

Our Ref: HRP14114
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29 July 2016

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Dear Assessment Manager,

APPLICATION FOR A COMBINED DEVELOPMENT PERMIT – RECONFIGURING A LOT (ONE (1) LOT INTO TEN (10) LOTS) AND MATERIAL CHANGE OF USE (S242 PRELIMINARY APPROVAL OVERRIDING THE PLANNING SCHEME) OVER LAND LOCATED AT EL-ARISH – MISSION BEACH ROAD, MISSION BEACH (LOT 5 ON SP202686)

On behalf of Buxton Superannuation Fund ('the Applicant'), we attach for Council's consideration a combined development application for Reconfiguring Lot (one (1) lot into ten lots) and Material Change of Use (s242 Preliminary approval overriding the planning scheme), to facilitate the establishment of a boutique eco-residential estate ('Cassowary Rise Eco-Residential Estate') on premises located at El Arish Mission Beach Road, Maria Creeks, property described as Lot 5 on SP202686 (refer **Attachment A**).

IDAS Forms relevant to the development application are provided at **Attachment B**.

Council's application fee of \$10,215.00, payable in accordance with Council's Schedule of Charges and Fees 2016/2017 and confirmed by Diana Daniels via email correspondence dated 29 July 2016 will be paid to Council, following the lodgement of this Application.

It is requested that a Tax Invoice for the development application fees be issued to the Applicant, C/- Cardno to facilitate payment.

Please do not hesitate to contact me on (07) 4034 0500 or at dominic.hammersley@cardno.com.au should you wish to discuss the attached further.

Yours faithfully

A handwritten signature in blue ink, appearing to read "DH", is written over a blue circular stamp.

Dominic Hammersley
Principal, Planning and Business Development Manager
For Cardno

Enc:
Attachment A – Town Planning Report
Attachment B – IDAS Forms

**ATTACHMENT A –
TOWN PLANNING REPORT – CASSOWARY RISE ECO-
RESIDENTIAL ESTATE**

Town Planning Report

El Arish Mission Beach Road, Maria
Creeks

Lot 5 SP202686

HRP14114

Reconfiguring a Lot – 1 lot into 10 eco-
residential Lots plus 60.7 hectare Cassowary
conservation lot

s242 Preliminary Approval Affecting the
Planning Scheme – Cassowary Rise Eco-
Residential Estate

Prepared for
Buxton Superannuation Fund

July 2016

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Prepared for:
Buxton Superannuation Fund
C/- Po Box 1619, Cairns, Qld, 4870

Prepared by:
Cardno

The client may use this document only for the purpose for which it was prepared. No third party is entitled to use or rely on this document.

This report is based on our opinion of the town planning issues that arise from the statutory provisions relating to this site. Comments and conclusions in or construed from this report relating to matters of law are not to be relied upon. You should only rely upon the advice of your professional legal advisors with respect to matters of law. This report is provided on the basis that our standard Terms and Conditions apply. For a copy, please contact us or visit <http://www.hrppc.com.au/TermsConditions>. Our report is based on information made available by the client. The validity and comprehensiveness of supplied information has not been independently verified and, for the purposes of this report, it is assumed that the information provided to Cardno HRP is both complete and accurate. Whilst, to the best of our knowledge, the information contained in this report is accurate at the date of issue, changes may occur to the site conditions, the site context or the applicable planning framework. This report should not be used after any such changes without consulting the provider of the report or a suitably qualified person.

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Appendix C – Registered Survey Plan and Smart Map

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Appendix E – Searches: CLR and EMR

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Appendix G – Flood Investigation Report

Appendix H – SDAP Responses

Appendix I – Code Responses

Appendix J – Agricultural Land Report

Appendix K – C4 Letter of Support

Appendix L – Owner's Consent

1 Executive Summary

1.1 Site Details

Site Details	
Address	El Arish Mission Beach Road, Maria Creeks Refer to Figure 1 – Location Map
RPD	Lot 5 on SP202686 ¹
Owner	<p>Lot 5: Thomas Raymond Buxton, Elizabeth Buxton, Christian Buxton and Alexander Buxton as trustees of the Buxton Superannuation Fund being owners as Mortgagees in Possession.</p> <p>Note: A current title search is provided at Appendix A showing Property Projects Australia Pty Ltd as the registered owner of Lot 5. A priority deed is however registered on the title which has come into effect, providing ownership to the trustees as detailed above.</p> <p>Lot 364: WMD & Associates Pty Ltd</p>
Regional Plan	Far North Queensland Regional Plan – Regional Landscape and Rural Production Area
Planning Scheme	Cassowary Coast Regional Council planning scheme ('the Planning Scheme')
Zone	Part Rural Part Environment Management and Conservation Refer to Figure 2 – Zoning Map
Overlays	Agricultural Land Overlay Bushfire Hazard Overlay Coastal Protection Overlay Environmental Significance Overlay Flood Hazard Overlay Landslide Hazard Overlay Note: development is not proposed on land identified as Landslide hazard area. Scenic Amenity Overlay Transport Noise Corridors Overlay Waterway Corridors and Wetlands Overlay
Site Area	89 hectares (Lot 5)

¹ Flood modelling undertaken for the Site indicates that the proposed development may cause flood impacts to adjacent land located to the south (Lot 364 on NR2120), for which Owner's consent has been provided. Notwithstanding that the proposed development affects two (2) lots, this town planning report has been drafted with regard to the primary site of development, being Lot 5 on SP202686.

1.2 Application Details

Application Details	
Development Type	Reconfiguring a Lot (Development Permit) Material Change of Use (s242 Preliminary Approval)
Level of Assessment	Impact assessable: Reconfiguring a Lot – Code assessable Material Change of Use (s242 Preliminary Approval) – Impact assessable
Proposal Summary	Reconfiguring a Lot to create 10 eco-residential lots plus a 60.7 hectare cassowary conservation lot; and Material Change of Use (s242 Preliminary approval affecting the Planning Scheme) to make land included in the Cassowary Rise Eco-Residential Estate – Precinct Plan assessable in accordance with the levels of assessment in Appendix B – Levels of Assessment Tables and assessable against The Cassowary Rise Eco-Residential Estate Code, as detailed within the Cassowary Rise Eco-Residential Estate Plan of Development.
Defined Land Use	Material Change of Use: Dwelling house(s) (Environment facility and Nature-based tourism subject to further assessment)
Referral – Concurrence	Yes – refer to Section 5.4 of this Report for further detail.
Referral – Advice	Nil
Applicant	Buxton Superannuation Fund C/- Cardno HRP
Applicant's Representative	Dominic Hammersley, Cardno HRP
Reference	HRP14114

2 Introduction

This Town Planning Report ('the Report') accompanies a development application that has respect to land located at El Arish Mission Beach Road, Maria Creeks (refer to **Figure 1 – Location Plan**).

The Applicant is seeking a Development Permit for Reconfiguring a Lot – 1 lot into 10 eco-residential lots plus a 60.7 hectare Cassowary conservation lot and Preliminary Approval in accordance with section 242 of *Sustainable Planning Act 2009* ('the SPA') for Material Change of Use to make land included in the Cassowary Rise Eco-Residential Estate – Precinct Plan assessable in accordance with the levels of assessment in Appendix B – Levels of Assessment Tables and assessable against The Cassowary Rise Eco-Residential Estate Code.

Section 4 – The Proposed Development of this report together with **Appendix B – s242 Plan of Development** contains detailed information with regard to the proposed development.

The proposed application has been assessed against the *Cassowary Coast Regional Council planning scheme* (2015) ('the Planning Scheme'). The Planning Scheme requires an impact assessable development application to be made in this instance.

Section 314 of the SPA prescribes the requirements for impact assessment.

Section 6 – Summary of Compliance of this report provides a summary of the proposed development's compliance with the applicable provisions of the Planning Scheme.

3 Site Details and Characteristics

3.1 Site Details

3.1.1 Location

The Site is situated at El Arish Mission Beach Road, Maria Creeks.

3.2 Site Characteristics

3.2.1 Zoning

The Site is predominantly zoned **Rural**, with smaller tracts of land to the east, south and west zoned **Environmental Management and Conservation**.

3.2.2 Current Use of the Site

The Site contains an existing Dwelling house and land used for cropping.

3.2.3 Road Frontages

The Site is located approximately 385 metres west of the El Arish Mission Beach Road frontage, with an access strip providing approximately 20 metres of frontage to El Arish Mission Beach Road. The access strip is burdened by an access easement (Easement A on SP196736), which provides access to Lots 1, 2, 3 and 4 on SP202686 located in front of Lot 5.

3.2.4 Ownership

The registered owner of the Site is Thomas Raymond Buxton, Elizabeth Buxton, Christian Buxton and Alexander Buxton as trustees of the Buxton Superannuation Fund being owners as Mortgagees in Possession. Refer to **Appendix A – Current Title Search** for details.

Note: The current title search provided at Appendix A shows Property Projects Australia Pty Ltd as the registered owner. A priority deed is however registered on the title which has come into effect, providing ownership to the trustees as detailed above.

3.2.5 Easements

The Site is burdened by an easement (Easement A on SP196736), being for access purposes. Refer to **Appendix A – Current Title Search** and **Appendix C – Registered Survey Plan and Smart Map** for further details.

The proposed development does not seek to change the purpose of this easement. However, it is noted that the existing easement will be cancelled and a new road opened as part of the Reconfiguring a Lot aspect of development.

3.2.6 Covenants

The Site is affected by existing Covenants A, B and C on SP202686. The purpose of the covenants are to conserve naturally occurring flora and fauna.

3.2.7 Existing Significant Vegetation and Waterway Values

The Site includes mapped regulated vegetation, refer **Appendix D – State Mapping Searches**.

The Site is traversed by Jurs Creek in a north / south alignment.

3.2.8 Surrounding Land Uses and Zoning

Table 3-1 outlines the various land uses and zones of the properties surrounding the subject lot.

Table 3-1 Surrounding land uses and Zoning

Direction	Zoning	Land use
North	Environmental management and conservation zone Rural zone	Conservation Dwelling houses and Rural uses on Mountain View Close on lot sizes from 1,943m ²

East	Environmental management and conservation zone	Dwelling houses (four) on lot sizes from 5.8997 hectares and conservation
South	Rural zone Environmental management and conservation zone	Rural uses and Dwelling house Conservation
West	Environmental management and conservation zone	Conservation

3.2.9 Access

The Site currently gains access to El Arish Mission Beach Road via an existing constructed driveway, located within an access strip. The access strip is burdened by an access easement (Easement A on SP196736), which provides access to Lots 1, 2, 3 and 4 on SP202686 located in front of Lot 5. The driveway is sealed and understood to be constructed to road standard.

3.2.10 Existing Infrastructure and Services

Table 3-2 provides a description of the location of existing services to the Site.

Table 3-2 Existing Services Location

Water	No reticulated water supply is available.
Sewerage	No existing sewer network is available to be connected to within the locality.
Stormwater	No existing stormwater drainage infrastructure is located within the locality.
Electricity	Existing overhead electricity is provided along El Arish Mission Beach Road.
Access	Current access to the Site is provided via El Arish Mission Beach Road.
Roads	The Site has direct frontage to El Arish Mission Beach Road, a state-controlled road

3.2.11 Site Contamination

On 20 March 2015 a search of the Environmental Register and Contaminated Land Register was executed, which confirmed that the Site is not included in either register.

Refer to **Appendix E – Searches CLR & EMR** for details.

3.2.12 Topography

The Site is predominantly flat, with rises in elevation towards the west of the site.

4 Proposed Development

4.1 Application Particulars

Application Particulars	
Development Type	Reconfiguring a Lot (Development Permit) Material Change of Use (s242 Preliminary Approval)
Level of Assessment	Impact
Proposal Summary	Reconfiguring a Lot to create 10 eco-residential lots plus a 60.7 hectare cassowary conservation lot; and Material Change of Use (s242 Preliminary approval affecting the Planning Scheme) to make land included in the Cassowary Rise Eco-Residential Estate – Precinct Plan assessable in accordance with the levels of assessment in Appendix B – Levels of Assessment Tables and assessable against The Cassowary Rise Eco-Residential Estate Code, as detailed within the Cassowary Rise Eco-Residential Estate Plan of Development.
Referral – Concurrence	Yes – refer to Section 5.4 of this Report for further detail.
Referral – Advice	N/A

4.2 Reconfiguring a Lot

4.2.1 Proposal Description

The Applicant seeks a Development Permit to create 10 eco-residential lots ranging in size from 7,182m² – 62,486m², plus a 60.7 hectare Cassowary conservation lot. The proposed development, to be known as the Cassowary Rise Eco-Residential Estate (‘the Estate’) represents a low intensity use that responds to the existing site characteristics and provides for the continued protection of the Southern Cassowary (*Casuaris casuaris johnsonii*), through dedicated conservation and corridor precincts, as detailed on the Precinct Plan provided at Appendix F.

The proposed development is constrained to land located east of Jurs Creek, which is proposed to be located within a dedicated Waterway precinct, which will act as a drainage reserve.

Further detail on the proposed development is provided in Table 4-1 as well as the plans provided at Appendix F.

Table 4-1 Proposed lot characteristics

Proposed Lot	Area (m ²)	Frontage (m)	Depth (m)	Proposed Lot	Area (m ²)	Frontage (m)	Depth (m)
1	62,486m ²	235.6m ²	356.7m ²	8	20,002m ²	78.8m ²	255.9m ²
2	19,940m ²	159.6m ²	151.3m ²	9	18,430m ²	84.7m ²	233.2m ²
3	7,467m ²	70.5m ²	124.2m ²	10	25,761m ²	90.7m ²	268.7m ²
4	7,182m ²	106.5m ²	124.2m ²	100	60.7ha	N/A	N/A
5	10,381m ²	168.2m ²	145.5m ²				
6	61,130m ²	234.1m ²	361.2m ²				
7	25,519m ²	95.4m ²	304.4m ²				

4.2.2 Internal Road Works and Traffic

Access to proposed lots will be provided via the construction of a new road, which will replace and extend the existing driveway currently providing access to the Site from Mission Beach-El Arish Road. Accordingly, the existing access easement will be cancelled under this proposal.

The proposed internal road of the Estate will extend to proposed Lot 10, terminating in a cul-de-sac head. A secondary road will be constructed off the main internal road in a southerly direction, providing access to proposed Lots 1 - 5, also terminating in a cul-de-sac head.

An access easement is proposed over part of Lot 5 to provide access to proposed Lot 100.

4.2.3 External road Works

No external road works are proposed as part of this development.

4.2.4 Open Space Corridors and Vegetation

The proposed development is unique in that it endeavours to retain and enhance the existing vegetation, through the creation of a dedicated Cassowary conservation lot of 60.7 hectares, which is to be placed under an environmental covenant. We note that an existing environmental covenant, 2.921 hectares in area exists over part of proposed Lot 100.

The proposed development also proposes the staged rehabilitation of the Cassowary conservation lot. The proposed Cassowary Rise Eco-residential Estate Plan of Development identifies all requirements in relation to the rehabilitation of this area.

4.2.5 Existing Covenants

The Site is affected by existing Covenants A, B and C on SP202686. The purpose of the covenants are to conserve naturally occurring flora and fauna.

4.2.6 Infrastructure Services

4.2.6.1 *Waste Water*

Reticulated waste water networks are not available to the Site. Waste water will be disposed onsite.

4.2.6.2 *Water*

Reticulated water networks are not available to the Site. Water supply for potable purposes will be provided by way of roof water tanks or water bores, to be provided at dwelling building works stage.

4.2.6.3 *Stormwater*

No stormwater infrastructure is provided to the Site, other than the Jurs Creek waterway. The proposed development is for a small, eco-residential development facilitating 10 Dwelling houses, new road and Cassowary conservation lot. The total impervious area proposed as part of the development will be less than 25% of the site area. Future Dwelling houses will discharge to the rainwater tanks and then to ground. Due to the large grassed areas available on each lot, on-site infiltration is available.

4.2.6.4 *Electricity and Communications*

Electricity will be provided to the new lots, via the existing connection to the overhead wires in the El Arish Mission Beach Road reserve.

4.2.7 Flooding

The Site is identified on the Flood Hazard Overlay of the Planning Scheme as being a Potential hazard area.

A flood investigation has been undertaken with respect to the Site to model peak flood levels upstream and downstream of the site and peak discharge downstream of the Site, based on existing and developed conditions (refer **Appendix G – Flood Investigation Report**).

The flood model has been amended to represent the following aspects of the proposed development:

- fill pads with areas of 1,200 to 2,000m² on Lots 1 to 10 except for Lot 5 (which includes an existing dwelling);
- internal roads; and
- three banks of box culverts.

The Planning Scheme requires that new buildings have minimum floor levels of greater than or equal to the 1% annual exceedance probability (AEP) level plus 0.3 metres. For Reconfiguring a Lot, all lots are required to contain a suitably sized and shaped area to accommodate a building and ancillary structures and provide **maximum possible flood immunity for the safety of people and the protection of property for all flood events.**

The elevation of the top of the fill pads as proposed is 13.65 metres AHD, being generally 900 mm to one metre above the 1% AEP level (above the 0.2% AEP (500 year ARI) flood level).

Minimum floor levels afforded will therefore be approximately 1.2 to 1.3 metres above the 1% AEP level, exceeding the additional 0.3 metre freeboard requirement.

Internal roads are proposed to be constructed no lower than 300mm below the 50 year ARI flood level (2% AEP). The results presented in Figure D7 of the Report provided at **Appendix G**, demonstrate that the peak flood depths over the internal roads during the 50 year ARI (2% AEP) flood event are less than 300 mm.

The flood investigation identifies that there may be increases of up to 60mm near the upstream boundary of the Site, however these increases are localised and will only affect heavily vegetated areas of lands upstream which cannot be developed or used for agricultural purposes. We note that the adjoining owner has provided consent for any flood impact attributed to the development (refer **Appendix K**).

The flood modelling also demonstrates that the proposed development has a negligible impact on discharges. Refer to **Appendix G** for detailed results of the flood modelling.

Furthermore, a Flood Evacuation Plan and associated flood warning infrastructure (which includes signs, flood gauges and notation on title) is proposed as part of the development to further mitigate flood risk. Flood immunity and flood risk management requirements are included in the Cassowary Rise Eco-residential Estate Plan of Development (POD).

In summary, if the residents of the proposed dwellings choose to seek refuge in place rather than evacuate the Site prior to a flood event:

- the proposed fill pads provide greater than a 500 year ARI (0.2% AEP) flood immunity for the residential dwellings;
- the minimum floor levels in the dwellings will be approximately 1.2 to 1.3 metres above the 100 year ARI (1% AEP) flood level, thus exceeding Council's requirement of floor levels of greater than or equal to the 1% AEP level plus 0.3 metres of 0.3 metres above the 1% AEP level);
- all rooms in the second storey of the proposed dwellings will be located above the Probable Maximum Flood level, which has an Average Recurrence Interval of between 1,000,000 and 10,000,000 years, i.e. between 1 million and 10 million years; and
- the duration for which the Site will be isolated is generally less than one day during extreme flood events.

In addition, residents are able to safely drive on the internal roads and enter/exit the Site for all floods up to and including the 50 year ARI (2% AEP) event.

Thus, residents will be able to freely enter and exit the Site for the vast majority of flood events. During extreme flood events (i.e. an average recurrence interval of 100 years or more), residents may either choose to evacuate the Site prior to the flood event, or safely seek refuge within their own dwelling.

4.2.8 Adopted Infrastructure Charges

We acknowledge that infrastructure charges may be payable with respect to the Reconfiguring of a Lot component of this application, in accordance with the *Cassowary Coast Regional Council Infrastructure charges resolution (No. 1) 2015* ('the Resolution'). However, we note that the Site is not connected to reticulated water or waste water networks and accordingly, no charge is applicable for these infrastructure elements.

Accordingly, we identify the following charges that would ordinarily apply to the development:

Infrastructure Charges Item	Adopted Charge Per Lot	Proposed lots	Total Charge
Public parks and land for community services network	\$3,000.00 per lot	10 lots	\$30,000.00
Transport network	\$1,125.00 per lot	10 lots	\$11,250.00
Total charges payable:			\$41,250.00

Notwithstanding the Resolution, we note that Council currently has a moratorium on infrastructure charges for all new development applications, and therefore in the event of an approval, no infrastructure charges would be payable.

4.3 Material Change of Use – s242 Preliminary Approval affecting the Planning Scheme

The purpose of the POD is to facilitate the establishment of an eco-village that sensitively responds to the surrounding environment (refer to **Section 4.6** for further detail).

Approval is sought to affect the Planning Scheme such that eco-residential development (in the form of Dwelling houses) on the Site are self assessable and Environment facility and Nature-based tourism land uses code assessable, in accordance with the POD.

The POD also provides specific urban design and built form guidelines to ensure that future development maintains the scale and type of development considered consistent with the purpose of the POD.

Given the scale and nature of the development, it is requested that the relevant period for the approval for Material Change of Use be ten (10) years.

4.4 Cassowary Rise Eco-Residential Estate Plan of Development

The Cassowary Rise Eco-Residential Estate Plan of Development (POD) specifies how the assessment categories and applicable codes of the Planning Scheme relate to the development Site and details proposed variations to the gazetted Planning Scheme provisions.

The effect of the POD is that assessment categories and associated codes for urban development will apply to the Site, in accordance with:

- a) the Precinct Plan (Map 1 – Precinct Plan)
- b) Cassowary Rise Eco-residential 3D renders (Figures 1a – 1e)
- c) Cassowary Rise Eco-residential Master Plan (Figure 2)
- d) a plan describing select parameters for development (Map 2 – Development Parameters Plan)
- e) a statement of purpose for the Eco-residential Precinct, Cassowary Corridor Precinct and Cassowary Conservation Precinct
- f) Tables of Assessment
- g) a Precincts Code applying to development within the POD area, which forms part of the common material against which subsequent development applications within the POD area will be assessed.

The POD has been structured to utilise the definitions specified in the Planning Scheme, or provide definitions otherwise.

4.5 Precinct Plan

Map 1 of the POD provided at **Appendix B** of this Report details the proposed arrangement of land uses into precincts.

4.6 Cassowary Rise Eco-Residential Estate Code

The purpose of the Cassowary Rise **Eco-Residential Estate Code** is to facilitate a boutique **eco-residential development** that co-exists with localised Cassowary habitat and areas of ecological significance.

Three (3) precincts have been determined within the Cassowary Rise Eco-Residential Estate:

1. Eco-residential Precinct
2. Cassowary Conservation Precinct
3. Cassowary Corridor Precinct

The purpose and overall outcomes to achieve the purpose of each of the precincts as detailed above are detailed below.

Eco-Residential Precinct

The purpose of the Eco-Residential Precinct is to facilitate the establishment of an eco-village that sensitively responds to the surrounding environment.

The purpose of the Eco-Residential Precinct will be achieved through the following overall outcomes:

- a) Protect the Southern Cassowary (*Casuarus casuarus johnsonii*) through maintaining eco-residential land uses and activities that are consistent with maintaining the local Southern Cassowary population in the Cassowary Conservation Precinct and Cassowary Corridor Precinct;
- b) Facilitate sustainable eco-residential development with a low-rise built form;
- c) Flood risk management minimises the impact on property and appropriately protects the health and safety of persons at risk of potential flood hazard.

Cassowary Conservation Precinct

The purpose of the Cassowary Conservation Precinct is to protect the Southern Cassowary through the dedication of approximately 60 hectares of land as ecological habitat.

The purpose of the Cassowary Conservation Precinct will be achieved through the following overall outcomes:

- a) Facilitate land uses, including 'Environment facility' and 'Nature-based tourism' that promote a thriving Southern Cassowary population;
- b) Existing native vegetation is protected and enhanced;
- c) Any development within the Cassowary Conservation Precinct includes compensatory rehabilitation of former agricultural land or degraded land and other ecological enhancements in support of a thriving Southern Cassowary population;
- d) Flood risk management minimises the impact on property and appropriately protects the health and safety of persons at risk of potential flood hazard.

Cassowary Corridor Precinct

The purpose of the Cassowary Corridor Precinct is to facilitate and support the habitat and movements of the Southern Cassowary.

The purpose of the Cassowary Corridor Precinct will be achieved through the following overall outcomes:

- a) Existing native vegetation is protected and enhanced
- b) No fencing is provided that limits the movement of the Southern Cassowary within the Cassowary Corridor Precinct
- c) The ecological and hydrological function of Jurs Creek is protected and enhanced.

The code provides Performance Criteria and Acceptable Outcomes for proposed uses, which are either Self Assessable, Code Assessable or Impact Assessable. Impact assessable development will be assessable against the Planning Scheme and the Cassowary Rise Eco-residential estate Precincts Code. In order to be self assessable, any future eco-residential Dwelling house(s) must comply with the Acceptable Outcomes of the code. All development within the Cassowary Corridor Precinct will be impact assessable.

5 Statutory Town Planning Framework

5.1 Introduction

This section of the town planning report explains the applicable components of the statutory town planning framework and their relevance to the proposed development.

5.2 Sustainable Planning Act 2009

The *Sustainable Planning Act 2009* (the SPA) is the statutory instrument for the State of Queensland under which, amongst other matters, development applications are assessed by local governments.

The SPA delivers an Integrated Development Assessment System (IDAS) for integrating State and local government assessment and approval processes for development. Relevant stages in the IDAS process including referral and public notification are addressed below.

5.2.1 Impact Assessment

The planning framework relevant to assessing the development application at the time of lodgement comprises the SPA and the *Cassowary Coast Shire Council planning scheme*.

Section 238 of the SPA prescribes that a Development Permit is necessary for assessable development, as declared under the relevant planning scheme.

In this instance, an impact assessable development application is required to be made to the Assessment Manager to acquire the necessary Development Permit.

Section 314 of SPA set out the provisions for assessment managers to assess impact assessable applications as follows:

- (2) *The assessment manager must assess the part of the application against each of the following matters or things to the extent the matter or thing is relevant to the development—*
 - (a) *the State planning regulatory provisions;*
 - (b) *the regional plan for a designated region, to the extent it is not identified in the planning scheme as being appropriately reflected in the planning scheme;*
 - (c) *if the assessment manager is not a local government—the laws that are administered by, and the policies that are reasonably identifiable as policies applied by, the assessment manager and that are relevant to the application;*
 - (d) *State planning policies, to the extent the policies are not identified in—*
 - (i) *any relevant regional plan as being appropriately reflected in the regional plan; or*
 - (ii) *the planning scheme as being appropriately reflected in the planning scheme;*
 - (e) *a temporary local planning instrument;*
 - (f) *a preliminary approval to which section 242 applies;*
 - (g) *a planning scheme;*
 - (h) *for development not in a planning scheme area—any planning scheme or temporary local planning instrument for a planning scheme area that may be materially affected by the development;*
 - (i) *if the assessment manager is an infrastructure provider—an adopted infrastructure charges resolution or the priority infrastructure plan.*
- (3) *In addition to the matters or things against which the assessment manager must*

assess the application under subsection (2), the assessment manager must assess the part of the application having regard to the following—

- (a) the common material;*
- (b) any development approval for, and any lawful use of, premises the subject of the application or adjacent premises;*
- (c) any referral agency's response for the application.'*

According to Section 327 of the SPA:

- (1) In deciding the part of an application for a preliminary approval mentioned in section 242 that states the way in which the applicant seeks approval to vary the effect of any applicable local planning instrument for the premises, the assessment manager must—*
 - (a) approve all or some of the variations sought; or*
 - (b) subject to section 242(3) and (5)—approve different variations from those sought; or*
 - (c) refuse the variations sought*
- (2) The assessment manager's decision must be based on the assessments made under division 2.*
- (3) The assessment manager's decision must not be inconsistent with a State planning regulatory provision.*
- (4) To the extent development applied for under other parts of the application is refused, any variation relating to the development must also be refused.'*

At the time of the lodgement of the development application, the common material comprises the application material only. The application material includes an assessment of the proposed development against the relevant planning documents and the assessment criteria of the SPA. However, information arising from the subsequent Information and Referral Stage will also form part of the common material to be assessed by Council.

5.2.2 Referral

Section 254 of the SPA states that:

"A referral agency has, for assessing and responding to the part of an application giving rise to the referral, the jurisdiction or jurisdictions prescribed under a regulation."

Section 13 of the Sustainable Planning Regulation 2009 ("SPR") explains that:

"For sections 250(a), 251(a) and 254(1) of the Act —

- (a) schedule 7, column 2 states the referral agency, and whether it is an advice agency or a concurrence agency, for the development application mentioned in column 1; and*
- (b) schedule 7, column 3 states the jurisdiction of the referral agency mentioned in column 2."*

The following triggers have been identified:

- Schedule 7, Table 2, Item 2 – State-controlled road
- Schedule 7, Table 2, Item 4 – Clearing vegetation
- Schedule 7, Table 3, Item 1 – State-controlled road
- Schedule 7, Table 3, Item 10 – Clearing vegetation

5.2.3 Public Notification

According to Section 295 of the SPA, the notification stage of the IDAS process applies to an application if either of the following applies –

- “(a) any part of the application requires impact assessment;
(b) the application is an application to which section 242 applies.”

The proposal relates to section 242 and therefore requires a public notification period of thirty business days.

5.2.4 State Planning Regulatory Provisions

State planning regulatory provisions are planning instruments that the planning Minister can introduce. State Planning Regulatory Provisions affect the operation of a planning scheme. They provide a single overarching planning instrument that can be applied in a range of circumstances, with the ability to regulate and prohibit development.

The table below shows the current State Planning Regulatory Provisions. State Planning Regulatory Provisions developed under the *Integrated Planning Act 1997* remain current under the *Sustainable Planning Act 2009*.

Table 5-1 Table 14: State Planning Regulatory Provisions

Policy Number	Current State Planning Regulatory Policy	Applicable to Proposed Development
Oct 2013	Draft amendment to the South East Queensland Regional Plan 2009-2031 State planning regulatory provisions	No
Sep 2013	Guragunbah State Planning Regulatory Provision	No
June 2011	State planning regulatory provision (adopted charges)	Yes
Nov 2011	Yeerongpilly Transit Oriented Development State Planning Regulatory Provision	No
Oct 2010	Off-road motorcycling facility on State-owned land at Wyaralong	No
July 2010	State Planning Regulatory Provisions (Adult stores)	No
May 2010	South East Queensland Koala Conservation State Planning Regulatory Provisions	No

Cassowary Coast Regional Council has adopted a resolution which applies the SPRPs to infrastructure charges for within the local government areas subject to the *Cassowary Coast Shire Council planning scheme*, the *Cardwell Shire Planning Scheme 2007* and the *Johnstone Shire Planning Scheme 2005*.

5.3 State Planning Policy

Section 314 of the SPA details that when assessing an impact assessable application the assessment manager must have regard to:

‘...’

- (d) State planning policies, to the extent the policies are not identified in—
- (i) any relevant regional plan as being appropriately reflected in the regional plan; or
 - (ii) the planning scheme as being appropriately reflected in the planning scheme;

...’

The State Planning Policy (the SPP) commenced on 1 July 2014 and replaced the SPP which was released on 2 December 2013. The SPP is a broad and comprehensive statutory planning instrument, which enables development, protects our natural environment and allows communities to grow and prosper.

The State Interests identified in the SPP are the following:



Figure 6: Matters of State interest

The SPP applies to the:

- (1) *making or amending of a planning scheme, and*
- (2) *designation of land for community infrastructure by a Minister, and*
- (3) *making or amending of a regional plan, and*
- (4) *assessment of a development application mentioned in Part E, to the extent the SPP has not been identified in the planning scheme as being appropriately integrated in the planning scheme, and*
- (5) *carrying out of self-assessable development mentioned in Part F.*

The Cassowary Coast Regional planning scheme was adopted 3 July 2015. The minister has identified that the Planning Scheme appropriately integrates all aspects of the SPP, as stated below:

- (1) *Liveable communities and housing:*
 - (a) *Liveable communities*
 - (b) *- Housing supply and diversity*
- (2) *Economic growth*
 - (a) *Agriculture*
 - (b) *Development and construction*
 - (c) *Mining and extractive resources*
 - (d) *Tourism*
- (3) *Environment and heritage*
 - (a) *Biodiversity*
 - (b) *Coastal environment*
 - (c) *Cultural heritage*
 - (d) *Water quality*
- (4) *Safety and resilience to hazards*
 - (a) *Emissions and hazardous activities*
 - (b) *Natural hazards, risk and resilience*
- (5) *Infrastructure*
 - (a) *Energy and water supply*
 - (b) *State transport infrastructure*

(c) *Strategic airports and aviation facilities*

(d) *Strategic ports*

As a result, the proposed development is not required to be assessed against *Part E – Interim Development Assessment Requirements* of the SPP.

5.4 SARA Referral Review

In accordance with Schedule 7 of the *Sustainable Planning Regulation 2009* (current as at 6 July 2015) (SPR), the following referral review has been prepared:

Table 5-2 Referrals identified under Schedule 7, Table 2 of the *Sustainable Planning Regulation 2009*

Application Involving	Applicable	Comment
Environmentally relevant activities	No	This application does not involve the carrying out of a new, and/or continuation of an existing, environmentally relevant activity.
State-controlled road	YES	This Site is within 25 metres of a State-controlled road and proposes to increase the number of lots.
Clearing vegetation	YES	The Site is larger than 5 hectares and proposes lots less than 25 hectares. The proposed development will facilitate additional exempt operational work to be carried out on created lots.
Strategic port land	No	This application does not involve identified strategic port land.
Major hazard facilities	No	This application is not for a major hazard facility or possible major hazard facility.
Taking or interfering with water	No	This application does not involve the taking of and/or interference with water.
Interfering with water in drainage and embankment areas or wild river floodplain management areas	No	This application does not involve any operational works that interferes with a water resource in a drainage and embankment areas or wild river floodplain management areas.
Particular dams	No	This application does not involve any operational works for the construction of a particular dam, although lesser dams are proposed.
Removal of quarry material	No	This application does not involve the removal of quarry material, made assessable under Schedule 3, Part 1, Table 5, Item 1 of the SPR.
Tidal works, or development in a coastal management district	No	This application does not involve tidal works or development in a coastal management district.
Queensland heritage place	No	This application is not for a development on an identified Queensland heritage place.
Electricity infrastructure	No	The Site is not burdened by an easement for electricity.
Contaminated land	No	This application does not relate to land identified on the Contaminated Land Register or Environmental Management Register.
Works or other development in or adjoining a fish habitat area	No	<p>These triggers relate to:</p> <ul style="list-style-type: none"> > Building work in a declared fish habitat area; > Operational work, completely or partly within a declared fish habitat area; or > Development that adjoins a declared fish habitat area. <p>This application does not involve any of these development types.</p>
Certain aquaculture	No	This application does not involve the establishment of aquaculture.
Constructing or raising waterway barrier works	No	This application does not involve the constructing or raising waterway barrier works.
Removal, destruction or damage of marine plants	No	This application does not involve development that will result in the removal, destruction or damage of marine plants.

Application Involving	Applicable	Comment
Public passenger transport	No	The Site is not located within 25m of a public passenger transport corridor.
Railways	No	The Site is not located within 25m of a railway or future railway.
State-controlled transport tunnels	No	The Site is not located within 25m of transport tunnel.
Oil and gas infrastructure	No	The Site is not subject to an easement for a gas pipeline.
Regional plans	No	The Site is not located within the SEQ region.
Certain agricultural or animal husbandry activities in a wild river area	No	This application does not involve any agricultural or animal husbandry activities in a wild river area.
Land in or near a wetland	No	The Site is not located in or near a wetland.
Land in distributor-retailer's geographic area	No	The Cassowary Coast local government area is not a participating local government for the purposes of this trigger.

Table 5-3 Referrals identified under Schedule 7, Table 3 of the Sustainable Planning Regulation 2009

Application Involving	Applicable	Comment
State-controlled road	YES	The proposed development is for Material Change of Use and the Site is located within 25 metres of a State-controlled road.
Development impacting on a State transport infrastructure	No	The application does not meet the trigger threshold for a LGA population 2.
Coastal management districts	No	The Site is not located in the Coastal Management District.
Land designated for community infrastructure	No	The development is not on land designated for community infrastructure intended to be supplied by a public sector entity.
Electricity infrastructure	No	The Site is not burdened by an electrical easement.
Clearing vegetation	YES	The lot contains native vegetation and the proposed development is seeking preliminary approval for Material Change of Use in accordance with section 242 of the SPA.
Contaminated land	No	This land is not identified on the EMR and CLR registers.
Regional plans	No	The Site is not located within the SEQ region.
Public passenger transport	No	The Site is not in proximity to a public transport corridor
Railways	No	The Site is not in proximity to a railway
State-controlled transport tunnels	No	The Site is not on land within proximity to a tunnel.
Oil and gas infrastructure	No	The Site is not burdened by the holder of a petroleum pipeline.
Land in or near a wetland	No	The Site is not located in or near a wetland
Removal, destruction or damage of marine plants	No	The application does not involve removal, destruction or damage of marine plants
Development in distributor-retailer's geographic area	No	The Site is not located in SEQ

5.4.2 Summary of Necessary Referrals to SARA

On the basis of the above analysis of Schedule 7 of the SPA, the development requires referral for the following:

- Schedule 7, Table 2, Item 2 – State-controlled road
- Schedule 7, Table 2, Item 4 – Clearing vegetation
- Schedule 7, Table 3, Item 1 – State-controlled road

- Schedule 7, Table 3, Item 10 – Clearing vegetation

Detailed assessment of the proposed development against the State Development Assessment Provisions (SDAP) is provided at **Appendix H**.

5.5 Far North Queensland Regional Plan

The Far North Queensland Regional Plan 2009-2031 ('the Regional Plan') identifies the Site as being within the Regional Landscape and Rural Production Area.

On 26 October 2012 the Regional Plan State Planning Regulatory Provisions were repealed.

The consequence of the repeal is that the Regional Plan has no regulatory function and Material Change of Use and Reconfiguring a Lot development permits no longer require referral to the Department of State Development, Infrastructure and Planning (DSDIP), for the purposes of the Regional Plan.

Notwithstanding, the 'eco-residential' development concept receives some limited support in the sub-regional narrative of the Regional Plan (emphasis added):

*There are a number of small coastal and rural settlements in Cassowary Coast where the **natural** or rural **surrounds contribute to valued lifestyle choices**. These include Bingil Bay, El Arish, Etty Bay, Flying Fish Point, Kurrimine Beach, Mena Creek, Mourilyan and South Johnstone. These settlements generally have limited infrastructure and urban services and are not intended to grow significantly (but grow nonetheless).*

In a broader sense, ecological sustainability is identified as being a fundamental principle of Far North Queensland planning under the Regional Plan.

The following principles are identified as being applicable to the proposed development in achieving ecological sustainability.

- *Inter-generational equity*—ensuring that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.
- *Precautionary principle*—ensuring that, where there are threats of serious or irreversible environmental damage, lack of full scientific certainty is not used as a reason for postponing measures to prevent environmental degradation.
- *Conserving biological diversity and ecological integrity*—protecting the variety of all life forms, their genetic diversity and the ecosystem of which they form a part, recognising the various services they provide to humans as well as their intrinsic values.

Furthermore, Wet Tropics icon, the Southern cassowary is identified as being a national and state priority for recovery actions. Protection of vulnerable habitat is articulated under 'The Natural Environment' Desired Regional Outcome (DRO), which aims to:

Protect, manage and enhance the extent, diversity, condition and connectivity of the region's natural areas to maintain ecological integrity and processes, reverse biodiversity decline and increase resilience to the expected impacts of climate change.

Particularly in relation to the area of the Site, the Regional Plan states:

Mission Beach and hinterland, southern Atherton Tablelands, and Daintree to Cape Tribulation are considered as priority areas for biodiversity conservation (DCILGPS, 2000). In the Mission Beach area, urban development is contributing to significant ongoing decline of the small cassowary population. Current urban impacts upon cassowaries and their habitat—especially increasing losses due to road traffic and dog attacks—are not believed to be sustainable. These areas are not considered appropriate for high-density urban development.

We assert that distinct to high density, rural residential development, the proposal is for eco-residential development that **supports** the ecological function of the Site and surrounds and includes the dedication of over 60 hectares of land for ecological protection within the Cassowary Coast Precinct and Cassowary Corridor Precinct.

5.6 Cassowary Coast Regional Council Planning Scheme

This application has been assessed against the *Cassowary Coast Regional Council planning scheme* ('the Planning Scheme').

5.6.1 Area Classification

The site is located within the Rural Zone and the Environmental Management and Conservation Zone of the Planning Scheme.

5.6.2 Assessment criteria

This application is impact assessable and therefore assessable against the entire Planning Scheme. The below codes have been identified as being relevant to the application. A summary of compliance and non-compliance with relevant codes is set out in **Section 6** of this report.

Planning Area Code –	Rural Zone Code
	Environmental Management and Conservation Zone Code
Land Use Code –	Dwelling House Code
Other Code –	Reconfiguring a Lot Code
Overlay Codes –	Bushfire Hazard Code
	Environmental Significance Code
	Flood Hazard Code
	Coastal Protection Code
	Waterway Corridors and Wetlands Code

6 Compliance Summary

6.1 Introduction

The following sections comprise a summary of compliance against the relevant provisions of the planning framework as they apply to the proposed development, identified in **Section 5** of this report.

More detailed information and responses to the *Cassowary Coast Regional Council planning scheme* provisions are included in the appendices to the proposal report. **Appendix I – Statement of Code Compliance** is particularly relevant in this regard, as it contains an assessment of the proposed development against the relevant codes of the Planning Scheme.

6.2 State Planning Regulatory Provisions

The current State Planning Regulatory Provisions are listed in **Section 5.2.4** of this report.

There are no State Planning Regulatory Provisions that are relevant to the proposed development, other than State Planning Regulatory Provision (adopted charges).

6.3 Cassowary Coast Regional Council planning scheme

Compliance with the relevant aspects of the strategic framework and the Planning Scheme is discussed in detail below.

6.3.1 Strategic Framework

SETTLEMENT PATTERN

Strategic outcomes

(13) It is acknowledged that the extent of certain natural hazards and the historic pattern of development in the Region may make it impractical to avoid locating urban development in areas of natural hazards, especially where the development takes the form of infill development. Therefore, development should be designed and located to ensure maximum resilience to natural hazard events. An example of a design solution for residential activities located in areas subject to flooding would be to locate habitable floor levels above the 1% annual exceedance probability level, leaving a ground floor level for car parking. However, land subject to extreme hazard flooding is not considered suitable for urban development and high coastal hazard areas are not considered suitable for any intensification of development.

Comment:

The development has been designed to ensure maximum resilience to natural hazard events, particularly with regard to flood. The proposed development exceeds the requirements prescribed for development within a Flood hazard area.

(15) New development incorporates tropical design principles where practicable, taking into account siting, orientation and passive climate control that benefits from the Region's tropical climate. Urban development provides for public open space that encourages social interaction and takes advantage of the Region's natural features and assets.

Comment:

The Cassowary Rise Eco-residential Estate POD requires that new development incorporates tropical design principles, such as building siting and design to maximise natural ventilation and light and the requirement for access to a covered outside areas that is accessible to breezes.

NATURAL ENVIRONMENT

Strategic outcomes

(6) The cassowary is recognised as an iconic symbol of the Region. Ensuring that conditions exist for its survival, for example through the preservation of cassowary habitat and habitat corridors and reducing/minimising conflicts with urban development and associated impacts such as traffic, is extremely important.

Comment:

The proposed development heavily emphasises the protection of the Southern cassowary through the provision of a dedicated Cassowary conservation lot, **proposed rehabilitation of habitat**, Cassowary Conservation Precinct, specialised fencing requirements, prohibition of **domestic cats and dogs** and signage to increase awareness of their presence.

Element – Natural environment

The Region's natural environment is protected and enhanced through the design and siting of development and infrastructure

Comment:

The proposed development protects and enhances the region's natural environment through the following measures:

- **Retention of existing vegetation;**
- Revegetation of a significant portion of the Site (subject to future development proceeding in the Cassowary Conservation Precinct);
- Inclusion of a dedicated Cassowary Corridor Precinct where future development will be impact assessable;
- Design specifications within The Cassowary Rise Eco-Residential Estate Code governing sustainable house design, including a neutral colour palette to tie future dwellings in with the landscape and not detract from the scenic amenity;
- Limiting dwelling pads to already cleared locations on the Site.

Specific outcome

(1) Development is designed to take into account the Region's biodiversity and environmental values, and seeks to protect the Region's biodiversity and environmental values.

Comment:

The proposed development has been designed in consideration of the region's biodiversity and environmental values and seeks to protect same, as detailed above.

Element – Coastal management:

Development in the coastal zone does not impact on coastal ecosystems and avoids coastal hazards.

Comment:

The proposed development is identified as being within the Coastal Zone. Notwithstanding, the proposed development, being for a boutique, eco-residential estate comprising 10 lots is not considered to impact upon Coastal ecosystems and mitigates coastal hazard risks through the incorporation of flood mitigation measures detailed at Section 4.2.8 of this report.

COMMUNITY IDENTITY AND DIVERSITY**Element – Safe and strong communities**

Development ensures that the Region's towns and villages remain safe and viable

Comment:

The proposed development cannot reasonably be expected to negatively affect the viability of the region's towns or villages.

Element – Community identity

Development protects and enhances the character of the Region's towns and villages and places of cultural heritage significance.

Comment:

The Site is not known to contain any places of cultural or heritage significance.

NATURAL RESOURCES AND LANDSCAPE**Element – Scenic Amenity**

The scenic quality of the Region's landscape is recognised and protected

Comment:

The proposed development recognises and protects the scenic landscape via the following measures:

- Retention of existing vegetation;
- Revegetation of a significant portion of the Site;
- Design specifications within The Cassowary Rise Eco-Residential Estate Code governing sustainable house design, including a neutral colour palette to tie future dwellings in with the landscape and not detract from the scenic amenity;
- Limiting construction to already cleared locations on the Site.

Element – Rural and agricultural land

The Region's rural and important agricultural land is protected and maintained to ensure ongoing use for agricultural and rural uses.

Comment:

Although classed as comprising Agricultural Land (Classes A and B), the Site currently has little to no agricultural value, and retains considerable vegetation.

An Agricultural Land Report was prepared for the Site by Rural and Environmental Resources in accordance with the requirements of the Planning Guidelines for 'The Identification of Good Quality Agricultural Land' (DPI and DHLGP) as recommended in the former State Planning Policy 1/92. The report concludes that the subject land is not 'capable of sustainable use for agriculture with a reasonable level of inputs', as biophysical limitations, locational restraints and the size and fragmentation of the Site are not able to be resolved.

It is therefore considered that the proposed development would not alienate good quality agricultural land.

Element – Extractive resources

The Region's quarries and extractive industries are protected for future use and development of those resources.

Comment:

The Site is not known to be located within proximity to any extractive facilities.

ACCESS AND MOBILITY**Element – Effective road networks**

Road networks are planned to facilitate the safe and efficient movement of people and freight

Comment:

The proposed development will be serviced by and connected to a safe and efficient road network.

INFRASTRUCTURE AND SERVICES**Element – Delivery of infrastructure:**

Infrastructure is provided in an efficient and cost effective

Comment:

The Site is not currently serviced by water, sewer, waste water or stormwater infrastructure, however the proposed development will manage on-site water provision, sewer treatment, waste water and storm water as detailed in Table 3.2.9 of this report.

Element – Energy

Development provides for adverse and reliable energy supply and does not impact on existing energy infrastructure

Comment:

The proposed development is for a boutique, eco-residential estate comprising 10 lots, for which electricity supply will be provided. It is not considered that the development will impact upon existing energy infrastructure.

All buildings are required to include solar energy, powering one or more service (e.g. hot water, electricity and/or pool pump).

ECONOMIC DEVELOPMENT

Element – Tourism and eco-tourism:

The expansion of the tourism industry in the region is supported.

Comment:

The proposed development is for eco-residential development, with the potential for future Nature-based tourism or Environment facility development to be located on Site. Both identified potential future uses will have a low impact on the social and physical environment and will be either code or impact assessable, dependent on size and location.

WATER MANAGMEENT

Element – Healthy waters:

The integrity of the Region's waterways and wetlands is maintained and enhanced through sustainable land use practices and best practice design of development.

Comment:

The proposed development has been designed in consideration of Jurs Creek, which traverses the Site. Development is constrained to the east of the creek, which identified within a Waterway Precinct within the Plan of Development for the estate.

NATURAL HAZARDS

Element – Safety and resilience:

Development ensures the safety of persons from natural hazards and community resilience from such events.

Comment:

Flood modelling undertaken on the Site demonstrates that:

- the proposed fill pads provide greater than a 500 year ARI flood (0.2% AEP) immunity for the residential dwellings;
- the minimum floor levels in dwellings will be approximately 1.2 to 1.3 metres above the 1% AEP flood level (beyond Council's requirement of an additional 0.3 metres above the 1% AEP flood level);
- all rooms in the second storey of the proposed dwellings will be located above the Probable Maximum Flood level, which has an Average Recurrence Interval of between 1,000,000 and 10,000,000 years;
- the duration for which the Site will be isolated is generally less than one day during extreme flood events;
- residents will be able to safely drive on the internal roads and enter/exit the Site for all floods up to and including the 50 year ARI event (2% AEP).

Thus, residents will be able to freely enter and exit the Site for the vast majority of flood events. During extreme flood events (i.e. an average recurrence interval of 100 years or more), residents may either choose to evacuate the Site prior to the flood event, or safely seek refuge within their own dwelling

6.3.2 Rural Zone Code

Development that achieves compliance with the assessment criteria of the Rural zone code complies with the code.

Performance solutions have been provided with respect to building height, road frontage setbacks and boundary setbacks. The proposed development also does not achieve compliance with PO8, which has regard to ensuring the ongoing use of land for agricultural activities.

It is noted that the Cassowary Rise Eco-Residential Estate Code prescribes building height and setback distances that are able to achieve compliance with the relevant Performance outcomes.

With regard to the development being sited on ALC Class A and B Agricultural Land, an Agricultural Land Report has been prepared for the Site, which concludes that the Site is not 'capable of sustainable use for agriculture with a reasonable level of inputs', as biophysical limitations, locational restraints and the size and

fragmentation of the Site are not able to be resolved. Accordingly, the Site is not viewed as being agriculturally viable.

Notwithstanding, the proposed development, proposed on land identified on the Agricultural Land Overlay, is not able to achieve compliance with the purpose of the code in the following respects:

- *provide opportunities for non-agricultural activities that are compatible with agriculture, the environmental features, and landscape character of the rural area where the activities do not compromise the long-term use of the land for rural purposes;*
- *ensure the viability of ALC Class A and B land;*

Further discussion in respect of the above is provided at Section 7 of this Report.

The proposed development is able to achieve compliance with the other Acceptable outcomes of the code, where relevant.

Detailed assessment of the proposed development against the assessment criteria of the Rural zone code is provided in **Appendix A**.

6.3.3 Environmental Management and Conservation Zone

Development that achieves compliance with the assessment criteria of the Environmental management and conservation code complies with the code.

As identified in section 3.2.1 of this Report, the Site is predominantly zoned Rural, with smaller tracts of land to the east, south and west zoned Environmental Management and Conservation. Areas of the Site zoned Environmental management and conservation align with land designated as Cassowary Conservation Precinct and Cassowary Corridor Precinct under the POD for the Estate. No development within these precincts is proposed as part of this development, with the Cassowary Corridor Precinct protected under environmental covenant.

Accordingly, assessment of the proposed development against this code has been undertaken on a 'where relevant' basis. The proposed development is able to achieve compliance with the Acceptable outcomes of the code, where relevant.

It is noted that with respect to future development of the Cassowary Conservation Precinct, the Cassowary Rise Eco-residential Estate Code prescribes building height and setback distances that are consistent with the relevant Performance outcomes.

Detailed assessment of the proposed development against the assessment criteria of the Environmental management and conservation code is provided in **Appendix A**.

6.3.4 Dwelling House Code

Development that achieves compliance with the assessment criteria of the Dwelling house code complies with the code.

Performance solutions have been provided with respect to road frontage setbacks and boundary setbacks. It is noted that the Cassowary Rise Eco-Residential Estate Code prescribes building height and setback distances that are able to achieve compliance with the relevant Performance outcomes.

The proposed development is able to achieve compliance with the other Acceptable outcomes of the code, where relevant.

Detailed assessment of the proposed development against the assessment criteria of the Dwelling house code is provided in **Appendix A**.

6.3.5 Reconfiguring a Lot Code

Development that achieves compliance with the assessment criteria of the Reconfiguring a Lot code complies with the code.

Performance solutions have been provided with respect to lot size and frontages proposed, which are less than the 60 hectares and 250 metres respectively prescribed for the Rural and Environmental Management and Conservation zones and boundary setbacks (as proposed under the relevant zones).

It is noted however that the lot sizes and dimensions as proposed are considered to be adequate for the intended land use and the proposed development is able to achieve compliance with the relevant Performance outcomes.

The proposed development is able to achieve compliance with the other Acceptable outcomes of the code, where relevant.

Detailed assessment of the proposed development against the assessment criteria of the Reconfiguring a Lot code is provided in **Appendix A**.

6.3.6 Bushfire Hazard Code

Development that achieves compliance with the assessment criteria of the Bushfire hazard code complies with the code.

The proposed development is not able to achieve compliance with AO2.3 or PO2, which requires firebreaks or fire maintenance trails to be provided where development will result in multiple lots.

With respect to the above, it is noted that the proposed development does not propose fire breaks as development is proposed on existing cleared areas of the site, which will provide a 'firebreak' of sorts, ensuring adequate distance between hazardous vegetation and future Dwelling houses. Jurs Creek provides an additional fire buffer to the west.

Despite non-compliance with the code as above, the proposed development is able to achieve compliance with the purpose and overall outcomes of the code, which require that development is designed to:

- (i) *avoid or minimise the risk of loss of life from bushfire;*
- (ii) *minimise the damage to property from bushfire;*
- (iii) *assist emergency services in responding to any bushfire threat.*

The proposed development is able to achieve compliance with the other Acceptable outcomes of the code, where relevant.

Detailed assessment of the proposed development against the assessment criteria of the Bushfire hazard code is provided in **Appendix A**.

6.3.7 Coastal Protection Code

The Site is identified as being within the Coastal zone, however due to the Site's distance from the coast, no further assessment against this code has been undertaken.

6.3.8 Environmental Significance Code

Development that achieves compliance with the assessment criteria of the Environmental significance code complies with the code.

Performance solutions have been provided with respect to development being located within 100 metres of areas of High Ecological Significance (HES). It is noted however that development is proposed to be located in existing cleared areas of the Site. Future development of the eco-residential estate, governed by the POD, is not expected to generate adverse impacts on ecological values and accordingly, the proposed development is considered to be able to achieve compliance with the relevant Performance outcome.

The proposed development is able to achieve compliance with the other Acceptable outcomes of the code, where relevant.

Detailed assessment of the proposed development against the assessment criteria of the Environmental significance code is provided in **Appendix A**.

6.3.9 Flood Hazard Code

Development that achieves compliance with the assessment criteria of the Flood hazard code complies with the code.

Performance solutions have been provided with respect to the design of buildings allowing for the flow of water and flood storage underneath minimum floor levels (i.e. buildings are not constructed as slab on ground) and providing an evacuation route that is accessible and trafficable during a 1% AEP flood event. With respect to the above, it is noted that the proposed development incorporates a variety of measures with regard to

flooding and the proposed development is considered to be able to achieve compliance with the relevant Performance outcomes.

Further discussion with respect to the above is provided in Section 7 of the Town Planning Report.

The proposed development is able to achieve compliance with the other Acceptable outcomes of the code, where relevant.

Detailed assessment of the proposed development against the assessment criteria of the Flood hazard code is provided in **Appendix A**.

6.3.10 Waterway Corridors and Wetlands Code

Development that achieves compliance with the assessment criteria of the Waterway corridors and wetland code complies with the code.

The proposed development is able to achieve compliance with all Acceptable outcomes of the code, where applicable.

Detailed assessment of the proposed development against the assessment criteria of the Waterway corridors and wetland code is provided in **Appendix A**.

7 Key Issues Summary

It is acknowledged that certain elements of the proposed development may have the potential to be considered in conflict with various aspects of the Cassowary Coast Regional Council planning scheme ('the Planning Scheme') and the Far North Queensland Regional Plan ('the Regional Plan'), particularly on the following fronts:

1. The Site's location external to a Rural Living Area within the Regional Plan;
2. The partial rural zoning of the Site under the Planning Scheme, which predominantly aims to ensure the viability of ALC Class A and B land and protect the long-term use of the land for rural purposes;
3. The Site's designation as Agricultural Land Classification (ALC) – Class A and Class B on the Agricultural Land Overlay and as Important Agricultural Land on Strategic Framework Map 3B – Economic Development of the Planning Scheme; and
4. The flood prone nature of the Site.

Statutory Guideline 05/09 'Sufficient grounds for decisions that conflict with a relevant instrument' ('the Guideline') provides guidance on what are considered to be sufficient grounds, and provides the following definition of **grounds** (*emphasis added*):

*'The term **grounds** is defined in the SPA to mean **matters of public interest**. It does not include considerations such as the personal circumstances of the applicant, the owner of the land or another interested party.'*

The SPA however does not provide guidance on what grounds are considered to be sufficient for justifying a decision that may conflict with a relevant instrument.

In terms of what are considered 'sufficient grounds', the Guideline states (*emphasis added*):

...

*'For each development application, any decision about whether or not there are sufficient grounds **will depend on the facts of the matter**. The examples in this guideline are intended as a **guide only** and are **not intended to be exhaustive**.'*

As identified above, we assert that the examples contained within the guideline are non-exhaustive and are a guide only. We therefore outline the following sufficient grounds to provide Council with the means to approve the development:

Sufficient Ground 1: Significant Community and Ecological Benefit

The proposed development is unique in that it endeavours to retain and enhance the existing vegetation, through the dedication of a 60 plus hectare Cassowary conservation area. Valuable corridor habitat is also retained and protected through the designation of a Cassowary corridor precinct.

It is proposed that the 60 plus hectare Southern Cassowary conservation area be placed under an environmental covenant, which will provide a significant environmental asset for the community and local fauna, particularly the endangered Southern Cassowary.

The proposed development also proposes the staged rehabilitation of the Cassowary conservation precinct. The proposed Cassowary Rise Eco-residential Estate Plan of Development identifies requirements in relation to the rehabilitation of this area.

Government statistics indicate that only 20-25% of former cassowary habitat remains, with much of the habitat still under pressure. Vehicle traffic and dog attacks are detailed as key threats to the Southern Cassowary².

As well as the retention of a significant parcel of land for conservation, revegetation and dedicated Cassowary Corridor precinct, Cassowary Rise Eco-residential Estate proposes to incorporate a cassowary crossing, a cassowary feeding station for every 500m² of GFA associated with a Nature-based tourism/Environment facility, cassowary safe fencing, and the prohibition of domestic animals from the estate, to further support the endangered Southern Cassowary.

² Commonwealth of Australia, Department of the Environment,
<http://www.environment.gov.au/biodiversity/threatened/publications/factsheet-southern-cassowary>

It is noted that the preservation of cassowary habitat and habitat corridors as proposed within the development, and the nature of the development itself, being for urban development that will not conflict with cassowary protection is supported within the strategic framework of the scheme (section 3.4 Natural environment). Further detail with respect to the proposed developments compliance with the strategic framework is provided in Section 6.3.1 of this Report.

For the significant efforts proposed to minimise future impacts on the Site as detailed above, Cassowary Rise Eco-residential Estate has also received in-principle support from the C4 Community for Coastal and Cassowary Conservation Inc. group for the development.

The SPA came in to effect in 2009. The purpose of the SPA is stated as follows:

The purpose of this Act is to seek to achieve **ecological sustainability** by—

- (a) managing the process by which development takes place, including ensuring the process is accountable, effective and efficient and **delivers sustainable outcomes**; and
- (b) **managing the effects of development on the environment, including managing the use of premises**; and
- (c) continuing the coordination and integration of planning at the local, regional and State levels.

In respect of Items (a) and (b) above, the development can be seen to achieve ecological sustainability, the purpose of the SPA by:

1. Utilising already cleared land for eco-residential development. Development will be underpinned by the Cassowary Rise Eco-Residential Estate Plan of Development, which features a variety of design measures to further protect and enhance the natural environment, such as the promotion of sustainable housing and associated land use and development that is sensitive to ensure a thriving Southern Cassowary population;
2. The retention and enhancement of existing vegetation and valuable habitat;
3. The requirement for all future development to be assessed under the Cassowary Rise Eco-Residential Estate Plan of Development, of which the purpose is to facilitate the establishment of an eco-village that sensitively responds to the surrounding environment (Eco-residential Precinct).

It is therefore clear, that the proposed development achieves ecological sustainability, consistent with the purpose of the SPA, and offers a significant public benefit by the dedication of land for ecological purposes. The proposed development also provides the opportunity for enhanced public enjoyment and education on the Southern Cassowary through a Plan of Development that paves the way for Nature-based tourism and Environment facility land use.

Sufficient Ground 2: Mission Beach Lifestyle: A Perspective on Need

The Mission Beach area is known for its unspoilt natural environment, comprising Wet Tropics rainforest and the Great Barrier Reef World Heritage Listings. The lifestyle is reflective of the surrounds, with residential uses co-existing with the rainforest.

Evidence of subdivision of similar lot sizes can be seen to the immediate north of the proposed development (Mountain View Close). It is noted that the Mountain View Close subdivision had less available cleared area in which to situate residential dwellings, and a lesser area of available ecologically significant tracts of land to offset the development (refer **Figure 7-1 – Mountain View Close**).

The proposed development is a boutique, 10 lot eco-residential subdivision that will appeal to a niche market that seeks out developments of this nature.

To be clear, the proposed development and its ecological benefits cannot be considered as rural residential development, and therefore the development is not inconsistent with the Planning Scheme in respect to the requirements relating to rural residential development. The development is eco-residential development.

Figure 7-1 Mountain View Close



Sufficient Ground 3: Non-viable Agricultural Land, Significant Environmental Values

The Rural zone code states that the purpose of the Rural zone code is to:

‘...’

- *provide opportunities for non-agricultural activities that are compatible with agriculture, the environmental features, and landscape character of the rural area where the activities do not compromise the long-term use of the land for rural purposes;*

...

- *ensure the viability of ALC Class A and B land;*

...’

The purpose of the code, with respect to the above, is to be achieved through the following overall outcomes:

(a) ALC Class A and B land is protected from fragmentation and alienation;

...

(d) low impact activities such as small scale tourism, commercial activities and outdoor recreation are encouraged within the rural zone where they do not compromise the long-term use of the land for agricultural activities;

...

(f) development minimises impacts on any environmental values present on the land or surrounding area.

...’

Although classed as Agricultural Land (Classes A and B), the Site currently has little to no agricultural value.

An Agricultural Land Report was prepared for the Site by Rural and Environmental Resources in accordance with the requirements of the Planning Guidelines for ‘The Identification of Good Quality Agricultural Land’ (DPI and DHLGP) as recommended in State Planning Policy 1/92 (refer **Appendix I – Agricultural Land Report**). The desktop report identified the following limitations of the Site in relation to potential agricultural production:

- There is a lack of a reliable water supply to the Site, limiting the site to dry-land sugarcane cropping and grazing options that do not require irrigation;
- Various biophysical limitations exist on Site impacting on agricultural production, including:

- Freely draining soils generating moisture and nutrient deficits;
 - Erosion caused by occasional food events; and
 - Sub soil constraints on shallow soils.
- In terms of land suitability, only the flat alluvial areas of the Site would be suited to dry-land sugar cane production only (the balance of the Site is not considered to be GQAL);
- The Site is fragmented, and the collective size of the cleared parcels are not considered to be an economic unit for sugar cane production

The report concludes that the subject land is not '*capable of sustainable use for agriculture with a reasonable level of inputs*', as biophysical limitations, locational restraints and the size and fragmentation of the Site are not able to be resolved.

It is therefore considered that the proposed development would not alienate good quality agricultural land.

The Site does however does retain considerable environmental values, which are also considered under the Rural zone code (particularly within overall outcome (f)). The potential environmental values of the Site are recognised in the Site's dual zoning within both the Rural and Environmental management and conservation zones.

The Cassowary Rise Eco-residential Estate POD promotes sustainable development and prescribes that development be limited to designated building envelopes only, in accordance with the Cassowary Rise Eco-residential Estate Plan of Development. Other associated requests include not only Cassowary safe, four (4) wire fencing be used, but also that no domestic dogs and cats be kept on the premises.

The proposed development therefore attempts to minimise impacts on any environmental values present on the land or surrounding area, in accordance with overall outcome (f).

It is therefore requested that on the basis that the Site does not contain agricultural value, as identified within the Agricultural Land Report, yet does contain significant environmental value, that Council consider the proposed development, which seeks to conserve and enhance local environmental values consistent with the Environmental management and conservation zoning of part of the land and land surrounding the Site and which is considered within the overall outcomes of the Rural zone code.

Sufficient Ground 4: A Flood Safe Eco-village

The proposed development represents a flood safe residential development, providing greater flood protection to residents, visitors and property than can be seen in many other locations within the Cassowary Coast region. Cassowary Rise Eco-Residential Estate incorporates various measures to ensure a high level of protection against flood hazard, over and beyond what is required under the Cassowary Coast Regional Council planning scheme.

These measures, articulated within the Plan of Development (POD) include:

- Requirement for habitable floor levels to have immunity to a 500 year ARI flood event (0.2% AEP);
- Requirement for vehicular access (including roads) to have immunity of 300mm below a 50 year ARI flood event (2% AEP);
- Requirement for Operational Works to be undertaken in accordance with the Flood Investigation Report provided at **Appendix G**.
- The requirement for extensive flood infrastructure, including flood warning signage (two types), flood gauges and road markers to indicate road location during a flood event. Suggested flood warning sign types, including location and dimensions are provided within the POD.

The strict flood controls prescribed within the POD ensure that Cassowary Rise Eco-residential Estate will be afforded a greater level of flood protection than development under the Planning Scheme. Due to the nature of the proposed development, impacts on surrounding properties will be minimal (up to 60mm near the upstream boundary of the Site), however these increases are localised and will only affect heavily vegetated areas of lands upstream which cannot be developed or used for agricultural purposes.

The proposed development also has a negligible impact on discharges. Refer to **Appendix G** for detailed results of the flood modelling.

7.1 The Cassowary Rise Eco-Residential Estate Vision

The vision for the Cassowary Rise Eco-Residential Estate is to provide a boutique, 10 Lot Eco-residential development with an emphasis on habitat protection and conservation. It is important to note that the proposed development is fundamentally removed from the previous Reconfiguring a Lot lodged with Council.

The Cassowary Rise Eco-Residential Estate Code features a variety of design measures to further protect and enhance the natural environment, such as the promotion of sustainable housing and exclusion of domestic animals from the estate.

The proposed development also supports the protection of the Cassowary and accordingly, has in-principle support from local environmental champions C4 (refer **Appendix J – C4 Support Letter**).

The proposed development comes with a significant environmental asset for the community – 60 hectares of land identified for strategic rehabilitation by Council in the Cassowary Coast Planning Scheme.

Flood constraints onsite have been demonstrated to be capable of mitigation to a degree of **risk tolerance far more acceptable than development in other parts of the Council area**, and consistent with post Brisbane 2011 flood decisions in flood prone areas elsewhere in Queensland.

It is therefore considered that in lieu of agricultural production value (of which the Site has limited to no value), the development proposed represents an outstanding opportunity for habitat conservation and community benefit, whilst providing a unique residential opportunity.

8 Conclusions and Recommendations

This Town Planning Report accompanies an application for a Development Permit for Reconfiguring a Lot and s242 Preliminary Approval Affecting the Planning Scheme for Material Change of Use (Dwelling houses) (Environment facility and Nature-based tourism subject to further assessment) to facilitate a boutique eco-residential development on premises located at El Arish Mission Beach Road, Maria Creeks, properly described as Lot 5 on SP202686.

According to Section 326 of the SPA:

“(1) The assessment manager’s decision must not conflict with a relevant instrument unless—

- (a) the conflict is necessary to ensure the decision complies with a State planning regulatory provision; or*
- (b) there are sufficient grounds to justify the decision, despite the conflict; or*
- (c) the conflict arises because of a conflict between—*
 - (i) 2 or more relevant instruments of the same type, and the decision best achieves the purposes of the instruments; or*
 - (ii) 2 or more aspects of any 1 relevant instrument, and the decision best achieves the purposes of the instrument.”*

This Town Planning Report (and supporting application material) has demonstrated that the proposed development complies with the relevant parts of the Planning Scheme and where there is conflict, there are grounds to overcome such conflicts.

In particular, the proposed development:

- (i) Satisfies the relevant elements of the Strategic Framework of the Planning Scheme;
- (ii) Is not considered to be inconsistent with the Planning Scheme or the Regional Plan and to the extent of any seeming inconsistency provides sufficient grounds in support of the proposed development;
- (iii) Satisfies relevant provisions of each of the codes applicable to the development or provides sufficient grounds why the development should be approved despite any conflict with the codes;
- (iv) Satisfies the rules of the SPA for assessment of impact assessable developments;
- (v) Provides a significant environmental asset for the community – 60 hectares of land identified for strategic rehabilitation by Council;
- (vi) Retains valuable corridor habitat through the dedication of a Cassowary Corridor Precinct;
- (vii) Promotes sustainable housing;
- (viii) Facilitates native wildlife protection through the prohibition of domestic animals;
- (ix) Supports the protection of the Southern Cassowary; and

In conclusion, based upon the planning assessment of the proposed development against the provisions of the SPA, Regional Plan, relevant State Planning Policies and the *Cassowary Coast Regional Council Planning Scheme*, it is recommended that the Cassowary Coast Regional Council approves the development application, subject to reasonable and relevant conditions.

Yours faithfully



DOMINIC HAMMERSLEY

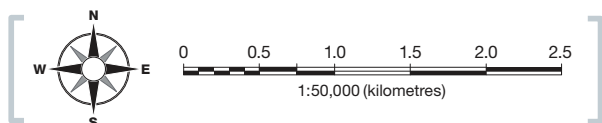
Principal (Planning) and Business Development Manager
For CARDNO

El Arish Mission Beach Road, Maria Creeks

FIGURES

Figure 1 **Location Map**

Figure 2 **Zoning Map**



[LEGEND]

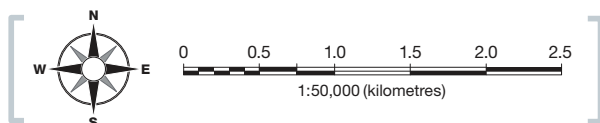
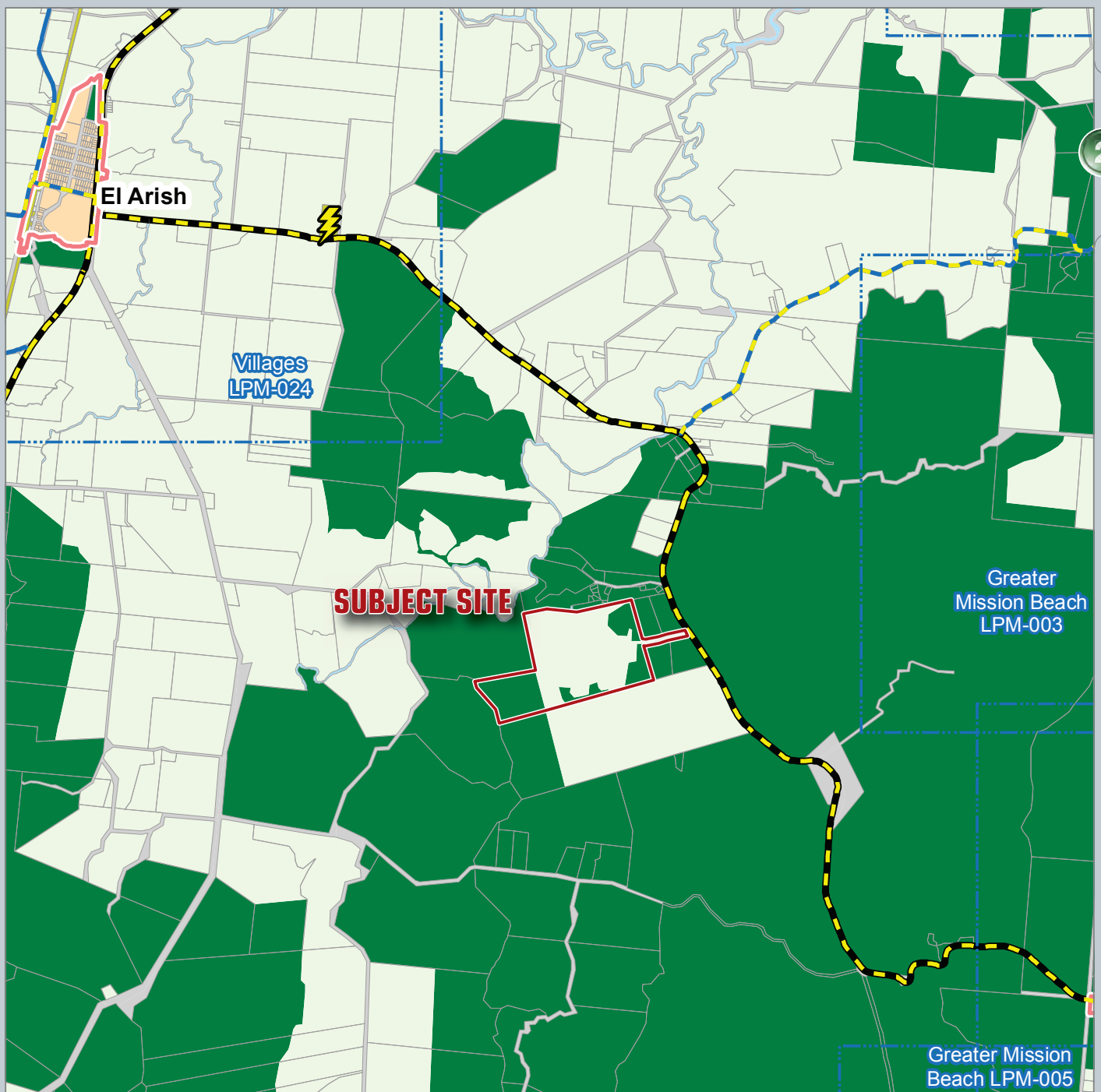
Subject Site



CASSOWARY RISE ECO-RESIDENTIAL ESTATE,
EL ARISH MISSION BEACH ROAD, MARIA CREEKS

Location Map

FILENAME >	Location Map	DATE >	20 June 2016
JOB NO. >	HRP14114	AMENDED >	n/a
SCALE >	1:50,000	VERSION >	1.0
SOURCE >	Google Maps		



[LEGEND]

- Subject Site
- Environmental Management and Conservation
- Rural
- Township

CASSOWARY RISE ECO-RESIDENTIAL ESTATE,
EL ARISH MISSION BEACH ROAD, MARIA CREEKS

Zoning Map

FILENAME >	Zoning Map	DATE >	20 June 2016
JOB NO. >	HRP14114	AMENDED >	n/a
SCALE >	1:50,000	VERSION >	1.0
SOURCE >	Cassowary Coast Regional Council Planning Scheme, 03 July 2015; Zoning Map ZM-008		

El Arish Mission Beach Road, Maria
Creeks

APPENDIX

A

CURRENT TITLE SEARCHES

CURRENT TITLE SEARCH

DEPT OF NATURAL RESOURCES AND MINES, QUEENSLAND

Request No: 21436259

Search Date: 21/07/2015 13:24

Title Reference: 50690915

Date Created: 07/11/2007

Previous Title: 50690804

REGISTERED OWNER

Dealing No: 711131161 29/10/2007

PROPERTY PROJECTS AUSTRALIA PTY LTD A.C.N. 075 620 656

ESTATE AND LAND

Estate in Fee Simple

LOT 5 SURVEY PLAN 202686
County of NARES Parish of HULL
Local Government: CASSOWARY COAST

EASEMENTS, ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Crown by
Deed of Grant No. 21037173 (POR 356)
2. MORTGAGE No 710314829 06/02/2007 at 12:25
KORVEN SECURITIES LIMITED TRUSTEE 1/2
UNDER INSTRUMENT 710314829
CORPORATE ADVANCE PTY LTD A.C.N. 111 429 004
TENANT IN COMMON 1/2
3. EASEMENT No 711131120 29/10/2007 at 16:22
burdening the land to
LOT 1 ON SP196736
OVER EASEMENT A ON SP196736
4. COVENANT No 711131169 29/10/2007 at 16:35
COUNCIL OF THE SHIRE OF JOHNSTONE
OVER COVENANT A ON SP202686
5. COVENANT No 711131170 29/10/2007 at 16:35
COUNCIL OF THE SHIRE OF JOHNSTONE
OVER COVENANT B ON SP202686
6. MORTGAGE No 712365908 24/04/2009 at 15:29
TOMAS RAYMOND BUXTON
ELIZABETH ANNE BUXTON
CHRISTIAN BUXTON
ALEXANDER BUXTON TRUSTEE
UNDER INSTRUMENT 712365908

CURRENT TITLE SEARCH

DEPT OF NATURAL RESOURCES AND MINES, QUEENSLAND

Request No: 21436259

Search Date: 21/07/2015 13:24

Title Reference: 50690915

Date Created: 07/11/2007

EASEMENTS, ENCUMBRANCES AND INTERESTS

7. PRIORITY OF MORTGAGE No 712446177 01/06/2009 at 15:25
MORTGAGE: 712365908
is given priority over
MORTGAGE: 710314829
8. COVENANT No 713347582 13/07/2010 at 12:10
CASSOWARY COAST REGIONAL COUNCIL
OVER COVENANT C ON SP235331
9. STATUTORY CHARGE No 713471128 17/09/2010 at 15:25
The Commissioner of State Revenue under SEC 60 of the Land
Tax Act 2010

ADMINISTRATIVE ADVICES - NIL

UNREGISTERED DEALINGS - NIL

CERTIFICATE OF TITLE ISSUED - No

Caution - Charges do not necessarily appear in order of priority

** End of Current Title Search **

COPYRIGHT THE STATE OF QUEENSLAND (DEPT OF NATURAL RESOURCES AND MINES) [2015]
Requested By: D APPLICATIONS CITEC CONFIRM

CURRENT TITLE SEARCH

DEPT OF NATURAL RESOURCES AND MINES, QUEENSLAND

Request No: 23898992

Search Date: 26/07/2016 14:40

Title Reference: 21028094

Date Created: 12/11/1976

REGISTERED OWNER

Dealing No: 717330970 21/06/2016

WMD & ASSOCIATES PTY LTD A.C.N. 612 773 707

ESTATE AND LAND

Estate in Fee Simple

LOT 364 CROWN PLAN NR2120

Local Government: CASSOWARY COAST

EASEMENTS, ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Crown by
Deed of Grant No. 21028094 (POR 364)

ADMINISTRATIVE ADVICES - NIL

UNREGISTERED DEALINGS - NIL

CERTIFICATE OF TITLE ISSUED - No

** End of Current Title Search **

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Requested By: D-ENQ CITEC CONFIRM

El Arish Mission Beach Road, Maria
Creeks

APPENDIX

B

S242 PLAN OF DEVELOPMENT

CASSOWARY RISE ECO- RESIDENTIAL ESTATE PLAN OF DEVELOPMENT

EL ARISH – MISSION BEACH ROAD, MISSION BEACH (LOT 5 SP202686)

VERSION 1.0

Prepared for:
Buxton Superannuation Fund

Prepared by:
Cardno HRP

Prepared:
July 2014

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CASSOWARY RISE ECO-RESIDENTIAL ESTATE PLAN OF DEVELOPMENT – EL ARISH – MISSION BEACH ROAD, MISSION BEACH
PLAN OF DEVELOPMENT VERSION 1.0

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1. Introduction

1.1 Application

This Plan of Development applies to the area identified as the *Cassowary Rise Eco-residential Estate Plan of Development, El Arish – Mission Beach Road, Mission Beach* (hereafter 'Plan of Development') as shown on **Map 1 – Precinct Plan**. It contains specific planning requirements to those set out in the *Johnstone Planning Scheme 2005* (the 'planning scheme').

Where it conflicts with the requirements of the planning scheme, this Plan of Development prevails.

1.2 Relationship to the Sustainable Planning Act 2009

The Plan of Development functions as part of the preliminary approval pursuant to s242 of the *Sustainable Planning Act 2009* ('SPA') that varies the effect of the local planning instrument for the area by specifying:

- a) The level of assessment for certain development within the Plan of Development Area
- b) Codes that form part of the common material against which subsequent development applications within the Plan of Development Area will be assessed.

1.3 Structure

The Plan of Development includes:

- a) a Precinct Plan (**Map 1 – Precinct Plan**)
- b) A plan describing select parameters for development (**Map 2 – Development Parameters Plan**)
- c) **Figures 1a to 1e** that pictorially represent the Eco-residential vision
- d) a statement of purpose for the Eco-residential Precinct, Cassowary Corridor Precinct and Cassowary Conservation Precinct
- e) Tables of Assessment
- f) a Precincts Code applying to development within the Plan of Development Area which forms part of the common material against which subsequent development applications within the Plan of Development Area will be assessed.



2. Purpose

2.1 Eco-residential Precinct Purpose

The purpose of the Eco-residential Precinct is to facilitate the establishment of an eco-village that sensitively responds to the surrounding environment.

The purpose of the Eco-residential precinct will be achieved through the following overall outcomes:

- a) Protect the Southern Cassowary (*Casuaris casuaris*) through maintaining eco-residential land uses and activities that are consistent with maintaining the local Southern Cassowary population in the Cassowary Conservation Precinct and Cassowary Corridor Precinct
- b) Facilitate sustainable eco-residential development with a low-rise built form
- c) Flood risk management minimises the impact on property and appropriately protects the health and safety of persons at risk of potential flood hazard.

2.2 Cassowary Conservation Precinct Purpose

The purpose of the Cassowary Conservation Precinct is to protect the Southern Cassowary through the dedication of approximately 60 hectares of land as ecological habitat.

The purpose of the Cassowary Conservation Precinct will be achieved through the following overall outcomes:

- a) Facilitate land uses, including 'Environment facility' and 'Nature-based tourism' that promote a thriving Southern Cassowary population
- b) Existing native vegetation is protected and enhanced
- c) Any development within the Cassowary Conservation Precinct includes compensatory rehabilitation of former agricultural land or degraded land and other ecological enhancements in support of a thriving Southern Cassowary population
- d) Flood risk management minimises the impact on property and appropriately protects the health and safety of persons at risk of potential flood hazard.

2.3 Cassowary Corridor Precinct Purpose

The purpose of the Cassowary Corridor Precinct is to facilitate and support the habitat and movements of the Southern Cassowary.

The purpose of the Cassowary Corridor Precinct will be achieved through the following overall outcomes:

- a) Existing native vegetation is protected and enhanced
- b) No fencing is provided that limits the movement of the Southern Cassowary within the Cassowary Corridor Precinct
- c) The ecological and hydrological function of Jurs Creek is protected and enhanced.



3. Tables of Assessment

The Tables of Assessment in the following sub-sections apply to land identified on **Map 1 – Precinct Plan**.

3.1 Levels of assessment - Material change of use

The following tables identify **exceptions** to the material change of use levels of assessment contained in Part 4, Division 2 of the *Johnstone Shire Planning Scheme*

Table 3.1.1 Eco-residential Precinct - Material Change of Use

Use	Level of assessment	Assessment criteria
Commercial activities	<ul style="list-style-type: none"> Impact assessment 	<ul style="list-style-type: none"> Johnstone Shire Planning Scheme Cassowary Rise Eco-residential estate precincts code
Single residential	<ul style="list-style-type: none"> Self assessable if complying with the self assessable acceptable outcomes Code assessment where not self assessable 	<ul style="list-style-type: none"> Rural zone code P1 to P3 (Johnstone Shire Planning Scheme) Single residential code P1 to P9 (Johnstone Shire Planning Scheme) Cassowary Rise Eco-residential estate precincts code
Multiple rural occupancy	<ul style="list-style-type: none"> Impact assessment 	<ul style="list-style-type: none"> Johnstone Shire Planning Scheme Cassowary Rise Eco-residential estate precincts code
Rural service industry	<ul style="list-style-type: none"> Impact assessment 	<ul style="list-style-type: none"> Johnstone Shire Planning Scheme Cassowary Rise Eco-residential estate precincts code

Table 3.1.2 Cassowary Conservation Precinct - Material Change of Use

Use	Level of assessment	Assessment criteria
Commercial activities	<ul style="list-style-type: none"> Impact assessment 	<ul style="list-style-type: none"> Johnstone Shire Planning Scheme Cassowary Rise Eco-residential estate precincts code
Environment facility ¹	<ul style="list-style-type: none"> Code Assessment if not exceeding the GFA limit in AO3.2 of Table 5.2.2 Impact assessment where not code assessable 	<ul style="list-style-type: none"> Cassowary Rise Eco-residential estate precincts code

¹ Per Queensland Planning Provisions version 3.1 (27 June 2014).



CASSOWARY RISE ECO-RESIDENTIAL ESTATE PLAN OF DEVELOPMENT – EL ARISH – MISSION BEACH ROAD, MISSION BEACH
PLAN OF DEVELOPMENT VERSION 1.0

Table 3.1.2 Cassowary Conservation Precinct - Material Change of Use (continued)

Use	Level of assessment	Assessment criteria
Nature based tourism ¹	<ul style="list-style-type: none"> Code Assessment if not exceeding the GFA limit in AO3.2 of Table 5.2.2 Impact assessment where not code assessable 	<ul style="list-style-type: none"> Cassowary Rise Eco-residential estate precincts code
Single residential	<ul style="list-style-type: none"> Code assessment if for the use of a caretaker associated with an 'Environment facility' or 'Nature based tourism' Impact assessment where not code assessable 	<ul style="list-style-type: none"> Single residential code P1 to P9 (Johnstone Shire Planning Scheme) Cassowary Rise Eco-residential estate precincts code
Multiple rural occupancy	<ul style="list-style-type: none"> Impact assessment 	<ul style="list-style-type: none"> Johnstone Shire Planning Scheme Cassowary Rise Eco-residential estate precincts code
Rural service industry	<ul style="list-style-type: none"> Impact assessment 	<ul style="list-style-type: none"> Johnstone Shire Planning Scheme Cassowary Rise Eco-residential estate precincts code

Table 3.1.3 Corridor Conservation Precinct - Material Change of Use

Use	Level of assessment	Assessment criteria
Environment facility ¹	<ul style="list-style-type: none"> Code Assessment if 0m² GFA is proposed in the Corridor Conservation Precinct Impact assessment where not code assessable 	<ul style="list-style-type: none"> Cassowary Rise Eco-residential estate precincts code
Nature based tourism ¹	<ul style="list-style-type: none"> Code Assessment if 0m² GFA is proposed in the Corridor Conservation Precinct Impact assessment where not code assessable 	<ul style="list-style-type: none"> Cassowary Rise Eco-residential estate precincts code

3.2 Levels of assessment – Reconfiguring a lot

The following table identifies **exceptions** to the Reconfiguring a lot levels of assessment contained in Part 4, Division 2 of the *Johnstone Shire Planning Scheme*

Table 3.2.1 Reconfiguring a lot

Precinct	Level of assessment	Assessment criteria
Eco-residential Precinct	<ul style="list-style-type: none"> Code assessment where not exceeding a maximum of 10 lots within the Eco-residential precinct Impact assessment 	<ul style="list-style-type: none"> Reconfiguring code (Johnstone Shire Planning Scheme) Cassowary Rise Eco-residential estate precincts code



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Table 3.2.1 Reconfiguring a lot (continued)

Precinct	Level of assessment	Assessment criteria
Cassowary Conservation Precinct	<ul style="list-style-type: none"> Impact assessment 	<ul style="list-style-type: none"> Johnstone Shire Planning Scheme Cassowary Rise Eco-residential estate precincts code
Cassowary Corridor Precinct	<ul style="list-style-type: none"> Impact assessment 	<ul style="list-style-type: none"> Johnstone Shire Planning Scheme Cassowary Rise Eco-residential estate precincts code

3.3 Levels of assessment – Building work

The following table identifies exceptions to the Building work levels of assessment contained in Part 4, Division 2 of the *Johnstone Shire Planning Scheme*

Table 3.3.1 Eco-residential Precinct - Material Change of Use

Precinct	Level of assessment	Assessment criteria
Building work not associated with a material change of use		
Eco-residential Precinct	<ul style="list-style-type: none"> Self assessable if complying with the self assessable acceptable outcomes Code assessment where not self assessable 	<ul style="list-style-type: none"> Single residential code P1 to P9 (Johnstone Shire Planning Scheme) Cassowary Rise Eco-residential estate precincts code
Cassowary Conservation Precinct	<ul style="list-style-type: none"> Impact assessment 	<ul style="list-style-type: none"> Johnstone Shire Planning Scheme Cassowary Rise Eco-residential estate precincts code
Cassowary Corridor Precinct	<ul style="list-style-type: none"> Impact assessment 	<ul style="list-style-type: none"> Johnstone Shire Planning Scheme Cassowary Rise Eco-residential estate precincts code



3.4 Levels of assessment – Operational work

The following table identifies **exceptions** to the Operational work levels of assessment contained in Part 4, Division 2 of the *Johnstone Shire Planning Scheme*

Table 3.4.1 Eco-residential Precinct - Material Change of Use

Precinct	Level of assessment	Assessment criteria
Eco-residential Precinct	Self assessment	
	If for: <ul style="list-style-type: none"> landscape work²; OR clearing of vegetation³; AND <ul style="list-style-type: none"> Complying with the self assessable acceptable solutions 	<ul style="list-style-type: none"> Cassowary Rise Eco-residential estate precincts code
	Code assessment	
	Where not self assessable	Cassowary Rise Eco-residential estate precincts code
	Impact assessment	
	If for extracting or filling	<ul style="list-style-type: none"> Filling and excavation code Cassowary Rise Eco-residential estate precincts code
Cassowary Conservation Precinct / Cassowary Corridor precinct	Code assessment	
	If for landscape work ²	<ul style="list-style-type: none"> Cassowary Rise Eco-residential estate precincts code
	Impact assessment	
	If for clearing of vegetation ³	<ul style="list-style-type: none"> Johnstone Shire Planning Scheme Cassowary Rise Eco-residential estate precincts code

² Per Queensland Planning Provisions version 3.1 (27 June 2014).

³ *Vegetation* as defined in the *Vegetation Management Act 1999*.



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4. Overlay Maps

The following planning scheme maps are not applicable to the Eco-residential Precinct, Cassowary Conservation Precinct or Cassowary Corridor Precinct:

- Good Quality Agricultural Land – Soils Plan
- Areas of High Scenic Amenity and Tourist Route – Scenic Amenity Map

This section overrides the provisions in Part 5 of the planning scheme, to the extent that provisions applied to the above-listed planning scheme maps.



5. Cassowary Rise Eco-residential Estate Precincts Code

5.1 Introduction

This section provides a code for the Plan of Development area (**Map 1 – Precinct Plan**). The code provides additional and/or alternative performance outcomes and acceptable outcomes to the codes identified in Part 4, Division 2, and Part 5 of the planning scheme.

The purpose of this code is to ensure that development in the Plan of Development area is consistent with the purpose (refer Part 2) of this Plan of Development.

5.2 Cassowary Rise Eco-Residential Estate Precincts Assessment Criteria

Table 5.2.1 Eco-residential Precinct Criteria for self assessable and assessable development

Performance Outcome	Acceptable Outcome
Development that is Self Assessable and Assessable Development	
Built form	
PO1 Eco-residential precinct buildings must: <ul style="list-style-type: none"> a) have a predominant low-rise character; b) retain an appropriate human scale and relationship with the landscape setting and with other buildings adjoining the land; c) ensure that the maximum height of buildings is sensitive to the height of other buildings adjoining the land and the prevailing local character; d) maintain a high degree of visual access through the site. 	AO1.1 Buildings and structures do not exceed a maximum: <ul style="list-style-type: none"> a) <i>building height</i> of 8.5 metres; b) <i>height</i> of 10.5 metres; c) two (2) storeys.
PO2 Buildings must provide for setbacks from the side and rear boundaries of the site, which are appropriate for the: <ul style="list-style-type: none"> a) efficient use of the site; b) local character of the area; c) effective separation from neighbouring properties. 	AO2.1 The building envelope of any building does not extend beyond the building envelope shown on Map 2 – Development Parameters Plan .
Site Coverage	
PO3 The site coverage of development must be in accordance with the function of the Eco-residential Precinct and surrounding precincts.	AO3.1 The site coverage of any building does not exceed 20% of the area of the site within the Eco-residential precinct.



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Performance Outcome	Acceptable Outcome
Car Parking	
PO4 Car parking spaces are provided consistent with the requirements of lower density development in a natural setting.	AO4.1 A minimum of two (2) car parking spaces are provided for each <i>single residential</i> dwelling. AS5.2 A minimum of one (1) car parking space is covered.
Sustainability	
PO5 Buildings and structures are designed to respond to the tropical climate of Mission Beach, the natural surrounds and have minimal impact on ecological systems or natural resources.	AO5.1 The placement of buildings is consistent with the design intent shown conceptually in Figure 1a – 1e Cassowary Rise Eco-residential estate renders . Note – Example buildings are indicative of only and building height must be in accordance with AO6.2 . AO5.2 <i>Single residential</i> dwellings are designed to maximise natural ventilation and natural light and every dwelling has: a) Access to prevailing breezes including external walls with openings in at least two different orientations / facades to allow breeze paths within the dwelling; and b) Access to a covered, outside area accessible to breezes. AO5.3 The external features, walls and roofs of buildings and structures have a subdued and non-reflective palette. Note – Examples of suitable colours include shades of green, olive green, blue green, grey green, green blue, indigo, brown, blue grey, and green yellow. AO5.4 Each <i>single residential</i> dwelling includes one or more of the following alternative energy sources: a) Solar hot water; or b) Solar electricity; or c) Solar pool pump. AO5.5 Each <i>single residential</i> dwelling includes on-site storage for potable water with a minimum storage capacity of 20,000 litres. AO5.6 No domestic cats or dogs are permitted.



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Performance Outcome	Acceptable Outcome
Flood Immunity	
<p>PO6</p> <p>The habitable floor level for buildings, structures and associated development within the Eco-residential Precinct addresses the risk of flood impacts such that:</p> <ul style="list-style-type: none"> a) habitable floor levels are above known flood inundation levels with immunity to a 500 year Annual Recurrence Interval (ARI) + 300mm freeboard; and b) vehicular access, including roads has a minimum immunity of 300 mm below a 50 year ARI event. 	<p>AO6.1</p> <p>The habitable floor level for <i>buildings</i> is not less than 13.95 metres Australian Height Datum (AHD).</p> <p>AO6.2</p> <p>Buildings are a minimum of two (2) storeys in height.</p> <p>AO6.3</p> <p>All car parking areas are provided with a minimum surface level of 13.65 metres AHD.</p> <p>Where for Reconfiguring a Lot or Operational Works associated with Reconfiguring a Lot</p> <p>AO6.4</p> <p>Operational Works must be undertaken generally in accordance with El Arish – Mission Beach Road Development Flood Investigation (refer Appendix A) and:</p> <ul style="list-style-type: none"> a) Include a filled house pad with a minimum area of 1,200m² for each lot at the prescribed minimum finished ground level (refer AO6.4(b)); b) Each filled house pad has a minimum finished ground level of 13.65 metres AHD; c) Roads and vehicle access to house pads have a minimum flood immunity of 300mm below a 50 year ARI event. <p>Note - refer Figure 1a – 1e Cassowary Rise Eco-residential estate renders.</p> <p>AO6.5</p> <p>The layout for any Reconfiguring a Lot is generally consistent with Figure 2 – Cassowary Rise Eco-residential estate master plan.</p>
Flood Risk Management	
<p>PO7</p> <p>Flood risk management minimises the impact on property and appropriately protects the health and safety of persons at risk of flood hazard, and:</p> <ul style="list-style-type: none"> (a) indicates the position and path of all safe evacuation routes off the site; and (b) hazard warning signage and depth indicators are provided at key hazard points, such as at floodway crossings. 	<p>Where for Reconfiguring a Lot or Operational Works associated with Reconfiguring a Lot</p> <p>AO7.1</p> <p>The following flood related infrastructure must be provided in accordance with Map 2 – Development Parameters Plan and Table 5.2.1 A – Flood signage:</p> <ul style="list-style-type: none"> (a) Flood Warning Sign 1A; (b) Flood Warning Sign 1B; (c) Flood Gauge; (d) Road markers.



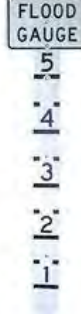


CASSOWARY RISE ECO-RESIDENTIAL ESTATE PLAN OF DEVELOPMENT – EL ARISH – MISSION BEACH ROAD, MISSION BEACH
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Performance Criteria	Acceptable Solutions
Stormwater Infrastructure	
PO8 Stormwater infrastructure is provided in consideration of best practice water sensitive urban design and the mitigation of potential flood worsening impacts.	Where for Reconfiguring a Lot or Operational Works associated with Reconfiguring a Lot AO8.1 Operational Works (extracting or filling) and Operational Works (works for infrastructure) shall be undertaken generally in accordance with El Arish – Mission Beach Road Development Flood Investigation (refer Appendix A) and box culverts are provided to roads as identified on Map 2 – Development Parameters Plan .
Building Exclusion Area	
PO10 Appropriate building setbacks are provided to the Corridor Conservation Sub-Precinct and the Environmental Covenant Sub-Precinct to reduce land-use conflict.	AO10.1 Buildings are not located within the Building Exclusion Areas identified on Map 2 – Development Parameters Plan .
Landscaping	
PO11 Landscaping is provided consistent with the local character of Mission Beach and the ecological values of the site and surrounds, including the protection and conservation of the Southern Cassowary.	AO11.1 Boundary fencing is limited to four (4) strand un-electrified plain wire. Where for Reconfiguring a Lot or Operational Works associated with Reconfiguring a Lot AO11.2 On-street landscaping includes plant species contained in Table SC6.4.3.2 – On-street landscaping – species suitable in certain localities (Schedule 6 – Cassowary Coast Planning Scheme).
Corridor Conservation Sub-Precinct Rehabilitation	
PO12 Rehabilitation and management arrangements in the Cassowary Corridor Precinct identified on Map 1 – Precinct Plan are undertaken as part of any Reconfiguring a Lot in the Eco-residential Precinct identified on Map 1 – Precinct Plan to ensure the ongoing viability of the Southern Cassowary.	Where for Reconfiguring a Lot or Operational Works associated with Reconfiguring a Lot AO12.1 The Cassowary Corridor Conservation Sub-Precinct identified on Map 1 – Precinct Plan is rehabilitated in accordance with an approved Rehabilitation Management Plan. AO12.2 A wildlife crossing point must be provided in accordance with Map 2 – Development Parameters Plan and includes: a) Reduction in design speed of the road to 40 km/h; b) Road surface and edge treatment to encourage reduced vehicle speed; and c) Erection of signage to educate motorists on Cassowary and other wildlife movements.



Table 5.2.1 A – Flood signage

Flood Warning Sign 1A	
<p>This is a generic flood warning sign indicating that the area is subject to flooding and must contain the wording shown right.</p> <p>The proposed dimensions of this sign is 600 x 600 (diamond) plus additional wording of 600 x 400 below.</p> <p>Location of Flood Warning Sign 1A to be provided in accordance with Map 2 – Development Parameters Plan.</p>	<p>Example:</p> 
Flood Warning Sign 1B	
<p>This sign includes a warning of deep water associated with the waterway in the event of a flood and must contain the wording shown right (or similar).</p> <p>The proposed dimensions of this sign is 600 x 400.</p> <p>Location of Flood Warning Sign 1B to be provided in accordance with Map 2 – Development Parameters Plan.</p>	<p>Example:</p> 
Flood Gauge	
<p>This sign indicates the depth of water along road ways.</p> <p>Location of Flood Gauge signage is to be provided in accordance with Map 2 – Development Parameters Plan.</p>	<p>Example:</p> 



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Table 5.2.1 A – Flood signage (cont.)

Road Markers	
<p>Road markers are to be placed every 25 metres marking the horizontal alignment of the road.</p> <p>Location of Road Markers is to be provided in accordance with Map 2 – Development Parameters Plan.</p>	<p>Example:</p> 



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Table 5.2.2 Cassowary Conservation Precinct Criteria for assessable development

Performance Outcome	Acceptable Outcome
Development that is Assessable Development	
Built form	
PO1 Cassowary Conservation Precinct buildings must: <ul style="list-style-type: none"> a) have a predominant low-rise character; b) retain an appropriate human scale and relationship with the landscape setting and with other buildings adjoining the land; c) ensure that the maximum height of buildings is sensitive to the height of other buildings adjoining the land and the prevailing local character; d) maintain a high degree of visual access through the site. 	AO1.1 Buildings and structures do not exceed a maximum: <ul style="list-style-type: none"> a) <i>building height</i> of 8.5 metres; b) <i>height</i> of 10.5 metres; c) two (2) storeys.
PO2 Buildings must provide for setbacks from the side and rear boundaries of the site, which are appropriate for the: <ul style="list-style-type: none"> a) efficient use of cleared areas; b) local character of the area; c) effective separation from neighbouring properties. 	AO2.1 No acceptable outcome.
Site Coverage	
PO3 The site coverage of development must be in accordance with the function of the Cassowary Conservation Precinct.	AO3.1 The site coverage of any building or hardstand area does not exceed 5% of the area of the site. AO3.2 The cumulative Gross Floor Area (GFA) of Environment facility and / or Nature based tourism development does not exceed 3,000m ² .
Sustainability	
PO4 Buildings and structures are designed to respond to the tropical climate of Mission Beach, the natural surrounds and have minimal impact on ecological systems or natural resources.	AO4.1 Buildings are designed to maximise natural ventilation and natural light and every dwelling has: <ul style="list-style-type: none"> a) Access to prevailing breezes including external walls with openings in at least two different orientations / facades to allow breeze paths within the dwelling; and b) Access to a covered, outside area accessible to breezes.



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Performance Outcome	Acceptable Outcome
	<p>AO4.2 The external features, walls and roofs of buildings and structures have a subdued and non-reflective palette. Note – Examples of suitable colours include shades of green, olive green, blue green, grey green, green blue, indigo, brown, blue grey, and green yellow.</p> <p>AO4.3 All buildings include one or more of the following alternative energy sources: a) Solar hot water; or b) Solar electricity; or c) Solar pool pump.</p> <p>AO4.4 No domestic cats or dogs are permitted.</p>
Flood Immunity	
<p>PO5 The habitable floor level for buildings, structures and associated development within the Eco-residential Precinct addresses the risk of flood impacts such that habitable floor levels are above known flood inundation levels with immunity to a 500 year Annual Recurrence Interval (ARI) + 300mm freeboard.</p>	<p>AO5.1 The habitable floor level for <i>buildings</i> is not less than 13.95 metres Australian Height Datum (AHD).</p>
Flood Risk Management	
<p>PO6 Flood risk management minimises the impact on property and appropriately protects the health and safety of persons at risk of flood hazard, and: (a) indicates the position and path of all safe evacuation routes off the site; and (b) hazard warning signage and depth indicators are provided at key hazard points, such as at floodway crossings; and (c) identifies the level of immunity for development associated with Environment facility and/or Nature based tourism, having regard to the flood risk. Development includes but is not limited to roads, vehicular access, waterway crossings and car parking areas; and (d) identifies a flood management response to be enacted in the event of a flood and managed by an appropriate entity.</p>	<p>AO6.1 No acceptable outcome.</p>



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Performance Outcome	Acceptable Outcome
<p>Note – A material change of use that involves new GFA or increases the number of persons living, working or residing in the Cassowary Conservation Precinct is supported by a Flood Emergency Evacuation Plan prepared by suitably qualified persons having regard to Floodplain Management in Australia: Best Practice Principles and Guidelines (2000), prepared by Standing Committee on Agriculture and Resource Management (SCARM), CSIRO.</p>	
Stormwater Infrastructure	
<p>PO7</p> <p>Stormwater infrastructure is provided in consideration of best practice water sensitive urban design and the mitigation of potential flood worsening impacts.</p>	<p>A07.1</p> <p>No acceptable outcome.</p>
Building Exclusion Area	
<p>PO8</p> <p>Appropriate building setbacks are provided to the Corridor Conservation Sub-Precinct and the Environmental Covenant Sub-Precinct to reduce land-use conflict.</p>	<p>A08.1</p> <p>Vegetation is not removed or destroyed for the purposes of accommodating buildings.</p>
Landscaping	
<p>PO9</p> <p>Landscaping is provided consistent with the local character of Mission Beach and the ecological values of the site and surrounds and supports the health and vitality of the local Southern Cassowary population.</p>	<p>A09.1</p> <p>No acceptable outcome.</p>
Lighting	
<p>PO10</p> <p>Outside lighting devices associated with the development shall be positioned on the site and shielded so as not to cause glare or other nuisance to nearby residents or affect wildlife that is known or likely to inhabit the area.</p>	<p>A010.1</p> <p>No acceptable outcome.</p>



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Performance Outcome	Acceptable Outcome
Cassowary Conservation Precinct Rehabilitation	
PO11 Rehabilitation and management arrangements must facilitate the conservation and protection of the Cassowary Conservation Precinct and the Southern Cassowary in consideration of the staged development of the Cassowary Conservation Precinct.	AO11.1 The Cassowary Corridor Precinct is protected under environmental covenant, where reflecting the restricted bounds of the Plan of Development for development. AO11.2 The rehabilitation areas on Map 1 – Precinct Plan are rehabilitated in accordance with the following requirements: a) One (1) hectare for every 200m ² (or part thereof) of GFA associated with Nature based tourism and/or Environment facility; and Note – rehabilitation must be in accordance with a rehabilitation plan prepared by suitably qualified persons to the satisfaction of Cassowary Coast Regional Council. AO11.3 A Cassowary feeding station is provided for every 500m ² (or part thereof) of GFA associated with Nature based tourism and/or Environment facility. Note – the type and scale of Cassowary feeding station must be recommended by suitably qualified persons to the satisfaction of Cassowary Coast Regional Council.
Vegetation clearing	
PO12 The ecological values of the Cassowary Conservation Precinct and the protection and conservation of the Southern Cassowary is protected in perpetuity.	AO12.1 The development does not result in the loss of habitat or vegetation.

Table 5.2.2 Cassowary Corridor Precinct Criteria for assessable development

Performance Outcome	Acceptable Outcome
Ecological Protection	
PO1 Any development within the Cassowary Corridor Precinct must not detrimentally impact the natural environment by way of: a) Loss of Connectivity; b) Loss of habitat; c) Loss of soils or erosion; d) Inappropriate fire management practices; or e) Introduction of pest and weed species.	AO1.1 No buildings or structures are permitted.



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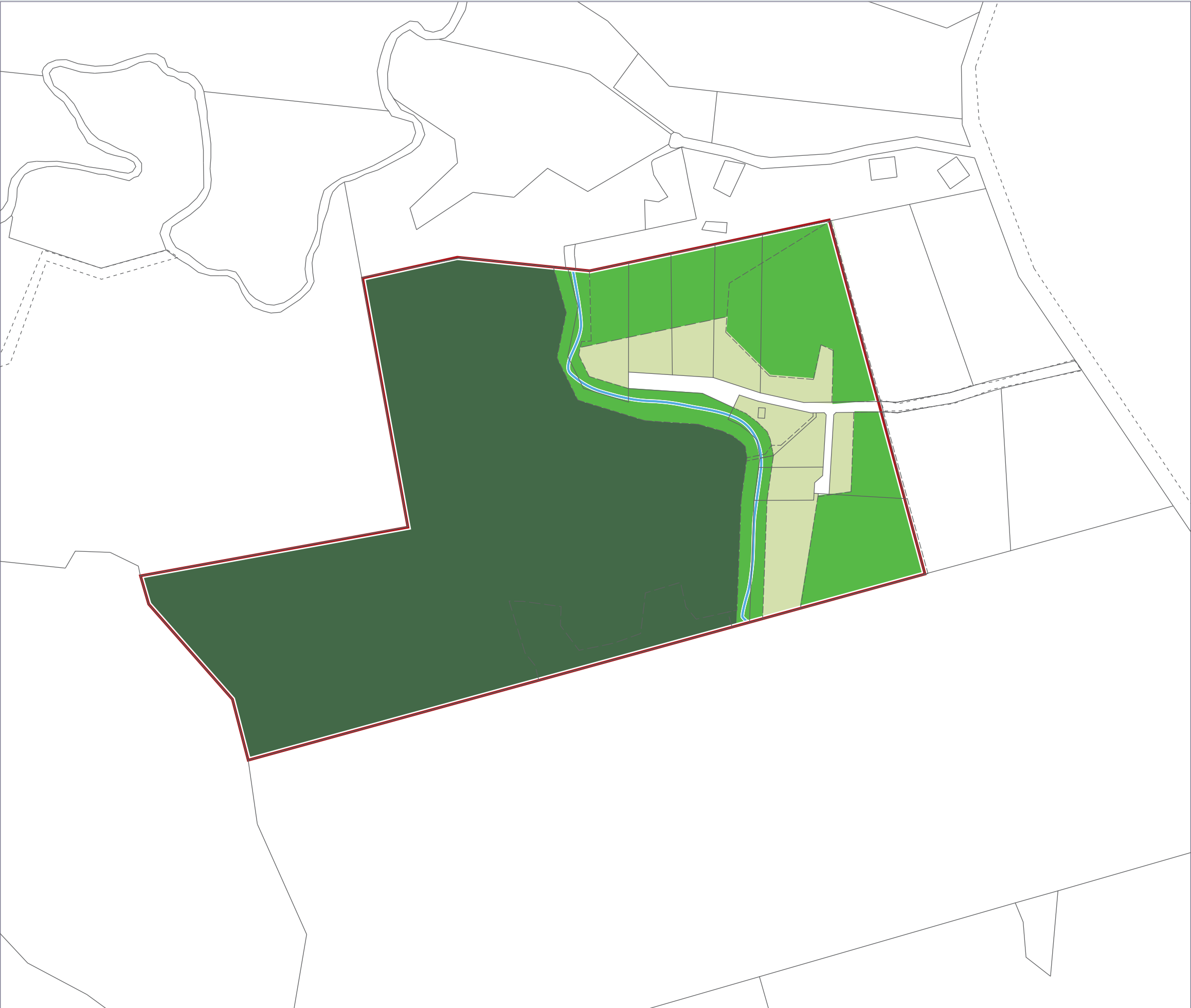
Performance Outcome	Acceptable Outcome
PO2 Native fauna and its habitat located in the Cassowary Corridor Precinct must be conserved.	AO2.1 Vegetation or native fauna habitat is not damaged.
Riparian Function	
PO3 The hydrological regime of Jurs Creek, including natural water quality, quantity and groundwater conditions is maintained and enhanced.	AO3.1 No acceptable solution.
Operational Works	
PO4 No cut or fill occurs within the Cassowary Corridor Precinct, except where to undertake essential hydraulic (flood mitigation) and stormwater (hydraulic conveyance) works.	AO4.1 Development within the Cassowary Corridor Precinct is limited to operational works associated with essential hydraulic (flood mitigation) and stormwater (hydraulic conveyance) infrastructure. AO4.2 No cut or fill is undertaken except where in accordance with AO4.1 .
Ecological Management	
PO5 Management arrangements must facilitate the conservation and protection of ecologically significant areas, ecological corridors and buffers.	AO5.1 The Cassowary Corridor Precinct is protected under environmental covenant. AO5.2 Public access to the Corridor Conservation Sub-Precinct is consistent with the ecological values and purpose of the area.
Ecological Management	
PO6 Management arrangements must facilitate the conservation and protection of the Environmental Covenant Area.	AO6.1 The Environmental Covenant Area identified on Map 2 – Environmental Parameters Plan is protected under environmental covenant.
Educational Embellishments	
PO7 Minor nature based embellishments may occur where the ecological values and ecological function of the Cassowary Corridor Precinct is maintained.	AO7.1 No acceptable outcome.



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6. Supporting Maps

MAP 1	–	PRECINCT PLAN
MAP 2	–	DEVELOPMENT PARAMETERS PLAN



LEGEND

SUBJECT SITE

PRECINCTS LEGEND

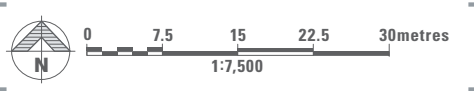
ECO-RESIDENTIAL PRECINCT

CASSOWARY CONSERVATION PRECINCT

CASSOWARY CORRIDOR PRECINCT

WATERWAY

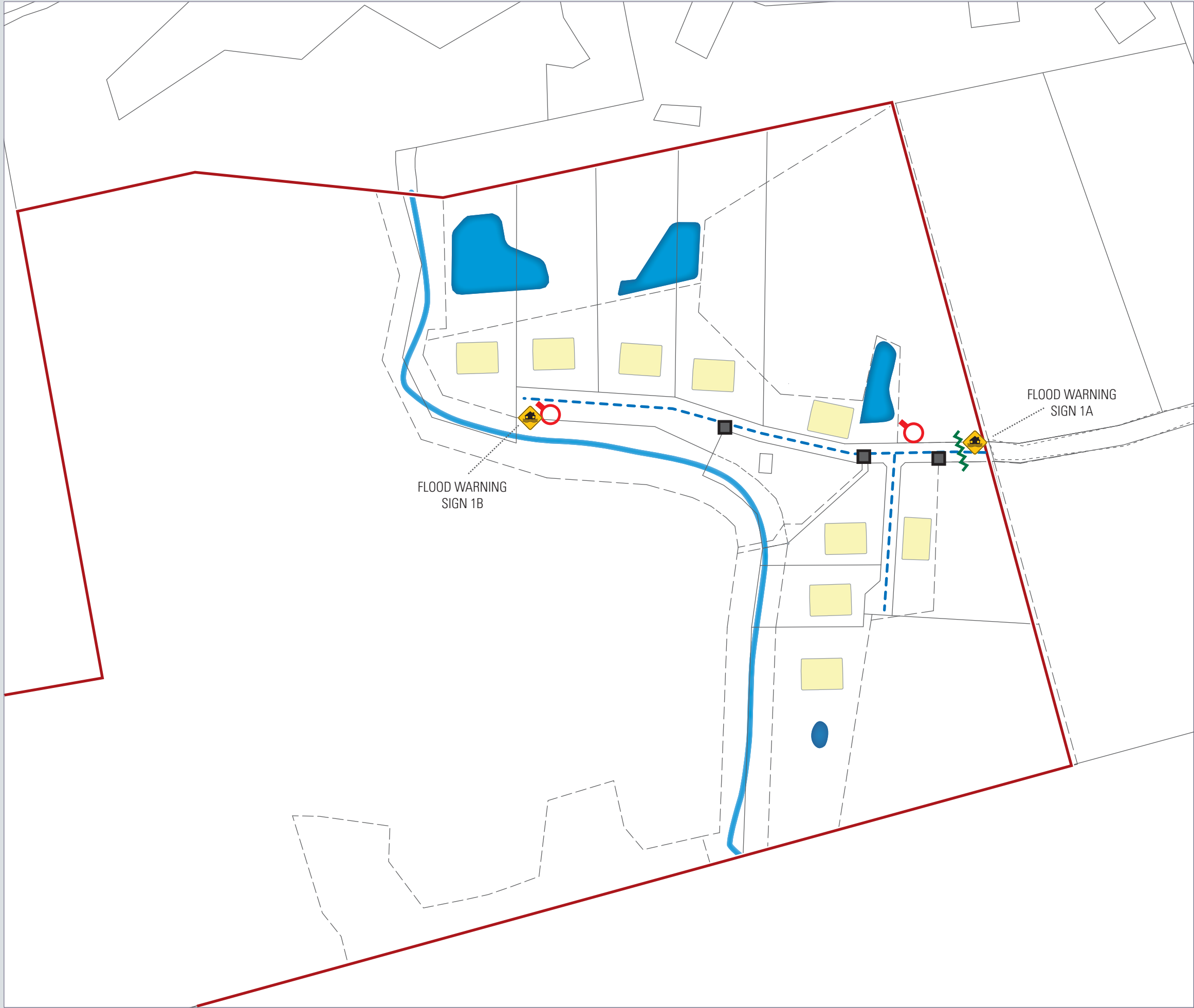
* AREAS NOT IDENTIFIED AS 'ECO-RESIDENTIAL LIFESTYLE AREAS' ARE PROTECTED AREAS TO BE MANAGED IN ACCORDANCE WITH RELEVANT COUNCIL APPROVALS AND COVENANTS.



MISSION BEACH
LOT 5 ON SP202686

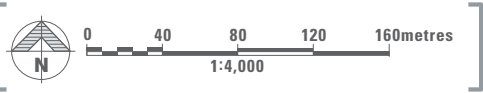
Precinct Plan

FILENAME >	PRECINCT PLAN	DATE >	JULY 2015
JOB NO. >	HRP14114	AMENDED >	N/A
SCALE >	1:7,500	VERSION >	1.0
SOURCE >	QUEENSLAND GOVERNMENT: STATE OF QUEENSLAND: DNRM: 2015: SMARTMAP		



LEGEND	
	SUBJECT SITE
	BUILDING ENVELOPES/EARTHEN PADS
	BOX CULVERTS
	WILDLIFE CROSSING
	FLOOD WARNING SIGN
	FLOOD GAUGE
	ROAD MARKERS
	DAMS
	RIVER

* AREAS NOT IDENTIFIED AS 'ECO-RESIDENTIAL LIFESTYLE AREAS' ARE PROTECTED AREAS TO BE MANAGED IN ACCORDANCE WITH RELEVANT COUNCIL APPROVALS AND COVENANTS.



MISSION BEACH
LOT 5 ON SP202686

Development Parameters Plan

FILENAME >	DEV PARAMETERS	DATE >	JULY 2015
JOB NO. >	HRP14114	AMENDED >	N/A
SCALE >	1:4,000	VERSION >	1.0
SOURCE >	DTMR SMARTMAP		



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7. Supporting Figures

- FIGURES 1a-1e – CASSOWARY RISE ECO-RESIDENTIAL ESTATE RENDERS
- FIGURE 2 – CASSOWARY RISE ECO-RESIDENTIAL ESTATE MASTER PLAN

Cassowary Rise Eco-residential Estate

3D Render Lots 9 &10

MISSION BEACH

LOT 5 ON SP202686

FILENAME >	FIGURE 1a	DATE >	JULY 2015
JOB NO. >	HRP14114	AMENDED >	N/A
SOURCE >	GOOGLE EARTH	VERSION >	1.0

CAMERA ANGLE LOCATION KEY:



Cassowary Rise Eco-residential Estate

3D Render Lots 7 & 8

MISSION BEACH

LOT 5 ON SP202686

FILENAME >	FIGURE 1b	DATE >	JULY 2015
JOB NO. >	HRP14114	AMENDED >	N/A
SOURCE >	GOOGLE EARTH	VERSION >	1.0

CAMERA ANGLE LOCATION KEY:



Cassowary Rise Eco-residential Estate

3D Render Lots 6,7 & 8

MISSION BEACH

LOT 5 ON SP202686

FILENAME >	FIGURE 1c	DATE >	JULY 2015
JOB NO. >	HRP14114	AMENDED >	N/A
SOURCE >	GOOGLE EARTH	VERSION >	1.0

CAMERA ANGLE LOCATION KEY:



Cassowary Rise Eco-residential Estate

3D Render Lots 2,3 & 4

MISSION BEACH

LOT 5 ON SP202686

FILENAME >	FIGURE 1d	DATE >	JULY 2015
JOB NO. >	HRP14114	AMENDED >	N/A
SOURCE >	GOOGLE EARTH	VERSION >	1.0

CAMERA ANGLE LOCATION KEY:



Cassowary Rise Eco-residential Estate

3D Render Lots 1 & 3

MISSION BEACH

LOT 5 ON SP202686

FILENAME >	FIGURE 1e	DATE >	JULY 2015
JOB NO. >	HRP14114	AMENDED >	N/A
SOURCE >	GOOGLE EARTH	VERSION >	1.0

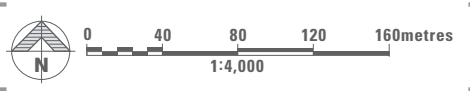
CAMERA ANGLE LOCATION KEY:





LEGEND	
	SUBJECT SITE
	REHABILITATION AREAS
	HOUSE PADS (FL 13.65m AHD)
	DAMS
	ECO-RESIDENTIAL LIFESTYLE AREAS *

* AREAS NOT IDENTIFIED AS 'ECO-RESIDENTIAL LIFESTYLE AREAS' ARE PROTECTED AREAS TO BE MANAGED IN ACCORDANCE WITH RELEVANT COUNCIL APPROVALS AND COVENANTS.



MISSION BEACH
LOT 5 ON SP202686

Master Plan

FILENAME >	MASTERPLAN	DATE >	FEBRUARY 2015
JOB NO. >	HRP14114	AMENDED >	N/A
SCALE >	1:4,000	VERSION >	1.0
SOURCE >	GOOGLE EARTH		

El Arish Mission Beach Road, Maria
Creeks

APPENDIX

C

REGISTERED SURVEY PLAN / SMART
MAP

Land Title Act 1994; Land Act 1994
Form 21 Version 2

SURVEY PLAN

Sheet 1 of 2

Peg placed at all new corners

Amendments by Charles O'Neill Pty Ltd (ACN 010 329 174)

Director Date 04/09/07

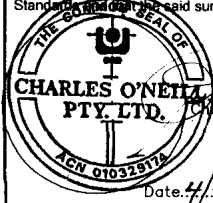
PERMANENT MARKS			
PM	ORIGIN	BEARING	DIST
7-OPM	SP196736	3°15'25"	2.963
9-OPM	NR839145	143°31'20"	546.593

Original information compiled from NR2120
in the Department of Natural Resources & Water.

N=C

REFERENCE MARKS			DIST
STN	TO	ORIGIN	
2	Pin	RP740212	1.969
3	Pin	NR2110	1.101
4	Pin	SP196736	1.006
5	Pin	SP196736	2.386
6	Pin	SP196736	7.154
7	Pin	SP196736	1.065
8	Pin	SP196736	3.33
9	Pin	SP196736	3.017
10	Pin	SP196736	2.884
11	Pin	SP196736	7.517
12	Pin	SP196736	0.99
13	Pin	SP196736	0.994
14	Pin	SP196736	2.955
15	Pin	SP196736	1.513
16	Pin	SP196736	1.185
17	Pin	SP196736	1.163
18	Pin	SP196736	4.23
19	Pin	SP196736	0.97
20	Pin	SP196736	11.94
21	Pin	SP196736	0.965
22	Pin	SP196736	1.092
23	Pin	SP196736	0.96

CHARLES O'NEILL PTY. LTD. (ACN 010 329 174) hereby certify that the land comprised in this plan was surveyed by the corporation, by Lloyd Raymond Gilbert, Registered Surveying Associate, for whose work the corporation accepts responsibility, under the supervision of Grant Harold Phillips, Cadastral Surveyor and that the plan is accurate, that the said survey was performed in accordance with the Survey and Mapping Infrastructure Act 2003 and Surveyors Act 2003 and associated Regulations and Standards and that the said survey was completed on 15/8/07.



Date: 4/9/07

Julie Anne O'Neill,
Director

Plan of

Lots 2 - 5 &
Covenants A & B in Lot 5
Cancelling Lot 2 on SP196736

PARISH: HULL

COUNTY: Nares

Meridian: SP196736

F/N's: Yes

Scale: 1: 7500

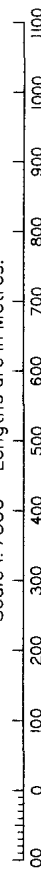
Format: STANDARD



SP202686

Plan Status:

Scale 1: 7500 - Lengths are in Metres.



7347END-03 7347BS-03 22/8/07

711131161

CS 400 NT

\$548.40
29/10/2007 16:30WARNING : Folded or Mutilated Plans will not be accepted.
Plans may be rolled.
Information may not be placed in the outer margins.

Registered

5. Lodged by

O'Reilly Stevens Bovey 707
PO Box 4685
Cairns Q 4870

(Include address, phone number, reference, and Lodger Code)

1. Certificate of Registered Owners or Lessees.

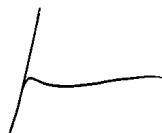
We **PROPERTY PROJECTS AUSTRALIA PTY LTD**
ACN 075 620 656

(Names in full)

* as Registered Owners of this land agree to this plan and dedicate the Public Use
Land as shown hereon in accordance with Section 50 of the Land Title Act 1994.

* as Lessees of this land agree to this plan.

Signature of *Registered Owners *Lessees

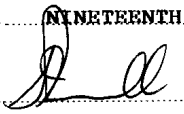
 SOLE DIRECTOR.

* Rule out whichever is inapplicable

2. Local Government Approval.

* **COUNCIL OF THE SHIRE OF JOHNSTONE**

hereby approves this plan in accordance with the :

% **Integrated Planning Act 1997****APPROVED ACCORDING TO APPLICATION SUBMITTED**
27TH FEBRUARY 2004Dated this **NINETEENTH** day of **OCTOBER 2007**# **STUART RANDLE**
CHIEF EXECUTIVE OFFICER
#* Insert the name of the Local Government. % Insert Integrated Planning Act 1997 or
Insert designation of signatory or delegation Local Government (Planning & Environment) Act 1990

3. Plans with Community Management Statement :

CMS Number :

Name :

4. References :

Dept File :

Local Govt :

Surveyor : **7347END**

6. Existing

Title Reference	Lot	Plan	Lots	Covs	Road
3103 7173	2	SP196736	2-5	A, B	

Created

MORTGAGE ALLOCATIONS

Mortgage	Lots Fully Encumbered	Lots Partially Encumbered
2- ISSUE		

2-5

Por 356

Lots

Orig

7. Portion Allocation :

8. Map Reference :

8162-34313

9. Locality :

MARIA CREEKS

10. Local Government :

JOHNSTONE SHIRE COUNCIL

11. Passed & Endorsed :

By: **Charles O'Neill Pty Ltd**
ACN 010 323 174Date: **4/3/07**Signed: Designation: **Cadastral Surveyor**

12. Building Formot Plans only.

I certify that :

* As far as it is practical to determine, no part
of the building shown on this plan encroaches
onto adjoining lots or road;~~* Part of the building shown on this plan
encroaches onto adjoining lots and road~~Cadastral Surveyor/Director * Date
* delete words not required

13. Lodgement Fees :

Survey Deposit	\$
Lodgement	\$
.....New Titles	\$
Photocopy	\$
Postage	\$
TOTAL	\$

14. Insert
Plan
Number**SP202686**

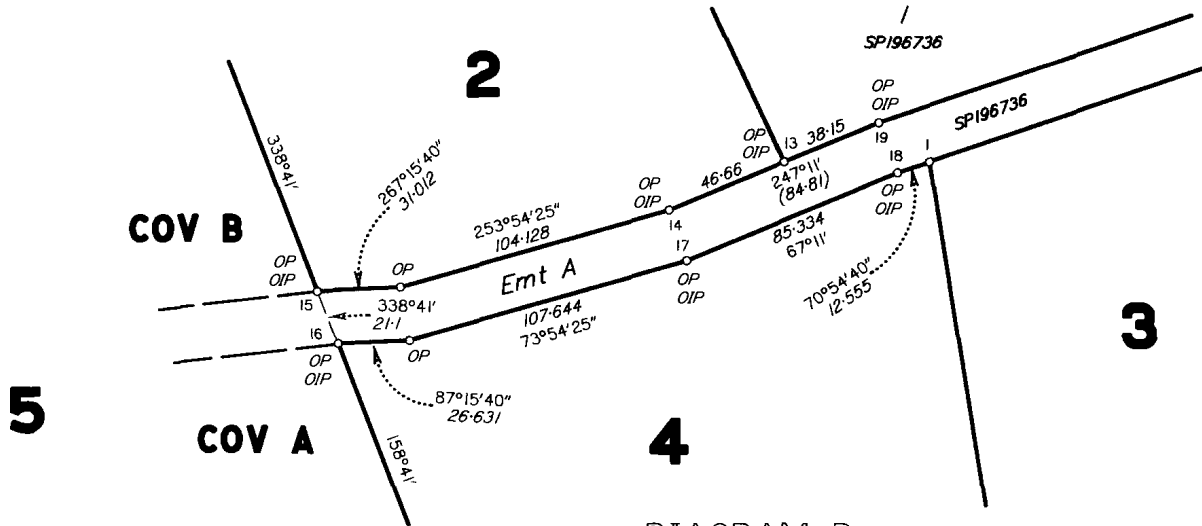


DIAGRAM B

Scale 1: 2000 – Lengths are in Metres.

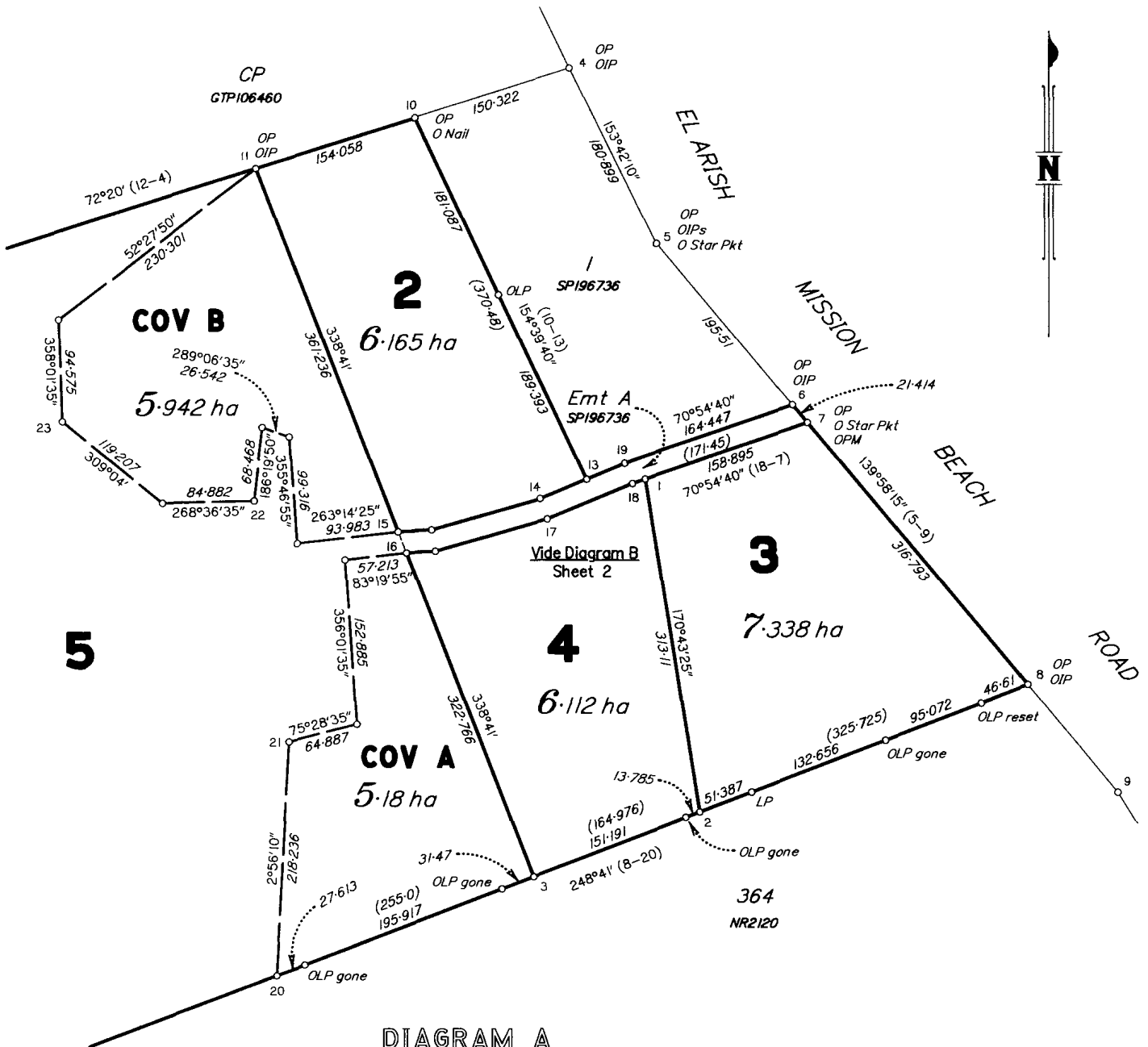
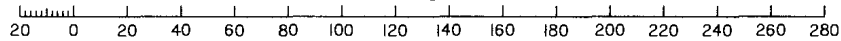
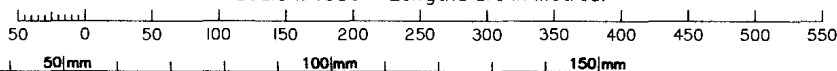


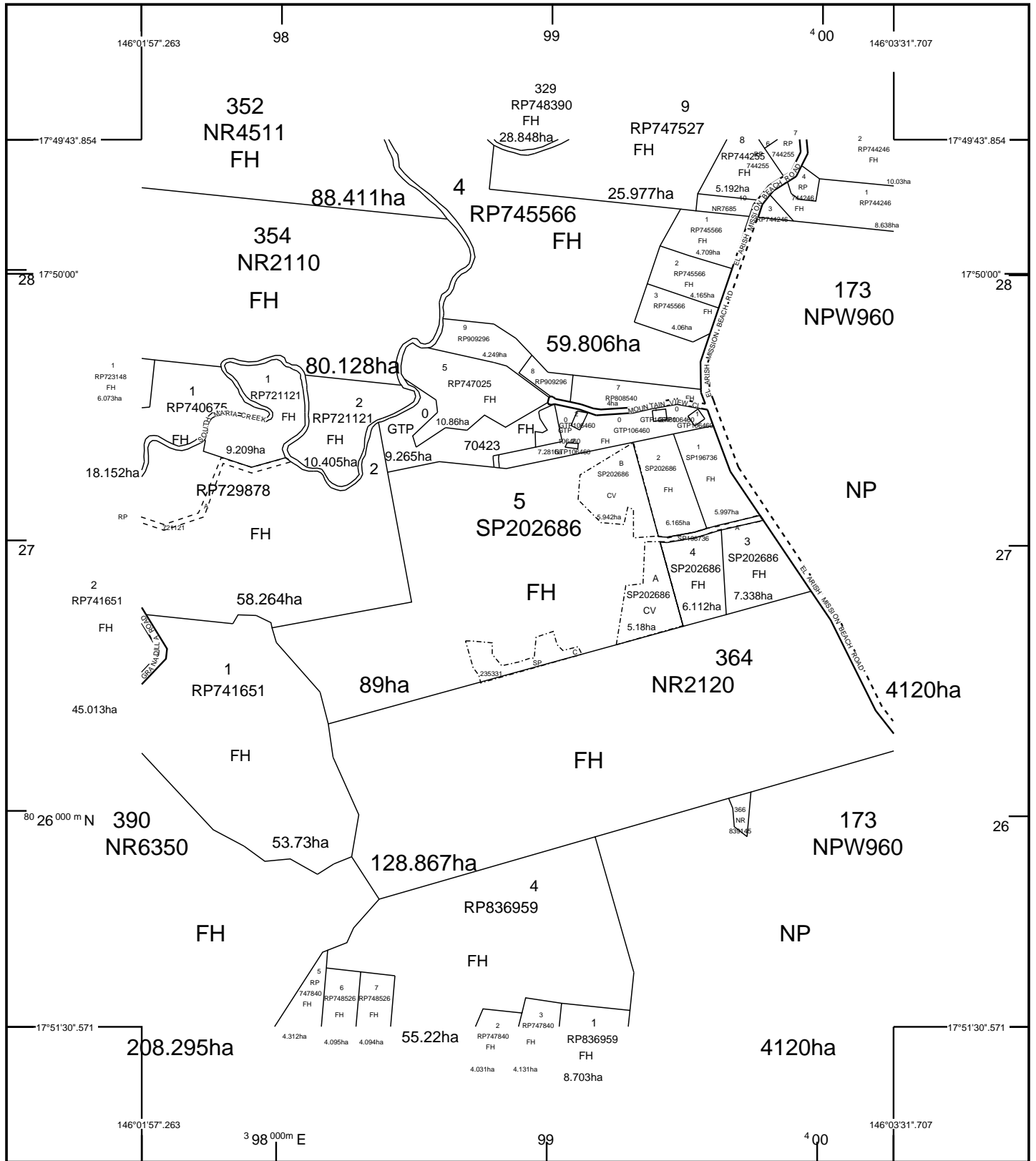
DIAGRAM A

Scale 1: 4000 – Lengths are in Metres.



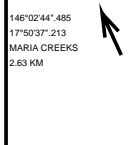
State copyright reserved.

Insert Plan Number SP202686



STANDARD MAP NUMBER
8162-34313

MAP WINDOW POSITION &
NEAREST LOCATION



SUBJECT PARCEL DESCRIPTION

DCDB	
Lot/Plan	5/SP202686
Area/Volume	89ha
Tenure	FREEHOLD
Local Government	CASSOWARY COAST REGIONAL COUNCIL
Locality	MARIA CREEKS
Parish	HULL
County	NARES
Segment/Parcel	37227/743

CLIENT SERVICE STANDARDS

PRINTED (dd/mm/yyyy)	20/03/2015
DCDB	19/03/2015 (Lots with an area less than 3000m² are not shown)
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SmartMap

An External Product of
SmartMap Information Services
Based upon an extraction from the
Digital Cadastral Data Base



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El Arish Mission Beach Road, Maria
Creeks

APPENDIX

D

STATE MAPPING SEARCHES

State Assessment and Referral Agency

Date: 20/06/2016



Department of Infrastructure
Local Government
and Planning

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Matters of Interest for all selected Lot Plans

Qld waterways for waterway barrier works

Coastal zone

Category A and B extract from the regulated vegetation management map

State-controlled roads

Area within 25m of State-controlled roads

Matters of Interest by Lot Plan

Lot Plan: 5SP202686 (Area: 890000 m²)

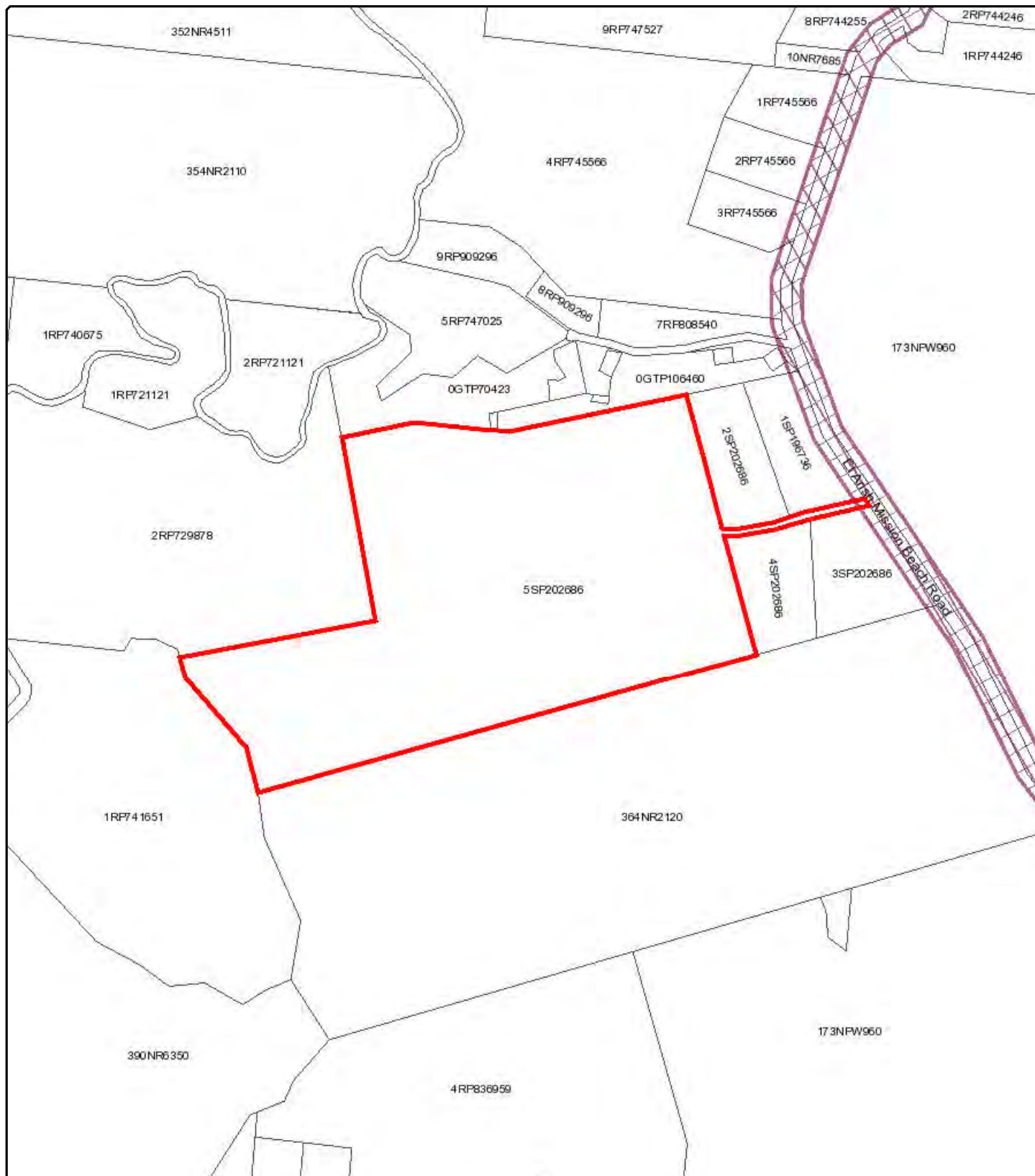
Qld waterways for waterway barrier works

Coastal zone

Category A and B extract from the regulated vegetation management map

State-controlled roads

Area within 25m of State-controlled roads



State Assessment and Referral Agency

Date: 20/06/2016



Department of Infrastructure
Local Government
and Planning

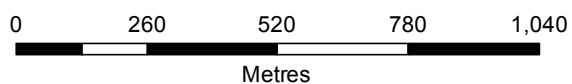
© The State of Queensland 2016.

Legend

Area within 25m of State controlled roads

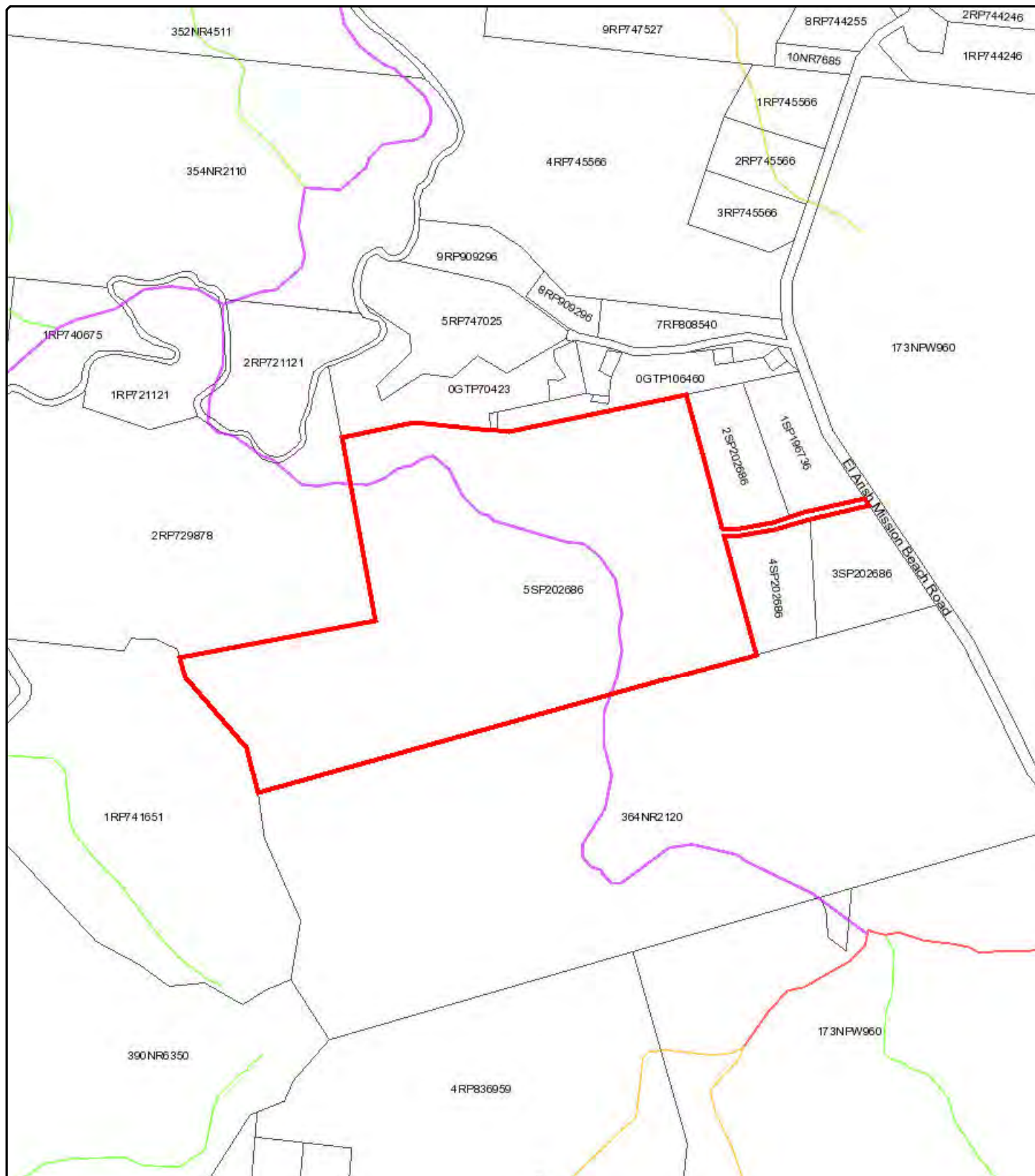


Area within 25m of State controlled roads



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State Assessment and Referral Agency

Date: 20/06/2016



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Local Government
and Planning

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Legend

Qld waterways for waterway barrier
works

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

0 260 520 780 1,040
Metres

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Legend

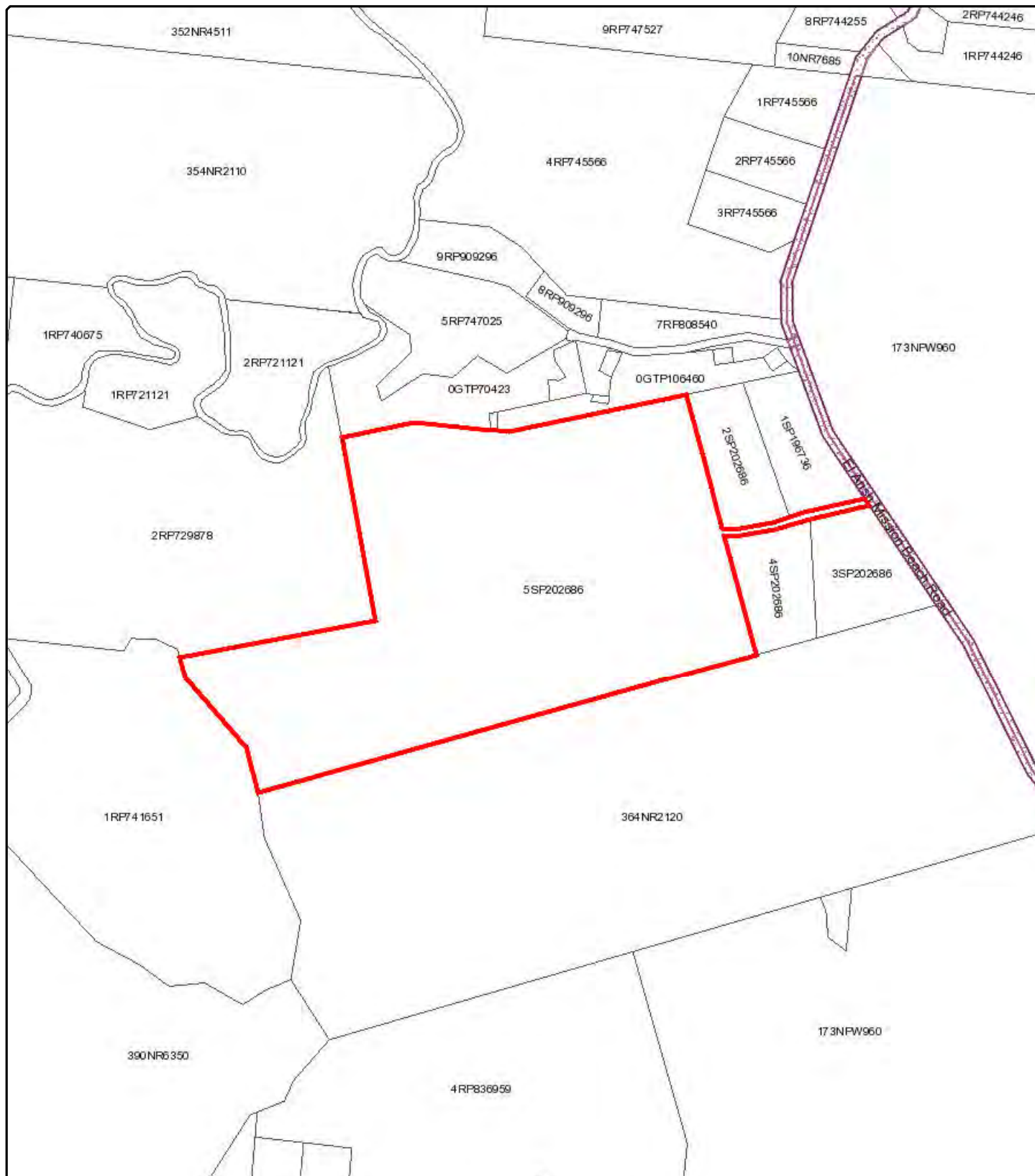
Coastal zone

 Coastal zone

0 260 520 780 1,040
Metres

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State Assessment and Referral Agency

Date: 20/06/2016



Department of Infrastructure
Local Government
and Planning

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Legend

State-controlled roads



State-controlled roads

0 260 520 780 1,040
Metres

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State Assessment and Referral Agency

Date: 20/06/2016



Department of Infrastructure
Local Government
and Planning

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Legend

Category A and B extract from the regulated
vegetation management map

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

0 260 520 780 1,040
Metres

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Infrastructure, Local
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Legend


Drawn Polygon Layer

Override 1


Cadastre (25k)

 Cadastre (25k)


Climatic regions - stormwater management design objectives

 Climatic regions - stormwater management design objectives


MSES - Regulated vegetation (intersecting a watercourse)

 MSES - Regulated vegetation (intersecting a watercourse)

MSES - Wildlife habitat

 MSES - Wildlife habitat


Flood hazard area* - Level 1 - Queensland floodplain assessment overlay


 Flood hazard area* - Level 1 - Queensland floodplain assessment overlay


MSES - Regulated vegetation


 MSES - Regulated vegetation

Bushfire hazard area (Bushfire prone area)

 Very High Potential Bushfire Intensity

 High Potential Bushfire Intensity

 Medium Potential Bushfire Intensity

 Potential Impact Buffer



El Arish Mission Beach Road, Maria Creeks

APPENDIX

E

SEARCHES: CLR AND EMR



Department of Environment and Heritage Protection (EHP)
ABN 46 640 294 485
400 George St Brisbane, Queensland 4000
GPO Box 2454 Brisbane QLD 4001 AUSTRALIA
www.ehp.qld.gov.au

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 50163504 EMR Site Id: 20 March 2015
This response relates to a search request received for the site:
Lot: 5 Plan: SP202686

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Registrar
Administering Authority

El Arish Mission Beach Road, Maria Creeks

APPENDIX

F

PROPOSED PLAN OF RECONFIGURATION



This plan is conceptual and for discussion purposes only. All areas, dimensions and land uses are preliminary, subject to investigation, survey, engineering and Local Authority and Agency approvals.

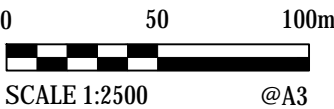
PROPOSED 10 LOT SUBDIVISION



Cardno (Qld) Pty Ltd | ABN 57 051 074 992
Level 1, 280 Sheridan Street
Cairns North, Qld 4870
PO Box 1616 Cairns, Qld 4870
Tel: (07) 4051 0288 Fax: (07) 4051 0133
Email: cairns@cardno.com.au Web: www.cardno.com.au

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SCALE NTS SHEET SIZE (A3)

Date
21 JUNE 2016

Project/Plan Number
HRP14114 - 001

Revision
04

PROPOSED RECONFIGURATION DRAWING

LOT 5 ON SP202686

EL-ARISH-MISSION BEACH RD, MISSION BEACH

El Arish Mission Beach Road, Maria
Creeks

APPENDIX

G

FLOOD INVESTIGATION REPORT

El Arish – Mission Beach Road Development

Flood Investigation

HRP14114



Prepared for
TR Buxton

8 July 2015

Contact Information

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Document Information

Prepared for	TR Buxton
Project Name	Flood Investigation
File Reference	El Arish Flood Study.docx
Job Reference	HRP14114
Date	8 July 2015

Document Control

Version	Date	Description of Revision	Prepared By	Prepared (Signature)	Reviewed By	Reviewed (Signature)
1	8 July 2015		MD		MG	

Version	Reason for Issue	Approved for Release By	Approved (Signature)	Approved Release Date

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Appendix D	Local Flood Model Results – Developed Conditions
Appendix E	Local Flood Model Results – Impact of Development

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1 Introduction

It is proposed to subdivide the subject site, described as Lot 5 of SP202686, located at El Arish-Mission Beach Road.

The proposed layout of the development is shown in the Cardno Drawing contained in Appendix A.

This report presents the results of a flood investigation of the proposed development in the subject site.

2 Background Information

BMT WBM carried out a flood study of the Cassowary Coast area for the local Council. The results of the flood study are described in the report titled *Cassowary Coast Regional Council Flood Study* (December 2012).

The flood study included the development of an URBS hydrologic model and a TUFLOW hydraulic model of the Liverpool/Maria Creek catchments. Copies of these models were provided to carry out the flood investigation for the subject site.

The TUFLOW model developed by BMT WBM stopped just upstream of the El Arish – Mission Beach Road on Jurs Creek, approximately 1.5 kilometres downstream of the subject site. Therefore, the TUFLOW model was extended to include the subject site and surrounding area. The extended model comprised an additional 3,000 hectares of floodplain (approximately), and also included a potential overflow path from Big Maria Creek to the Jurs Creek catchment during extreme flood events.

A comparison of the extents of the original BMT WBM model (red line) and the extended model (green line) are shown in the image below. The potential overflow path from Big Maria Creek to the Jurs Creek catchment is indicated by the arrow.

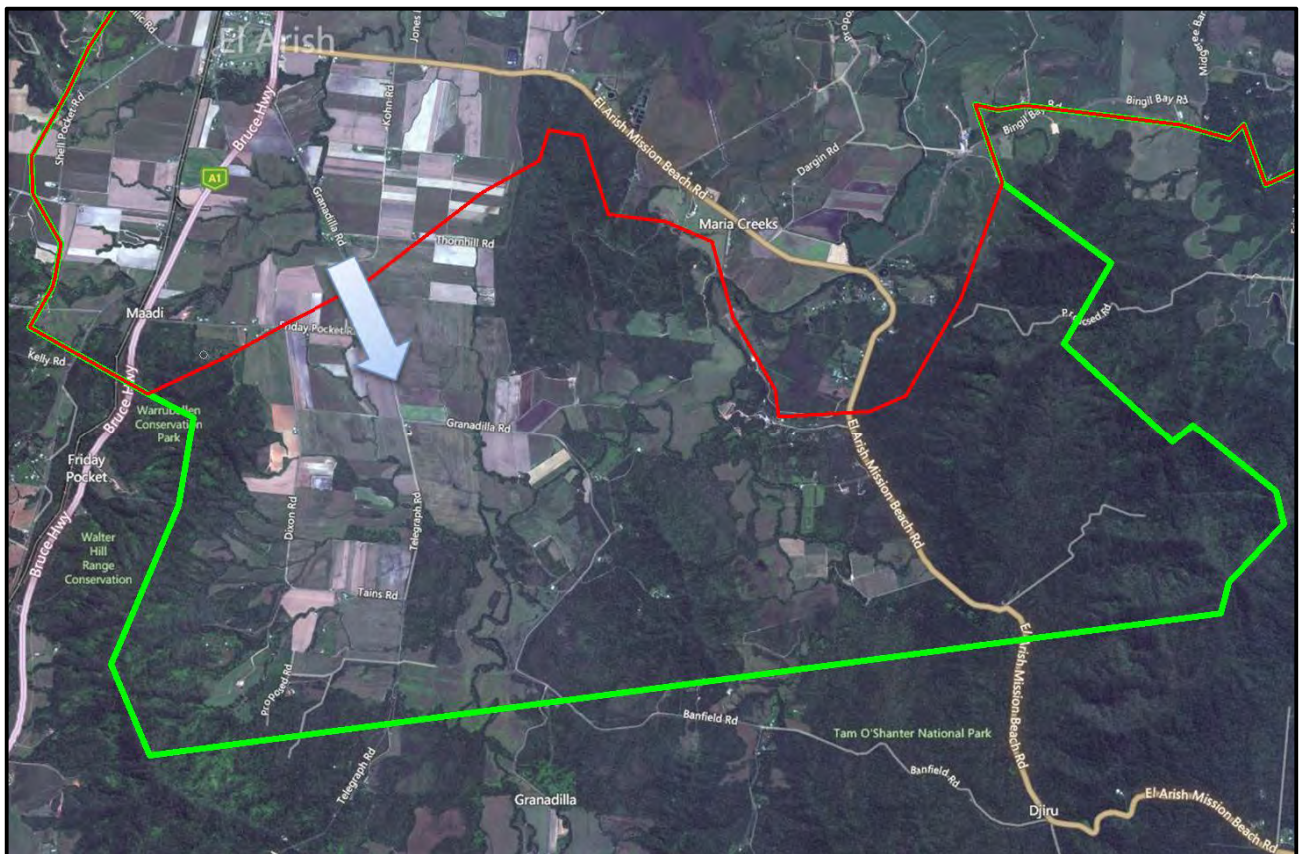


Image 1. Comparison of TUFLOW Model Extents

3 URBS Model

As discussed in Section 2, the TUFLOW model developed by BMT WBM stopped just upstream of the El Arish – Mission Beach Road on Jurs Creek. The URBS model comprises 6 subcatchments upstream of this point: subareas 36, 37, 38, 39, 40 and 41. Thus, the total flow from these 6 subcatchments are routed and summed in the URBS model, and applied to the upstream end of the TUFLOW model. However, the URBS model does not take into account the large volume of storage which is available in the floodplain in the lower reaches of these subcatchments.

Consequently, the local flow hydrographs from each of the aforementioned six subcatchments were applied at the appropriate locations in the extended TUFLOW model, to take account of the available floodplain storage and better represent the inflow from these subcatchments.

No changes were made to the existing URBS model, other than the minor amendments required to extract the six local hydrographs from the model.

4 TUFLOW Model

4.1 Flood Models

Two new TUFLOW models were developed based on the model information provided by BMT WBM:

- Regional Flood Model – to determine the peak flood levels in the region due to extreme flood events (100 year Average Recurrence Interval (ARI) to Probable Maximum Flood (PMF); and
- Local Flood Model – to determine the localised flooding behaviour in the vicinity of the subject site, and the impact of the proposed development on flooding, due to the 2 year to 100 year ARI flood events.

4.2 Regional Flood Model

The only changes made to the original flood model provided by BMT WBM, to provide the regional flood model, are summarised below.

- The model boundaries were extended, as shown in Image 1, to include approximately 3,000 hectares of additional floodplain in the vicinity of the subject site.
- The inflows from subcatchments 36, 37, 38, 39, 40 and 41 were applied as local inflows from each respective subcatchment, rather than as a total inflow from the combined catchment.
- Gully lines were included in the extended part of the model, to assist in the delineation of the waterways in the region.

As discussed in Section 2, the extension of the model allowed for the inclusion of the potential overflow path from Big Maria Creek to the Jurs Creek catchment during extreme flood events. The results of the modelling indicated that this overflow path is triggered during extreme flood events.

The model utilised a 20 metre grid, as per the original BMT WBM model.

The peak flood levels and discharges calculated by the regional flood model at the subject site are shown in Table 4-1. For the largest flood events modelled (i.e. 200 and 500 year ARI events, and the PMF), there is a negligible change in peak flood level through the site. Consequently, for the purposes of defining the applicable flood level for the developed site during these extreme events, the calculated flood level at the upstream end of the site was conservatively adopted throughout the site.

Table 4-1 Regional Flood Model Results

Flood Event	Peak Flood Level Upstream End of Site (mAHD)	Peak Flood Level Downstream End of Site (mAHD)	Peak Discharge Downstream End of Site (m ³ /s)
100 Year ARI	12.95	12.83	194
100 Year ARI + Climate Change	13.27	13.20	239
200 Year ARI	13.28	13.20	240
500 Year ARI	13.64	13.59	300
PMF	16.09	16.06	634

The results of the regional flood model in the area extended for the current flood investigation are presented in Appendix B, as follows:

- Peak Flood Levels – Figures B1 to B4;
- Peak Flood Depths – Figures B5 to B8;
- Peak Velocities – Figures B9 to B12; and
- Peak Flood Hazard (Depth x Velocity) – Figures B13 to B16.

4.3 Local Flood Model

To assess the impact of the proposed development on flooding behaviour, a local flood model of the Jurs Creek catchment was developed. The model utilised a 10 metre grid.

The local flood model had the same upstream boundary as the regional flood model. The downstream boundary was located approximately 500 metres downstream of El Arish – Mission Beach Road, or approximately 3.5 km downstream of the subject site.

A rating curve was applied to the outlets at the downstream end of the model. An average slope of 1% was adopted at the outlets, based on the topographic data in this area.

The peak flood levels and discharges calculated by the local flood model at the subject site are shown in Table 4-2.

The results of the model are presented in Appendix C.

Table 4-2 Local Flood Model Results – Existing Conditions

Flood Event	Peak Flood Level Upstream End of Site (mAHD)	Peak Flood Level Downstream End of Site (mAHD)	Peak Discharge Downstream End of Site (m ³ /s)
2 Year ARI	11.76	11.03	66
5 Year ARI	12.29	11.54	97
10 Year ARI	12.42	11.82	113
20 Year ARI	12.56	12.16	152
50 Year ARI	12.70	12.43	181
100 Year ARI	12.80	12.64	206

The 100 year ARI flood levels calculated by the local flood model are approximately 150-190 mm lower than those calculated by the regional flood model. This is considered to be due to the better definition of the waterways and overland flow paths in the local flood model with the finer grid resolution.

The peak discharge at the downstream end of the subject site is similar in both models.

The local flood model was therefore used to assess the impact of the proposed development on flood levels in the area.

The results of the local flood model under existing conditions in the vicinity of the subject site are presented in Appendix C, as follows:

- Peak Flood Levels – Figures C1 to C4;
- Peak Flood Depths – Figures C5 to C8;
- Peak Velocities – Figures C9 to C12; and
- Peak Flood Hazard (Depth x Velocity) – Figures C13 to C16.

4.4 Proposed Development

The changes made to the local flood model to represent the proposed development are summarised below.

- Fill pads with areas of 1,200 to 2,000 m² were added to the model in Lots 1 to 10 except for Lot 5 (which includes an existing dwelling). The elevation of the top of the fill pads was 13.65 mAHD. As shown by the results presented in Table 4-1, the fill pads will be located above the 500 year ARI flood level.
- Internal roads were added to the model, to service the fill pads. The roads had an elevation that was generally 300 mm below the 50 year ARI flood level. This is discussed further below.
- Box culverts are required under the internal roads in three locations. The locations of these culverts are shown in Image 3. The sizes of each bank of culverts are as follows:
 - 10 / 2.1 x 1.5 metre RCBCs, at the eastern end of the internal road;
 - 5 / 2.1 x 0.9 metre RCBCs, midway along the internal road; and
 - 10 / 2.1 x 0.9 metre RCBCs, near the western end of the internal road.

A table of the peak flood levels applicable to each Lot and other reporting points within the site is presented in Table 4-3. The location of the Reporting Points is shown in Image 2.

Table 4-3 Local Flood Model Results – Developed Conditions

Reporting Point	Peak Flood Level (mAHD)					
	2 year ARI	5 year ARI	10 year ARI	20 year ARI	50 year ARI	100 year ARI
Lot01	11.62	12.11	12.23	12.40	12.58	12.73
Lot02	10.94	11.54	11.84	12.21	12.49	12.68
Lot03	11.48	11.95	12.11	12.34	12.53	12.70
Lot04	11.46	11.91	12.08	12.32	12.52	12.70
Lot05	11.39	11.84	12.03	12.30	12.50	12.69
Lot06	10.94	11.54	11.84	12.19	12.47	12.67
Lot07	11.31	11.78	11.99	12.25	12.48	12.68
Lot08	11.22	11.68	11.92	12.21	12.46	12.67
Lot09	11.16	11.64	11.89	12.19	12.45	12.66
Lot10	11.12	11.60	11.86	12.18	12.45	12.66
RoadE	n/a	n/a	n/a	n/a	12.47	12.67
RoadN	n/a	n/a	n/a	n/a	12.45	12.66
RoadS	n/a	n/a	n/a	n/a	12.51	12.69
Site_DS	11.03	11.54	11.82	12.16	12.44	12.65
Site_US	11.76	12.29	12.42	12.58	12.71	12.81



Image 2. Reporting Points

The 100 year ARI flood levels through the developed site adjacent to the fill pads vary from 12.66 mAHD (Lot 10) to 12.73 mAHD (Lot 1). The elevation of the fill pads is proposed to be 13.65 mAHD. Thus, the fill pads are generally 900 mm to one metre above the 100 year ARI flood level. The minimum floor levels in the dwellings are likely to be at least 300 mm above the elevation of the fill pad. Therefore, the minimum floor levels will be approximately 1.2 to 1.3 metres above the 100 year ARI flood level. In comparison, Council's requirement is for the minimum floor levels to be 300 mm above the 100 year ARI flood level.

As discussed above, the internal roads are proposed to be located at a level approximately 300 mm below the 50 year ARI flood level. The design levels of the internal roads are shown in Image 3.



Image 3. Internal Road Levels

(Dark Blue = 12.2 mAH; Cyan = 12.25 mAH; Green = 12.3 mAH)

The results of the local flood model under developed conditions in the vicinity of the subject site are presented in Appendix D, as follows:

- Peak Flood Levels – Figures D1 to D4;
- Peak Flood Depths – Figures D5 to D8;
- Peak Velocities – Figures D9 to D12; and
- Peak Flood Hazard (Depth x Velocity) – Figures D13 to D16.

The results presented in Figure D7 demonstrate that the peak flood depths over the internal roads during the 50 year ARI flood event are less than 300 mm.

The impacts of the proposed development on peak flood levels (or depths) are presented in Appendix E (Figures E1 to E6). These results demonstrate that the proposed development does not have a significant impact on flood levels in the vicinity of the subject site.

Increases of up to 60 mm occur near the upstream boundary of the subject site. However, these increases are localised, and only affect heavily vegetated areas of lands upstream which cannot be developed or used for agricultural purposes.

The impact of the proposed development on the peak discharge at the downstream end of the site is shown in Table 4-4. These results demonstrate that the proposed development has a negligible impact on discharges.

Table 4-4 Impact of Development on Peak Discharges

Flood Event	Existing Peak Discharge (m ³ /s)	Developed Peak Discharge (m ³ /s)	Change in Peak Discharge (m ³ /s)
2 Year ARI	66	66	0
5 Year ARI	97	98	1
10 Year ARI	113	114	1
20 Year ARI	152	153	1
50 Year ARI	181	182	1
100 Year ARI	206	208	2

5 Emergency Management

As discussed in Section 4.4, the proposed development will comprise fill pads with a top elevation of 13.65 mAHD. The minimum floor levels in the dwellings are likely to be at least 300 mm above the elevation of the fill pad. As shown by the results presented in Table 4-1, this elevation provides the proposed residential dwellings with immunity to floods significantly greater than the 500 year ARI event. In other words, the fill pads would not be overtopped more frequently than once every 500 years on average. Most local Councils only require this level of flood immunity for essential services, such as emergency services facilities, hospitals, and power stations.

As discussed in Section 4.4, the minimum floor levels in the residential dwellings are likely to be 1.2 to 1.3 metres above the 100 year ARI flood level. In comparison, Council's requirement is for the minimum floor levels to be 300 mm above the 100 year ARI flood level.

It can therefore be seen that the proposed fill pads provide a very high immunity to flooding, and the level of the pads is well in excess of Council's normal requirements for a residential dwelling.

The Average Recurrence Interval (ARI) of the Probable Maximum Flood (PMF) for the Liverpool/Maria Creek catchment is estimated to be between 1,000,000 and 10,000,000 years. As shown in Table 4-1, the Probable Maximum Flood level in the site is approximately 16.09 mAHD. This flood level is 2.44 metres above the proposed fill pad level. Thus, all rooms on the second storey of the proposed dwellings will be located above the level of the PMF.

These results demonstrate that if residents choose to remain rather than evacuate the area, they will be able to safely take refuge inside their dwellings in the proposed development during a flood event of any magnitude.

Roads are considered to be trafficable for vehicles if the maximum depth of inundation on the road is as follows:

- small passenger cars – 300 mm; and
- four wheel drive (4WD) vehicles – 500 mm.

The minimum elevation of the internal roads within the development is 12.2 mAHD. Thus, the roads are trafficable when the flood level in the site is less than 12.5 mAHD for small passenger cars, and 12.7 mAHD for 4WD vehicles.

Image 4 presents the flood level hydrographs in the site for a range of extreme flood events. The graph shows that the period of time during which the internal road is not trafficable is generally less than one day during these extreme flood events. For a 4WD vehicle, the duration which the road is not trafficable is as little as approximately 12 hours during the 100 year ARI event. The results are summarised in Table 5-1.

Table 5-1 Trafficability of Internal Roads

Flood Event	Period of Time that Internal Road is Not Trafficable (hours)	
	Small Passenger Cars	4WD Vehicles
100 Year ARI	22.3	12.8
200 Year ARI	24.0	22.2
500 Year ARI	25.0	23.7
PMF	29.0	27.8

As discussed in Section 4.4, all internal roads are designed to have less than 300 mm of inundation during a 50 year ARI event. Thus, the internal roads are trafficable for all events up to and including a 50 year ARI event.

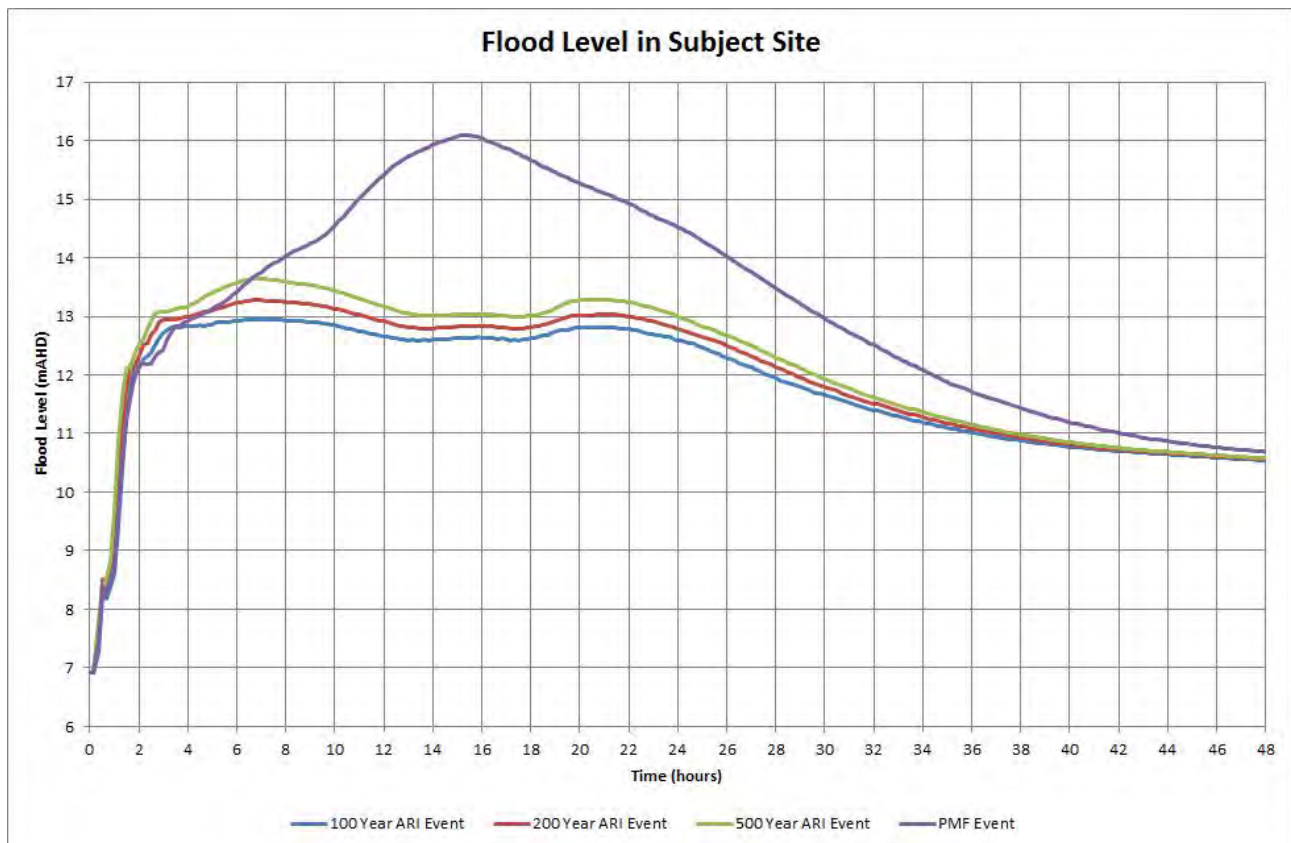


Image 4. Flood Level Hydrographs

In summary, if the residents of the proposed dwellings choose to seek refuge in place rather than evacuate the site prior to a flood event:

- the proposed fill pads provide greater than a 500 year ARI flood immunity for the residential dwellings;
- the minimum floor levels in the dwellings are approximately 1.2 to 1.3 metres above the 100 year ARI flood level (compared to Council's requirement of 300 mm above the 100 year ARI flood level);
- all rooms in the second storey of the proposed dwellings will be located above the Probable Maximum Flood level, which has an Average Recurrence Interval of between 1,000,000 and 10,000,000 years; and
- the duration for which the site will be isolated is generally less than one day during extreme flood events.

In addition, residents are able to safely drive on the internal roads and enter/exit the site for all floods up to and including the 50 year ARI event.

Thus, residents will be able to freely enter and exit the site for the vast majority of flood events. During extreme flood events (i.e. an average recurrence interval of 100 years or more), residents may either choose to evacuate the site prior to the flood event, or safely seek refuge within their own dwelling.

6 Assessment Criteria

6.1 Johnstone Shire Planning Scheme

An assessment of the proposed development against the provisions of the Johnstone Shire Planning Scheme is presented below.

5.4.2 Hazards Code

Flooding Purpose: The purpose of this section of the code is to seek a level of flood immunity and to ensure that development will not contribute to the worsening of flood conditions on site, or elsewhere in the catchment.		
Specific Outcomes	Probable Solution	Response
S1. Development for single residential purposes provides the greatest level of flood immunity practical.	P1. The minimum habitable floor level for a single residential is 300 mm above the 100 year ARI flood level. P2. On allotments created prior to 1997 where achievement of P1 above is not practical the minimum habitable room floor level for a single residential is 300 mm above the 50 year ARI flood level.	Minimum habitable flood levels are 1.2 to 1.3 metres above the 100 year ARI flood level.
S2. Development involving a reconfiguration of a lot for residential, commercial or industrial purposes is to have sufficient height to prevent the floor level of buildings from being exposed to the risk of inundation in a 100 year ARI flood.	P3. Each allotment has the entire area of the lot or a minimum area of 1000 m ² (minimum dimension of 25 metres) whichever is the lesser, of the land that is no more than 300 mm below the 100 year ARI flood level.	Each fill pad has an area of at least 1,200 m ² (minimum dimension of 30 metres) which is 0.9 to 1.0 metres above the 100 year flood level.
S3. The habitable floor level of <i>Multiple unit residential uses</i> and community facilities are not exposed to a 100 year ARI flood.	Not Applicable.	Not Applicable.
S4. Development for <i>Commercial and Industrial Uses</i> provides the greatest level of flood immunity practical.	Not Applicable.	Not Applicable.
S5. Aquaculture, heavy industry and intensive agriculture are not exposed to a 100 year ARI flood.	Not Applicable.	Not Applicable.
S6. Any development involving the excavation or filling of land is carried out such that no increase in flood water levels or flows	P9. No acceptable solution prescribed.	The impact of the proposed development on flood levels is shown in Appendix E. It is considered that the impacts on

result.		upstream heavily vegetated areas are acceptable.
S7. New roads are designed to be drivable in a 50 year ARI flood.	<p>P10. Roads are constructed so that the surface is no greater than 300 mm lower than the 50 year ARI flood level.</p> <p>P11. The rate of flow is less than 0.5 m/s.</p>	The internal roads are proposed to be constructed no lower than 300 mm below the 50 year ARI flood level.
Coastal and Riverine Erosion Purpose: The purpose of this section of the code is to ensure that development on erosion prone land is appropriate and secure with minimal risk to life, property or the environment..		
Specific Outcomes	Probable Solution	Response
S1. Development is located outside the erosion prone land except where the development would not result in detrimental impacts to natural coastal/riverine processes and poses no risk to land stability on the site or adjoining properties if erosion occurs.	<p>P1. No development occurs within 100 metres of the high water mark on rural and conservation zoned land.</p> <p>P2. Development is not located within:</p> <ul style="list-style-type: none"> (a) 25 metres of the high bank of a natural watercourse (identified on Map 10); (b) 50 metres of the high bank of a major watercourse (identified on Map 10) or wetland (identified on Map 7) 	<p>Subject site is not located within 100 metres of the high water mark.</p> <p>Proposed allotment fill pads will be located at least 25 metres from the high bank of the mapped watercourse through the site.</p>
S2. Development on land fronting an esplanade or foreshore must have an adequate setback distance.	Not Applicable.	Not Applicable.

6.2.1 Reconfiguration Code

Purpose: The purpose of this code is to ensure residential subdivisions result in safe, convenient functional and attractive communities.		
Specific Outcomes	Probable Solution	Response
S1. Reconfigurations provide for a high level of connectivity for pedestrians, motorists and cyclists within the development, to existing development and future developments.	P1. Subdivision design addresses the approach described in the Queensland Residential Design Guidelines Part 4 – Subdivision.	The proposed subdivision provides a high level of connectivity for pedestrians, motorists and cyclists within the development. There are no other existing or future developments in the vicinity of the subject site.
S2. Subdivision layout and	P2. Subdivision design	The proposed subdivision

design provides for a strong neighbourhood identity through responding to site characteristics, retention of significant vegetation and features, community focal points and landscaping.	addresses the approach described in the Queensland Residential Design Guidelines Part 4 – Subdivision.	maintains the existing site characteristics, and retains significant vegetation and watercourses through the site.
S3. Reconfigurations provides for public access to watercourses and foreshores and protection from natural processes.	P3. A minimum 20 metre esplanade is provided along all watercourses and foreshores.	Proposed allotment fill pads will be located at least 20 metres from watercourses through the site.

6.3.2 Filling and Excavation Code

Purpose: The purpose of this code is to ensure that filling and excavation does not cause stability, flooding or drainage problems, reduction in the visual amenity of an area or environmental harm.		
Specific Outcomes	Probable Solution	Response
Stability S1. Filling and excavation is carried out in a way that does not impact adversely on the stability of land.	P1. Material is compacted in layers not exceeding 200 mm to the requirements of AS1289. P2. No filling or excavation is carried out within 1.5 metres of the site boundary. P3. Where the level of filling or excavation at the rear or sides of the proposed lot differs from the level of adjoining lots by more than 100 mm, either: (a) a retaining wall entirely within the development site is provided with at least a 50 mm parapet above the allotment fill to ensure water is deflected from the adjoining land; or (b) a batter with a slope not exceeding one in five is provided with the bottom of the batter at least 1 metre from the site boundary.	Material will be compacted to appropriate standard, in accordance with Council requirements. All proposed filling and excavation will be carried out more than 1.5 metres from any site boundary. No excavation or filling is proposed at the rear or sides of lots adjacent to adjoining lots.
Flooding and Drainage S2. Filling or excavation does not result in a change to the runoff characteristics of a site that will have a detrimental effect upon the site, surrounding land, groundwater and/or infrastructure.	P4. Filling and excavation does not result in the ponding of water on the site, surrounding land and/or infrastructure. P5. Filling and excavation does not result in an increase in the flow of water across a site, surrounding land and/or	The proposed earthworks will not result in the ponding of water on site or in surrounding areas. The proposed development will not materially affect the flow of water across the site or to surrounding areas. The proposed development will

	<p>infrastructure.</p> <p>P6. Filling and excavation does not result in an increase in the volume of water or concentration of water in a watercourse and overland flow paths.</p>	<p>not increase the volume of water in the watercourse, or concentrate the flow in the watercourse.</p>
<p>Environment</p> <p>S3. Filling or excavation does not result in a reduction of the water quality of receiving waters.</p>	<p>P7. Filling and excavation does not occur within 25 metres of a watercourse or wetland.</p> <p>P8. A sediment erosion control plan is developed and implemented for all filling and excavation.</p>	<p>Proposed allotment fill pads will be located at least 25 metres from the watercourses through the site.</p> <p>A sediment erosion control plan will be developed for all proposed earthworks within the site.</p>
<p>S4. Filling or excavation does not result in the disturbance of contaminated and/or acid sulphate soils.</p>	<p>P9. No contaminated material or soil that is not treated from a saline environment is used as fill.</p> <p>P10. No contaminated material or acid sulphate soil is excavated.</p>	<p>Contaminated or saline material is not proposed to be used as fill.</p> <p>No contaminated material or acid sulphate soil is proposed to be excavated.</p>
<p>Visual Amenity</p> <p>S5. Filling or excavation must be undertaken to ensure that the visual amenity of the adjoining lots and the area is not compromised.</p>	<p>P11. Filling and excavation is no greater than 2 metres in height or depth.</p> <p>P12. Soil used for filling is not stockpiled in locations that can be visible from roads or adjoining lots for a period exceeding 1 month.</p>	<p>Most of the proposed fill pads will be less than 2 metres in height. Some of the proposed pads require more than 2 metres of fill to achieve the minimum pad level of 13.65 mAHD. However, due to the amount of vegetation which is proposed to be retained within the site, and the rural setting of the proposed development, these fill pads are not considered to affect the visual amenity of adjoining lots or the area.</p>

6.4.2 Infrastructure Code

<p>Purpose: The purpose of this code is to ensure that developments include provision of infrastructure which complies with the standards of road construction, street lighting, water supply, treatment and disposal of effluent, stormwater drainage, electricity supply, bike lanes and pedestrian paths which will provide for the needs of users, maintain high environmental standards and are safe and efficient.</p>		
Specific Outcomes	Probable Solution	Response
<p>General</p> <p>S1. The location and design of operational works is carried out with minimal disturbance to soils and with the careful management of any runoff or dust to prevent off site impacts during and after construction</p>	<p>P1. Development is designed and constructed in accordance with the requirements of planning scheme policy 5 (Sections CP1, D2, D4 and D5).</p>	<p>An Erosion and Sediment Control Plan will need to be developed for the proposed earthworks, in accordance with Council's requirements.</p>

S2. Operational works associated with a development must not affect the efficient functioning of any public utilities.	P2. Public utilities are altered or repaired to ensure their continued efficient functioning in accordance with the relevant specifications set out in planning scheme policy 5.	Public utilities are not expected to be affected by the proposed development.
Road Design and Construction	Not applicable to this Flood Investigation.	Not applicable to this Flood Investigation.
Street Lights	Not applicable to this Flood Investigation.	Not applicable to this Flood Investigation.
Water Supply	Not applicable to this Flood Investigation.	Not applicable to this Flood Investigation.
Treatment and Disposal of Effluent	Not applicable to this Flood Investigation.	Not applicable to this Flood Investigation.
Stormwater Drainage and Stormwater Quality S6. Development is provided with sufficient stormwater management infrastructure that provides suitable management of stormwater runoff in terms of: <ul style="list-style-type: none"> (a) maintaining natural drainage systems; (b) protecting water quality; (c) minimising erosion potential; and (d) avoid the risk of landslip and subsidence. 	P11. The stormwater management infrastructure is designed and constructed in accordance with requirements of planning scheme policy 5 (Sections CP1, D2, D4 and D5).	All stormwater infrastructure required for the proposed development will be designed and constructed to comply with the requirements of Council's Planning Scheme Policy 5.
Electricity Supply	Not applicable to this Flood Investigation.	Not applicable to this Flood Investigation.
Bike Lanes and Pedestrian Paths	Not applicable to this Flood Investigation.	Not applicable to this Flood Investigation.

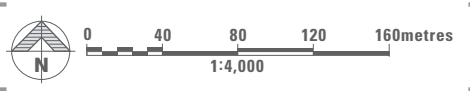
APPENDIX A

DEVELOPMENT LAYOUT



LEGEND	
	SUBJECT SITE
	REHABILITATION AREAS
	HOUSE PADS (FL 13.65m AHD)
	DAMS
	ECO-RESIDENTIAL LIFESTYLE AREAS *

* AREAS NOT IDENTIFIED AS 'ECO-RESIDENTIAL LIFESTYLE AREAS' ARE PROTECTED AREAS TO BE MANAGED IN ACCORDANCE WITH RELEVANT COUNCIL APPROVALS AND COVENANTS.



MISSION BEACH
LOT 5 ON SP202686

Master Plan

FILENAME >	MASTERPLAN	DATE >	FEBRUARY 2015
JOB NO. >	HRP14114	AMENDED >	N/A
SCALE >	1:4,000	VERSION >	1.0
SOURCE >	GOOGLE EARTH		

Flood Investigation

APPENDIX B

REGIONAL FLOOD MODEL RESULTS

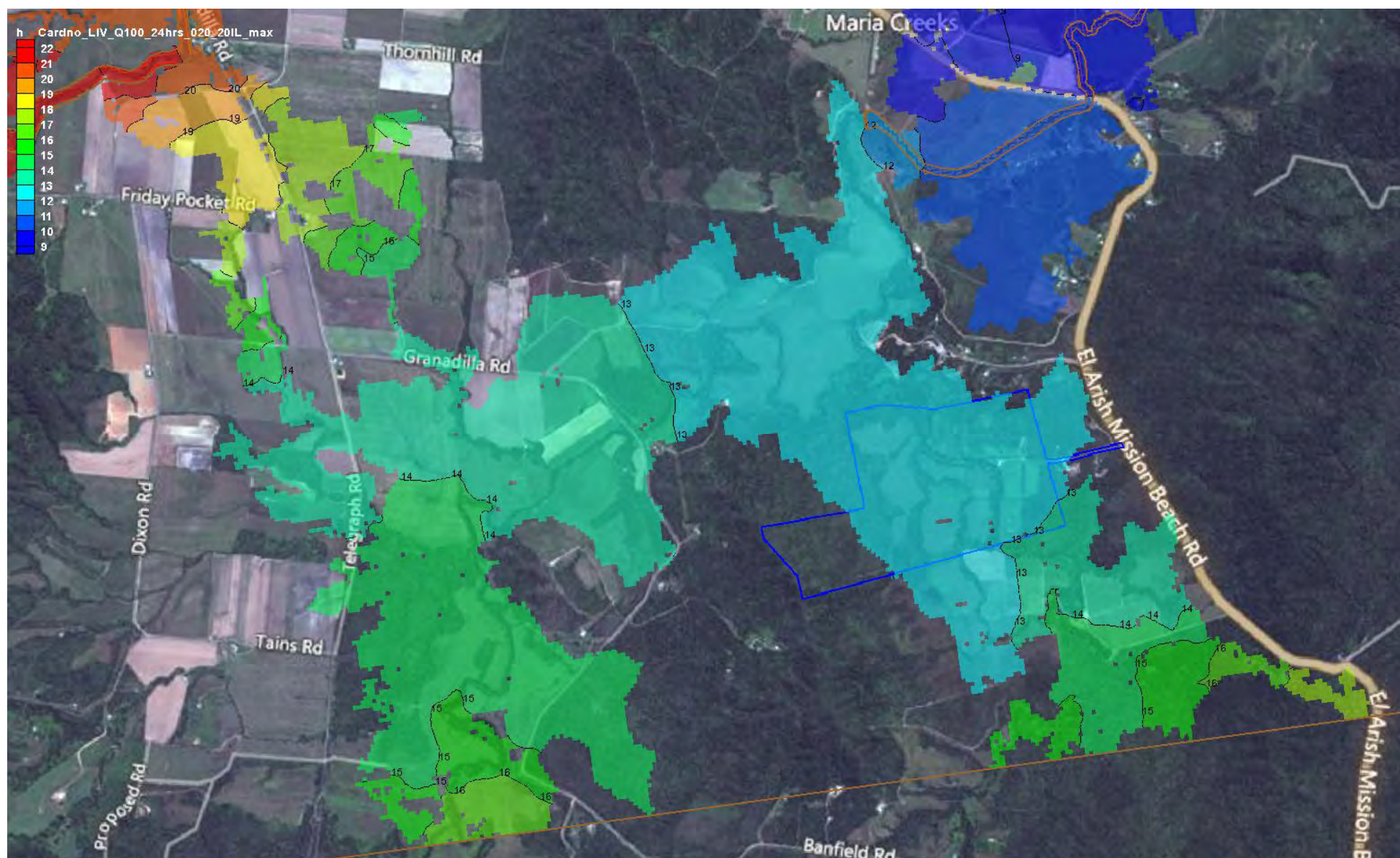


Figure B1. Existing Flood Levels – 100 Year ARI Event

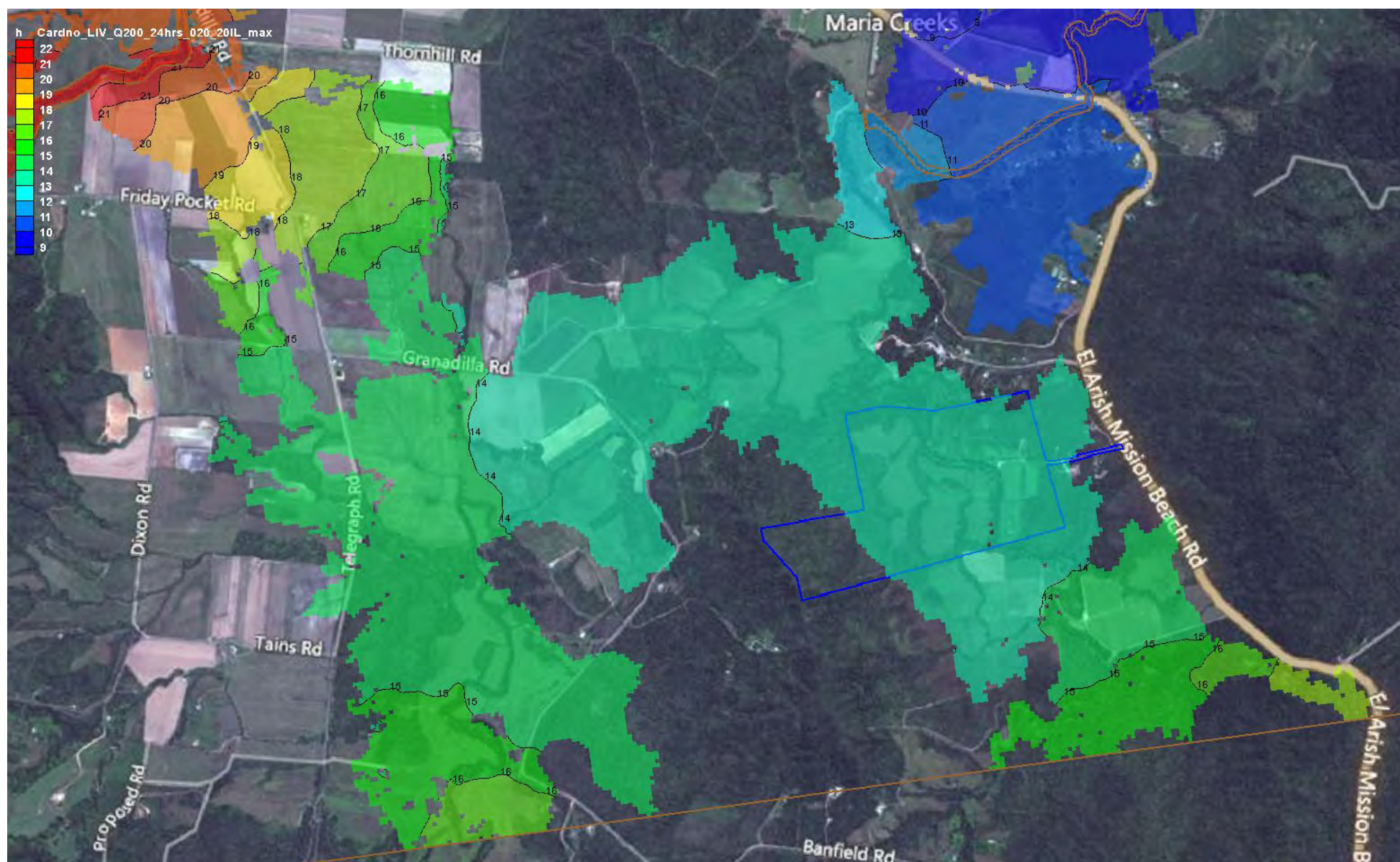


Figure B2. Existing Flood Levels – 200 Year ARI Event

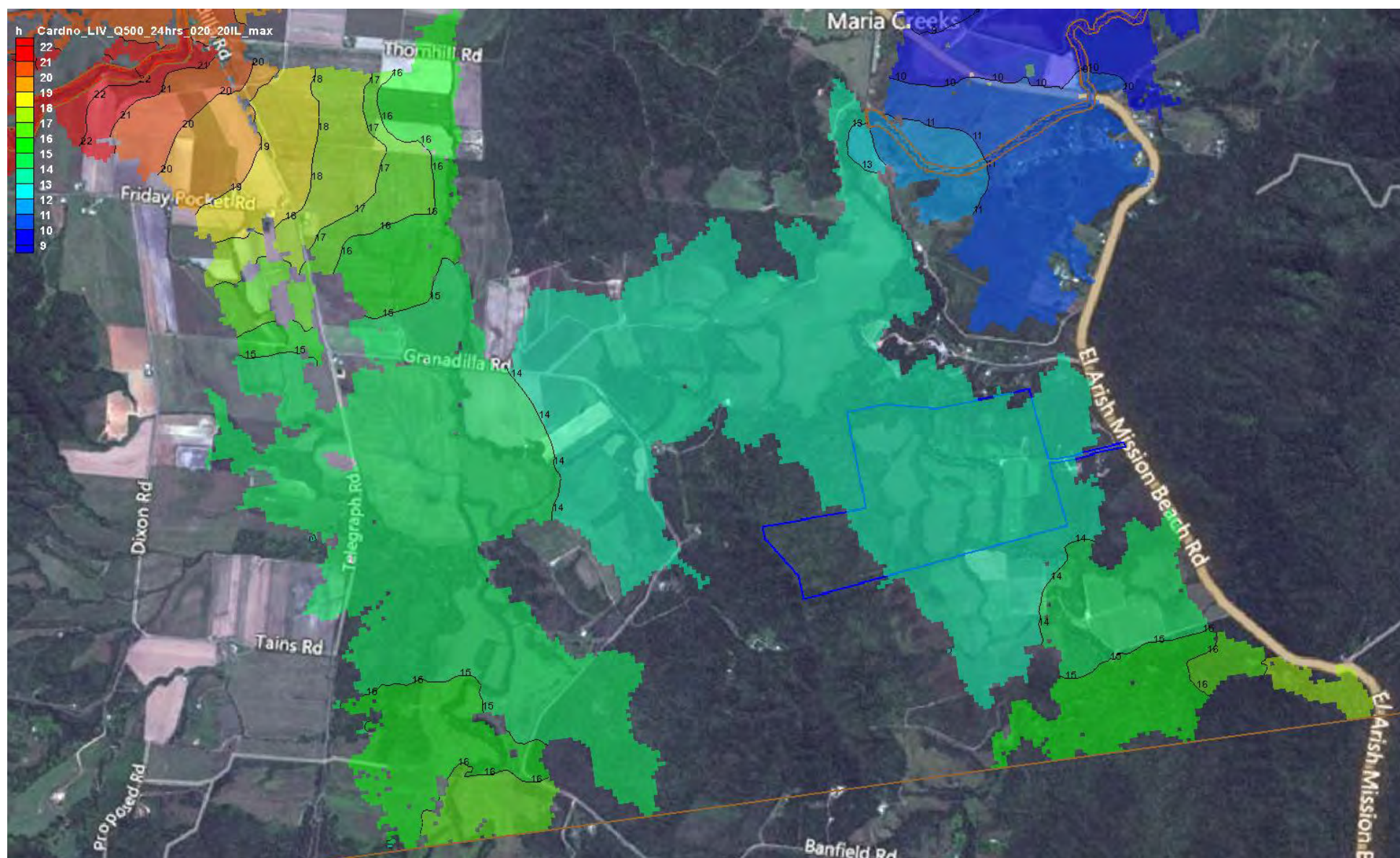


Figure B3. Existing Flood Levels – 500 Year ARI Event

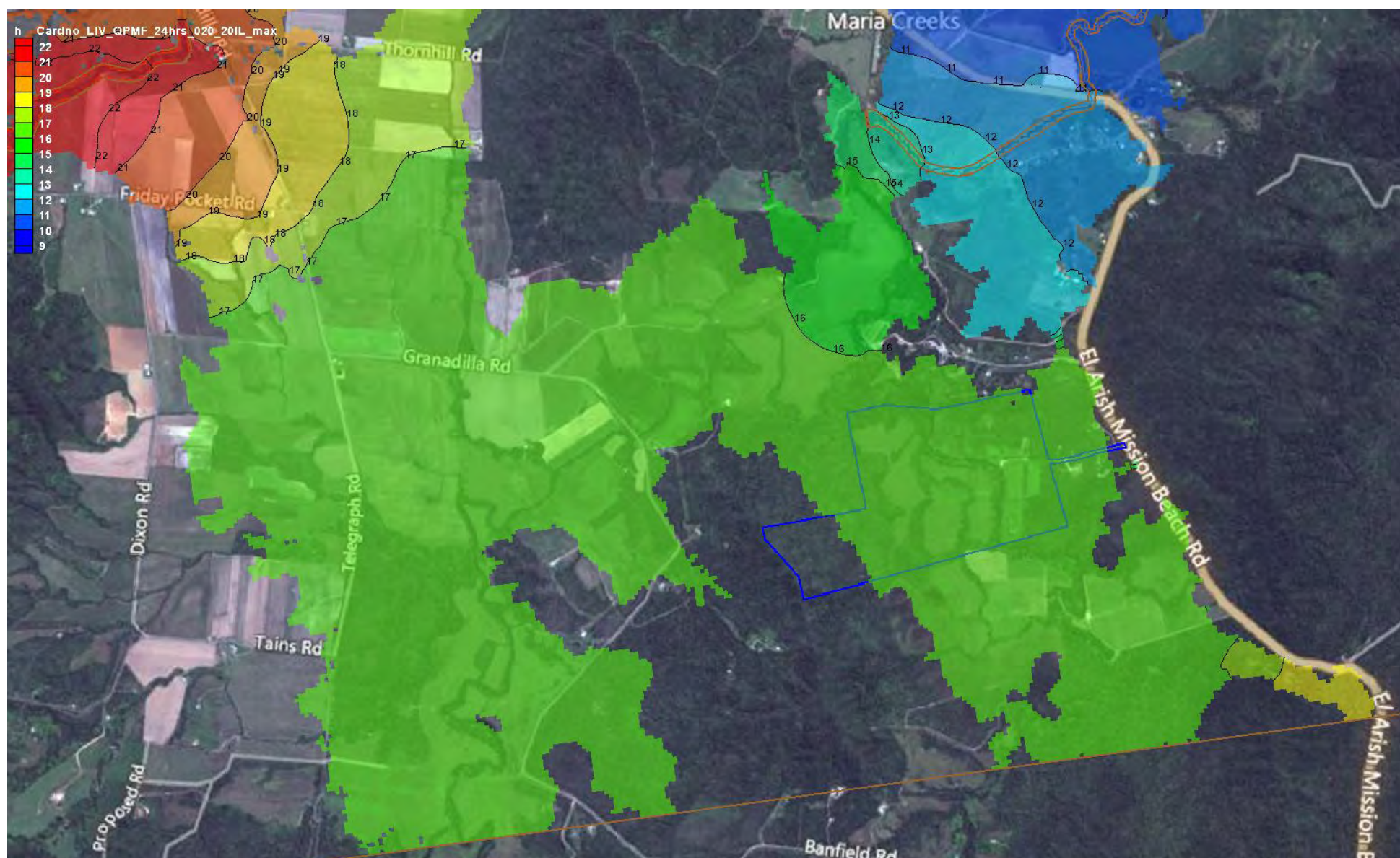


Figure B4. Existing Flood Levels – PMF Event

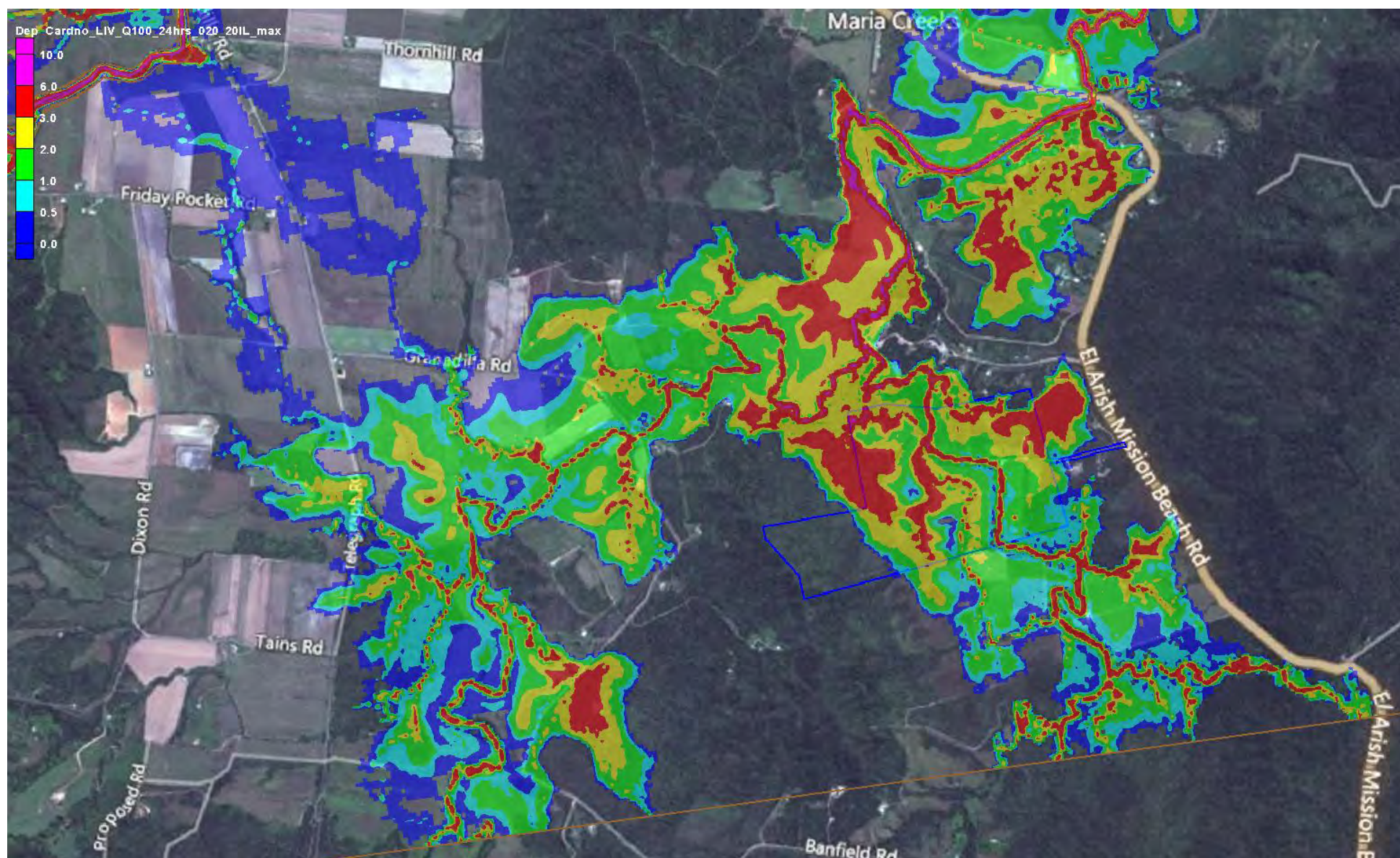


Figure B5. Existing Flood Depths – 100 Year ARI Event

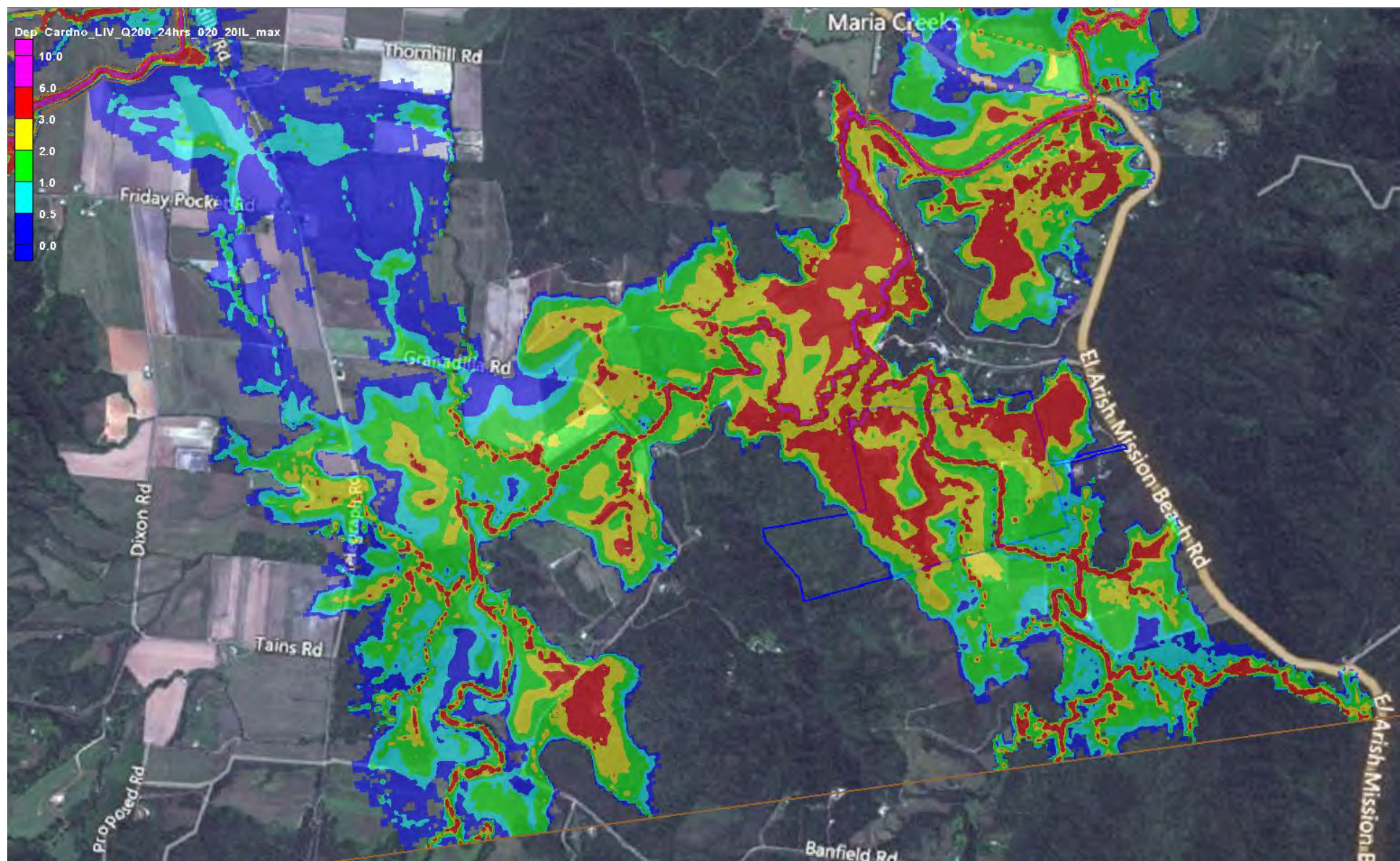


Figure B6. Existing Flood Depths – 200 Year ARI Event

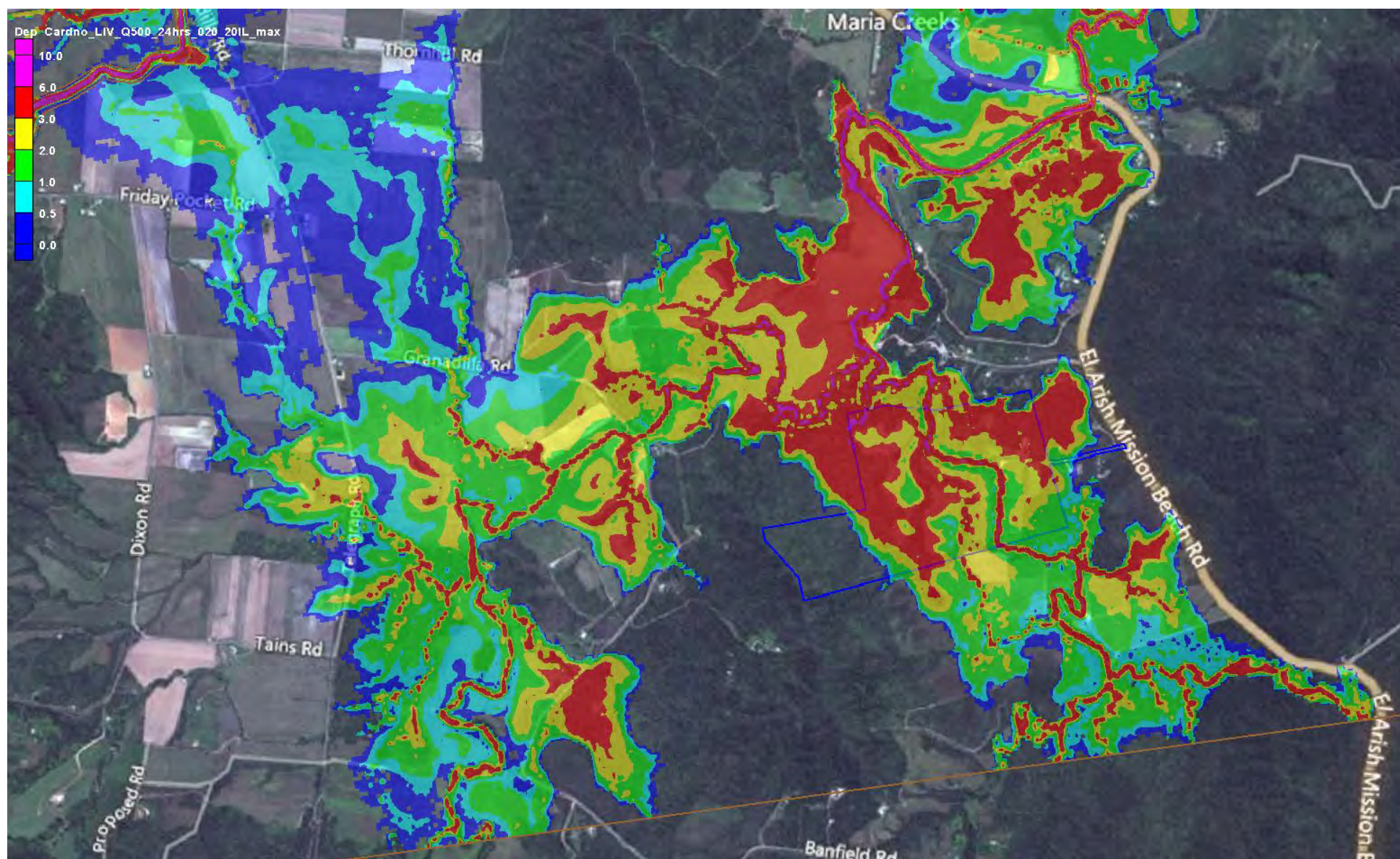


Figure B7. Existing Flood Depths – 500 Year ARI Event

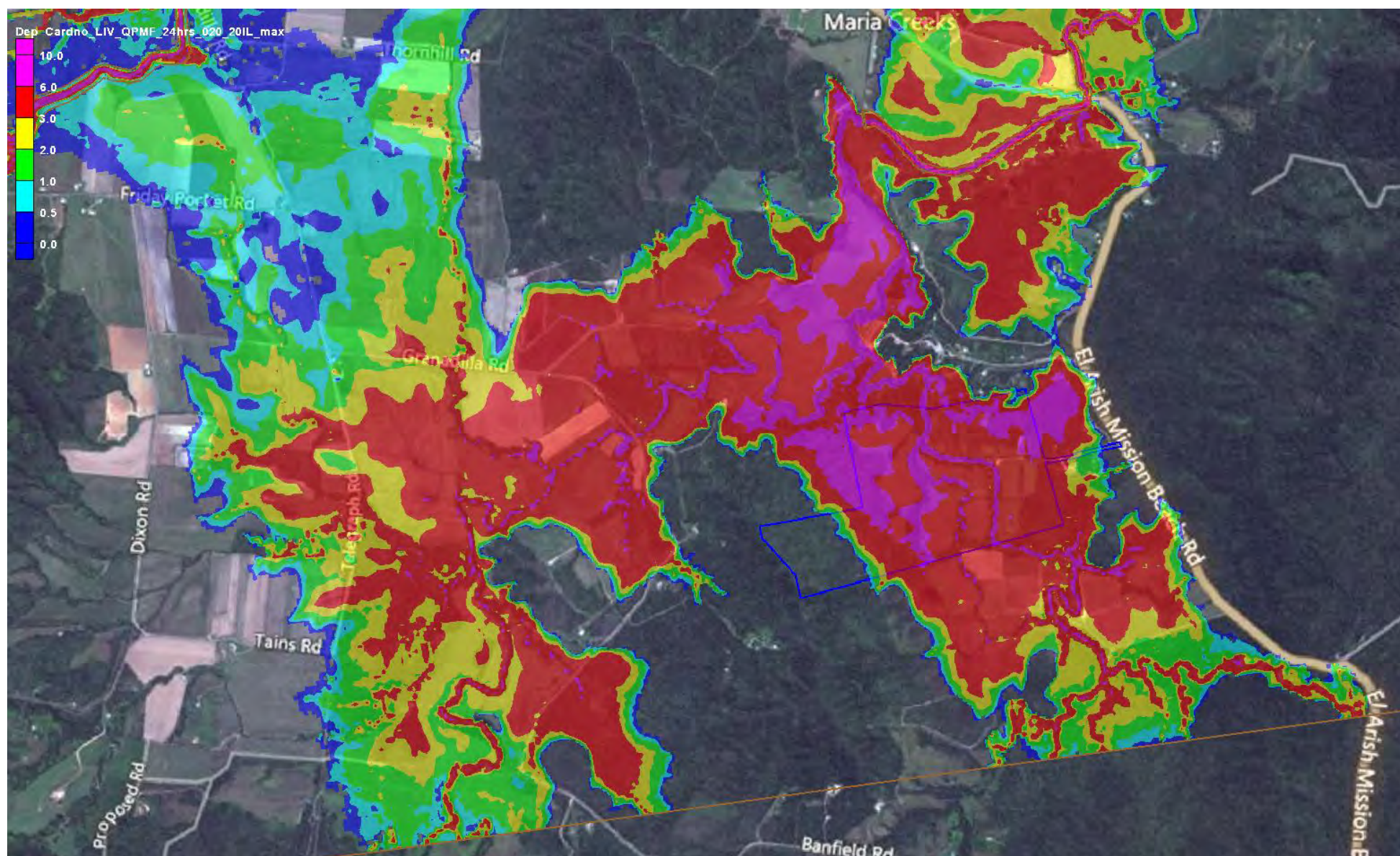


Figure B8. Existing Flood Depths – PMF Event

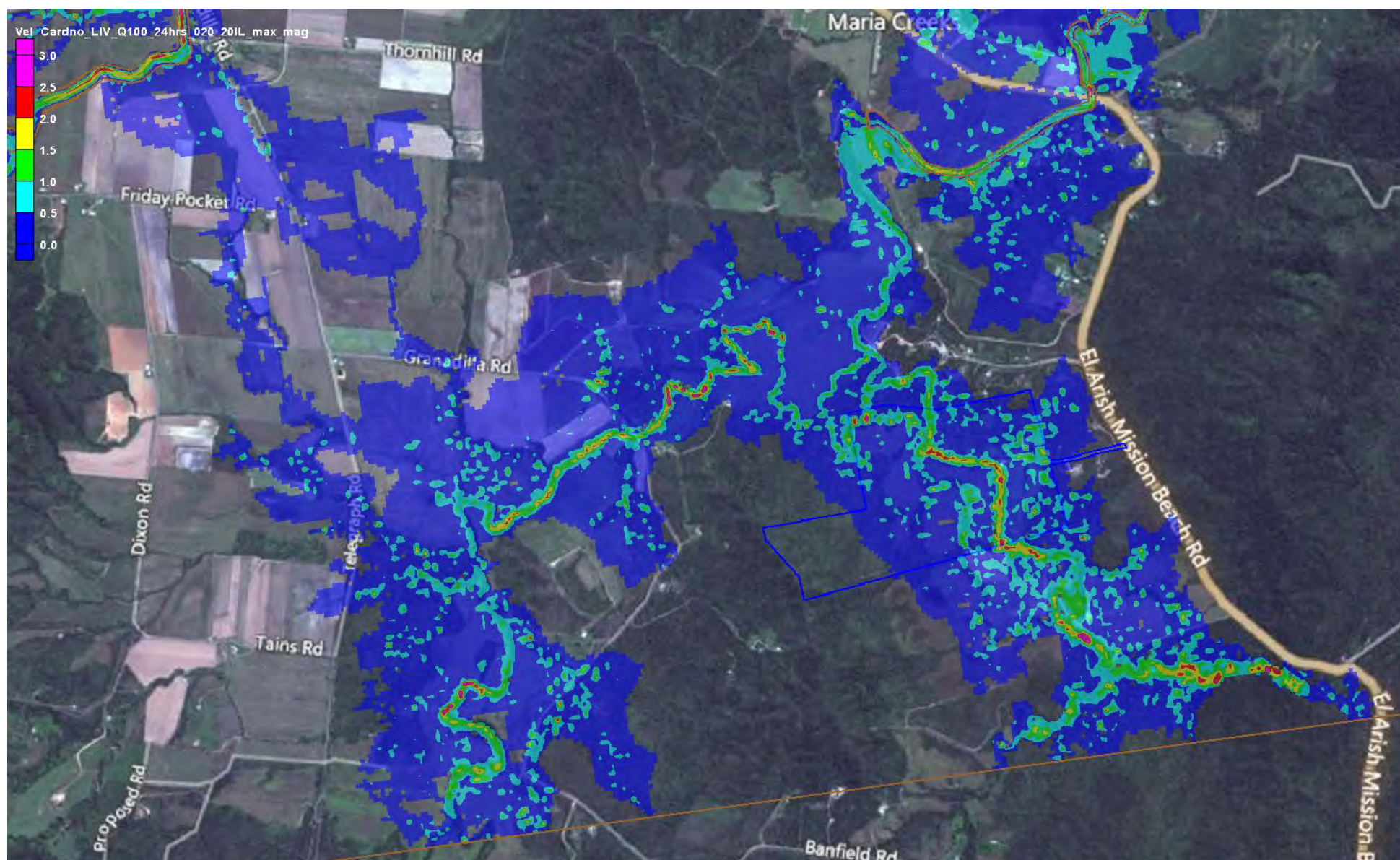


Figure B9. Existing Peak Velocities – 100 Year ARI Event

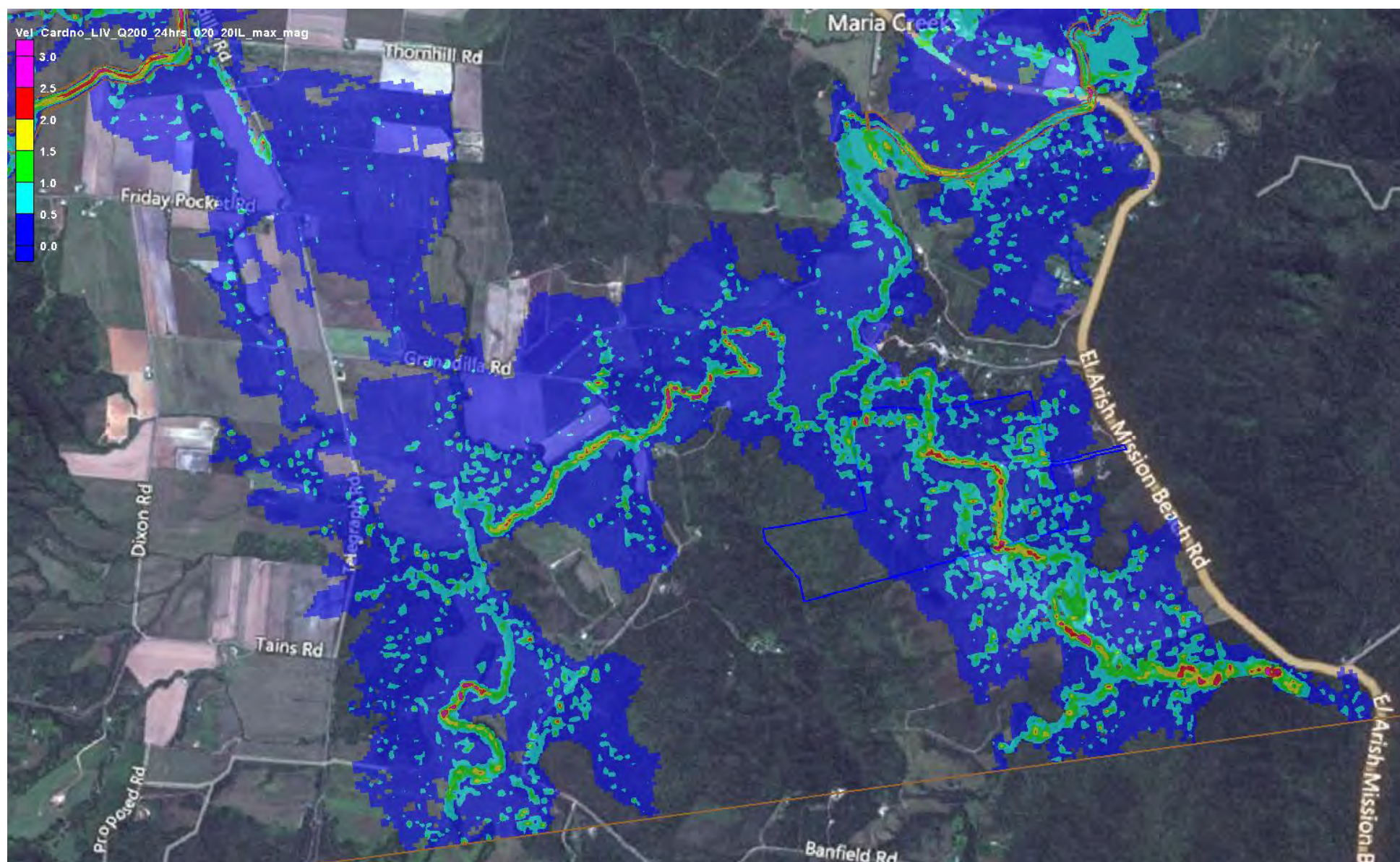


Figure B10. Existing Peak Velocities – 200 Year ARI Event

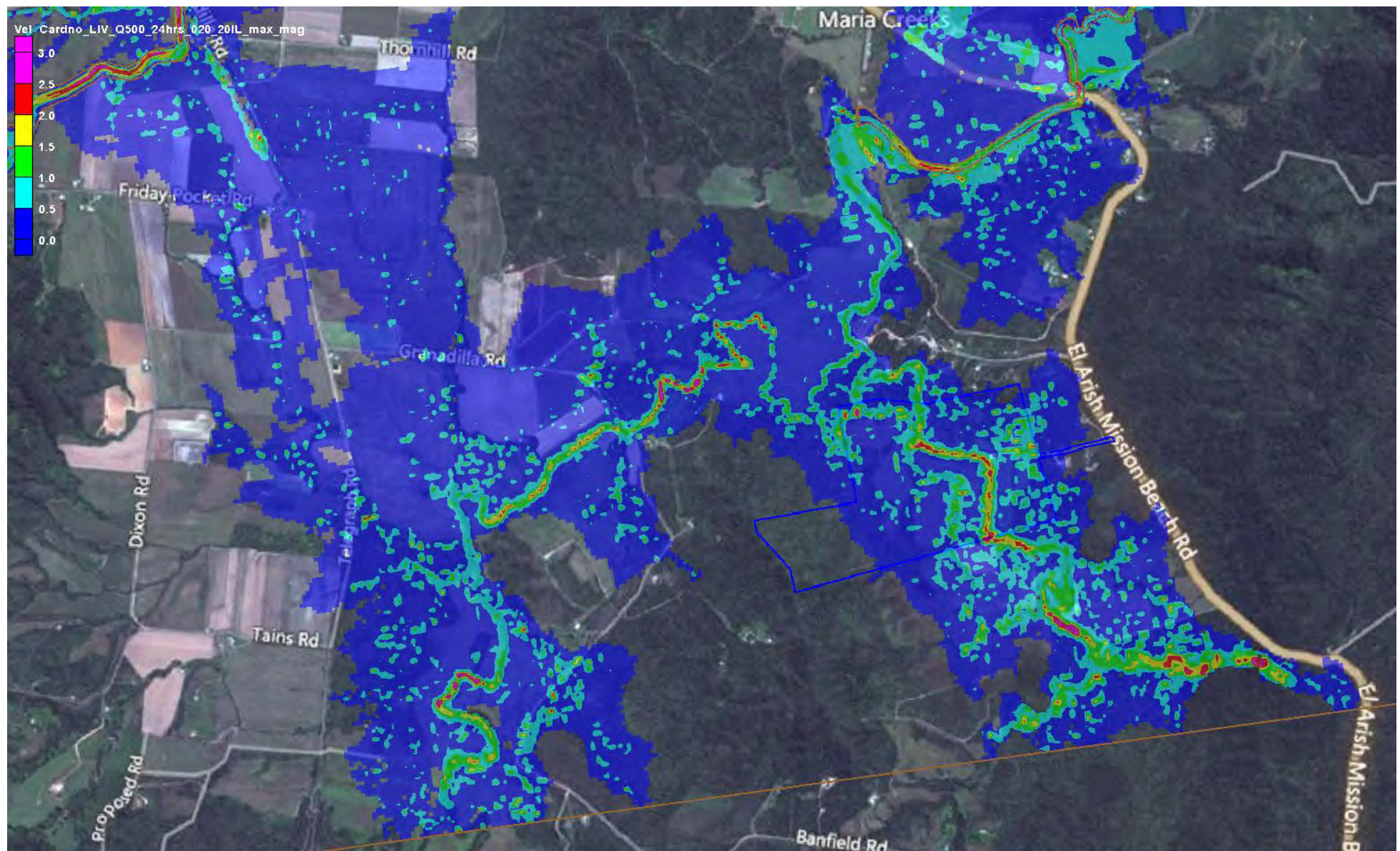


Figure B11. Existing Peak Velocities – 500 Year ARI Event

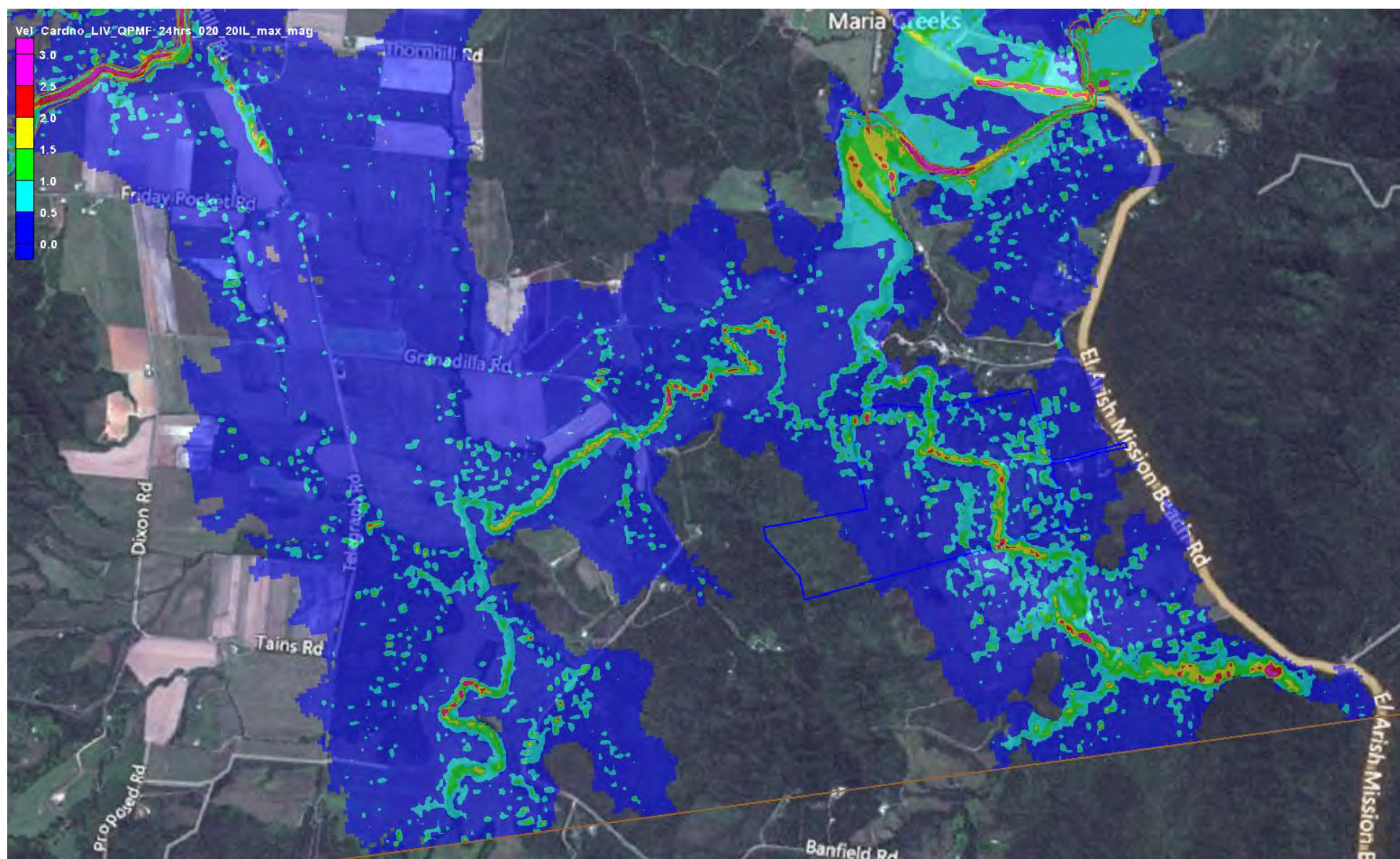


Figure B12. Existing Peak Velocities – PMF Event

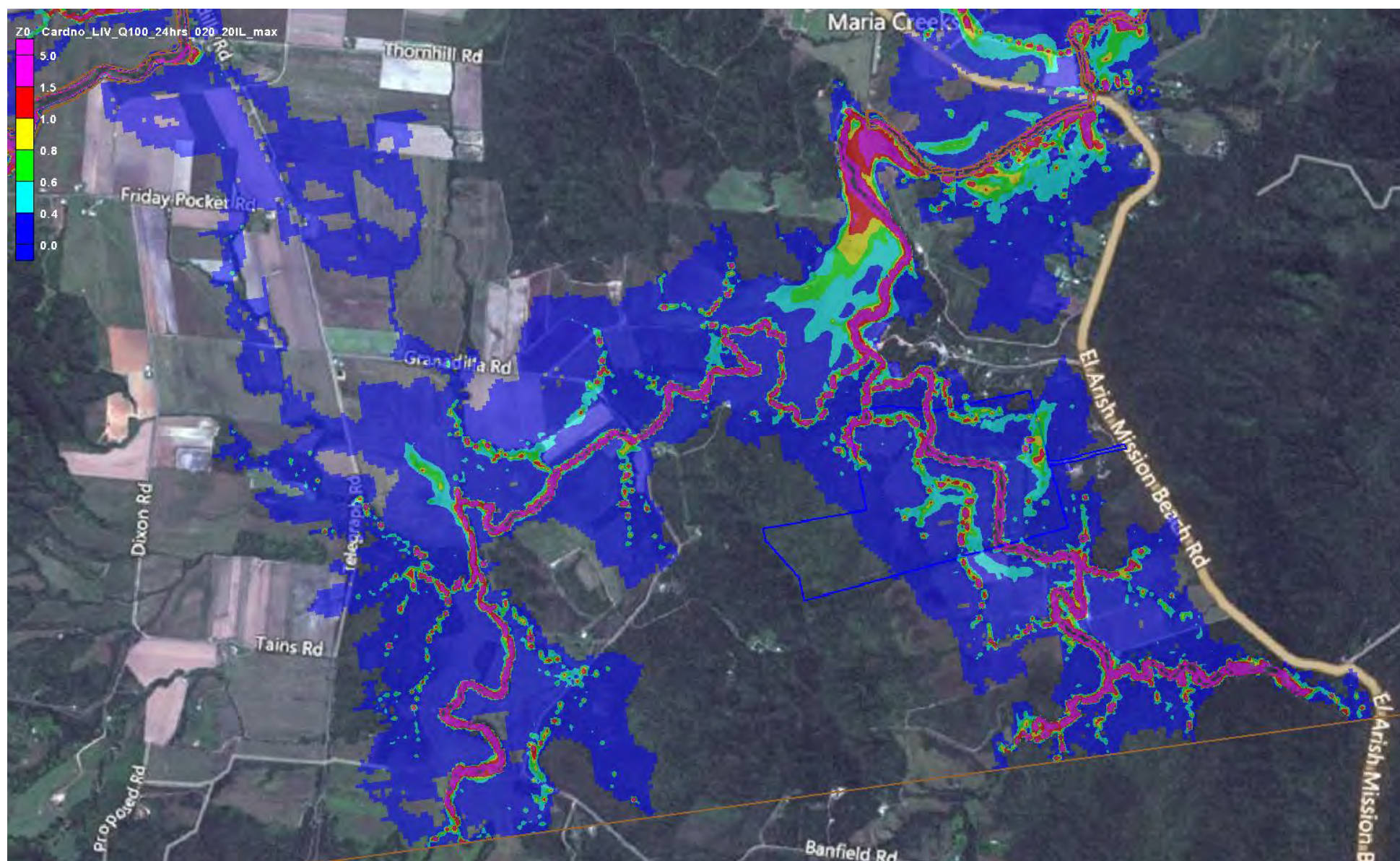


Figure B13. Existing Flood Hazard – 100 Year ARI Event

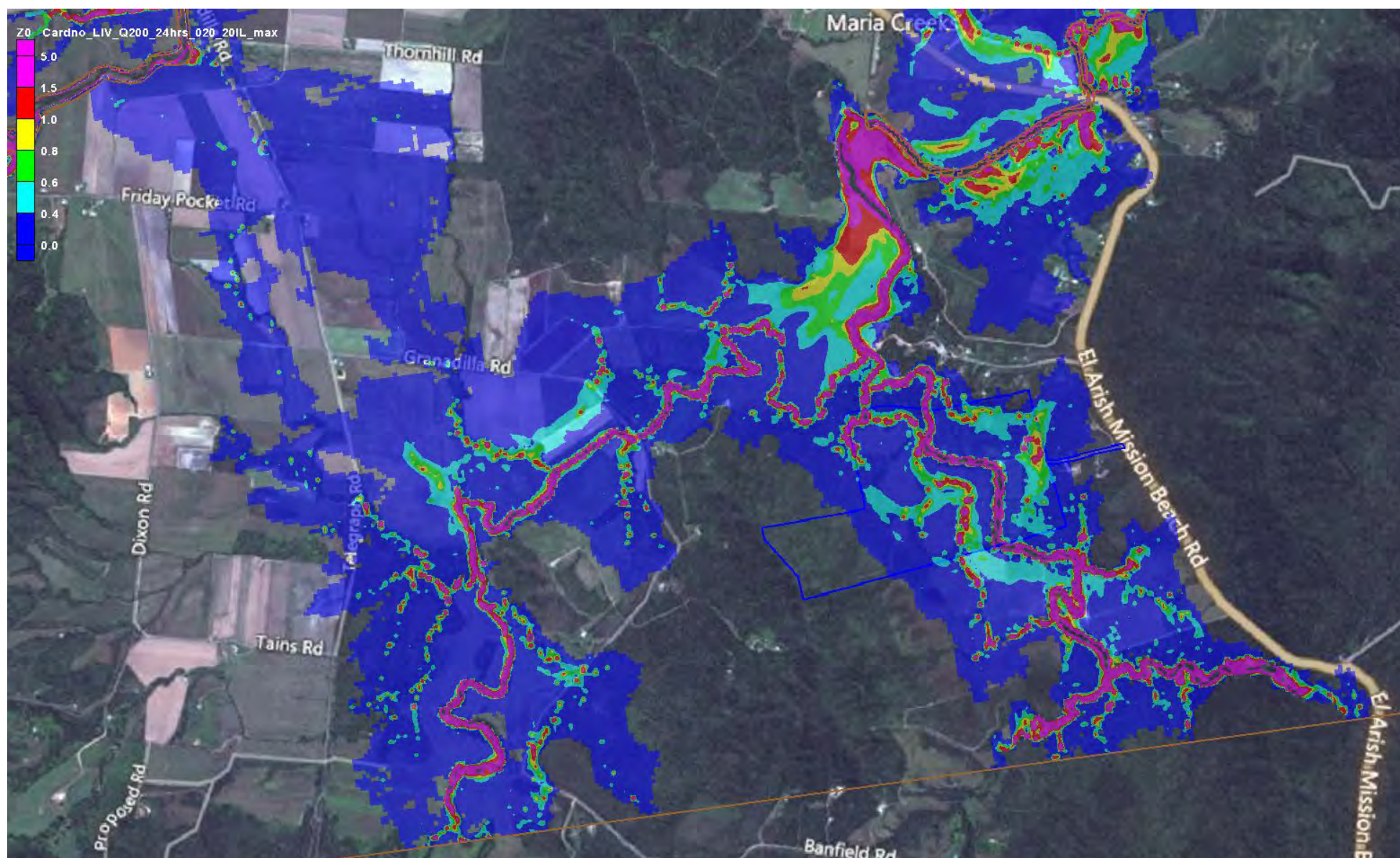


Figure B14. Existing Flood Hazard – 200 Year ARI Event

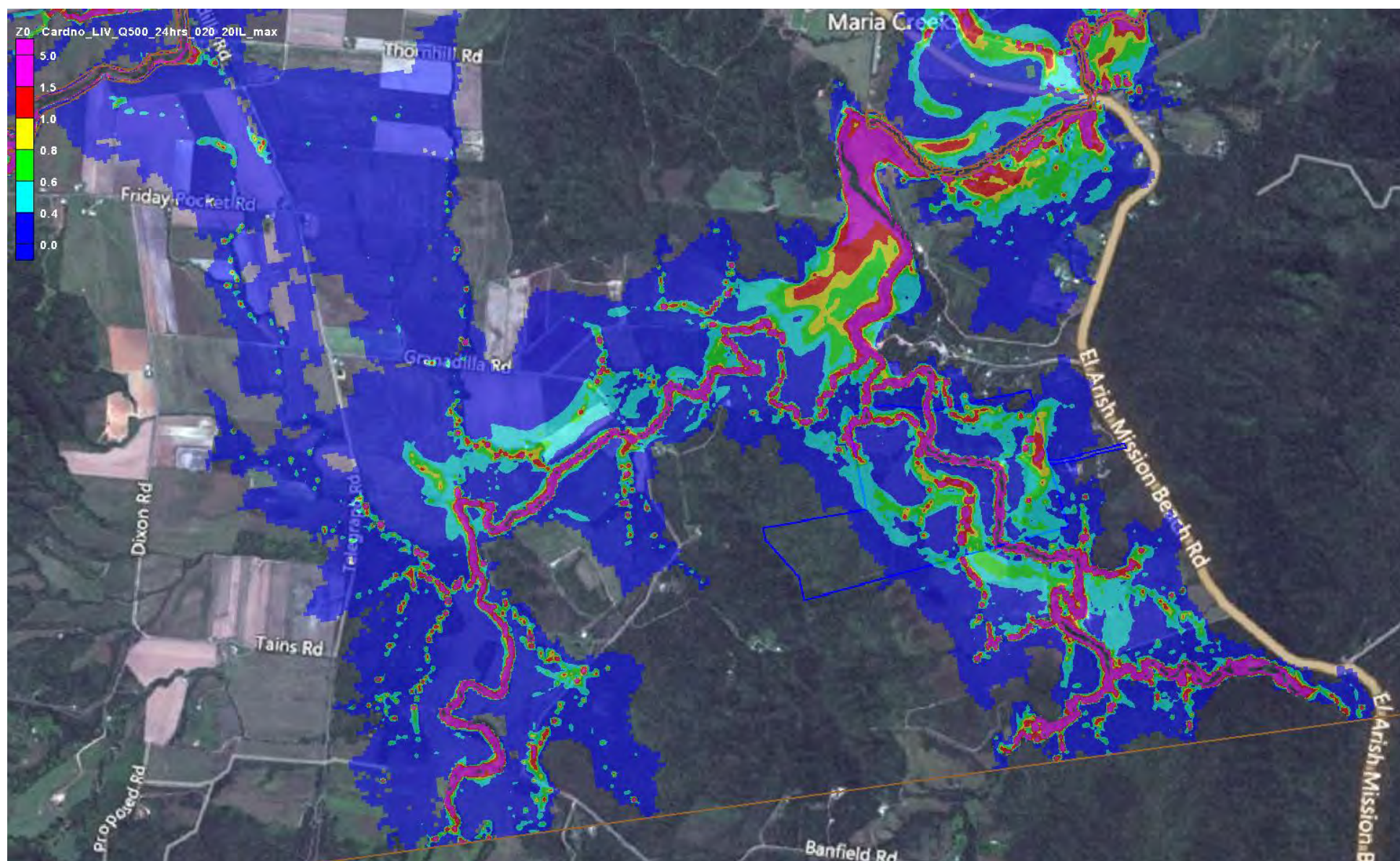


Figure B15. Existing Flood Hazard – 500 Year ARI Event

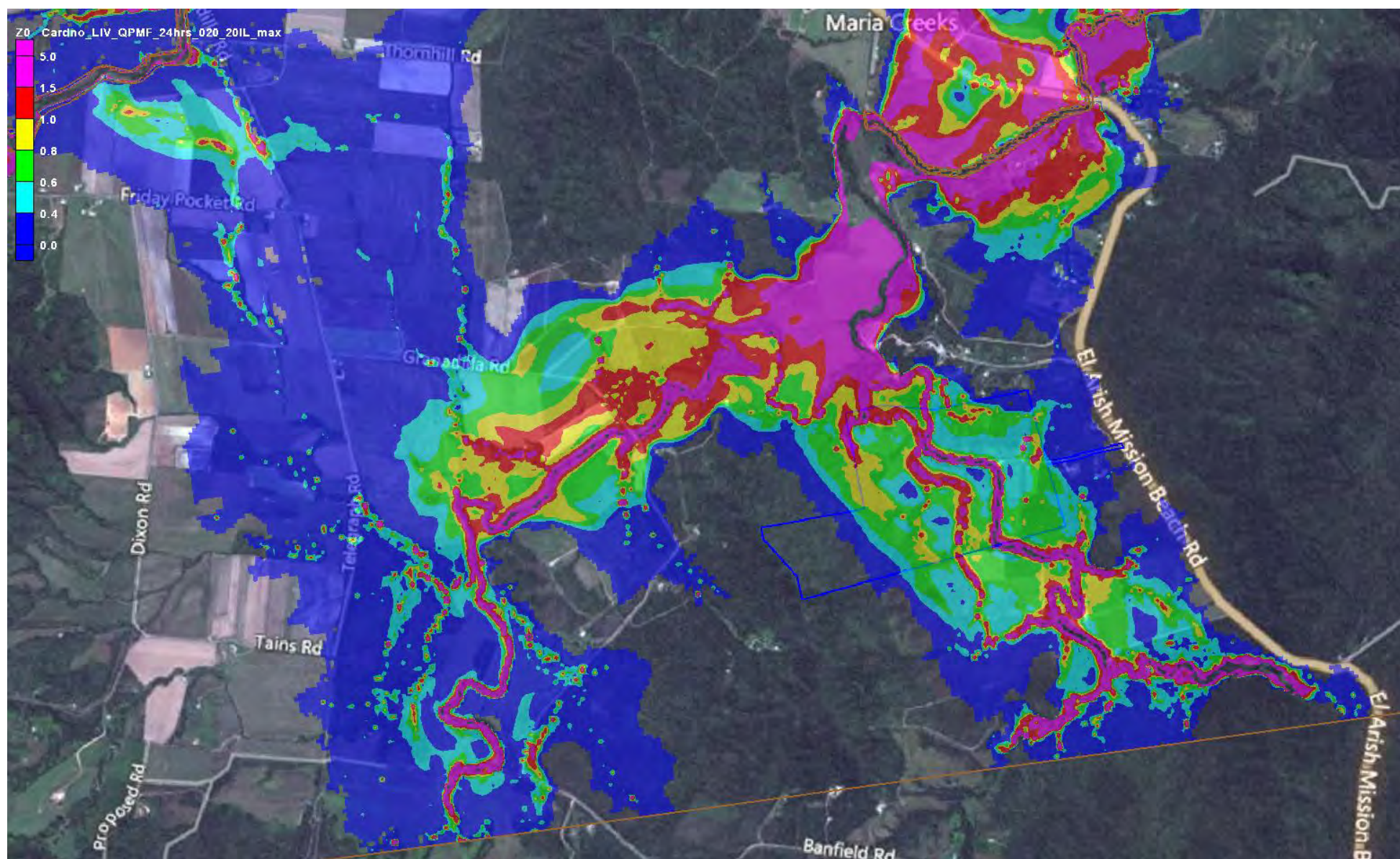


Figure B16. Existing Flood Hazard – PMF Event

Flood Investigation

APPENDIX C

LOCAL FLOOD MODEL RESULTS – EXISTING CONDITIONS

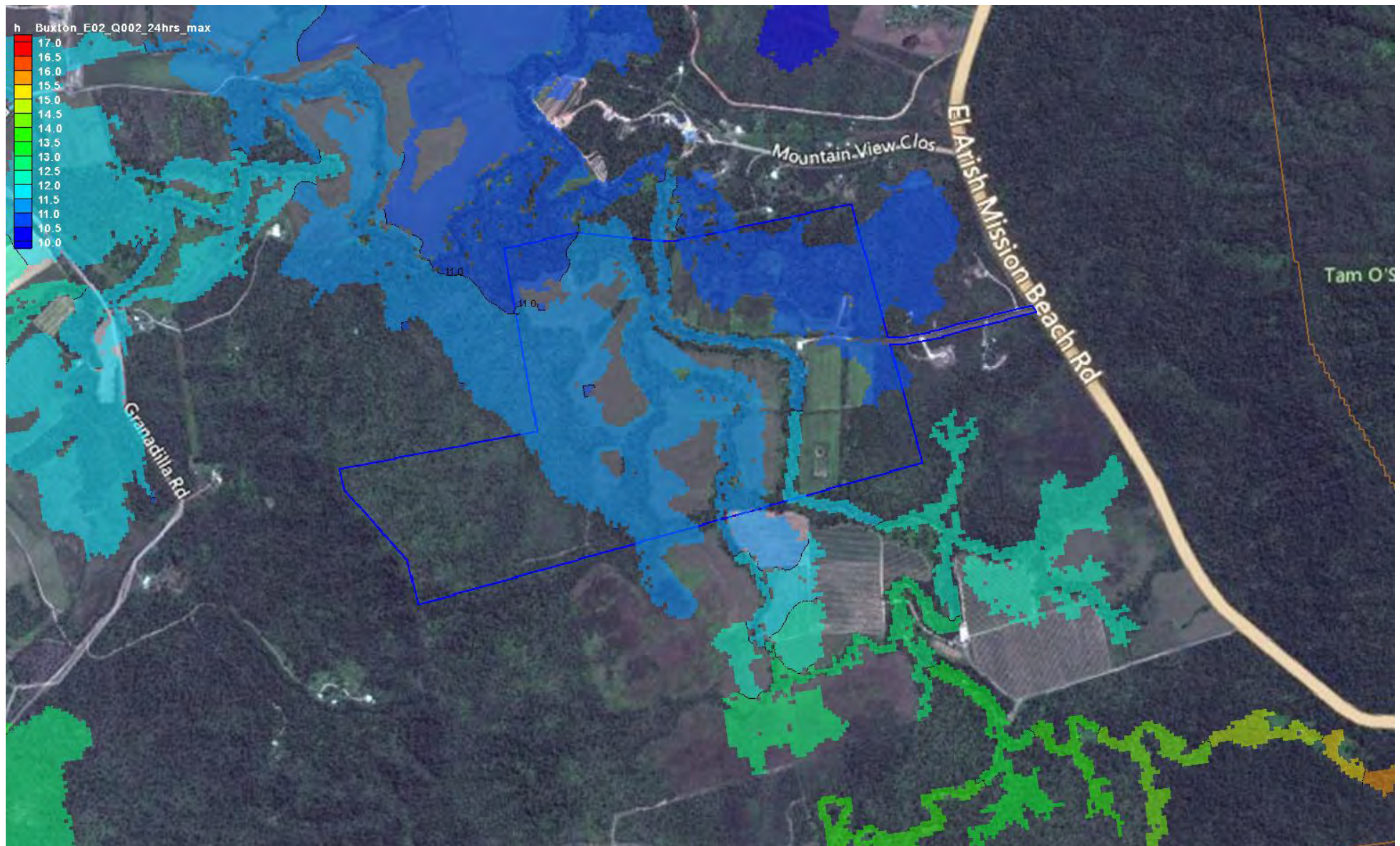


Figure C1. Existing Flood Levels – 2 Year ARI Event

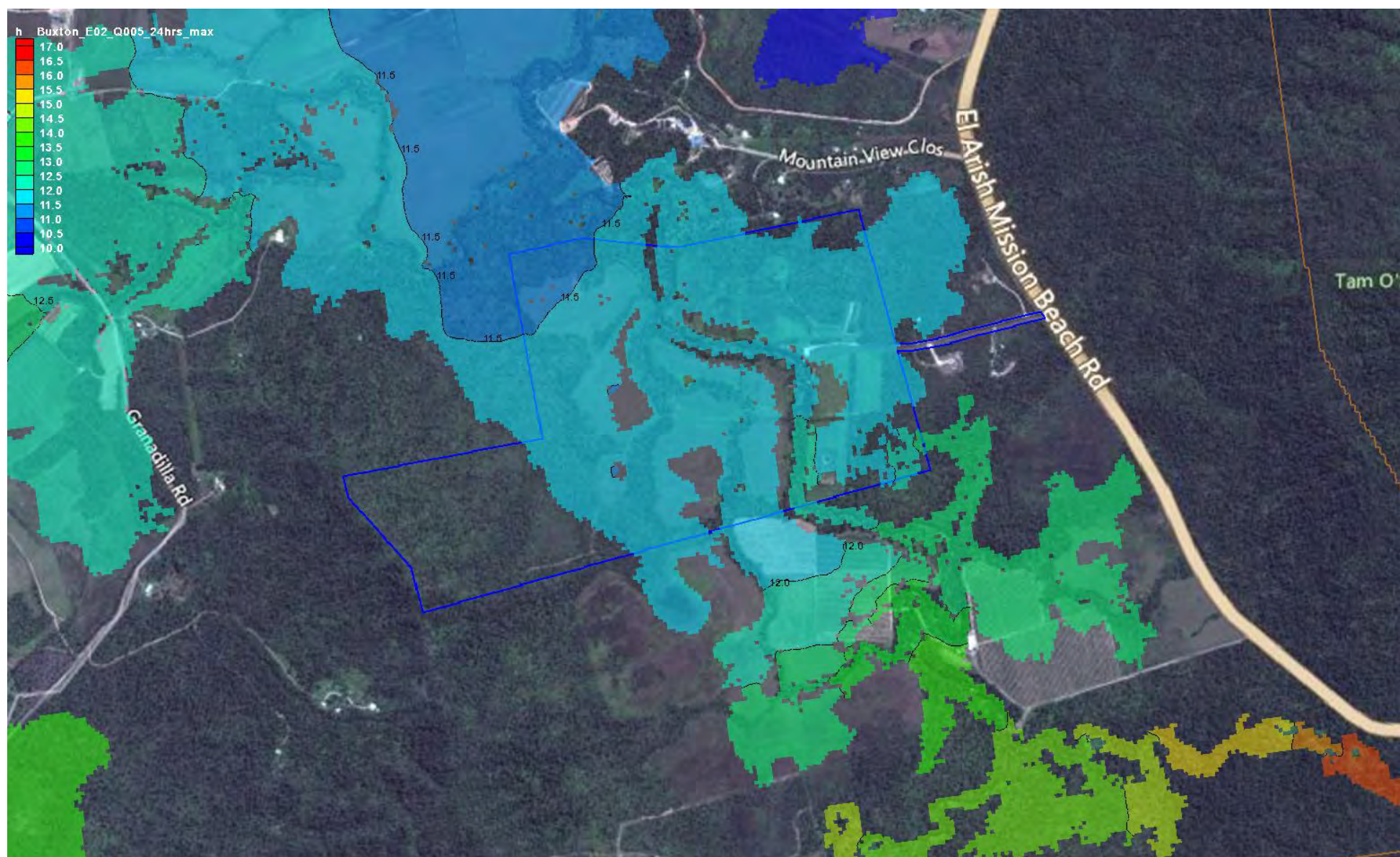


Figure C2. Existing Flood Levels – 5 Year ARI Event

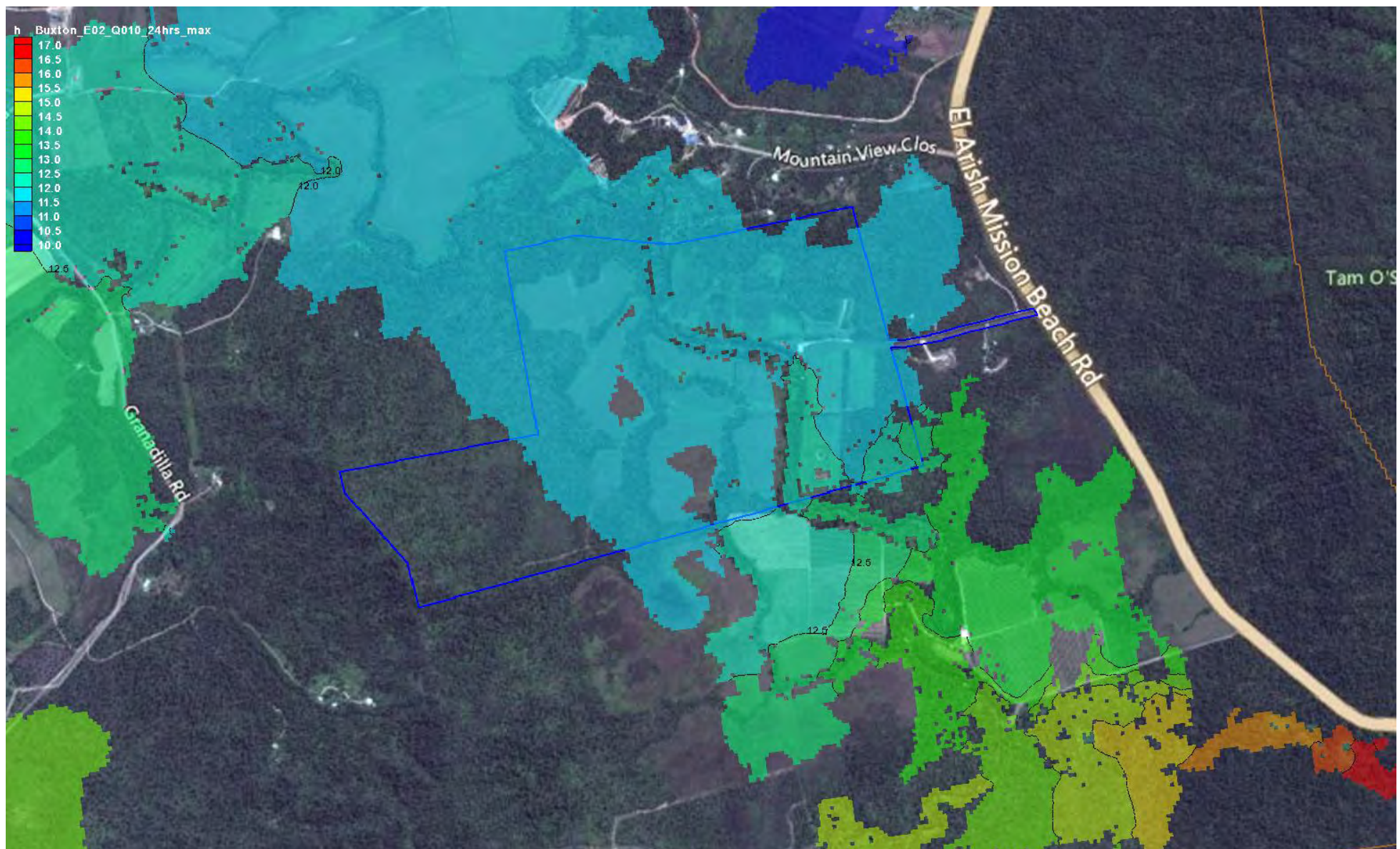


Figure C3. Existing Flood Levels – 10 Year ARI Event

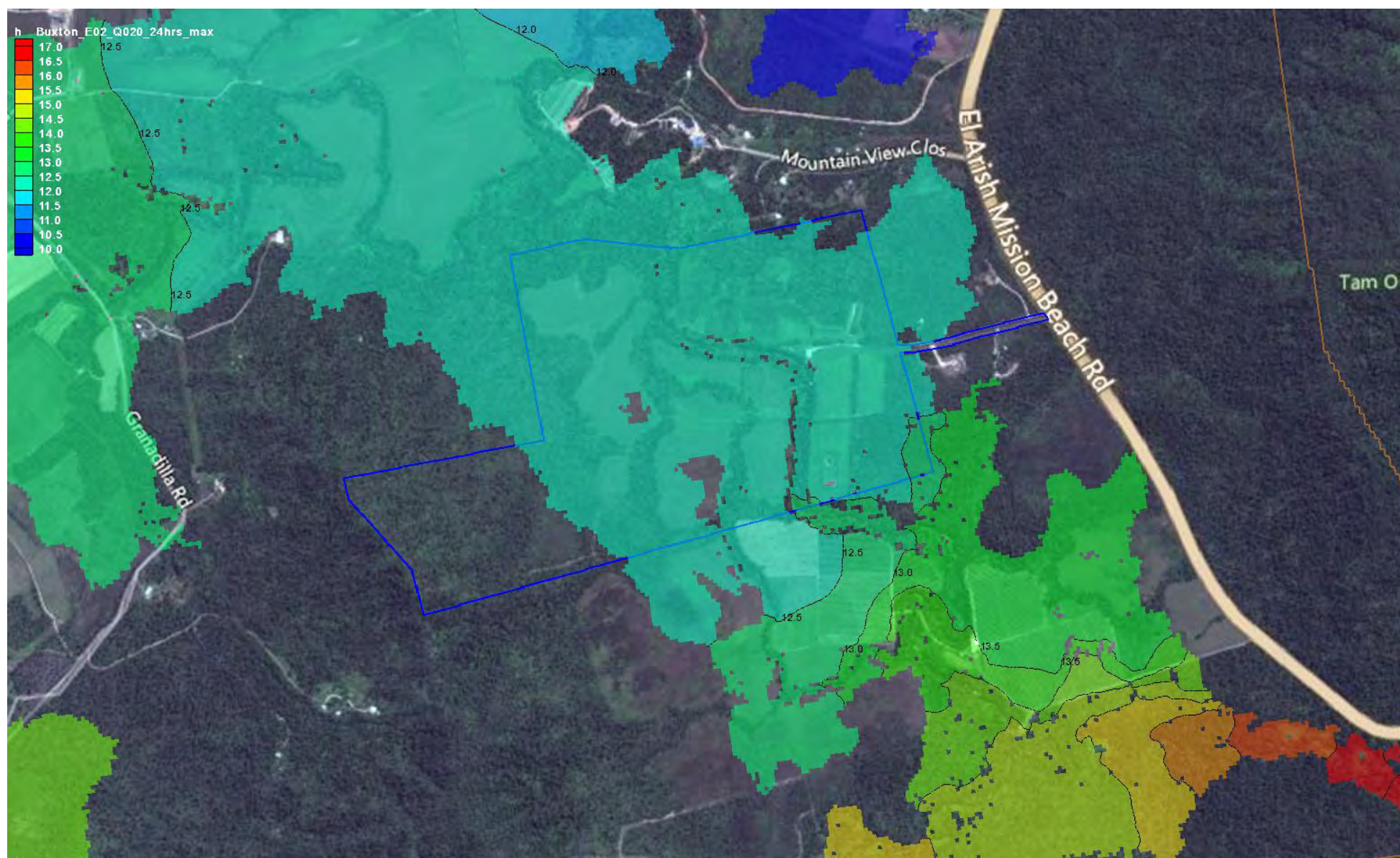


Figure C4. Existing Flood Levels – 20 Year ARI Event

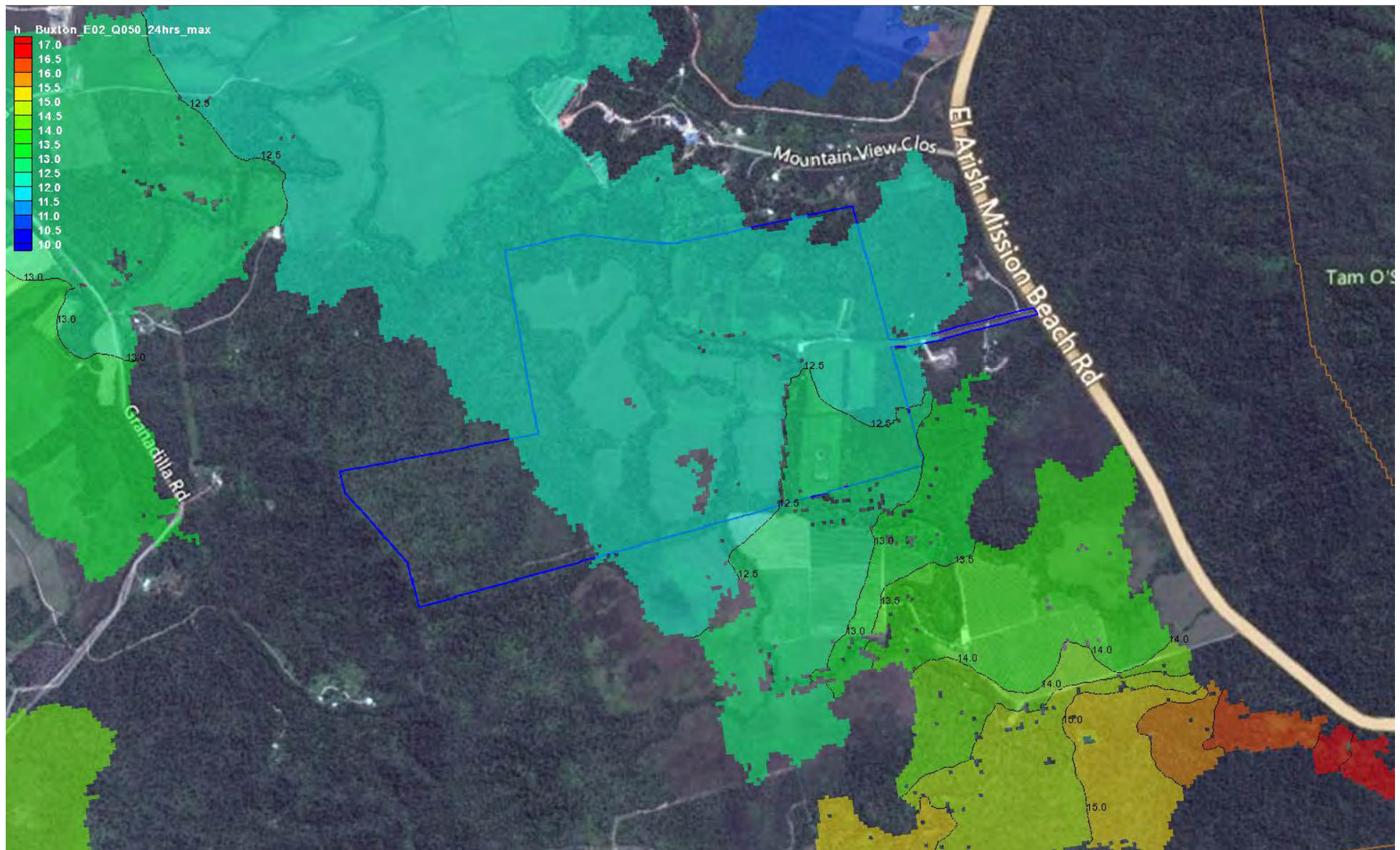


Figure C5. Existing Flood Levels – 50 Year ARI Event

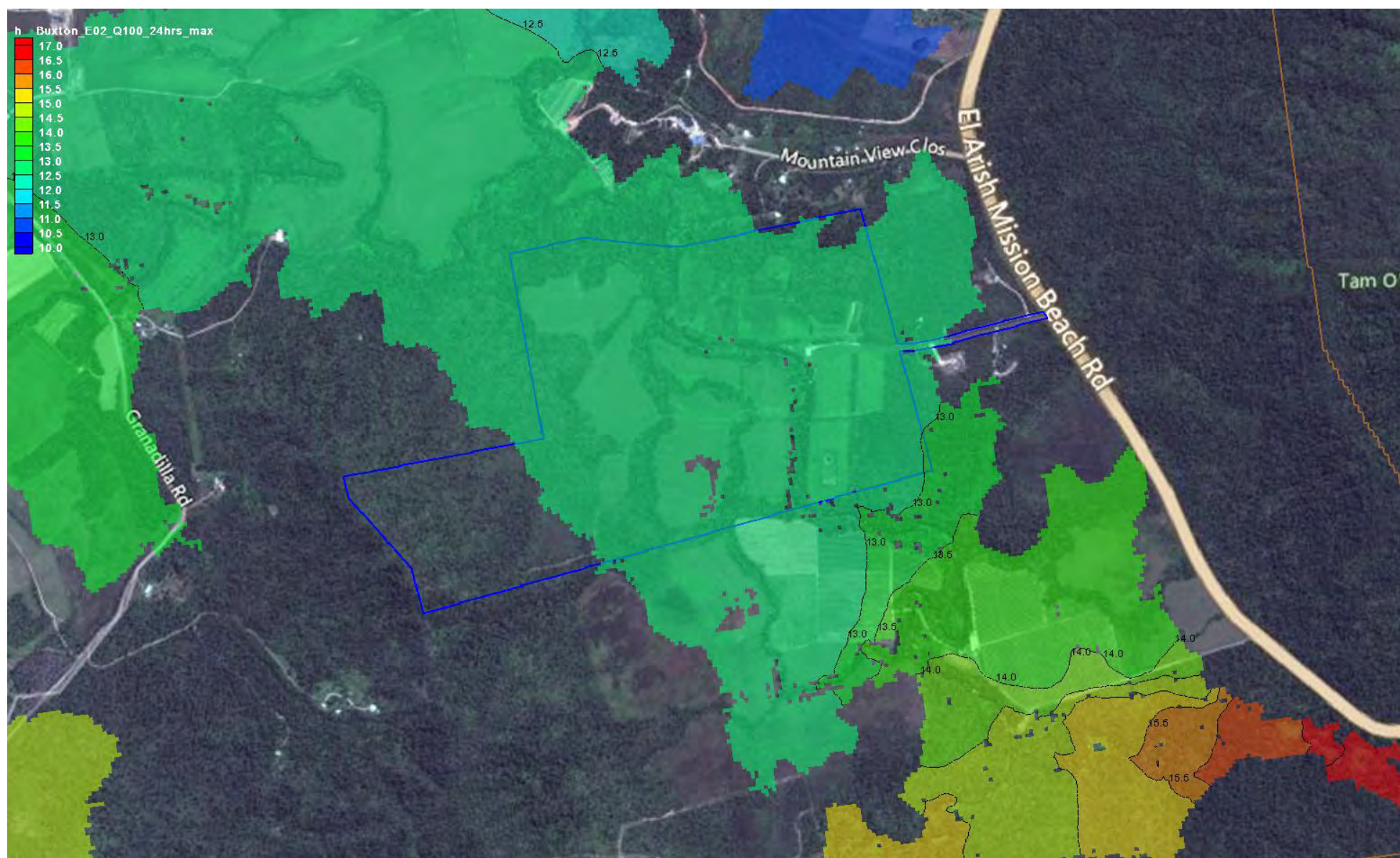


Figure C6. Existing Flood Levels – 100 Year ARI Event

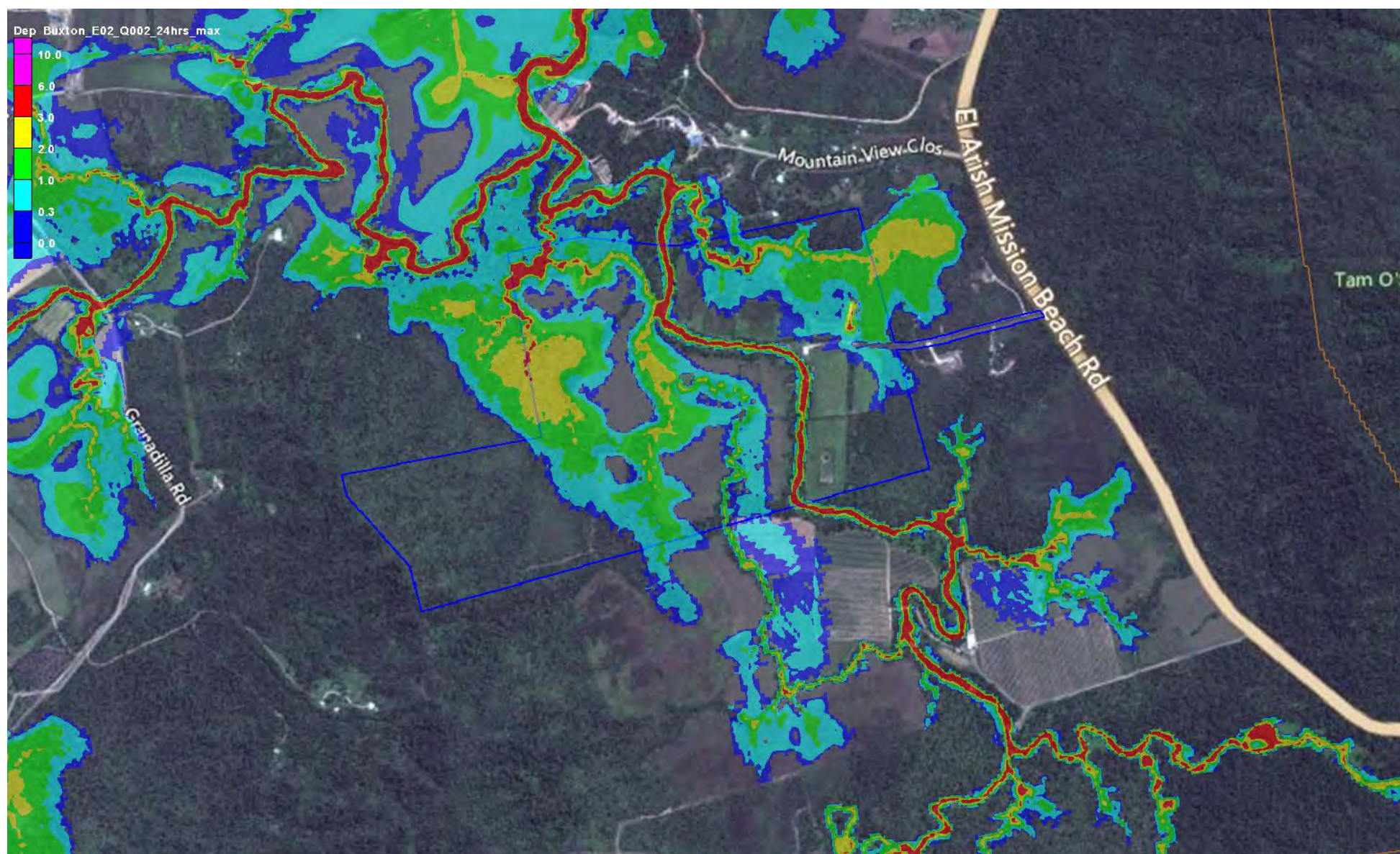


Figure C7. Existing Flood Depths – 2 Year ARI Event

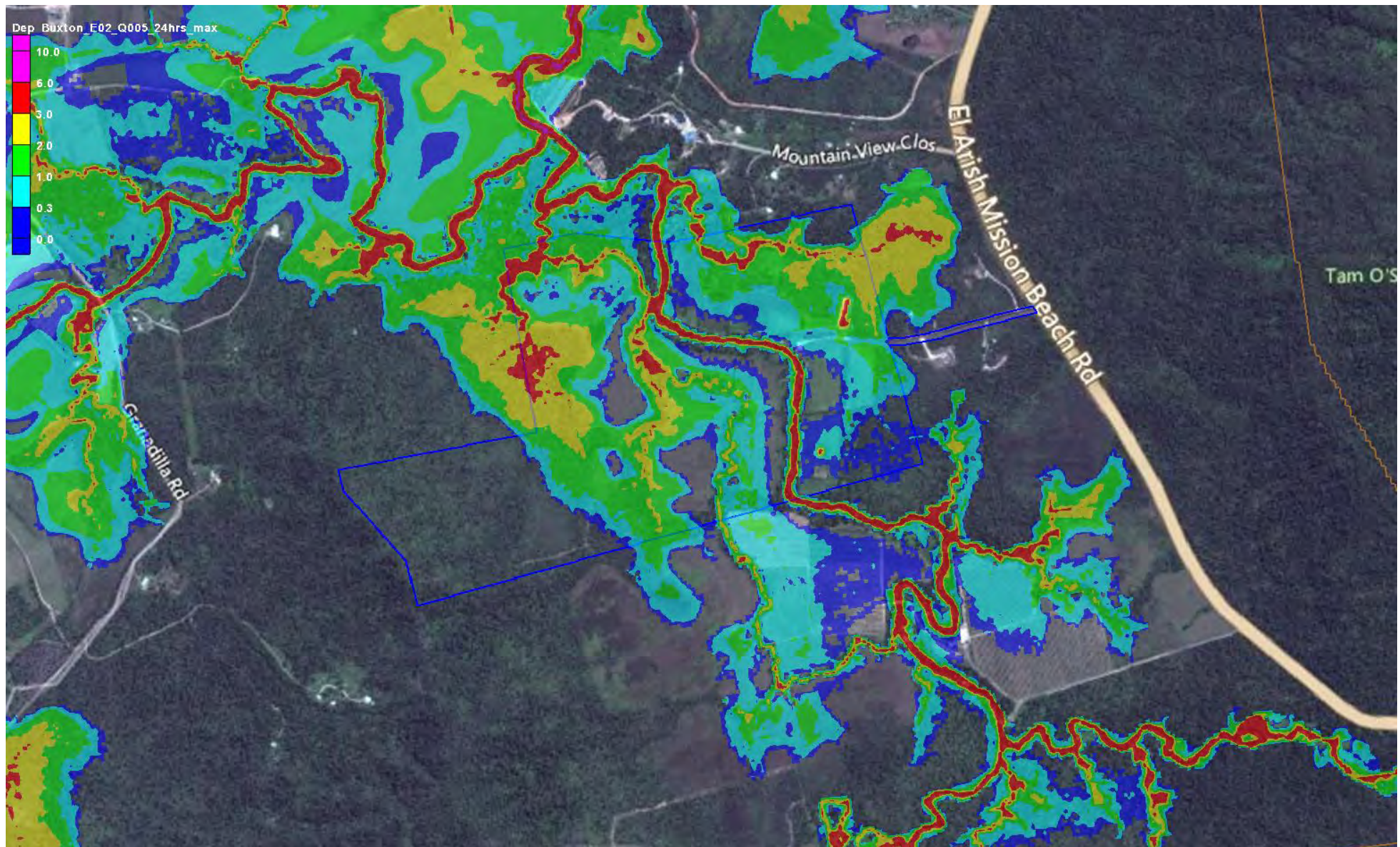


Figure C8. Existing Flood Depths – 5 Year ARI Event

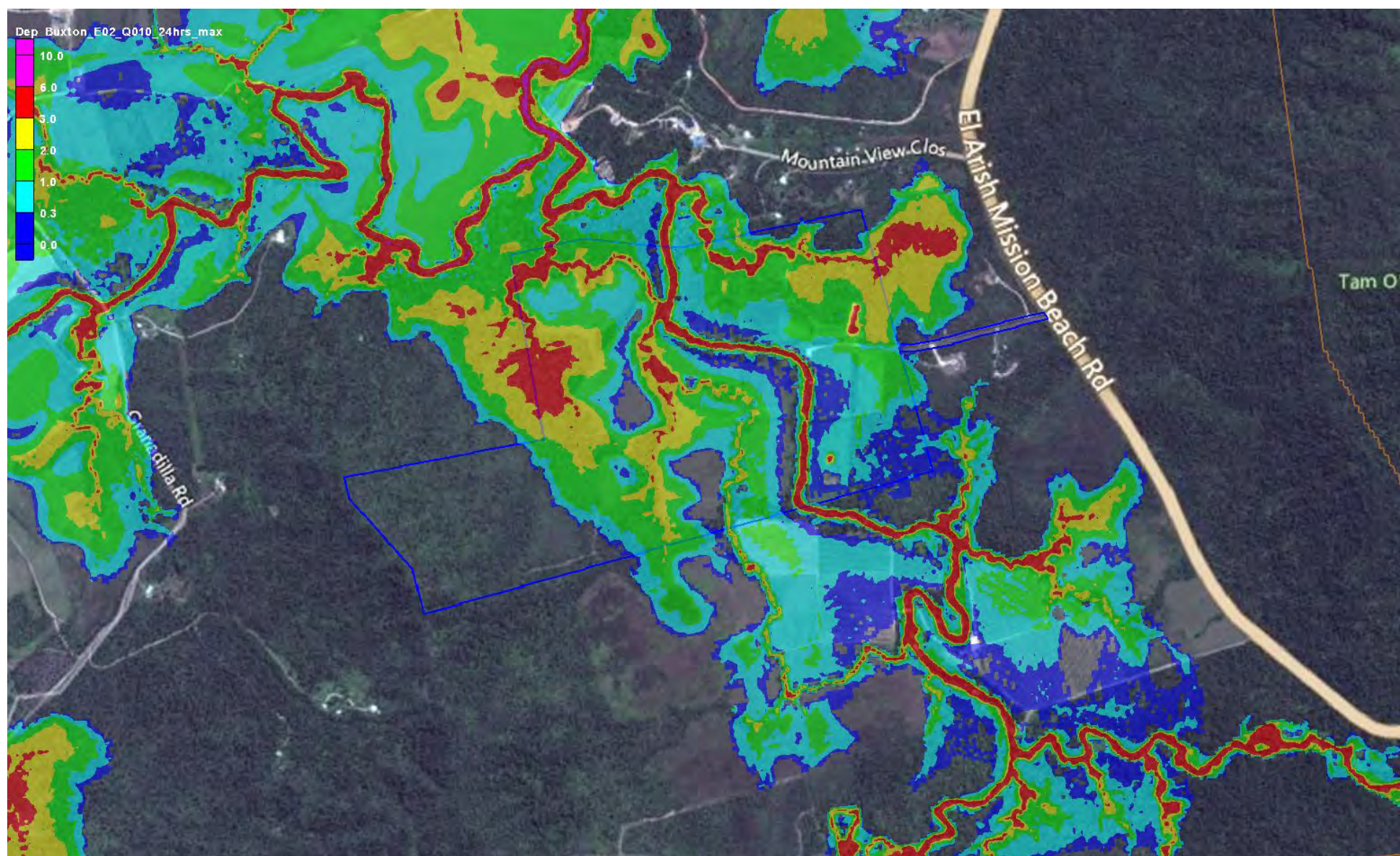


Figure C9. Existing Flood Depths – 10 Year ARI Event

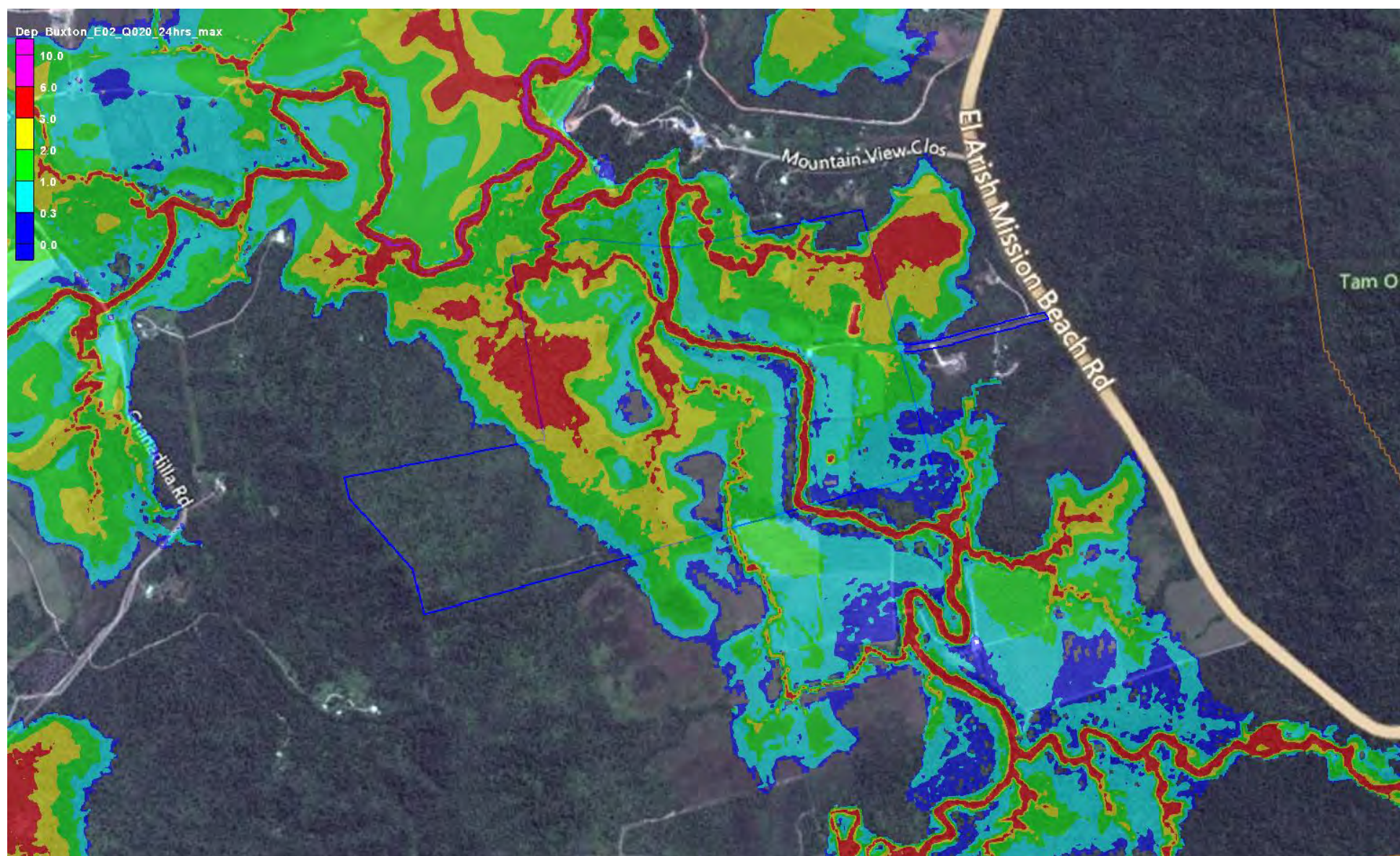


Figure C10. Existing Flood Depths – 20 Year ARI Event

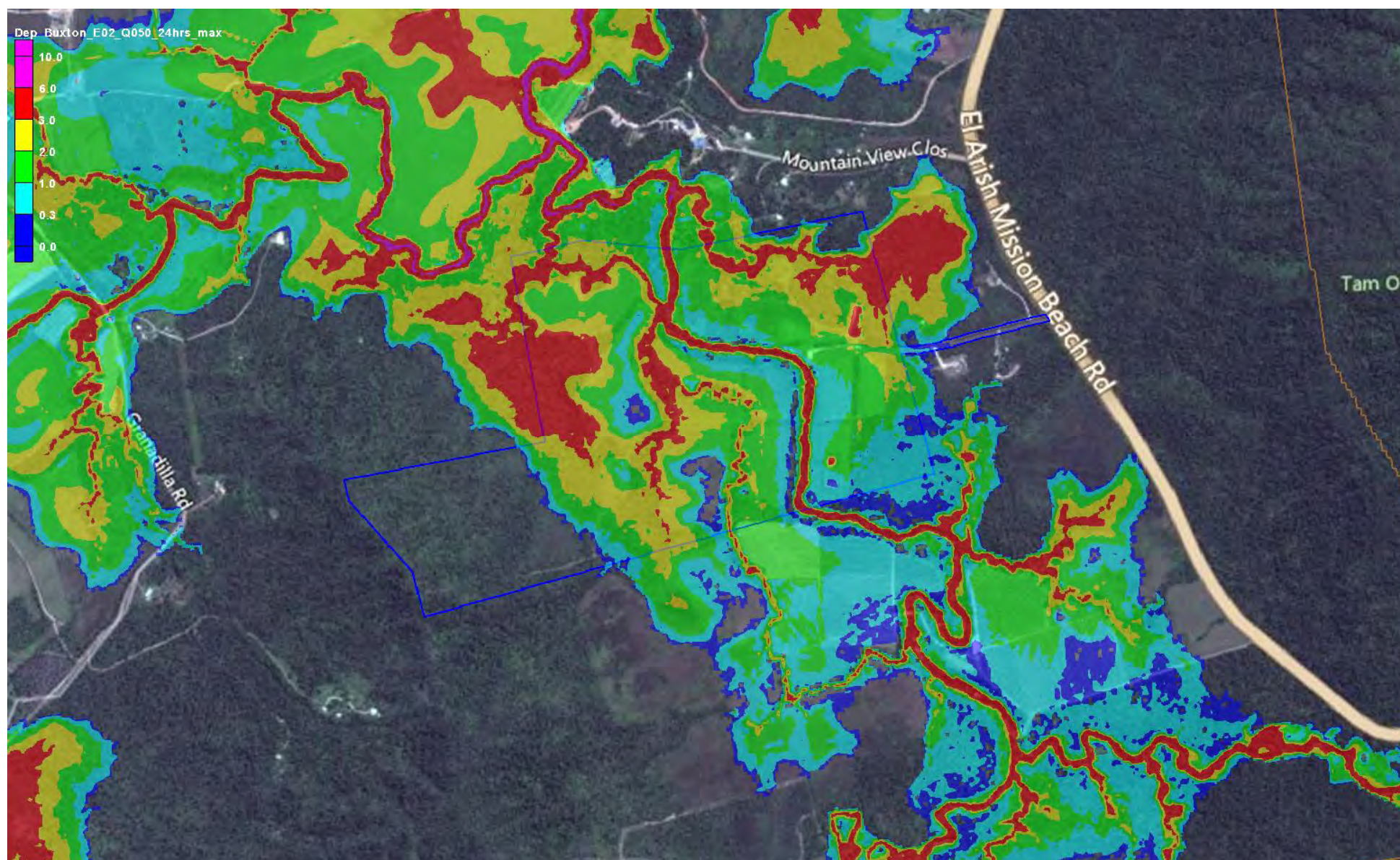


Figure C11. Existing Flood Depths – 50 Year ARI Event

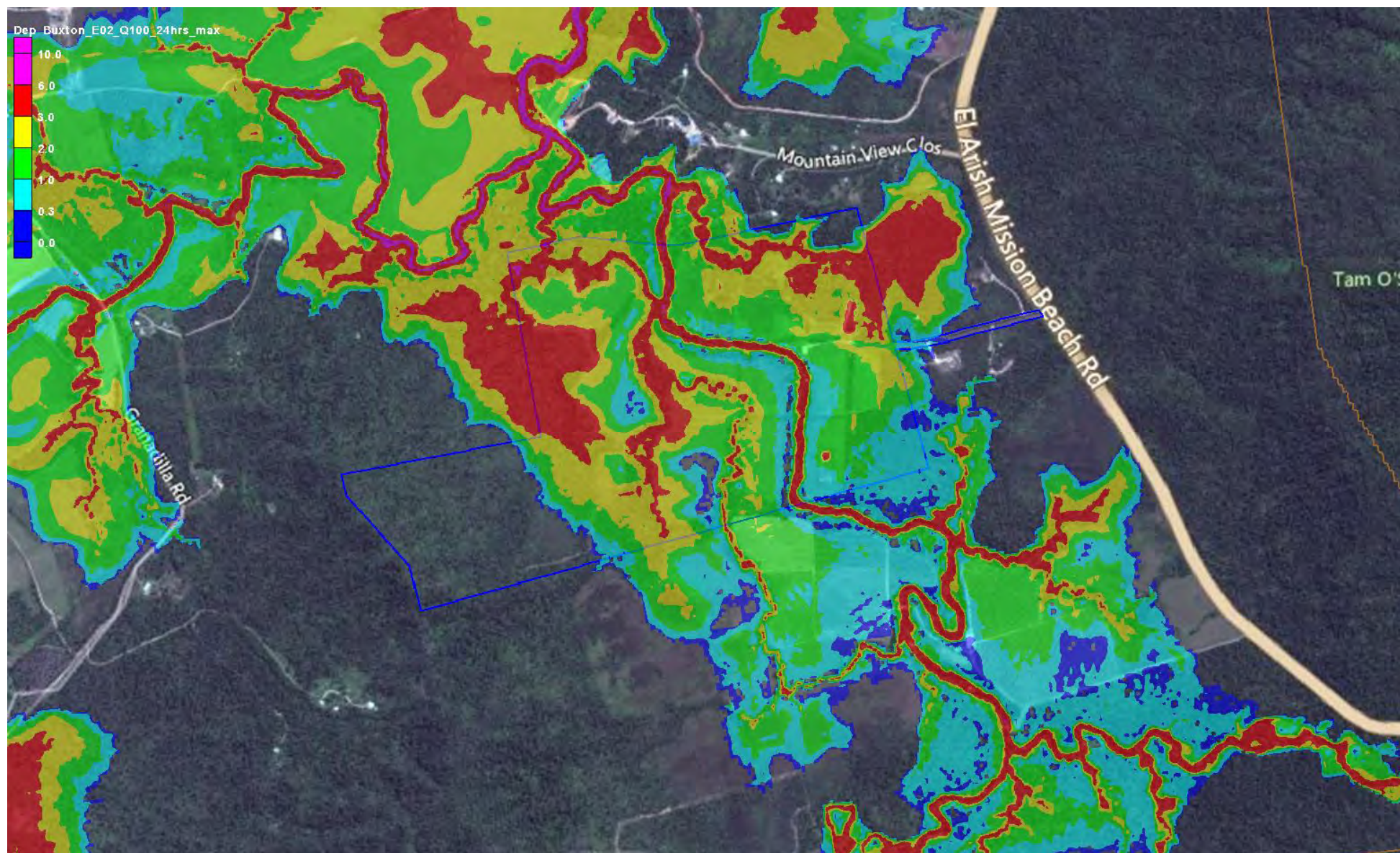


Figure C12. Existing Flood Depths – 100 Year ARI Event

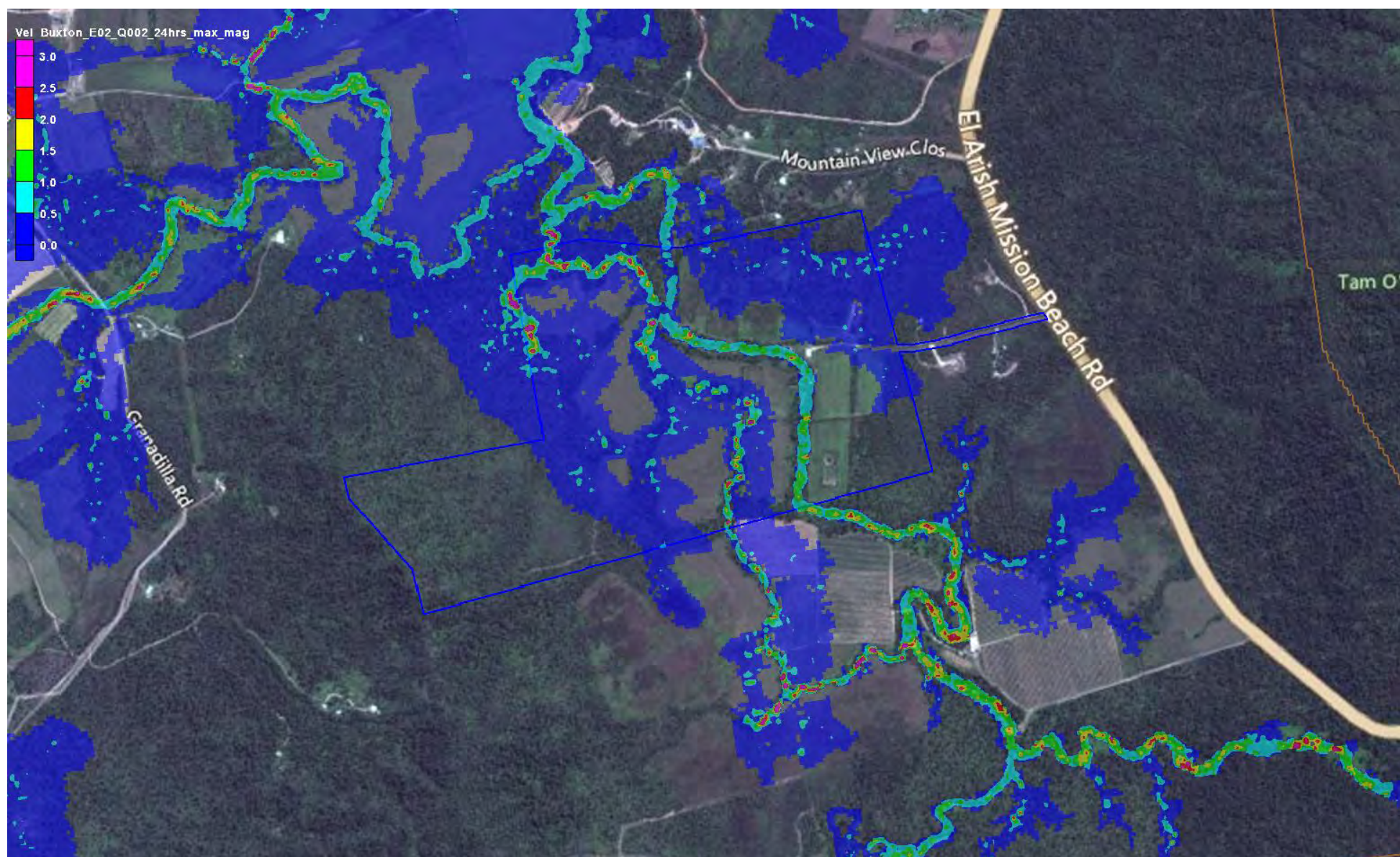


Figure C13. Existing Velocities – 2 Year ARI Event

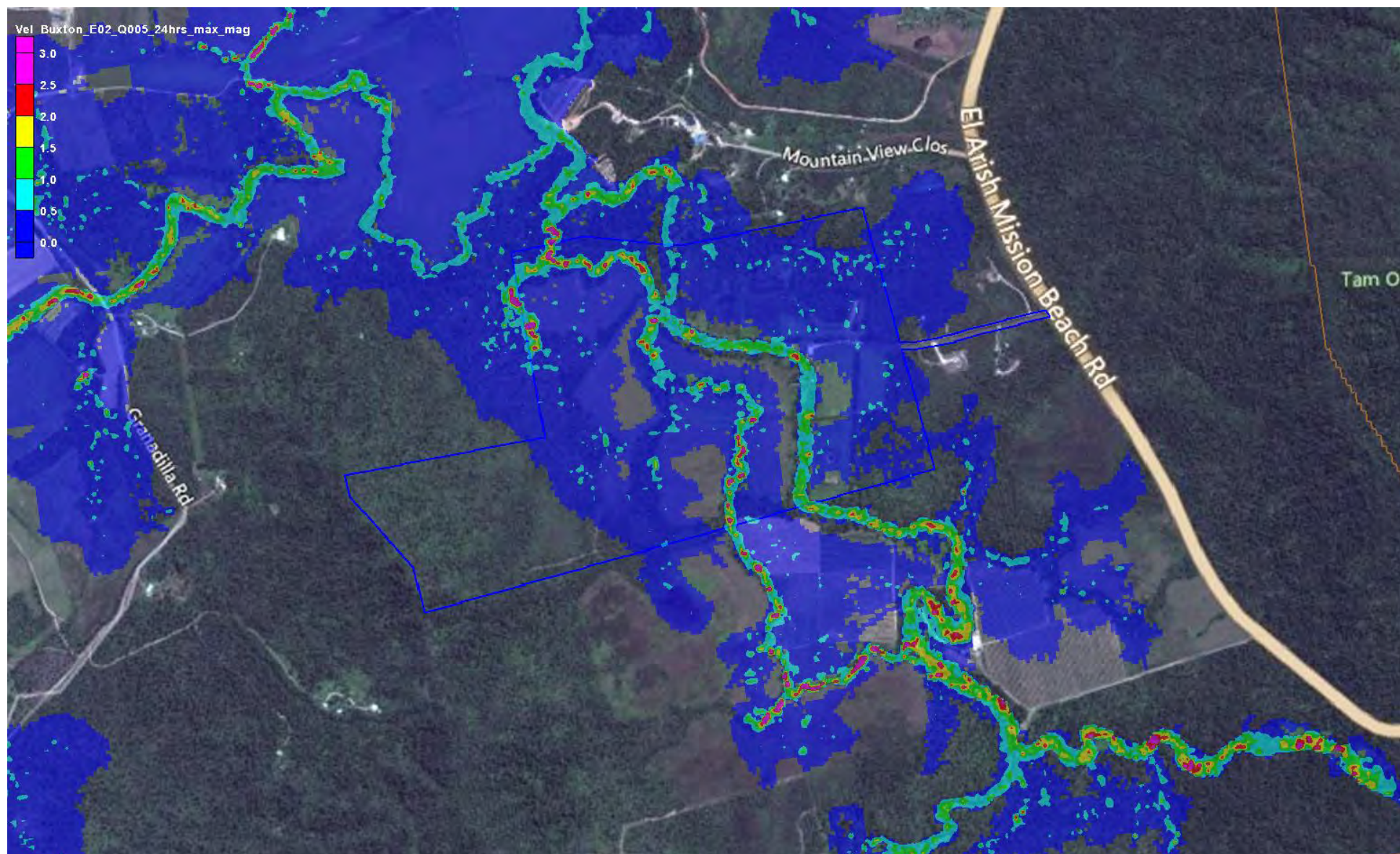


Figure C14. Existing Velocities – 5 Year ARI Event

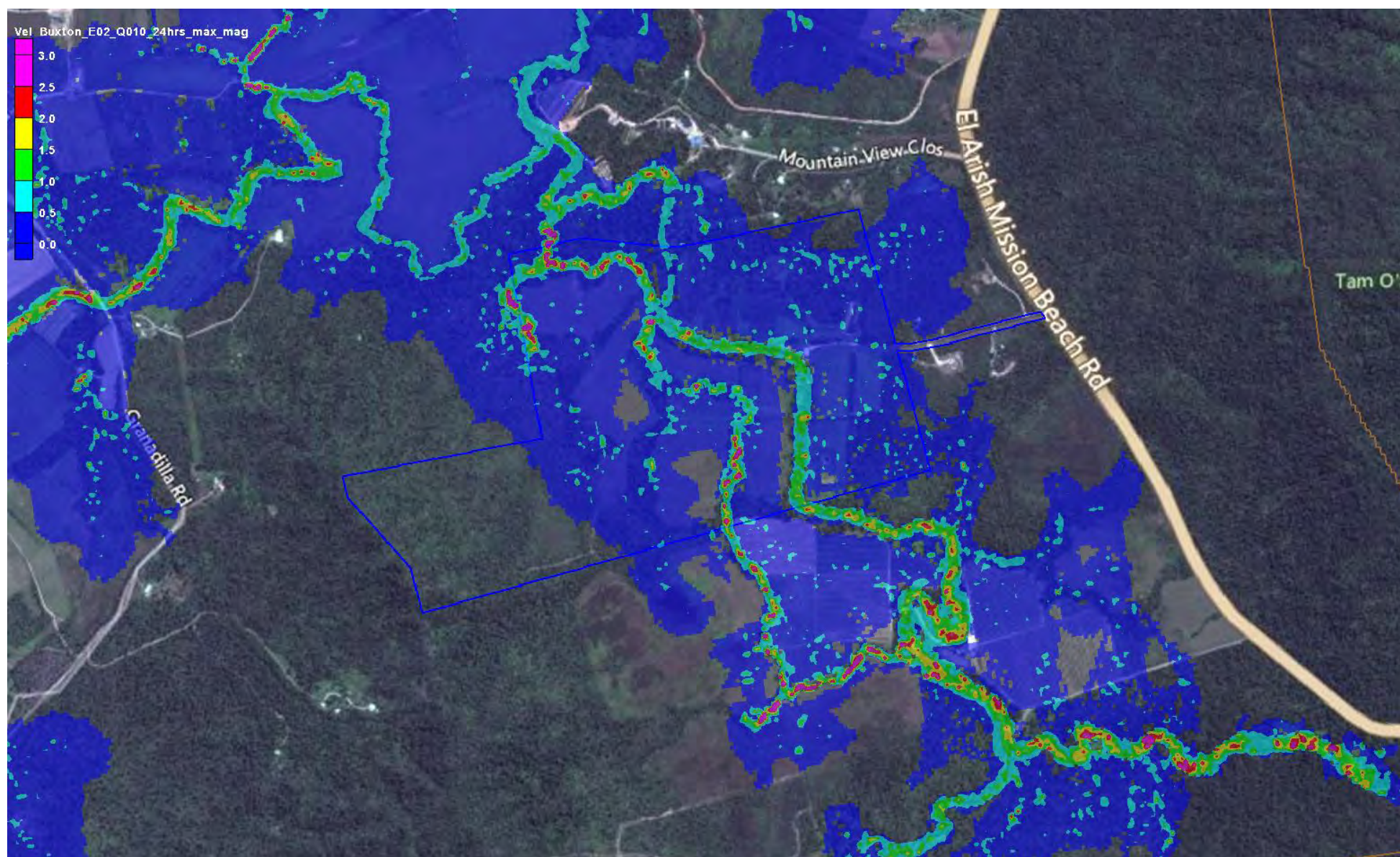


Figure C15. Existing Velocities – 10 Year ARI Event

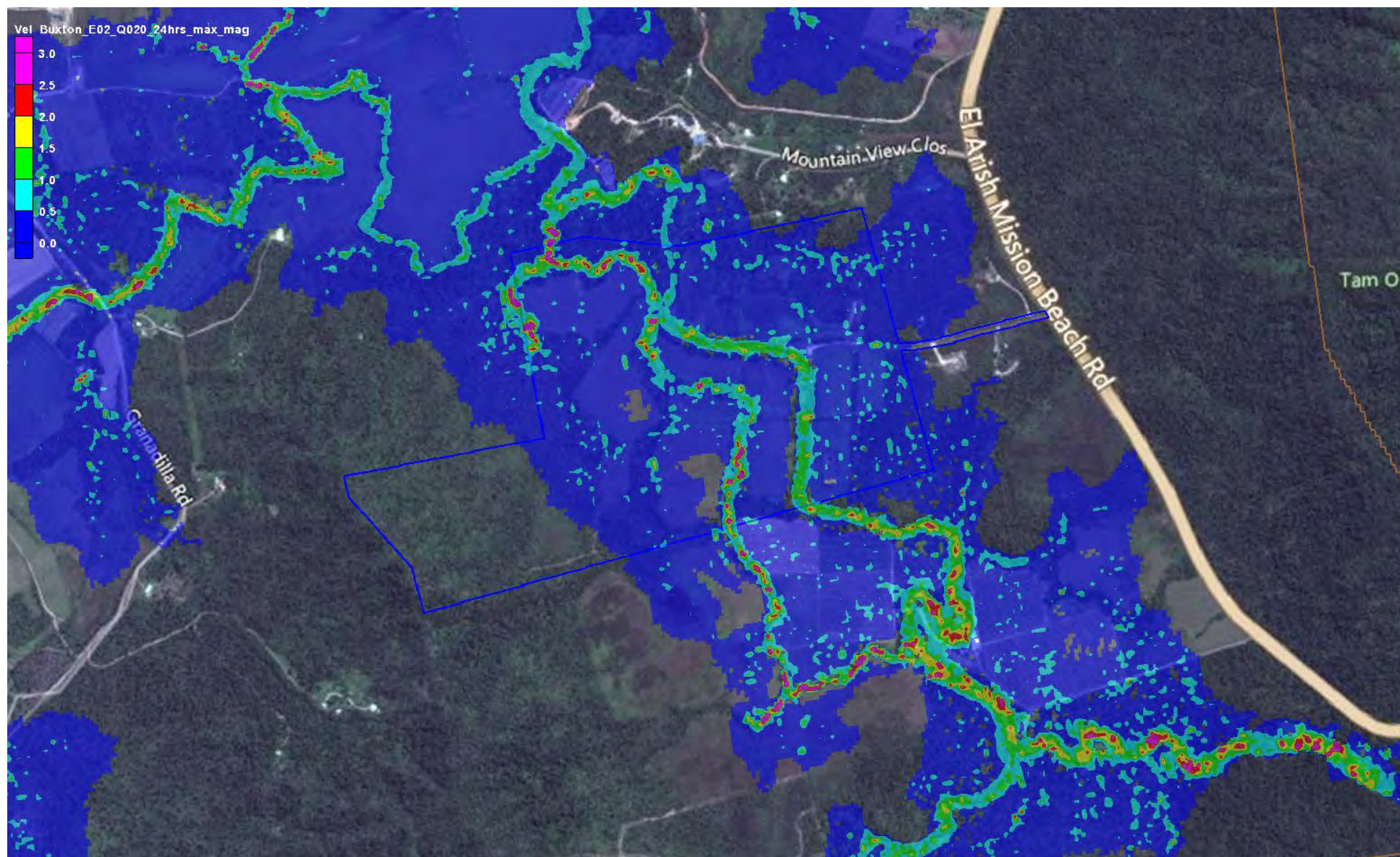


Figure C16. Existing Velocities – 20 Year ARI Event

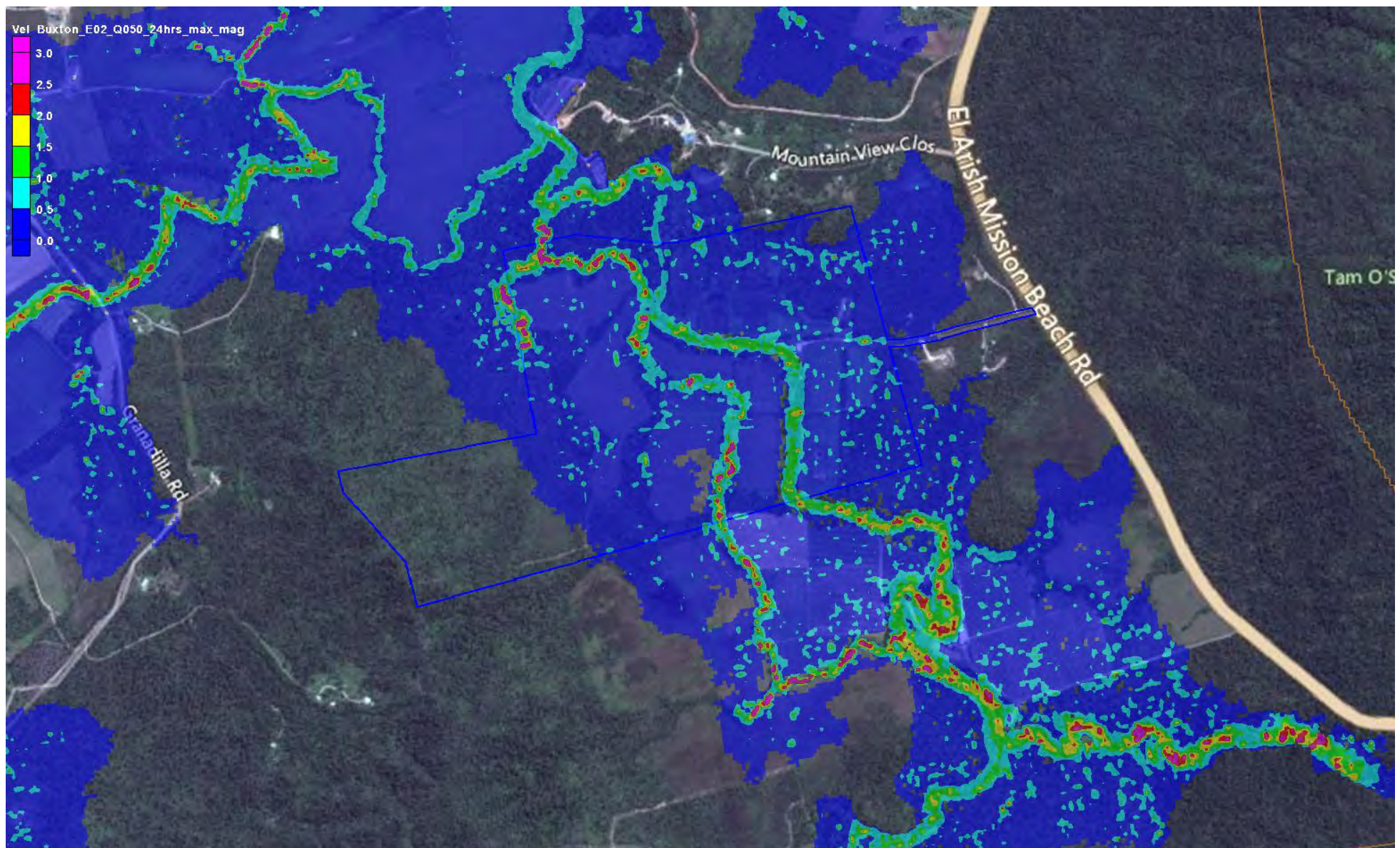


Figure C17. Existing Velocities – 50 Year ARI Event

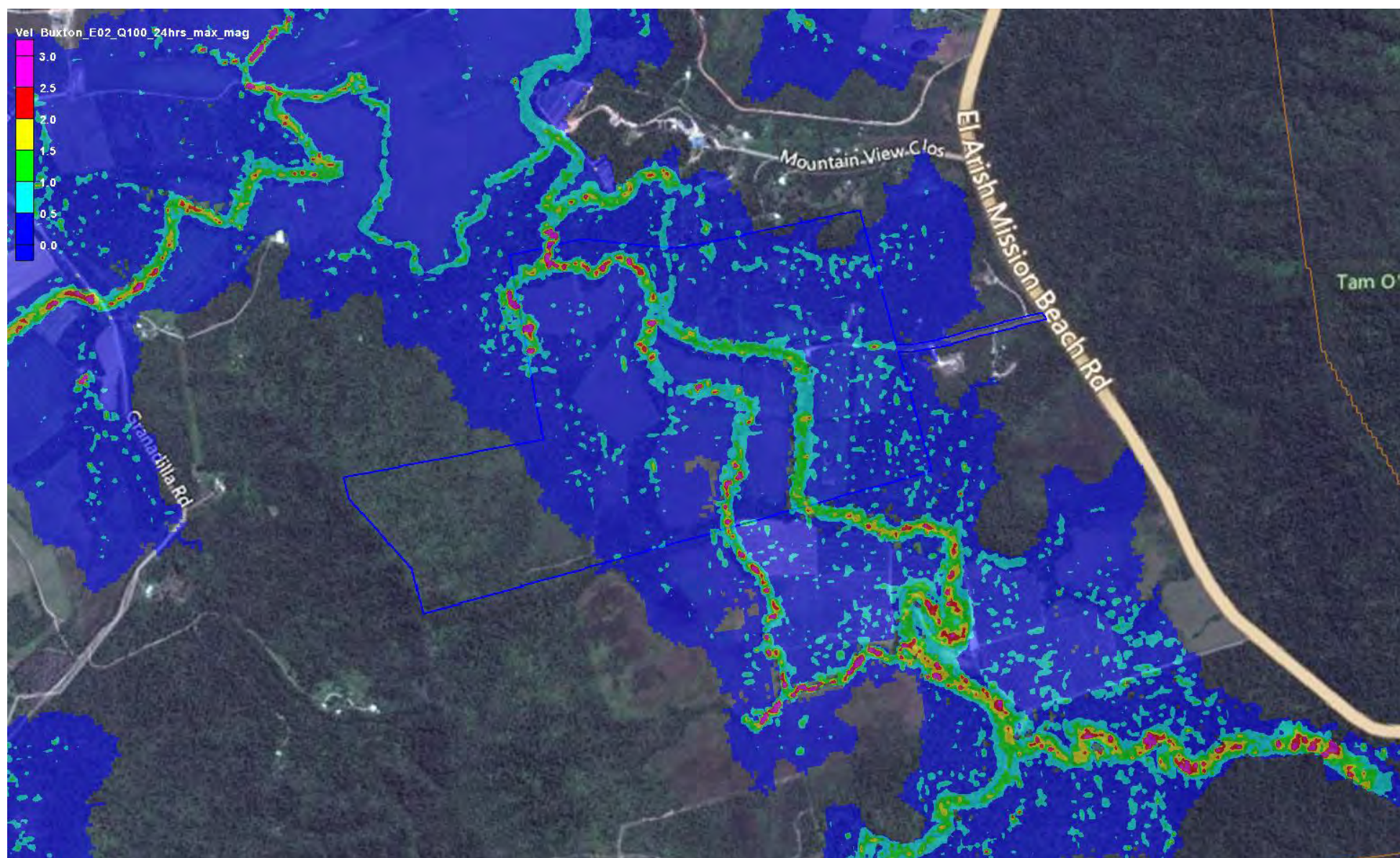


Figure C18. Existing Velocities – 100 Year ARI Event

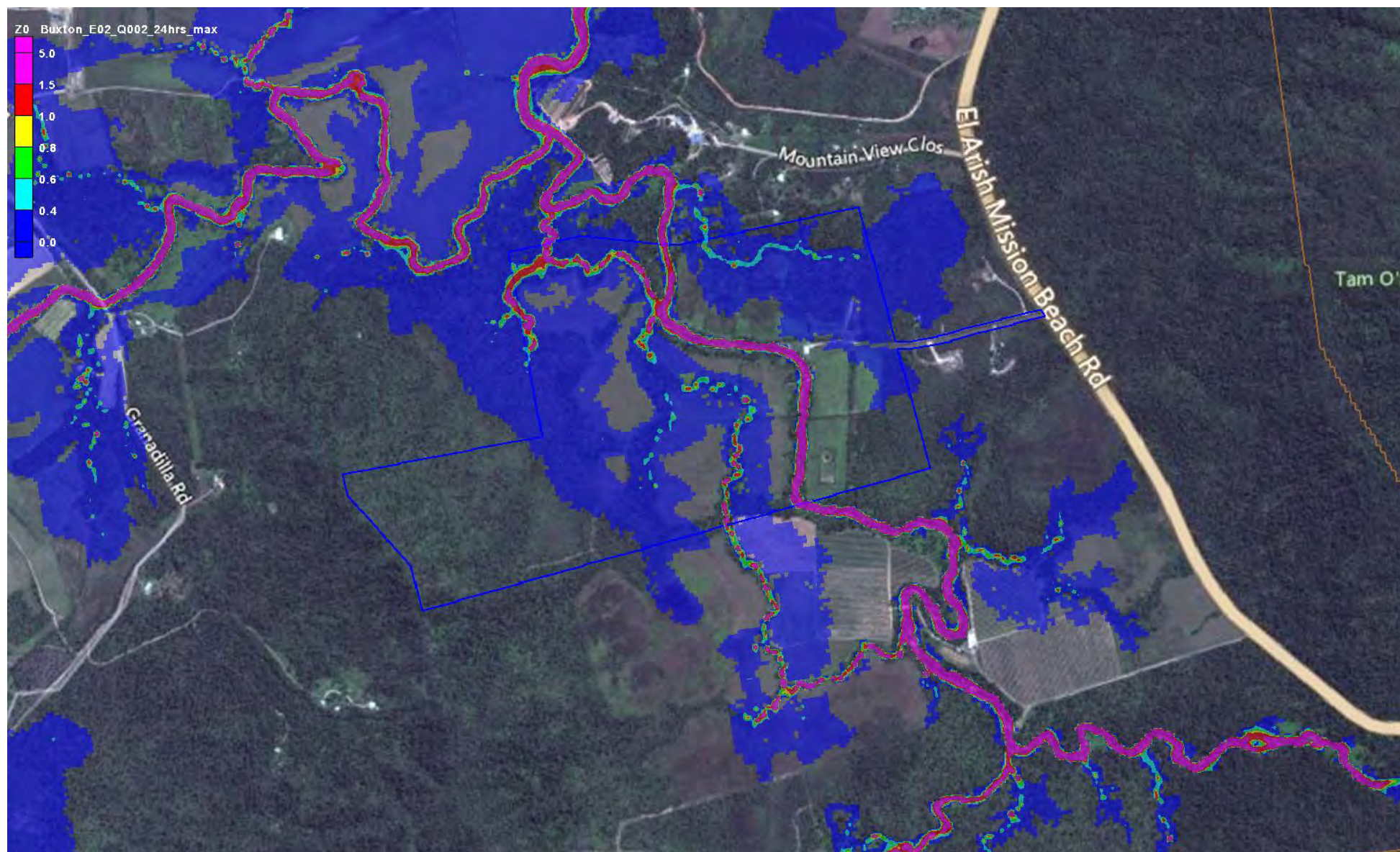


Figure C19. Existing Flood Hazard – 2 Year ARI Event

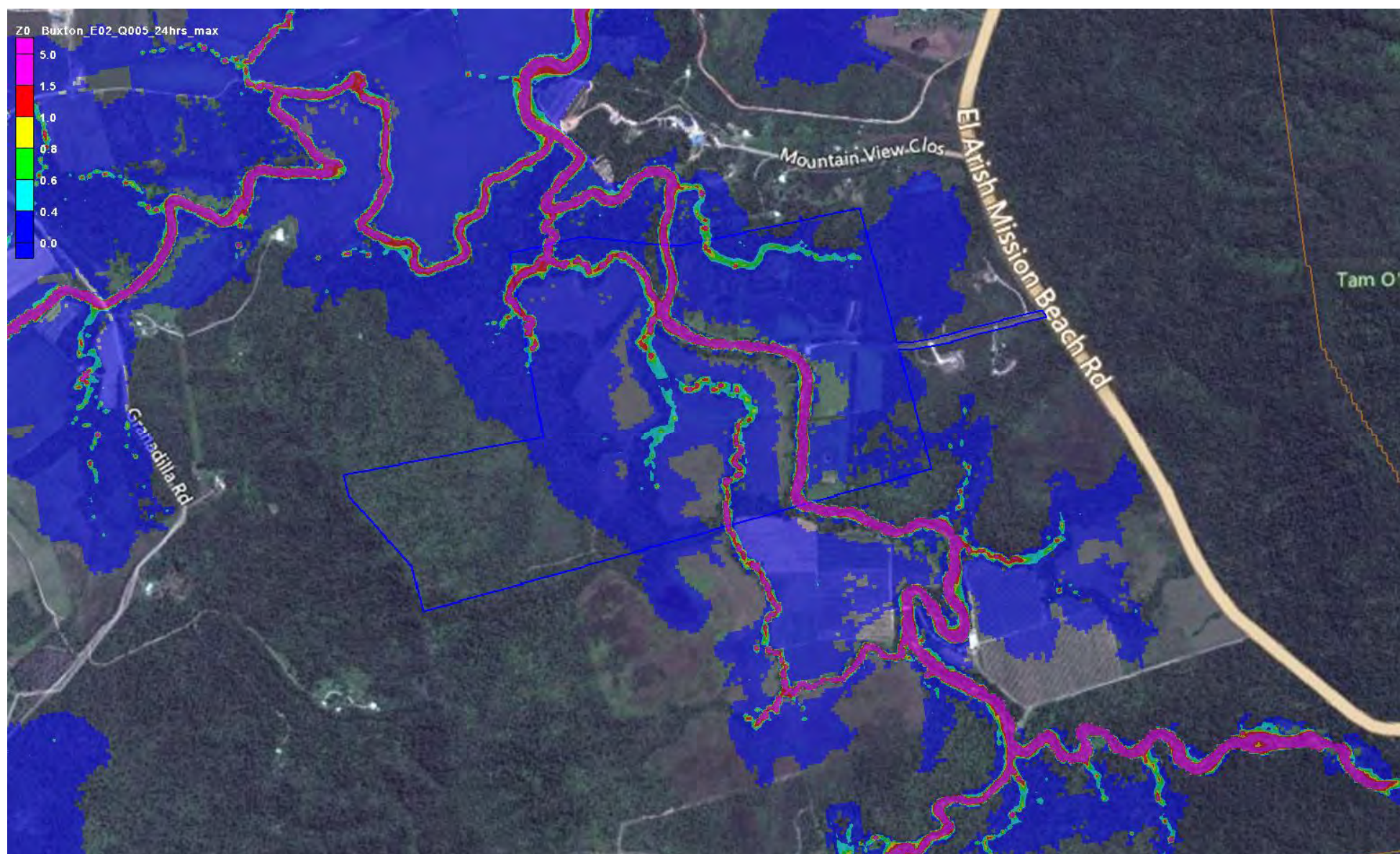


Figure C20. Existing Flood Hazard – 5 Year ARI Event

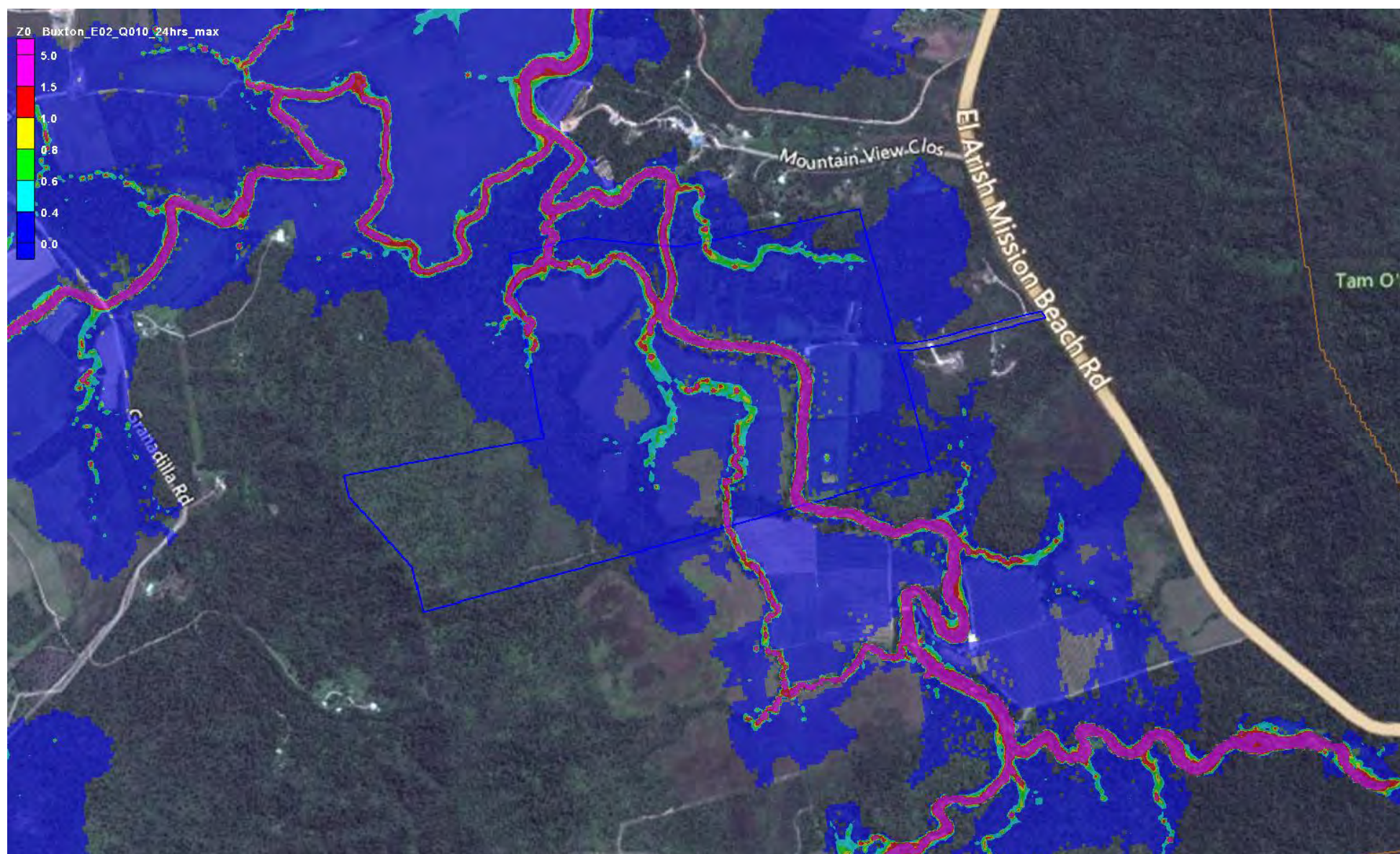


Figure C21. Existing Flood Hazard – 10 Year ARI Event

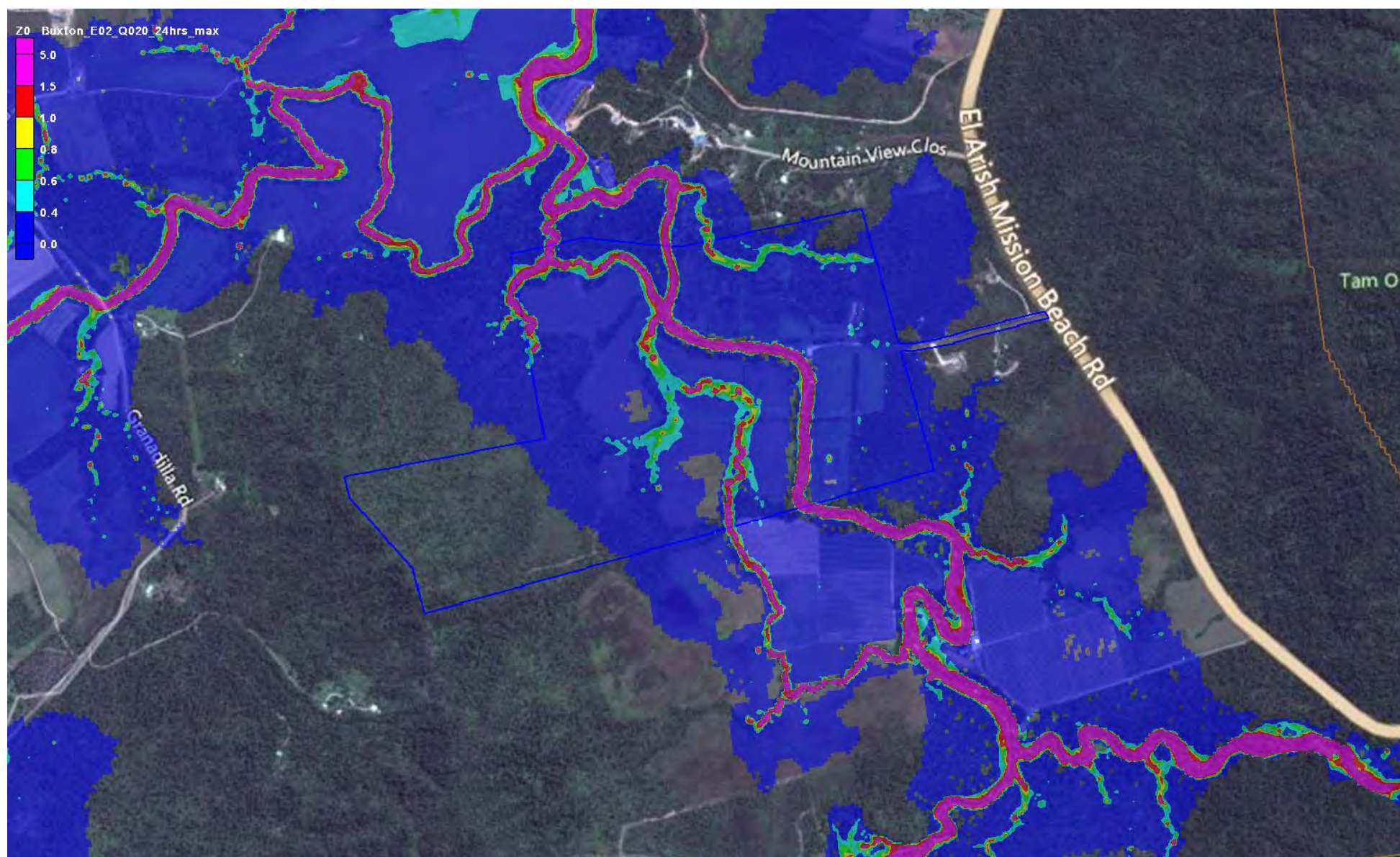


Figure C22. Existing Flood Hazard – 20 Year ARI Event

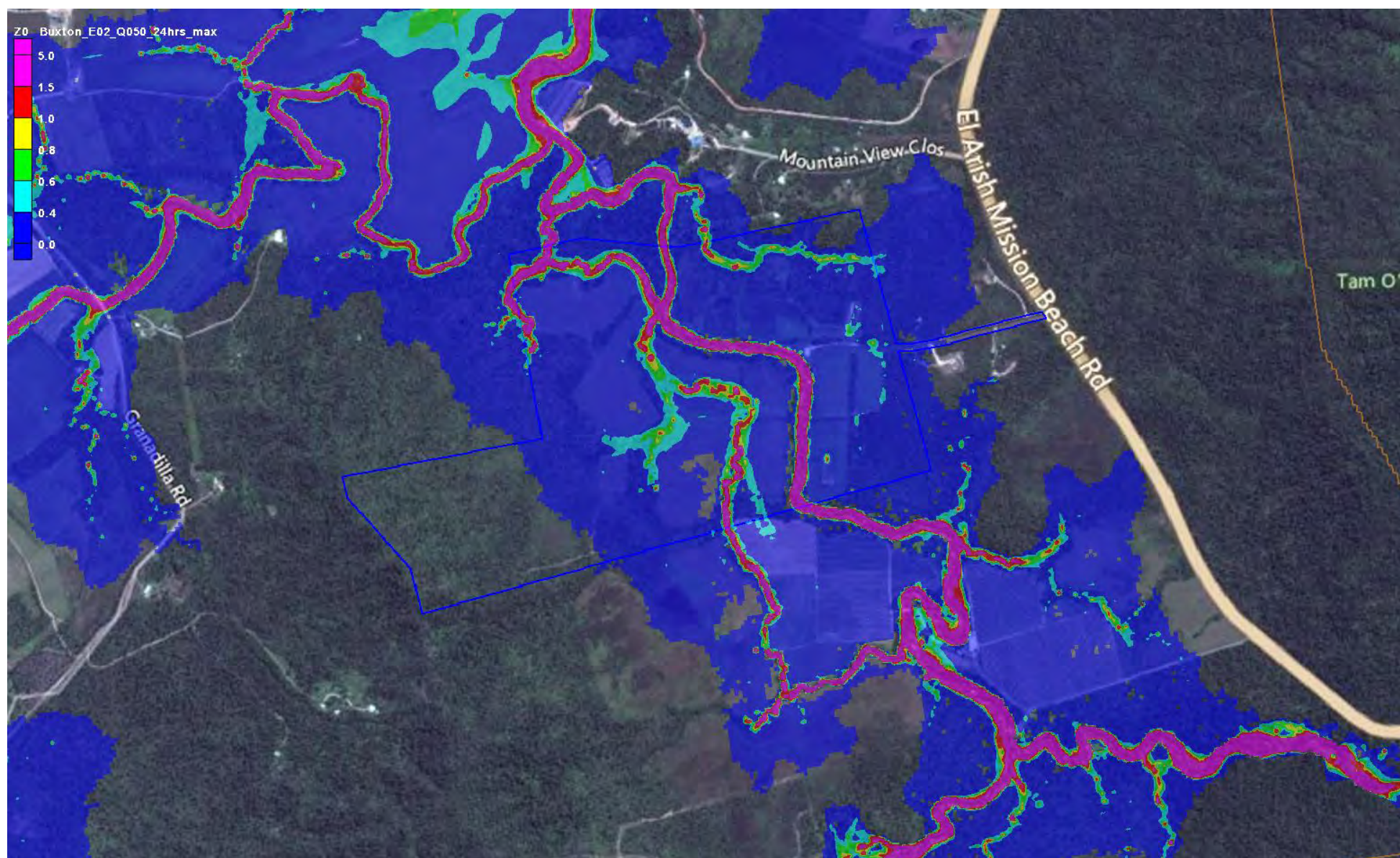


Figure C23. Existing Flood Hazard – 50 Year ARI Event

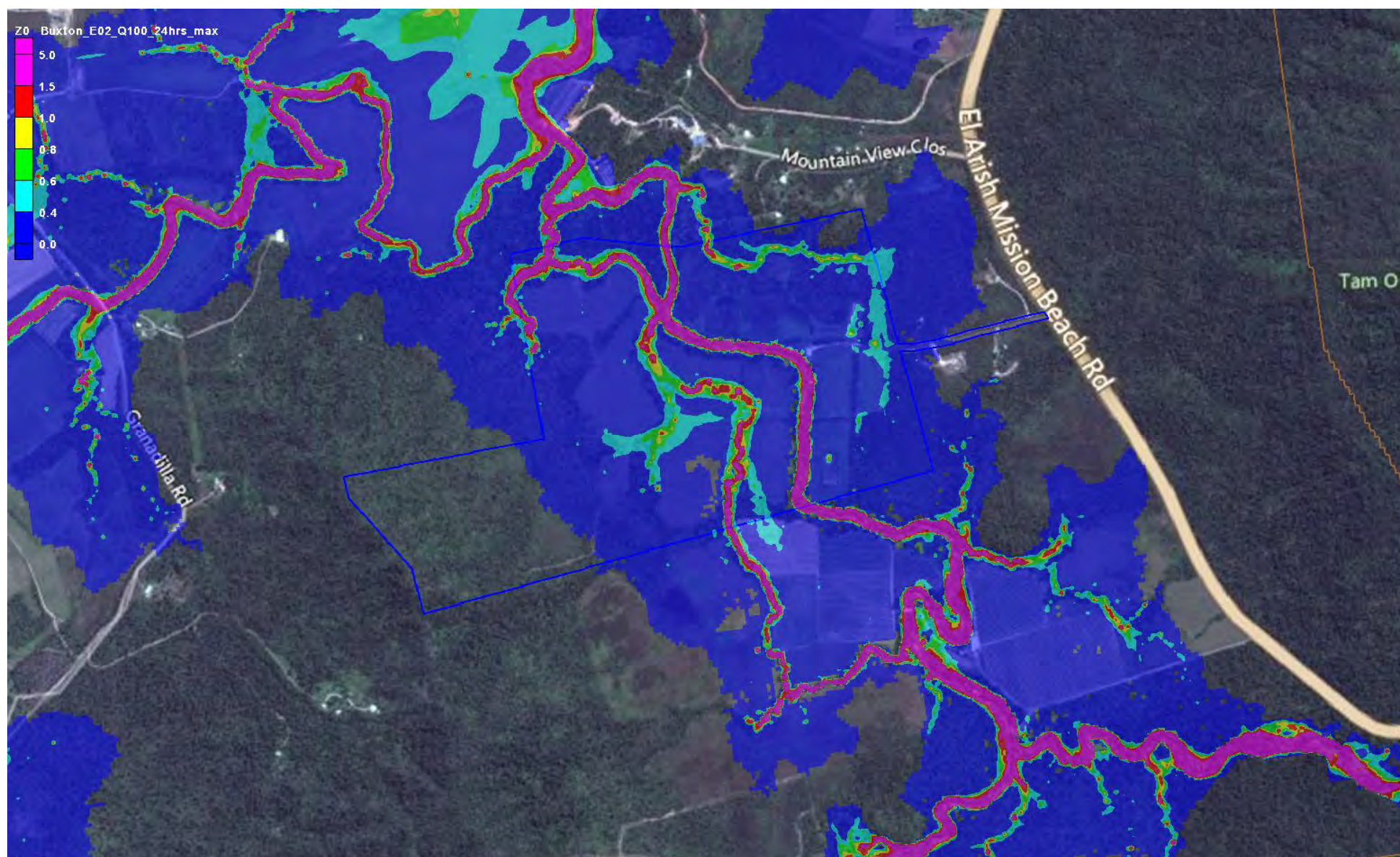


Figure C24. Existing Flood Hazard – 100 Year ARI Event

Flood Investigation

APPENDIX D

LOCAL FLOOD MODEL RESULTS – DEVELOPED CONDITIONS

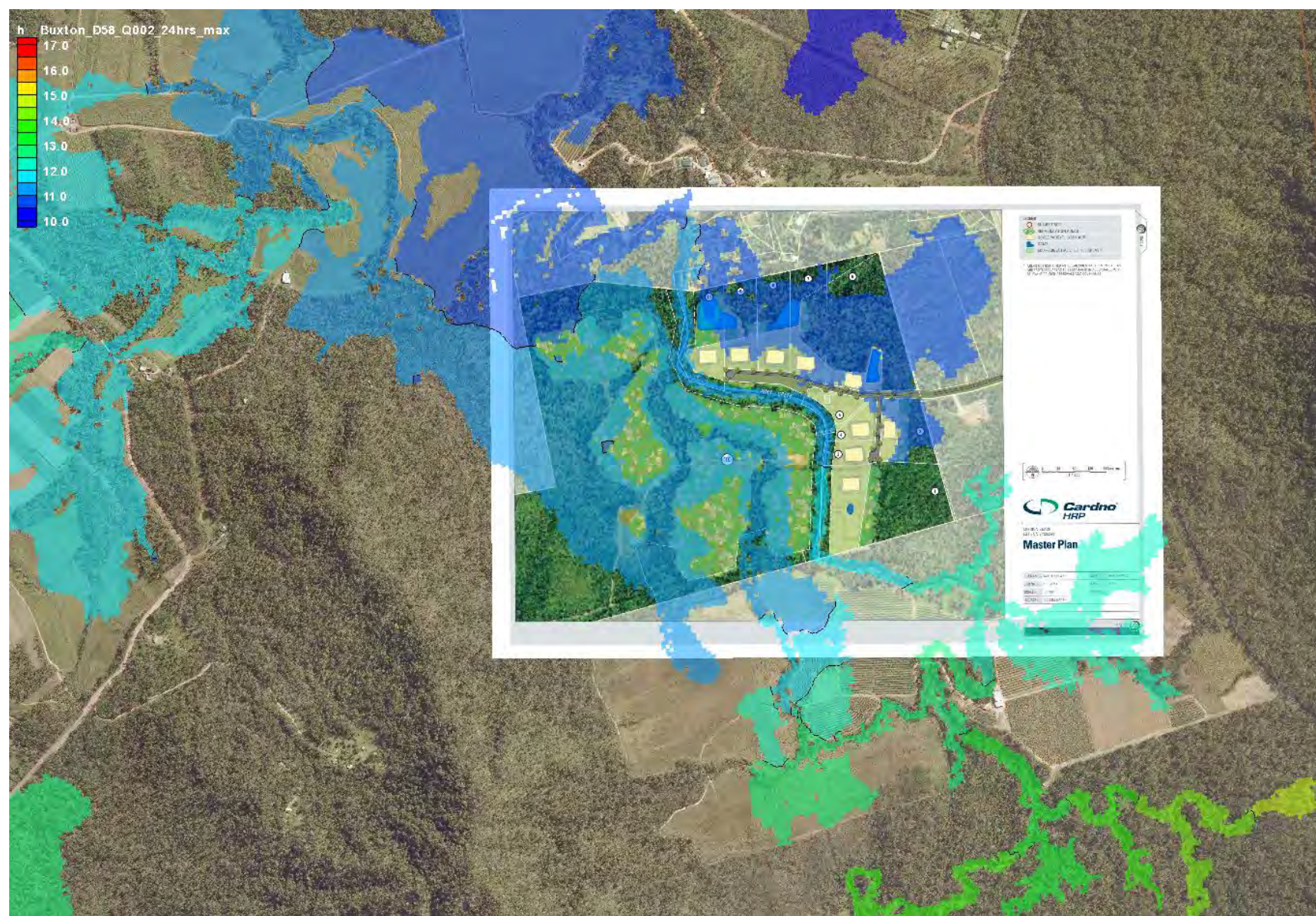


Figure D1. Developed Flood Levels – 2 Year ARI Event

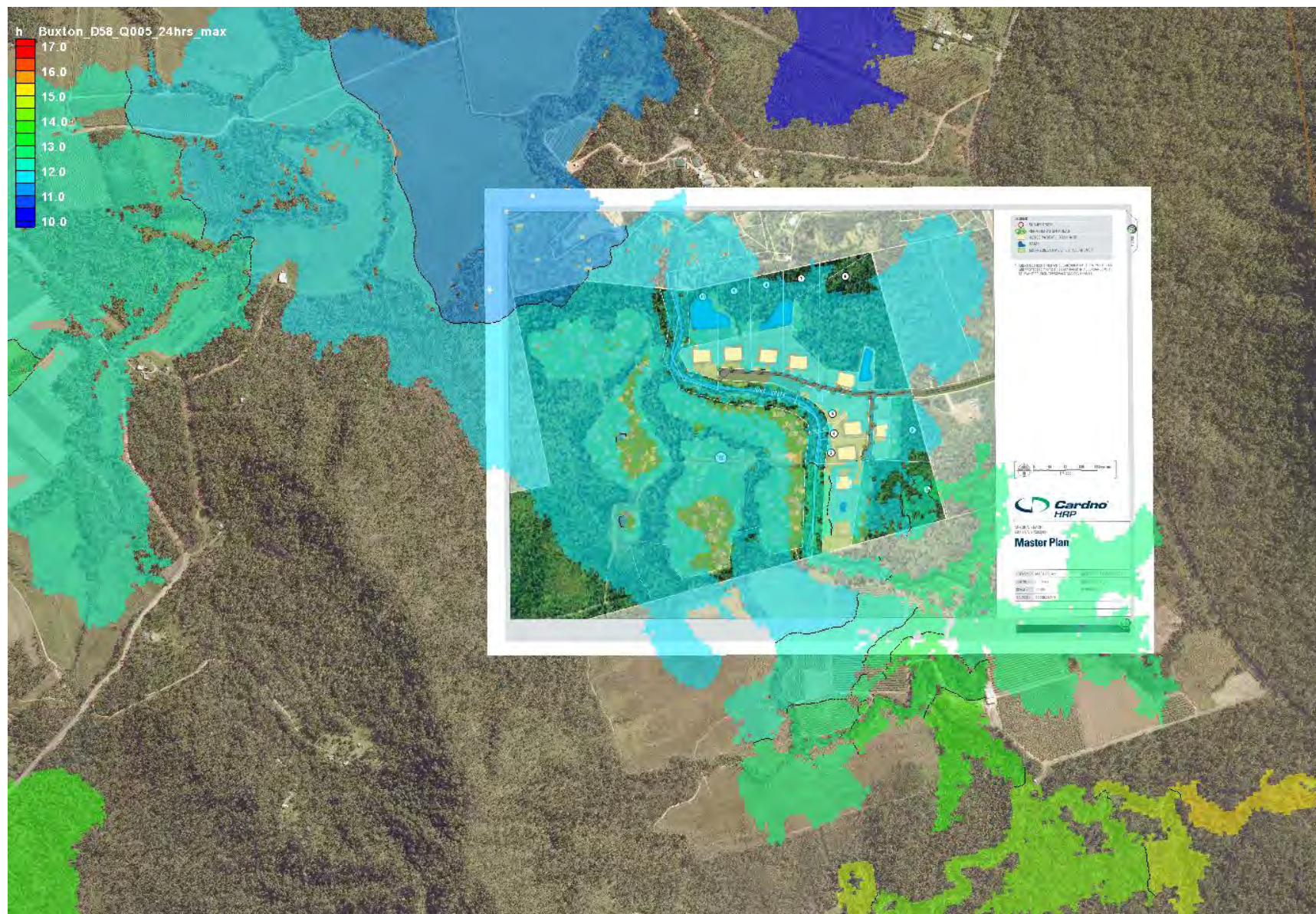


Figure D2. Developed Flood Levels – 5 Year ARI Event

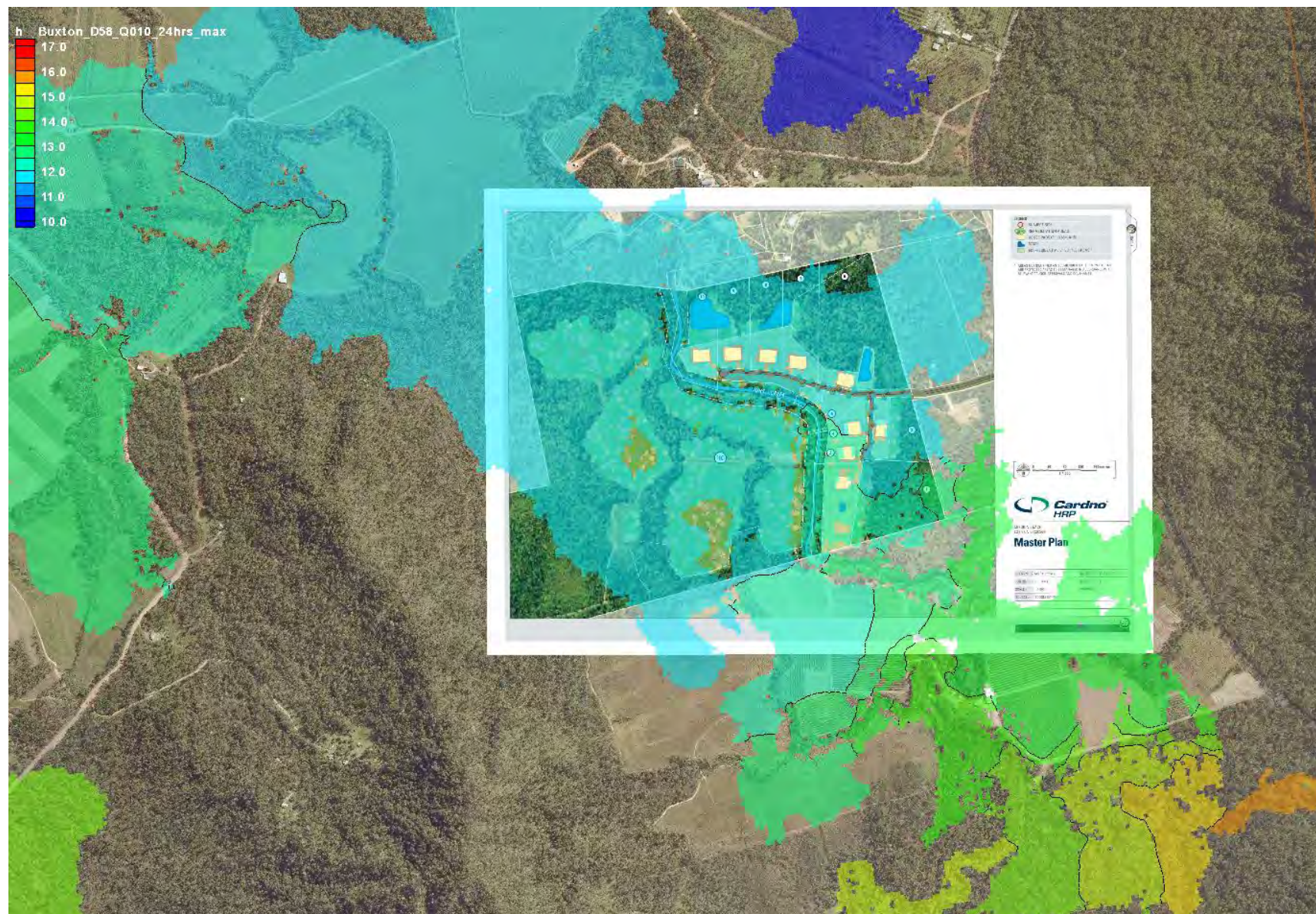


Figure D3. Developed Flood Levels – 10 Year ARI Event

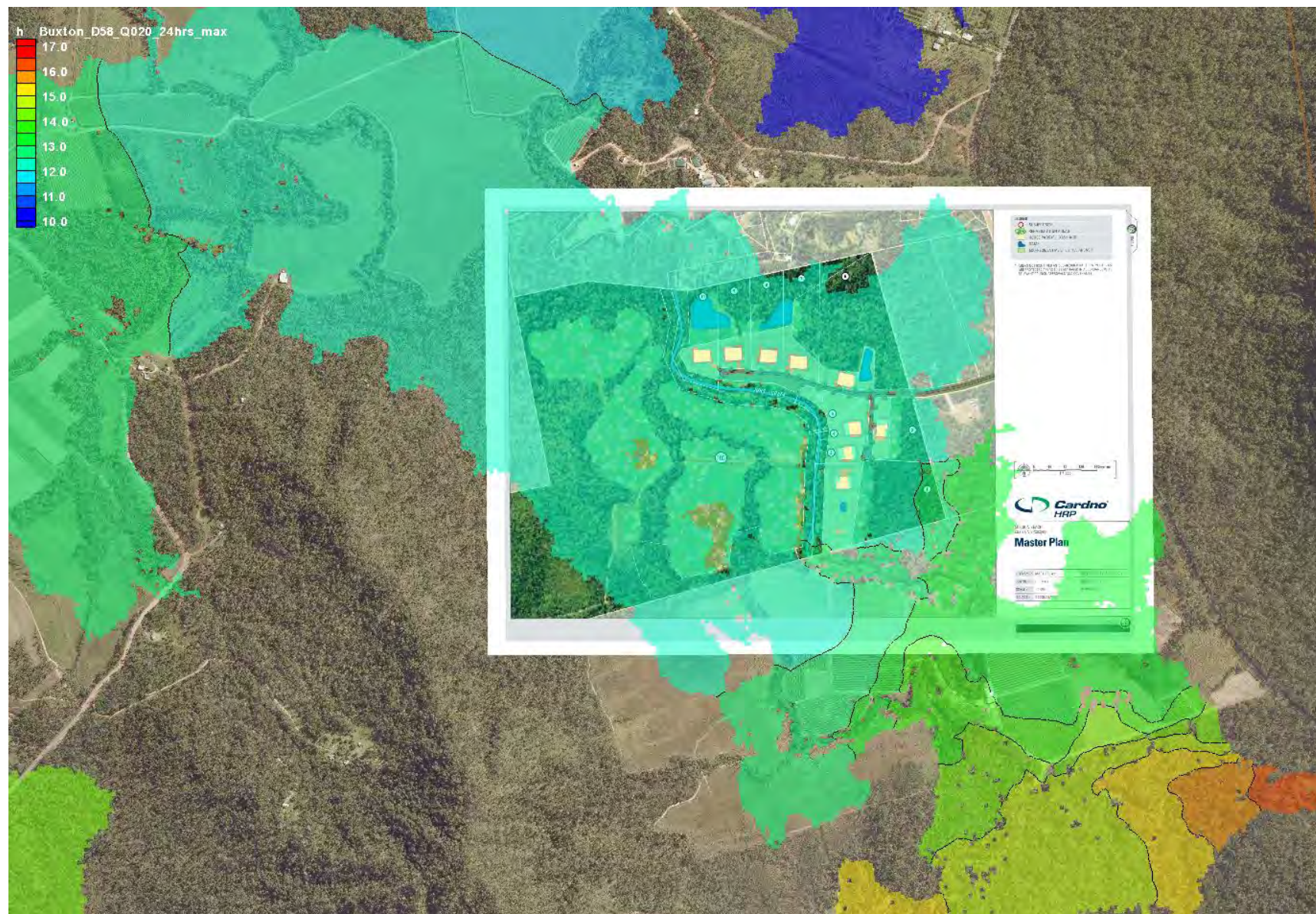


Figure D4. Developed Flood Levels – 20 Year ARI Event

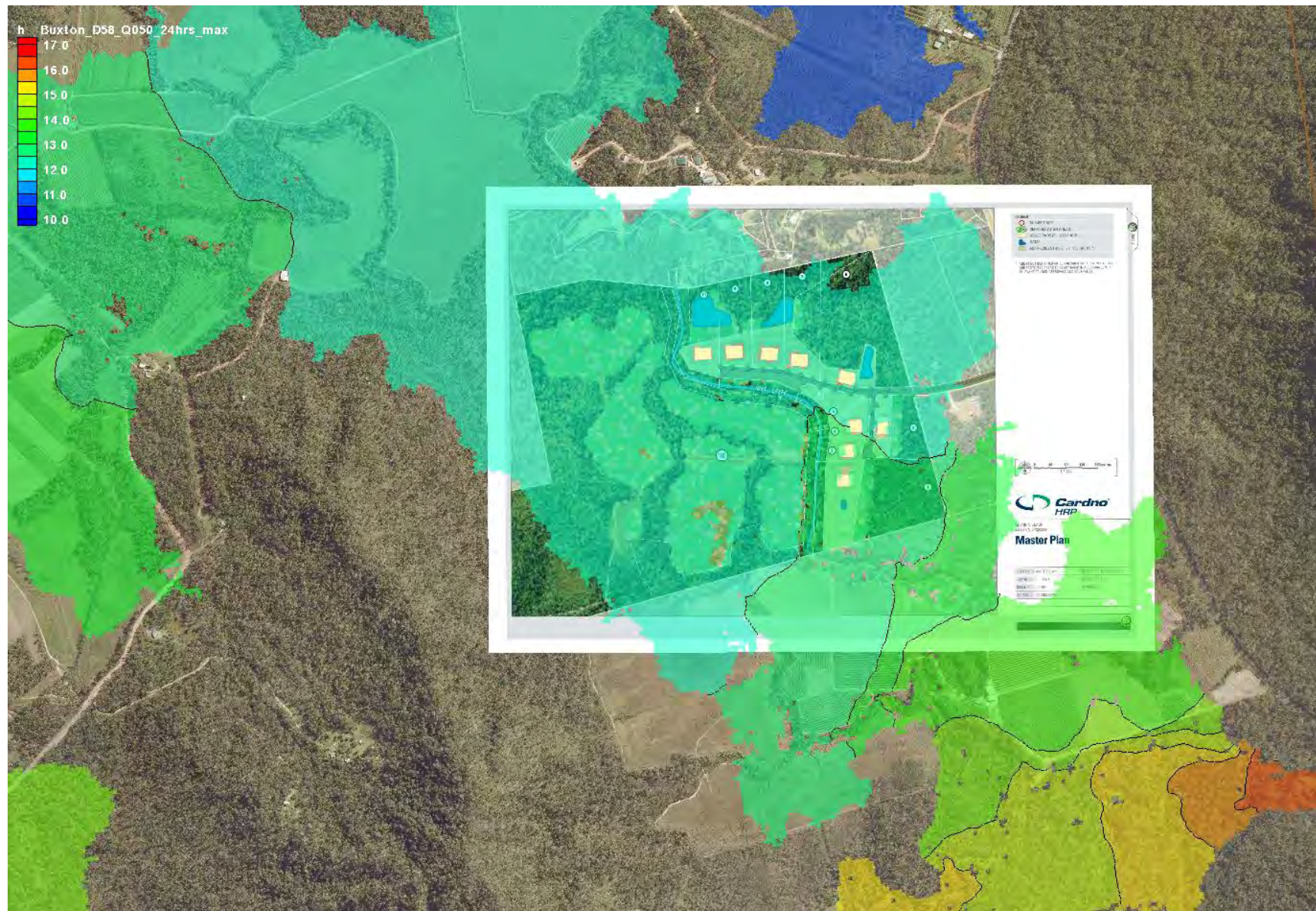


Figure D5. Developed Flood Levels – 50 Year ARI Event

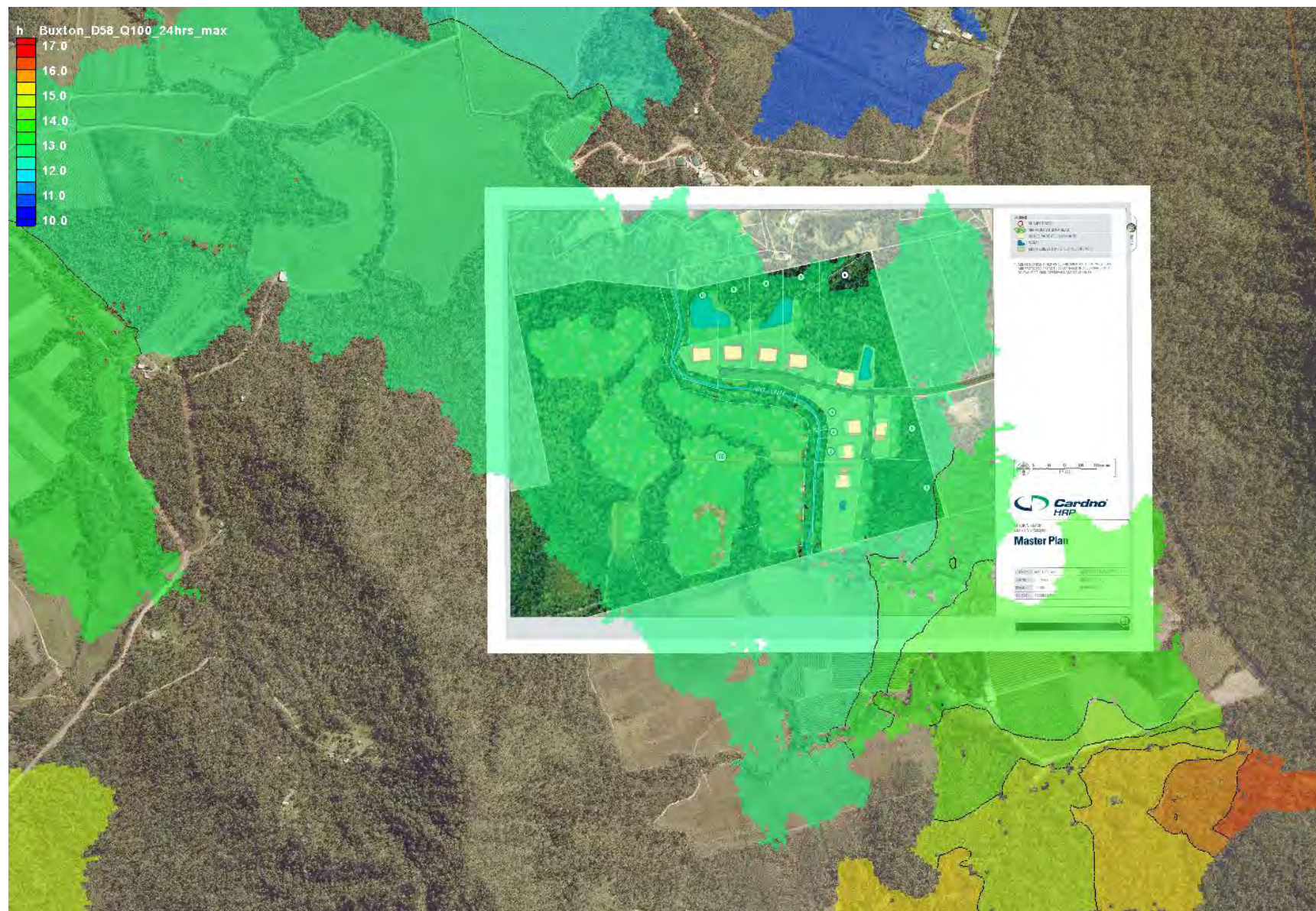


Figure D6. Developed Flood Levels – 100 Year ARI Event



Figure D7. Developed Flood Depths – 2 Year ARI Event

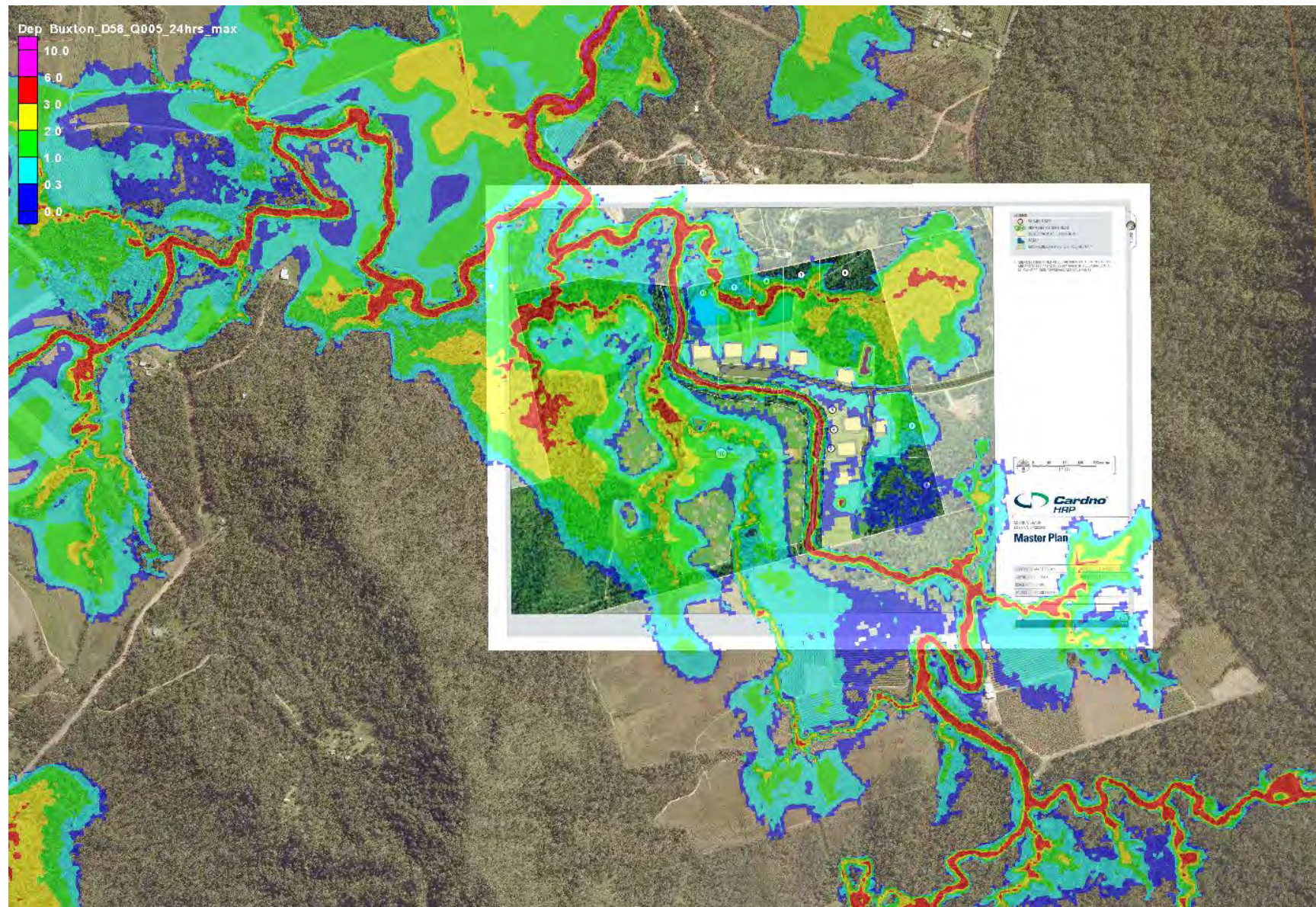


Figure D8. Developed Flood Depths – 5 Year ARI Event

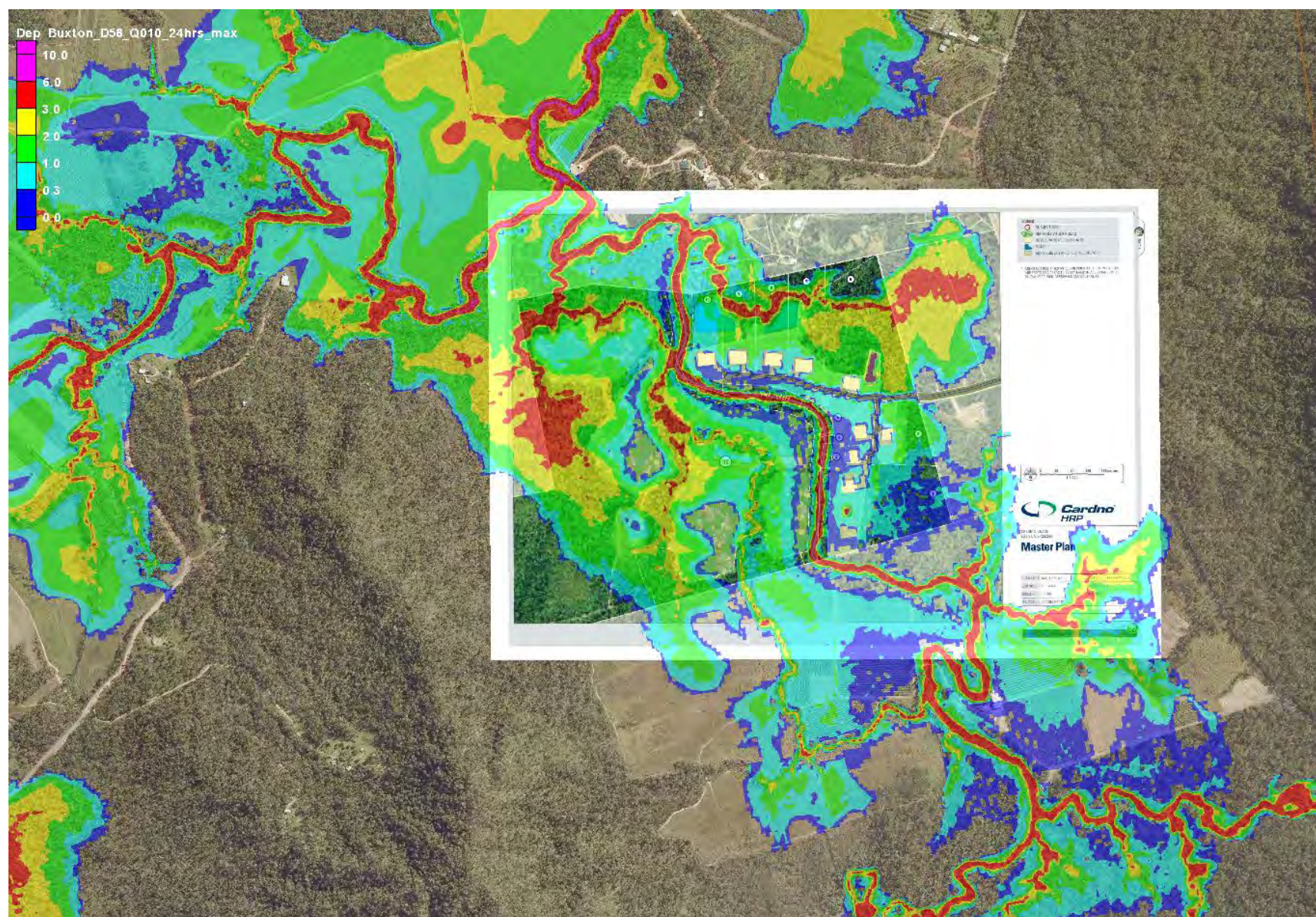


Figure D9. Developed Flood Depths – 10 Year ARI Event

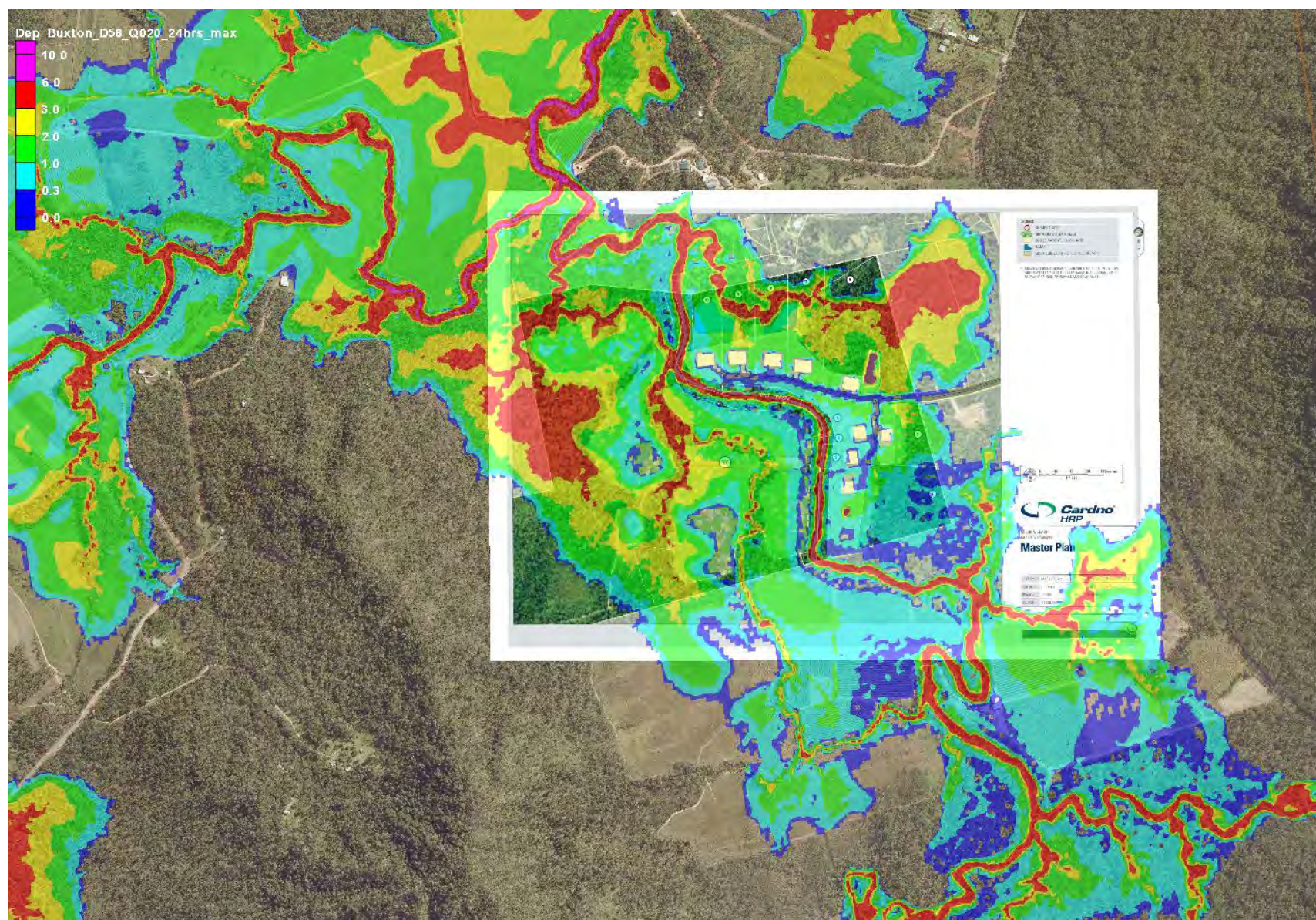


Figure D10. Developed Flood Depths – 20 Year ARI Event

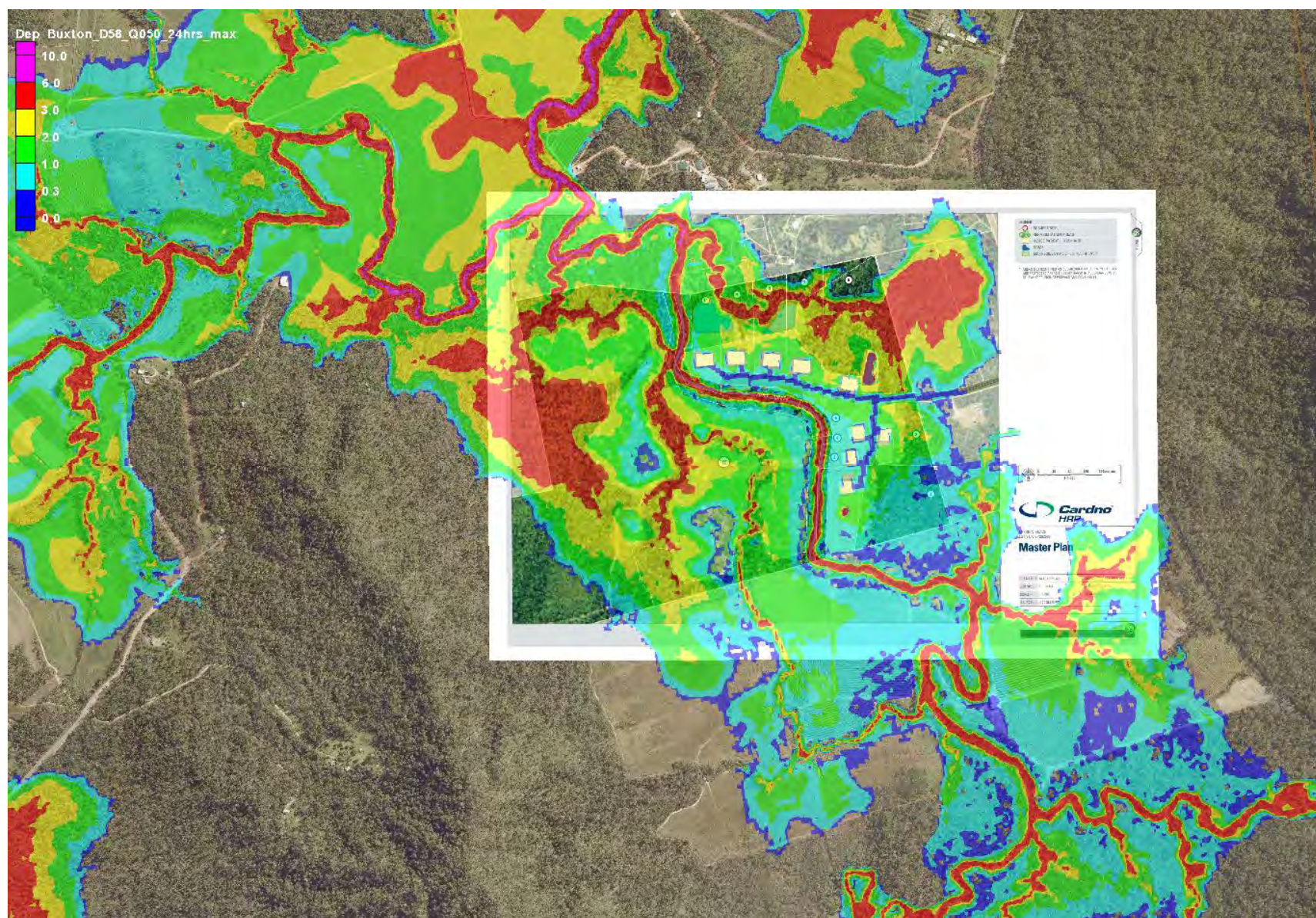


Figure D11. Developed Flood Depths – 50 Year ARI Event

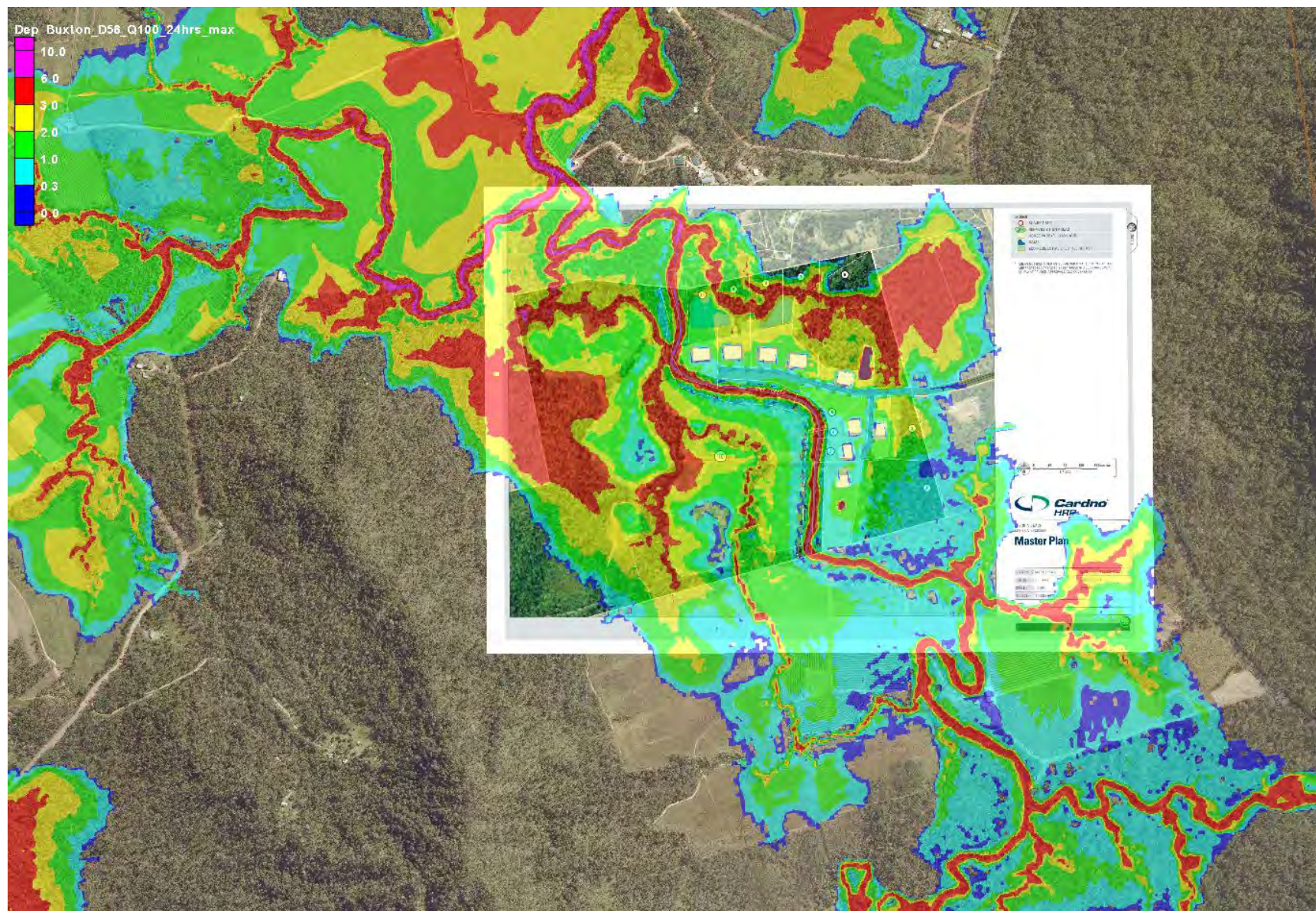


Figure D12. Developed Flood Depths – 100 Year ARI Event

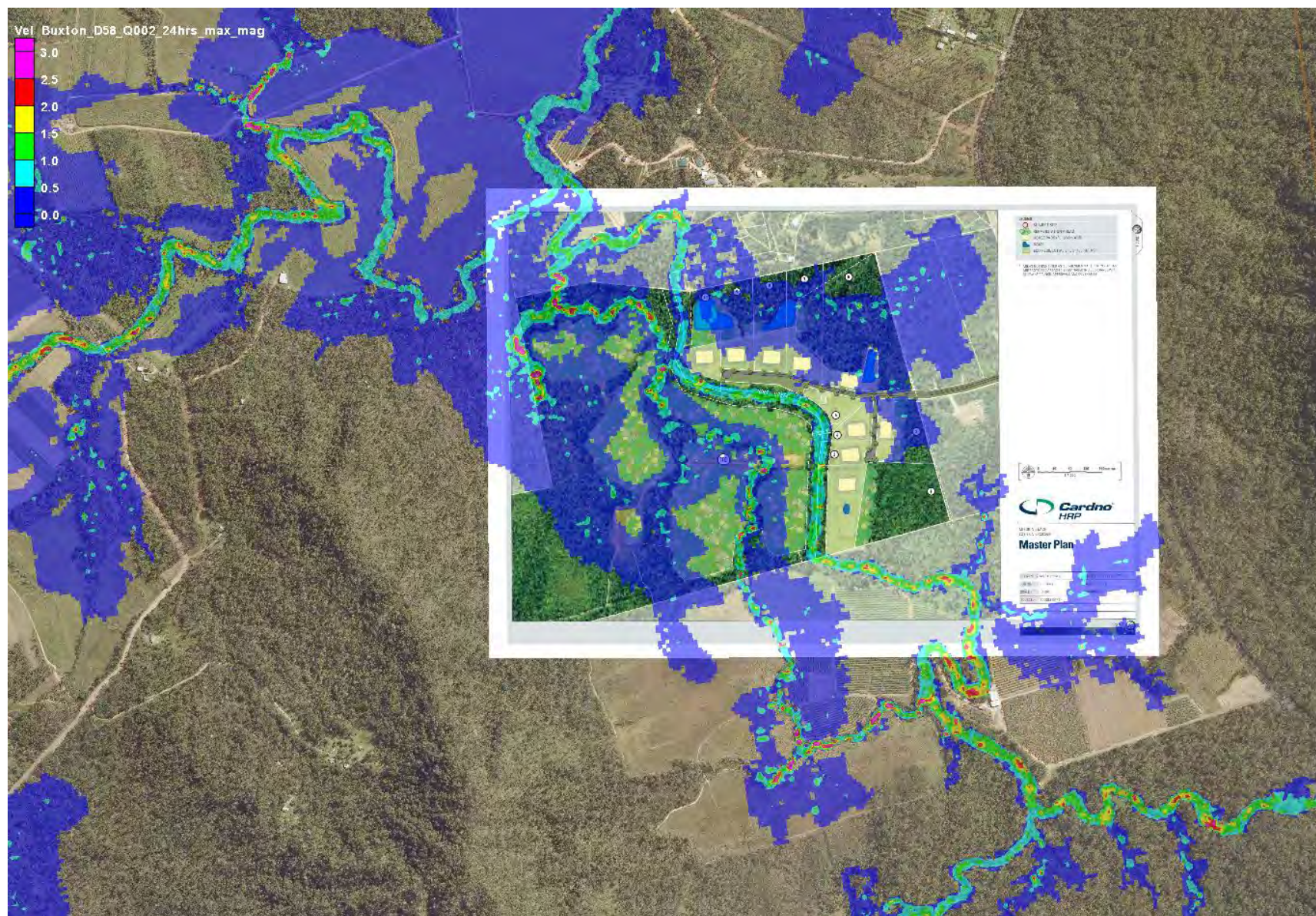


Figure D13. Developed Velocities – 2 Year ARI Event

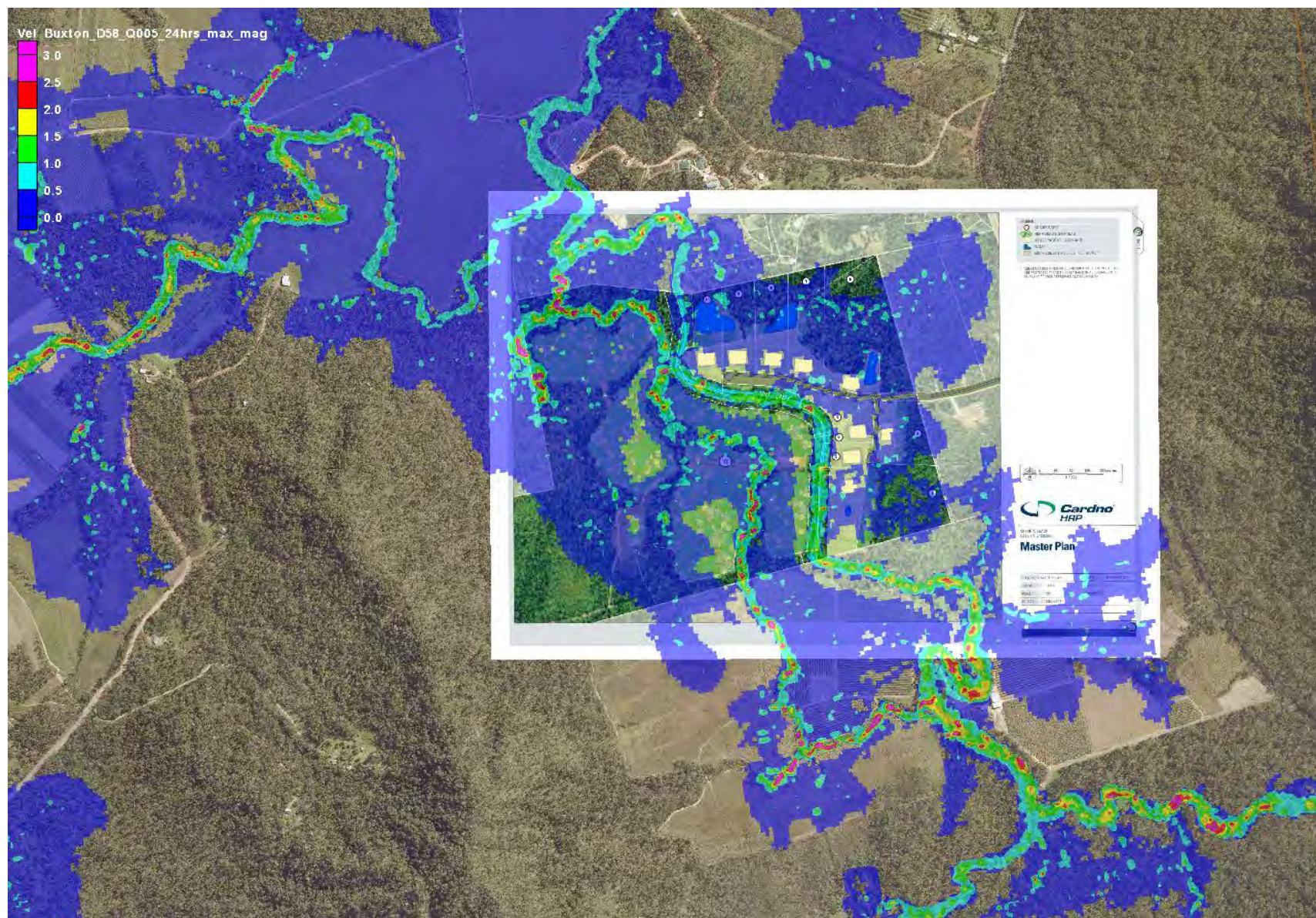


Figure D14. Developed Velocities – 5 Year ARI Event

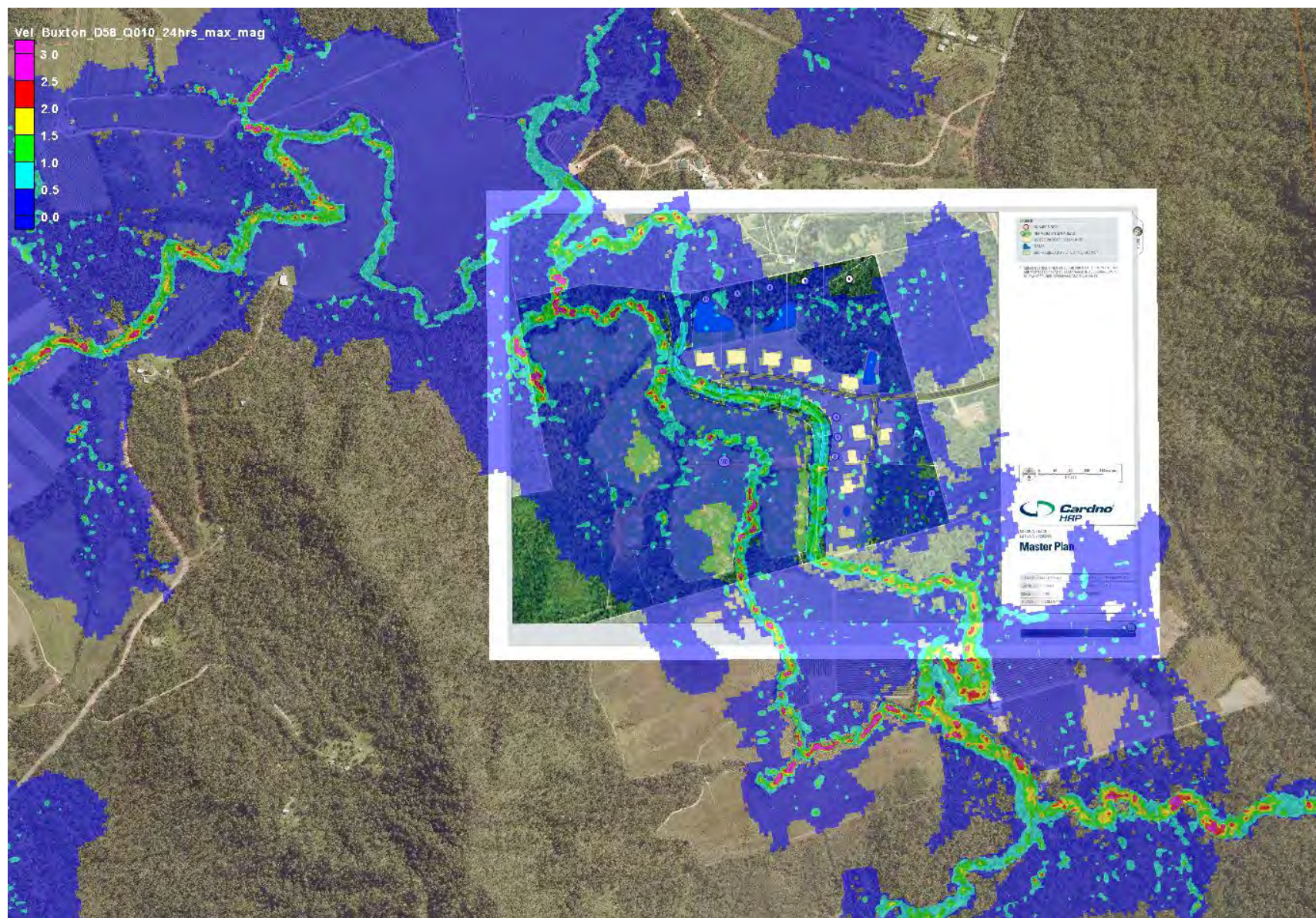


Figure D15. Developed Velocities – 10 Year ARI Event

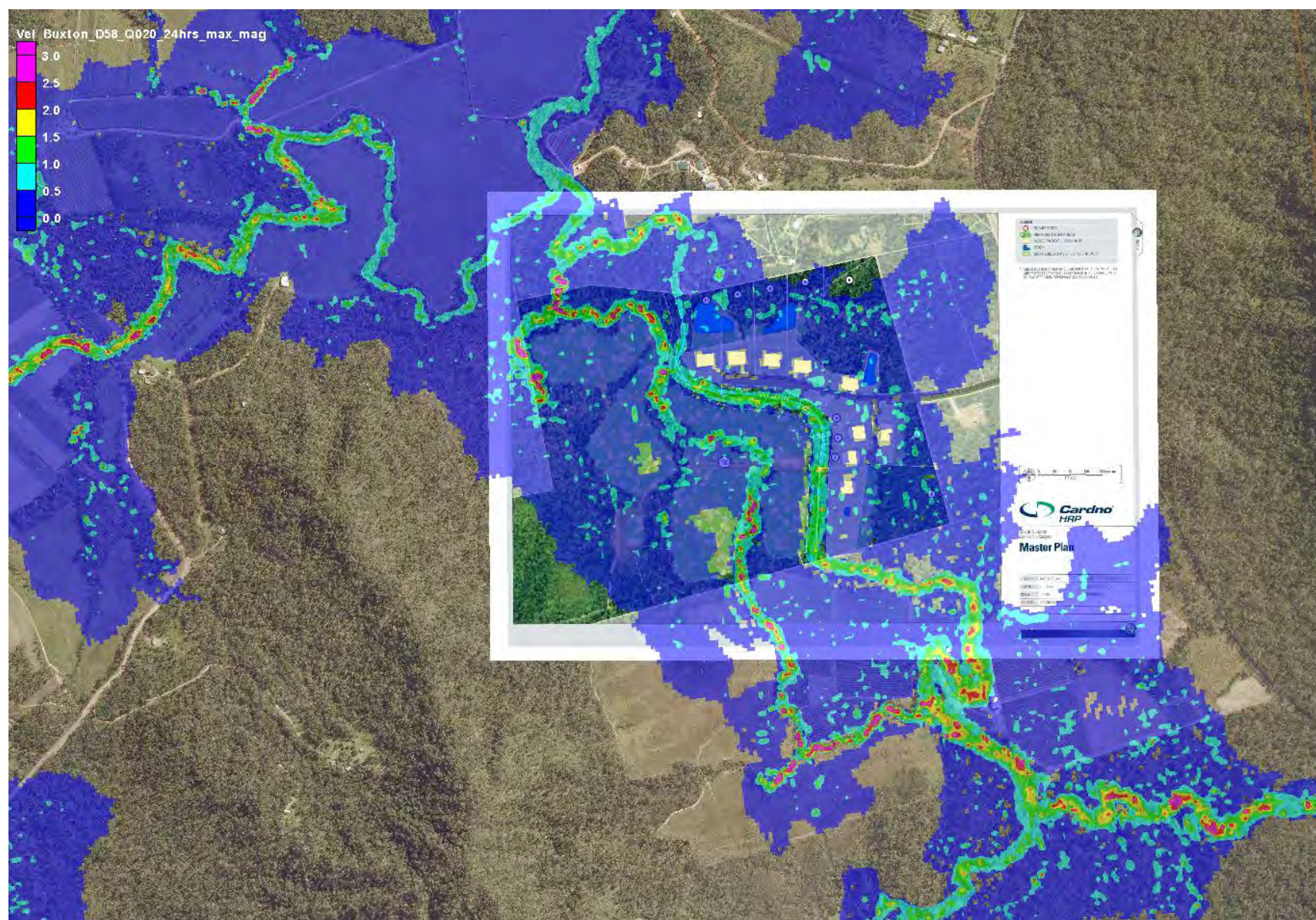


Figure D16. Developed Velocities – 20 Year ARI Event

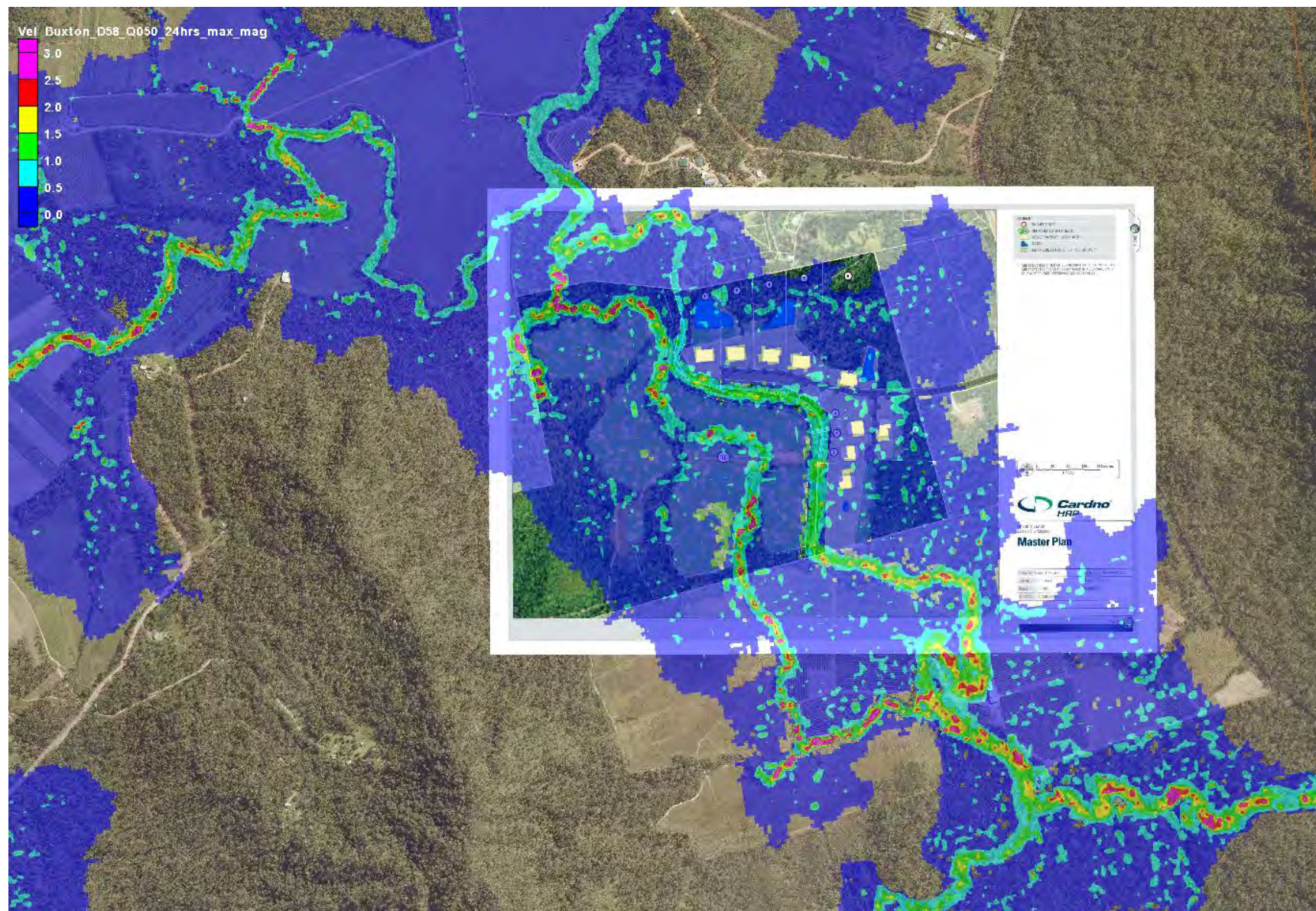


Figure D17. Developed Velocities – 50 Year ARI Event

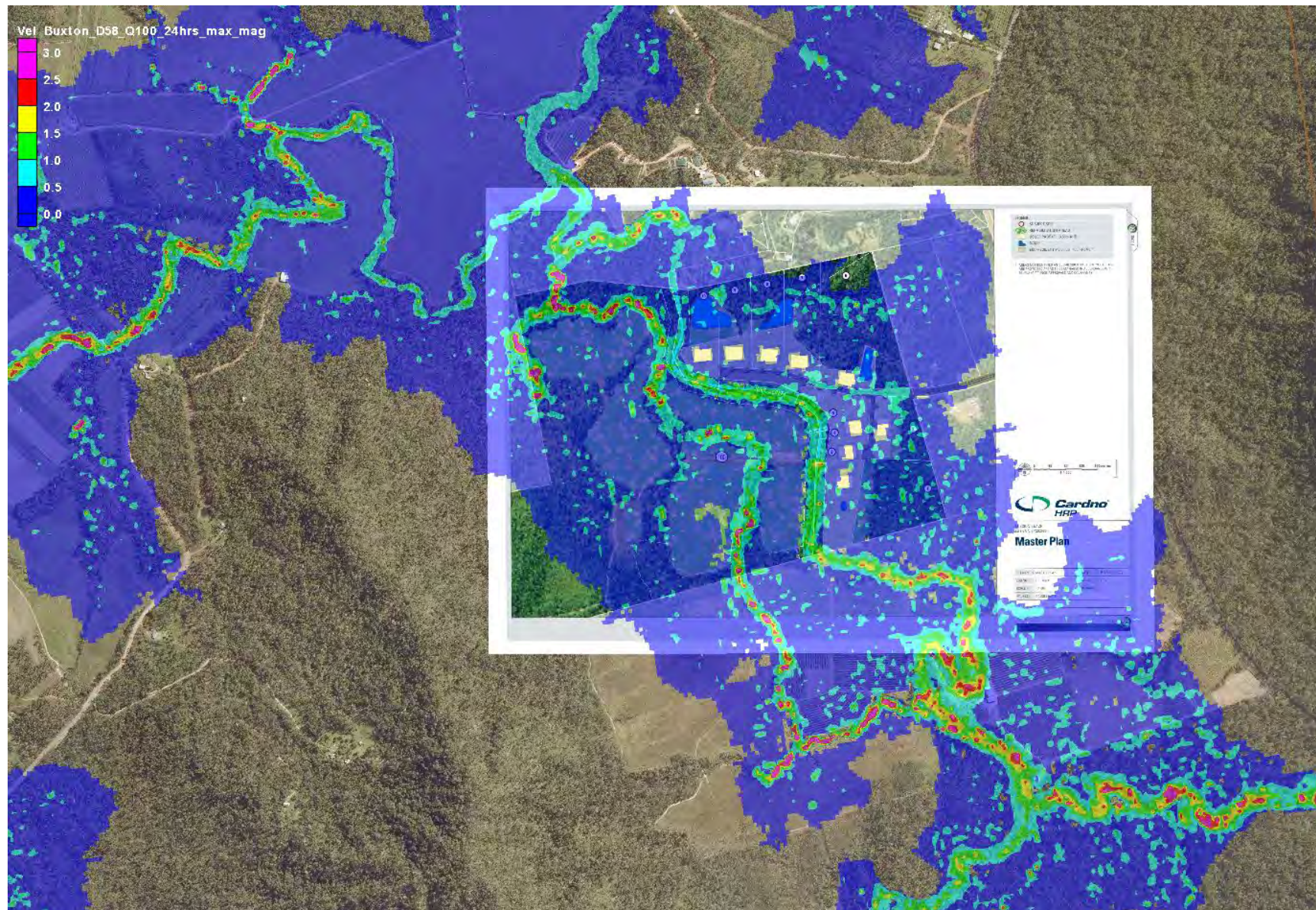


Figure D18. Developed Velocities – 100 Year ARI Event

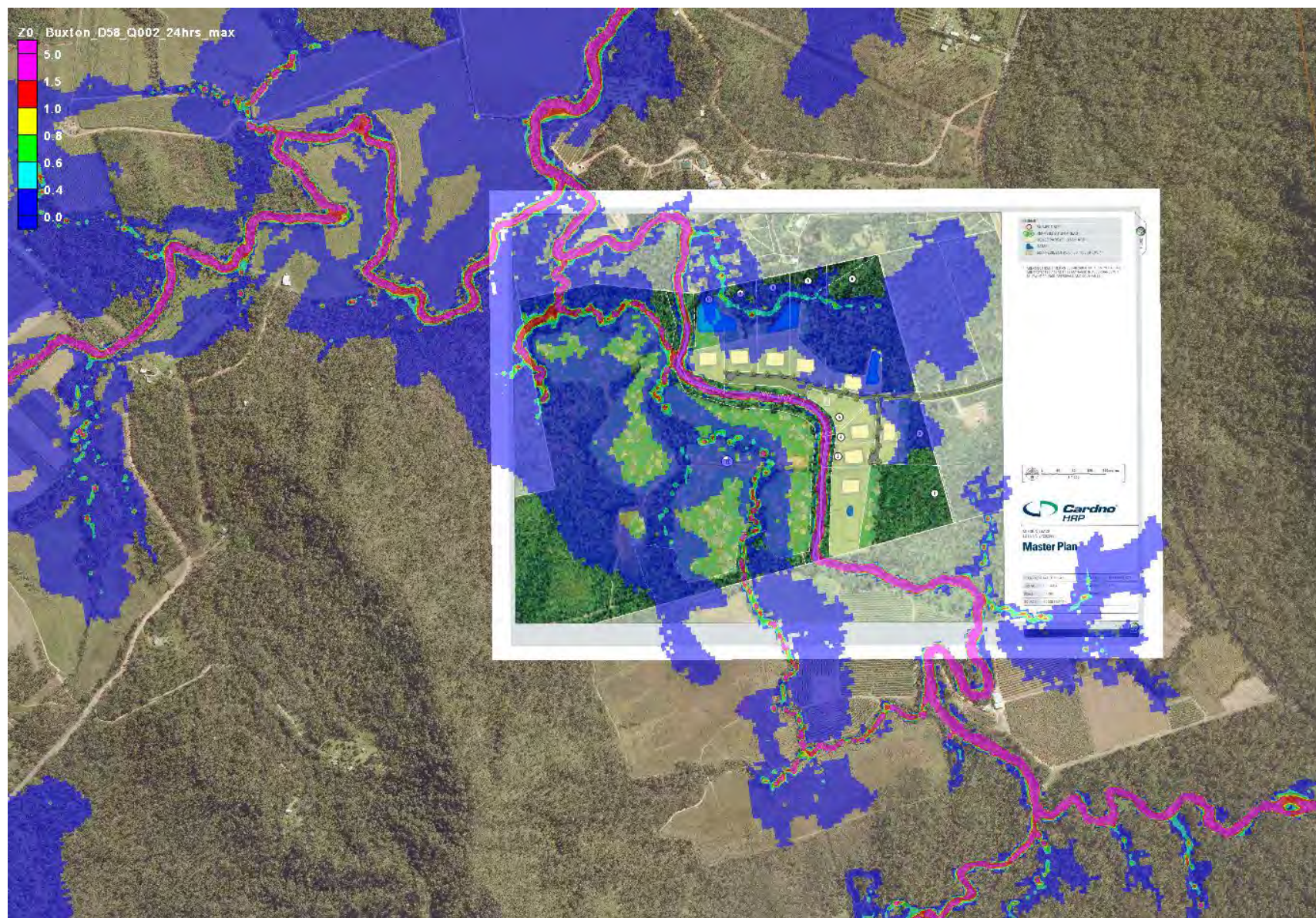


Figure D19. Developed Flood Hazard – 2 Year ARI Event

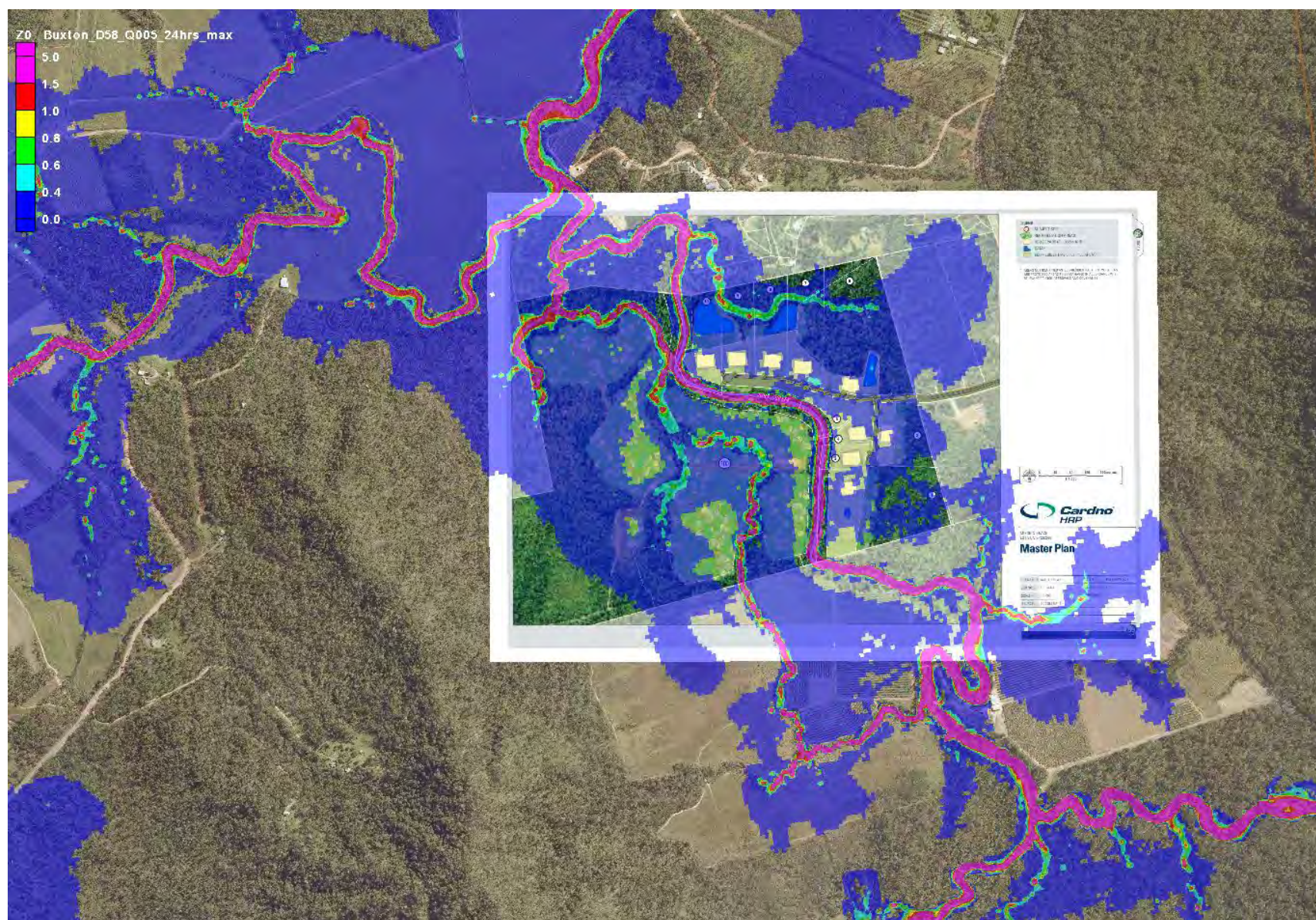


Figure D20. Developed Flood Hazard – 5 Year ARI Event

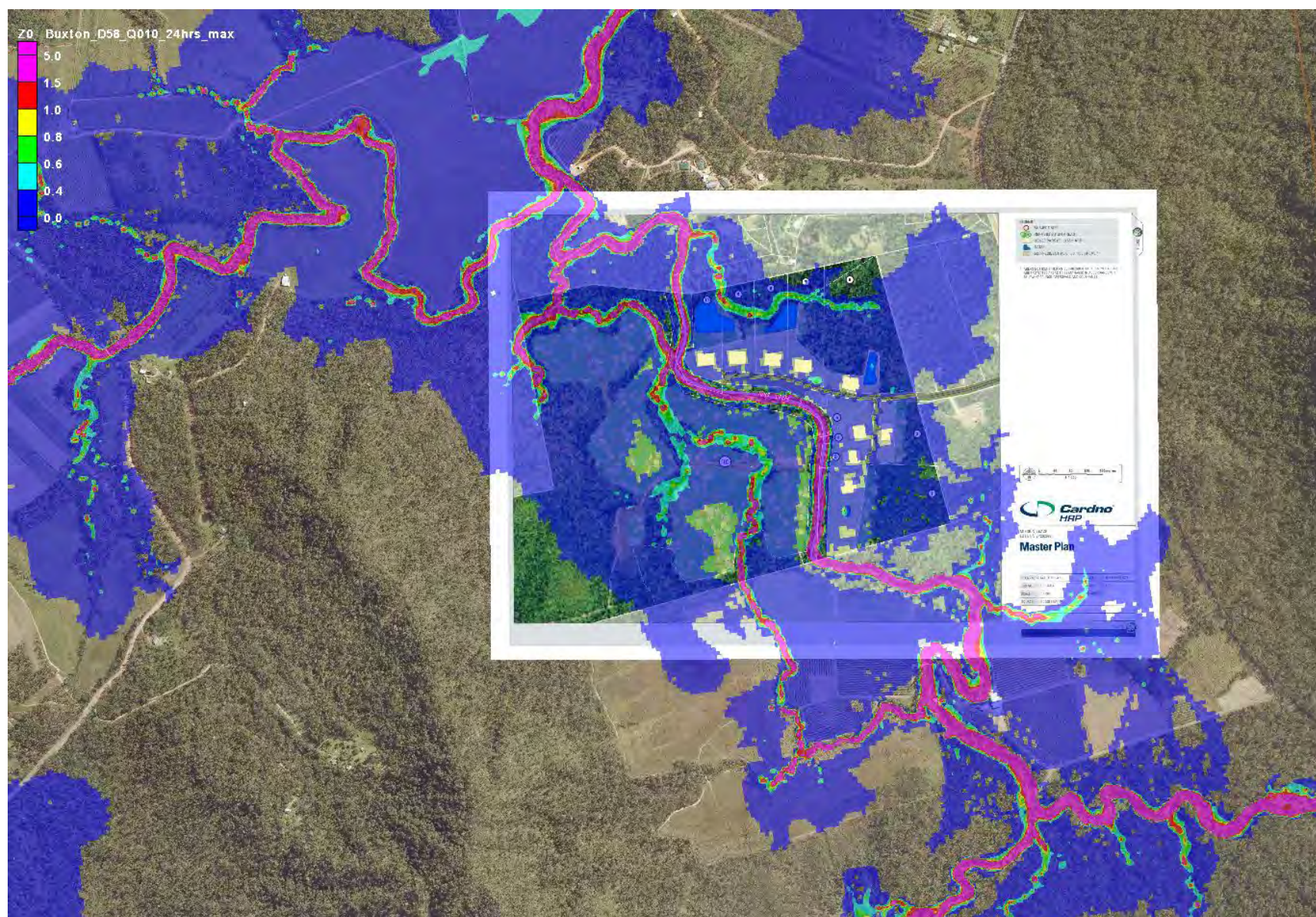


Figure D21. Developed Flood Hazard – 10 Year ARI Event

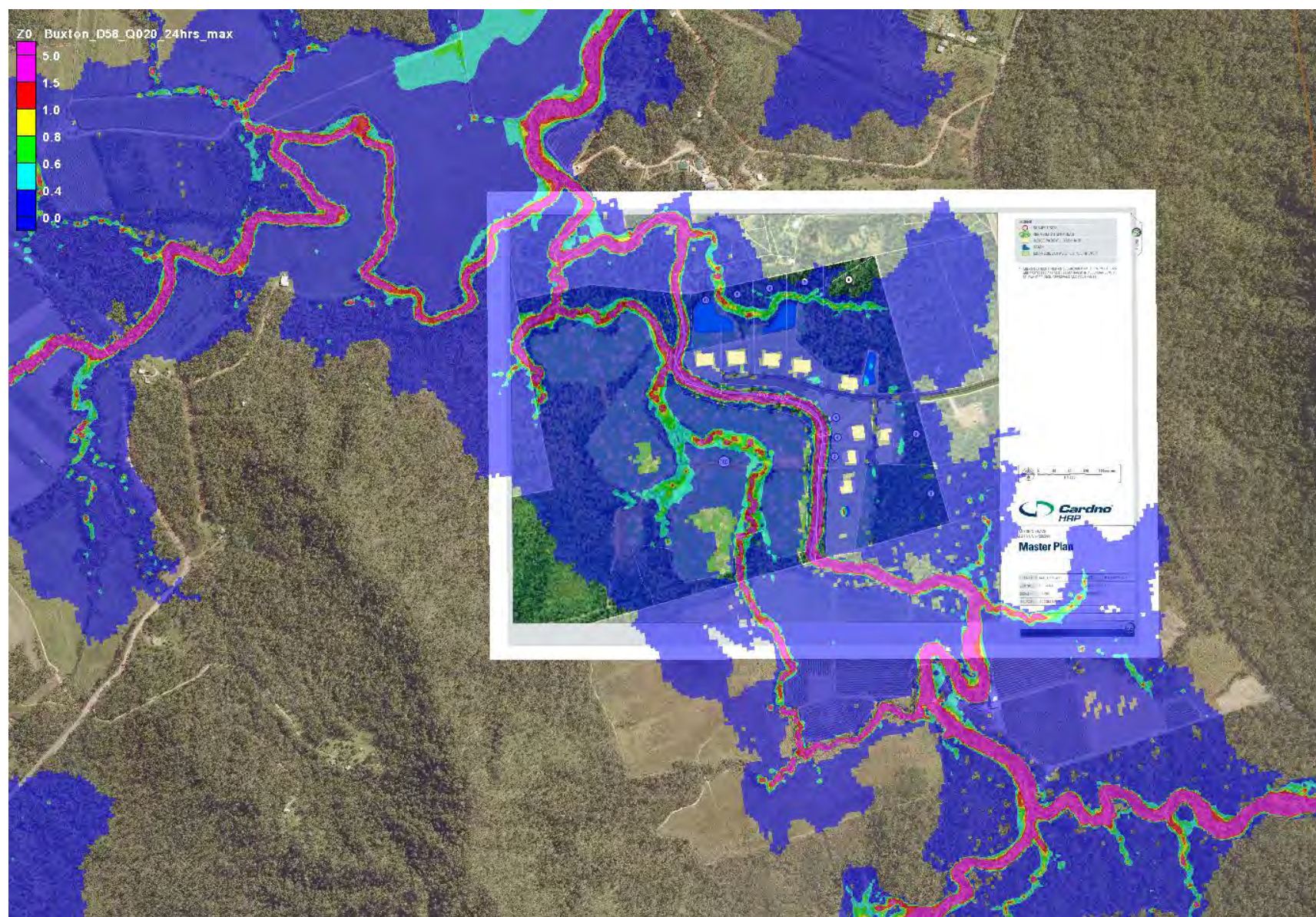


Figure D22. Developed Flood Hazard – 20 Year ARI Event

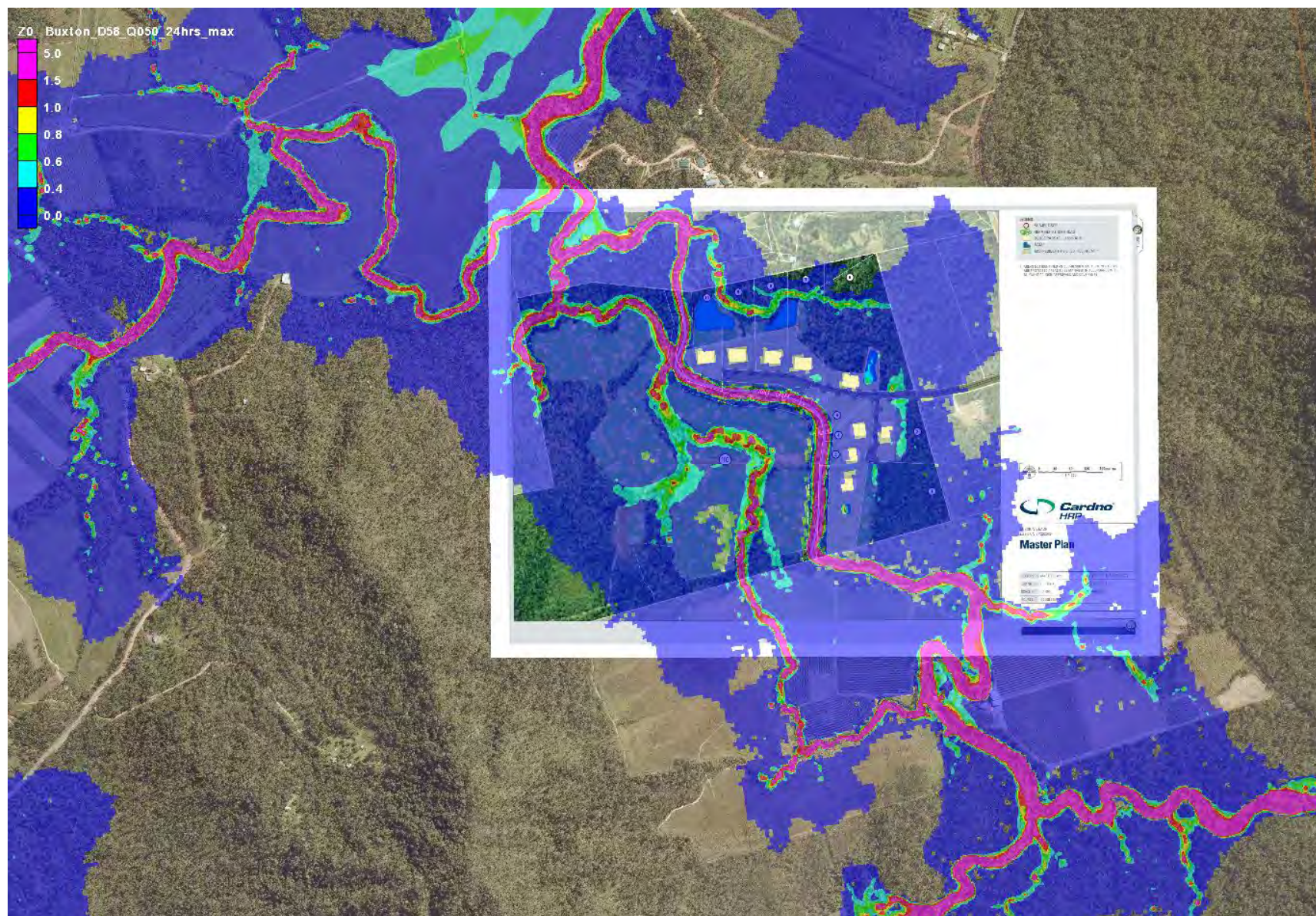


Figure D23. Developed Flood Hazard – 50 Year ARI Event

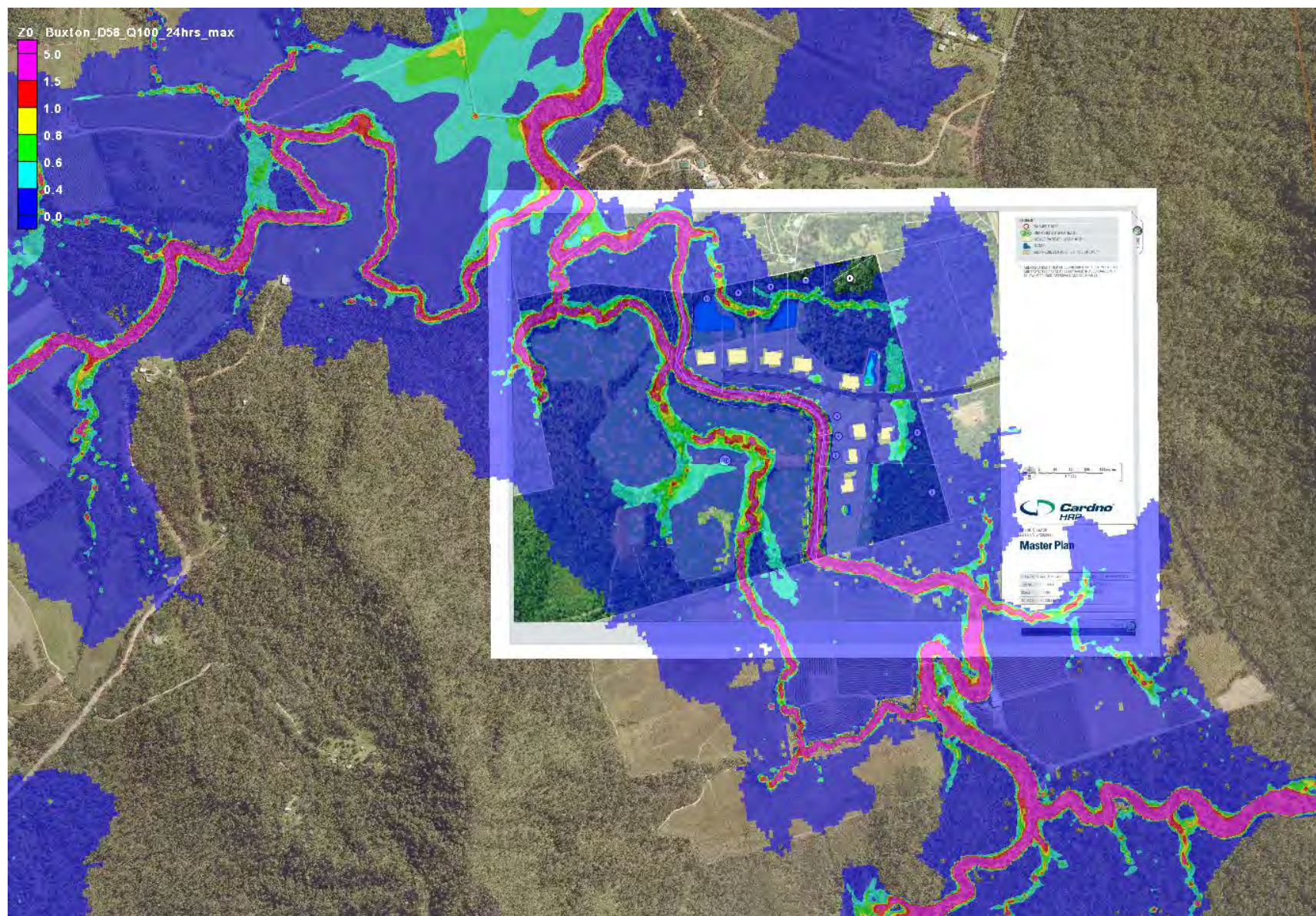


Figure D24. Developed Flood Hazard – 100 Year ARI Event

Flood Investigation

APPENDIX E

LOCAL FLOOD MODEL RESULTS – IMPACT OF DEVELOPMENT



Figure E1. Impact of Development on Peak Flood Levels – 2 Year ARI Event

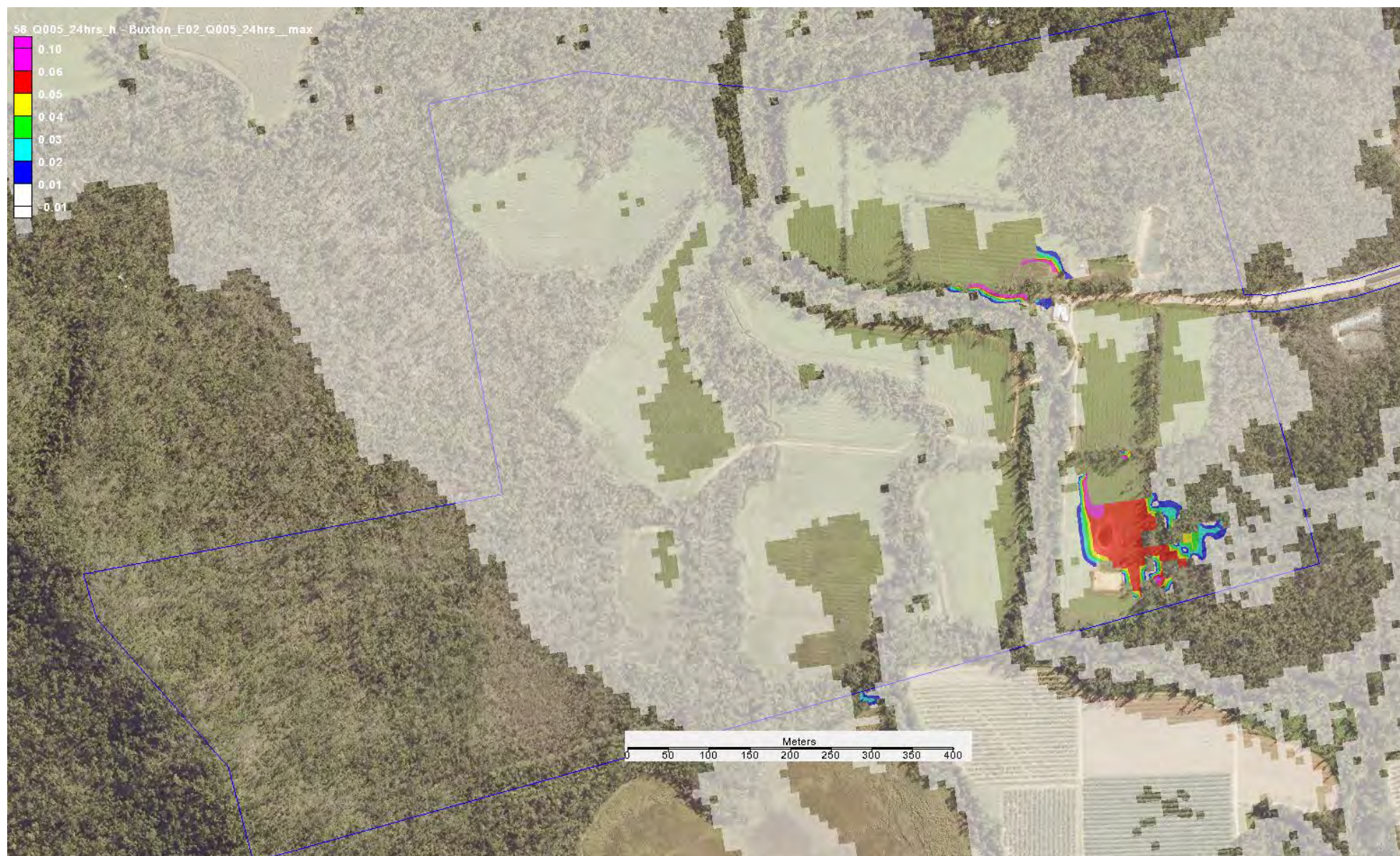


Figure E2. Impact of Development on Peak Flood Levels – 5 Year ARI Event

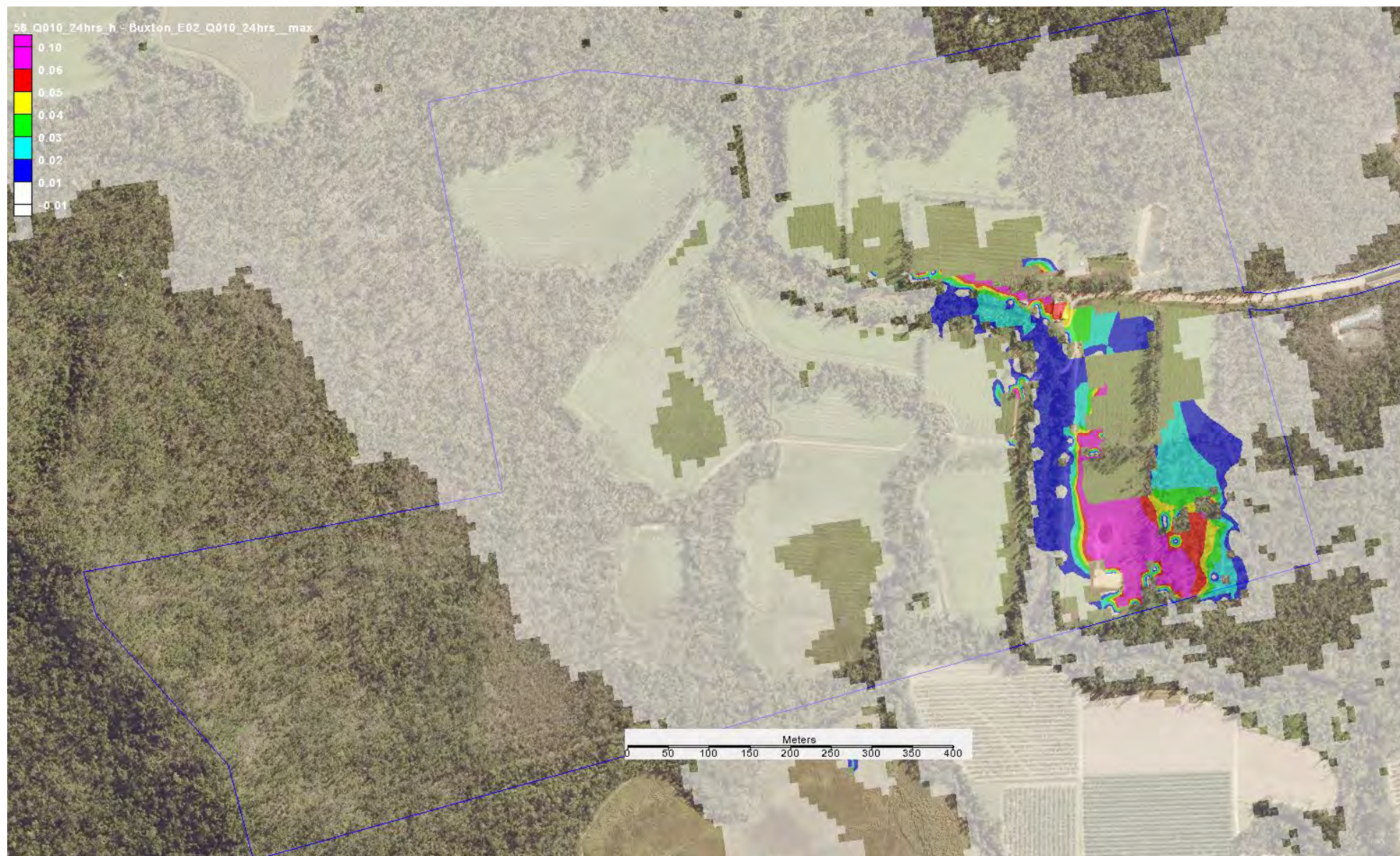


Figure E3. Impact of Development on Peak Flood Levels – 10 Year ARI Event

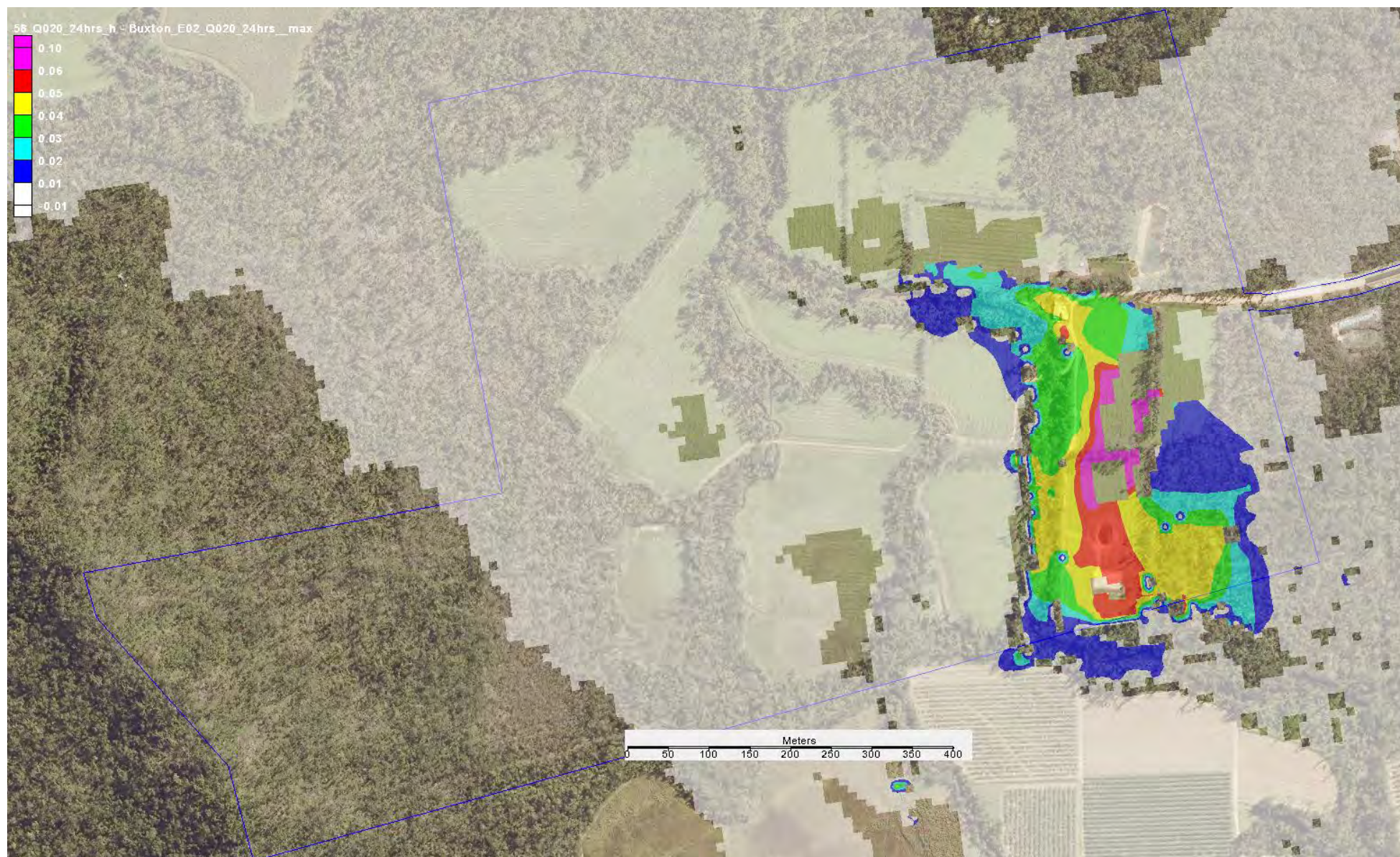


Figure E4. Impact of Development on Peak Flood Levels – 20 Year ARI Event

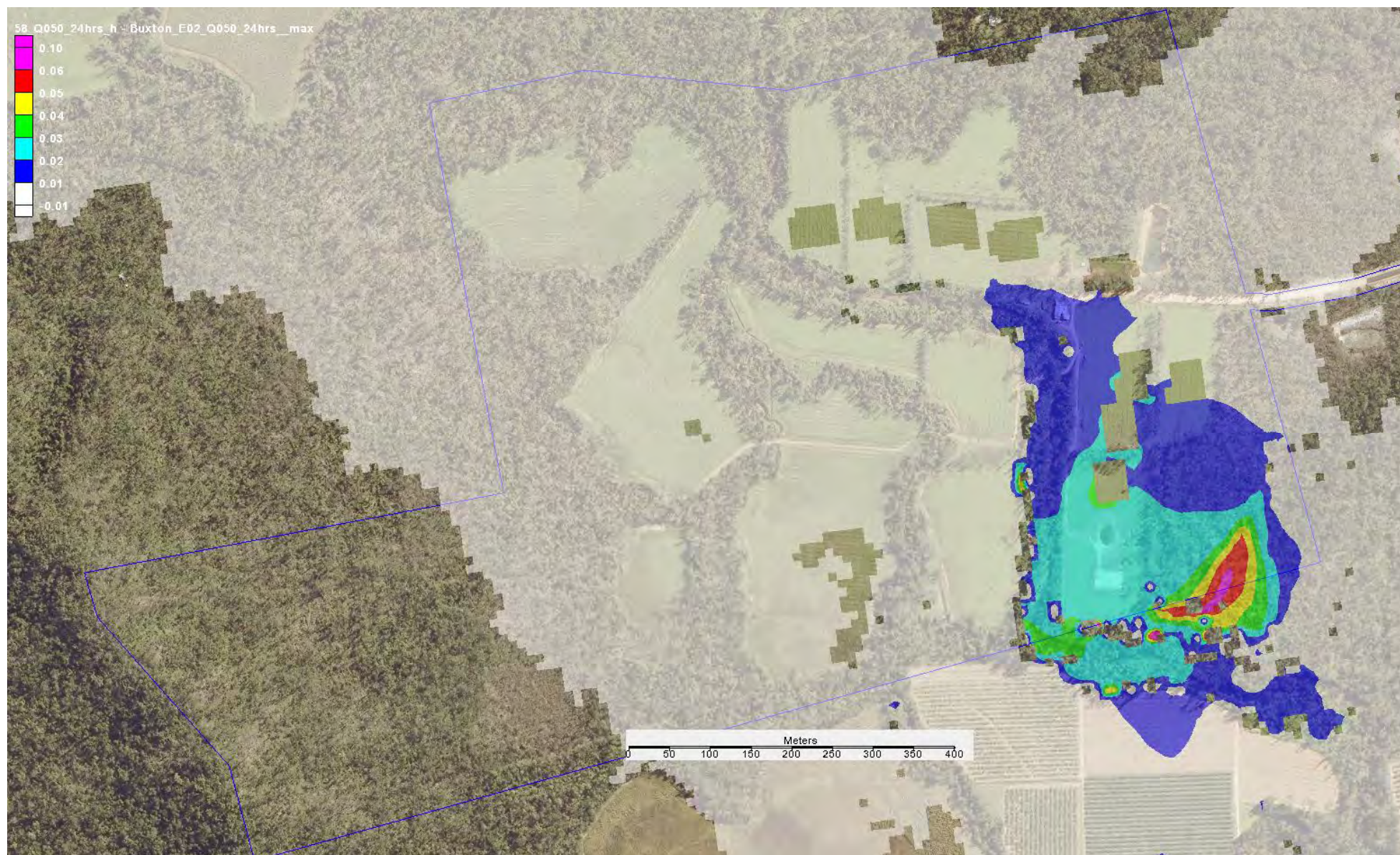


Figure E5. Impact of Development on Peak Flood Levels – 50 Year ARI Event

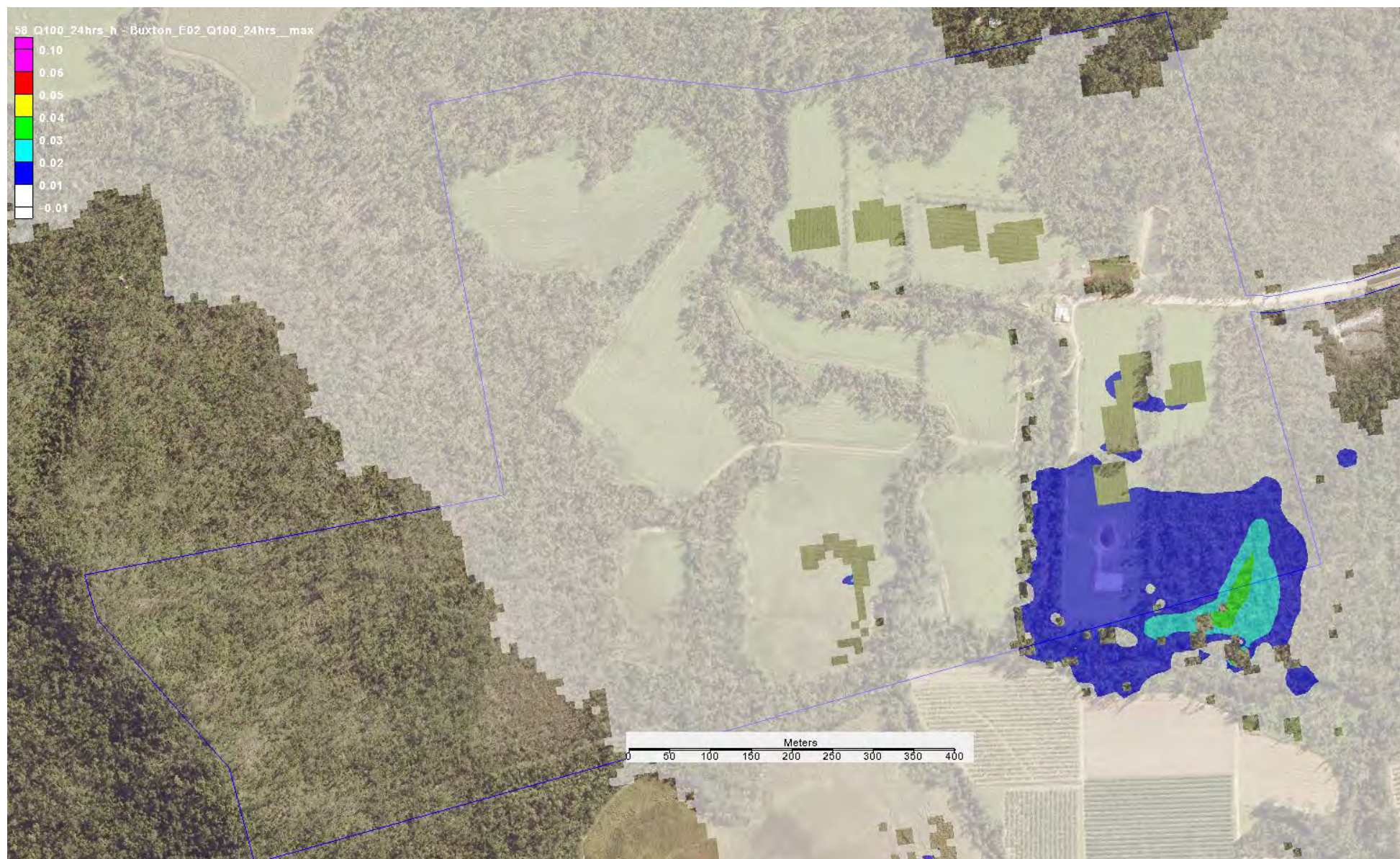


Figure E6. Impact of Development on Peak Flood Levels – 100 Year ARI Event

El Arish Mission Beach Road, Maria
Creeks

APPENDIX

H

SDAP RESPONSES

1.1 Managing noise and vibration impacts from transport corridors state code

Response column key:

☒ Achieved

P/S Performance solution

N/A Not applicable

Table 1.1.1: Building work and material change of use

Performance outcomes	Acceptable outcomes	Response	Comment
Residential buildings near a state-controlled road or type 1 multi modal corridor			
PO1 Development involving an accommodation activity that is a residential building achieves acceptable noise levels for residents and visitors by mitigating adverse impacts on the development from noise generated by a state-controlled road or a type 1 multi-modal corridor.	AO1.1 All facades of a residential building exposed to noise from a state-controlled road or type 1 multi-modal corridor meet the following external noise criteria#: (1) ≤ 60 dB(A) L_{10} (18 hour) facade corrected (measured L_{90} (8 hour) free field between 10 pm and 6 am ≤ 40 dB(A)) (2) ≤ 63 dB(A) L_{10} (18 hour) facade corrected (measured L_{90} (8 hour) free field between 10 pm and 6 am > 40 dB(A)). AND	P/S	The nearest distance from a building pad for a future House to the El Arish Mission Beach Road is approximately 500 metres; acceptable noise levels are expected to be afforded to future residents and visitors of the development.
	AO1.2 Every private open space in an accommodation activity exposed to noise from a state-controlled road or type 1 multi-modal corridor meet the following external noise criteria#: (1) ≤ 57 dB(A) L_{10} (18 hour) free field (measured L_{90} (18 hour) free field between 6 am and 12 midnight ≤ 45 dB(A)) (2) ≤ 60 dB(A) L_{10} (18 hour) free field (measured L_{90} (18 hour) free field between 6 am and 12 midnight > 45 dB(A)). AND	P/S	The nearest distance from a building pad for a future House to the El Arish Mission Beach Road is approximately 500 metres; acceptable noise levels are expected to be afforded to future residents and visitors of the development.
	AO1.3 Every passive recreation area in an accommodation activity exposed to noise from a state-controlled road or type 1 multi-modal corridor meets the following external noise criteria#: (1) 63 dB(A) L_{10} (12 hour) free field (between 6 am and 6 pm). AND	P/S	The nearest distance from a building pad for a future House to the El Arish Mission Beach Road is approximately 500 metres; acceptable noise levels are expected to be afforded to future residents and visitors of the development.
	AO1.4 Every habitable room in an accommodation activity (other than a residential building), exposed to noise from a state-controlled road or type 1 multi-modal corridor meet the following internal noise criteria#:	P/S	The nearest distance from a building pad for a future House to the El Arish Mission Beach Road is approximately 500 metres; acceptable noise levels are expected to be afforded to future residents and

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>(1) ≤ 35 dB(A) L_{eq} (1 hour) (maximum hour over 24 hours).</p> <p>Note: Noise levels from a state-controlled road or type 1 multi-modal corridor are to be measured in accordance with <i>AS1055.1–1997 Acoustics – Description and measurement of environmental noise</i>.</p> <p>Editor's note: Habitable rooms of residential buildings located within a transport noise corridor must comply with the <i>Queensland Development Code MP4.4 Buildings in a transport noise corridor</i>, Queensland Government, 2010. Transport noise corridors are mapped on the Department of Infrastructure, Local Government and Planning's State Planning Policy Interactive Mapping System.</p>		visitors of the development.
Accommodation buildings near a railway with more than 15 passing trains per day or a type 2 multi modal corridor			
PO2 Development involving an accommodation activity that is a residential building achieves acceptable noise levels for residents and visitors by mitigating adverse impacts on the development from noise generated by a railway with more than 15 passing trains per day or a type 2 multi-modal corridor.	AO2.1 All facades of a residential building exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following external noise criteria#: <p>(1) ≤ 65 dB(A) L_{eq} (24 hour) facade corrected</p> <p>(2) ≤ 87 dB(A) (single event maximum sound pressure level) facade corrected.</p> <p>AND</p>	N/A	The proposed development is not located near a railway or type 2 multi modal corridor.
	AO2.2 Every private open space and passive recreation area exposed to noise from a railway with more than 15 passing trains per day or type 2 multi-modal corridor meet the following external noise criteria#: <p>(1) ≤ 62 dB(A) L_{eq} (24 hour) free field</p> <p>(2) ≤ 84 dB(A) (single event maximum sound pressure level) free field.</p> <p>AND</p>	N/A	The proposed development is not located near a railway or type 2 multi modal corridor.
	AO2.3 Every habitable room in an accommodation activity (other than a residential building) exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following internal noise criteria#: <p>(1) ≤ 45 dB(A) single event maximum sound pressure level (railway).</p> <p>Note: Noise levels from railways or type 2 multi-modal corridors</p>	N/A	The proposed development is not located near a railway or type 2 multi modal corridor.

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>are to be measured in accordance with <i>AS1055.1–1997 Acoustics – Description and measurement of environmental noise</i>.</p> <p>Editor's note: Habitable rooms of residential buildings located within a transport noise corridor must comply with the <i>Queensland Development Code MP4.4 Buildings in a transport noise corridor</i>, Queensland Government, 2010. Transport noise corridors are mapped on the Department of Infrastructure, Local Government and Planning's State Planning Policy Interactive Mapping System.</p>		
Accommodation activities near a busway or light rail			
PO3 Development involving an accommodation activity achieves acceptable noise levels for residents and visitors by mitigating adverse impacts on the development from noise generated by a busway or light rail.	<p>AO3.1 All facades of an accommodation activity exposed to noise from a busway or light rail meet the following external noise criteria#:</p> <p>(1) ≤ 55 dB(A) L_{eq} (1 hour) facade corrected (maximum hour between 6 am and 10 pm)</p> <p>(2) ≤ 50 dB(A) L_{eq} (1 hour) facade corrected (maximum hour between 10 pm and 6 am)</p> <p>(3) ≤ 64 dB(A) L_{max} facade corrected (between 10 pm and 6 am).</p> <p>AND</p>	N/A	The proposed development is not located near a busway or light rail.
	<p>AO3.2 Every private open space and passive recreation area in an accommodation activity exposed to noise from a busway or light rail meet the following external noise criteria#:</p> <p>(1) ≤ 52 dB(A) L_{eq} (1 hour) free field (maximum hour between 6 am and 10 pm)</p> <p>(2) ≤ 66 dB(A) L_{max} free field.</p> <p>AND</p>	N/A	The proposed development is not located near a busway or light rail.
	<p>AO3.3 Every habitable room of an accommodation activity exposed to noise from a busway or light rail meets the following internal noise criteria#:</p> <p>(1) ≤ 35 dB(A) L_{eq} (1 hour) (maximum hour over 24 hours).</p> <p>Note: Noise levels from a busway or light rail are to be measured in accordance with <i>AS1055.1–1997 Acoustics – Description and measurement of environmental noise</i>.</p>	N/A	The proposed development is not located near a busway or light rail.
Particular development near a state-controlled road or type 1 multi modal corridor			

Performance outcomes	Acceptable outcomes	Response	Comment
PO4 Development involving a: (1) child care centre, or (2) educational establishment achieves acceptable noise levels for workers and patrons by mitigating adverse impacts on the development from noise generated by a state-controlled road or a type 1 multi-modal corridor.	AO4.1 All facades of buildings for a child care centre or educational establishment exposed to noise from state-controlled roads or type 1 multi-modal corridors meet the following external noise criteria#: (1) ≤ 58 dB(A) L_{10} (1 hour) facade corrected (maximum hour during normal opening hours). AND	N/A	No child care centres or educational establishments are proposed as part of this development.
	AO4.2 Outdoor education area and outdoor play area exposed to noise from a state-controlled road or type 1 multi-modal corridor meet the following external noise criteria#: (1) ≤ 63 dB(A) L_{10} (12 hours) free field (between 6 am and 6 pm). AND	N/A	No child care centres or educational establishments are proposed as part of this development.
	AO4.3 Indoor education areas and indoor play areas in a childcare centre or educational establishment exposed to noise from a state-controlled road or type 1 multi-modal corridor meet the following internal noise criteria#: (1) ≤ 35 dB(A) L_{eq} (1 hour) (maximum hour during opening hours). Note: Noise levels from state-controlled roads or type 1 multi-modal corridors are to be measured in accordance with <i>AS1055.1–1997 Acoustics – Description and measurement of environmental noise</i> .	N/A	No child care centres or educational establishments are proposed as part of this development.
PO5 Development involving a hospital achieves acceptable noise levels for workers and patrons by mitigating adverse impacts on the development from noise generated by a state-controlled road or a type 1 multi-modal corridor.	AO5.1 All facades of buildings for a hospital exposed to noise from state-controlled roads or type 1 multi-modal corridors meet the following external noise criteria#: (1) ≤ 58 dB(A) L_{10} (1 hour) facade corrected (maximum hour during normal opening hours). AND	N/A	No hospitals are proposed as part of this development.
	AO5.2 Patient care areas exposed to noise from a state-controlled road or type 1 multi-modal corridor meet the following internal noise criteria#: (1) ≤ 35 dB(A) L_{eq} (1 hour) (maximum hour during opening hours). Note: Noise levels from state-controlled roads or type 1 multi-	N/A	No hospitals are proposed as part of this development.

Performance outcomes	Acceptable outcomes	Response	Comment
	modal corridors are to be measured in accordance with <i>AS1055.1–1997 Acoustics – Description and measurement of environmental noise</i> .		
Particular development near a railway (with more than 15 passing trains per day) or a type 2 multi modal corridor			
PO6 Development involving a: (1) child care centre, or (2) educational establishment achieves acceptable noise levels for workers and patrons by mitigating adverse impacts on the development from noise generated by a railway with more than 15 passing trains per day or a type 2 multi-modal corridor.	AO6.1 All facades of buildings in a child care centre or educational establishment exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following external noise criteria#: <ul style="list-style-type: none"> (1) ≤ 65 dB(A) L_{eq} (1 hour) facade corrected (maximum hour during normal opening hours) (2) ≤ 87 dB(A) (single event maximum sound pressure level) facade corrected. AND	N/A	No child care centres or educational establishments are proposed as part of this development. The proposed development is not located near a railway or type 2 multi modal corridor.
	AO6.2 Outdoor education area and outdoor play area exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following external noise criteria#: <ul style="list-style-type: none"> (1) ≤ 62 dB(A) L_{eq} (12 hour) free field (between 6 am and 6 pm) (2) ≤ 84 dB(A) (single event maximum sound pressure level) free field. AND	N/A	No child care centres or educational establishments are proposed as part of this development. The proposed development is not located near a railway or type 2 multi modal corridor.
	AO6.3 Sleeping rooms in a child care centre exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following internal noise criteria#: <ul style="list-style-type: none"> (1) ≤ 45 dB(A) single event maximum sound pressure level. AND	N/A	No child care centres or educational establishments are proposed as part of this development. The proposed development is not located near a railway or type 2 multi modal corridor.
	AO6.4 Indoor education areas and indoor play areas exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following internal noise criteria#: <ul style="list-style-type: none"> (1) ≤ 50 dB(A) single event maximum sound pressure level. 	N/A	No child care centres or educational establishments are proposed as part of this development. The proposed development is not located near a railway or type 2 multi modal corridor.

Performance outcomes	Acceptable outcomes	Response	Comment
	Note: Noise levels from railways or type 2 multi-modal corridors are measured in accordance with <i>AS1055.1–1997 Acoustics – Description and measurement of environmental noise</i> .		
PO7 Development involving a hospital achieves acceptable noise levels for workers and patrons by mitigating adverse impacts on the development from noise generated by a railway with more than 15 passing trains per day or a type 2 multi-modal corridor.	AO7.1 All facades of buildings for a hospital exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following external noise criteria#: (1) ≤ 65 dB(A) L_{eq} (1 hour) facade corrected (maximum hour during normal opening hours) (2) ≤ 87 dB(A) (single event maximum sound pressure level) facade corrected. AND	N/A	No hospitals are proposed as part of this development. The proposed development is not located near a railway or type 2 multi modal corridor.
	AO7.2 Ward areas exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following internal noise criteria#: (1) ≤ 45 dB(A) single event maximum sound pressure level. AND	N/A	No hospitals are proposed as part of this development. The proposed development is not located near a railway or type 2 multi modal corridor.
	AO7.3 Patient care areas (other than ward areas) exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following internal noise criteria#: (1) ≤ 50 dB(A) single event maximum sound pressure level. Note: Noise levels from railways or type 2 multi-modal corridors are measured in accordance with <i>AS1055.1–1997 Acoustics – Description and measurement of environmental noise</i> .	N/A	No hospitals are proposed as part of this development. The proposed development is not located near a railway or type 2 multi modal corridor.
Particular development near a busway or light rail			
PO8 Development involving a: (1) child care centre, or (2) educational establishment achieves acceptable noise levels for workers and patrons by mitigating adverse impacts on the development	AO8.1 All facades of buildings for a child care centre or educational establishment exposed to noise from a busway or light rail meet the following external noise criteria#: (1) ≤ 55 dB(A) L_{eq} (1 hour) facade corrected (maximum hour during normal opening hours). AND	N/A	No child care centres or educational establishments are proposed as part of this development. The proposed development is not located near a busway or light rail.

Performance outcomes	Acceptable outcomes	Response	Comment
from noise generated by a busway or light rail.			
	AO8.2 Outdoor education area and outdoor play areas exposed to noise from a busway or light rail meet the following external noise criteria#: (1) ≤ 52 dB(A) L_{eq} (1 hour) free field (maximum hour during normal opening hours) (2) ≤ 66 dB(A) L_{max} free field (during normal opening hours). AND	N/A	No child care centres or educational establishments are proposed as part of this development. The proposed development is not located near a busway or light rail.
	AO8.3 Indoor education areas and indoor play areas exposed to noise from a busway or light rail meet the following internal noise criteria#: (1) ≤ 35 dB(A) L_{eq} (1 hour) (maximum hour during opening hours). Note: Areas exposed to noise from a busway or light rail are measured in accordance with <i>AS1055.1-1997 Acoustics – Description and measurement of environmental noise</i> .	N/A	No child care centres or educational establishments are proposed as part of this development. The proposed development is not located near a busway or light rail.
PO9 Development involving a hospital achieves acceptable noise levels for workers and patients by mitigating adverse impacts on the development from noise generated by a busway or light rail.	AO9.1 All facades of buildings for a hospital exposed to noise from a busway or light rail meet the following external noise criteria#: (1) ≤ 55 dB(A) L_{eq} (1 hour) facade corrected (maximum hour during normal opening hours). AND	N/A	No hospitals are proposed as part of this development. The proposed development is not located near a busway or light rail.
	AO9.2 Patient care areas exposed to noise from a busway or light rail meet the following internal noise criteria#: (1) ≤ 35 dB(A) L_{eq} (1 hour) (maximum hour during opening hours). Note: Areas exposed to noise from a busway or light rail are measured in accordance with <i>AS1055.1-1997 Acoustics – Description and measurement of environmental noise</i> .	N/A	No hospitals are proposed as part of this development. The proposed development is not located near a busway or light rail.
Noise barriers or earth mounds			
PO10 Noise barriers or earth mounds erected to mitigate noise from transport operations and infrastructure are designed, sited and constructed to:	AO10.1 Where adjacent to a state-controlled road or type 1 multi-modal corridor, noise barriers and earth mounds are designed, sited and constructed in accordance with Chapter 7 Integrated Noise Barrier Design of the	N/A	Due to the distance of proposed building pads from the El Arish Mission Beach Road (approximately 500 metres at a minimum), noise barriers or earth mounds are not proposed as part of this development.

Performance outcomes	Acceptable outcomes	Response	Comment
(1) maintain safe operation and maintenance of state transport infrastructure (2) minimise impacts on surrounding properties (3) complement the surrounding local environment (4) maintain fauna movement corridors where appropriate	<i>Transport Noise Management Code of Practice – Volume 1 Road Traffic Noise</i> , Department of Transport and Main Roads, 2013. OR		
	AO10.2 Where adjacent to a railway or type 2 multi-modal corridor, noise barriers and earth mounds are designed, sited and constructed in accordance with the <i>Civil Engineering Technical Requirement – CIVIL-SR-014 Design of noise barriers adjacent to railways</i> , Queensland Rail, 2011. OR	N/A	The proposed development is not adjacent to a railway or type 2 multi-modal corridor.
	AO10.3 No acceptable outcome is prescribed for noise barriers and earth mounds adjacent to a busway or light rail.	N/A	The proposed development is not adjacent to a busway or light rail.
Vibration			
PO11 Development mitigates adverse impacts on the development from vibration generated by transport operations and infrastructure.	No acceptable outcome is prescribed.	N/A	The nearest distance from a building pad for a future House to the El Arish Mission Beach Road is approximately 500 metres; vibration generated by transport operations and infrastructure is not expected to impact upon future development.

Table 1.1.2: Reconfiguring a lot

Performance outcomes	Acceptable outcomes	Response	Comment
Future anticipated accommodation activity near a state controlled road or type 1 multi-modal corridor			
PO1 Development involving land where a future anticipated accommodation activity is made exempt or self-assessable development under a local planning instrument is to achieve acceptable noise levels for residents and visitors by mitigating adverse impacts on the development site from noise generated by a state-controlled road or a type 1 multi-modal corridor.	AO1.1 Land for a future anticipated accommodation activity exposed to noise from a state-controlled road or type 1 multi-modal corridor meets the following external noise criteria at the building envelope or if the building envelope is unknown, the deemed-to-comply setback distance for buildings stipulated by the local planning instrument or relevant building regulations#: <ul style="list-style-type: none"> (1) ≤ 57 dB(A) L_{10} (18 hour) free field (measured L_{90} (18 hour) free field between 6 am and 12 midnight ≤ 45 dB(A)) (2) ≤ 60 dB(A) L_{10} (18 hour) free field (measured L_{90} (18 hour) free field between 6 am and 12 midnight > 45 dB(A)). 	P/S	The nearest distance from a building pad for a future House to the El Arish Mission Beach Road is approximately 500 metres; acceptable noise levels are expected to be afforded to future residents and visitors of the development.
Future anticipated accommodation activity near a railway with more than 15 passing trains per day or a type 2 multi-modal corridor			
PO2 Development involving land where a future anticipated accommodation activity is made exempt or self-assessable development under a local planning instrument is to achieve acceptable noise levels for residents and visitors by mitigating adverse impacts on the development site from noise generated by a railway with more than 15 passing trains per day or a type 2 multi-modal corridor.	AO2.1 Land for a future anticipated accommodation activity exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meets the following external noise criteria at the building envelope or if the building envelope is unknown, the deemed-to-comply setback distance for buildings stipulated by the local planning instrument or relevant building regulations#: <ul style="list-style-type: none"> (1) ≤ 62 dB(A) L_{eq} (24 hour) free field (2) ≤ 84 dB(A) (single event maximum sound pressure level) free field. 	N/A	The proposed development is not located near a railway or type 2 multi modal corridor.
Future anticipated accommodation activity near a busway or light rail			
PO3 Development involving land where a future anticipated accommodation activity is made exempt or self-assessable development under a local planning instrument is to achieve acceptable noise levels by mitigating adverse impacts on the development site from noise generated by a busway or light rail.	AO3.1 Land for a future anticipated accommodation activity exposed to noise from a busway or light rail meets the following external noise criteria at the building envelope or if the building envelope is unknown, the deemed-to-comply setback distance for buildings stipulated by the local government planning instrument or building regulations#: <ul style="list-style-type: none"> (1) ≤ 52 dB(A) L_{eq} (1 hour) free field (maximum hour between 6 am and 10 pm) (2) ≤ 47 dB(A) L_{eq} (1 hour) free field (maximum hour between 10 pm and 6 am) 	N/A	The proposed development is not located near a busway or light rail.

Performance outcomes	Acceptable outcomes	Response	Comment
	(3) ≤ 66 dB(A) L_{\max} free field.		
Noise barriers or earth mounds			
PO4 Noise barriers or earth mounds erected to mitigate noise from transport operations and infrastructure are designed, sited and constructed to: <ul style="list-style-type: none"> (1) maintain safe operation and maintenance of state transport infrastructure (2) minimise impacts on surrounding properties (3) complement the surrounding local environment (4) maintain fauna movement corridors where appropriate. 	AO4.1 Where adjacent to a state-controlled road or a type 1 multi-modal corridor, noise barriers and earth mounds are designed, sited and constructed in accordance with Chapter 7 Integrated Noise Barrier Design of the <i>Transport Noise Management Code of Practice – Volume 1 Road Traffic Noise</i> , Department of Transport and Main Roads, 2013. OR	N/A	Due to the distance of proposed building pads from the El Arish Mission Beach Road (approximately 500 metres at a minimum), noise barriers or earth mounds are not proposed as part of this development.
	AO4.2 Where adjacent to a railway or a type 2 multi-modal corridor, noise barriers and earth mounds are designed, sited and constructed in accordance with the <i>Civil Engineering Technical Requirement — CIVIL-SR-014 Design of noise barriers adjacent to railways</i> , Queensland Rail, 2011. OR	N/A	The Site is not located near a railway or type 2 multi modal corridor.
	AO4.3 No acceptable outcome is prescribed for noise barriers and earth mounds adjacent to a busway or light rail.	N/A	The Site is not located near a railway or type 2 multi modal corridor.

1.2 Managing air and lighting impacts from transport corridors state code

Response column key:

☒ Achieved

P/S Performance solution

N/A Not applicable

Table 1.2.1: Building work, material change of use and reconfiguring a lot

Performance outcomes	Acceptable outcomes	Response	Comment
Air quality			
PO1 Development involving sensitive development achieves acceptable levels of air quality for occupiers or users of the development by mitigating adverse impacts on the development from air emissions generated by state transport infrastructure.	AO1.1 Every private open space and passive recreation area of an accommodation activity meets the air quality objectives in the <i>Environmental Protection (Air) Policy 2008</i> for the following indicators: (1) carbon monoxide (2) nitrogen dioxide (3) sulphur dioxide (4) photochemical oxidants (5) respirable particulate matter (PM10) (6) fine particulate matter (PM2.5) (7) lead (8) toluene (9) formaldehyde (10) xylenes. AND	P/S	The nearest distance from a building pad for a future House to the El Arish Mission Beach Road is approximately 500 metres; acceptable noise levels are expected to be afforded to future residents and visitors of the development.
	AO1.2 Every outdoor education area and passive recreation area of an educational establishment, childcare centre and hospital meet the air quality objectives in the <i>Environmental Protection (Air) Policy 2008</i> for the following indicators: (1) carbon monoxide (2) nitrogen dioxide (3) sulphur dioxide (4) photochemical oxidants (5) respirable particulate matter (PM10) (6) fine particulate matter (PM2.5) (7) lead (8) toluene (9) formaldehyde (10) xylenes.	N/A	No educational establishments, child care centres or hospitals are proposed as part of this development.
Lighting impacts			
PO2 Development involving an accommodation activity or hospital	AO2.1 Buildings for an accommodation activity or hospital are designed, sited and constructed to incorporate	P/S	The nearest distance from a building pad for a future House to the El Arish Mission Beach Road is approximately 500

Performance outcomes	Acceptable outcomes	Response	Comment
achieves acceptable levels of amenity for residents and patients by mitigating lighting impacts from state transport infrastructure.	treatments to attenuate ingress of artificial lighting from state transport infrastructure during the hours of 10 pm – 6 am.		metres; acceptable levels of amenity, particularly with respect to lighting, are expected to be afforded to future residents and visitors of the development.

8.1 Queensland vegetation management state code

Table 8.1.3: General

Response column key:

☒ Achieved

P/S Performance

Performance outcomes	Acceptable outcomes	Response	Comment
Clearing to avoid and minimise impacts			
PO1 Clearing only occurs where the applicant has demonstrated that the development has first avoided, and then minimised the impacts of development.	No acceptable outcome is prescribed.	P/S (No acceptable outcome prescribed)	The proposed development has been designed to be located within existing cleared areas of the Site. The clearing of regulated vegetation is not expected to be required to facilitate the proposed development, however the development will facilitate the opportunity for the clearing of additional exempt operational work to be carried out, namely clearing of boundaries to establish a necessary fence. However, the Applicant is prepared to enter in to a vegetation protection agreement that prevents vegetation clearing for the establishment of fences.
Clearing on land in particular circumstances			
PO2 Clearing in an area must not be inconsistent with or impact on any of the following unless a better environmental outcome can be achieved: (1) a declared area, or (2) an exchange area, or (3) unlawfully cleared area, or	No acceptable outcome is prescribed.	P/S (No acceptable outcome prescribed)	The proposed development has been designed to be located within existing cleared areas of the Site. The clearing of regulated vegetation is not expected to be required to facilitate the proposed development, however the development will facilitate the opportunity for the clearing of additional exempt operational work to be carried out, namely clearing of boundaries to establish a necessary fence. However, the Applicant is prepared to enter in to a vegetation protection agreement that prevents vegetation clearing for the establishment of fences.

Performance outcomes	Acceptable outcomes	Response	Comment
<p>(4) a restoration notice, or</p> <p>(5) an enforcement notice under the <i>Sustainable Planning Act 2009</i> issued for a vegetation clearing offence, or</p> <p>(6) a compliance notice containing conditions about the restoration of vegetation, or</p> <p>(7) a Land Act notice, or</p> <p>(8) a trespass notice if the trespass related act under the <i>Land Act 1994</i> for the notice is the clearing of vegetation on the relevant land, or</p> <p>(9) an area on a PMAV shown to be category A where the chief executive of the VMA reasonably believes that a vegetation clearing offence is being, or has been, committed in relation to the area.</p>			
Clearing on land that is an environmental offset area			

Performance outcomes	Acceptable outcomes	Response	Comment
PO3 Clearing on land that contains an existing environmental offset is consistent with the delivery plan or agreement for the environmental offset area. Editor's note: Environmental offset agreements may also be described as an 'agreed delivery arrangement' or 'delivery agreement'. Clearing should be consistent with any agreement however described.	AO3.1 Clearing is consistent with the offset delivery plan or agreement for the environmental offset area. OR	N/A	The Site does not contain an existing environmental offset area, proposed to be impacted by clearing.
	AO3.2 An additional environmental offset is provided that is consistent with the relevant <i>Queensland Environmental Offsets Policy</i> .	N/A	The Site does not contain an existing environmental offset area, proposed to be impacted by clearing.
No clearing of vegetation as a result of the material change of use or reconfiguration of a lot			
PO4 Clearing as a result of the material change of use or reconfiguration of a lot will not occur.	No acceptable outcome is prescribed.	P/S (No acceptable outcome prescribed)	The proposed development has been designed to be located within existing cleared areas of the Site. The clearing of regulated vegetation is not expected to be required to facilitate the proposed development, however the development will facilitate the opportunity for the clearing of additional exempt operational work to be carried out, namely clearing of boundaries to establish a necessary fence. However, the Applicant is prepared to enter in to a vegetation protection agreement that prevents vegetation clearing for the establishment of fences.
Clearing that could already be done under an exemption			
PO5 All clearing is limited to clearing that could be done under an exemption for the purpose of the	No acceptable outcome is prescribed.	N/A	If we take PO5 as accurately stated, the Material Change of Use preliminary approval does not allow for any clearing not presently provided for.

Performance outcomes	Acceptable outcomes	Response	Comment
development (as prescribed under Schedule 24, Parts 1 and 2 of the Sustainable Planning Regulation 2009) prior to the material change of use application being approved.			

Table 8.1.4: Public safety, relevant infrastructure and coordinated projects

Performance outcomes	Acceptable outcomes	Response	Comment
Limits to clearing			
<p>PO1 Clearing is limited to the extent that is necessary:</p> <p>(1) for establishing a necessary fence, firebreak, road or vehicular track, or for constructing necessary built infrastructure, if there is no suitable alternative site for the fence, firebreak, road, track or infrastructure (relevant infrastructure), or</p> <p>(2) as a natural and ordinary consequence of other assessable development for which a development approval as defined under the repealed <i>Integrated Planning Act 1997</i> was given, or a development application as defined under that Act was made, before 16 May 2003, or</p>	No acceptable outcome is prescribed.	P/S (No acceptable outcome prescribed)	The exempt clearing created by the Reconfiguring a Lot aspect of the propose development is only for that required to establish a necessary fence; except that the Applicant is willing to enter an agreement that protects native vegetation on proposed lot boundaries.

Performance outcomes	Acceptable outcomes	Response	Comment
(3) to ensure public safety, or (4) for a coordinated project and any associated ancillary works—other than a coordinated project that involves high value agriculture clearing, or irrigated high value agriculture clearing.			
Wetlands			
PO2 Maintain the current extent of vegetation associated with any natural wetland to protect: (1) water quality by filtering sediments, nutrients and other pollutants (2) aquatic habitat (3) terrestrial habitat.	AO2.1 Clearing does not occur in or within 100 metres of any natural wetland. OR	N/A	The Site is not located within proximity any natural wetlands.
	AO2.2 Clearing only occurs within 100 metres of any natural wetland where: (1) the clearing does not occur within 50 metres of the defining bank of any natural wetland, or (2) the widths stipulated by Table 1 are not exceeded. OR	N/A	The Site is not located within proximity any natural wetlands.
	AO2.3 Where it can be demonstrated that clearing cannot be avoided, and the extent of clearing has been minimised, an environmental offset is provided	N/A	The Site is not located within proximity any natural wetlands.

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>for any significant residual impacts from clearing of vegetation associated with a natural wetland.</p> <p>Editor's note: Applications for development should identify whether there is likely to be a significant residual impact and a need for an environmental offset having regard to Section 3.3 (Wetlands and watercourses) of the <i>Significant Residual Impact Guideline</i> and the relevant <i>Queensland Environmental Offsets Policy</i>.</p>		
Watercourses			
<p>PO3 Maintain the current extent of vegetation associated with any watercourse to protect:</p> <p>(1) bank stability by protecting against bank erosion</p> <p>(2) water quality by filtering sediments, nutrients and other pollutants</p> <p>(3) aquatic habitat</p> <p>(4) terrestrial habitat.</p>	<p>AO3.1 Clearing does not occur:</p> <p>(1) in any watercourse, or</p> <p>(2) within the relevant distance stipulated by Table 2 of the defining bank of any watercourse.</p> <p>OR</p>	<p><input checked="" type="checkbox"/> Achieved</p>	<p>No clearing of vegetation within a watercourse or within 25 metres of the watercourse is proposed within this development application.</p>
	<p>AO3.2 Clearing only occurs within any watercourse or within the relevant distance stipulated by Table 2 of the defining bank of any watercourse where:</p> <p>(1) the clearing does not occur within 5 metres of the defining bank, or</p> <p>(2) the widths stipulated by Table 1 is not exceeded</p> <p>OR</p>	N/A	<p>Refer to response 3.1 above.</p>
	AO3.3 Where it can be demonstrated that clearing	N/A	No clearing of vegetation within a watercourse or within 25

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>cannot be avoided, and the extent of clearing has been minimised, an environmental offset is provided for any significant residual impact from clearing of vegetation associated with any watercourse.</p> <p>Editor's note: Applications for development should identify whether there is likely to be a significant residual impact and a need for an environmental offset having regard to Section 3.3 (Wetlands and watercourses) of the <i>Significant Residual Impact Guideline</i> and the relevant <i>Queensland Environmental Offsets Policy</i>.</p>		metres of the watercourse is proposed within this development application.
Connectivity (public safety and relevant infrastructure)			
<p>PO4 In consideration of vegetation on the subject lot(s) and in the landscape adjacent to the subject lot(s), vegetation is retained that:</p> <p>(1) is of sufficient size and configured in a way that maintains ecosystem functioning</p> <p>(2) remains in the landscape despite threatening processes.</p>	AO4.1 Clearing occurs in accordance with Table 3.	P/S	The proposed development has been designed to be located within existing cleared areas of the Site. The clearing of regulated vegetation is not expected to be required to facilitate the proposed development, however the development will facilitate the opportunity for the clearing of additional exempt operational work to be carried out, namely clearing of boundaries to establish a necessary fence. However, the Applicant is prepared to enter in to a vegetation protection agreement that prevents vegetation clearing for the establishment of fences.
Connectivity (coordinated projects)			
<p>PO5 In consideration of vegetation on the subject lot(s) and in the landscape adjacent to the subject lot(s), vegetation is retained that:</p>	AO5.1 Clearing occurs in accordance with Table 3. OR	N/A	The proposed development is not a coordinated project.
	AO5.2 Where it can be demonstrated that clearing	N/A	The proposed development is not a coordinated

Performance outcomes	Acceptable outcomes	Response	Comment
<p>(1) is of sufficient size and configured in a way that maintains ecosystem functioning</p> <p>(2) remains in the landscape despite threatening processes</p> <p>or where this is not reasonably possible, maintain the current extent of vegetation.</p>	<p>cannot be avoided, and the extent of clearing has been minimised, an environmental offset is provided for any significant residual impact from clearing of vegetation that forms a connectivity area.</p> <p>Editor's note: Applications for development should identify whether there is likely to be a significant residual impact and a need for an environmental offset having regard to Section 3.2 (Connectivity areas) of the <i>Significant Residual Impact Guideline</i> and the relevant <i>Queensland Environmental Offsets Policy</i>.</p>		project.
Soil erosion			
<p>PO6 Clearing does not result in:</p> <p>(1) mass movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, stream bank erosion, wind erosion, or scalding</p> <p>(2) any associated loss of chemical, physical or biological fertility—including, but not limited to water holding capacity, soil structure, organic matter, soil biology, and nutrients</p> <p>within or outside the lot(s) that are the subject of the application.</p>	<p>AO6.1 Clearing is undertaken in accordance with a sediment and erosion control plan which avoids and minimises land degradation.</p> <p>OR</p>	N/A	Refer to response to AO6.2 below.
	<p>AO6.2 The application is a development application where a local government is the assessment manager.</p>	<input checked="" type="checkbox"/> Achieved	The application is a development application where a local government is the assessment manager.
Salinity			

Performance outcomes	Acceptable outcomes	Response	Comment
P07 Clearing does not contribute to land degradation through: (1) waterlogging, or (2) the salinisation of groundwater, surface water or soil.	A07.1 Clearing does not occur in or within 200 metres of a discharge area or recharge area. OR	N/A	Refer to response to A07.2 below.
	A07.2 Clearing is less than: (1) 2 hectares, or (2) 10 metres wide.	<input checked="" type="checkbox"/> Achieved	Any clearing that is made exempt by the approval would be 10 metres wide associated with boundary fence erection.
Conserving endangered and of concern regional ecosystems			
P08 Maintain the current extent of endangered regional ecosystems and of concern regional ecosystems.	A08.1 Clearing does not occur in: (1) an endangered regional ecosystem, or (2) an of concern regional ecosystem. OR	N/A	Refer to response to A08.2 below.
	A08.2 Clearing in an endangered regional ecosystem or an of concern regional ecosystem does not exceed the width or area prescribed in Table 1. OR	<input checked="" type="checkbox"/> Achieved	The Site is mapped as containing an of concern regional ecosystem within the vicinity of proposed development. The proposed development has been designed to be located within existing cleared areas of the Site. The clearing of regulated vegetation is not expected to be required to facilitate the proposed development, however the development will facilitate the clearing of additional exempt operational work to be carried out, such as clearing that is necessary for essential or routine management, which is expected to be undertaken at areas less than prescribed in

Performance outcomes	Acceptable outcomes	Response	Comment
			Table 1.
	<p>AO8.3 Where it can be demonstrated that clearing cannot be avoided, and the extent of clearing has been minimised, an environmental offset is provided for any significant residual impact from clearing of endangered regional ecosystems and of concern regional ecosystems.</p> <p>Editor's note: Applications for development should identify whether there is likely to be a significant residual impact and a need for an environmental offset having regard to Section 3.1 (Regulated vegetation) of the <i>Significant Residual Impact Guideline</i> and the relevant <i>Queensland Environmental Offsets Policy</i>.</p>	N/A	Refer to response to AO8.2 above.
Essential habitat			
PO9 Maintain the current extent of essential habitat.	<p>AO9.1 Clearing does not occur in an area of essential habitat.</p> <p>OR</p>	N/A	Refer to response to AO9.2 below.
	<p>AO9.2 Clearing in essential habitat does not exceed the widths or areas prescribed in Table 1.</p> <p>OR</p>	<input checked="" type="checkbox"/> Achieved	<p>The Site is mapped as containing an of concern regional ecosystem that is further mapped as being Essential habitat, which is located within the vicinity of proposed development. Notwithstanding, the proposed development has been designed to be located within existing cleared areas of the Site. The clearing of regulated vegetation is not expected to be required to facilitate the proposed development, however the development will facilitate the opportunity for the clearing of additional exempt operational work to be carried out, namely clearing of boundaries to establish a necessary</p>

Performance outcomes	Acceptable outcomes	Response	Comment
			fence. Notwithstanding the above, the Applicant is prepared to enter in to a vegetation protection agreement that prevents vegetation clearing for the establishment of fences.
	AO9.3 Clearing only occurs where an area of essential habitat is isolated and small in size and at risk from threatening processes, for the prescribed species. OR	N/A	Refer to response to AO9.2 above.
	AO9.4 Where it can be demonstrated that clearing cannot be avoided, and the extent of clearing has been minimised, an environmental offset is provided for any significant residual impact from clearing of essential habitat. Editor's note: Applications for development should identify whether there is likely to be a significant residual impact and a need for an environmental offset having regard to Section 3.1 (Regulated vegetation) of the <i>Significant Residual Impact Guideline</i> and the relevant <i>Queensland Environmental Offsets Policy</i> .	<input checked="" type="checkbox"/> Achieved	Refer to response to AO9.2 above.
Acid sulfate soils			
PO10 Clearing activities do not result in disturbance of acid sulfate soils or changes to the hydrology of the location that will either:	AO10.1 Clearing does not occur in land zone 1, land zone 2 or land zone 3. OR	N/A	Refer to response to AO10.3 below.
	AO10.2 Clearing in land zone 1, land zone 2 or land	N/A	Refer to response to AO10.3 below.

Performance outcomes	Acceptable outcomes	Response	Comment
(1) aerate horizons containing iron sulfides, or (2) mobilise acid or metals.	zone 3 in areas below the 5 metre Australian Height Datum only occurs where: (1) it does not involve mechanical clearing (2) the acid sulfate soils are managed consistent with the <i>State Planning Policy</i> , Department of State Development infrastructure and Planning 2014, and with the Soil Management Guidelines in the <i>Queensland Acid Sulfate Soil Technical Manual</i> , Department of Science, Information Technology, Innovation and the Arts, 2014.		
	OR AO10.3 The application is a development application where a local government is the assessment manager.	<input checked="" type="checkbox"/> Achieved	The application is a development application where a local government is the assessment manager.

Table 8.1.5: Extractive industry – Not assessed as the proposed development is not for extractive industry

Table 8.1.6: High value agriculture clearing and irrigated high value agriculture clearing – Not assessed as the proposed development does not involve High value agriculture clearing or Irrigated high value agriculture clearing.

Table 8.1.7: Necessary environmental clearing – Not assessed as the proposed development does not seek to undertake Necessary environmental clearing.

Table 8.1.8: Weed or pest management – Not assessed as the proposed development does not seek to undertake clearing for Weed or pest management.

Table 8.1.9: Thinning – Not assessed as the proposed development does not seek to undertake clearing for Thinning purposes.

Table 8.1.10: Encroachment – Not assessed as the proposed development does not seek to undertake clearing for Thinning purposes.

Table 8.1.11: Fodder – Not assessed as the proposed development does not seek to undertake clearing for Thinning purposes.

Response column key:

☑ Achieved

P/S Performance solution

N/A Not applicable

18.1 Filling, excavation and structures state code

Table 18.1.1: All development

Performance outcomes	Acceptable outcomes	Response	Comment
All development			
PO1 Buildings, services, structures and utilities do not adversely impact on the safety or operation of: (1) state transport corridors (2) future state transport corridors (3) state transport infrastructure Editor's note: For a railway, <i>Section 2.3 – Structures, setbacks, utilities and maintenance of the Guide for Development in a Transport Environment: Rail</i> , Department of Transport and Main Roads, 2015, provides guidance on how to comply with this performance outcome.	AO1.1 Buildings, structures, services and utilities are not located in a railway, future railway land or public passenger transport corridor. AND (1)	☑ Achieved	The Site is not located within proximity to a railway or public passenger transport corridor.
	AO1.2 Buildings and structures are set back horizontally a minimum of three metres from overhead line equipment. AND (2)	N/A	Development as proposed is not located within proximity to overhead line equipment.
	AO1.3 Construction activities do not encroach into a railway or public passenger transport corridor. AND (3)	☑ Achieved	The Site is not located within proximity to a railway or public passenger transport corridor.
	AO1.4 The lowest part of development in or over a railway or future railway land is to be a minimum of: (1) 7.9 metres above the railway track where the proposed development extends along the <u>railway</u> for a distance of less than 40 metres, or (2) 9.0 metres above the railway track where the development extends along the <u>railway</u> for a distance of between 40 and 80 metres. AND (4)	N/A	The Site is not located within proximity to a railway or future railway land.
	AO1.5 Existing authorised access points and access routes to state transport corridors for maintenance and emergency works are maintained, allowing for uninterrupted access at all times. AND (5)	☑ Achieved	The proposed development will not impact on access points or access routes to state transport corridors for maintenance or emergency works.
	AO1.6 Pipe work, services and utilities can be maintained without requiring access to the state transport corridor.	Will comply	Pipe work, services and utilities of the Estate will be able to be maintained without requiring access to the state transport corridor. Detailed design of services and infrastructure

Performance outcomes	Acceptable outcomes	Response	Comment
	AND (6)		required for the Estate will be provided at the Operational Works stage(s) of development).
	AO1.7 Pipe work, services and utilities are not attached to rail transport infrastructure: (1) are not attached to rail transport infrastructure or other rail infrastructure, and (2) do not penetrate through the side of any proposed building element or structure where built to boundary in, over or abutting a railway. AND (7)	<input checked="" type="checkbox"/> Achieved	The Site is not located within proximity to rail transport infrastructure.
	AO1.8 Buildings and structures are set back a minimum of three metres from a railway bridge. AND (8)	<input checked="" type="checkbox"/> Achieved	The Site is not located within proximity to rail transport infrastructure.
	AO1.9 Development below or abutting a railway bridge is to be clear of permanent structures or any other activity that may impede emergency access or works and maintenance of rail transport infrastructure. (9) Editor's note: Temporary activities below or abutting a railway bridge could include, for example, car parking or outdoor storage.	N/A	The Site is not located within proximity to rail transport infrastructure.
	AO1.10 Development above a railway is designed to facilitate ventilation as follows: (1) for development extending above a railway for a distance of less than 80 metres, gaps are provided to ensure natural ventilation, or (2) for development extending above a railway for a distance of more than 80 metres, ventilation shafts are provided. Editor's note: For development extending above a railway for a distance of more than 80 metres, it is recommended that modelling of smoke dispersion should be undertaken by a RPEQ to predict the spread of combustion products and inform the ventilation design. <i>Section 5.1 –</i>	N/A	The Site is not located within proximity to rail transport infrastructure.

Performance outcomes	Acceptable outcomes	Response	Comment
	<i>Development over a railway of the Guide to Development in a Transport Environment: Rail</i> , Department of Transport and Main Roads, 2015, provides guidance on how to comply with this acceptable outcome.		
P02 Development prevents unauthorised access to: (1) state transport corridors, (2) future state transport corridors, (3) state transport infrastructure, by people, vehicles and projectiles. Editor's note: For a railway, <i>Section 2.4 – Preventing unauthorised access of the Guide to Development in a Transport Environment: Rail</i> , Department of Transport and Main Roads, 2015, provides guidance on how to comply with this performance outcome.	AO2.1 Fencing is provided along the property boundary with the railway. Editor's note: Where fencing is provided it is to be in accordance with the railway manager's standards. AND (10)	N/A	The Site is not located within proximity to rail transport infrastructure.
	AO2.2 Accommodation activities with a publicly accessible area located within 10 metres from the boundary of a railway or 20 metres from the centreline of the nearest railway track (whichever is the shorter distance), include throw protection screens for the publicly accessible area as follows: (1) openings of no greater than 25 mm x 25 mm (2) height of 2.4 metres vertically above the highest toe hold if see-through, or 2 metres if non see-through. Editor's note: Expanded metal is considered see-through. AND (11)	N/A	The Site is not located within proximity to rail transport infrastructure.
	AO2.3 Development in or over a railway or future railway land includes throw protection screens. Editor's note: Throw protection screens in a railway or future railway land designed in accordance with the relevant provisions of the <i>Civil Engineering Technical Requirement CIVIL-SR-005 Design of buildings over or near railways</i> , Queensland Rail, 2011, and the <i>Civil Engineering Technical Requirement CIVIL-SR-008 Protection screens</i> , Queensland Rail, 2011, comply with this acceptable outcome. AND (12)	N/A	The Site is not located within proximity to rail transport infrastructure.
	AO2.4 Built to boundary walls and solid fences abutting a railway are protected by an anti-graffiti coating. Editor's note: The <i>Anti-Graffiti Protection Specification MRTS83</i> , Department of Transport and Main Roads,	N/A	The Site is not located within proximity to rail transport infrastructure.

Performance outcomes	Acceptable outcomes	Response	Comment
	2009, provides guidance on how to comply with this acceptable outcome. AND (13)		
	AO2.5 Road barriers are installed along any proposed roads abutting a railway. Editor's note: Road barriers designed in accordance with Queensland Rail Civil Engineering Technical Requirement CIVIL-SR-007 Design and selection criteria for road/rail interface barriers comply with this acceptable outcome. AND (14)	N/A	The Site is not located within proximity to rail transport infrastructure.
	AO2.6 Proposed vehicle manoeuvring areas, driveways, loading areas or carparks abutting a railway include rail interface barriers. Editor's note: A Registered Professional Engineer of Queensland (RPEQ) certified barrier design complies with this acceptable outcome.	N/A	The Site is not located within proximity to rail transport infrastructure.
PO3 Buildings and structures in, over or below a railway or future railway land are able to sustain impacts to their structural integrity in the event of an impact from a derailed train.	AO3.1 Buildings and structures, including piers or supporting elements, located in, over or below a railway or future railway land are designed and constructed in accordance with <i>AS5100 Bridge design, AS 1170 Structural design actions</i> and <i>Civil Engineering Technical Requirement CIVIL-SR-012 Collision protection of supporting elements adjacent to railways</i> , Queensland Rail, 2011.	N/A	The Site is not located within proximity to rail transport infrastructure.
PO4 Buildings and structures in, over, below or within 50 metres of a state-controlled transport tunnel or a future state-controlled transport tunnel have no adverse impact on the structural integrity of the state-controlled transport tunnel. Editor's note: For a railway, <i>Section 2.5 – Tunnels</i> of the <i>Guide to Development in a Transport Environment: Rail</i> , Department of Transport and Main Roads, 2015, provides guidance on how to comply with this performance	AO4.1 Development in, over, below or within 50 metres of a state-controlled transport tunnel or future state-controlled transport tunnel ensures that the tunnel is: (1) not vertically overloaded or affected by the addition or removal of lateral loading (2) not adversely affected as a result of directly or indirectly disturbing groundwater or soil. (15) Editor's note: To demonstrate compliance with this acceptable outcome, it is recommended that a Registered Professional Engineer of Queensland	N/A	The Site is not located within proximity to a State-controlled transport tunnel or Future State-controlled transport tunnel.

Performance outcomes	Acceptable outcomes	Response	Comment
outcome.	(RPEQ) certified geotechnical investigation, earthworks drawings and supporting technical details, and structural engineering drawings and supporting technical details be prepared and submitted with the application.		
<p>P05 Development involving dangerous goods adjacent to a railway or future railway land does not adversely impact on the safety of a railway.</p> <p>Editor's note: <i>Section 2.6 – Dangerous goods and fire safety</i> of the <i>Guide to Development in a Transport Environment: Rail</i>, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this performance outcome.</p>	<p>AO5.1 Development involving dangerous goods, other than hazardous chemicals below the threshold quantities listed in table 5.2 of the <i>State Planning Policy guideline: State interest – emissions and hazardous activities, Guidance on development involving hazardous chemicals</i>, Department of State Development, Infrastructure and Planning, 2013, ensures that impacts on a railway from a fire, explosion, spill, gas emission or dangerous goods incident can be appropriately mitigated.</p> <p>Editor's note: To demonstrate compliance with this acceptable outcome, it is recommended that a risk assessment be undertaken in accordance with <i>Attachment 1: Risk assessment guide</i> of the <i>Guide to Development in a Transport Environment: Rail</i>, Department of Transport and Main Roads, 2015.</p>	N/A	The Site is not located within proximity to rail transport infrastructure and does not involve dangerous goods.
<p>P06 Any part of the development located within 25 metres of a state-controlled road or future state-controlled road minimises the potential to distract drivers and cause a safety hazard.</p>	<p>AO6.1 Advertising devices proposed to be located within 25 metres of a state-controlled road or future state-controlled road are designed to meet the relevant standards for advertising outside the boundaries of, but visible from, a state-controlled road, outlined within the <i>Roadside advertising guide</i>, Department of Transport and Main Roads, 2013.</p>	N/A	No advertising devices are proposed as part of the proposed development.
<p>P07 Filling, excavation and construction does not adversely impact on or compromise the safety or operation of:</p> <ol style="list-style-type: none"> (1) state transport corridors, (2) future state transport corridors, (3) state transport infrastructure. <p>Editor's note: For a railway, <i>Section 2.7 – Filling, excavation and ground disturbance</i> of the <i>Guide to Development in a Transport Environment: Rail</i>, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this performance</p>	<p>AO7.1 Filling and excavation does not undermine, cause subsidence of, or groundwater seepage onto a <u>state</u> transport corridor or future state transport corridor.</p> <p>Editor's note: To demonstrate compliance with this acceptable outcome for a state-controlled road, it is recommended that a filling and excavation report assessing the proposed filling and excavation be prepared in accordance with the requirements of the <i>Road planning and design manual</i>, Department of Transport and Main Roads, 2013.</p> <p>Editor's note: To demonstrate compliance with this acceptable outcome for a state transport corridor, excluding a state-controlled road, it is recommended that the following be submitted with the application:</p>	Will comply	Filling, excavation and construction works will be detailed at operational works stage(s) of development, however are not expected to undermine, cause subsidence of, or groundwater seepage onto a State transport corridor, due to the distance between where development is proposed on the Site and the State-controlled highway (approximately 450 metres).

Performance outcomes	Acceptable outcomes	Response	Comment
outcome.	<p>(1) a RPEQ certified geotechnical investigation</p> <p>(2) RPEQ certified earthworks drawings and supporting technical details</p> <p>(3) RPEQ certified structural engineering drawings and supporting technical details.</p> <p>Editor's note: If a development involves filling and excavation within a state-controlled road, an approval issued by the Department of Transport and Main Roads under section 33 of the <i>Transport Infrastructure Act 1994</i> may be required.</p> <p>AND</p>		
	<p>AO7.2 Development involving excavation, boring, piling or blasting does not result in vibration impacts during construction or blasting which would compromise the safety and operational integrity of a state transport corridor.</p> <p>Editor's note: To demonstrate compliance with this acceptable outcome it is recommended that an RPEQ certified geotechnical report be prepared and submitted with the application.</p> <p>AND</p>	Will comply	Filling, excavation and construction works will be detailed at operational works stage(s) of development, however are not expected to undermine, cause subsidence of, or groundwater seepage onto a State transport corridor, due to the distance between where development is proposed on the Site and the State-controlled highway (approximately 450 metres).
	<p>AO7.3 Development does not store fill, spoil or any other material in a railway.</p>	N/A	The Site is not located within proximity to rail transport infrastructure.
P08 Filling and excavation does not interfere with or impact on existing or future planned services or public utilities on a state-controlled road.	<p>AO8.1 Any alternative service and public utility alignment must satisfy the standards and design specifications of the service or public utility provider, and any costs of relocation are borne by the developer.</p> <p>Editor's note: An approval issued by the Department of Transport and Main Roads under section 33 of the <i>Transport Infrastructure Act 1994</i> may be required.</p>	N/A	No alternative service or public utility alignments are proposed.
P09 Retaining or reinforced soil structures required to contain fill and excavation:	<p>AO9.1 Retaining or reinforced soil structures (including footings, rock anchors and soil nails) are not located in a state transport corridor or future state transport corridor.</p>	Will comply	No retaining or reinforced soil structures are expected to be required within the State transport corridor under this proposal.

Performance outcomes	Acceptable outcomes	Response	Comment
<p>(1) do not encroach on a state transport corridor,</p> <p>(2) are capable of being constructed and maintained without adversely impacting a state transport corridor,</p> <p>(3) do not adversely impact on a state transport corridor through the addition or removal of lateral loads or surcharge loads,</p> <p>(4) are constructed of durable materials which maximise the life of the structure.</p> <p>Editor's note: For a railway, <i>Section 2.7 – Filling, excavation and ground disturbance</i> of the <i>Guide to Development in a Transport Environment: Rail</i>, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this performance outcome.</p>	AND		
	<p>AO9.2 Retaining or reinforced soil structures in excess of an overall height of one metre abutting a state transport corridor are to be designed and certified by a structural RPEQ.</p> <p>Editor's note: To demonstrate compliance with this acceptable outcome, it is recommended that the following be submitted with the application:</p> <ul style="list-style-type: none"> (1) a RPEQ certified geotechnical investigation (2) RPEQ certified earthworks drawings and supporting technical details (3) RPEQ certified structural engineering drawings and supporting technical details. <p>AND</p>	N/A	No retaining or reinforced soil structures are expected to be required abutting the State transport corridor.
	<p>AO9.3 Retaining or reinforced soil structures that are set back less than 750 millimetres from a common boundary with a state-controlled road are certified by a structural RPEQ and designed to achieve a low maintenance external finish.</p> <p>AND</p>	N/A	No retaining or reinforced soil structures will be required within 750 millimetres from the common boundary with the State-controlled road.
	<p>AO9.4 Retaining or reinforced soil structures adjacent to a state-controlled road, and in excess of an overall height of two metres, incorporate design treatments (such as terracing or planting) to reduce the overall height impact.</p> <p>AND</p>	N/A	No retaining or reinforced soil structures are expected to be required to be located adjacent the State transport corridor.
	<p>AO9.5 Construction materials of all retaining or reinforced soil structures have a design life exceeding 40 years, and comply with the specifications approved by a RPEQ.</p> <p>AND</p>	Will comply	<p>Any retaining or reinforced soil structures to contain fill and excavation will be designed and constructed at the operational works stage(s) of development, in accordance with all relevant specifications.</p> <p>It is noted that no retaining or reinforced soil structures are expected to be required within or near to the State transport corridor under this proposal.</p>

Performance outcomes	Acceptable outcomes	Response	Comment
	AO9.6 Temporary structures and batters do not encroach into a railway. AND	☑ Achieved	The Site is not located within proximity to a railway.
	AO9.7 Surcharge loading from vehicles or the stockpiling of materials or soil on retaining or reinforced soil structures adjacent to a state transport corridor or future state transport corridor meet the requirements of <i>AS5100.2 Bridge design—Design loads</i> or a minimum of 10 kPa (whichever is greater). AND	N/A	Stockpiling of materials or soil is not expected to occur under this proposal.
	AO9.8 Excavation or any other works do not remove the lateral load of retaining structures associated with, or adjacent to, a state transport corridor. Editor's note: To demonstrate compliance with this acceptable outcome, it is recommended that a RPEQ certified geotechnical and structural assessment be prepared and submitted with the application.	Will comply	No filling or excavation works are expected to be required on land within proximity to a State transport corridor.
PO10 Filling and excavation does not cause siltation and erosion run-off from the property, or wind blown dust nuisance onto a state-controlled road.	AO10.1 Compaction of fill is carried out in accordance with the requirements of <i>AS 1289.0 2000 – Methods of testing soils for engineering purposes</i> .	Will comply	Compaction of fill will be undertaken during Operational Works stage(s) of development in accordance with the relevant standards.
PO11 Where the quantity of fill or excavated spoil material being imported or exported for a development exceeds 10 000 tonnes, and haulage will be on a state-controlled road, any impact on the infrastructure is identified and mitigation measures implemented.	AO11.1 The impacts on the state-controlled road network are identified, and measures are implemented to avoid, reduce or compensate the effects on the asset life of the state-controlled road. Editor's note: It is recommended that a pavement impact assessment report be prepared to address this acceptable outcome. Guidance for preparing a pavement impact assessment is set out in <i>Guidelines for assessment of road impacts of development (GARID)</i> , Department of Transport and Main Roads, 2006.	Will comply	Filling and excavation works will be detailed at the operational works stage of development, although it is not expected that development will impact upon the State-controlled road. Notwithstanding, any identified impacts on El Arish Mission Beach Road as a result of importing fill or excavated spoil material will be mitigated accordingly.
PO12 Filling and excavation associated with providing a driveway crossover to a state-controlled road does not compromise the operation or capacity of	AO12.1 Filling and excavation associated with the design of driveway crossovers complies with the relevant Institute of Public Works Engineering Australia Queensland (IPWEAQ) standards.	Will comply	All driveway crossovers within the Estate will be designed and constructed in accordance with the relevant standards. It is noted however that no driveway crossovers to El Arish Mission Beach Road are proposed.

Performance outcomes	Acceptable outcomes	Response	Comment
existing drainage infrastructure.	Editor's note: The construction of any crossover requires the applicant to obtain a permit to work in the state-controlled road corridor under section 33 of the <i>Transport Infrastructure Act 1994</i> and a section 62 approval under the <i>Transport Infrastructure Act 1994</i> for the siting of the access and associated works.		
PO13 Fill material does not cause contamination from the development site onto a state-controlled road.	AO13.1 Fill material is free of contaminants including acid sulphate content, and achieves compliance with AS 1289.0 – Methods of testing soils for engineering purposes and AS 4133.0-2005 – Methods of testing rocks for engineering purposes.	Will comply	Filling will be undertaken during the Operational Works stage(s) of development. Notwithstanding, contaminated material is not proposed to be used as fill for the proposed development.
PO14 Vibration generated through fill compaction does not result in damage or nuisance to a state-controlled road.	AO14.1 Fill compaction does not result in any vibrations beyond the site boundary, and is in accordance with AS 2436–2010 – <i>Guide to noise and vibration control on construction, demolition and maintenance sites</i> .	Will comply	Filling will be undertaken during the Operational Works stage(s) of development. Notwithstanding, contaminated material is not proposed to be used as fill for the proposed development.

18.2 Stormwater and drainage impacts on state transport infrastructure state code

Table 18.2.1: All development

Response column key:

☑ Achieved

P/S Performance solution

Performance outcomes	Acceptable outcomes	Response	Comment
Stormwater and drainage management			
PO1 Stormwater management for the development must ensure there is no worsening of, and no actionable nuisance in relation to peak discharges, flood levels, frequency or duration of flooding, flow velocities, water quality, ponding, sedimentation and scour effects on an existing or future state transport corridor for all flood and stormwater events that exist prior to development, and up to a 1 per cent annual exceedance probability.	AO1.1 The development does not result in stormwater or drainage impacts or actionable nuisance within an existing or future state transport corridor. Editor's note: It is recommended that basic stormwater information is to be prepared to demonstrate compliance with AO1.1. OR	☑ Achieved	Detailed flood modelling undertaken with respect to the proposed development demonstrates there will only be minimal worsening of peak discharges upstream of the property. Stormwater impacts from the proposed development will not impact upon El Arish Mission Beach Road. Refer Appendix J of the Town Planning Report for detailed flood modelling of the site.
	AO1.2 A stormwater management statement certified by an RPEQ demonstrates that the development will achieve a no worsening impact or actionable nuisance on an existing or future state transport corridor. OR	N/A	Refer to response to AO1.1 above.
	AO1.3 A stormwater management plan certified by an RPEQ demonstrates that the development will achieve a no worsening impact or actionable nuisance on an existing future state transport corridor. OR	N/A	Refer to response to AO1.1 above.
	AO1.4 For development on premises within 25 metres of a railway, a stormwater management plan certified by an RPEQ demonstrates that: <ol style="list-style-type: none"> (1) the development will achieve a no worsening impact or actionable nuisance on the railway (2) the development does not cause stormwater, roofwater, ponding, floodwater or any other drainage to be directed to, increased or concentrated on the railway (3) the development does not impede any drainage, stormwater or floodwater flows from the railway (4) stormwater or floodwater flows have been designed to: <ol style="list-style-type: none"> (a) maintain the structural integrity of the light rail transport infrastructure (b) avoid scour or deposition 	N/A	The Site is not located within proximity to a railway.

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>(5) additional railway formation drainage necessitated by the development is located within the premises where the development is carried out</p> <p>(6) retaining structures for excavations abutting the railway corridor provide for drainage.</p>		
Lawful point of discharge			
PO2 Stormwater run-off and drainage are directed to a lawful point of discharge to avoid adverse impacts on a future or existing state transport corridor.	<p>AO2.1 Where stormwater run-off is discharged to a state transport corridor, the discharge is to a lawful point of discharge in accordance with section 1.4.3 of the <i>Road drainage manual</i>, Department of Transport and Main Roads, 2010 and section 3.02 of <i>Queensland urban drainage manual</i>, Department of Energy and Water Supply, 2013.</p> <p>OR</p>	N/A	Stormwater run-off is not proposed to be discharged to a state transport corridor under this proposal.
	<p>AO2.2 For development on premises within 25 metres of a railway, approval from the relevant railway manager for the railway, as defined in the <i>Transport Infrastructure Act 1994</i>, schedule 6 has been gained to verify the lawful point of discharge for stormwater onto the railway.</p> <p>AND</p>	N/A	The Site is not located within proximity to a railway.
	<p>AO2.3 Development does not cause a net increase in or concentration of stormwater or floodwater flows discharging onto the state transport corridor during construction or thereafter.</p> <p>AND</p>	<input checked="" type="checkbox"/> Achieved	<p>Detailed flood modelling undertaken with respect to the proposed development demonstrates there will only be minimal worsening of peak discharges upstream of the property. Stormwater impacts from the proposed development will not impact upon El Arish Mission Beach Road.</p> <p>Refer Appendix J of the Town Planning Report for detailed flood modelling of the site.</p>
	<p>AO2.4 Development does not create any additional points of discharge or changes to the condition of an existing lawful point of discharge to the state transport corridor.</p>	<input checked="" type="checkbox"/> Achieved	<p>Detailed flood modelling undertaken with respect to the proposed development demonstrates there will only be minimal worsening of peak discharges upstream of the property. Stormwater impacts from the proposed development will not impact upon El Arish Mission Beach Road.</p> <p>Refer Appendix J of the Town Planning Report for detailed flood modelling of the site.</p>
Sediment and erosion management			
PO3 Run-off from upstream development is managed to ensure that sedimentation	AO3.1 Development with a moderate to high risk of erosion incorporates erosion and sediment control	Will comply	A sediment erosion control plan will be developed for all proposed earthworks within the site at the Operational

Performance outcomes	Acceptable outcomes	Response	Comment
and erosion do not cause siltation of stormwater infrastructure in the state transport corridor.	<p>measures.</p> <p>Editor's note: For a state-controlled road where a development has a moderate to high risk of erosion as per section 13.5 of the <i>Road drainage manual</i>, Department of Transport and Main Roads, 2010, an erosion and sedimentation control plan should be provided to support a stormwater management plan.</p>		Works stage(s) of development.

19.1 Access to state-controlled roads state code

Response column key:	
<input checked="" type="checkbox"/>	Achieved
P/S	Performance solution
N/A	Not applicable

Table 19.1.1: All development

Performance outcomes	Acceptable outcomes	Response	Comment
Location of the direct vehicular access to the state-controlled road			
PO1 Any road access location to the state-controlled road from adjacent land does not compromise the safety and efficiency of the state-controlled road.	AO1.1 Any road access location to the state-controlled road complies with a decision under section 62 of the TIA. OR	N/A	Refer to response R1.4 below.
	AO1.2 Development does not propose a new or temporary road access location, or a change to the use or operation of an existing permitted road access location to a state-controlled road. OR	N/A	Refer to response R1.4 below.
	AO1.3 Any proposed road access location for the development is provided from a lower order road where an alternative to the state-controlled road exists. OR all of the following acceptable outcomes apply	N/A	Refer to response R1.4 below.
	AO1.4 Any new or temporary road access location, or a change to the use or operation of an existing permitted road access location, demonstrates that the development: <ul style="list-style-type: none"> (1) does not exceed the acceptable level of service of a state-controlled road (2) meets the sight distance requirements outlined in Volume 3, parts 3, 4, 4A, 4B and 4C of the <i>Road planning and design manual</i>, 2nd edition, Department of Transport and Main Roads, 2013 (3) does not exceed the acceptable operation of an intersection with a state-controlled road, including the degree of saturation, delay, queuing lengths and intersection layout (4) is not located within and/or adjacent to an existing or planned intersection in accordance with Volume 3, parts 4, 4A, 4B and 4C of the <i>Road planning and design manual</i>, 2nd edition, Department of Transport and Main Roads, 2013 (5) does not conflict with another property's road access location and operation. Editor's note: To demonstrate compliance with this acceptable outcome, it is recommended a traffic impact	P/S	<p>Access to the Site is proposed to be via El Arish Mission Beach Road, in the location of the existing access easement, which currently provides access to existing Lots 1-5 on SP202686. The existing access easement is proposed to be cancelled and the internal road, providing access to the Estate, opened under this proposal.</p> <p>The proposed development, being for 10 eco-residential lots is not expected to compromise the safe and efficient management or operation of the road.</p> <p>Road design will be detailed as part of the Operational Works stage of the development. Any upgrade works required to be undertaken will be designed in accordance with the relevant standards.</p>

Performance outcomes	Acceptable outcomes	Response	Comment
	assessment be developed in accordance with Chapters 1, 4, 6, 7, 8 and 9 of the <i>Guidelines for assessment of road impacts of development (GARID)</i> , Department of Main Roads, 2006, and the requirements of Volume 3, parts 4, 4A, 4B and 4C of the <i>Road planning and design manual</i> , 2nd edition, Department of Transport and Main Roads, 2013, SIDRA analysis or traffic modelling. AND		
	AO1.5 Development does not propose a new road access location to a limited access road. Editor's note: Limited access roads are declared by the chief executive under section 54 of the TIA. Details can be accessed by contacting the appropriate DTMR regional office.	N/A	The road is not known to be a limited access road.
Number of road accesses to the state-controlled road			
PO2 The number of road accesses to the state-controlled road maintains the safety and efficiency of the state-controlled road.	AO2.1 Development does not increase the number of road accesses to the state-controlled road. AND	<input checked="" type="checkbox"/> Achieved	Development does not increase the number of accesses to the State-controlled road – it relies on an existing access built to road standard.
	AO2.2 Where multiple road accesses to the premises exist, access is rationalised to reduce the overall number of road accesses to the state-controlled road. AND	N/A	Multiple road accesses to the premises do not exist.
	AO2.3 Shared or combined road accesses are provided for adjoining land having similar uses to rationalise the overall number of direct accesses to the state-controlled road. Editor's note: Shared road accesses may require easements to provide a legal point of access for adjacent lots. If this is required, then the applicant must register reciprocal access easements on the titles of any lots for the shared access.	<input checked="" type="checkbox"/> Achieved	Access to the Site is proposed to be via El Arish Mission Beach Road, in the location of the existing access easement, which currently provides access to existing Lots 1-5 on SP202686. The existing access easement is proposed to be cancelled and the internal road, providing access to the Estate, opened under this proposal.
Design vehicle and traffic volume			
PO3 The design of any road access maintains the safety and efficiency of the state-controlled road.	AO3.1 Any road access meets the minimum standards associated with the design vehicle. Editor's note: The design vehicle to be considered is the	Will comply	Road design will be detailed as part of the Operational Works stage for the development in accordance with the relevant standards.

Performance outcomes	Acceptable outcomes	Response	Comment
	same as the design vehicle set under the relevant local government planning scheme. AND		
	AO3.2 Any road access is designed to accommodate the forecast volume of vehicle movements in the peak periods of operation or conducting the proposed use of the premises. AND	Will comply	Road design will be detailed as part of the Operational Works stage for the development in accordance with the relevant standards.
	AO3.3 Any road access is designed to accommodate 10 year traffic growth past completion of the final stage of development in accordance with GARID. AND	Will comply	Road design will be detailed as part of the Operational Works stage for the development in accordance with the relevant standards.
	AO3.4 Any road access in an urban location is designed in accordance with the relevant local government standards or <i>IPWEAQ R-050, R-051, R-052 and R-053 drawings</i> . AND	N/A	The Site is not located within an urban location.
	AO3.5 Any road access not in an urban location is designed in accordance with Volume 3, parts 3, 4 and 4A of the <i>Road planning and design manual</i> , 2nd edition, Department of Transport and Main Roads, 2013.	Will comply	Road design will be detailed as part of the Operational Works stages of development in accordance with the relevant standards.
Internal and external manoeuvring associated with direct vehicular access to the state-controlled road			
PO4 Turning movements for vehicles entering and exiting the premises via the road access maintain the safety and efficiency of the state-controlled road.	AO4.1 The road access provides for left in and left out turning movements only. AND	☑ Achieved	The current access does not limit movements to left in and left out; and the proposal seeks to maintain all movements.
	AO4.2 Internal manoeuvring areas on the premises are designed so the design vehicle can enter and leave the premises in a forward gear at all times. Editor's note: The design vehicle to be considered is the same as the design vehicle set under the relevant local government planning scheme.	☑ Achieved	Cul-de-sacs are proposed as part of the internal road network, allowing for all vehicles to enter and leave in forward gear.
PO5 On-site circulation is suitably designed to accommodate the design vehicle associated with the proposed land use, in order to ensure that there is no impact on the safety and efficiency of the state-controlled road.	AO5.1 Provision of on-site vehicular manoeuvring space is provided to ensure the flow of traffic on the state-controlled road is not compromised by an overflow of traffic queuing to access the site in accordance with <i>AS2890 – Parking facilities</i> . AND	P/S	Ten eco-residential lots will be provided within Cassowary Rise Eco-residential Estate. It is therefore anticipated that an overflow of traffic queuing to access the site will not occur. Notwithstanding, road design will be detailed as part of the operational works stage for the development in accordance with the Australian Standard and in way as to not

Performance outcomes	Acceptable outcomes	Response	Comment
			compromise the safety or efficiency of El Arish Mission Beach Road.
	AO5.2 Mitigation measures are provided to ensure that the flow of traffic on the state-controlled road is not disturbed by traffic queuing to access the site.	P/S	The proposed subdivision will not result in traffic queuing on the State-controlled road.
Vehicular access to local roads within 100 metres of an intersection with a state-controlled road			
PO6 Development having road access to a local road within 100 metres of an intersection with a state-controlled road maintains the safety and efficiency of the state-controlled road.	AO6.1 The road access location to the local road is located as far as possible from where the road intersects with the state-controlled road and accommodates existing operations and planned upgrades to the intersection or state-controlled road. AND	N/A	Access to the proposed development is not within 100 metres of an intersection with El Arish Mission Beach Road.
	AO6.2 The road access to the local road network is in accordance with Volume 3, parts 3, 4 and 4A of the <i>Road planning and design manual</i> , 2nd edition, Department of Transport and Main Roads, 2013, and is based on the volume of traffic and speed design of both the local road and intersecting state-controlled road for a period of 10 years past completion of the final stage of development. AND	N/A	Access to the proposed development is not within 100 metres of an intersection with El Arish Mission Beach Road.
	AO6.3 Vehicular access to the local road and internal vehicle circulation is designed to remove or minimise the potential for vehicles entering the site to queue in the intersection with the state-controlled road or along the state-controlled road itself.	N/A	Access to the proposed development is not within 100 metres of an intersection with El Arish Mission Beach Road.

19.2 Transport infrastructure and network design state code

Response column key:

- ☒ Achieved
- P/S Performance solution
- N/A Not applicable

Table 19.2.1: All development

Performance outcomes	Acceptable outcomes	Response	Comment
All state transport infrastructure – except state-controlled roads			
PO1 Development does not compromise the safe and efficient management or operation of state transport infrastructure or transport networks. Editor's note: To demonstrate compliance with this performance outcome, it is recommended that a traffic impact assessment be prepared. A traffic impact assessment should identify any upgrade works required to mitigate impacts on the safety and operational integrity of the state transport corridor.	No acceptable outcome is prescribed.	N/A	The Site is not within proximity to state transport infrastructure, other than a State-controlled road.
PO2 Development does not compromise planned upgrades to state transport infrastructure or the development of future state transport infrastructure in future state transport corridors. Editor's note: Written advice from DTMR advising that there are no planned upgrades of state transport infrastructure or future state transport corridors that will be compromised by the development will assist in addressing this performance outcome.	AO2.1 The layout and design of the proposed development accommodates planned upgrades to state transport infrastructure. AND	N/A	The Site is not within proximity to state transport infrastructure, other than a State-controlled road.
	AO2.2 The layout and design of the development accommodates the delivery of state transport infrastructure in future state transport corridors. Editor's note: To demonstrate compliance with this acceptable outcome, it is recommended that a traffic impact assessment be prepared.	N/A	The Site is not within proximity to state transport infrastructure, other than a State-controlled road.
PO3 Development does not adversely impact on the safety of a railway crossing.	AO3.1 Development does not require a new railway crossing. OR	N/A	The Site is not located within proximity to rail infrastructure.
	AO3.2 A new railway crossing is grade separated. OR	N/A	The Site is not located within proximity to rail infrastructure.
	AO3.3 Impacts to level crossing safety are mitigated. Editor's note: To demonstrate compliance with this acceptable outcome, it is recommended that a traffic impact assessment be prepared. An impact on a level crossing may require an Australian Level Crossing Assessment Model (ALCAM) assessment to be undertaken. <i>Section 2.2 – Railway crossing</i>	N/A	The Site is not located within proximity to rail infrastructure.

Performance outcomes	Acceptable outcomes	Response	Comment
	<i>safety of the Guide to Development in a Transport Environment: Rail</i> , Department of Transport and Main Roads, 2015, provides guidance on how to comply with this acceptable outcome. AND		
	AO3.4 Upgrades to a level crossing are designed and constructed in accordance with <i>AS1742.7 – Manual of uniform traffic control devices, Part 7: Railway crossings</i> and applicable rail manager standard drawings. AND	N/A	The Site is not located within proximity to rail infrastructure.
	AO3.5 Access points achieve sufficient clearance from a level crossing in accordance with <i>AS1742.7 – Manual of uniform traffic control devices, Part 7: Railway crossings</i> by providing a minimum clearance of 5 metres from the edge running rail (outer rail) plus the length of the largest vehicle anticipated on-site. AND	N/A	The Site is not located within proximity to rail infrastructure.
	AO3.6 On-site vehicle circulation is designed to give priority to entering vehicles at all times.	N/A	The Site is not located within proximity to rail infrastructure.
State-controlled roads			
PO4 Development does not compromise the safe and efficient management or operation of state-controlled roads. Editor's note: A traffic impact assessment will assist in addressing this performance outcome.	No acceptable outcome is prescribed.	P/S (No acceptable outcome prescribed)	Access to the Site is proposed to be via El Arish Mission Beach Road, a State-controlled road. The proposed development, being for 10 eco-residential lots is not expected to compromise the safe and efficient management or operation of the road. Due to the low intensity nature of the proposed development, a Traffic Impact Assessment has not been prepared in this instance.
PO5 Development does not compromise planned upgrades of the state-controlled road network or delivery of future state-controlled roads. Editor's note: Written advice from DTMR that there are no planned upgrades of state-controlled roads or future state-controlled roads which will be compromised by the development will assist in addressing this performance outcome.	AO5.1 The layout and design of the development accommodates planned upgrades of the state-controlled road AND	N/A	There are no upgrades identified on the SARA DA Mapping tool as being planned in the vicinity of the development on El Arish Mission Beach Road (as at 27 July 2015).
	AO5.2 The layout and design of the development accommodates the delivery of future state-controlled roads.	N/A	There are no Future State-controlled roads identified on the SARA DA Mapping tool as being planned in the vicinity of the proposed development (as at 27 July 2015).

Performance outcomes	Acceptable outcomes	Response	Comment
	Editor's note: To demonstrate compliance with this acceptable outcome, it is recommended that a traffic impact assessment be prepared.		
PO6 Upgrade works on, or associated with, the state-controlled road network are undertaken in accordance with applicable standards.	AO6.1 Upgrade works for the development are consistent with the requirements of the <i>Road planning and design manual</i> , 2 nd edition, Department of Transport and Main Roads, 2013. AND	Will comply	Road design will be detailed as part of the Operational Works stage of the development. Any upgrade works required to be undertaken will be designed in accordance with the relevant standards; however, it is understood that the existing access was constructed consistent with road standards at the time of construction.
	AO6.2 The design and staging of upgrade works on or associated with the state-controlled road network are consistent with planned upgrades.	N/A	There are no upgrades identified on the SARA DA Mapping tool as being planned in the vicinity of the development on El Arish Mission Beach Road (as at 27 July 2015).
PO7 Development does not impose traffic loadings on the state-controlled road network which could be accommodated on the local road network.	AO7.1 New lower order roads do not connect directly to a state-controlled road. AND	Performance solution	A new, lower-order internal road within the estate will provide access to the site via El Arish Mission Beach Road, in the location of the existing access easement, which currently provides access to existing Lots 1-5 on SP202686. Due to the small size of the boutique development (proposing 10 lots), it is considered that extra traffic loadings generated by the development will be minimal.
	AO7.2 The layout and design of the development directs traffic generated by the development to use lower order roads.	Performance solution	Refer to response to AO7.1 above.

El Arish Mission Beach Road, Maria
Creeks

APPENDIX

I

CODE RESPONSES

Cassowary Coast Regional planning scheme codes

Rural Zone Code

Environmental Management and Conservation Zone Code

Dwelling House Code

Reconfiguring a Lot Code

Bushfire Hazard Code

Environmental Significance Code

Flood Hazard Code

Coastal Protection Code – not assessed due to the Sites distance from the coast.

Waterway Corridors and Wetlands Code

6.2.4 Rural Code

Performance outcomes	Acceptable outcomes	Response
Amenity		
PO1 Buildings and other structures do not have a detrimental impact on the amenity of the locality.	AO1.1 Buildings and other structures do not exceed: (a) a maximum height of 9.5 metres; (b) a maximum of 2 storeys.	R1.1 Performance solution The Cassowary Rise Eco-Residential Estate Code limits total building height to 10.5 metres (or two storeys) on site. The low-rise built form of the eco-residential dwellings promoted within the code will result in minimal detrimental impacts on surrounding land uses.
	AO1.2 Buildings and other structures are set back at least: (a) 6 metres from the street frontage where fronting a private road; (b) where the lot is 4,000m ² or less in area, 10 metres from the street frontage when fronting a public road; or (c) where the lot is greater than 4,000m ² in area, 20 metres from the street frontage when fronting a public road.	R1.2 Performance solution The Cassowary Rise Eco-Residential Estate Code stipulates that the building envelope of any building will not extend beyond the building envelope shown on Map 2 – Development Parameters of the POD. Notwithstanding, buildings are required under the code to be setback appropriate distances to road infrastructure and maintain the amenity of the locality.
	AO1.3 Buildings and other structures are set back at least 10 metres from any side and rear boundaries.	R1.3 Performance solution Refer to response R1.2 above.
	AO1.4 Buildings used for residential activities must be located: (a) at least 20 metres from a cane railway line; (b) at least 40 metres from a cane railway siding or cane bin loading point.	R1.4 Not applicable The Site is not located within proximity to cane rail infrastructure.

	AO1.5 Buildings not used for residential activities must be located: (a) at least 10 metres from a cane railway line; (b) at least 20 metres from a cane railway siding or cane bin loading point.	R1.5 Not applicable Refer to response R1.4 above.
	AO1.6 Residential activities are designed to incorporate architectural/design elements detailed in Planning Scheme Policy SC6.2 Building design.	R1.6 Will comply The POD for the Estate provides specific urban design and built form guidelines to ensure that future development maintains the desired scale and type of development considered to be suitable for the area and the nature of the estate, being for an eco-residential estate. The provisions of the POD align with the objectives of Planning Scheme Policy SC6.2 Building Design.
Sensitive land uses		
PO2 Sensitive land uses are appropriately separated from agricultural activities to minimise adverse impacts such as chemical spray drift, odour, noise, dust, fire, smoke and ash.	AO2.1 Where a sensitive land use, other than a dwelling, house, is proposed on land that adjoins or is within 400 metres of an agricultural activity: (a) the sensitive land use must be located at least 300 metres from any agricultural activity, if the land between the activities is cleared, cropped or improved pasture; (b) the sensitive land use must be located at least 40 metres from any agricultural activity, if the land between the activities is vegetated; (c) where the buffer specified in (a) or (b) above is located within the lot containing the sensitive land use, a building footprint must be nominated that is not located within that buffer.	R2.1 Not applicable No sensitive land uses other than Dwelling house(s) are proposed.
PO3 Sensitive land uses are appropriately separated from industrial activities to prevent exposure to industrial air, noise and odour emissions that impact on human health, wellbeing or amenity.	AO3.1 A site used for a sensitive land use is not located within 250 metres of a site used for medium impact industry.	R3.1 Complies The Site is not located within 250 metres of medium impact industry.
	AO3.2 A site used for a sensitive land use is not located within 500 metres of a site used for high impact industry.	R3.2 Complies The Site is not located within 250 metres of high impact industry.

	AO3.3 A site used for a sensitive land use is not located within 1.5 kilometres of a site used for special industry.	R3.2 Complies The Site is not located within 500 metres of special industry.
PO4 Development is not exposed to potential impacts from special industry that will affect human health, wellbeing, human safety or amenity.	No acceptable outcome prescribed.	R4 Performance solution (no acceptable outcome prescribed) The Site is not located within 250 metres of special industry.
PO5 Development must not result in a sensitive land use being exposed to industrial air, noise and odour emissions that impact on human health, wellbeing and amenity.	AO5.1 The use is designed to ensure that: (a) the indoor noise objectives set out in the <i>Environmental Protection (Noise) Policy 2008</i> are met; (b) the air quality objectives in the <i>Environmental Protection (Air) Policy 2008</i> are met.	R5.1 Performance solution The Site is not located within proximity to industrial activity and is not expected to be exposed to industrial air, noise and odour emissions that impact on human health, wellbeing and amenity.
	AO5.2 Noxious and offensive odours are not experienced at the location of sensitive land uses.	R5.2 Complies The Site is not located within proximity to industrial activity and is not expected to be exposed to industrial air, noise and odour emissions that impact on human health, wellbeing and amenity.
PO6 Development for a sensitive land use must incorporate measures to protect that development from the impacts of agricultural activities such as chemical spray drift, odour,	No acceptable outcome prescribed.	R6.1 Performance solution (no acceptable outcome prescribed) Vegetation surrounding the Site is expected to protect future dwellings from the impacts of agricultural activities.
PO7 Sensitive land uses are sufficiently separated from major electricity infrastructure or substations to minimise the likelihood of nuisance or complaint.	AO7.1 Sensitive land uses maintain the following separation distances from a substation or easement for major electricity infrastructure: (a) 20 metres for transmission lines up to 132 kilovolts; (b) 30 metres for transmission lines between 133 kilovolts and 275 kilovolts; (c) 40 metres for transmission lines exceeding 275 kilovolts.	R7.1 Not applicable The Site is not located within proximity to transmission lines.

Diversification		
PO8 Development that is not for an agricultural activity does not interfere with the ongoing use of land for agricultural activities and ensures the ongoing viability of agricultural activities in the locality.	AO8.1 A material change of use that is not an agricultural activity occurs in an existing building or on land not identified as ALC Class A and B land on Agricultural Land Overlay Map (OM-002).	R8.1 Does not comply Although classed as Agricultural Land (Classes A and B), the Site currently has little to no agricultural value, and retains considerable vegetation. An Agricultural Land Report was prepared for the Site by Rural and Environmental Resources in accordance with the requirements of the Planning Guidelines for 'The Identification of Good Quality Agricultural Land' (DPI and DHLGP) as recommended in State Planning Policy 1/92 (refer Appendix I – Agricultural Land Report). The report concludes that the subject land is not 'capable of sustainable use for agriculture with a reasonable level of inputs', as biophysical limitations, locational restraints and the size and fragmentation of the Site are not able to be resolved. Accordingly, the Site is not viewed as being agriculturally viable. Further discussion in respect of the above is provided at Section 7 of the Town Planning Report.
Environmental values		
PO9 Clearing of vegetation is avoided to the extent practicable, having regard to the purpose of the code, and the disturbance of areas of environmental significance is minimised.	No acceptable outcome prescribed.	R9.1 Performance solution (no acceptable outcome prescribed) Development is proposed on parts of the land that are already cleared.
Traffic and access		
PO10 Vehicular traffic generated by the development does not conflict with local or through traffic and will not have a detrimental impact on the safety and amenity of the locality.	No acceptable outcome prescribed.	R10.1 Performance solution (no acceptable outcome prescribed) The proposed development is for Reconfiguring a Lot to create 10 eco-residential lots. Due to the scale of the development, vehicular traffic generated is not expected to conflict with the local traffic or have an impact of the safety or amenity of the locality.

PO11 Development mitigates the impact of rail and road traffic noise to provide for an acceptable level of amenity.	No acceptable outcome prescribed.	R11.1 Performance solution (no acceptable outcome prescribed) The proposed development is located approximately 400 metres from the El Arish Mission Beach Road, which is not expected to impact upon the amenity of the Estate.
Future bypass corridors		
PO12 The Innisfail, Tully and Cardwell future bypass corridors are protected from further development.	AO12.1 Development other than for an agricultural activity does not occur within a future bypass corridor as shown on Zoning Maps (ZM-001 to ZM-021).	R12.1 Not applicable The Site is not located within a future bypass corridor.
Pest management		
PO13 The development site must be kept free of pest plants and animals.	AO13.1 The development site does not contain: (a) class 1 or 2 pests identified in the <i>Land Protection (Pest and Stock Route Management) Act 2002</i> ; (b) local pests identified in Planning Scheme Policy SC6.4 Landscaping.	R13.1 Performance solution Weeds discovered onsite will be managed at the Operational Works stage. A Landscaping Plan will be provided to Council as part of the Operational Works stage of the development. Notwithstanding, the Cassowary Rise Eco-Residential Estate POD prescribes that street landscaping feature plant species suitable for the location.

6.2.2 Environmental management and conservation zone code

Performance outcomes	Acceptable outcomes	
Amenity		
PO1 Buildings and other structures are of an appropriate design, scale and location so as to: <ul style="list-style-type: none"> (a) blend in with the surrounding environment; (b) avoid any detrimental impact on the amenity of the locality; (c) avoid any detrimental impact on surrounding land uses; (d) minimise the clearing of native vegetation. 	AO1.1 Buildings and other structures do not exceed: <ul style="list-style-type: none"> (a) a maximum height of 9.5 metres; (b) a maximum of 2 storeys. 	R1.1 Not applicable Areas of the Site zoned Environmental management and conservation align with land designated as Cassowary Conservation Precinct and Cassowary Corridor Precinct under the POD for the Estate. No development within these precincts is proposed as part of this development. With regard to future development, the Cassowary Rise Eco-residential Code limits total building height in the Conservation Precinct to 10.5 metres (or two storeys) on site, which is considered to be appropriate for Site and surrounding area. No buildings or structures are permitted within the Cassowary Corridor Precinct, which is protected under
	AO1.2 Buildings and other structures are set back at least: <ul style="list-style-type: none"> (a) 6 metres from the street frontage where fronting a private road; (b) where the lot is 4,000m² or less in area, 10 metres from the street frontage when fronting a public road; or (c) where the lot is greater than 4,000m² in area, 20 metres from the street frontage when fronting a public road. 	R1.2 Not applicable Areas of the Site zoned Environmental management and conservation align with land designated as Cassowary Conservation Precinct and Cassowary Corridor Precinct under the POD for the Estate. No development within these precincts is proposed as part of this development. With regard to future development, the Cassowary Conservation Precinct requires that buildings must provide for setbacks that are appropriate for the cleared use of cleared areas, local character of the area and to achieve separate from neighbouring properties, which is consistent with the requirements detailed in PO1. No buildings or structures are permitted within the Cassowary Corridor Precinct, which is protected under environmental covenant.

<p>AO1.3 Buildings and other structures are set back at least 10 metres from any side and rear boundaries.</p>	<p>R1.3 Not applicable Refer to response R1.2 above.</p>
<p>AO1.4 Buildings used for residential activities must be located: (a) at least 20 metres from a cane railway line; (b) at least 40 metres from a cane railway siding or cane bin loading point.</p>	<p>R1.4 Not applicable The Site is not located within proximity to cane rail infrastructure.</p>
<p>AO1.5 Buildings not used for residential activities must be located: (a) at least 10 metres from a cane railway line; (b) at least 20 metres from a cane railway siding or cane bin loading point.</p>	<p>R1.5 Not applicable Refer to response R1.4 above.</p>
<p>AO1.6 Development is limited to existing cleared areas of the site and the maximum combined gross floor area of all buildings located within the existing cleared area/s is no more than 400m².</p>	<p>R1.6 Not applicable Areas of the Site zoned Environmental management and conservation align with land designated as Cassowary Conservation Precinct and Cassowary Corridor Precinct under the POD for the Estate. No development within these precincts is proposed as part of this development.</p> <p>With regard to future development, the Cassowary Conservation Precinct requires that the cumulative Gross Floor Area (GFA) of Environment facility and / or Nature based tourism development does not exceed 3,000m². Notwithstanding, setback requirements under the POD Code, as detailed in R1.2 above, requires setbacks that are appropriate for the cleared use of cleared areas, local character of the area and to achieve separate from neighbouring properties, which is consistent with the requirements detailed in PO1.</p> <p>No buildings or structures are permitted within the Cassowary Corridor Precinct, which is protected under environmental covenant.</p>

	<p>AO1.8 Residential activities are designed to incorporate architectural/design elements detailed in Planning Scheme Policy SC6.2 Building design.</p>	<p>R1.8 Not applicable Areas of the Site zoned Environmental management and conservation align with land designated as Cassowary Conservation Precinct and Cassowary Corridor Precinct under the POD for the Estate. No residential development within these precincts is proposed as part of this development.</p> <p>With regard to future development, the POD for the estate discourages residential development within the Cassowary Conservation Precinct however buildings within the precinct are required to incorporate natural ventilation and natural light, consistent with the requirements of PSP SC6.2 Building Design. No buildings or structures are permitted within the Cassowary Corridor Precinct, which is protected under environmental covenant.</p>
Sensitive land uses		
<p>PO2 Sensitive land uses are appropriately separated from agricultural activities to minimise adverse impacts such as chemical spray drift, odour, noise, dust, fire, smoke and ash.</p>	<p>AO2.1 Where a sensitive land use, other than a dwelling house, is proposed on land that adjoins or is within 400 metres of rural zoned land:</p> <ul style="list-style-type: none"> (a) the sensitive land use must be located at least 300 metres from any agricultural activity, if the land between the activities is cleared, cropped or improved pasture; the sensitive land use must be located at least 40 metres from any agricultural activity, if the land between the activities is vegetated; (b) where the buffer specified in (a) or (b) above is located within the lot containing the sensitive land use, a building footprint must be nominated that is not located within that buffer. 	<p>R2.1 Not applicable Areas of the Site zoned Environmental management and conservation align with land designated as Cassowary Conservation Precinct and Cassowary Corridor Precinct under the POD for the Estate. No development within these precincts is proposed as part of this development.</p> <p>With regard to future development, sensitive land uses (other than Dwelling house(s)) are not proposed or anticipated to be established within these precincts and are not considered within the POD for the estate. Should sensitive development desire to be established within these Precincts in the future, the development would be assessable against the Cassowary Coast Regional Council planning scheme.</p> <p>No buildings or structures are permitted within the Cassowary Corridor Precinct, which is protected under environmental covenant.</p>

PO3 Sensitive land uses are appropriately separated from industrial activities to prevent exposure to industrial air, noise and odour emissions that impact on human health, wellbeing or amenity.	AO3.1 A site used for a sensitive land use is not located within 250 metres of a site used for medium impact industry.	R3.1 Complies The Site is not located within 250 metres of medium impact industry.
	AO3.2 A site used for a sensitive land use is not located within 500 metres of a site used for high impact industry.	R3.2 Complies The Site is not located within 500 metres of high impact industry.
	AO3.3 A site used for a sensitive land use is not located within 1.5 kilometres of a site used for special industry.	R3.2 Complies The Site is not located within 250 metres of special industry.
PO4 Development is not exposed to potential impacts from special industry that will affect human health, wellbeing, human safety or amenity.	No acceptable outcome prescribed.	R4 Not applicable The Site is not located within 250 metres of special industry.
PO5 Development must not result in a sensitive land use being exposed to industrial air, noise and odour emissions that impact on human health, wellbeing or amenity.	AO5.1 The use is designed to ensure that: (a) the indoor noise objectives set out in the <i>Environmental Protection (Noise) Policy 2008</i> are met; (b) the air quality objectives in the <i>Environmental Protection (Air) Policy 2008</i> are met.	R5.1 Not applicable Areas of the Site zoned Environmental management and conservation align with land designated as Cassowary Conservation Precinct and Cassowary Corridor Precinct under the POD for the Estate. No development within these precincts is proposed as part of this development. Future development of these precincts is not expected to be affected by noise, odour or emissions, as the Site is not located within proximity to industrial activity.

	<p>AO5.2 Noxious and offensive odours are not experienced at the location of sensitive land uses.</p>	<p>R5.2 Not applicable Refer to response R5.1 above.</p>
<p>PO6 Sensitive land uses are sufficiently separated from major electricity infrastructure or substations to minimise the likelihood of nuisance or complaint.</p>	<p>AO6.1 Sensitive land uses maintain the following separation distances from a substation or easement for major electricity infrastructure:</p> <ul style="list-style-type: none"> (a) 20 metres for transmission lines up to 132 kilovolts; (b) 30 metres for transmission lines between 133 kilovolts and 275 kilovolts; (c) 40 metres for transmission lines exceeding 275 kilovolts. 	<p>R7.1 Not applicable The Site is not located within proximity to transmission lines.</p>
Environmental values		

<p>PO7 Development is undertaken in a way that is consistent with and maintains the environmental values of the site.</p>	<p>A07.1 The development envelope area for all residential activities at a site is no greater than 800m².</p> <p>Note—The development envelope area must include all on-site sewerage infrastructure and disposal areas.</p>	<p>R7.1 Not applicable Areas of the Site zoned Environmental management and conservation align with land designated as Cassowary Conservation Precinct and Cassowary Corridor Precinct under the POD for the Estate. Residential development within these precincts is not proposed as part of this development.</p> <p>In terms of future development, the POD for the estate discourages residential development within the Cassowary Conservation Precinct and no building pads are proposed to be constructed in this precinct. Further, setback requirements within the Code require that buildings within the precinct are set back appropriate for the efficient use of the cleared areas.</p> <p>No buildings or structures are permitted within the Cassowary Corridor Precinct, which is protected under environmental covenant.</p>
	<p>A07.2 Development does not result in vegetation clearing within an area of environmental significance.</p>	<p>R7.2 Not applicable Areas of the Site zoned Environmental management and conservation align with land designated as Cassowary Conservation Precinct and Cassowary Corridor Precinct under the POD for the Estate. The Site contains areas of environmental significance. No development within these precincts is proposed as part of this development.</p> <p>In terms of future development, the POD for the Estate requires that development within the Cassowary Conservation Precinct does not result in the loss of habitat or vegetation and contains provisions for Building Exclusion Areas, to ensure vegetation is not removed or destroyed for the purposes of accommodating buildings.</p> <p>The Cassowary Corridor Precinct is protected under environmental covenant.</p>

<p>A07.3 Vegetation clearing for any access and internal access routes is limited to 6 metres in width.</p>	<p>R7.3 Not applicable Refer to response R7.2 above.</p>
<p>A07.4 Where more than 1 residential activity or dwelling is located on a site, each residential activity or dwelling must share the same access.</p>	<p>R7.4 Not applicable Areas of the Site zoned Environmental management and conservation align with land designated as Cassowary Conservation Precinct and Cassowary Corridor Precinct under the POD for the Estate. No development within these precincts is proposed as part of this development.</p> <p>With regard to future development, the POD for the estate discourages residential development within the Cassowary Conservation Precinct.</p>
<p>A07.5 Services corridors are to be laid within the same corridor as the access.</p>	<p>R7.5 Not applicable Refer to response R7.4 above.</p>
<p>A07.6 Fencing can only be used: (a) around the development envelope area for residential activities; (b) around existing improved pastures or cropped areas (whether the cropped areas are currently planted or have been left fallow).</p>	<p>R7.6 Complies Additional fencing will only be provided to the boundaries of residential lots created, upon construction of Dwelling houses under future building works approvals.</p>

<p>AO7.7 Fencing is designed as follows:</p> <ul style="list-style-type: none"> (a) no more than 2 metres in height; (b) made of smooth wire, welded bar, timber, steel cladding, solid masonry or brick; (c) any gaps are no more than 100 millimetres in width; (d) secured at the base to prevent domestic animals from burrowing underneath; (e) not electrified; (f) single gates: <ul style="list-style-type: none"> (i) are constructed in accordance with (a) to (c) above; (ii) are capable of being securely closed with a closing mechanism securing the gate to a side post; (iii) are constructed so the space between the bottom of the gate and the ground is no more than 100 millimetres when in the closed position; (g) double gates: <ul style="list-style-type: none"> (i) are constructed in accordance with (a) to (c) above; (ii) are capable of being securely closed with 2 closing mechanisms, one securing at least one gate leaf to the ground (ie. with a drop bolt) and another located within the top half of the other gate leaf and securing the 2 gate leafs together (eg. with a D latch); (iii) constructed so the space between the bottom of the gate and the ground is no more than 100 millimetres when in the 	<p>R7.7 Not applicable Fencing required to be erected to residential lot boundaries will be undertaken at future stages of development, under building works approvals.</p> <p>With regard to future development, the POD for the Estate requires that boundary fencing for lots within the Eco-residential estate precinct be limited to four (4) strand unelectrified plain wire, in order to be consistent with and maintain the environmental values of the site.</p> <p>The Cassowary Corridor Precinct Purpose states that no fencing is provided that limits the movement of the Southern Cassowary within the Cassowary Corridor Precinct.</p>
<p>AO7.8 An area no more than 2 metres in width can be cleared either side of a fence line to allow for maintenance.</p>	<p>R7.8 Can comply Noted.</p>

	<p>A07.9 In an area of environmental significance and where areas cleared for fire breaks, access and fencing are consolidated in a single area, the cleared area must not exceed a total combined width of 20 metres.</p>	<p>R7.9 Not applicable Clearing of land zoned Environmental management and conservation for firebreaks, access and fencing is not proposed under this development application.</p>
<p>PO8 Land uses and land management is consistent with the enhancement and conservation of habitat, and must not reduce the area, quality or stability of that part of the habitat system located at the site.</p>	No acceptable outcome prescribed.	<p>R8.1 Performance solution (No acceptable outcome prescribed) Areas of the Site zoned Environmental management and conservation align with land designated as Cassowary Conservation Precinct and Cassowary Corridor Precinct under the POD for the Estate. It is the intent of these precincts to enhance and conserve habitat located in these areas of the Site, as articulated within the POD for the estate.</p>
<p>PO9 Development does not result in the loss of habitat or the clearing of an environmentally significant area.</p>	No acceptable outcome prescribed.	<p>R9.1 Not applicable Areas of the Site zoned Environmental management and conservation align with land designated as Cassowary Conservation Precinct and Cassowary Corridor Precinct under the POD for the Estate. The Site contains areas of environmental significance. No development within these precincts is proposed as part of this development.</p> <p>With regard to future development, the POD for the Estate requires that development within the Cassowary Conservation Precinct does not result in the loss of habitat or vegetation and contains provisions for Building Exclusion Areas, to ensure vegetation is not removed or destroyed for the purposes of accommodating buildings.</p> <p>The Cassowary Corridor Precinct is protected under environmental covenant.</p>
<p>PO10 Foreshore areas remain predominantly in a natural state.</p>	No acceptable outcome prescribed.	<p>R10 Not applicable The proposed development is not located within proximity to a foreshore area.</p>
Traffic and access		

PO11 Vehicular traffic generated by the development does not conflict with local or through traffic and will not have a detrimental impact on the safety and amenity of the locality.	No acceptable outcome prescribed.	R11.1 Performance solution (no acceptable outcome prescribed) Vehicular traffic is not expected to be generated via future development of land within the Environmental Management and Conservation Zone.
PO12 Development is designed to ensure that vehicular traffic generated by the development does not have a detrimental impact on the safety of wildlife in the locality.	No acceptable outcome prescribed.	R11.1 Performance solution (no acceptable outcome prescribed) Vehicular traffic is not expected to be generated via future development of land within the Environmental Management and Conservation Zone.
PO13 The surrounding road system is capable of accommodating additional traffic generated by the proposal without creating any adverse impact.	No acceptable outcome prescribed.	R11.1 Performance solution (no acceptable outcome prescribed) Refer to response R11.1 above.
PO14 Development mitigates the impact of rail and road traffic noise to provide for an acceptable level of amenity.	No acceptable outcome prescribed.	R14.1 Not applicable Future development of land within the Environmental Management and Conservation Zone is not expected to be impacted to an unacceptable level by road traffic noise.
Future bypass corridor		
PO15 The Cardwell future bypass corridor is protected from further development.	AO15.1 Development does not occur within the future bypass corridor as shown on Zoning Maps (ZM-001 to ZM- 021).	R15.1 Not applicable The Site is not located within a future bypass corridor.
Pest management		
PO16 The development site must be kept free of pest plants and animals.	AO16.1 The development site does not contain: (a) class 1 or 2 pests identified in the <i>Land Protection (Pest and Stock Route Management) Act 2002</i> ; (b) local pests identified in Planning Scheme Policy SC6.4 Landscaping.	R16.1 Not applicable Development of land zoned Environmental management and conservation is not proposed as part of this development.
Additional requirements for commercial activities		

PO17 Commercial activities must not result in the clearing of vegetation, filling or excavation or any disturbance of the environmental values of the site.	No acceptable outcome prescribed.	R17.1 Not applicable The proposed development is not for commercial activities.
Ella Bay Little Cove development		
PO18 Development carried out on Lot 337 on NR53 located at Ella Bay Road, Wanjuru occurs in accordance with and is consistent with the documents listed in Table SC7.1 in Schedule 7.	No acceptable outcome prescribed.	R18.1 Not applicable The proposed development is not part of the Ella Bay Little Cove development.

9.3.10 Dwelling house code

Performance outcomes	Acceptable outcomes	
Amenity		
PO1 Buildings and other structures are of an appropriate design, scale and location so as to: <ul style="list-style-type: none"> (a) blend in with the surrounding environment; (b) avoid any detrimental impact on the amenity of the locality; (c) avoid any detrimental impact on surrounding land uses. 	AO1.1 Buildings and other structures in the township zone are set back: <ul style="list-style-type: none"> (a) at least: <ul style="list-style-type: none"> (i) 1.5 metres from any side and rear boundaries; (ii) 6 metres from the primary street frontage; (iii) 3 metres from any other street frontage, or (b) in accordance with the Queensland Development Code unless a greater setback is required by (a) above. 	R1.1 Not applicable The Site is not located within the township zone.
	AO1.2 Buildings and other structures in the rural residential zone are set back at least 5 metres from any side and rear boundaries.	R1.2 Not applicable The Site is not located within the Residential zone.
	AO1.3 Buildings and other structures in a zone other than the rural residential zone and the township zone are set back at least 10 metres from any side and rear boundaries.	R1.3 Performance solution The Cassowary Rise Eco-Residential Estate Code stipulates that the building envelope of any building will not extend beyond the building envelope shown on Map 2 – Development Parameters of the POD. Notwithstanding, buildings are required under the code to blend in with the surrounding environment and avoid detrimental impacts on amenity.
	AO1.4 Buildings and other structures in a zone other than the township zone are set back at least: <ul style="list-style-type: none"> (a) 6 metres from the street frontage where fronting a private road; (b) where the lot is 4,000m² or less in area, 10 metres from the street frontage when fronting a public road; or (c) where the lot is greater than 4,000m² in area, 20 metres from the street frontage when 	R1.4 Performance solution The Cassowary Rise Eco-Residential Estate Code stipulates that the building envelope of any building will not extend beyond the building envelope shown on Map 2 – Development Parameters of the POD. Notwithstanding, buildings are required under the code to blend in with the surrounding environment and avoid detrimental impacts on amenity.

	AO1.5 Buildings must be located: (a) at least 20 metres from a cane railway line; (b) at least 40 metres from a cane railway siding or cane bin loading point.	R1.5 Not applicable The Site is not located within proximity to cane rail infrastructure.
	AO1.6 Development is designed to incorporate architectural/design elements detailed in Planning Scheme Policy SC6.2 Building design.	R1.6 Will comply The POD for the Estate provides specific urban design and built form guidelines to ensure that future development maintains the desired scale and type of development considered to be suitable for the area and the nature of the estate, being for an eco-residential estate. The provisions of the POD align with the objectives of Planning Scheme Policy SC6.2 Building Design.
Services		
PO2 The dwelling house must be provided with an acceptable standard of water supply waste water disposal, electricity supply and telecommunications infrastructure relative to its location.	AO2.1 The dwelling house (including any secondary dwelling) is connected to electricity supply and telecommunications infrastructure.	R2.1 Will comply Lots created as a result of the proposed development will be connected to electricity supply and telecommunications infrastructure.
	AO2.2 If the site is in an area serviced or capable of being serviced by reticulated water, the dwelling house (including any secondary dwelling) is connected to the reticulated water system.	R2.2 Not applicable No reticulated water supply is available to the site. Water supply for potable purposes will be provided by way of roof water tanks or water bores, to be provided at dwelling building works stage.
	AO2.3 If the site is in an area serviced or capable of being serviced by reticulated sewerage, the dwelling house (including any secondary dwelling) is connected to the reticulated sewerage system.	R2.3 Not applicable Reticulated waste water networks are not available to the Site. Waste water will be disposed onsite, via methods to be detailed at future building works stage.
	AO2.4 If the site is not in an area serviced or capable of being serviced by reticulated water, the dwelling house (including any secondary dwelling) is provided with adequate and reliable water supply from on site sources.	R2.4 Will comply Water supply for potable purposes will be provided by way of roof water tanks or water bores, to be provided at dwelling building works stage.

	AO2.5 If the site is not in an area serviced or capable of being serviced by reticulated sewerage, the dwelling house (including any secondary dwelling) is provided with an approved on-site waste water disposal system.	R2.5 Will comply Waste water will be disposed onsite, via methods to be detailed at future building works stage.
Secondary dwellings		
PO3 The secondary dwelling must be sited in close proximity to the primary dwelling.	AO3.1 The secondary dwelling is: (a) attached to or included within the primary dwelling; or (b) a detached dwelling located within 10 metres of the primary dwelling and connected by a covered pathway.	R3.1 Not applicable The proposed development does not involve a secondary dwelling.
PO4 The siting of the secondary dwelling must have regard to the privacy of the occupants of: (a) the secondary dwelling; (b) the primary dwelling; (c) dwellings on adjoining lots.	AO4.1 The secondary dwelling is designed and located so that: (a) there are no direct views between the living areas of the secondary dwelling and the primary dwelling; or (b) there is a direct view into the living areas of the primary dwelling, but it is obscured or screened.	R4.1 Not applicable The proposed development does not involve a secondary dwelling.
	AO4.2 The secondary dwelling is designed and sited so that there are no direct views between the living areas of the secondary dwelling and any dwelling on an adjoining lot.	R4.2 Not applicable The proposed development does not involve a secondary dwelling.
PO5 The secondary dwelling must be designed and constructed to complement the primary dwelling on the site, having regard to the architectural style, materials, colours and finish of the primary dwelling.	AO5.1 The architectural style, colours and materials of the secondary dwelling are the same as the primary dwelling.	R5.1 Not applicable The proposed development does not involve a secondary dwelling.
PO6 The secondary dwelling and the primary dwelling must present as a single dwelling to the street frontage	AO6.1 The primary dwelling and the secondary dwelling are aligned so as to present as not more than 1 dwelling from the street frontage.	R6.1 Not applicable The proposed development does not involve a secondary dwelling.

PO7 The gross floor area of the secondary dwelling must not compromise the role of the primary dwelling.	AO7.1 The maximum gross floor area of the secondary dwelling does not exceed 60m ² .	R7.1 Not applicable The proposed development does not involve a secondary dwelling.
PO8 Access to the secondary dwelling and the primary dwelling must be designed to facilitate safe and convenient vehicular and pedestrian movement within the site.	AO8.1 The secondary dwelling shares its driveway and vehicle crossover with the primary dwelling.	R8.1 Not applicable The proposed development does not involve a secondary dwelling.
	AO8.2 The secondary dwelling shares a pedestrian path with the primary dwelling.	R8.2 Not applicable The proposed development does not involve a secondary dwelling.
PO9 The secondary dwelling must only be occupied as an ancillary use to the primary dwelling.	AO9.1 No more than 1 secondary dwelling is established on the site.	R9.1 Not applicable The proposed development does not involve a secondary dwelling.
	AO9.2 Separate water and electricity meters are not installed for the secondary dwelling.	R9.2 Not applicable The proposed development does not involve a secondary dwelling.
Residential density		
PO10 Residential density is consistent with that of the surrounding area.	AO10.1 No more than 1 dwelling house is erected on a lot.	R10.1 Will comply One building pad per lot is proposed as part of this development application.

9.4.7 Reconfiguring a lot code

Performance outcomes	Acceptable outcomes	
Subdivision design		
PO1 Subdivision design responds to the specific characteristics of the site and integrates appropriately into its wider urban, environmental or rural context.	No acceptable outcome prescribed.	R1.1 Performance solution (No acceptable outcome prescribed) The proposed subdivision has been designed in response to existing site characteristics such as vegetation and Jurs Creek, and therefore integrates with its wider environmental context.
PO2 The reconfiguration of a lot must not: (a) affect the consistent rhythm and pattern of buildings; or (b) adversely affect historically important views; or (c) adversely affect the interrelationship of a group of buildings.	No acceptable outcome prescribed.	R2.1 Performance solution (No acceptable outcome prescribed) The Site includes an existing building that will be retained on proposed Lot 5. The ROL will not adversely affect historically important views, as construction will be limited to existing cleared areas. Future development will be governed by the POD, which prescribes measures such as sustainable house design and a neutral colour palette so as not to detract from scenic amenity.
Area and dimensions of lots		
PO3 Lots are of sufficient area and dimensions to: (a) accommodate the intended land use; (b) provide for suitable building envelopes and safe vehicular and pedestrian access without the necessity for major earthworks and major retaining walls; (c) provide private outdoor space, on site landscaping and on site parking; (d) achieve consistency with the character of surrounding development; (e) protect environmental features and take into account site constraints.	AO3.1 Lots comply with the area and dimensions identified for lots in the relevant zone or precinct in Table 9.4.7.4.	R3.1 Performance solution The Reconfiguring a Lot Code requires that lots within the Environmental management and conservation zone and the Rural zone are a minimum of 60 hectares where outside the urban footprint. Lots as proposed range in size from 7,182m ² – 62,486m ² (excl. the 60.7 hectare Cassowary conservation lot). Notwithstanding, lots as proposed are considered to be of sufficient area to accommodate the intended land use (Dwelling houses) and provide suitable building pads to protect environmental features. Development of the estate is to be undertaken in accordance with the POD, ensuring consistency within the estate.

	<p>AO3.2 Lots have their own street frontage, unless access is provided by way of easement, in which case multiple lots do not utilise the same access easement (ie. each lot has its own dedicated access easement).</p>	<p>R3.2 Complies Lots will have their own street frontage, except for Lot 100, which is proposed to be accessed via an access easement.</p>
<p>PO4 Lots which can be reconfigured further at a later date are designed so that any further reconfiguration will achieve:</p> <ul style="list-style-type: none"> (a) lots of a sufficient area and dimension to accommodate the ultimate intended land use; (b) the provision of a safe, efficient and effective infrastructure network. 	<p>AO4.1 The ability to further reconfigure a lot is demonstrated by submitting a master/concept plan with lots that meet the requirements of this Planning Scheme and showing building envelopes for all current and future buildings.</p>	<p>R4.1 Not applicable Further subdivision of the Site is not anticipated.</p>
<p>PO5 Lots which are configured to incorporate existing land uses ensure:</p> <ul style="list-style-type: none"> (a) lots are of a sufficient area and dimension; (b) the provision of a safe, efficient and effective infrastructure network. 	<p>AO5.1 Lots comply with the area and dimensions identified for lots in the relevant zone or precinct in Table 9.4.7.4.</p>	<p>R5.1 Performance solution The Reconfiguring a Lot Code requires that lots within the Environmental management and conservation zone and the Rural zone are a minimum of 60 hectares where outside the urban footprint. Lots as proposed range in size from 7,182m² – 62,486m² (excl. the 60.7 hectare Cassowary conservation lot). Notwithstanding, lots as proposed are considered to be of sufficient area to accommodate the intended land use (Dwelling houses) and provide a safe, efficient and effective infrastructure network.</p>
	<p>AO5.2 Each land use and associated infrastructure is contained within each lot.</p>	<p>R5.2 Will comply Each land use and its associated infrastructure will be contained within its own lot.</p>

	AO5.3 Buildings and structures comply with the relevant boundary setbacks and zone or precinct requirements.	R5.3 Performance solution The Cassowary Rise Eco-Residential Estate Code stipulates that the building envelope of any building will not extend beyond the building envelope shown on Map 2 – Development Parameters of the POD. Notwithstanding, lots as proposed are considered to be of sufficient area to accommodate the intended land use (Dwelling houses) and provide a safe, efficient and effective infrastructure network.
Buffers		
Performance outcomes	Acceptable outcomes	
PO6 Additional lots are created in locations that: <ul style="list-style-type: none"> (a) are adequately buffered from potential adverse impacts of incompatible land uses on the future users of the lots; (b) incorporate adequate buffers to separate the lots from potential adverse impacts on sensitive land uses; (c) do not create “reverse amenity” situations where the continued operation of existing uses is compromised by closer settlement nearby. 	AO6.1 Where lots for a residential activity are created within 400 metres of rural zoned land: <ul style="list-style-type: none"> (a) the residential activity to be contained within the new lot/s must be located at least 300 metres from any agricultural activity, if the land between the activities is cleared, cropped or improved pasture; (b) the residential activity to be contained within the new lot/s must be located at least 40 metres from any agricultural activity, if the land between the activities is naturally vegetated; (c) where the buffer specified in (a) or (b) above is located within the lot containing the residential activity, a building footprint must be nominated 	R2.1 Complies The land between the Site and surrounding agricultural activities is naturally vegetated and the proposed development is located at least 40 metres from the agricultural activity.
	AO6.2 A lot used for medium impact industry is not located within 250 metres of a site used for a sensitive land use.	R6.2 Not applicable The Site is not within proximity to medium impact industry.
	AO6.3 A lot used for high impact industry is not located within 500 metres of a site used for a sensitive land use.	R6.3 Not applicable The Site is not within proximity to high impact industry.
	AO6.4 A lot used for special impact industry is not located within 1.5 kilometres of a site used for a sensitive land use.	R6.4 Not applicable The Site is not within proximity to special impact industry.

	AO6.5 In all other situations, no acceptable outcome prescribed.	R6.5 Not applicable The Site is not located within proximity to any other potentially adverse impacts or incompatible land uses.
PO7 Amenity is maintained for residential activities adjacent to the Queensland Rail railway line, a State-controlled road and a proposed future bypass corridor.	AO7.1 A landscape buffer with a minimum width of 10 metres and sound proof fencing with a minimum height of 2 metres is provided along the boundary of any new lots for a residential activity that adjoins the railway line, a State controlled road or a future bypass corridor as shown on the Zoning Maps (ZM- 001 to ZM-021).	R7.1 Not applicable No new lots are proposed within proximity to a railway line, a State-controlled road or a future bypass corridor.
PO8 The reconfiguration of a lot ensures that sensitive land uses are sufficiently separated from major electricity infrastructure or substations to minimise the likelihood of nuisance or complaint.	AO8.1 Sensitive land uses maintain the following separation distances from a substation or easement for major electricity infrastructure: <ul style="list-style-type: none"> (a) 20 metres for transmission lines up to 132 kilovolts; (b) 30 metres for transmission lines between 133 kilovolts and 275 kilovolts; (c) 40 metres for transmission lines exceeding 275 kilovolts. 	R8.1 Not applicable The Site is not located within proximity to major electricity infrastructure.
Orientation and energy		
PO9 Lots are orientated to facilitate the siting of dwellings to: <ul style="list-style-type: none"> (a) have appropriate solar orientation, except where significant constraints limit this; and (b) take advantage of the south east prevailing summer breeze or any modification of those patterns caused by the local topography; (c) ensure minimum exposure of the walls and windows in habitable rooms to low angle eastern and western sun. 	No acceptable outcome prescribed.	R9.1 Performance solution (No acceptable outcome prescribed) Lot layout and design and raised building pads provide ample access to breezes and for appropriate solar orientation.
Lot and road layout		

<p>PO10 Subdivision design provides the new community with a local identity by responding to the site context, site characteristics, setting, land marks and views.</p>	<p>No acceptable outcome prescribed.</p>	<p>R10.1 Performance solution (No acceptable outcome prescribed) The subdivision has been designed to provide the new community with a local identity through responding to site context and characteristics and the POD, which facilitates an eco-residential estate incorporating sustainable housing and initiatives to protect the Southern cassowary and the natural environment.</p>
<p>PO11 Elements of natural and cultural significance are incorporated into the subdivision design and become features of the subdivision layout contributing to the amenity of the development.</p>	<p>No acceptable outcome prescribed.</p>	<p>R11.1 Performance solution (No acceptable outcome prescribed) The subdivision has been designed to acknowledge natural elements including existing vegetation and Jurs Creek to contribute to the amenity of the</p>
<p>PO12 The road network is designed to: (a) provide a high level of connectivity, permeability and circulation for local vehicles, public transport, pedestrians and cyclists; (b) minimise the use of cul-de-sacs.</p>	<p>No acceptable outcome prescribed.</p>	<p>R12.1 Performance solution (No acceptable outcome prescribed) The internal road network has been designed to provide a high level of connectivity to new lots. Two (2) cul-de-sacs have been incorporated however this is considered to be appropriate given the scale of the development and existing site characteristics.</p>
<p>PO13 The road layout is safe, efficient and functional.</p>	<p>AO13.1 Development complies with Planning Scheme Policy SC6.3 FNQROC Development Manual.</p>	<p>R13.1 Will comply The development will be designed in accordance with the provisions of the FNQROC Development Manual, to be detailed at future Operational Works stage(s) of the proposed development.</p>
<p>PO14 Roads, including private roads, are designed so as to achieve the following: (a) convenient and safe access to all lots for pedestrians, cyclists and vehicles; (b) safe, logical and hierarchical transport linkages with the existing road system; (c) appropriate access for buses, emergency and service vehicles; (d) convenient service corridors for public infrastructure; (e) opportunities for street landscaping; (f) convenient parking for visitors.</p>	<p>AO14.1 Roads, including private roads, are designed in accordance with Planning Scheme Policy SC6.3 FNQROC Development Manual.</p>	<p>R14.1 Will comply The development will be designed in accordance with the provisions of the FNQROC Development Manual, to be detailed at future Operational Works stage(s) of the proposed development.</p>

PO15 To facilitate housing choice and diversity, developments consist of a variety of lot sizes.	AO15.1 A variety of lot sizes are incorporated into the development.	R15.1 Complies Lot sizes range in size from 7,182m ² – 62,486m ² , plus a 60.7 hectare Cassowary conservation lot is proposed to be provided.
	AO15.2 Lots are arranged to avoid clusters of smaller lots all of the minimum size.	R15.2 Performance solution No clusters of smaller lots are proposed. Lot sizes are less than the minimum size, ranging in size from 7,182m ² – 62,486m ² , however are considered to be of adequate size to facilitate the intended land use and facilitate housing diversity.
PO16 Residential neighbourhoods incorporate physical and social infrastructure through the orderly and sequential development of land.	AO16.1 New development adjoins: (a) existing urban development; or (b) approved urban development where construction of the development has commenced.	R16.1 Complies The proposed development adjoins existing development to the north that has lot sizes in the order of 1,943 – 4,000m ² .
PO17 Social and physical infrastructure is delivered in a timely and efficient manner.	No acceptable outcome prescribed.	R17.1 Performance solution (No acceptable outcome prescribed) No social infrastructure is proposed. Physical infrastructure will be provided at Operational Works stage(s) of development.
PO18 The creation of battle-axe or rear lots is avoided, however where this is unavoidable, battle-axe or rear lots are designed to: (a) provide a high standard of amenity for residents and other users of the site and adjoining properties; (b) positively contribute to the character of adjoining properties and the area; (c) not adversely impact on the safety and efficiency of the road from which access is gained. Note—Battle-axe or rear lots include lots created behind or to the rear of another lot and requiring the creation of an access easement through the front lot for legal and/or practical access.	AO18.1 Battle-axe or rear lots are not created in greenfield areas within the urban footprint.	R18.1 Complies No battle-axe or rear lots are proposed.

	AO18.2 Battle-axe or rear lots are designed as follows: <ul style="list-style-type: none"> (a) the access handle or easement has a minimum street frontage, driveway width, length and standard of construction as set out in Table 9.4.7.5; (b) the access handle or easement does not change direction by more than 20% at any point; (c) the access handle or easement is not used by more than 1 lot; (d) development of the lot will not result in a lot having an access handle or easement on either side of the lot. 	R18.2 Not applicable No battle-axe or rear lots are proposed.
Access and services		
PO19 Access to the site (including driveways and paths) must not have an adverse impact on: <ul style="list-style-type: none"> (a) safety, including fire fighting; (b) drainage; (c) visual amenity; (d) privacy of adjoining premises; 	AO19.1 Minimum street frontages comply with Table 9.4.7.4.	R19.1 Performance solution Street frontages proposed are less than the 250 metres prescribed under the Reconfiguring a Lot Code for the Environmental management and conservation zone and the Rural zone. Notwithstanding, access to the lots proposed will not have an adverse impact on safety, drainage, visual amenity, privacy or service provision.
PO20 The dimensions of each lot must be sufficient to allow access to the premises (including all works associated with the access): <ul style="list-style-type: none"> (a) to follow as close as possible to the existing contours; (b) to be contained within the premises and not the road reserve. 	No acceptable outcome prescribed.	R19.1 Performance solution (No acceptable outcome prescribed) The dimensions of each lot as proposed are considered to be sufficient to allow access to the premises to follow as close as possible to existing contours and be contained within the premises and not the road reserve.
Public transport		
PO21 Where available, subdivision design must provide practical, safe and convenient access to public transport.	AO21.1 In the Innisfail local plan area, public transport infrastructure is located in accordance with Planning Scheme Policy SC6.3 FNQROC Development Manual.	R21.1 Not applicable The Site is not located within the Innisfail local plan area.
	AO21.2 In all other areas, no acceptable outcome prescribed.	R21.2 Performance solution The Site is accessible via El Arish Mission Beach Road, which is serviced by public transport.

Pedestrian and bikeway facilities		
PO22 Subdivision design incorporates pedestrian and bikeway facilities that are functional and achieve safe, attractive and efficient pedestrian and bike networks.	AO22.1 Where the development is adjacent to the pedestrian/cycle network as identified on the Zoning Maps (ZM-001 to ZM-021) or a Local Plan Map (LPM-001 to LPM-027), pedestrian and bikeway facilities must be incorporated in the subdivision design.	R22.1 Not applicable The Site is not adjacent to the pedestrian/cycle network.
	AO22.2 Pedestrian and bikeway facilities are designed and constructed in accordance with Planning Scheme Policy SC6.3 FNQROC Development	R22.2 Not applicable Pedestrian and bikeway facilities are not proposed as part of the development.
Park and open space		
PO23 Development provides for sufficient open space to: <ul style="list-style-type: none"> (a) meet the needs of the occupiers of the proposed lots; (b) ensure that the environmental and scenic values of the area are protected; (c) contribute to the local amenity; (d) provide a diversity of settings; (e) retain riparian corridors and significant vegetation and habitat areas and provide linkages between those areas; (f) provide links between public open spaces to form a legible network; (g) meet regional, district and neighbourhood open space requirements. 	No acceptable outcome prescribed.	R23.1 Performance solution (no acceptable outcome prescribed) A 60.7 hectare Cassowary conservation lot is proposed as part of the development, which is considered to provide sufficient open space for the development and protect environmental and scenic values of the area.
PO24 The subdivision layout, lot and dwelling orientation ensure that all areas of a park are overlooked by dwellings to encourage casual surveillance.	AO24.1 Parks are positioned on lots so that they are capable of being fronted and overlooked by surrounding development.	R24.1 Not applicable No parks are proposed to be provided as part of the development.
	AO24.2 Parks have sufficient street frontage to ensure all areas of the park are visible from overlooking lots.	R24.2 Not applicable No parks are proposed to be provided as part of the development.
	AO24.3 The number of lots that back or side onto the park is minimised.	R24.3 Not applicable No parks are proposed to be provided as part of the development.

	AO24.4 The park is regular in shape.	R24.4 Not applicable No parks are proposed to be provided as part of the
	AO24.5 Site lines between development and the park are not impeded by structures or vegetation.	R24.5 Not applicable No parks are proposed to be provided as part of the development.
PO25 Parks are functional, usable places for all members of the community and are free from topographical, environmental and other hazardous constraints.	No acceptable outcome prescribed.	R25 Not applicable No parks are proposed to be provided as part of the development.
Infrastructure		
PO26 Each lot has access to the following essential infrastructure: (a) water supply; (b) sewerage; (c) electricity; (d) telecommunications.	AO26.1 Each lot: (a) is connected to the telecommunications and electricity supply networks; or (b) has connection to the telecommunications and electricity supply networks arranged.	R26.1 Will comply Lots created as a result of the proposed development will be connected to electricity supply and telecommunications infrastructure.
	AO26.2 If the site is in an area serviced or capable of being serviced by reticulated water, the lots are connected to the reticulated water system.	R26.2 Not applicable No reticulated water supply is available to the site. Water supply for potable purposes will be provided by way of roof water tanks or water bores, to be provided at dwelling building works stage.
	AO26.3 If the site is in an area serviced or capable of being serviced by reticulated sewerage, the lots are connected to the reticulated sewerage system.	R26.3 Not applicable Reticulated waste water networks are not available to the Site. Waste water will be disposed onsite, via methods to be detailed at future building works stage.
	AO26.4 If the site is not in an area serviced or capable of being serviced by reticulated water, adequate potable water and water available for fire fighting is available for each lot.	R26.4 Will comply Water supply for potable purposes will be provided by way of roof water tanks or water bores, to be provided at dwelling building works stage.
	AO26.5 If the site is not in an area serviced or capable of being serviced by reticulated sewerage, lots can accommodate an on-site effluent treatment and disposal system.	R26.5 Will comply Waste water will be disposed onsite, via methods to be detailed at future building works stage.

PO27 The electricity supply network for all lots is placed underground where: (a) more than 5 lots are created and the site is not in a greenfield area; or (b) the site is in a greenfield area.	AO27.1 All electricity lines along the full frontages of created lots are placed underground.	R27.1 Will comply Electricity supply to the proposed development will be detailed at future Operational Works stage(s) of development.
	AO27.2 The construction of the underground electricity supply network is carried out in accordance with Planning Scheme Policy SC6.3 FNQROC Development Manual.	R27.1 Will comply Electricity supply to the proposed development will be detailed at future Operational Works stage(s) of development, in accordance with the provisions of the FNQROC Development Manual.
PO28 Development ensures that the increase in development density arising from the development can be accommodated within: i. pedestrian and bikeway infrastructure; i. footpath infrastructure; i. community facilities; /. open space; /. public transport infrastructure; i. stormwater and flooding infrastructure; i. water supply and sewerage services; i. road network infrastructure.	No acceptable outcome prescribed.	R28.1 Performance solution (No acceptable outcome prescribed) The proposed development is for Reconfiguring a Lot to create 10 additional lots. Infrastructure servicing the development will be detailed at the Operational Works stage(s) of development, but is expected to be able to accommodate the increased density.
Drainage		
PO29 Effective drainage of lots and roads is designed to: (a) maintain pre-existing or natural flow regimes; (b) effectively manage stormwater quality and quantity; (c) ensure no adverse impacts on receiving waters, surrounding premises and the surrounding environment.	No acceptable outcome prescribed.	R29.1 Performance solution (No acceptable outcome prescribed) Flood modelling has been undertaken, which indicates that there may be increases of up to 60mm near the upstream boundary of the Site, however these increases are localised and will only affect heavily vegetated areas of lands upstream which cannot be developed or used for agricultural purposes. It is noted that the adjoining owner has provided consent for any flood impact attributed to the development. The flood modelling also demonstrates that the proposed development has a negligible impact on discharges. Detailed drainage design will be provided at the Operational Works stage(s) of development.
Boundary realignments		

<p>PO30 The realignment of a boundary or boundaries:</p> <ul style="list-style-type: none"> (a) does not result in the potential creation of additional lots; (b) is an improvement on the existing situation. 	<p>AO30.1 An improvement on the existing situation results when the dimensions of the proposed lots comply more fully with Table 9.4.7.4 and at least one of the following is achieved:</p> <ul style="list-style-type: none"> (a) the boundary realignment will correct an existing boundary encroachment by a building or areas; or (b) lots will become more regular in shape; or (c) access is provided to a lot that previously had no access or an unsuitable access; or (d) the rearranged lots better meet the overall outcomes for the zone or precinct within which it is located. 	<p>R30.1 Not applicable Realignment of boundaries is not proposed as part of this development.</p>
	<p>AO30.2 Individual new lots are not split across road reserves or other tenures.</p>	<p>R30.2 Not applicable Realignment of boundaries is not proposed as part of this development.</p>
<p>PO31 Outside the urban footprint, the realignment of a boundary or boundaries must:</p> <ul style="list-style-type: none"> (a) result in improved agricultural efficiency; or (b) facilitate agricultural activities or conservation outcomes; or (c) resolve boundary issues where: <ul style="list-style-type: none"> (i) a building or structure is built over the boundary line of 2 lots; or (ii) a lot has been intersected by the compulsory installation of infrastructure such as a road or electricity line. 	<p>No acceptable outcome prescribed.</p>	<p>R31 Not applicable Realignment of boundaries is not proposed as part of this development.</p>

<p>PO32 A boundary realignment outside the urban footprint must:</p> <ul style="list-style-type: none"> (a) allow for enough space within the new lots to accommodate buffers from adjoining land uses to mitigate adverse impacts such as chemical spray drift, odour, noise, dust, fire, smoke and ash; (b) not prevent existing industries from expanding or new agricultural enterprises from being established; (c) not create new small lots for rural residential or rural lifestyle purposes; (d) not be for the purpose of creating a separate house lot, unless the lot contains a house that was built prior to 9 May 2008 and is of a sufficient size to 	<p>No acceptable outcome prescribed.</p>	<p>R32 Not applicable Realignment of boundaries is not proposed as part of this development.</p>
Pest management		
<p>PO33 New lots are cleared of pest plants and animals.</p>	<p>AO33.1 Prior to Council endorsing the Plan of Survey, the development site is cleared of:</p> <ul style="list-style-type: none"> (a) class 1 or 2 pests identified in the <i>Land Protection (Pest and Stock Route Management) Act 2002</i>; (b) local pests identified in Planning Scheme Policy SC6.4 Landscaping. 	<p>R33.1 Performance solution Pest plants and animals will be assessed and removed by a suitably qualified professional at the Operational Works stage(s) of development.</p>
Future bypass corridor		
<p>PO34 The Innisfail, Tully and Cardwell future bypass corridors are protected from further development.</p>	<p>AO34.1 No additional lots are created within the Innisfail, Tully and Cardwell future bypass corridor as shown on the Zoning Maps (ZM-001 to ZM-021).</p>	<p>R34.1 Not applicable The Site is not located within the Innisfail, Tully and Cardwell future bypass corridor.</p>
Additional requirements for the environmental management and conservation zone		

<p>PO35 Lots in the environmental management and conservation zone are of sufficient area and dimensions to:</p> <p>(a) retain and, where practicable, restore the natural features and environmental/ecological/habitat values of the site including:</p> <ul style="list-style-type: none"> (i) areas of remnant vegetation; (ii) riparian corridors; (iii) areas of natural habitat; (iv) habitat linkages; (v) natural topographical and ecological features, for example wetlands, waterways, dune systems and foreshore areas; strategic rehabilitation areas as shown on the Environmental Significance Overlay Map (OM-007), <p>(b) achieve a low scale, natural amenity rather than a residential ambience.</p>	<p>No acceptable outcome prescribed.</p>	<p>R35.1 Performance solution (No acceptable outcome prescribed) The subdivision has been designed to utilize existing cleared areas, to retain natural features and the environmental values of the Site. The proposed development also proposes the staged rehabilitation of the Cassowary conservation lot. The proposed Cassowary Rise Eco-residential Estate Plan of Development identifies all requirements in relation to the rehabilitation of this area.</p>
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<p>PO36 Where the new lots are created in the environmental management and conservation zone and inside the urban footprint, 60% of each lot must be retained and protected in its natural vegetated state (the "protected area"), as follows:</p> <ul style="list-style-type: none"> (a) the protected area may include cleared or degraded areas which have been or will be rehabilitated to enhance the natural values of the locality; (b) the protected area must comprise one consolidated area, minimising edge effects; (c) the protected area must be selected to: <ul style="list-style-type: none"> (i) maximise the protection of riparian areas, remnant vegetation of habitat value and any wetlands and waterways; (ii) where appropriate, provide connectivity to adjacent habitat, environmentally significant areas and areas of environmental value; (d) the protected area is protected by a conservation covenant to which Council is a party and which is binding on successors in title. 	<p>No acceptable outcome prescribed.</p>	<p>R36.1 Not applicable The Site is not located within the urban footprint.</p>
<p>PO37 Reconfiguring a lot in the environmental management and conservation zone does not result in loss of ecological connectivity.</p>	<p>No acceptable outcome prescribed.</p>	<p>R37.1 Performance solution (No acceptable outcome prescribed) The proposed subdivision will not result in loss of ecological connectivity. The proposed development also includes a 60.7 hectare Cassowary conservation lot, for which staged rehabilitation is</p>
<p>Additional requirements for the rural zone</p>		

<p>PO38 Lots are of sufficient area and dimensions to ensure that long term agricultural viability is maintained or achieved.</p>	<p>No acceptable outcome prescribed.</p>	<p>R38.1 Does not comply Although classed as Agricultural Land (Classes A and B), the Site currently has little to no agricultural value, and retains considerable vegetation. An Agricultural Land Report was prepared for the Site by Rural and Environmental Resources in accordance with the requirements of the Planning Guidelines for 'The Identification of Good Quality Agricultural Land' (DPI and DHLGP) as recommended in State Planning Policy 1/92 (refer Appendix I – Agricultural Land Report).</p> <p>The report concludes that the subject land is not '<i>capable of sustainable use for agriculture with a reasonable level of inputs</i>', as biophysical limitations, locational restraints and the size and fragmentation of the Site are not able to be resolved. Accordingly, the Site is not viewed as being agriculturally viable.</p> <p>Further discussion in respect of the above is provided at Section 7 of the Town Planning Report.</p>
<p>PO39 No new lots are created within 1 kilometre of Mundoo Airport, unless they are created to accommodate uses associated with or ancillary to the Airport.</p>	<p>No acceptable outcome prescribed.</p>	<p>R39.1 Not applicable The Site is not located within 1 kilometre of the Mundoo Airport.</p>
<p>Additional requirements for the rural residential zone</p>		
<p>PO40 New rural residential lots are set back from waterways to avoid the creation of water entitlements for urban uses.</p>	<p>No acceptable outcome prescribed.</p>	<p>R40.1 Not applicable The Site is not located within the Rural residential zone.</p>
<p>Additional requirements for the Innisfail central business precinct</p>		
<p>PO41 The size of lots facilitates the development of lots within the Innisfail central business precinct for a wide range of commercial activities and activity centre functions.</p>	<p>No acceptable outcome prescribed.</p>	<p>R41.1 Not applicable The Site is not located within the Rural residential zone.</p>

8.2.3 Bushfire hazard code

Performance outcomes	Acceptable outcomes	
Avoidance		
PO1 Development avoids areas of very high, high or medium potential bushfire intensity where practicable.	AO1.1 Development is not located in an area of very high, high or medium potential bushfire intensity. Note—A site-specific bushfire hazard assessment will be necessary to demonstrate that a proposed development site is low bushfire risk despite being mapped as an area of very high, high or medium potential bushfire intensity.	R1.1 Complies The proposed development is sited in an area of the Site containing Potential bushfire impact buffer area only.
Mitigation		
PO2 Development maintains the safety of people and property by mitigating the risk of bushfire through: <ul style="list-style-type: none"> (a) lot design; (b) including firebreaks that provide adequate access for fire-fighting and other emergency vehicles; (c) providing adequate road access for safe evacuation and fire-fighting and other emergency vehicles; (d) providing an adequate and accessible water supply for fire-fighting purposes. 	AO2.1 One water tank with fire brigade fittings is provided within 100 metres of each Class 1, 2, 3 or 4 building where the development: <ul style="list-style-type: none"> (a) involves new or existing buildings with a gross floor area greater than 50m²; (b) is located in an area not serviced by a reticulated water supply; (c) where a water tank is provided for the purpose of household water supply. 	R2.1 Will comply Water supply will be provided by way of roof water tanks or water bores, to be provided at dwelling building works stage. It is expected that water tanks will be fitted with fire brigade fittings.
	AO2.2 Lots created for a residential activity are designed so that their size and shape allow for efficient emergency access to buildings for fire-fighting appliances (eg. by avoiding long narrow lots with long access drives to buildings).	R2.2 Complies The subdivision has been designed to ensure for efficient emergency access to new lots.

<p>AO2.3 Where development will result in multiple buildings or lots:</p> <ul style="list-style-type: none"> (a) firebreaks are provided by a perimeter road that separates lots from areas of bushfire hazard and that road has: <ul style="list-style-type: none"> (i) a minimum cleared width of 20 metres; (ii) a constructed road width and weather standards complying with Planning Scheme Policy SC6.3 FNQROC Development Manual, or (b) fire maintenance trails are located as close as practicable to the boundaries of the lots and the adjoining bushfire hazard, and the fire maintenance trails: <ul style="list-style-type: none"> (i) have a minimum cleared width of 6 metres; (ii) have a formed width and gradient, and erosion control devices complying with Planning Scheme Policy SC6.3 FNQROC Development Manual; (iii) have vehicular access at each end; (iv) provide passing bays and turning areas for fire-fighting vehicles; (v) are either located on public land or within an access easement that is granted in favour of the Queensland Fire and Rescue Service. 	<p>R2.3 Does not comply The subdivision has been designed to ensure for efficient emergency access to new lots and water tanks are expected to be fitted with fire brigade fittings. The proposed development does not however propose fire breaks, as development is proposed on existing cleared areas of the site. Building pads are to be provided on created lots, ensuring distance between hazardous vegetation and future Dwelling house(s). Jurs Creek provides an additional fire buffer to the west.</p> <p>Notwithstanding the above, the proposed development is able to achieve compliance with the purpose and overall outcomes of the Bushfire hazard code, which require that development is designed to:</p> <ul style="list-style-type: none"> i. <i>avoid or minimise the risk of loss of life from bushfire;</i> ii. <i>minimise the damage to property from bushfire;</i> iii. <i>assist emergency services in responding to any bushfire threat.</i>
<p>AO2.4 Where development will result in multiple buildings or lots, cleared firebreaks at least 6 metres wide are provided adjacent to vegetation within the site to allow the burning of sections and access for bushfire response.</p>	<p>R2.4 Complies Development is proposed on existing cleared areas of the site. A cleared 'firebreak' will exist between building pads and hazardous vegetation.</p>

	<p>AO2.5 New roads are designed and constructed as follows:</p> <ul style="list-style-type: none"> (a) in accordance with Planning Scheme Policy SC6.3 FNQROC Development Manual; (b) to have a maximum gradient of 12.5%; (c) no cul-de-sacs are created, unless the road is a perimeter road isolating the development from a bushfire hazard. 	<p>R2.5 Will comply New roads will be designed in accordance with the provisions of the FNQROC Development Manual.</p>
Firebreaks		
<p>PO3 The establishment of firebreaks minimises impacts on areas of environmental significance.</p>	<p>AO3.1 The establishment of a firebreak in accordance with PO2, AO2.3 and AO2.4 above must not involve the clearing of native vegetation unless a site-specific bushfire hazard assessment demonstrates that the bushfire hazard is very high, high or medium on that site.</p>	<p>R3.1 Not applicable Development is proposed on existing cleared areas of the site. A cleared 'firebreak' will exist between building pads and hazardous vegetation.</p>
Community infrastructure		
<p>PO4 Development for community infrastructure in the form of emergency services, an emergency shelter, air services, hospital, educational establishment, substation, a power station, telecommunications facility or utility installation or stores of valuable records or items of historic or cultural significance, is able to function effectively during and immediately after bushfire events.</p>	<p>AO4.1 Development for community infrastructure as identified in PO4:</p> <ul style="list-style-type: none"> (a) is not located on land in an area of very high, high or medium potential bushfire intensity; or (b) does not involve any new building work other than extending the gross floor area of an existing building by less than 20m²; or (c) is designed to function effectively during and immediately after bushfire events. <p>Note—For AO4.1(a), a site-specific bushfire hazard assessment is necessary to demonstrate that although the site is mapped as an area of area of very high, high or medium potential bushfire intensity, the bushfire risk is low on that site.</p> <p>Note—To comply with AO4.1(c), the development application will need to include a comprehensive Bushfire Management Plan</p>	<p>R4.1 Not applicable The proposed development is not for community infrastructure.</p>
Bushfire management plans		

<p>PO5 Development complies with a bushfire management plan where the development:</p> <ul style="list-style-type: none"> (a) is in an area of very high or high potential bushfire intensity; or (b) involves the manufacture or bulk storage 	<p>No acceptable outcome prescribed.</p>	<p>R5.1 Performance solution (No acceptable outcome prescribed) A Bushfire Management Plan is not proposed for the development, as development will be situated within an area containing Potential bushfire impact buffer area only.</p>
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8.2.5 Environmental significance code

Performance outcomes	Acceptable outcomes	
Areas of environmental significance		
PO1 Outside the urban footprint, development does not occur within an area of HES unless it can be demonstrated that the mapped area of high environmental significance does not possess the environmental and biodiversity values and attributes to warrant its classification as an area of high environmental significance.	AO1.1 Development outside the urban footprint is: <ul style="list-style-type: none"> (a) not located within an area of HES; or (b) associated with a port, an airport or an aerodrome; or (c) for minor public marine development and associated access facilities; or (d) for an extractive industry within a resource/processing area as shown on Extractive Resources Overlay Map (OM-008); or (e) for essential community infrastructure; or (f) for nature-based tourism; or (g) for an agricultural activity. 	R1.1 Complies The Site contains areas of HES, however development is proposed to be located in existing cleared areas of the Site, which are identified as Strategic rehabilitation areas.
PO2 Development within or adjacent to an area of HES is located, designed and operated to: <ul style="list-style-type: none"> (a) avoid adverse impacts on ecological values; or (b) where avoidance is not practicable, minimise any adverse impacts on ecological values. 	AO2.1 Development is not located within an area of HES.	R2.1 Complies The Site contains areas of HES, however development is proposed to be located in existing cleared areas of the Site, which are identified as Strategic rehabilitation areas.
	AO2.2 Development is setback at least 100 metres from the area of HES.	R2.2 Performance solution The Site contains areas of HES, however development is proposed to be located in existing cleared areas of the Site, which are not identified as HES. Notwithstanding, future development of the eco-residential estate, governed by the POD, is not expected to generate adverse impacts on ecological values.
PO3 Development within or adjacent to an area of GES is located, designed and operated to: <ul style="list-style-type: none"> (a) avoid adverse impacts on ecological values; or (b) where avoidance is not practicable, minimise any adverse impacts on 	AO3.1 Development is not located within an area of GES.	R3.1 Complies The Site does not contain GES.
	AO3.2 Development adjacent to an area of GES is setback at least 100 metres from the area of GES.	R3.2 Not applicable The Site does not contain GES.

Strategic rehabilitation areas		
PO4 Development within a strategic rehabilitation area maintains or enhances ecological connectivity and/or habitat extent within the subject lot by: <ul style="list-style-type: none"> (a) providing for the retention, regeneration, expansion or rehabilitation of areas of native vegetation; (b) minimising impacts on native fauna feeding, nesting, breeding and roosting sites; (c) minimising impacts on native fauna 	No acceptable outcome prescribed.	R4.1 Performance solution (No acceptable outcome prescribed) The proposed development has been designed to enhance ecological connectivity and habitat by providing through the retention and rehabilitation of the area identified as the Cassowary conservation lot. A Cassowary corridor precinct is located at the rear of proposed lots to ensure connectivity with habitat despite development of the Site. It is also noted that development is proposed within existing cleared areas of the Site.
Cassowary corridors and mahogany glider corridors		
PO5 Development within a cassowary corridor maintains or enhances ecological connectivity and/or habitat extent within the subject lot by: <ul style="list-style-type: none"> (a) providing for the retention, regeneration, expansion or rehabilitation of areas of native vegetation; (b) minimising impacts on native fauna feeding, nesting, breeding and roosting sites; (c) minimising impacts on native fauna 	No acceptable outcome prescribed.	R5.1 Not applicable The Site is not identified as containing Cassowary corridor areas.
PO6 Development within a mahogany glider corridor maintains or enhances ecological connectivity and/or habitat extent within the subject lot by: <ul style="list-style-type: none"> (a) providing for the retention, regeneration, expansion or rehabilitation of areas of native vegetation; (b) minimising impacts on native fauna feeding, nesting, breeding and roosting sites; 	No acceptable outcome prescribed.	R6.1 Not applicable The Site is not identified as containing Mahogany glider corridor areas.

8.2.7 Flood hazard code

Performance outcomes	Acceptable outcomes	
Development standards for land use		
PO1 Development provides flood immunity to ensure the safety of people and protection of property.	AO1.1 Development, other than for a Class 10a building, road, levee, dam or bridge, is not located on land in an extreme hazard area.	R1.1 Complies The Site does not contain Flood hazard - Extreme hazard areas.
Floor level		
PO2 Development provides maximum possible flood immunity to ensure the safety of people and the protection of property from flood events.	AO2.1 Development meets the minimum floor levels set out in Table 8.2.7.4 of this code.	R2.1 Complies The Flood hazard code requires that new buildings have minimum floor levels of greater than or equal to the 1% annual exceedance probability (AEP) level plus 0.3 metres. For Reconfiguring a Lot, all lots are required to contain a suitably sized and shaped area to accommodate a building and ancillary structures and provide maximum possible flood immunity for the safety of people and the protection of property for all flood events. The elevation of the top of the fill pads as proposed is 13.65 metres AHD, being generally 900 mm to one metre above the 1% AEP level (above the 0.2% AEP (500 year ARI) flood level). Minimum floor levels afforded will therefore be approximately 1.2 to 1.3 metres above the 1% AEP level, exceeding the additional 0.3 metre freeboard requirement. Further discussion with respect to the above is provided in Section 7 of the Town Planning Report.
Community infrastructure		

PO3 Development for community infrastructure in the form of emergency services, an emergency shelter, air services, hospital, educational establishment, substation, a power station, telecommunications facility, utility installation or stores of valuable records or items of historic or cultural significance, is able to function effectively during and immediately after a flood event.	AO3.1 Development for community infrastructure as identified in PO3 (excluding educational establishment) is not located on land in a high hazard or extreme hazard area.	R3.1 Not applicable The proposed development is not for Community infrastructure
	AO3.2 Educational establishment where located in the township zone is not located on land in a high hazard or extreme hazard area.	R3.2 Not applicable The proposed development is not for Community infrastructure
	AO3.3 Educational establishment where located in a zone other than the township zone is not located in an extreme hazard area.	R3.3 Not applicable The proposed development is not for Community infrastructure
Flood characteristics and effect		

<p>PO4 Development (excluding a Class 10a building in the low hazard area in the rural zone, environmental management and conservation zone, special purpose zone, emerging community zone or rural residential zone) minimises adverse impacts on people's safety and on property by:</p> <ul style="list-style-type: none"> (a) counteracting any changes the development will cause to flood behaviour; (b) not resulting in any reductions of on-site flood storage capacity; or (c) not changing the flood characteristics outside the subject site, including cumulative impacts on flood characteristics, that result in: <ul style="list-style-type: none"> (i) loss of flood storage; (ii) loss/changes to flow paths; (iii) acceleration or retardation of flows; (iv) any reduction in flood warning times elsewhere. <p>Note—Council requires the preparation of an Engineering/Flood Report to demonstrate compliance with</p>	<p>No acceptable outcome prescribed.</p>	<p>R4.1 Performance solution (No acceptable outcome prescribed) Flood modelling has been undertaken, which indicates that there may be increases of up to 60mm near the upstream boundary of the Site, however these increases are localised and will only affect heavily vegetated areas of lands upstream which cannot be developed or used for agricultural purposes. It is noted that the adjoining owner has provided consent for any flood impact attributed to the development. The flood modelling also demonstrates that the proposed development has a negligible impact on discharges. Further discussion with respect to the above is provided in Section 7 of the Town Planning Report.</p>
<p>Other development or infrastructure</p>		

<p>PO5 Development is resilient to flood events by ensuring design and built form account for the potential risks of flooding.</p>	<p>AO5.1 The design of buildings for commercial activities, community activities, residential activities and tourism activities allow for the flow of water and flood storage underneath minimum floor levels (i.e. buildings are not constructed as slab on ground).</p>	<p>R5.1 Performance solution The proposed development has been designed to be resilient to flood events by incorporating the following measures:</p> <ul style="list-style-type: none"> • Development of a Flood Evacuation Plan and incorporation of associated flood warning infrastructure (which includes signs, flood gauges and notation on title) is proposed as part of the development to further mitigate flood risk. Flood immunity and flood risk management requirements are included in the Cassowary Rise Eco-residential Estate POD; • Proposed fill pads that will provide greater than a 500 year ARI (0.2% AEP) flood immunity for the residential dwellings; and • Constructing internal and entrance/exit to the estate to be accessible up to and including the 50 year ARI (2% AEP) event. <p>Further discussion with respect to the above is provided in Section 7 of the Town Planning Report.</p>
	<p>AO5.2 The design of buildings for industrial activities allow for the flow of flood waters through the building at ground floor and includes a second level or mezzanine that meets Table 8.2.7.4 of this code and may be used for storage, office functions or other flood-sensitive activities.</p>	<p>R5.2 Not applicable The proposed development is not for industrial activities.</p>

	<p>AO5.3 The development:</p> <ul style="list-style-type: none"> (a) is located in an area where there is sufficient flood warning time (at least 8 hours) to enable safe evacuation; or (b) a safe refuge is available for people within the site. 	<p>R5.3 Complies The Estate has been designed to provide a safe refuge for residents who choose not to evacuate during a flood event:</p> <ul style="list-style-type: none"> • Proposed fill pads provide greater than a 500 year ARI (0.2% AEP) flood immunity for the residential dwellings; • Minimum floor levels in future dwellings will be approximately 1.2 to 1.3 metres above the 100 year ARI (1% AEP) flood level, thus exceeding Council's requirement of floor levels of greater than or equal to the 1% AEP level plus 0.3 metres of 0.3 metres above the 1% AEP level); and • All rooms in the second storey of future dwellings will be located above the Probable Maximum Flood level, which has an Average Recurrence Interval of between 1,000,000 and 10,000,000 years, i.e. between 1 million and 10 million years; and <p>Further, the duration for which the Site will be isolated is generally less than one day during extreme flood events.</p> <p>Further discussion with respect to the above is provided in Section 7 of the Town Planning Report.</p>
<p>PO6 Infrastructure proposed as part of the development is located with due regard to flood risks associated with public safety, loss of function and economic loss.</p>	<p>AO6.1 Mechanical and electrical infrastructure (e.g. pump stations, emergency generators) are above the 1% annual exceedance probability level.</p>	<p>R6.1 Will comply Infrastructure required to service the proposed development will be located above the AEP level, to be detailed at future Operational Works stage(s) of development.</p>

	AO6.2 Any components of buildings that are likely to fail to function or may result in contamination when inundated by flood water (e.g. electrical switchgear and motors, lift motors, communications and data infrastructure, water supply pipeline air valves): (a) meet minimum floor levels in Table 8.2.7.4 of this code; or (b) are designed and constructed to exclude flood water intrusion/infiltration.	R6.2 Complies Minimum floor levels in future dwellings will be approximately 1.2 to 1.3 metres above the 100 year ARI (1% AEP) flood level, thus exceeding the minimum floor levels under the Flood hazard code.
PO7 Public safety, water quality of waterways and the environment are not adversely affected by the intrusion of waste water into flood waters.	AO7.1 Where development includes an on-site facility to treat and/or store waste water, that facility: (a) meets the 1% annual exceedance probability level; or (b) is designed and constructed to exclude flood water intrusion/infiltration.	R7.1 Will comply On-site waste water treatment facilities will be located above the AEP level, to be detailed at future Operational Works stage(s) of development.
Management of hazardous materials		
PO8 Public safety and the environment are not adversely affected by the impacts of floodwater on hazardous materials.	AO8.1 Where the development involves the manufacture and/or storage of hazardous materials, the: (a) development achieves minimum floor levels in Table 8.2.7.4 of this code; or (b) buildings or structures used to accommodate the manufacture or storage of the hazardous materials are designed to prevent intrusion/infiltration of floodwaters.	R8.1 Not applicable The proposed development does not involve the manufacture or storage of hazardous materials.
Maintenance		
PO9 Development that contains flood mitigation structures, devices or works (e.g. detention basins, grills, piped flow) are able to maintain functionality in flood events during the life of the development.	No acceptable outcome prescribed.	R9.1 Performance solution (No acceptable outcome prescribed) Stormwater drainage will be designed and constructed in accordance with the relevant standards and to function during the life of the development.
Reconfiguring a lot		

<p>PO10 All lots contain a suitably sized and shaped area to accommodate a building and ancillary structures and provide maximum possible flood immunity for the safety of people and the protection of property for all flood events.</p>	<p>AO10.1 For development involving the reconfiguring of a lot in a flood hazard area, a building location plan must be provided for each lot demonstrating that each lot can contain an area for a building/s and ancillary structures that is a minimum of 10 metres in width and the greater of: (a) 60% of the new lot size; or (b) a 300m² rectangular shaped area, and achieves the design levels in Table 8.2.7.5 of this code.</p>	<p>R10.1 Complies Building pads are proposed to be constructed as part of the development, which range in size from 1,204m² – 1,344m². The elevation of the top of the fill pads as proposed is 13.65 metres AHD, being generally 900 mm to one metre above the 1% AEP level (above the 0.2% AEP (500 year ARI) flood level), exceeding the requirements as articulated within the Flood hazard code.</p>
<p>PO11 Outside the township zone, no new lots for a residential activity are created in a high hazard area or an extreme hazard area.</p>	<p>No acceptable outcome prescribed.</p>	<p>R11.1 Not applicable The Site does not contain High or Extreme hazard areas.</p>
<p>Evacuation in flood events</p>		
<p>PO12 The development maximises the safety of people in flood events including an acceptable level of risk for flood evacuation.</p>	<p>AO12.1 The development provides an evacuation route from a building or site to a dedicated road that is safely accessible and trafficable during a 1% annual exceedance probability flood event and provides access to emergency services, an emergency shelter, a hospital or other medical treatment facility and communications facilities.</p>	<p>R12.1 Performance solution Residents will be able to safely drive on the internal roads and enter/exit the Site for all floods up to and including the 50 year ARI (2% AEP) event. The POD prescribes requirements for extensive flood infrastructure, including flood warning signage (two types), flood gauges and road markers to indicate road location during a flood event in order to assist flood evacuation if required.</p>

8.2.11 Waterway corridors and wetlands code

Performance outcomes	Acceptable outcomes	
Development within or adjacent to waterways and wetlands		
PO1 Development is set back from waterways and wetlands to maintain water quality and the ecological functions and services of waterways and wetlands unless: <ul style="list-style-type: none"> (a) the development is for essential community infrastructure; or (b) the development is for transport infrastructure such as bridges, pedestrian paths and bicycle paths; or (c) it is not feasible to locate the development outside of the relevant waterway or wetland set back area. 	AO1.1 Development (excluding animal husbandry and cropping) does not occur within: <ul style="list-style-type: none"> (a) 50 metres from the high bank of a waterway with a stream order 5 or greater; (b) 25 metres of the high bank of a waterway with a stream order 2 to 5. 	R1.1 Complies Development is not proposed within 25 metres of the high bank of Jurs Creek, identified as a stream order 4.
	AO1.2 Development (excluding animal husbandry and cropping) does not occur within: <ul style="list-style-type: none"> (a) 200 metres of a HES wetland outside the urban footprint; (b) 100 metres of a GES wetland outside the urban footprint; (c) 50 metres of a HES wetland and GES wetland inside the urban footprint. 	R1.2 Not applicable The Site is not located within proximity to a wetland (HES or GES).
	AO1.3 For animal husbandry and cropping, a 25 metre wide vegetated buffer is provided between the development and: <ul style="list-style-type: none"> (a) the high bank of a waterway; (b) a HES wetland; (c) a GES wetland. 	R1.3 Not applicable The proposed development is not for animal husbandry or cropping.
PO2 The set back areas specified in AO1.1, AO1.2 and AO1.3 are revegetated with endemic vegetation.	No acceptable outcome prescribed.	R2.1 Does not comply Development is proposed to be located within existing cleared areas of the Site. The existing cleared areas are proposed to remain cleared, to provide firebreaks to development.

<p>PO3 Development within a set back area specified in AO1.1, AO1.2 and AO1.3 is located, designed and operated to:</p> <ul style="list-style-type: none"> (a) avoid adverse impacts on ecological values, water quality and the ecological functions and services of the waterway or wetland; or (b) where avoidance is not practicable, minimise any adverse impacts on ecological values. 	<p>AO3.1 Development is not located within a setback area specified in AO1.1, AO1.2 or AO1.3.</p>	<p>R3.1 Complies Development is not proposed within the 25 metre setback from the high bank of Jurs Creek.</p>
HES wetlands		
<p>PO4 Outside the urban footprint, development does not occur within a HES wetland unless it can be demonstrated that an alternative mapped boundary of the HES wetland should apply and the development is located outside this alternative mapped boundary.</p>	<p>AO4.1 Development is:</p> <ul style="list-style-type: none"> (a) not located within a HES wetland; or (b) associated with a port, an airport or an aerodrome; or (c) for minor public marine development and associated access facilities; or (d) for an extractive industry within a resource/processing area as shown on Extractive Resources Overlay Map (OM-008); or (e) for essential community infrastructure; or (f) for transport infrastructure such as bridges, pedestrian paths and bicycle paths. 	<p>R4.1 Not applicable The Site is not located within proximity to a wetland (HES or GES).</p>
<p>PO5 Development within a HES wetland is located, designed and operated to:</p> <ul style="list-style-type: none"> (a) avoid adverse impacts on ecological values, water quality and the ecological functions and services of the wetland; or (b) where avoidance is not practicable, minimise any adverse impacts on ecological values and offset any residual 	<p>AO5.1 Development is not located within a HES wetland.</p>	<p>R5.1 Not applicable The Site is not located within proximity to a wetland (HES or GES).</p>

<p>PO6 The existing surface water hydrological regime of a HES wetland is enhanced or maintained.</p> <p>Note—The hydrological regime of surface waters includes:</p> <ul style="list-style-type: none"> - peak flows; - volume of flows; - duration of flows; - frequency of flows; - seasonality of flows; - water depth (seasonal average); - wetting and drying cycle. 	<p>AO6.1 Development does not change the existing surface water hydrological regime of a HES wetland, including through channelisation, redirection or interruption of flows.</p>	<p>R6.1 Not applicable The Site is not located within proximity to a wetland (HES or GES).</p>
<p>PO7 The existing groundwater hydrological regime of a HES wetland is enhanced or protected.</p>	<p>AO7.1 The water table and hydrostatic pressure within the HES wetland is not lowered or raised outside the bounds of variability under existing pre- development conditions.</p>	<p>R7.1 Not applicable The Site is not located within proximity to a wetland (HES or GES).</p>
	<p>AO7.2 Development does not result in the ingress of saline water into freshwater aquifers.</p>	<p>R7.2 Not applicable The Site is not located within proximity to a wetland (HES or GES).</p>
<p>PO8 Development involving the clearing of vegetation protects the biodiversity, ecological values and processes and hydrological functioning of a HES wetland, including:</p> <ul style="list-style-type: none"> (a) water quality values; (b) aquatic habitat values; (c) terrestrial habitat values; (d) usage of the site by native wetland fauna species or communities. 	<p>AO8.1 Vegetation clearing undertaken as a consequence of development does not occur in a HES wetland or within:</p> <ul style="list-style-type: none"> (a) 200 metres of a HES wetland outside the urban footprint; or (b) 50 metres of a HES wetland inside the urban footprint. 	<p>R8.1 Not applicable The Site is not located within proximity to a wetland (HES or GES).</p>
<p>PO9 Development does not result in the introduction of non-native pest plants or animals that pose a risk to the ecological values and processes of a HES wetland.</p>	<p>AO9.1 The development site does not contain:</p> <ul style="list-style-type: none"> (c) class 1 or 2 pests identified in the <i>Land Protection (Pest and Stock Route Management) Act 2002</i>; (d) local pests identified in Planning Scheme Policy SC6.4 Landscaping. 	<p>R9.1 Not applicable The Site is not located within proximity to a wetland (HES or GES).</p>

	AO9.2 Development does not result in the introduction of: <ul style="list-style-type: none"> (a) class 1 or 2 pests identified in the <i>Land Protection (Pest and Stock Route Management) Act 2002</i>; (b) local pests identified in Planning Scheme Policy SC6.4 Landscaping. 	R9.2 Not applicable The Site is not located within proximity to a wetland (HES or GES).
GES wetlands		
PO10 Development within a GES wetland is located, designed and operated to: <ul style="list-style-type: none"> (a) avoid adverse impacts on ecological values, water quality and the ecological functions and services of the wetland; or (b) where avoidance is not practicable, minimise any adverse impacts on ecological values and offset any residual 	AO10.1 Development is not located within a GES wetland.	R10.1 Not applicable The Site is not located within proximity to a wetland (HES or GES).
Waterway envelopes		
PO11 Urban development in greenfield areas is set back from waterways through the adoption of appropriate waterway envelopes to allow natural hydrologic and hydraulic processes to occur and to maintain water quality and the ecological functions and services of the waterways, unless the development: <ul style="list-style-type: none"> (a) is for essential community infrastructure; or (b) is for transport infrastructure such as bridges, pedestrian paths and bicycle paths; or (c) it is not feasible to locate the development outside of the waterway envelope. 	AO11.1 Urban development does not occur within a waterway envelope.	R11.1 Not applicable The Site is not located within a greenfield area and no waterway envelopes have been adopted.
	AO11.2 Stormwater treatment infrastructure is located on the development site and not in the waterway envelope. Note—The stormwater treatment infrastructure must be located upstream or upslope from the lawful point of discharge to the waterway.	R11.1 Not applicable The Site is not located within a greenfield area and no waterway envelopes have been adopted.

<p>PO12 Development for essential community infrastructure or transport infrastructure such as bridges, pedestrian paths and bicycle paths is:</p> <ul style="list-style-type: none"> (a) co-located with other essential community infrastructure or transport infrastructure where feasible; (b) set back as far as practicable from the waterway or wetland; (c) planned, designed, constructed and managed to: <ul style="list-style-type: none"> (i) allow natural physical stream processes to occur within waterway envelopes; (ii) protect and maintain the biodiversity conservation values including the terrestrial and aquatic habitat and corridor values 	<p>No acceptable outcome prescribed.</p>	<p>R11.1 Not applicable The Site is not located within a greenfield area and no waterway envelopes have been adopted. Further, the proposed development is not for essential community or transport infrastructure.</p>
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El Arish Mission Beach Road, Maria Creeks

APPENDIX

J

AGRICULTURAL LAND REPORT

Agricultural Land Report

**Lot 5 SP 202686
El Arish- Mission Beach Road
Mission Beach**

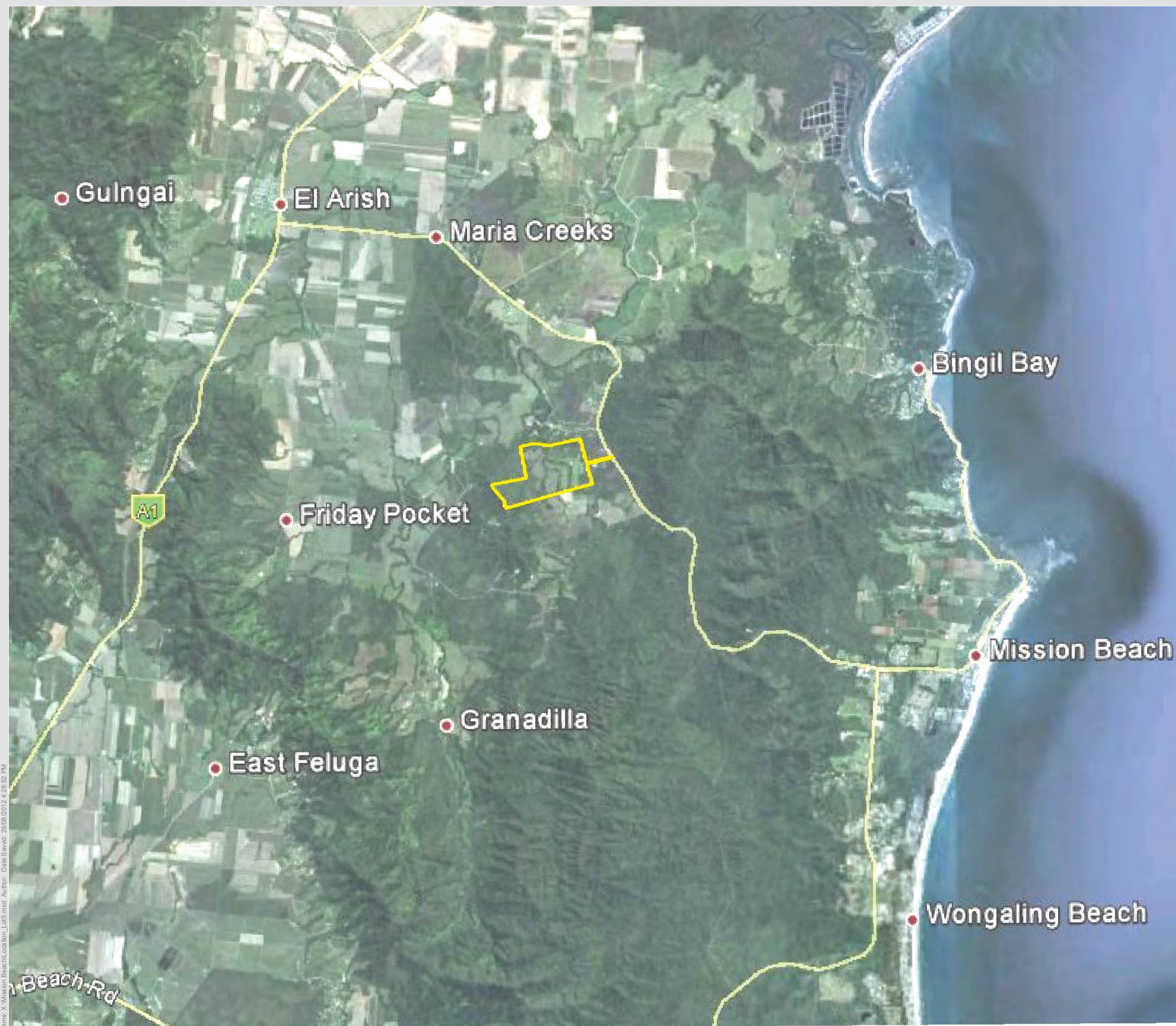
Prepared by:

Bob Walker
(Rural and Regional Resources)

1. Introduction

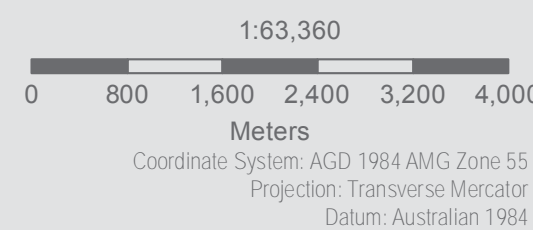
Rural and Regional Resources was commissioned to prepare an agricultural land assessment of Lot 5 SP202686, El Arish- Mission Beach Road, Mission Beach. This property description is subsequently referred to as 'the site' in this report. The site is generally a square block located on Mission Beach Road approximately 12 kilometres north- west of Mission Beach. **Map 1.1- Locality Plan** represents the configuration and lot alignment.

This assessment was completed in accordance with the requirements of the Planning Guidelines for 'The Identification of Good Quality Agricultural Land' (DPI and DHLGP, 1993) as recommended in State Planning Policy 1/92. It should be noted though that this report is the product of a desk-top assessment. The assessment methodology and the general findings are detailed in this report.



Legend

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1.1 - Location



2. Methodology

2.1 Definition of Good Quality Agricultural Land

The Planning Guidelines for 'The Identification of Good Quality Agricultural Land' (referred to as the Planning Guidelines) issued jointly by the Department of Primary Industries (DPI) and the Department of Housing, Local Government and Planning (DHLGP), defines good quality agricultural land as:

'land which is capable of sustainable use for agriculture, with a reasonable level of inputs and without causing degradation of land or other natural resources. In this context, agricultural land is defined as land used for crop or animal production, but excluding intensive animal uses such as feedlots, piggeries, poultry farms and plant nurseries based on either hydroponics or imported growth media.'

This definition has been adopted in our classification.

2.2 Classification System

The classification system adopted for this investigation is as specified in the planning guidelines. The classification system is based on the guidelines. Land is categorised into one of four agricultural land classes, these being A, B, C or D. **Table 2.1 Agricultural Land Classes** describes the distinguishing features of each land class.

Table 2.1: Agricultural Land Classes

Class	Description
Class A	Crop land - Land suitable for current and potential crops with limitations to production which range from none to moderate levels.
Class B	Limited crop land - Land that is marginal for current and potential crops due to severe limitations; and suitable for pastures. Engineering and/or agronomic improvements may be required before the land is considered suitable for cropping.
Class C	Pasture land - Land suitable only for improved or native pastures due to limitations which preclude continuous cultivation for crop production; but some areas may tolerate a short period of ground disturbance for pasture establishment.
Class D	Non-agricultural land - Land not suitable for agricultural uses due to extreme limitations. This may be undisturbed land with significant habitat, conservation and/or catchment values or land that may be unsuitable because of very steep slopes, shallow soils, rock outcrop or poor drainage.

Source: DPI and DHLGP, 1993, p 1.

2.3 Assessment Methodology

The assessment process relied on a desk-top process and related field work undertaken by the author on lands located approximately 1 kilometre from the site. Based on satellite interpretation, it is likely that this other location is similar in nature to this site in terms of bio-physical features.

Desk-top review

This review collated:

- i. aerial photograph information
- ii. existing departmental investigation reports
- iii. existing land use investigation reports
- iv. existing maps relevant to the site

Existing satellite imagery was reviewed to assess land use distribution, vegetation distribution and site features.

The most relevant department reports reviewed were:

- i. CSIRO's Division of Soils Divisional Report 123 report titled 'Soils of the Babinda- Cairns Area, North Queensland' by G.G. Murtha, M.G. Cannon and C.D. Smith
- ii. CSIRO's Division of Soils Divisional Report 82 report titled 'Soils of the Tully Innisfail Area, North Queensland' by G.G. Murtha, M.G. Cannon and C.D. Smith, 1986
- iii. QDPI's Wet Tropical Coast Study, Cardwell-Innisfail Area, Agricultural Land Suitability'

These reports provided broad-scale descriptions of soil associations, soil classifications and major characteristics of dominant soils. This CSIRO reports provided the background for 'site specific' conclusions.

Rural and Environmental Resources are not aware of any other 'site specific' investigations.

Cadastral mapping and aerial photographs have also been sourced to assist with the investigations.

Preparation of Land Suitability Report

This report outlines the:

- i. assessment procedures and methodology
- ii. land resources of the site
- iii. land use
- iv. land suitability for agriculture
- v. conclusions

3. Background Biophysical Data

3.1 Locational Attributes

Geographically, the site is located approximately 12 kilometres north- west of Mission Beach and runs off Mission Beach Road. There is a distant geographic separation between the site and surrounding agricultural areas on all boundaries except for the southern boundary. On the southern boundary, the site is separated by a narrower vegetated tree lined drainage area. The site is comprised of seven (7) small discreet areas separated by tree lined vegetated drainage areas. This represented in **Map 3.1- Proposed Lot Layout**.

Significant areas of remnant riverine vegetation have been retained adjacent to the bed and banks of the creek network meandering through the site. Areas immediately to the west support native vegetation communities. The area to the east of the site has been split into 2 rural residential style allotments.

The property land use is predominantly either bushland or pasture. In the district, large areas of bushland exist and pockets of land supporting either sugar or banana production. **Map 3.1** represents locational aspects of the site relative to surrounding land uses.

3.2 Topography and Vegetation

The site is undulating to flat with slopes ranging from flat (>1%) on alluvial areas adjacent to Jurs Creek to undulating over the western areas of the site. The alluvial areas are likely to be terraced with two levels evidenced. This topographic configuration is typical of the drainage systems in North Queensland.

Currently the site is growing grass with some volunteer sugar cane presenting. Large areas of the site also support native vegetation communities that are unlikely to have been cleared.

3.3 Climate

The site is located within north Queensland's wet tropical coast where distinct wet and dry seasons are experienced. Wet season periods coincide with hot and humid conditions. Climatic information accessed for this report used locational data closest to the site.

Temperature

Cairns experiences temperatures ranging from an average minimum of 16.2°C in winter and an average maximum of 32.1°C in summer. Innisfail also experiences a mean maximum around 32°C in summer. **Table 3.1: Climatic Data (Cairns/Innisfail)** demonstrates the temperature distribution throughout the year.

Table 3.1: Climatic Data- Cairns/Innisfail

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
TEMP. MAX. Cairns	32.1	31.6	30.6	29.4	27.6	26.1	25.7	26.5	28.1	29.8	31.1	32.0	29.2
TEMP. MIN. Cairns	23.4	23.3	22.5	21.1	19.0	17.5	16.2	16.2	17.7	19.7	21.4	22.7	20.0
%REL. HUM 9am Innisfail	82	85	85	86	87	86	86	83	78	75	75	76	82

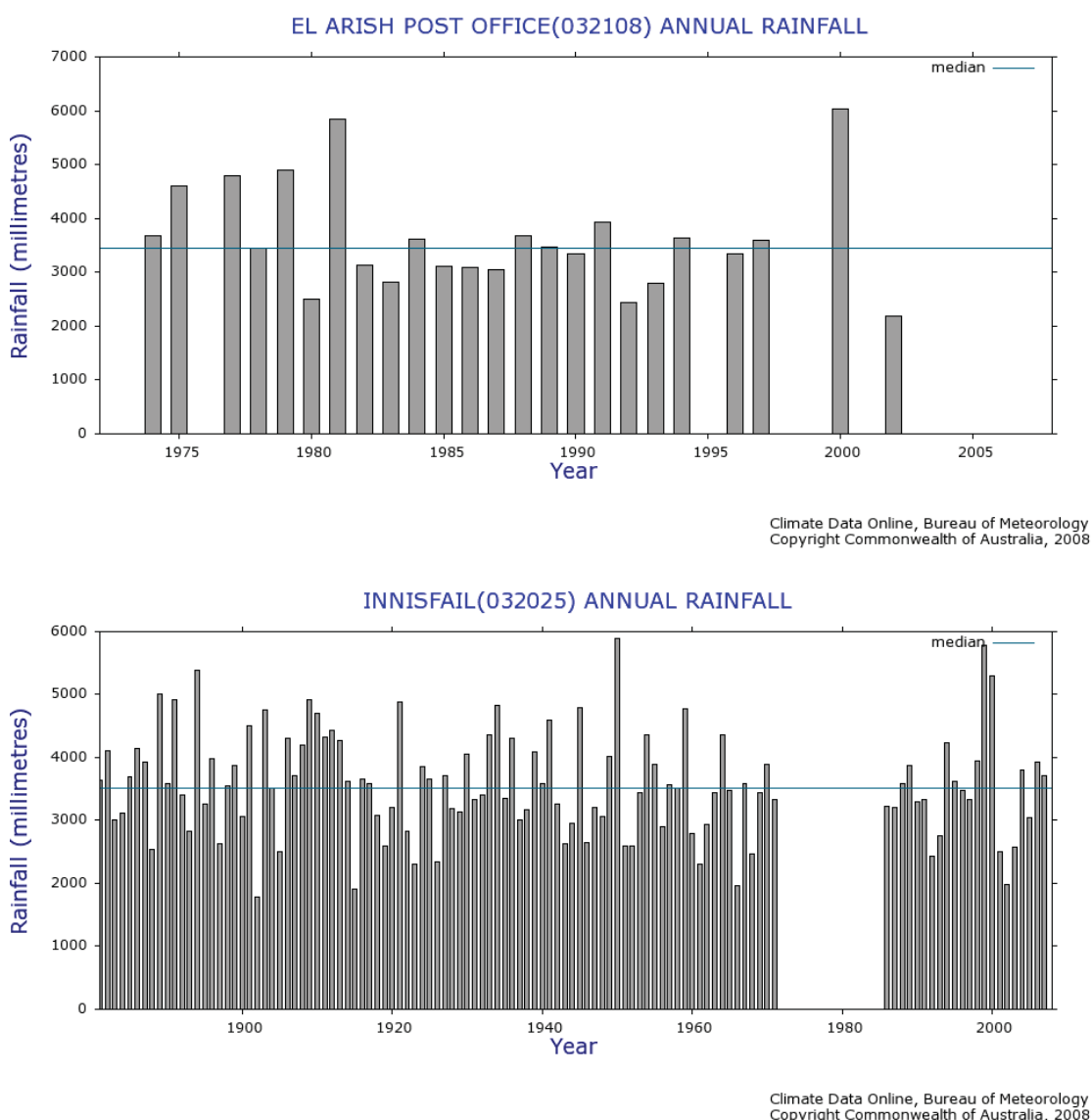
%REL. HUM 3pm Innisfail	72	75	74	74	73	70	68	68	65	66	68	70	70
60PAN EVAP. mm/day Cairns	6.0	5.8	5.2	4.5	3.8	3.4	3.7	4.3	5.0	5.7	5.9	6.1	4.9
PAN EVAP. Cairns	1788mm/year												

Source: Murtha et al, Soils of the Babinda- Cairns Area, North Queensland

Rainfall

The average rainfall for El Arish and Innisfail is in the order of 3 500mm. This is represented below in **Figure 3.1- El Arish Post Office and Innisfail Annual Rainfall.**

Figure 3.1- El Arish Post Office and Innisfail Annual Rainfall.



Evaporation

Evaporation data for Cairns indicates that evaporation rates range from 3.4mm/day in May to 6.1mm/day in December. The total pan evaporation amount for the year averages 1788mm/year. The distribution of pan evaporation throughout the year is included in **Table 3.1.**

Relative Humidity

Information on relative humidity for Innisfail indicates that the relative humidity levels average 74% to 79% over the wetter months of the year. As expected, relative humidity levels drop for 3pm recordings. The humidity distribution throughout the year at 9.00 am and 3.00 pm is illustrated in **Table 3.1**.

Wind

Prevailing winds at Innisfail are predominantly from the south and south-east when measured at 9am and south east and east when measured at 3pm. A more detailed outline of these statistics is presented in **Appendix A- Wind statistics – wind rose**.

Climatic Constraints

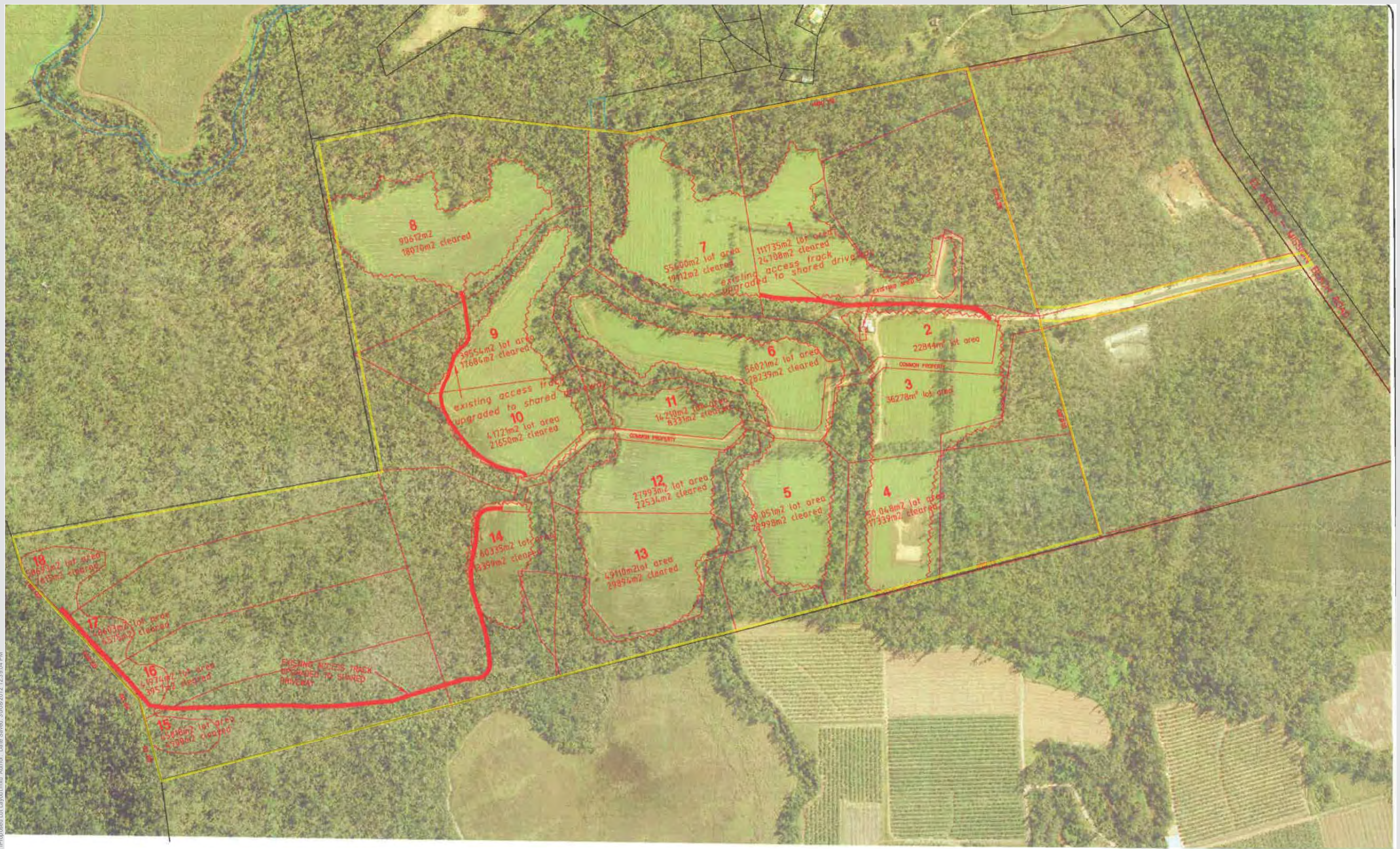
These climatic features do not exclude agricultural production on the site, but present constraints.

Rainfall levels are high, but poorly distributed. The region experiences definitive seasons. Evaporation levels are half annual rainfall averages. The site consists of soils that are well drained. The consequence of these features is that field crops eg. sugar cane will generally receive enough rainfall through the growing season. With respect to horticultural crops, it is expected that supplementary irrigation will be required to supply water at critical times throughout the year so that production levels are maintained.

The region's climate is characterised by high humidity throughout the summer. Agriculturally, humidity is generally associated with wetter conditions along the coast, and this encourages plant growth. However, the higher humidity also results in the higher incidence of fungal diseases and weeds necessitating a higher usage of either chemical control or more intensive cultivation. If agriculture were to re-commence on the site, the prevailing winds would potentially allow chemicals to drift onto adjacent areas to the west and north- west of the site if poorly applied. These effects would be mitigated by the treed drainage lines surrounding each discreet cleared parcel.

Similarly, if agriculture were to re-commence on the site, the prevailing winds would potentially allow dust to drift onto adjacent areas to the west and north- west of the site if poorly managed. Dust movement is a likely occurrence as a result of cultivation and cane harvesting operations. These effects though would be mitigated by the surrounding networks of vegetation corridors around the discreet cleared parcels.

Dust and spray drift from the existing southern neighbouring cane/banana farm to the site has the potential cause impact, but this effect is likely to be minimal due to the mitigating function of the riparian tree lined buffer.



NOT FOR CONSTRUCTION

PROPOSED LOT LAYOUT

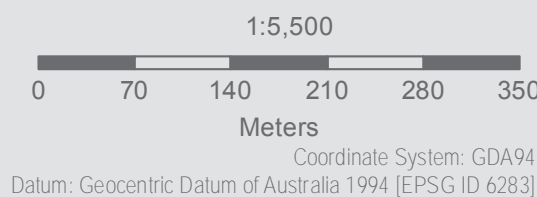


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Map 3.1 Proposed Lot Layout



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File Name: X:\Mission Beach3_Proposed Lot Layout.mxd Author: Date Saved: 30/09/2012 12:39:04 PM

4. Regional Soil Investigations

4.1 Regional Findings

CSIRO has investigated the area between Babinda and Cairns, dividing the area into soil associations, classified the soils according to a number of classification methods and described the major characteristics of the dominant soils. These investigations have collated into a CSIRO Division of Soils Divisional Report 123.

This report outlines many of the principles underlying the pedogenesis (soil forming) and morphology of the soils in the area. In addition to the CSIRO report, Australasian Groundwater and Environmental Consultants (AGEC) have completed a report on groundwater aspects on an area near the site. In this report, it was concluded that the aquifers within the alluvium unit of the site '*consist of clay from the Hodgkinson Formation and the fine grained, well sorted quartzose sand derived from the Mission Beach granite.*' This correlates with the CSIRO report's findings on morphology and provides the geological basis for the well drained soils formed on alluvium at the site.

In terms of specific soils found on the site through regional scale mapping, the CSIRO Division of Soils Divisional Reports 82 has identified 4 main soil type-landform associations, these being:

- i. Tully (Tu) soils- these are well drained soils formed on alluvium. Their main distinguishing features are that they are bright yellow, have uniform or gradational textured profiles and are in the silty clay loam to silty clay range. They generally form part of stream levee flood plain and terrace landforms.
- ii. Feluga (Fe) soils- these are soils of metamorphic rock origin. Their main distinguishing features are that they are very strongly leached gradational textured soils. These soils may have some ironstone gravels throughout. They generally form part of old alluvial fan landforms.
- iii. Galmara (Ga) soils- these are soils of metamorphic rock origin. Their main distinguishing features are that they are red, uniform or gradational textured soils formed in situ. They generally form part of low-high hilly landforms.
- iv. Mountainous (M1) unit.

The distribution of these soils over the site is presented in **Map 4.1- Soils on the site.**

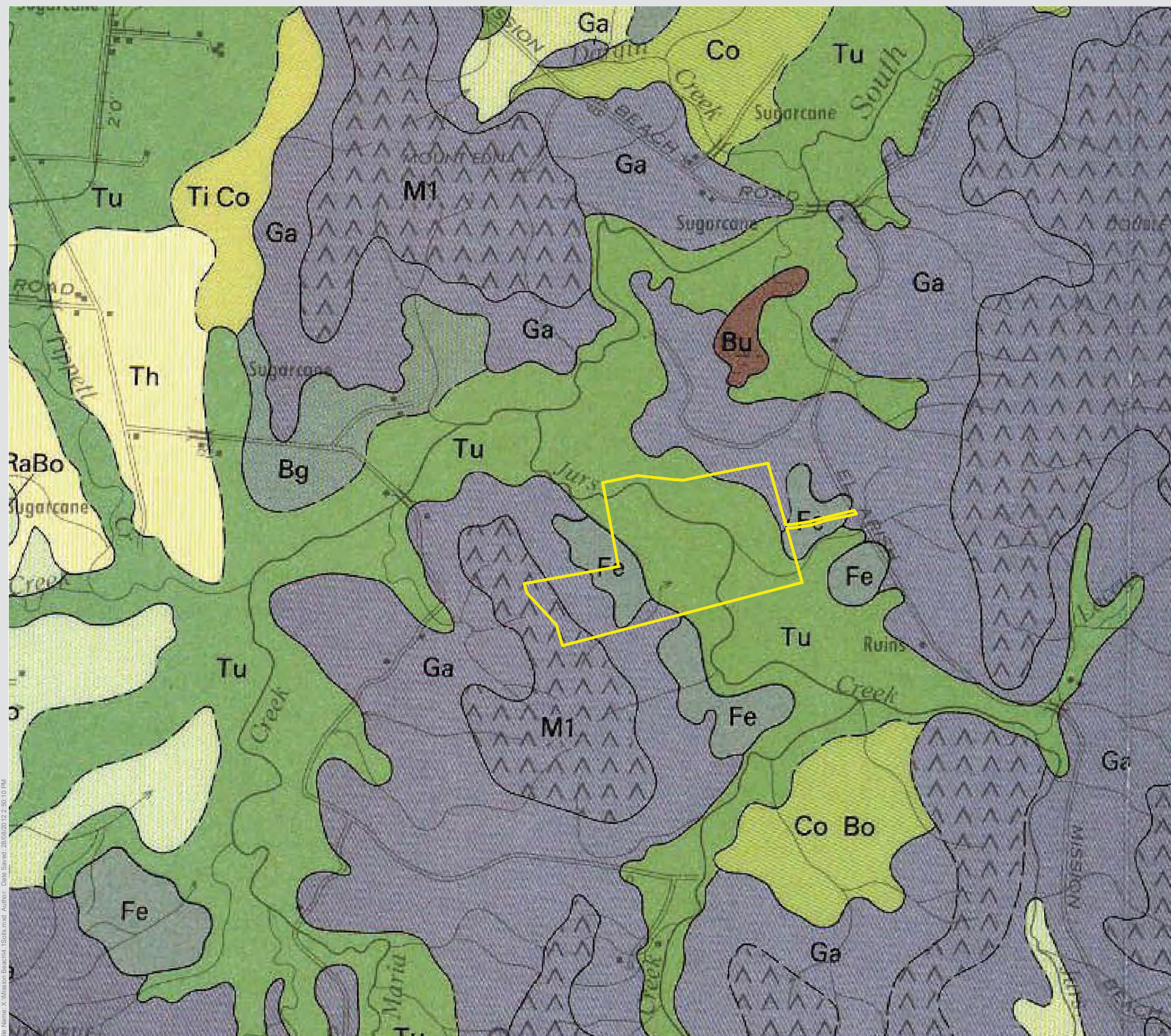
4.2 Field investigation findings

Based on departmental reporting, soils on the site appear to be associated with two alluvial variants and these variants are related with terracing effects of the alluvial system.

The landscape change occurring on the alluvial system is typical of alluvial processes and alluvial pedogenesis. The lower terraces are more flood-prone and are located adjacent to creek networks. This lower terrace is subject to more frequent flood events. Soil profile features indicate the sub soils are moderately to well-drained and this is indicative of accretion deposition of granitic sands over the years during flood events.

The upper terraces on the alluvium are less flood-prone and not subject to 'lower flow' deposition events but more deposition from major floods. The 'major floods' generally result in deposition of mixed material from parent sources including granitic sands, basaltic clays and metamorphic rocks. Deposits range from sand depositions to mud flows, depending on the extent and severity of the flood event and the source of the eroded material. The predominant soils identified on this variant are better structured, albeit better drained than the lower terrace.

It is expected that the soils on this site will to be similar in terms of features and attributes as those outlined above due to the similar landscape processes functioning in the area. This can only be confirmed through field assessment.



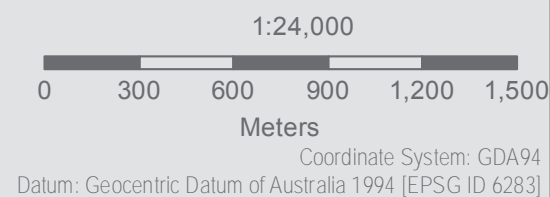
SOIL ASSOCIATION

Fe	FELUGA
Ga	GALMARA
M1	MOUNTAINOUS UNIT
Tu	TULLY

Source: CSIRO DIVISION OF SOILS
Divisional Report No. 82
Soils of the Tully-Innisfail Area
North Queensland

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4.1 Departmental Soils



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5. Agricultural Land Assessment

5.1 Assessment Procedure

Selection of land uses that are sustainable is determined by the:

- physical attributes of the land
- limiting factors of the land
- physical requirements of the predominant crops grown in the district

In accordance with the definition of SPP1/92, a '*land which is capable of sustainable use for agriculture, with a reasonable level of inputs and without causing degradation of land or other natural resources*' is a use where the physical and chemical attributes of the land support the physical requirements of the crop, without the need to impact on the inherent limiting factors. Non-sustainable uses occur when the physical and chemical attributes of the land are not compatible with the requirements of the crop, causing the inherent limiting factors of the land to degrade the land with use.

In this report and in accordance with the guidelines, land suitability for sugarcane, banana, horticultural and grazing uses were assessed as these are the major crops grown in the district.

5.2 Irrigation Status

The site is not part of any gazetted irrigation area and agricultural uses on the site are not serviced with any surface or underground water that would satisfy irrigation demands. It is unlikely that there are any substantial underground irrigation scale supplies due to the geological nature and features of the immediate district surrounding the site.

In addition, there is a government moratorium on the further take or interference with water in a watercourse, lake or spring and underground water in the Wet Tropics area. The site is within the boundaries of the Wet Tropics area, and this direction precludes any further extractions whilst the moratorium is in place.

This lack of a reliable water supply limits the crop selection for the site to dry-land sugarcane cropping and grazing options and excludes tree cropping and bananas. Sugar is the main crop in the district that is predominantly grown under dry-land conditions and commercial banana and horticulture production require irrigation to meet production needs.

5.3 Limitations Assessment

An evaluation of land related limitations that influence agricultural land use was completed. The severity of these was determined to assess the suitability of the site for agricultural purposes. Biophysical limitations identified that have the potential to restrict agricultural production on the site include:

- freely draining nature of the soils generating moisture and nutrient deficits at times and limiting production in dry periods
- occasional flood events causing erosion
- steeper slopes on shallow soils on the western ridge area causing erosion

- sub soil constraints on shallow soils on the western ridge areas limiting production

5.4 Land Suitability Assessment

Assumptions

Land suitability assessment takes into account assessments of the biophysical features, regional assessments, field investigations and aerial photographic interpretations. Suitability ratings are a judgement of the suitability of the biophysical features of the site to support sugarcane, horticulture, banana and pasture production. These assessments assume that commonly used industry management practices will be adopted.

In sugar cane production systems, we have assumed that green cane harvesting is the accepted practice. This assumption is based on knowledge that most sugar cane is now harvested green in the district. This management regime results in increased flexibility in relation to farm layout, erosion control and moisture retention rates in the soils.

Assessment

The site has been categorised into three (3) land types. Land suitability has been based on the biophysical features of the site for each of the land types. In summary, the three types are (i) flat alluvial areas, (ii) tree-lined drainage areas and (iii) the sloping areas on the western portion of the site.

In terms of known limitations, it is likely that the agricultural potential of the site will be impacted by occasional flooding, occasional water deficits, some steeper slopes on the western portion and maybe some sub-soil constraints. Departmental reporting has mapped the site as suitable for a range of crops. The distribution of crop suitability is presented in **Map 5.1- Crop suitability for the site**. The extent and severity of these limitations would need to be confirmed through field assessment and this in turn, will influence suitability ratings.

Based on the departmental reporting and an assumption that horticulture and banana production systems require access to irrigation water, it is expected that the flat alluvial areas of the site only would be suited to the production of dry-land sugar cane production only.

On this basis, the flat alluvial areas are considered to be good quality agricultural land (GQAL) in terms of State Planning Policy 1/92. The remainder of the site is not considered to be GQAL.

KEY LAND USES

- A1

Suitable for sugarcane, bananas, papaws and improved pastures.
- A2

Suitable for sugarcane, bananas and improved pastures.
- A3

Suitable for sugarcane and improved pastures.
- A4

Suitable for bananas and improved pastures.
- A5

Suitable for adapted tree crops and improved pastures.
- A6

Suitable for adapted dry season annual crops and improved pastures.
- B1

Suitable for improved pastures and marginal for tree crops.
- B2

Suitable for improved pastures and marginal for dry season annual crops.
- C

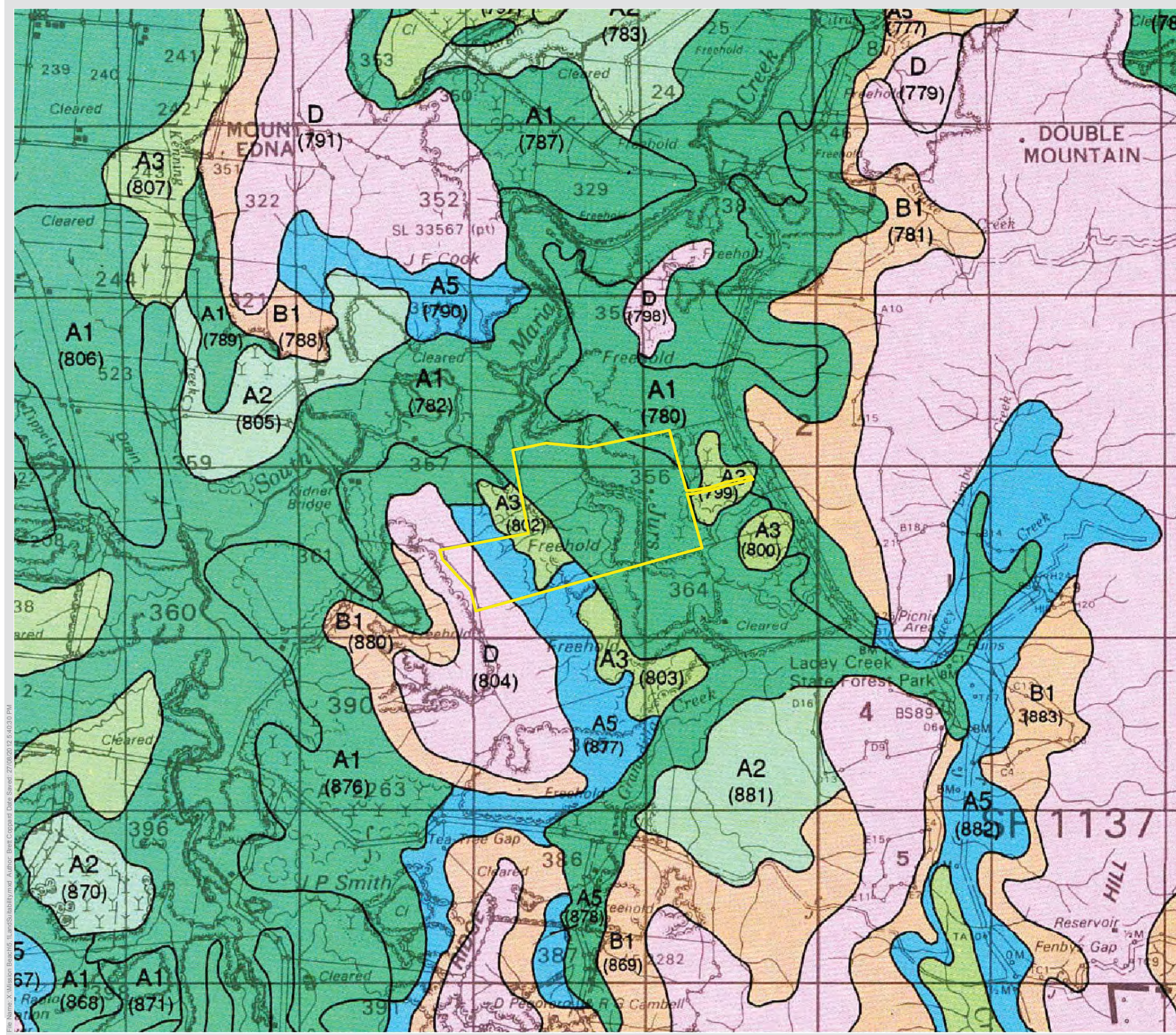
Suitable for improved pastures.
- D

Non-Agricultural land.

Source: P2973 Sheet 2 - Carwell Innisfail Area
AGRICULTURAL LAND SUITABILITY (DPI QLD)

Legend

Lot5 SP202686



1:24,000
0 300 600 900 1,200 1,500
Meters
Coordinate System: AGD 1984 AMG Zone 55
Projection: Transverse Mercator
Datum: Australian 1984

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5.1 Land Suitability

6. Related Site Features Impacting on Agricultural Production

Our investigations have concluded that on the basis of biophysical attributes alone, the flat alluvial areas only are suitable for agriculture. It is further considered though that these soils are only marginally capable of supporting sugar cane production and pasture production. Some of the areas flood, some of the areas are likely to have poor plant available water capacity (PAWC) due to their free draining nature and most are likely to suffer from some form of sub-soil constraint. Regardless, the severity of the constraint would not preclude sugar production but more relegate it to a marginal status.

However, despite the biophysical marginal suitability rating for the flat alluvial areas of the site, other non- biophysical factors severely restrict agricultural development on the site.

6.1 Insecure irrigation status

The site is not serviced with any surface or underground water that would satisfy irrigation demands. This limits the crop selection for the site to dry-land sugarcane cropping and grazing options.

6.2 Farm size and fragmentation

The site is fragmented and comprises 14 discreet parcels that are cleared and separated by either vegetated strips or vegetated creek lines. The areas of these cleared parcels range between 1 and 6 hectares. If taken collectively, these areas are not considered to be an economic unit for sugar cane production as throughput is not sufficient. The fragmented nature of the 14 blocks further exacerbates the impracticality of farming these small areas.

Section 2.3 of the SPP1/92 guidelines state that although *'explicit evaluation of economic factors'* should not be considered, *'where such land is isolated, or significantly fragmented by other uses, farming might be too heavily constrained to warrant protection for agricultural uses'*. The fragmented and isolated nature of the site suggests that the site is not easily amalgamated with neighbouring farms.

The practicality of the neighbouring banana farmer amalgamating this area is low due to the size and configuration of the site (s). In addition, the financial costs of purchasing the land for agricultural purposes are considered to be 'unsustainable' given the real estate value of the site as compared to expected returns from agriculture.

On this basis, it is considered that the small areas of GQAL that have been identified are not worth protecting.

6.3 Summary

This classification is based on SPP1/92 definition that QGAL is land that is *'capable of sustainable use for agriculture with a reasonable level of inputs'*. The constraints of the site that need to be overcome with a *'reasonable level of inputs'* and that are compromised include:

- i. Moisture deficits are likely to severely constrain agriculture choice;
- ii. Irrigation water is unlikely to be secured, and it is considered essential for horticultural and banana production;
- iii. There is a likely connectivity of groundwater systems limiting the use of nutrients, pesticides and fertilisers in areas adjacent to the creek;

- iv. Farm size constraints that are not easily overcome due to isolation and fragmentation barriers; and
- v. Farm amalgamation is impractical

The resolution of these constraints is not possible. Firstly, moisture deficits are biophysical and a reliable irrigation supply is not available. Secondly, locational constraints create a need for more organic farming practices for the site. These practices are not widely adopted, and incur a cost burden. Thirdly, farm size constraints are not easily overcome due to financial barriers. Finally, the site is isolated and fragmented. The costs involved in resolving each of these constraints individually and collectively are significant, and to the point of being an '*unreasonable level of input*' for an agricultural enterprise.

On this basis, the flat alluvial areas that are considered to be good quality agricultural land (GQAL) in terms of State Planning Policy 1/92 are isolated and fragmented, are of marginal soil suitability and of small size. The loss of these small areas of GQAL would not be inconsistent with the policy and its guidelines.

References

Department of Housing, Local Government and Planning 1992, *State Planning Policy 1/92, Development and the Conservation of Agricultural Land*, Queensland Department of Housing, Local Government and Planning.

Department of Primary Industry and Department of Housing, Local Government and Planning 1993, *Planning Guidelines: The Identification of Good Quality Agricultural Land*, Queensland Department of Housing, Local Government and Planning.

Department of Natural Resources and Department of Local Government and Planning 1997, *Planning Guidelines: Separating Agricultural and Residential Land Uses*, DNR: Brisbane.

Department of Natural Resources and Department of Local Government and Planning date unknown, *Suitability Framework- Wet Tropical Coast from Cape Tribulation to Ingham*: Bundaberg

Murtha, G.G., Cannon, M.G. and Smith, C.D, Soils of the Babinda-Cairns Area, North Queensland. CSIRO Divisional Report 123 ISSN 0725-8526.

Appendix A - Wind Statistics – Wind Rose

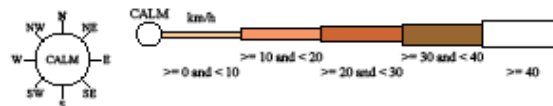
Rose of Wind direction versus Wind speed in km/h (01 Jan 1957 to 31 Dec 2006)

INNISFAIL

Site No: 032025 • Opened Jan 1881 • Still Open • Latitude: -17.5249° • Longitude: 146.0345° • Elevation 10m

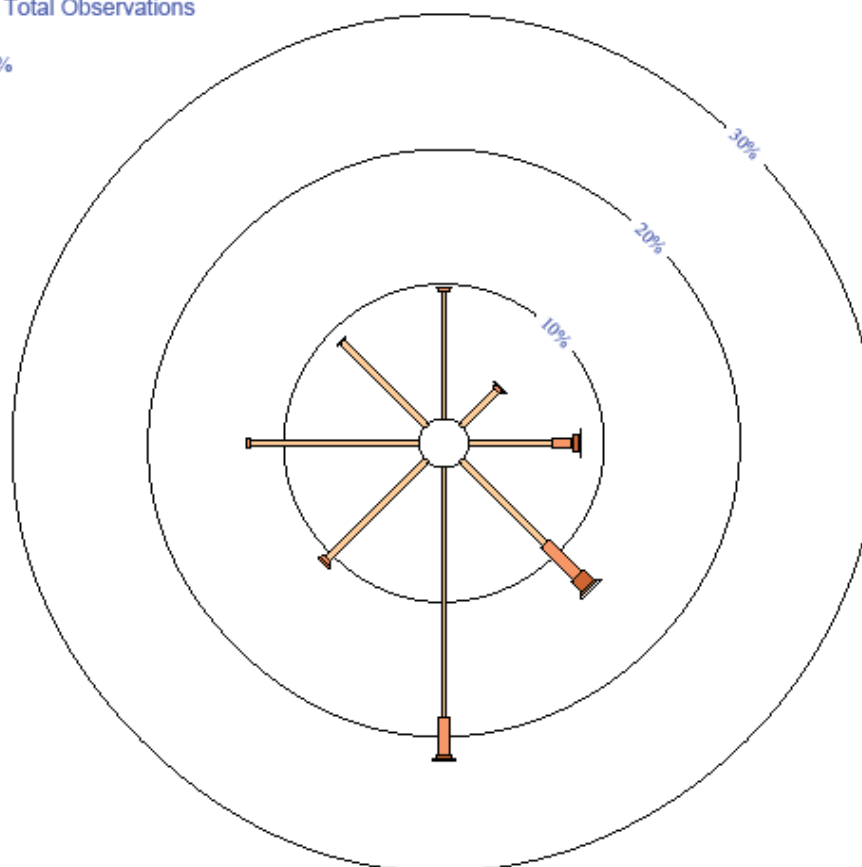
An asterisk (*) indicates that calm is less than 0.5%.

Other important info about this analysis is available in the accompanying notes.



9 am
17924 Total Observations

Calm 9%



Copyright © Commonwealth of Australia 2007. Prepared on 28 Mar 2007
Prepared by National Climate Centre of the Bureau of Meteorology.
Contact us by phone on (03) 9669 4082, by fax on (03) 9669 4515, or by email on webclim@bom.gov.au
We have taken all due care but cannot provide any warranty nor accept any liability for this information.

TCZ1857127 Page 1

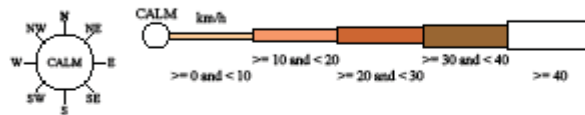
Rose of Wind direction versus Wind speed in km/h (01 Jan 1957 to 31 Dec 2006)

INNISFAIL

Site No: 032025 • Opened Jan 1881 • Still Open • Latitude: -17.5249° • Longitude: 146.0345° • Elevation 10m

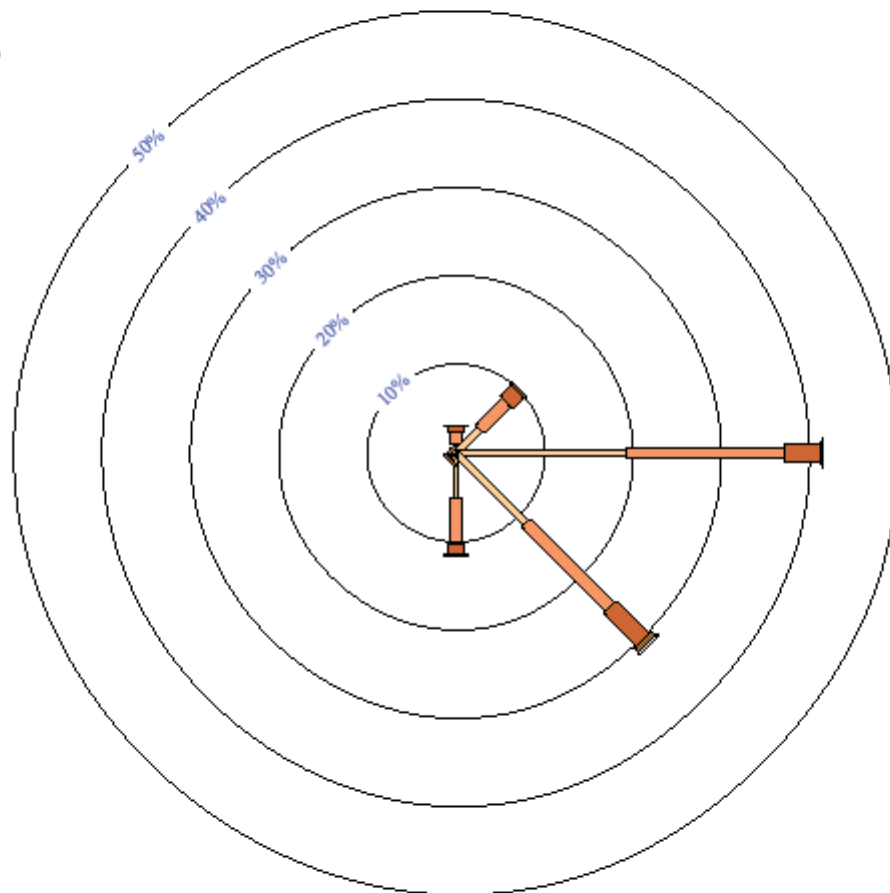
An asterisk (*) indicates that calm is less than 0.5%.

Other important info about this analysis is available in the accompanying notes.



3 pm
17046 Total Observations

Calm 1%



El Arish Mission Beach Road, Maria Creeks

APPENDIX

K

C4 LETTER OF SUPPORT



President: Peter Rowles
Secretary: Peter Trott
Treasurer: Maurice Franklin

Dominic Hammersley
Cardno HRP
280 Sheridan Street,
CAIRNS NORTH, Q. 4870

Dear Dominic,

Following discussions with your client, Graeme Thompson, regarding the proposed 12-lot subdivision on Lot 5, SP202686 El Arish Mission Beach Road (project/plan J13048-001/001 rev 04), we make the following comments:

We prefer in principle to see demand for residential housing met by existing subdivisions and therefore do not support new subdivisions.

However, we note that in this case, considerable attention has been given to providing sustainable residential sites on previously cleared, former farm land. We understand the requirements for owners will include provision of rainwater tanks, solar power generation capacity and limited building envelopes.

We commend the attention to detail in minimising environmental impacts, the provision of a covenanted cassowary corridor linking the Djiru National Park to forested land along the South Maria Creek catchment and the commitment to offer existing cleared areas as offsets so they will regenerate as forested land. Priority should be given to offering the portions adjoining the proposed corridor first.

We would prefer the requirements for owners to include a restriction on fencing except in the immediate vicinity of homes and in this case, any fencing to be of a type which does not trap flying foxes or native fauna.

We would also like to see a mechanism to exclude unrestrained dogs from the areas likely to be frequented by cassowaries.

We thank you for the opportunity to comment on the proposal and advise that as long as the conditions described by the developer are in place, we do not object to the proposal.

Yours sincerely,

Peter Trott,
Hon. Secretary
Community for Coastal and Cassowary Conservation.
October 13, 2014

El Arish Mission Beach Road, Maria Creeks

APPENDIX

L

OWNER'S CONSENT

The Chief Executive Officer
Cassowary Coast Regional Council
PO Box 887
Innisfail, QLD 4860

Dear Sir / Madam

OWNER'S CONSENT

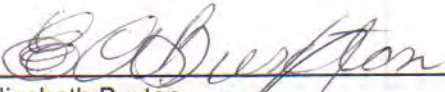
We, Thomas Raymond Buxton, Elizabeth Buxton, Christian Buxton and Alexander Buxton as trustees of the Buxton Superannuation Fund being owners as Mortgagees in Possession of property situated at El Arish Mission Beach Road, Maria Creeks described as Lot 5 on SP202686, consent to the making of a development application, under the *Sustainable Planning Act 2009* by Cardno HRP on the abovementioned property.

Yours faithfully,




Thomas Raymond Buxton

21/7/2015
Date



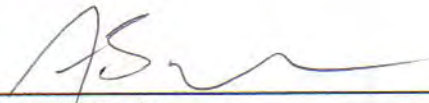
Elizabeth Buxton

21/7/2015
Date



Christian Buxton

21/7/2015
Date



Alexander Buxton

21/7/2015
Date

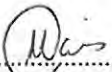
The Chief Executive Officer
Cassowary Coast Regional Council
PO Box 887
Innisfail, QLD 4860

Dear Sir

RE: OWNERS CONSENT

APPLICATION FOR A DEVELOPMENT PERMIT FOR A RECONFIGURATION OF A LOT (ONE INTO 10 LOTS PLUS BALANCE LOT) – AT EL ARISH MISSION BEACH ROAD, MARIA CREEKS – LOT 5 ON SP202686

We, **WMD & ASSOCIATES PTY LTD**, advise that we are the owners of property situated at El Arish Mission Beach Road, Maria Creeks (Lot 364 on NR2120) and that we consent to any flood impacts occurring on the abovementioned property as a result of the development application detailed above, made under the *Sustainable Planning Act 2009* by Cardno HRP.

Michelle Davis. 

Warrick Losper. 

Signed on the 22 day of 07 2016

**ATTACHMENT B –
IDAS FORMS**

IDAS form 1—Application details

(Sustainable Planning Act 2009 version 4.2 effective 3 August 2015)

This form must be used for **ALL** development applications.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

For all development applications, you must:

- complete this form (*IDAS form 1—Application details*)
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* (SPA) or the Sustainable Planning Regulation 2009.

This form and any other IDAS form relevant to your application must be used for development applications 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*. Whenever a planning scheme is mentioned, take it to mean land use plan for the strategic port land, Brisbane core port land or airport land.

PLEASE NOTE: This form is not required to accompany requests for compliance assessment.

Mandatory requirements

Applicant details (Note: the applicant is the person responsible for making the application and need not be the owner of the land. The applicant is responsible for ensuring the information provided on all IDAS application forms is correct. Any development permit or preliminary approval that may be issued as a consequence of this application will be issued to the applicant.)

Name/s (individual or company name in full)	Buxton Superannuation Fund		
For companies, contact name	Dominic Hammersley		
Postal address	C/- Cardno		
	PO Box 1619		
	Suburb	Cairns	
	State	QLD	Postcode 4870
	Country	Australia	
Contact phone number	07 4034 0500		
Mobile number (non-mandatory requirement)			
Fax number (non-mandatory requirement)			

Email address (non-mandatory requirement)

dominic.hammersley

@cardno.com.au

Applicant's reference number (non-mandatory requirement)

HRP14114

1. What is the nature of the development proposed and what type of approval is being sought?**Table A**—Aspect 1 of the application (If there are additional aspects to the application please list in Table B—Aspect 2.)

- a) What is the nature of the development? (Please only tick one box.)
- ☐ Material change of use ☒ Reconfiguring a lot ☐ Building work ☐ Operational work
- b) What is the approval type? (Please only tick one box.)
- ☐ Preliminary approval under s241 of SPA ☐ Preliminary approval under s241 and s242 of SPA ☒ Development permit
- c) Provide a brief description of the proposal, including use definition and number of buildings or structures where applicable (e.g. six unit apartment building defined as a *multi-unit dwelling*, 30 lot residential subdivision etc.)
- Reconfiguring a Lot (1 Lot into 10 Lots plus balance lot).
- d) What is the level of assessment? (Please only tick one box.)
- ☐ Impact assessment ☒ Code assessment

Table B—Aspect 2 of the application (If there are additional aspects to the application please list in Table C—Additional aspects of the application.)

- a) What is the nature of development? (Please only tick one box.)
- ☒ Material change of use ☐ Reconfiguring a lot ☐ Building work ☐ Operational work
- b) What is the approval type? (Please only tick one box.)
- ☐ Preliminary approval under s241 of SPA ☒ Preliminary approval under s241 and s242 of SPA ☐ Development permit
- c) Provide a brief description of the proposal, including use definition and number of buildings or structures where applicable (e.g. six unit apartment building defined as a *multi-unit dwelling*, 30 lot residential subdivision etc.)
- Material Change of Use (s242 Preliminary approval affecting the Planning Scheme) to make land included in the Cassowary Rise Eco-Residential Estate – Precinct Plan assessable in accordance with the levels of assessment in Appendix B – Levels of Assessment Tables and assessable against The Cassowary Rise Eco-Residential Estate Code, as detailed within the Cassowary Rise Eco-Residential Estate Plan of Development.
- d) What is the level of assessment?
- ☒ Impact assessment ☐ Code assessment

Table C—Additional aspects of the application (If there are additional aspects to the application please list in a separate table on an extra page and attach to this form.)

☐ Refer attached schedule ☒ Not required

2. Location of the premises (Complete Table D and/or Table E as applicable. Identify each lot in a separate row.)

Table D—Street address and lot on plan for the premises or street address and lot on plan for the land adjoining or adjacent to the premises (Note: this table is to be used for applications involving taking or interfering with water.) (Attach a separate schedule if there is insufficient space in this table.)

- ☒ Street address **and** lot on plan (All lots must be listed.)
- ☐ Street address **and** lot on plan for the land adjoining or adjacent to the premises (Appropriate for development in water but adjoining or adjacent to land, e.g. jetty, pontoon. All lots must be listed.)

Street address					Lot on plan description		Local government area (e.g. Logan, Cairns)
Lot	Unit no.	Street no.	Street name and official suburb/ locality name	Post-code	Lot no.	Plan type and plan no.	
i)			El Arish Mission Beach Road, Maria Creeks	4855	5	SP202686	Cassowary Coast
ii)							
iii)							

Planning scheme details (If the premises involves multiple zones, clearly identify the relevant zone/s for each lot in a separate row in the below table. Non-mandatory)

Lot	Applicable zone / precinct	Applicable local plan / precinct	Applicable overlay/s
i)	Rural Zone / Environment Management and Conservation Zone	N/A	Agricultural Land Overlay, Bushfire Hazard Overlay, Coastal Protection Overlay, Environmental Significance Overlay, Flood Hazard Overlay, Scenic Amenity Overlay, Transport Noise Corridors Overlay, Waterway Corridors and Wetlands Overlay
ii)			
iii)			

Table E—Premises coordinates (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.) (Attach a separate schedule if there is insufficient space in this table.)

Coordinates (Note: place each set of coordinates in a separate row)				Zone reference	Datum	Local government area (if applicable)
Easting	Northing	Latitude	Longitude			
					<input type="checkbox"/> GDA94 <input type="checkbox"/> WGS84 <input type="checkbox"/> other	

3. Total area of the premises on which the development is proposed (indicate square metres)

89 hectares

4. Current use/s of the premises (e.g. vacant land, house, apartment building, cane farm etc.)

Dwelling house

5. Are there any current approvals (e.g. a preliminary approval) associated with this application? (Non-mandatory requirement)

☒ No ☐ Yes—provide details below

List of approval reference/s	Date approved (dd/mm/yy)	Date approval lapses (dd/mm/yy)

6. Is owner's consent required for this application? (Refer to notes at the end of this form for more information.)

☐ No
☒ Yes—complete either Table F, Table G or Table H as applicable

Table F

Name of owner/s of the land	
I/We, the above-mentioned owner/s of the land, consent to the making of this application.	
Signature of owner/s of the land	
Date	

Table G

Name of owner/s of the land	TR Buxton, E Buxton, C Buxton & A Buxton as Trustees of the Buxton Superannuation Fund owners as Mortgagees in Possession
<input checked="" type="checkbox"/> The owner's written consent is attached or will be provided separately to the assessment manager.	

Table H

Name of owner/s of the land	
<input type="checkbox"/> By making this application, I, the applicant, declare that the owner has given written consent to the making of the application.	

7. Identify if any of the following apply to the premises (Tick applicable box/es.)

- ☒ Adjacent to a water body, watercourse or aquifer (e.g. creek, river, lake, canal)—complete Table I
- ☐ On strategic port land under the *Transport Infrastructure Act 1994*—complete Table J
- ☐ In a tidal water area—complete Table K
- ☐ On Brisbane core port land under the *Transport Infrastructure Act 1994* (No table requires completion.)
- ☐ On airport land under the *Airport Assets (Restructuring and Disposal) Act 2008* (no table requires completion)
- ☐ Listed on either the Contaminated Land Register (CLR) or the Environmental Management Register (EMR) under the *Environmental Protection Act 1994* (no table requires completion)

Table I

Name of water body, watercourse or aquifer
Jurs Creek

Table J	
Lot on plan description for strategic port land	Port authority for the lot

Table K	
Name of local government for the tidal area (if applicable)	Port authority for the tidal area (if applicable)

8. Are there any existing easements on the premises? (e.g. for vehicular access, electricity, overland flow, water etc)

☐ No ☒ Yes—ensure the type, location and dimension of each easement is included in the plans submitted

9. Does the proposal include new building work or operational work on the premises? (Including any services)

☒ No ☐ Yes—ensure the nature, location and dimension of proposed works are included in plans submitted

10. Is the payment of a portable long service leave levy applicable to this application? (Refer to notes at the end of this form for more information.)

☒ No—go to question 12 ☐ Yes

11. Has the portable long service leave levy been paid? (Refer to notes at the end of this form for more information.)

☐ No
☐ Yes—complete Table L and submit with this application the yellow local government/private certifier's copy of the receipted QLeave form

Table L		
Amount paid	Date paid (dd/mm/yy)	QLeave project number (6 digit number starting with A, B, E, L or P)

12. Has the local government agreed to apply a superseded planning scheme to this application under section 96 of the Sustainable Planning Act 2009?

☒ No
☐ Yes—please provide details below

Name of local government	Date of written notice given by local government (dd/mm/yy)	Reference number of written notice given by local government (if applicable)

13. List below all of the forms and supporting information that accompany this application (Include all IDAS forms, checklists, mandatory supporting information etc. that will be submitted as part of this application)

Description of attachment or title of attachment	Method of lodgement to assessment manager
Town Planning Report	Online via Smart EDA.

14. Applicant's declaration

☒ By making this application, I declare that all information in this application is true and correct (Note: it is unlawful to provide false or misleading information)

Notes for completing this form

- Section 261 of the *Sustainable Planning Act 2009* prescribes when an application is a properly-made application. Note, the assessment manager has discretion to accept an application as properly made despite any non-compliance with the requirement to provide mandatory supporting information under section 260(1)(c) of the *Sustainable Planning Act 2009*

Applicant details

- Where the applicant is not a natural person, ensure the applicant entity is a real legal entity.

Question 1

- Schedule 3 of the Sustainable Planning Regulation 2009 identifies assessable development and the type of assessment. Where schedule 3 identifies assessable development as "various aspects of development" the applicant must identify each aspect of the development on Tables A, B and C respectively and as required.

Question 6

- Section 263 of the *Sustainable Planning Act 2009* sets out when the consent of the owner of the land is required for an application. Section 260(1)(e) of the *Sustainable Planning Act 2009* provides that if the owner's consent is required under section 263, then an application must contain, or be accompanied by, the written consent of the owner, or include a declaration by the applicant that the owner has given written consent to the making of the application. If a development application relates to a state resource, the application is not required to be supported by evidence of an allocation or entitlement to a state resource. However, where the state is the owner of the subject land, the written consent of the state, as landowner, may be required. Allocation or entitlement to the state resource is a separate process and will need to be obtained before development commences.

Question 7

- If the premises is listed on either the Contaminated Land Register (CLR) or the Environmental Management Register (EMR) under the *Environmental Protection Act 1994* it may be necessary to seek compliance assessment. Schedule 18 of the Sustainable Planning Regulation 2009 identifies where compliance assessment is required.

Question 11

- The *Building and Construction Industry (Portable Long Service Leave) Act 1991* prescribes when the portable long service leave levy is payable.
- The portable long service leave levy amount and other prescribed percentages and rates for calculating the levy are prescribed in the Building and Construction Industry (Portable Long Service Leave) Regulation 2002.

Question 12

- The portable long service leave levy need not be paid when the application is made, but the *Building and Construction Industry (Portable Long Service Leave) Act 1991* requires the levy to be paid before a development permit is issued.
- Building and construction industry notification and payment forms are available from any Queensland post office or agency, on request from QLeave, or can be completed on the QLeave website at www.qleave.qld.gov.au. For further information contact QLeave on 1800 803 481 or visit www.qleave.qld.gov.au.

Privacy—The information collected in this form will be used by the Department of Infrastructure, Local Government and Planning (DILGP), assessment manager, referral agency and/or building certifier in accordance with the processing and assessment of your application. Your personal details should not be disclosed for a purpose outside of the IDAS process or the provisions about public access to planning and development information in the *Sustainable Planning Act 2009*, except where required by legislation (including the *Right to Information Act 2009*) or as required by Parliament. This information may be stored in relevant databases. The information collected will be retained as required by the *Public Records Act 2002*.

OFFICE USE ONLY

Date received

Reference numbers

NOTIFICATION OF ENGAGEMENT OF A PRIVATE CERTIFIER

To

Council. I have been engaged as the private certifier for the building work referred to in this application

Date of engagement	Name	BSA Certification license number	Building classification/s
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

QLEAVE NOTIFICATION AND PAYMENT (For completion by assessment manager or private certifier if applicable.)

Description of the work	QLeave project number	Amount paid (\$)	Date paid	Date receipted form sighted by assessment manager	Name of officer who sighted the form
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

The *Sustainable Planning Act 2009* is administered by the Department of Infrastructure, Local Government and Planning. This form and all other required application materials should be sent to your assessment manager and any referral agency.

IDAS form 5—Material change of use assessable against a planning scheme

(Sustainable Planning Act 2009 version 3.1 effective 3 August 2015)

This form must be used for development applications for a material change of use assessable against a planning scheme.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

For all development applications, you must:

- complete *IDAS form 1—Application details*
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* (SPA) or the Sustainable Planning Regulation 2009.

This form must also be used for material change of use on 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* that requires assessment against the land use plan for that land. Whenever a planning scheme is mentioned, take it to mean land use plan for the strategic port land, Brisbane core port land or airport land.

Mandatory requirements

- 1. Describe the proposed use.** (Note: this is to provide additional detail to the information provided in question 1 of *IDAS form 1—Application details*. Attach a separate schedule if there is insufficient space in this table.)

General explanation of the proposed use	Planning scheme definition (include each definition in a new row) (non-mandatory)	No. of dwelling units (if applicable) or gross floor area (if applicable)	Days and hours of operation (if applicable)	No. of employees (if applicable)
MCU s242 Preliminary Approval to facilitate the Cassowary Rise Eco-Residential Estate	(Dwelling house(s) (Environment facility and Nature-based tourism subject to further assessment))	N/A	N/A	N/A

- 2. Are there any current approvals associated with the proposed material change of use?** (e.g. a preliminary approval.)

☒ No ☐ Yes—provide details below

List of approval reference/s	Date approved (dd/mm/yy)	Date approval lapses (dd/mm/yy)

3. Does the proposed use involve the following? (Tick all applicable boxes.)

The reuse of existing buildings on the premises	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Yes
New building work on the premises	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Yes
The reuse of existing operational work on the premises	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Yes
New operational work on the premises	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Yes

Mandatory supporting information**4. Confirm that the following mandatory supporting information accompanies this application**

Mandatory supporting information	Confirmation of lodgement	Method of lodgement
All applications		
<p>A site plan drawn to an appropriate scale (1:100, 1:200 or 1:500 are recommended scales) which shows the following:</p> <ul style="list-style-type: none"> the location and site area of the land to which the application relates (<i>relevant land</i>) the north point the boundaries of the relevant land any road frontages of the relevant land, including the name of the road the location and use of any existing or proposed buildings or structures on the relevant land (note: where extensive demolition or new buildings are proposed, two separate plans [an existing site plan and proposed site plan] may be appropriate) any existing or proposed easements on the relevant land and their function the location and use of buildings on land adjoining the relevant land all vehicle access points and any existing or proposed car parking areas on the relevant land. Car parking spaces for persons with disabilities and any service vehicle access and parking should be clearly marked for any new building on the relevant land, the location of refuse storage the location of any proposed retaining walls on the relevant land and their height the location of any proposed landscaping on the relevant land the location of any stormwater detention on the relevant land. 	<input checked="" type="checkbox"/> Confirmed	
A statement about how the proposed development addresses the local government's planning scheme and any other planning instruments or documents relevant to the application.	<input checked="" type="checkbox"/> Confirmed	
A statement about the intensity and scale of the proposed use (e.g. number of visitors, number of seats, capacity of storage area etc.).	<input checked="" type="checkbox"/> Confirmed	
<p>Information that states:</p> <ul style="list-style-type: none"> the existing or proposed floor area, site cover, maximum number of storeys and maximum height above natural ground level for existing or new buildings (e.g. information regarding existing buildings but not being reused) the existing or proposed number of on-site car parking bays, type of vehicle cross-over (for non-residential uses) and vehicular servicing arrangement (for non-residential uses). 	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> Not applicable	

A statement addressing the relevant part(s) of the State Development Assessment Provisions (SDAP).	<input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable	
When the application involves the reuse of existing buildings		
Plans showing the size, location, existing floor area, existing site cover, existing maximum number of storeys and existing maximum height above natural ground level of the buildings to be reused.	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> Not applicable	
When the application involves new building work (including extensions)		
Floor plans drawn to an appropriate scale (1:50, 1:100 or 1:200 are recommended scales) which show the following: <ul style="list-style-type: none"> the north point the intended use of each area on the floor plan (for commercial, industrial or mixed use developments only) the room layout (for residential development only) with all rooms clearly labelled the existing and the proposed built form (for extensions only) the gross floor area of each proposed floor area. 	<input type="checkbox"/> Confirmed	
Elevations drawn to an appropriate scale (1:100, 1:200 or 1:500 are recommended scales) which show plans of all building elevations and facades, clearly labelled to identify orientation (e.g. north elevation)	<input type="checkbox"/> Confirmed	
Plans showing the size, location, proposed site cover, proposed maximum number of storeys, and proposed maximum height above natural ground level of the proposed new building work.	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> Not applicable	
When the application involves reuse of other existing work		
Plans showing the nature, location, number of on-site car parking bays, existing area of landscaping, existing type of vehicular cross-over (non-residential uses), and existing type of vehicular servicing arrangement (non-residential uses) of the work to be reused.	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> Not applicable	
When the application involves new operational work		
Plans showing the nature, location, number of new on-site car parking bays, proposed area of new landscaping, proposed type of new vehicle cross-over (non-residential uses), proposed maximum new vehicular servicing arrangement (non-residential uses) of the proposed new operational work.	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> Not applicable	

Privacy—Please refer to your assessment manager, referral agency and/or building certifier for further details on the use of information recorded in this form.

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IDAS form 7—Reconfiguring a lot

(Sustainable Planning Act 2009 version 3.2 effective 3 August 2015)

This form must be used for development applications or requests for compliance assessment for reconfiguring a lot.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

For all development applications, you must:

- complete *IDAS form 1—Application details*
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

For requests for compliance assessment, you must:

- complete IDAS form 32—Compliance assessment
- Provide any mandatory supporting information identified on the forms as being required to accompany your request

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* (SPA) or the Sustainable Planning Regulation 2009.

Mandatory requirements

1. What is the total number of existing lots making up the premises?

1

2. What is the nature of the lot reconfiguration? (Tick all applicable boxes.)

- ☒ subdivision—complete questions 3–6 and 11
- ☐ boundary realignment—complete questions 8, 9 and 11
- ☐ creating an easement giving access to a lot from a constructed road—complete questions 10 and 11
- ☐ dividing land into parts by agreement—please provide details below and complete questions 7 and 11

3. Within the subdivision, what is the number of additional lots being created and their intended final use?

Intended final use of new lots	Residential	Commercial	Industrial	Other—specify
Number of additional lots created	10			1 Balance lot

4. What type of approval is being sought for the subdivision?

- ☒ Development permit
- ☐ Preliminary approval
- ☐ Compliance permit

5. Are there any current approvals associated with this subdivision application or request?
(E.g. material change of use.)

☒ No ☐ Yes—provide details below

List of approval reference/s	Date approved (dd/mm/yy)	Date approval lapses (dd/mm/yy)

6. Does the proposal involve multiple stages?

☒ No—complete Table A ☐ Yes—complete Table B

Table A

- a) What is the total length of any new road to be constructed? (metres)
- b) What is the total area of land to be contributed for community purposes? (square metres)
- c) Does the proposal involve the construction of a canal or artificial waterway?
☒ No ☐ Yes
- d) Does the proposal involve operational work for the building of a retaining wall?
☒ No ☐ Yes

Approx. 640 metres

60,700m²

Table B—complete a new Table B for every stage if the application involves more than one stage

- a) What is the proposed estate name? (if known and if applicable)
- b) What stage in the development does this table refer to?
- c) If a development permit is being sought for this stage, will the development permit result in additional residential lots?
☐ No ☐ Yes—specify the total number
- d) What is the total area of land for this stage? (square metres)
- e) What is the total length of any new road to be constructed at this stage? (metres)
- f) What is the total area of land to be contributed for community purposes at this stage? (square metres)
- g) Does the proposal involve the construction of a canal or artificial waterway?
☐ No ☐ Yes
- h) Does the proposal involve operational work for the building of a retaining wall?
☐ No ☐ Yes

7. Lease/agreement details—how many parts are being created and what is their intended final use?

Intended final use of new parts	Residential	Commercial	Industrial	Other—specify
Number of additional parts created				

8. What are the current and proposed dimensions following the boundary realignment for each lot forming the premises?

Current lot			Proposed lot		
Lot plan description	Area (square metres)	Length of road frontage	Lot number	Area (square metres)	Length of road frontage

9. What is the reason for the boundary realignment?

--

10. What are the dimensions and nature of the proposed easement? (If there are more than two easements proposed please list in a separate table on an extra page and attach to this form.)

Width (m)	Length (m)	Purpose of the easement (e.g. pedestrian access)?	What land is benefitted by the easement?

Mandatory supporting information

11. Confirm that the following mandatory supporting information accompanies this application or request

Mandatory supporting information	Confirmation of lodgement	Method of lodgement
All applications and requests for reconfiguring a lot		
<p>Site plans drawn to an appropriate scale (1:100, 1:200 or 1:500 are the recommended scales) which show the following:</p> <ul style="list-style-type: none"> the location and site area of the land to which the application or request relates (relevant land) the north point the boundaries of the relevant land any road frontages of the relevant land, including the name of the road the contours and natural ground levels of the relevant land the location of any existing buildings or structures on the relevant land the allotment layout showing existing lots, any proposed lots (including the dimensions of those lots), existing or proposed road reserves, building envelopes and existing or proposed open space (note: numbering is required for all lots) any drainage features over the relevant land, including any watercourse, creek, dam, waterhole or spring and any land subject to a flood with an annual exceedance probability of 1% any existing or proposed easements on the relevant land and their function all existing and proposed roads and access points on the relevant land any existing or proposed car parking areas on the relevant land the location of any proposed retaining walls on the relevant land and their height the location of any stormwater detention on the relevant land the location and dimension of any land dedicated for community 	<input checked="" type="checkbox"/> Confirmed	

purposes <ul style="list-style-type: none"> the final intended use of any new lots. 		
For a development application – A statement about how the proposed development addresses the local government’s planning scheme and any other planning documents relevant to the application. For a request for compliance assessment – A statement about how the proposed development addresses the matters or things against which the request must be assessed.	<input checked="" type="checkbox"/> Confirmed	
A statement addressing the relevant part(s) of the State Development Assessment Provisions (SDAP).	<input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable	

Notes for completing this form

- For supporting information requirements for requests for compliance assessment, please refer to the relevant matters for which compliance assessment will be carried out against. To avoid an action notice, it is recommended that you provide as much of the mandatory information listed in this form as possible.

Privacy—Please refer to your assessment manager, referral agency and/or building certifier for further details on the use of information recorded in this form.

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IDAS form 31—Application for preliminary approval varying the effect of a local planning instrument

(Sustainable Planning Act 2009 version 3.1 effective 3 August 2015)

This form must be used for development applications for a preliminary approval under section 242 of the *Sustainable Planning Act 2009* that seek to vary the effect of any local planning instrument for the land the subject of the application.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

For all development applications you must:

- complete *IDAS form 1—Application details*
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* (SPA) or the Sustainable Planning Regulation 2009.

Mandatory requirements

1. What type of development is proposed?

- ☒ Material change of use—complete Table A
- ☐ Development other than a material change of use—complete Table B
- ☐ Both—provide details below and complete Table A and B

2. How does the application seek to vary the effect of the local planning instrument?

(Tick all applicable boxes.)

Table A

- ☐ By stating that the material change of use or development relating to the material change of use is exempt development
- ☐ By stating that the material change of use or development relating to the material change of use is self-assessable development
- ☐ By stating that the material change of use or development relating to the material change of use is development requiring compliance assessment
- ☐ By stating that the material change of use or development relating to the material change of use is assessable development requiring code or impact assessment, or both code and impact assessment
- ☒ By identifying or including codes for the proposed development—provide details of the codes below

Refer to the Plan of Development provided at **Appendix B** of the town planning report.

Table B

- ☐ By stating that the development is exempt development
- ☐ By stating that the development is self-assessable development
- ☐ By stating that the development is development requiring compliance assessment
- ☐ By stating that the development is assessable development requiring code or impact assessment, or both code and impact assessment
- ☐ By identifying or including codes for the proposed development—provide details of the codes below

Non-mandatory requirements

- 3. Please nominate the period after which the approval should lapse if the proposed development is started but not completed within the period.** (Refer to s. 343 of the *Sustainable Planning Act 2009* which sets out when a preliminary approval to which s. 242 of the *Sustainable Planning Act 2009* applies lapses if development is started but not completed.)

10 years

Mandatory supporting information

- 4. Confirm that the following mandatory supporting information accompanies this application**

Mandatory supporting information	Confirmation of lodgement	Method of lodgement
Details about the way in which the applicant seeks the approval to vary the effect of any local planning instrument.	<input checked="" type="checkbox"/> Confirmed	
Written statement about the consistency of the proposed variations with aspects of the local planning instrument, other than the aspects sought to be varied.	<input checked="" type="checkbox"/> Confirmed	

Notes for completing this form

- It is recommended that development applications are prepared following best practice standards provided in IDAS *Statutory Guideline 04/09—Preliminary approvals that affect a local planning instrument*.

Privacy—Please refer to your assessment manager, referral agency and/or building certifier for further details on the use of information recorded in this form.

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