominated.	**Complies –** the development is located in the best area possible for retaining and protecting significant natural assets. The driveway access is located to avoid interfering with the watercourse identified on site. Identified areas of State environmental significance are avoided. Native vegetation will be retained throughout the site, with the only vegetation proposed to be cleared identified as regrowth vegetation. Refer to *Appendix D – Assessment & Mitigation of Impacts to MES.*
PO2 Development ensures native vegetation is retained, regenerated and rehabilitated in such a way as to: a. ensure protection of areas of vegetation within biodiversity corridors and wildlife habitats; b. maintain vegetation that is in patches of greatest size and smallest possible edge-to-area ratio; c. maximise the linkages between vegetation located on the subject site; d. maximise linkages between vegetation located on adjacent properties within the biodiversity network; e. allow the dispersal or movement through biodiversity corridors; and f. protect riparian vegetation in and adjacent to watercourses.	No acceptable outcome is nominated.	**Complies –** development is sited to ensure native vegetation is retained, regenerated and rehabilitated. *Refer to Appendix D – Assessment & Mitigation of Impacts to MES.*
Matters of local (general) environmental significance		

PO3 Development minimises impacts on biodiversity values by ensuring they are retained to the greatest extent possible. Editor's note—minimising the impacts on biodiversity values can be achieved by: a. retaining native vegetation; b. allowing for the regeneration of native vegetation; c. landscaping with native local plants; d. locating and designing public access (for example roads, bushfire separation areas etcetera) to avoid disturbance of ecological values; e. accommodating the safe movement of wildlife through the site; and f. limiting alterations to natural landforms and avoiding disturbance to natural waterways and drainage paths.	No acceptable outcome is nominated.	**Complies –** the development ensures native vegetation is retained to the greatest extent possible. No impact upon environmental areas is proposed, and areas of local environmental significance have been identified as regrowth vegetation. *Refer to Appendix D – Assessment & Mitigation of Impacts to MES.*
Biodiversity corridors and wildlife habitats		
PO4 Development maintains unimpeded movement of terrestrial and aquatic fauna that are associated with or are likely to use the biodiversity corridor as part of their normal life cycle by: a. ensuring development, including roads, pedestrian access and in-stream structures, do not create barriers to the movement of fauna (including fish passage) along or within biodiversity corridors; b. providing effective wildlife movement infrastructure in accordance with best practice and directing fauna to locations where wildlife movement infrastructure has been provided to enable fauna to safely negotiate a development area; and c. separating fauna from potential hazards through the use of appropriate fencing. Note—In areas where environmental values have been mapped but are no longer present a report certified by an appropriately qualified person that the development site does not contain any matters of environmental significance will be required. Editor's note—Biodiversity corridors have been mapped based on a minimum width of 500 metres.	No acceptable outcome is nominated.	**Complies –** development maintains movement of terrestrial and aquatic fauna by: a. ensuring aspects of the development such as access roads do not create barriers to the movement of fauna; b. establishing wildlife movement infrastructure and directing fauna towards these points of infrastructure to allow safe navigation of the development area; c. provision of appropriate fencing to separate fauna from potential hazards.
PO5 Development: a. retains and protects areas of wildlife habitat that support a critical life stage ecological process such as feeding, breeding or roosting for identified species; and b. incorporates measures as part of siting and design to protect and retain identified ecological values	**AO5.1** Development retains and protects native fauna feeding areas, nesting, breeding and roosting sites within the identified wildlife habitats. Editor's note—Development applications lodged with Council must identify all species listed that are present within or adjoining premises	**Complies –** *Refer to Appendix D - Assessment & Mitigation of Impacts to MES.*

and underlying ecosystem processes within or adjacent to the development site.	and habitats that may be affected by the proposal. In particular applications are to identify and describe how the development protects or enhances wildlife habitat at any critical life stage ecological processes within or adjacent to the development area. This should be reflected in an ecological assessment report prepared in accordance with the SC6.8 — Ecological assessment planning scheme policy.	
Wetlands and waterways		
PO6 Development has no adverse impacts on: a. native vegetation; b. habitat; c. ecological functions; d. water quality; and e. nature conservation values. Editor's note—Waterway buffers (aside from MSES-Waterways) have been mapped based on the following minimum widths: a. fifty (50) metres buffer (twenty-five (25) metres either side of the waterway) for stream orders 1 and 2; b. 100 metres (fifty (50) metres either side of the waterway) for stream orders 3 and 4; c. 200 metres for stream order 5 and above, except for the Fitzroy River; and d. for the Fitzroy River: 350 metres buffer (175 metres either side of the waterway) upstream of the Fitzroy River Barrage, and 450 metres (225 metres either side of the waterway) downstream of the Fitzroy River Barrage. Editor's note—Wetland buffers have a minimum width of: e. fifty (50) metres buffer (twenty-five (25) metres either side of the waterway) in urban areas; and f. 200 metres buffer (100 metres either side of the waterway) in non-urban areas. Editor's note—Vegetation clearing undertaken as a consequence of development occurs in compliance with the Vegetation Management Act 1999 and Nature Conservation Act 1992.	No acceptable outcome is nominated.	**Complies –** development will have no adverse impacts on identified areas of environmental significance. Refer to *Appendix D - Assessment & Mitigation of Impacts to MES.*
PO7 Development does not cause land degradation near a waterway or wetland, including: a. mass movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, stream bank erosion, wind erosion, or scalding; and b. loss or modification of chemical, physical or biological properties or functions of soil.	**AO7.1** Excavation and filling is not undertaken in waterways or wetlands.	**Complies –** excavation and filling will not be undertaken in waterways or wetlands.
Hydrology		
PO8 Development: a. enhances or maintains the existing groundwater hydrological regime of all areas of environmental significance; and	No acceptable outcome is nominated.	**Complies –** development will not impact the existing hydrological regime on-site and will maintain the natural

b. ensures that the water table and hydrostatic pressure in the area of environmental significance is returning to its natural state.		water table and hydrostatic pressure.
Non-native pest management		
PO9 Development avoids the introduction of non-native pest species (plant or animal) that pose a risk to ecological integrity.	**AO9.1** Development does not introduce non-native pest species.	**Complies –** development will not introduce non-native pest species.
Ongoing management, construction and operation		
PO10 During construction and operation of development, ongoing management, monitoring and maintenance is undertaken to ensure impacts on environmentally significant areas, biodiversity values and ecological processes, including water quality and hydrology, are avoided or minimised. Editor's note—Construction and operation related to a development are carried out in accordance with an operational management plan where appropriate. This plan can form an amendment to an existing approved management plan for the site.	No acceptable outcome is nominated.	**Complies –** during construction and operation of development, the potential impacts on environmentally significant areas will be monitored and appropriately managed. *Refer to Appendix D - Assessment & Mitigation of Impacts to MES.*
PO11 Development adjoining a national park or other land in a protected area estate: a. maintains and where appropriate, improves access to a protected area estate; and b. maintains a buffer to a protected area estate in accordance with minimum best practice standards and includes characteristics to avoid development impacts. Editor's note—Protected area estate includes the following classes, as defined in the Nature Conservation Act 1992: a. national park (scientific); b. national parks; c. national parks (Aboriginal land); d. national parks (Torres Strait Islander); e. national parks (Cape York Peninsula Aboriginal land); f. national parks (recovery); g. conservation parks; h. resource reserves; i. nature refuges; j. coordinated conservation area; k. wilderness areas; l. World Heritage management areas; and m. international agreement areas.	No acceptable outcome is nominated.	**Not applicable –** development is not directly adjoining a national park.
PO12 Management arrangements facilitate the effective conservation and protection of matters of national, state or local environmental significance, ecological processes and biodiversity values.	**AO12.1** Areas supporting matters of national, state or local significance features, biodiversity values or ecological processes are: a. transferred into public ownership where the land is required for public access or for some other	**Not applicable –** development is not an area supporting matters of national, state or local significance features, biodiversity values or ecological processes.

	public purpose consistent with its ecological, open space or recreation functions, including: (i) access for maintenance; (ii) linking core and remnant habitat areas; (iii) protecting water quality and ecological processes; and (iv) other public benefit; or b. incorporated within private open space and included within a voluntary statutory covenant that is registered under the Land Title Act 1994. Editor's note—Matters of national, state or local environmental significance include all areas shown on all biodiversity overlay maps.	
Rehabilitation		
PO13 Areas degraded as a result of development are rehabilitated by the proponent as near as is practical to the naturally occurring suite of native plant species and ecological communities. Editor's note—A rehabilitation plan supported by expert ecological advice prepared in accordance with SC6.8 — Ecological assessment planning scheme policy as well as reference to SC6.12 — Landscape design and street trees planning scheme policy will assist in demonstrating achievement of this performance outcome.	No acceptable outcome is nominated.	**Complies –** any areas that may be degraded as a result of the development will be rehabilitated as necessary.
Reconfiguring a lot		
PO14 The ecological function and biodiversity values of existing habitat are maintained by ensuring that reconfiguring a lot does not result in the fragmentation of habitat.	**AO14.1** Reconfiguring a lot does not result in any additional lots where the entire site is subject to: a. matters of state or local (high) environmental significance; or b. biodiversity corridors and wildlife habitats; or c. waterways and wetlands. **AND** **AO14.2** Roads created as the result of reconfiguring a lot are located between the riparian corridor and any additional lots created.	**Not applicable –** development does not involve reconfiguring a lot.

8.2.4.3.1 Bushfire hazard overlay code

Performance outcome	Acceptable outcome	
Access		
PO1 Development ensures that the location, siting, and design of development and associated driveways and access routes: a. avoid potential for entrapment during a bushfire; b. facilitate safe and efficient emergency services to access and egress the site during a bushfire; and c. enables safe evacuation of the site during a bushfire for site occupants.	**AO1.1** AO1.1.1 Where the development is located in an urban area, the development: a. has direct access to a constructed, all-weather, public road capable of carrying emergency service vehicles; b. has a maximum single access driveway length of sixty (60) metres from the street to the development; and c. access driveways have a maximum gradient of 12.5 per cent. OR AO1.1.2 Where the development is located in a non-urban area, the development: a. has direct access to a constructed, all-weather, public road capable of carrying emergency service vehicles; b. is separated from hazardous vegetation by a public road or fire trail with a minimum width of four (4) metres and at least six (6) metres clear of vegetation, with a minimum of 4.8 metres vertical clearance and a maximum gradient of 12.5 per cent; and c. has: (i) a maximum single access driveway length of sixty (60) metres from the street to the development; or (ii) access driveways that are greater than sixty (60) metres from the street to the dwelling provide a turning circle with a minimum radius of eight (8) metres every sixty (60) metres.	**Complies –** the development will have direct access to an appropriate road via an extension to Jim Goldston Avenue (Urban Access Place).
Water supply for fire fighting purposes		
PO2 Development provides adequate and accessible water supply for fire fighting purposes which is safely located and freely accessible for fire fighting.	**AO2.1** AO2.1.1 In a reticulated water supply area fire hydrants in: a. residential areas are above ground single outlet fire hydrants and provided at not less than eighty (80) metre intervals and at each street intersection; and Editor's note—To remove any doubt, these intervals also apply to common access ways within a common private title. b. commercial and industrial areas are above or below ground fire hydrants	

	and provided at not less than ninety (90) metre intervals and at each street intersection. Above ground fire hydrants are to be fitted with dual valve outlets in these areas. Editor's note—Fire hydrants are designed and installed in accordance with Australian Standard 2419.1 Fire hydrant installations – system design, installation and commissioning, unless specified by the relevant water entity. OR AO2.1.2 Where a reticulated water supply is not available or the development is not within eighty (80) metres of a hydrant, a water tank is provided within ten (10) metres of the building or structure, and the water tank has: a. a take-off connection from the building to the tank which is at a level that provides on-site water storage of not less than the water requirement outlined in Table 8.2.4.3.3; b. a hardstand area allowing heavy rigid fire appliance access within six (6) metres of a tank; and c. fire brigade tank fittings consisting of: (i) for above ground tanks, (A) fifty (50) millimetre ball valve and male camlock coupling; and (B) above ground water pipe fittings that are metal; or (ii) for underground tanks, an access hole of 200 millimetre diameter (minimum) to allow access for suction lines. Note—Plastic tanks are not recommended, however if they are fully submerged with above ground access points they are acceptable. Note—Where water tanks are required, swimming pools, creeks and dams should not be used as a substitute for a dedicated static supply as these sources of water are not reliable during drought conditions.	**Complies –** a water tank will be provided that meets the stated requirements. *Refer to Appendix E – Bushfire Management Plan.*
Activities involving hazardous materials		
PO3 Public safety and the environment are not adversely affected by the impacts of bushfire on hazardous materials.	**AO3.1** Development does not involve the manufacture or storage of hazardous materials within a bushfire hazard area. Editor's note—Refer to the Work Health and Safety Act 2011 and associated regulation, the Environmental Protection Act 1994 and the relevant building assessment provisions under the Building Act 1975 for requirements related to the manufacture and storage of hazardous substances.	**Complies –** development does not involve the manufacture or storage of hazardous materials.
Development within the high and very high bushfire hazard areas		
Avoiding the hazard		
PO4	**AO4.1**	**Complies with PO4 –** the development

The development is compatible with the level of risk associated with the bushfire hazard.	The development has a Bushfire Attack Level of less than 12.5. Editor's note—The Bushfire Attack Level is calculated in accordance with the methodology described in the Australian Standard AS 3959 — Construction of buildings in bushfire prone areas.	will have appropriate Asset Protection Zones for the identified Bushfire Attack Level. *Refer to Appendix E – Bushfire Management Plan.*
Land use		
PO5 Essential community infrastructure and community facilities are highly vulnerable development are located, designed and sited to: a. protect the safety of people during a bushfire; b. not increase the exposure of people to the risk from a bushfire event; c. minimise the risk to vulnerable populations; and d. ensure essential community infrastructure can function effectively during and immediately after bushfire events.	**AO5.1** The following uses are not located in high or very high bushfire hazard areas: a. childcare centre; b. detention facility; c. educational establishment; d. emergency services; e. hospital; f. industrial use involving manufacture or storage of hazardous materials; g. multiple dwelling; h. outstation; i. relocatable home park; j. residential care facility; k. retirement facility; l. rooming accommodation; m. shopping centre; n. short-term accommodation; o. telecommunications facility; p. tourist park; q. tourist attraction; r. transport depot; and s. utility installation.	**Complies –** development is for a dwelling house.
Reconfiguring a lot		
General		
PO6 Where reconfiguration is undertaken a separation distance from hazardous vegetation is provided. Editor's note—The preparation of a bushfire management plan in accordance with SC6.5 — Bushfire management planning scheme policy can assist in demonstrating compliance with this performance outcome.	**AO6.1** In urban areas lots are separated from hazardous vegetation by a distance: a. that achieves a Bushfire Attack Level of twenty-nine (29) or less at all boundaries; and b. is contained wholly within the development site. **OR** **AO6.2** In non-urban areas a building envelope of reasonable dimensions is provided on each lot which achieves a Bushfire Attack Level of twenty-nine (29) or less at all boundaries Editor's note—Where a separation distance is proposed to be achieved by utilising existing cleared developed areas external to the site, certainty must be established (through tenure or other means) that the land will remain cleared of hazardous vegetation. For staged developments, temporary separation distances, perimeter roads or fire trails may be absorbed as part of subsequent stages.	**Not applicable –** development does not involve reconfiguring a lot.
PO7	**AO7.1**	**Not applicable**

In urban areas development includes a constructed perimeter road between the lots and hazardous vegetation with reticulated water supply. The access is available for both fire fighting and maintenance works.	In urban areas lot boundaries are separated from hazardous vegetation by a public road which: a. has a two lane sealed carriageway; b. contains a reticulated water supply; c. is connected to other public roads at both ends and at intervals of no more than 500 metres; d. accommodates geometry and turning radii in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; e. has a minimum of 4.8 metres vertical clearance above the road; f. is designed to ensure hydrants and water access points are not located within parking bay allocations; and g. incorporates roll-over kerbing.	
PO8 In non-urban areas development includes a perimeter road or an all-weather fire access trail which is available for both fire fighting and maintenance/hazard reduction works.	**AO8.1** In non-urban areas the development includes a perimeter road or an all-weather fire access trail which: a. separates the development from the hazardous vegetation with a width of at least twenty (20) metres; b. with a minimum formed width of four (4) metres; c. a minimum of 4.8 metres vertical clearance above the road; d. has a turning circle with a minimum radius of eight (8) metres every sixty (60) metres; e. has adequate drainage and erosion control devices; f. has a gradient no greater than 12.5 per cent and a cross fall of no greater than ten (10) degrees; g. has access at each end of the perimeter road or the fire trail from a public road; h. has the access point signed and direction of travel identified; and i. has a suitable arrangement in place to ensure maintenance in perpetuity.	**Not applicable**
PO9 Road widths and construction within the development are adequate for fire emergency vehicles.	No acceptable outcome is nominated.	**Not applicable**
Emergency services access		
PO10 Development facilitates the safe and efficient access and egress of emergency services during a bushfire event.	**AO10.1** The development includes a perimeter road or a fire access trail which: a. separates the development from the hazardous vegetation; b. is a minimum of ten (10) metres in width, with a minimum formed width of four (4) metres;	**Not applicable**

	c. is a minimum of six (6) metres clear of standing flammable vegetation; d. has passing bays twenty (20) metres long by three (3) metres extra trail width, or turning facilities every 200 metres; e. has adequate drainage and erosion control devices; f. has a gradient no greater than 12.5 per cent and a cross fall of no greater than ten (10) degrees; g. has access at each end of the perimeter road or the fire trail from a public road; h. has the access point signed and direction of travel identified; and i. has suitable arrangements in place to ensure maintenance in perpetuity.	
Avoiding the hazard		
PO11 Road widths and construction within the development are adequate for fire emergency vehicles to gain access to a safe working area close to dwellings and near water supplies whether or not on-street parking spaces are occupied.	**AO11.1** Road access minimum clearances of 3.5 metres wide and 4.8 metres high are provided for safe passage of emergency vehicles. Editor's note—For further information on how to address the above criteria please see Queensland Fire and Emergency Service: Fire hydrant and vehicle access guidelines for residential, commercial and industrial lots.	**Not applicable**
PO12 Hydrants are suitably identified so that fire services can locate them at all hours.	**AO12.1** Hydrants are identified as specified in Queensland Fire and Emergency Service: Fire hydrant and vehicle access guidelines for residential, commercial and industrial lots. Editor's note—Fire hydrants are designed and installed in accordance with Australian Standard 2419.1 Fire hydrant installations – system design, installation and commissioning, unless specified by the relevant water entity.	**Not applicable**

8.2.11.3.1 Steep land overlay code

Performance outcomes	Acceptable outcomes	Assessment
All development		
PO1 Development incorporates design measures for the development (including ancillary buildings, structures and swimming pools) to ensure: (a) the long-term stability of the site considering the full nature and end use of the development; (b) site stability during all phases of construction and development; (c) people and property are protected from a potential landslide event; and (d) adjoining properties are not impacted by a potential landslide event.	No acceptable outcome is nominated. Editor's note—The preparation of a site specific geotechnical assessment report or landslide risk assessment in accordance with SC6.11 — Geotechnical report planning scheme policy can assist in demonstrating compliance with this acceptable outcome.	**Complies –** the development is located in the areas least impacted by the steep land overlay. Refer to *Appendix F – Concept Civil Works.*
PO2 Vegetation clearing on site does not increase the risk of a landslide event occurring.	No acceptable outcome is nominated. Editor's note—The preparation of a site specific geotechnical assessment report or landslide risk assessment in accordance with SC6.11 — Geotechnical report planning scheme policy can assist in demonstrating compliance with this acceptable outcome.	**Complies –** development only involves clearing of regrowth vegetation which will have minimal impact on landslide risk. Refer to *Appendix D– Assessment & Mitigation of Impacts to MES and* Refer to *Appendix F – Concept Civil Works.*
PO3 Development involving the manufacture or storage of hazardous materials in bulk is not at risk from a landslide event.	**AO3.1** The manufacture or storage of hazardous materials in bulk does not occur within the steep land overlay area.	**Complies –** development does not involve the storage of hazardous materials.
PO4 Emergency services and community uses are able to function effectively during and immediately after landslide events.	No acceptable outcome is nominated.	**Complies –** the access driveway will be constructed and sealed to ensure it is operational during and immediately after a landslide event.
Reconfiguring a lot		
PO5 Development ensures that on all new lots: (a) future building location is not located on part of the site subject to a potential landslide; (b) the need for excessive work or changes to the finished	**AO5.1** When a development footprint has a slope of, or greater than fifteen (15) per cent, each new lot has a minimum size and road frontage in accordance with Table 8.2.11.3.2. Note—The minimum lot size and road frontage stated in Table 8.2.11.3.2 prevails over the	**Not applicable –** development does not involve reconfiguring a lot.

Performance outcomes	Acceptable outcomes	Assessment
landform to construct a building or vehicular access route within the development envelope nominated is avoided; and (c) future building will not be adversely affected by, or be at unacceptable risk from, landslide activity originating on sloping land above the site. Editor's note—The preparation of a site specific geotechnical assessment report or landslide risk assessment in accordance with SC6.11 — Geotechnical report planning scheme policy can assist in demonstrating compliance with this performance outcome.	reconfiguring a lot code to the extent of any inconsistency. **AND** **AO5.2** The development has: (a) a frontage to a formed road; and (b) any section of a driveway or road internal to a site is not steeper than twenty-five (25) per cent.	**Not applicable**
Operational works		
PO6 Filling and excavation does not: (a) occur on land that has a slope greater than or equal to fifteen (15) percent; and (b) alter the existing flow of surface water or groundwater on the site.	No acceptable outcome is nominated. Editor's note—The preparation of a site specific geotechnical assessment report or landslide risk assessment in accordance with SC6.11 — Geotechnical report planning scheme policy can assist in demonstrating compliance with this acceptable outcome.	**Complies in part –** excavation occurs within the flattest section of the site in the western corner. Only small sections of land within the Steep Land overlay are impacted. Refer to *Appendix F – Concept Civil Works.*

9.3.1.3.1 Access, parking and transport code

Performance outcomes	Acceptable outcomes	
Access driveways		
PO1 Access driveways are located to avoid conflicts and designed to operate efficiently and safely, taking into account: (a) the size of the parking area; (b) the volume, frequency and type of vehicle traffic; (c) the need for some land uses (for example hospitals) to accommodate emergency vehicle access; (d) the type of use and the implications on parking and circulation, for example long-term or short-term car parking; (e) frontage road function and conditions; and (f) the capacity and function of the adjoining street system.	**AO1.1** Access driveways are not located within: (a) twenty–five (25) metres of a signalised road intersection; (b) twenty (20) metres of an un-signalised road intersection in an industrial or centres zone or ten (10) metres otherwise; and (c) one (1) metre of any street signage, power poles, street lights, manholes, stormwater gully pits or other Council asset.	**Complies** - The proposed access driveways are not located next to street intersections nor any Council asset.
PO2 Access driveways do not disrupt existing road or footpath infrastructure.	**AO2.1** Access driveways: (a) do not require the modification, relocation or removal of any infrastructure including street trees, fire hydrants, water meters and street signs; (b) do not front a traffic island, speed control device, car parking bay, bus stop or other infrastructure within the road carriageway; (c) must be sealed and to a formed road; (d) are not constructed over an access point to equipment under the control of a regulatory authority, including storm water pits, water meters, hydrants and telephone pits; and (e) are raised or lowered to match the surface level of the driveway, where an access chamber is to be incorporated within the driveway.	**Complies** - The proposed access arrangements are located along Jim Goldston Avenue and do not involve the relocation of existing street trees or infrastructure and are appropriately sealed.
PO3 Access driveways are designed and constructed so as to: (a) enable safe and functional vehicular access from the street to the property; and not cause a change in the level of a footpath.	**AO3.1** Access driveways are constructed in compliance with the Capricorn Municipal Development Guidelines.	**Complies** - The proposed driveways are designed according to the Capricorn Municipal Development Guidelines. Refer to *Appendix F – Concept Civil Works.*

PO4 A driveway does not allow water to pond adjacent to any buildings or cause water to enter a building.	**AO4.1** A driveway has a minimum cross fall of one (1) metre (vertical) to 100 metres (horizontal) away from all adjoining buildings.	**Complies** – The cross fall of all access points will comply with the minimum requirements.
Parking		
PO5 Provision is made for on-site vehicle parking: (a) to meet the demand likely to be generated by the development; and (b) to avoid on-street parking where that would adversely impact on the safety or capacity of the road network or unduly impact on local amenity. Editor's note—SC6.6 — Car parking contributions planning scheme policy prescribes circumstances under which an applicant can satisfy PO5.	**AO5.1** AO5.1.1 On-site car parking is provided at the rates set out in Table 9.3.1.3.2 of the access, parking and transport code. OR AO5.1.2 Where a change of use of existing premises is proposed and there is no increase in the gross floor area, the existing number of on-site car parks is retained or increased. **AND** **AO5.2** All parking, loading and manoeuvring facilities for visitors and employees to be located on-site. **AND** **AO5.3** Manoeuvring facilities to be of adequate dimensions to prevent any queuing in a roadway.	**Complies –** The proposed dwelling house will provide a two-car garage space and additional parking outside. **Complies** – All parking, loading and manoeuvring facilities are located onsite. **Complies** – All manoeuvring facilities are of an adequate dimension to avoid queuing within the transport network.
PO6 Parking and servicing facilities are designed to meet user requirements.	**AO6.1** Parking spaces, access and manoeuvring facilities, loading facilities and connections to the transport network are sealed and designed in accordance with Australian Standard AS 2890.	**Complies** – All parking spaces, access and manoeuvring facilities are designed in accordance with relevant standards.
PO7 Sites with more than one (1) road frontage (excluding laneways) gain access only from the lower order road, except if it will introduce traffic generated by a non–residential use into a street that is in a residential zone.	No acceptable outcome is nominated.	**Complies –** The subject site has several road frontages, all of which are either Urban Access Place or Urban Access Street roads. The development will gain access through an extension to Jim Goldston Avenue (Urban Access Place).

PO8 Parking areas are illuminated in a manner that maximises user safety but minimises the impacts on adjoining residents.	**AO8.1** Parking areas for uses that operate at night are illuminated in accordance with the requirements of Australian Standard AS 1158. **AND** **AO8.2** Lighting used in parking areas does not cause an environmental nuisance and complies with Australian Standard AS 4282.	**Not applicable –** development is a dwelling house. **Not applicable –** development is a dwelling house.
PO9 Car parking areas, pathways and other elements of the transport network are designed to enhance public safety by discouraging crime and antisocial behaviour, having regard to: (a) provision of opportunities for casual surveillance; (b) the use of fencing to define public and private spaces, whilst allowing for appropriate sightlines; (c) minimising potential concealment points and assault locations; (d) minimising opportunities for graffiti and other vandalism; and (e) restricting unlawful access to buildings and between buildings.	No acceptable outcome is nominated.	**Not applicable –** development is a dwelling house.
PO10 Parking and servicing areas are kept accessible and available for their intended use at all times during the normal business hours of the activity.	No acceptable outcome is nominated.	**Not applicable –** development is for a dwelling house.
Transport Impact		
PO11 Development contributes to the creation of a transport network which is designed to: (a) achieve a high level of permeability and connectivity for all modes of transport, including pedestrians and cyclists, within the development and to the surrounding area; and (b) encourage people to walk, cycle or use public transport to and from the site instead of using a car.	No acceptable outcome is nominated. Editor's note—Refer to SC6.19 – Structure plan planning scheme policy for guidance.	**Complies** – The subject site is located near an established urban area and does not negatively impact the surrounding transport network.
PO12 Development is located on roads that are appropriate for the nature	**AO12.1** Traffic generated by the development is safely accommodated within the	**Complies** – The proposed development is

of traffic (including vehicles, pedestrians and cyclists) generated, having regard to the safety and efficiency of the transport network.	design capacity of roads as provided in SC6.15 — Road infrastructure and hierarchy planning scheme policy. **AND** **AO12.2** A road or street does not connect with another road or street that is more than two (2) levels higher or lower in the road hierarchy. **AND** **AO12.3** The existing infrastructure fronting the proposed development is upgraded in accordance with SC6.15 — Road infrastructure and hierarchy planning scheme policy and Capricorn Municipal Development Guidelines.	small scale and does not generate substantial traffic numbers. **Complies** **Complies –** The subject site is located adjacent to an established urban area and will utilise an extension of Jim Goldston Avenue.
PO13 Where the nature of the development creates a demand, provision is made for set down and pick-up facilities by bus, taxis or private vehicle, which: (a) are safe for pedestrians and vehicles; (b) are conveniently connected to the main component of the development by pedestrian pathway; and (c) provide for pedestrian priority and clear sightlines.	No acceptable outcome is nominated.	**Complies** – The proposed development is small scale and does not create a demand for such facilities.
Site access		
PO14 Development does not impact on the safety, operation or function of the road network or system.	**AO14.1** Vehicle manoeuvring into and from the site for all vehicles is designed in accordance with Australian Standard AS 2890, as updated from time to time. **AND** **AO14.2** No direct property access is gained to a highway, main road, urban arterial or sub arterial road as defined in SC6.15 — Road infrastructure and hierarchy planning scheme policy other than via a service road or a joint access arrangement with other sites. **AND** **AO14.3**	**Complies** – All vehicle manoeuvring into and from the site does not negatively impact the safety of local road users. **Complies** – The subject site will be accessed via Jim Goldston Avenue, an Urban Access Place. **Not applicable**

	Development that generates greater than 100 vehicle movements per day does not gain access to or from an urban access place or urban access streets as defined in SC6.15 — Road infrastructure and hierarchy planning scheme policy.	
PO15 Development facilitates the orderly provision and upgrading of the transport network or contributes to the construction of transport network improvements.	No acceptable outcome is nominated.	**Complies** – Upgrade to surrounding transport network is not required as part of the development.
PO16 On-site transport network infrastructure integrates safely and effectively with surrounding networks.	**AO16.1** Intersections, connections and access arrangements are designed in accordance with the Capricorn Municipal Development Guidelines and Australian Standard AS 2890.	**Complies –** The proposal does not involve the construction of transport network infrastructure.
Pedestrian and cyclist facilities		
PO17 Development provides safe and convenient pedestrian and cycle movement to the site and within the site having regard to desire lines, users' needs, safety and legibility.	**AO17.1** Pedestrian and cyclist movements are designed in compliance with the Capricorn Municipal Development Guidelines and Australian Standard AS 2890.	**Complies –** All pedestrian and cyclist movements generated from the development are designed in compliance with relevant requirements.
PO18 Provision is made for adequate bicycle parking and end of trip facilities, to meet the likely needs of users and encourage cycle travel.	No acceptable outcome is nominated.	**Complies –** The development provides sufficient space for bicycle parking areas.
Servicing		
PO19 Refuse collection vehicles are able to safely access on-site refuse collection facilities.	**AO19.1** Refuse collection areas are provided and designed in accordance with the waste management code and Australian Standard AS 2890.	**Complies –** The proposed development has a designated refuse collection area designed according to the Australian Standard AS 2890.

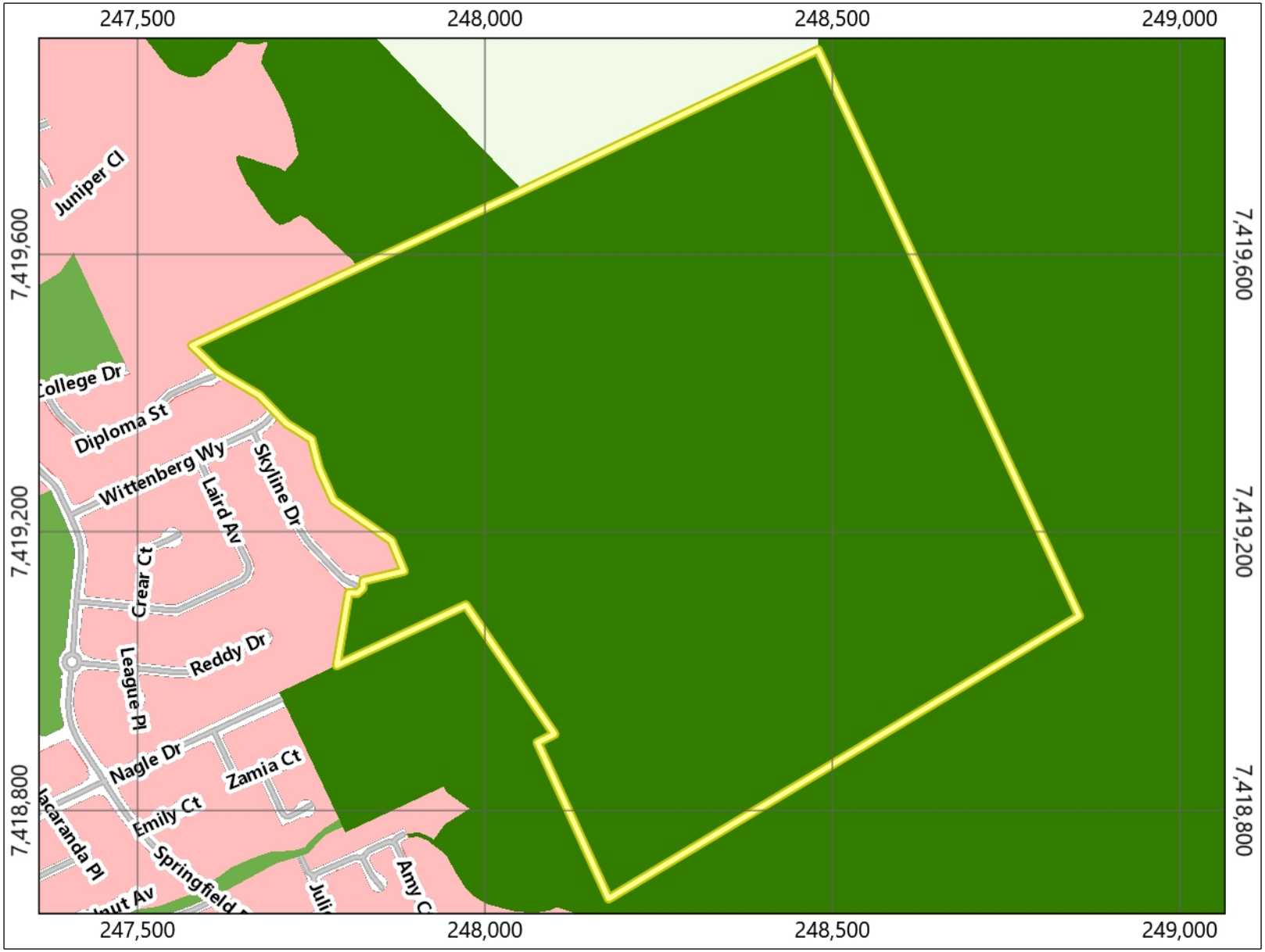
Zones

Spatial reference

GDA2020_MGA_Zone_56

A4 Page scale at 1: 8,500.00

Printed from RRPS on 29/11/23



Legend

- Precincts Text
- Precincts
- Sub Precincts
- Priority Development Area
- Strategic Port Land
- Zones
  - Low density residential
  - Low-medium density residential
  - High density residential
  - Principal centre
  - Major centre
  - District centre
  - Local centre
  - Neighbourhood centre
  - Sport and recreation
  - Open space
  - Environmental management and conservation
  - Low impact industry
  - Medium impact industry
  - High impact industry
  - Special industry
  - Waterfront and marine industry
  - Community facilities
  - Emerging communities
  - Limited development (constrained land)
  - Rural
  - Rural residential
  - Special purpose
  - Specialised centre
  - Township
- Roads2
  - Main roads
  - Major council roads
  - Standard council roads
  - Access roads
  - Private roads
- Easements
- Property Parcels
- Ocean
- CQ LGA Boundaries

GDA 2020

Rockhampton Regional Council

Biodiversity

Spatial reference

GDA2020_MGA_Zone_56

A4 Page scale at 1: 8,500.00

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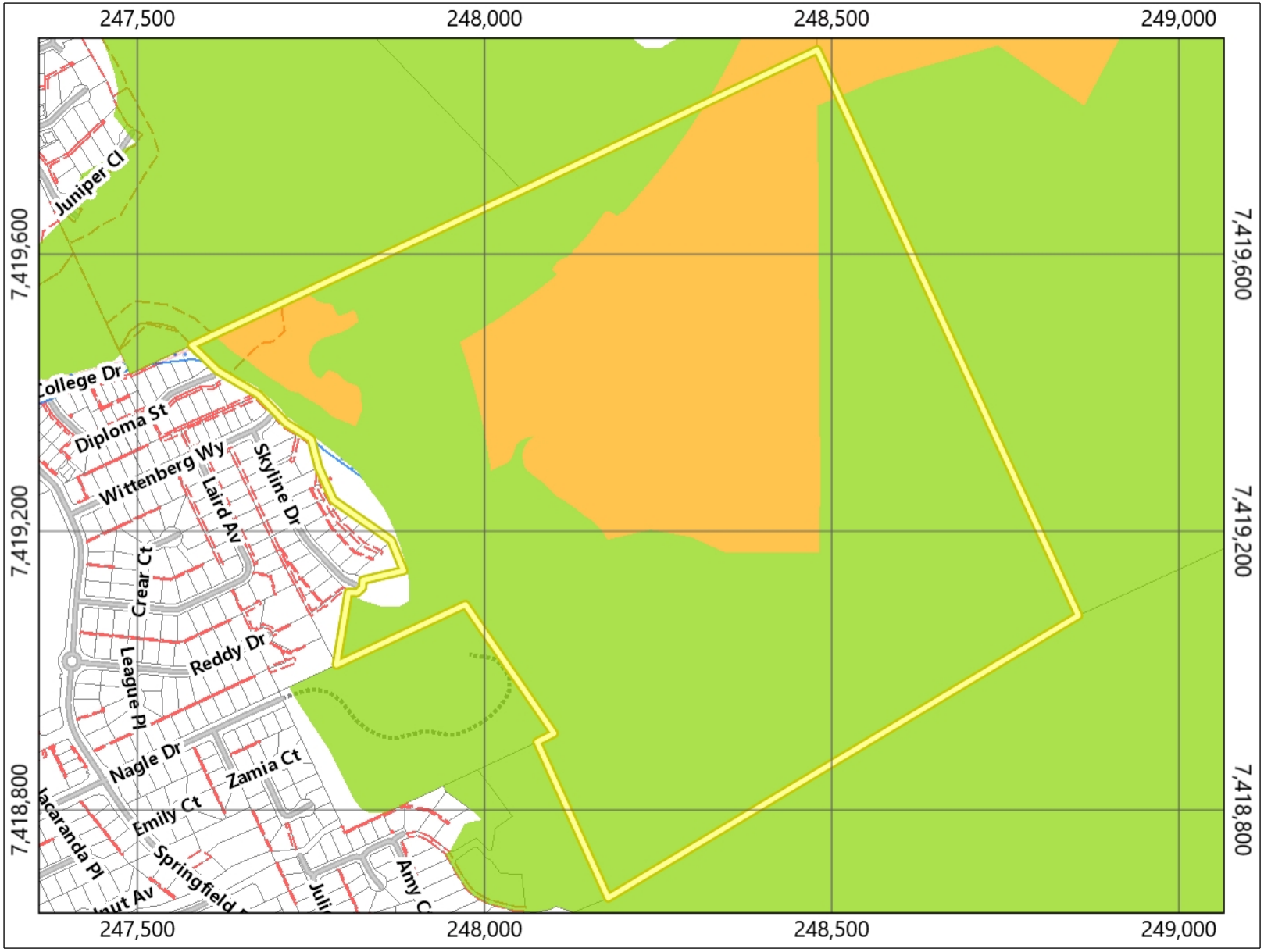


Legend

- Biodiversity Areas
  - MSES
  - MLES - High
  - MLES - General
- Corridors and Wildlife Habitats
  - Biodiversity Corridors
  - MSES - Wildlife Habitat
- Waterways
  - MSES - Waterways
  - Waterways
- Wetlands
- Roads2
  - Main roads
  - Major council roads
  - Standard council roads
  - Access roads
  - Private roads
- Easements
- Property Parcels
- Ocean
- CQ LGA Boundaries

GDA 2020

Rockhampton Regional Council

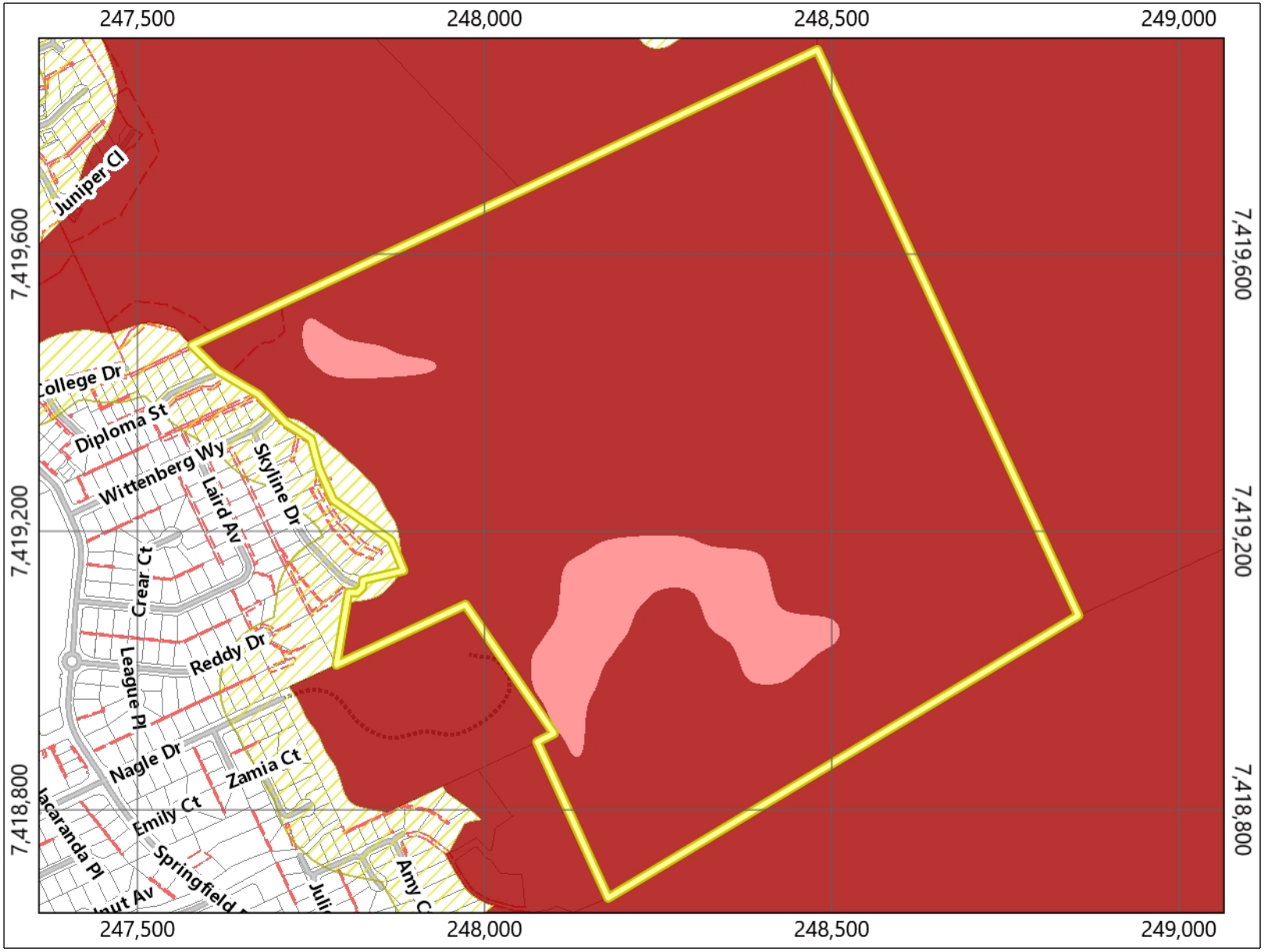
Bushfire Hazard

Spatial reference

GDA2020_MGA_Zone_56

A4 Page scale at 1: 8,500.00

Printed from RRPS on 29/11/23



Legend

Bushfire Hazard Classification
- Very High
- High
- Medium

Buffer

Roads2
- Main roads
- Major council roads
- Standard council roads
- Access roads
- Private roads

Easements

Property Parcels

Ocean

CQ LGA Boundaries

GDA 2020

Rockhampton Regional Council

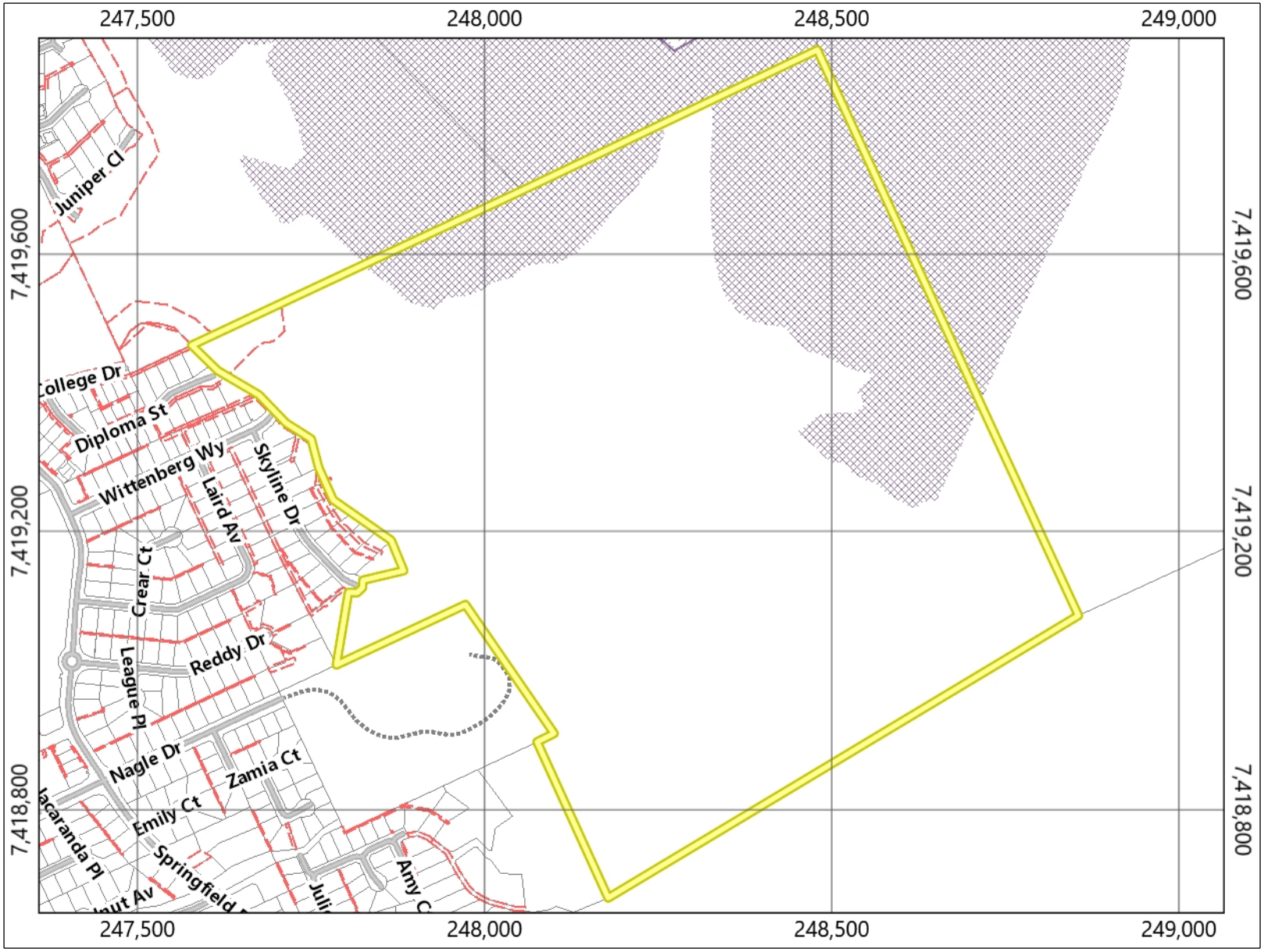
Extractive Resources

Spatial reference

GDA2020_MGA_Zone_56

A4 Page scale at 1: 8,500.00

Printed from RRPS on 29/11/23



Legend

- Extractive Resource Areas
  - Transport Route Seperation Area
  - Resource Processing Area
  - Seperation Area
- Transport Route Roads2
  - Main roads
  - Major council roads
  - Standard council roads
  - Access roads
  - Private roads
- Easements
- Property Parcels
- Ocean
- CQ LGA Boundaries

GDA 2020

Rockhampton Regional Council

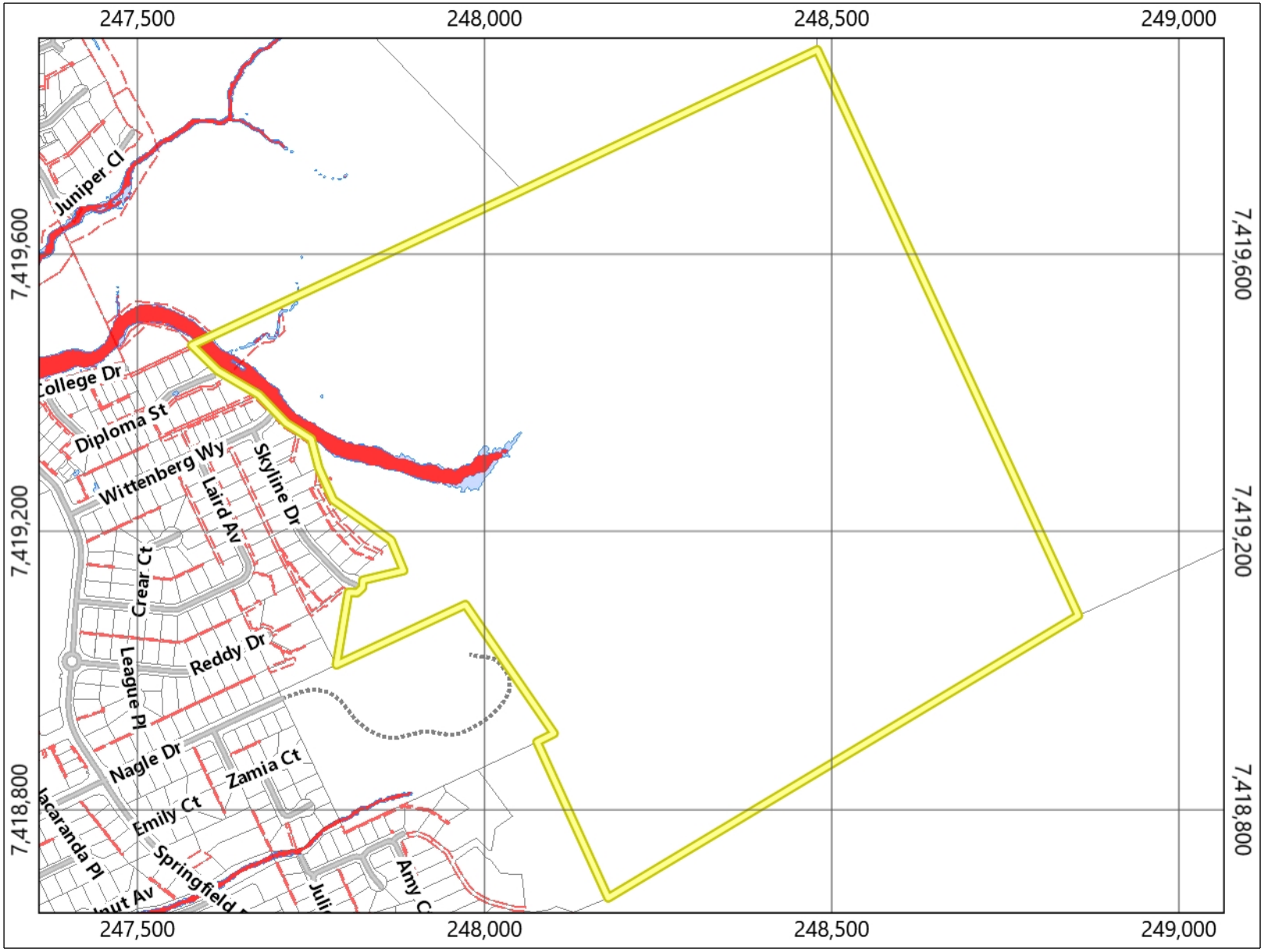
Flood Hazard

Spatial reference

GDA2020_MGA_Zone_56

A4 Page scale at 1: 8,500.00

Printed from RRPS on 29/11/23



Legend

- Planning Area 1
- Planning Area 2
- Roads2
  - Main roads
  - Major council roads
  - Standard council roads
  - Access roads
  - Private roads
- Easements
- Property Parcels
- Ocean
- CQ LGA Boundaries

GDA 2020

Rockhampton Regional Council

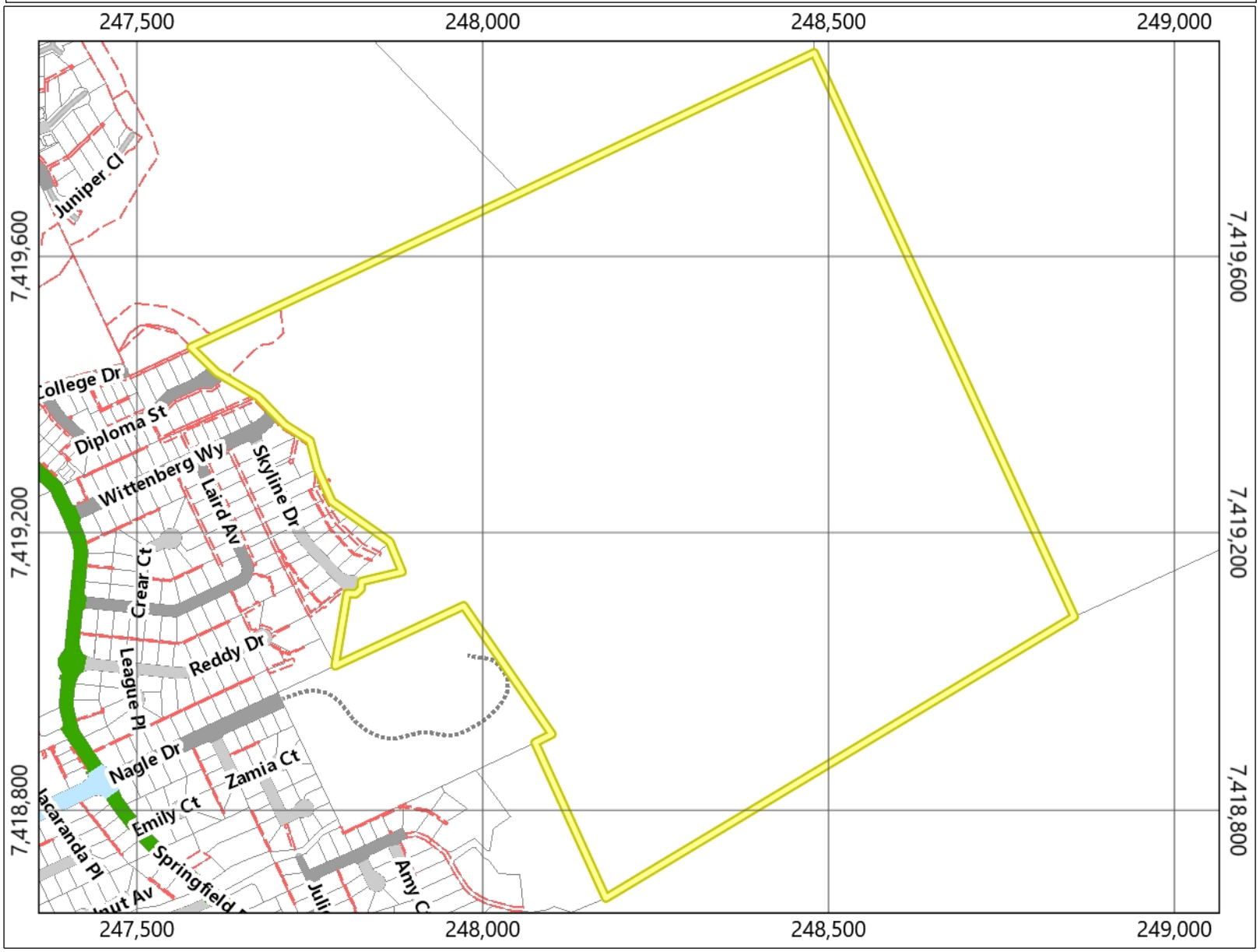
Road Hierarchy

Spatial reference

GDA2020_MGA_Zone_56

A4 Page scale at 1: 8,500.00

Printed from RRPS on 29/11/23



Legend

Road Hierarchy
- Highway
- State Controlled Road
- Urban Arterial
- Urban Sub-Arterial
- Major Urban Collector
- Minor Urban Collector
- Urban Access Street
- Urban Access Place
- Industrial Collector
- Industrial Access
- Rural Arterial
- Major Rural Collector
- Minor Rural Collector
- Rural Access

Roads2
- Main roads
- Major council roads
- Standard council roads
- Access roads
- Private roads

- Easements
- Property Parcels
- Ocean
- CQ LGA Boundaries

GDA 2020

Rockhampton Regional Council

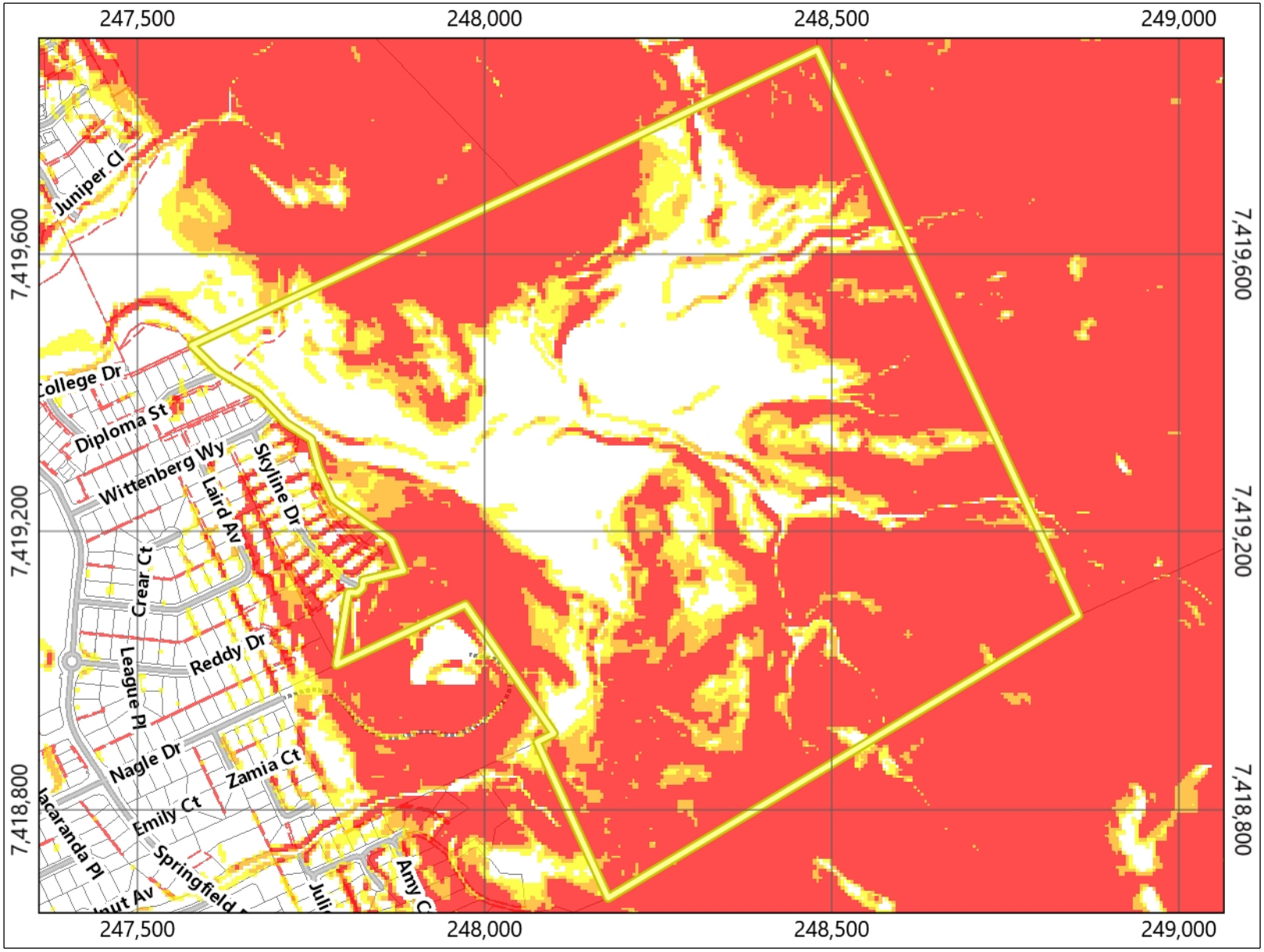
Steep Land

Spatial reference

GDA2020_MGA_Zone_56

A4 Page scale at 1: 8,500.00

Printed from RRPS on 29/11/23



Legend

Slope %
- 15-20%
- 20-25%
- 25%+

Roads2
- Main roads
- Major council roads
- Standard council roads
- Access roads
- Private roads

Easements

Property Parcels

Ocean

CQ LGA Boundaries

GDA 2020

Rockhampton Regional Council

State Assessment and Referral Agency

Date: 25/08/2021

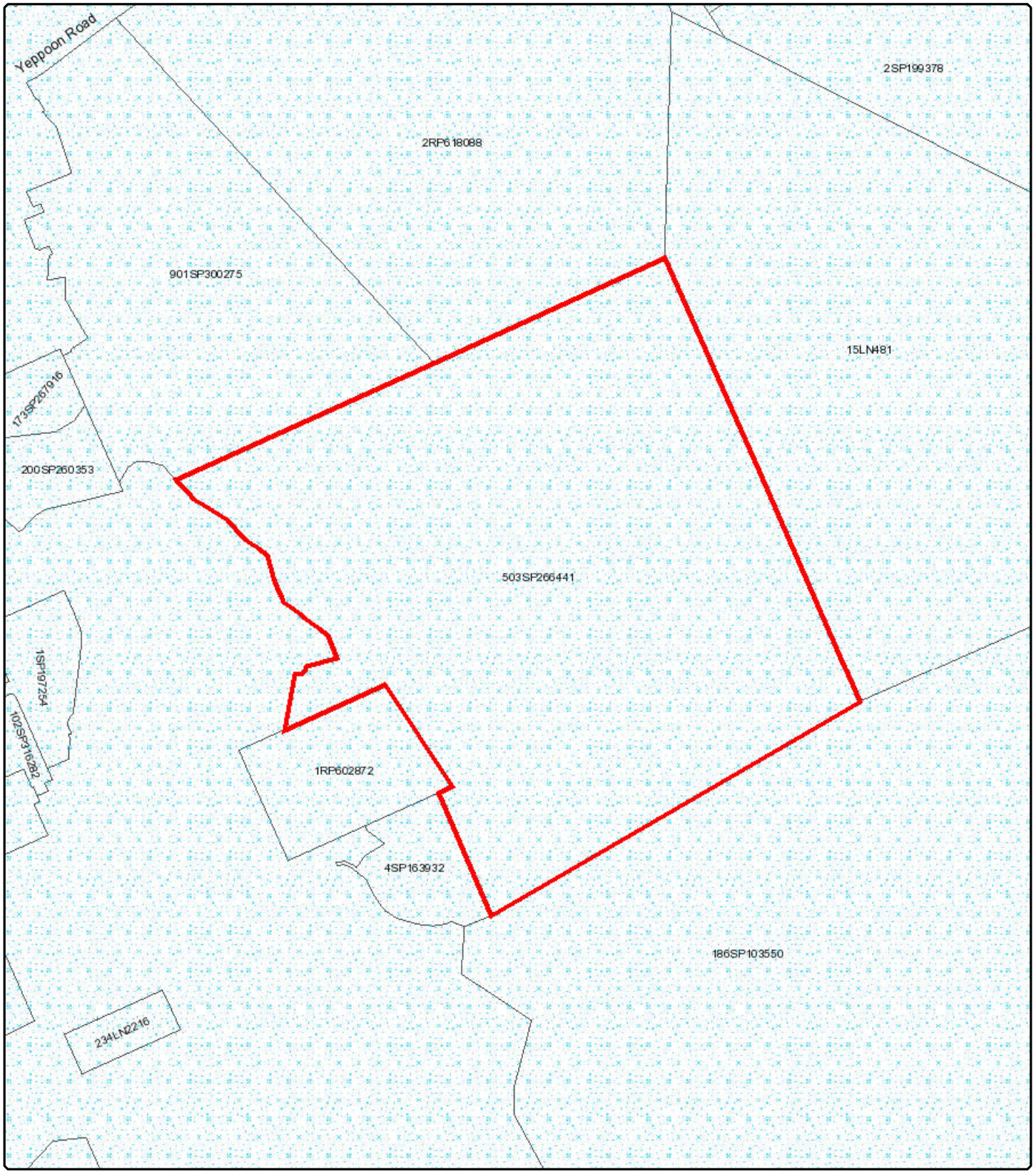
Queensland Government

Matters of Interest for all selected Lot Plans

Queensland waterways for waterway barrier works
Water resource planning area boundaries
Regulated vegetation management map (Category A and B extract)

Matters of Interest by Lot Plan

Lot Plan: 503SP266441 (Area: 800800 m^2)
Queensland waterways for waterway barrier works
Water resource planning area boundaries
Regulated vegetation management map (Category A and B extract)



State Assessment and Referral Agency

Date: 25/08/2021

Queensland Government

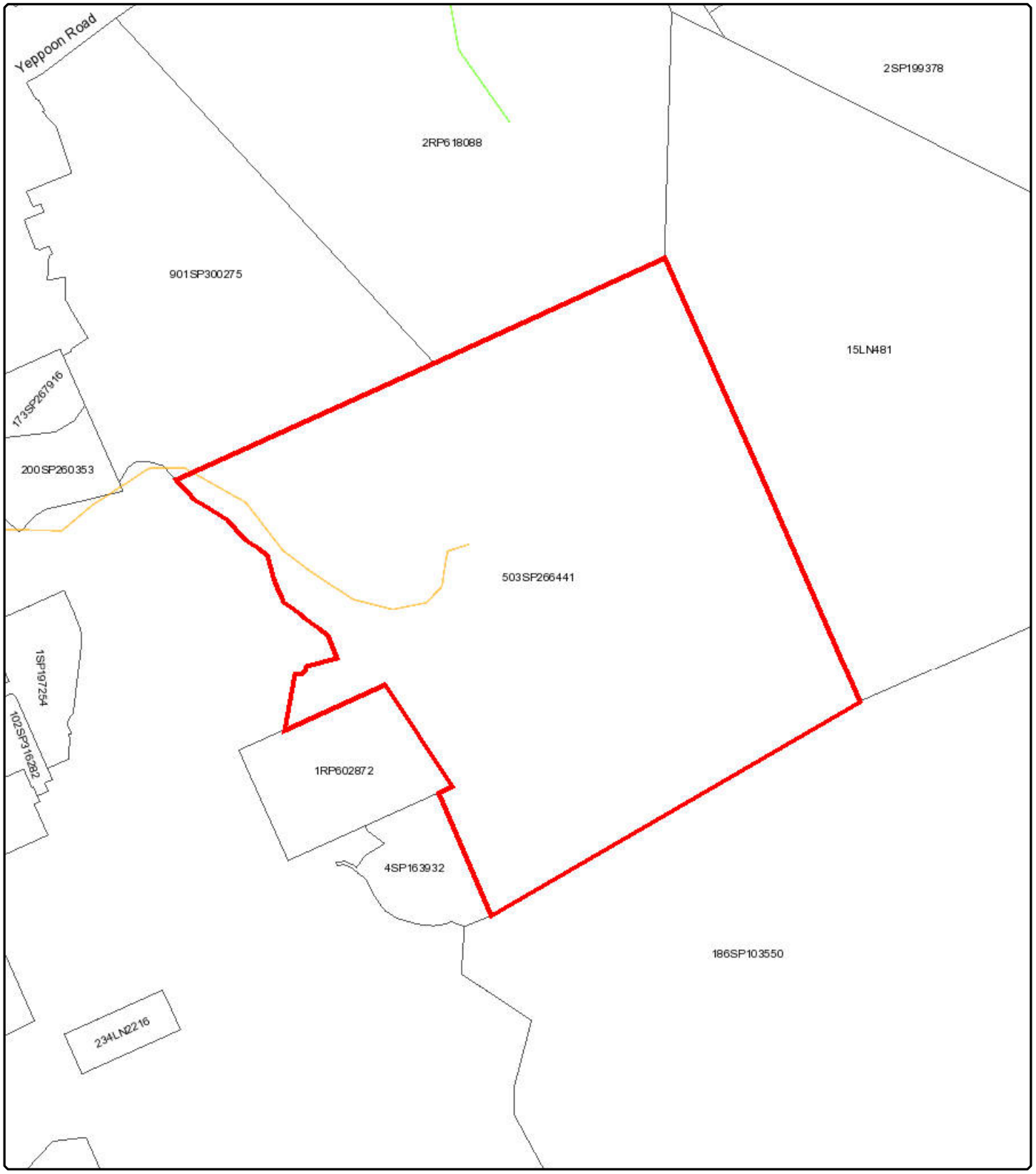
Legend

Water resource planning area boundaries

Water resource planning area boundaries

0 190 380 570 760

Metres



State Assessment and Referral Agency

Date: 25/08/2021

Queensland Government

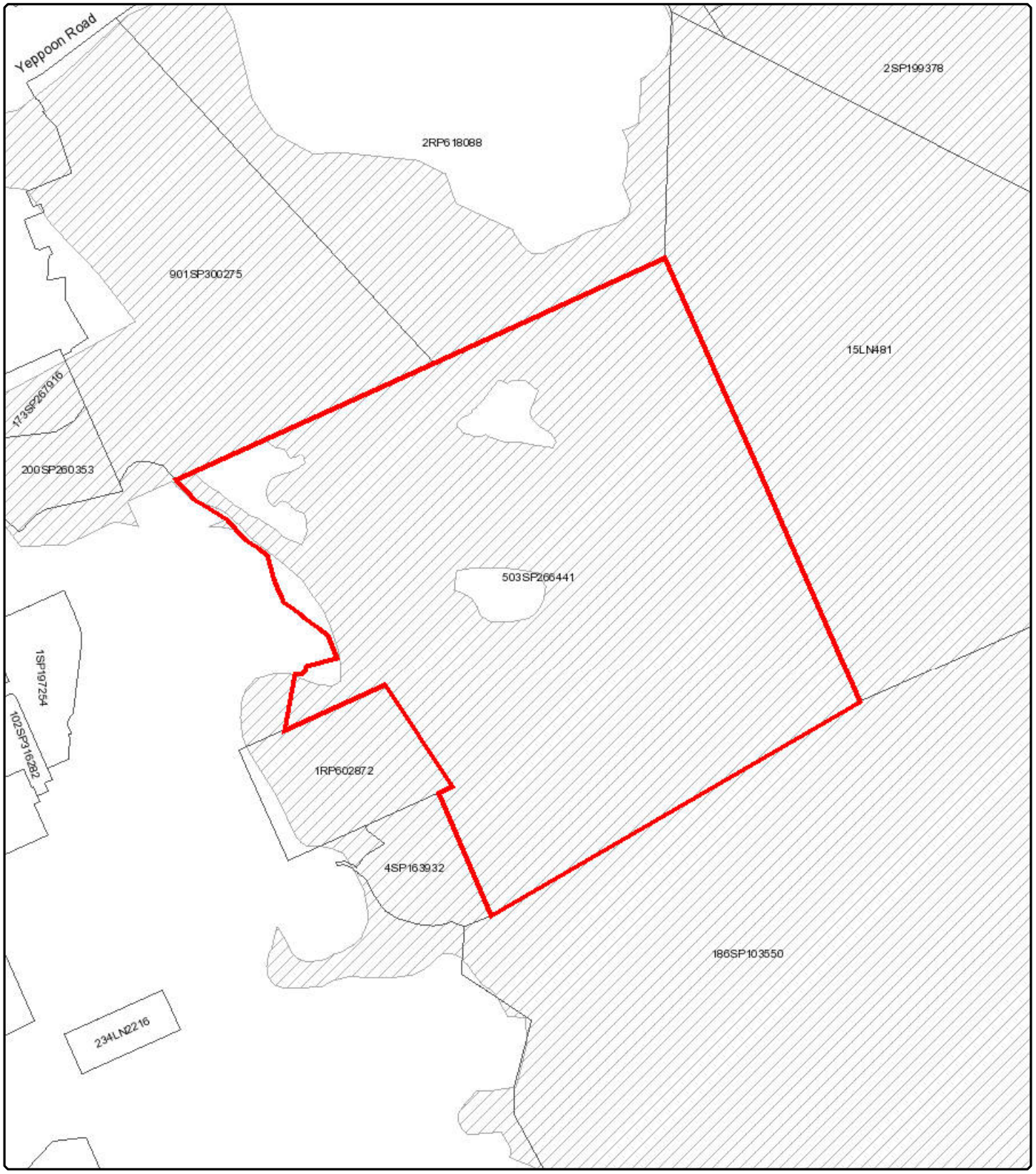
0 190 380 570 760

Metres

Legend

Queensland waterways for waterway barrier works

- 1 - Low
- 2 - Moderate
- 3 - High
- 4 - Major



State Assessment and Referral Agency

Date: 25/08/2021

Queensland Government

N

Legend

Regulated vegetation management map (Category A and B extract)

- Category A on the regulated vegetation management map
- Category B on the regulated vegetation management map

0 190 380 570 760

Metres

Confirmation Notice

PLANNING ACT 2016, PART 1 OF THE DEVELOPMENT ASSESSMENT RULES

Application number:	**D/39-2024**	*For further information regarding this notice, please contact:*	Kathy McDonald
Date application properly made**:**	**10 April 2024**	Phone:	07 4936 8099

1. APPLICANT DETAILS

Name:	**A B Hart and D T Hart**		
Postal address:	**C/- Gideon Town Planning** **PO Box 450** **ROCKHAMPTON CITY QLD 4700**		
Contact number:	07 4806 6959	Email:	info@gideontownplanning.com.au

2. PROPERTY DESCRIPTION

Street address:	Lot 503 Nagle Drive, Norman Gardens
Real property description:	Lot 503 on SP266441

3. OWNER DETAILS

Name:	A B Hart and D T Hart
Postal address:	351 Hobler Avenue, FRENCHVILLE QLD 4701

4. DEVELOPMENT APPROVAL SOUGHT

Development Permit for a Material Change of Use for a Dwelling House

5. APPLICATION TYPE

	Development Permit	Preliminary Approval
Development assessable under the planning scheme, a temporary local planning instrument, a master plan or a preliminary approval which includes a variation approval	☒	☐

6. REFERRAL AGENCIES	**NIL**

7. IMPACT ASSESSMENT

Will Impact Assessment be required?	**YES**
The whole of the application must be publicly notified under the provisions of Part 4 of the Development Assessment Rules by:	
- Publishing a notice at least once in a newspaper circulating generally in the locality of the premises which are the subject of the application; and	

- Placing a notice on the premises which are the subject of the application. The notice must remain on the premises for the period of time up to and including the stated day; and
- Giving a notice to all owners of any lots adjoining the premises which are the subject of the application.

8. PUBLIC NOTIFICATION DETAILS

The application requires public notification which must be undertaken in accordance with Section 53 of the *Planning Act 2016* and Part 4 of the Development Assessment Rules.

9. INFORMATION REQUEST

A further information request may be made by the assessment manager. Regardless of this advice, any concurrence agency for the application may make an information request.

10. SUPERSEDED PLANNING SCHEME

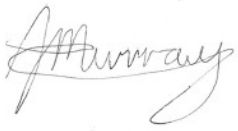
Is the application to be assessed under a Superseded Planning Scheme?	**NO**

You are further advised that the truth and accuracy of the information provided in the application form and accompanying information is relied on when assessing and deciding this application. If you find an INACCURACY in any of the information provided above or have a query or seek clarification about any of these details, please contact Council's Development Assessment Unit.

11. ASSESSMENT MANAGER

Name: **Aidan Murray**
SENIOR PLANNING OFFICER

Signature:



Date: 24 April 2024

Rockhampton Office
232 Bolsover St, Rockhampton
Gracemere Office
1 Ranger St, Gracemere
Mount Morgan Office
32 Hall St, Mount Morgan

10 May 2024

Our reference: D/39-2024
Enquiries to: Aidan Murray
Telephone: 07 4936 8099

A B Hart and D T Hart
C/- Gideon Town Planning
PO BOX 450
ROCKHAMPTON CITY QLD 4700

Dear Sir/Madam

INFORMATION REQUEST – DEVELOPMENT APPLICATION D/39-2024 FOR MATERIAL CHANGE OF USE FOR A DWELLING HOUSE – SITUATED AT LOT 503 NAGLE DRIVE, NORMAN GARDENS – DESCRIBED AS LOT 503 ON SP266441

Council refers to your application received by Council on 10 April 2024.

Council officers have undertaken a detailed assessment of the development application and require you to provide further information to address the following issues:

1.0 Planning

1.1 Under the Strategic Framework of the *Rockhampton Region Planning Scheme 2015*, the site located within the 'Nature conservation, open space and natural corridor or link' designation. The specific outcomes sought for Nature conservation and open space areas will contain national parks, public open space, environmentally significant areas. These areas are protected from urban development.

1.2 Within this designation, urban development that further encroaches on the undeveloped Berserker foothills will not occur. The steep and environmentally significant land within the Berserker Range (including the foothills and Mount Archer National Park) are protected to ensure the scenic and natural backdrop to Rockhampton is maintained.

1.3 In terms of Environmental and Natural Hazards, the site contains Matters of State Ecological Significance – Endangered Wildlife Habitat, Matters of Local Ecological Significance – General and High, and located within extreme bushfire hazard risk and partially impacted by steep land.

1.4 The site is located in the Environmental Management and Conservation Zone. This is in recognition of the development constraints for this area and the continued preservation of the visual amenity that the Berserker Ranges provide as a backdrop to the city of Rockhampton. The Planning Scheme seeks to restrict development in areas adversely affected by natural hazards and those that have environmentally significant values.

1.5 The subject allotment is located in an area impacted by natural hazards and is mapped as containing environmental values. The development is in an area Council has resolved to protect from further urban encroachment by zoning the allotment for purpose of environmental conservation and management.

1.6 Based on the constraints listed above and the potential risk to life and property during a bushfire event, Council Officers are unlikely to support the proposed development based on the application material provided.

2.0 Engineering

2.1 Separately to the above planning matters, Council is not satisfied that the application addresses the required engineering and infrastructure requirements for the development and potential impacts. Should the applicant choose to proceed with the application, in addition to addressing Council's planning concerns, the below actions will also need to be undertaken.

2.2 The Applicant is requested to demonstrate an alternative access, that complies with the *Capricorn Municipal Development Guideline*, for the proposed development until the extension of Jim Goldston Avenue (Crestwood Estate Stage 8) is completed.

Note: The plans indicate that the proposed Jim Goldston Avenue extension is currently located within an adjacent privately owned property.

2.3 The applicant is requested to provide a Site Evaluation Report in accordance with the *Queensland Plumbing and Wastewater Cod*e for on-site sewerage. The report is to be undertaken by a qualified person in accordance with the code. The report must consider the slope of the development site, flood implication and its proximity to a water course.

Note: Please be aware that an on-site sewerage facility would be for temporary use only. The on-site sewerage facility must be dismantled and removed once the development is connected to reticulated sewerage.

2.4 The applicant is to discuss with the neighbouring developer and come to an agreement for the extended sewer main proposed on the Plan 21-001/SK14. Written evidence of consent from the owner of Lot 901 on SP325485 is to be provided. The proposal will also require registration of a sewerage easement over Lot 901 on SP325485 as part of the establishment of the sewer main infrastructure.

Note: This is required as the proposed plan indicates the sewerage main extension is located within the adjacent property.

2.5 The existing sewerage connection point for the development site is located in the southeastern corner, adjacent to the southern boundary. If the proposal is to utilise this connection point, the applicant is requested to provide a sewerage strategy including levels demonstrating a gravity connection to the existing reticulation is achievable.

2.6 The applicant is to provide an on-site water supply strategy for the proposed development to be enacted until the development is connected to reticulated water services. This must include demonstration of how the development will achieve adequate water supply for firefighting purposes.

2.7 The applicant is requested to provide a brief waste management report along with bin collection location for the development site.

Under section 13 of the Development Assessment Rules, the Applicant has three (3) options available in response to this information request. The Applicant must give the Assessment Manager:

1. all of the information requested; or
2. part of the information requested, together with a notice requiring the Assessment Manager and each referral agency to proceed with the assessment of the application; or
3. a notice:
    i. stating the Applicant does not intend to supply any of the information requested; and
    ii. requiring the Assessment Manager and each referral agency to proceed with the assessment of the application.

Response to this further information request should be forwarded to:

General.Enquiries@rrc.qld.gov.au or;
Development Assessment Section
Rockhampton Regional Council
PO Box 1860
ROCKHAMPTON QLD 4700

A response needs to be received within a period of three (3) months from the date of this letter, In accordance with section 68 (1) of the *Planning Act 2016* and sections 12 and 13 of the Development Assessment Rules. Please forward your response to this information request to Council at your earliest convenience, in order for the assessment of your application to progress further.

Should you have any queries regarding the above information request, please contact the undersigned on 07 4936 8099.

Yours faithfully

Aidan Murray
Acting Coordinator Development Assessment
Planning and Regulatory Services

Information Request Response Form
(to be returned to the Assessment Manager with the response)

I _____ choose to respond to the Assessment Manager's Information Request:

- ☐ in full;

  OR

- ☐ in part, with this notice requiring the Assessment Manager and each referral agency to proceed with the assessment of the application;

  OR

- ☐ stating that I do not intend to supply any of the information requested; and requiring the Assessment Manager and each referral agency to proceed with the assessment of the application.

A copy of the response to the Assessment Manager's information request has been provided to all Referral Agencies nominated on the Confirmation Notice.

I understand the requirements of this Information Request as listed above.

Signed : _____ Date : _____

Position : _____

30 August 2024

Rockhampton Regional Council
PO BOX 1860
Rockhampton QLD 4700

GIDEON
TOWN PLANNING

Attention: Aidan Murray
Via Email: developmentadvice@rrc.qld.gov.au

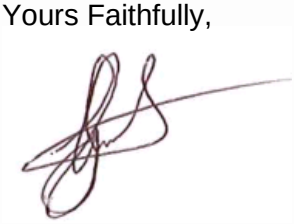
Dear Aidan,

RESPONSE TO INFORMATION REQUEST – DEVELOPMENT APPLICATION D/39-2024 FOR A MATERIAL CHANGE OF USE FOR A DWELLING HOUSE SITUATED AT LOT 503 NAGLE DRIVE, NORMAN GARDENS – DESCRIBED AS LOT 503 ON SP266441

On behalf of our client, **A B and D T Hart**, and in accordance with part 3, section 13 of the Development Assessment Rules, we provide a response to all items included in the Information Request issued by Rockhampton Regional Council on 10 May 2024.

Should Council require any further discussion on this matter, please do not hesitate to contact me on 07 4806 6959 or info@gideontownplanning.com.au.

Yours Faithfully,



Gideon Genade
Principal Town Planner

Encl.: Appendix A – Response to Information Request
Appendix B – Contour Plan
Appendix C – Updated Proposal Plans

APPENDIX A

Response to Information Request

1.0 PLANNING

1.1 Under the Strategic Framework of the *Rockhampton Region Planning Scheme 2015*, the site located within the 'Nature conservation, open space and natural corridor or link' designation. The specific outcomes sought for Nature conservation and open space areas will contain national parks, public open space, environmentally significant areas. These areas are protected from urban development.

RESPONSE:

The proposed development is for the establishment of a dwelling house. The location (building envelopes) and scale (height and size) of the proposed dwelling house are based on the supporting environmental assessment of the site and the outcomes of the assessment benchmarks. Establishing a dwelling house on a large non-residential zone land parcel is not considered urban development (simular to a dwelling on a rural lot).

Establishing a dwelling house on the site will enable the owners to implement appropriate and consistent land and vegetation management practices that will contribute to the subject site's environmental values and nature conservation. The establishment of a dwelling aligns with the overall outcome and intent of the zone as well as the performance outcomes of the codes.

1.2 Within this designation, urban development that further encroaches on the undeveloped Berserker foothills will not occur. The steep and environmentally significant land within the Berserker Range (including the foothills and Mount Archer National Park) are protected to ensure the scenic and natural backdrop to Rockhampton is maintained.

RESPONSE:

The proposed dwelling house's location does not impact the scenic and natural backdrop of the Berserker foothills. The proposed building envelope is located between contours 60 and 65. The established residential developments in the area are aligned or higher than the proposed development.

South of the proposed building envelope:

- Skyline Drive – dwellings located located between contours 60 and 90.

North West of the proposed building envelope:

- Argon Close, Cherry Clode, Teak Close, Redwood Close, Arthur Appleton Place and Juniper Close – dwellings located between contours 60-65

Refer to *Appendix B – Contour Plan*, based on data from Queensland Globe.

Further to the above, the applicant supports reasonable and relevant conditions being imposed to ensure the design of the dwelling minimises visual impact on the surrounding landscape. This can include limiting overall building height (8.5m), breaking rooflines, and limiting external wall lengths, with the external walls and roof finished being of a similar tonal value as surrounding vegetation.

Appendix C – Updated Proposal Plans, includes additional annotation in relation to building height and sizes.

1.3 In terms of Environmental and Natural Hazards, the site contains Matters of State Ecological Significance – Endangered Wildlife Habitat, Matters of Local Ecological Significance – General and High, and located within extreme bushfire hazard risk and partially impacted by steep land.

RESPONSE:

An Environmental Assessment and a Bushfire Management Plan accompanied the development application. These items have been addressed as part of the development application.

1.4 The site is located in the Environmental Management and Conservation Zone. This is in recognition of the development constraints for this area and the continued preservation of the visual amenity that the Berserker Ranges provide as a backdrop to the city of Rockhampton. The Planning Scheme seeks to restrict development in areas adversely affected by natural hazards and those that have environmentally significant values.

RESPONSE:

Refer to the response to Items 1.1 to 1.3 and the original application material.

1.5 The subject allotment is located in an area impacted by natural hazards and is mapped as containing environmental values. The development is in an area Council has resolved to protect from further urban encroachment by zoning the allotment for purpose of environmental conservation and management.

RESPONSE:

Refer to the response to Items 1.1 to 1.4 and the original application material.

1.6 Based on the constraints listed above and the potential risk to life and property during a bushfire event, Council Officers are unlikely to support the proposed development based on the application material provided.

RESPONSE:

Refer to the response to Items 1.1 to 1.5 and the original application material.

2.0 ENGINEERING

2.1 Separately to the above planning matters, Council is not satisfied that the application addresses the required engineering and infrastructure requirements for the development and potential impacts. Should the applicant choose to proceed with the application, in addition to addressing Council's planning concerns, the below actions will also need to be undertaken.

RESPONSE: Noted, refer to responses to items 2.2 – 2.7.

2.2 The Applicant is requested to demonstrate an alternative access, that complies with the *Capricorn Municipal Development Guideline*, for the

proposed development until the extension of Jim Goldston Avenue (Crestwood Estate Stage 8) is completed.

Note: The plans indicate that the proposed Jim Goldston Avenue extension is currently located within an adjacent privately owned property.
RESPONSE: Vehicle access is proposed for the development via the extension of Jim Goldston Avenue (Stage 8 of Crestwood Estate), located in the northwestern corner of the subject site. Alternative access options were investigated but required significant work (creek crossing). Reasonable and relevant conditions can be imposed regarding the commencement of the use and the formalisation of the access arrangement via Jim Goldston Avenue.

2.3 **The applicant is requested to provide a Site Evaluation Report in accordance with the *Queensland Plumbing and Wastewater Code* for on-site sewerage. The report is to be undertaken by a qualified person in accordance with the code. The report must consider the slope of the development site, flood implication and its proximity to a water course.**

Note: Please be aware that an on-site sewerage facility would be for temporary use only. The on-site sewerage facility must be dismantled and removed once the development is connected to reticulated sewerage.
RESPONSE:
The subject site is of a sufficient size to accommodate on-site sewer facilities. Reasonable and relevant conditions can be imposed regarding the provision of an adequate level of infrastructure.

2.4 **The applicant is to discuss with the neighbouring developer and come to an agreement for the extended sewer main proposed on the Plan 21-001/SK14. Written evidence of consent from the owner of Lot 901 on SP325485 is to be provided. The proposal will also require registration of a sewerage easement over Lot 901 on SP325485 as part of the establishment of the sewer main infrastructure.**

Note: This is required as the proposed plan indicates the sewerage main extension is located within the adjacent property.
RESPONSE: Formalisation of sewer connections can be undertaken at a later stage. Reasonable and relevant conditions can be imposed regarding the provision of an adequate level of infrastructure.

2.5 **The existing sewerage connection point for the development site is located in the southeastern corner, adjacent to the southern boundary. If the proposal is to utilise this connection point, the applicant is requested to provide a sewerage strategy including levels demonstrating a gravity connection to the existing reticulation is achievable.**
RESPONSE: Not applicable.

2.6 The applicant is to provide an on-site water supply strategy for the proposed development to be enacted until the development is connected to reticulated water services. This must include demonstration of how the development will achieve adequate water supply for firefighting purposes.

RESPONSE: Onsite water storage (water tanks), with separate water storage for firefighting purposes, will be provided onsite. Reasonable and relevant conditions can be imposed regarding the provision of an adequate level of infrastructure.

2.7 The applicant is requested to provide a brief waste management report along with bin collection location for the development site.

RESPONSE:

The proposal is for a dwelling house that will utilise standard wheelie bins to be serviced from Jim Goldston Avenue (Crestwood Estate Stage 8). An alternative option would be to store commercial waste service bins onsite. Reasonable and relevant conditions can be imposed regarding the provision of an adequate level of infrastructure.

APPENDIX B

Contour Plan

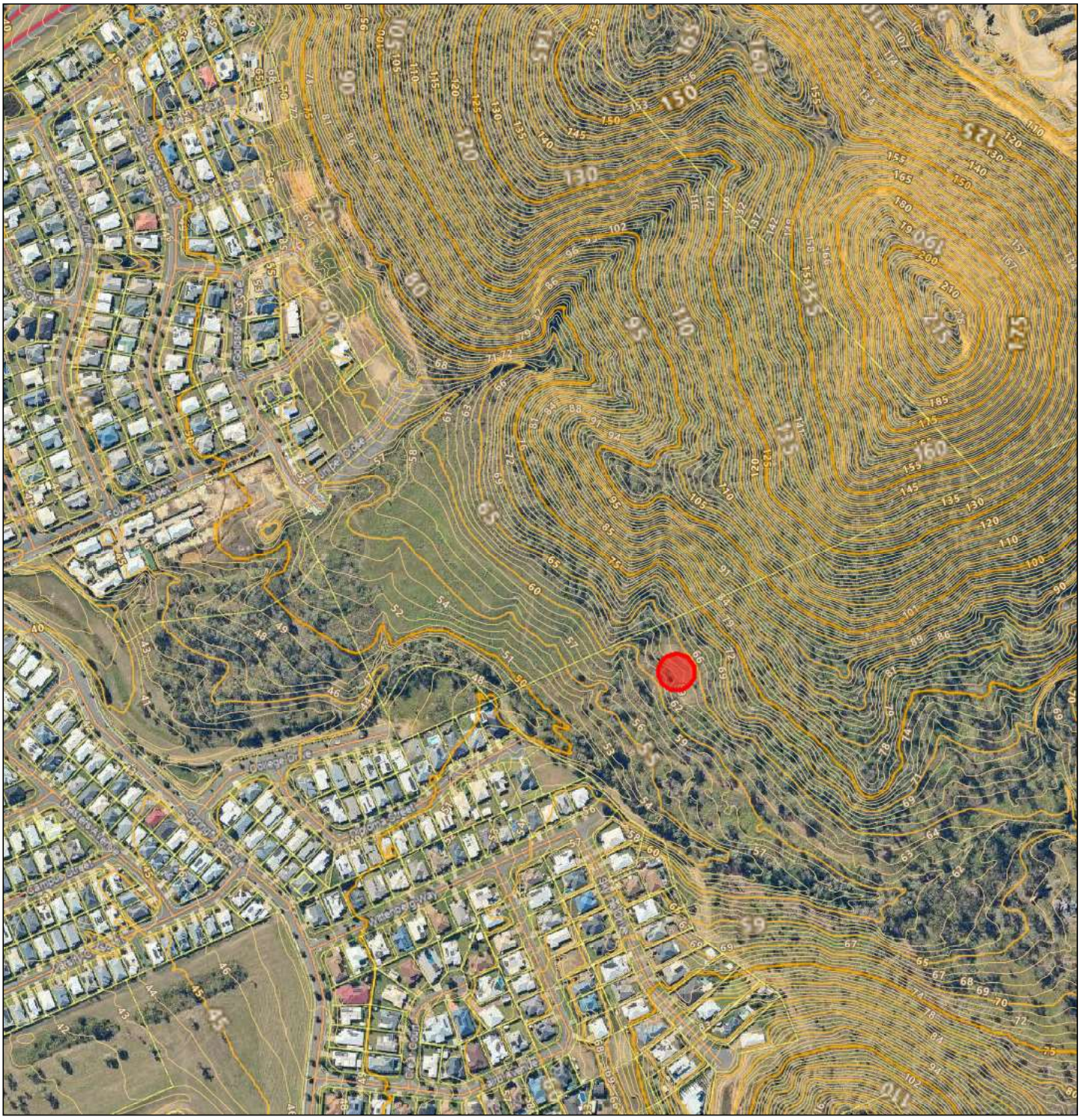
APPENDIX C

Updated Proposal Plans

Contour Plan

23°18'32"S 150°31'37"E

23°18'32"S 150°32'14"E



23°19'7"S 150°31'37"E

23°19'7"S 150°32'14"E

A product of Queensland Globe

Legend located on next page

N

0 100 metres

Scale: 1:3983

Printed at: A3

Print date: 28/8/2024

Not suitable for accurate measurement.

Projection: Web Mercator EPSG 102100 (3857)

For more information, visit https://qldglobe.information.qld.gov.au/help-info/Contact-us.html

Queensland Government

Department of Resources

GENERAL NOTE:

- THESE DRAWINGS ARE PART OF A TOWN PLANNING APPROVAL APPLICATION AND SHOULD NOT BE USED FOR ANY OTHER REASON
- THESE DRAWINGS ARE APPROXIMATE AND HIGHLY CONCEPTUAL
- TRAFFIC/STORMWATER/OPERATIONAL WORKS: AS PER CIVIL ENGINEER DOCUMENTS AND DRAWINGS IF REQUIRED
- CURRENT LOCATIONS AND BOUNDARY LINE ARE APPROXIMATE, RELEVANT SURVEY TO BE CONDUCTED BEFORE ANY DOCUMENTATION OR CONSTRUCTION
- REFER TO TOWNPLANNING APPLICATION AND OPERATIONAL WORKS DOCUMENTATION WHEN VIEWING THESE PLANS
- THESE DRAWINGS ARE CONCEPTUAL AND DO NOT REFLECT BUILDING APPROVAL, PLUMBING APPROVAL, QFRS APPROVAL OR DISABILITY REQUIREMENTS. CLIENT TO CONFIRM AND GET APPROVAL FROM RELEVANT AUTHORITIES
- IF THE SITE OR PROJECT ARE TRIGGERED OR LOCATED IN BUSHFIRE AREA, THEN THE BUILDINGS TO COMPLY WITH BUSHFIRE REQUIREMENTS OR AS PER COUNCIL REQUIREMENTS

GENERAL LEGEND

- APPROX BOUNDARY LINE
- FUTURE PROPERTY BOUNDARY
- EASEMENT
- PROPOSED BUILDING : 2632 SQM (APPROX) **LOCATION ENVELOPE A**
- PROPOSED BUILDING : 738 SQM (APPROX) **LOCATION ENVELOPE B**
- PROPOSED CROSSOVER
- PROPOSED ACCESS DRIVEWAY

GENERAL NOTE:
ALL BOUNDARIES, LOCATIONS AND DIMENSIONS ARE APPROXIMATES

E:\Users\ColinStrydom\Documents\PROJECTS E DRIVE\GG-NGG - N-2.rvt

10/06/2024 2:58:15 PM

drawing title:
LOCATION PLAN

drawing no: SK-001

project:
PROPOSED DWELLING

A3 DRAWINGNOTED SCALES RELATE TO A3 DRAWINGS

location:
NAGLE DRIVE, NORMAN GARDENS, 4701

client:
--

REVISIONS

REVISION	DESCRIPTION	DATE
1	PRELIMINARY	31/10/2023
2	PRELIMINARY	20/02/2024
3	PRELIMINARY	25/03/2024
4	PRELIMINARY	10/06/2024

GIDEON
TOWN PLANNING
gg@gideontownplanning.com.au

ISSUED FOR
PRELIMINARY

project no: GG - N

scale: As indicated

date: JUN 24

drawn: CC

rev: 4

PROPOSED DWELLING HOUSE
MAXIMUM BUILDING HEIGHT: 8.5M ABOVE GROUND LEVEL.
MAXIMUM GROSS FLOOR AREA: 400M², LOCATED WITHIN LOCATION ENVELOPE A

PROPOSED SHED
MAXIMUM BUILDING HEIGHT: 8.5M ABOVE GROUND LEVEL.
MAXIMUM GROSS FLOOR AREA: 200M², LOCATED WITHIN LOCATION ENVELOPE B

GENERAL NOTE:

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GENERAL LEGEND

- APPROX BOUNDARY LINE
- FUTURE PROPERTY BOUNDARY
- EASEMENT
- PROPOSED BUILDING : 2632 SQM (APPROX) **LOCATION ENVELOPE A**
- PROPOSED BUILDING : 738 SQM (APPROX) **LOCATION ENVELOPE B**
- PROPOSED CROSSOVER
- PROPOSED ACCESS DRIVEWAY

GENERAL NOTE:
ALL BOUNDARIES, LOCATIONS AND DIMENSIONS ARE APPROXIMATES

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10/06/2024 2:58:19 PM

drawing title:
PROPOSED SITE PLAN

drawing no: SK-002

project:
PROPOSED DWELLING

A3 DRAWING NOTED SCALES RELATE TO A3 DRAWINGS

location:
NAGLE DRIVE, NORMAN GARDENS, 4701

client:
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REVISIONS

REVISION	DESCRIPTION	DATE
1	PRELIMINARY	31/10/2023
2	PRELIMINARY	20/02/2024
3	PRELIMINARY	25/03/2024
4	PRELIMINARY	10/06/2024

GIDEON
TOWN PLANNING
gg@gideontownplanning.com.au

ISSUED FOR
PRELIMINARY

project no: GG - N
scale: As indicated
date: JUN 24
drawn: CC
rev: 4

GENERAL LEGEND

STATE MAPPING OVERLAY- RVM
CATEGORY B- REMNANT VEGETATION

GENERAL NOTE:
ALL BOUNDARIES, LOCATIONS AND DIMENSIONS ARE APPROXIMATES

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10/06/2024 2:58:24 PM

drawing title:
STATE MAPPING OVERLAY

drawing no: SK-003

project:
PROPOSED DWELLING

A3 DRAWINGNOTED SCALES RELATE TO A3 DRAWINGS

location:
NAGLE DRIVE, NORMAN GARDENS, 4701

client:
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REVISIONS

REVISION	DESCRIPTION	DATE
2	PRELIMINARY	20/02/2024
3	PRELIMINARY	25/03/2024
4	PRELIMINARY	10/06/2024

GIDEON
TOWN PLANNING
gg@gideontownplanning.com.au

ISSUED FOR
PRELIMINARY

project no: GG - N

scale: As indicated

date: JUN 24

drawn: Author

rev: 4

5 September 2024

Rockhampton Regional Council
PO Box 1860
ROCKHAMPTON QLD 4700

GIDEON
TOWN PLANNING

ATTENTION: Aidan Murray

Via Email**:** DevelopmentAdvice@rrc.qld.gov.au

RE: NOTICE OF INTENTION TO COMMENCE PUBLIC NOTIFICATION – D/39-2024 FOR MATERIAL CHANGE OF USE FOR A DWELLING HOUSE LOCATED AT LOT 503 NAGLE DRIVE, NORMAN GARDENS – DESCRIBED AS LOT 503 SP266441.

In accordance with section 17.2 of the Development Assessment Rules, I intend to start the public notification required under section 17.1 on Monday 9th September 2024.

At this time, I can advise that I intend to:

☒ Publish a notice in: **CQ Today (hardcopy version)** on **Saturday 7th September 2024.**

And

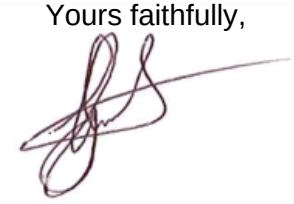
☒ Place a notice on the premises in the way prescribed under the Development Assessment Rules on **Friday 6th September 2024.**

And

☒ Notify the owners of all lots adjoining the premises the subject of the application on **Thursday 5th September 2024.**

If you wish to discuss this matter further, please contact me details below.

Yours faithfully,



Gideon Genade
Principal Town Planner

0402 066 532 gg@gideontownplanning.com.au @ gideontownplanning.com.au
PO Box 450, Rockhampton QLD 4700 ABN 849 2892 5088