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## Statement of Environmental Effects

### Staged Residential Subdivision

**Property:**

Lot 5200 DP1247841, Lot 3098 DP1246288 & Lot 4  
DP1145348  
2, 108 Settlers Boulevard & 487 Raymond Terrace Road,  
Chisholm

**Applicant:**



**Date:**

December 2021



Project Management • Town Planning • Engineering • Surveying  
Visualisation • Economic Analysis • Social Impact • Urban Planning

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# Document Control Sheet

Issue No.	Amendment	Date	Prepared By	Checked By
A	Draft to Client	10 <sup>th</sup> December 2021	BJ& SVD	MK
B	Final for Lodgement	17 <sup>th</sup> December 2021	SVD	MK

## Limitations Statement

This report has been prepared in accordance with and for the purposes outlined in the scope of services agreed between ADW Johnson Pty Ltd and the Client. It has been prepared based on the information supplied by the Client, as well as investigation undertaken by ADW Johnson and the sub-consultants engaged by the Client for the project.

Unless otherwise specified in this report, information and advice received from external parties during the course of this project was not independently verified. However, any such information was, in our opinion, deemed to be current and relevant prior to its use. Whilst all reasonable skill, diligence and care have been taken to provide accurate information and appropriate recommendations, it is not warranted or guaranteed and no responsibility or liability for any information, opinion or commentary contained herein or for any consequences of its use will be accepted by ADW Johnson or by any person involved in the preparation of this assessment and report.

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The Client should be aware that this report does not guarantee the approval of any application by any Council, Government agency or any other regulatory authority.

## Executive Summary

This Statement of Environmental Effects ("SEE") has been prepared by ADW Johnson to accompany a development application ("DA") with Maitland City Council for a residential subdivision at Chisholm.

### Application Details

<b>Applicant:</b>	Avid Property Group Pty Ltd
<b>Development:</b>	193 lot Torrens Title Residential Subdivision in two (2) stages
<b>Site Description:</b>	Lot 5200 DP1247841, Lot 3098 DP1246288 & Lot 4 DP1145348 2, 108 Settlers Boulevard & 487 Raymond Terrace Road, Chisholm
<b>Owner:</b>	Avid Residential Estates Pty Ltd & CSR Building Products Limited
<b>Development Cost:</b>	\$17,270,781

### Development Standards/Controls

<b>Zone:</b>	R1 General Residential & C3 Environmental Management
<b>Definition:</b>	Subdivision
<b>Permissibility:</b>	Permissible with Consent (Maitland Local Environmental Plan (LEP) 2011 – Clause 2.6)
<b>Minimum Lot Size:</b>	450m <sup>2</sup> (LEP – Clause 4.1)
<b>Urban Release Area:</b>	Thornton North Stage 2

### External Referrals

<b>Bushfire:</b>	Yes – Residential Subdivision within bushfire prone land (Rural Fire Service (RFS) – Integrated)
<b>Waterfront land:</b>	Yes – Development within waterfront land (NSW Office of Water – Integrated)

### Summary

The proposed residential subdivision achieves all LEP planning controls.

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# 1.0 Introduction

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ADW Johnson has been engaged by Avid Property Group Pty Ltd ("Avid") to prepare and lodge a Development Application (DA) with Maitland City Council ("Council") for a 193 lot staged residential subdivision over Lot 5200 DP1247841, Lot 3098 DP1246288 and Lot 4 DP1145348 2, 108 Settlers Boulevard and 487 Raymond Terrace Road, Chisholm.

This SEE has been prepared pursuant to the Environmental Planning and Assessment Act 1979 (EP&A Act) and accompanying regulations, and addresses the necessary issues that require assessment to assist Council in making a determination on the subject application.

The proposed development involves the creation of 193 residential lots which will connect to Stage 56 of the Waterford development to the west which is currently under assessment with Council under DA/2021/1502.

The proposal also includes one (1) residue lot which will contain all of the environmentally zoned land including 4.2ha of passive open space, the embellishment of which will form part of a separate proposal. The residential lots are all over 450m<sup>2</sup> and will be delivered in two (2) stages.

As part of this application, consent is also sought for the construction of roads, connection of stormwater through to the basins approved under Stages 53 and 55 (DA/2018/2022), vegetation removal, bulk earthworks/regrading, and landscaping. Water, sewer, stormwater, power and telecommunication services will also be provided under the proposal. Plans of the proposed subdivision are provided within Appendices 1A and 1B and further details are provided within Section 3.

The subject residential allotments are located within the *R1 General Residential Zone* (R1 zone) where subdivision is permissible with consent and where a minimum lot size of 450m<sup>2</sup> applies. All residential allotments have been designed to achieve this requirement. The remainder of the site is located within the *C3 Environmental Management Zone* (former E3 Zone). This area will not be impacted by the development and will provide an ecological corridor from Raymond Terrace Road in the south through to RU2 Rural Landscape zoned land in the north adjoining McFarlanes Road.

This land is located within Stage 2 of the Thornton North Urban Release Area (TNURA) which was rezoned in July 2007, and which involved the development of an area specific Master Plan – the principles of which are now included within Part F7 of the Maitland City Council Development Control Plan 2011 (DCP). A requirement of Part F7 is the creation of Precinct Plans for each area. The subject site is not covered by a Precinct Plan; however, the Draft Central Precinct Plan has been placed on public exhibition which includes the subject site. This will need to be adopted by Council prior to determination of the subject development in order to meet the requirements of the DCP.

A crucial advantage in the site being developed by Avid is their proven ability to deliver a quality product. Avid have, or are in the process of developing approximately a third of the TNURA on the northern side of Raymond Terrace Road. This has facilitated the coordinated delivery of Council's objectives in terms of providing accessible open space, a legible road hierarchy and a regional stormwater scheme. These objectives will continue to be realised through the proposed development and will in turn facilitate the completion of the development on the western side of the C3 corridor.

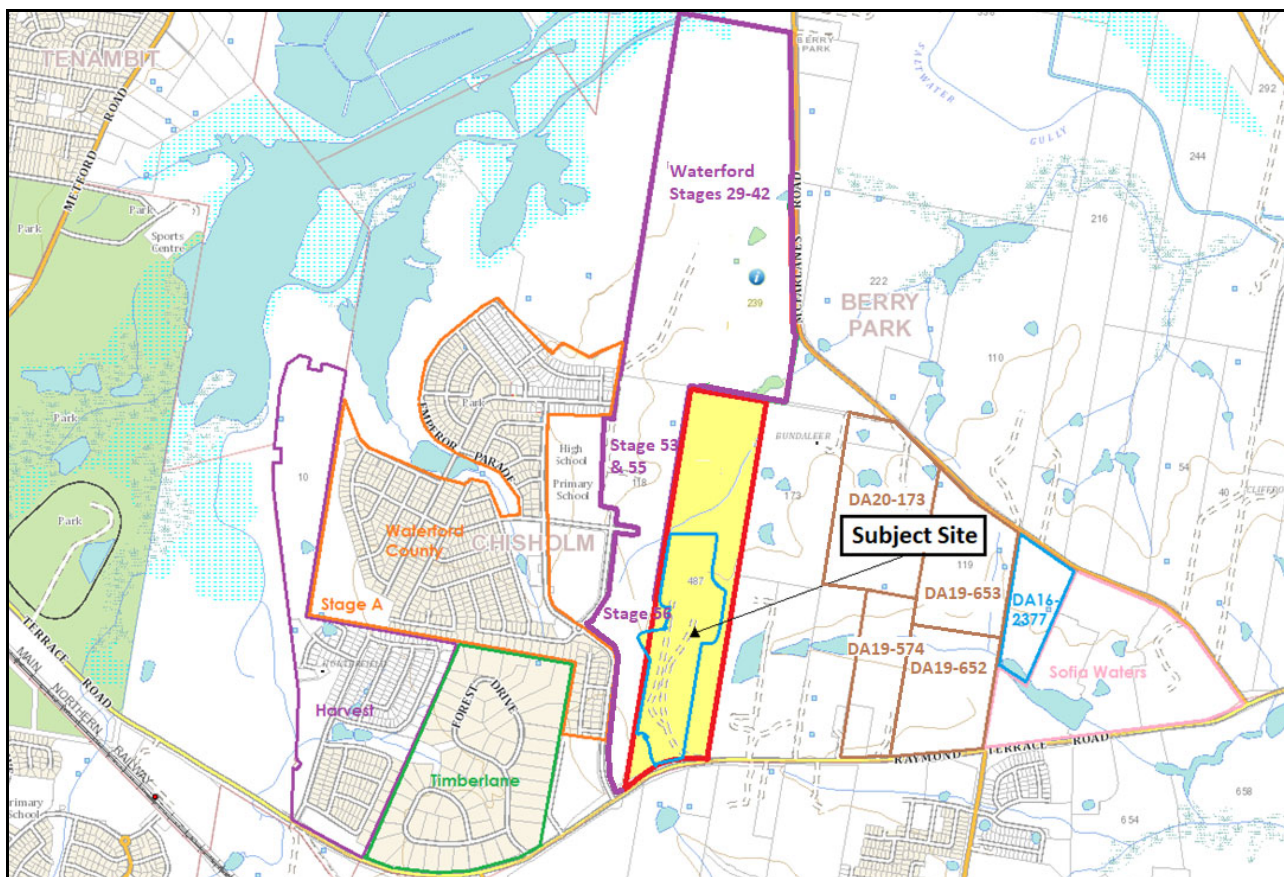
Overall, the proposed development complies with all relevant provisions of the Maitland Local Environmental Plan 2011 (LEP) as well as the relevant aims and objectives of the DCP. Where variations are proposed to DCP principles, they have been supported with evidence to ensure the objectives of the control continue to be achieved.



## 2.0 The Site

### 2.1 LOCATION

The subject site is located to the east of Stage 56 of the Waterford development and adjacent to Raymond Terrace Road at Chisholm. The site is approximately 4km to the east of East Maitland Town Centre, in a growing residential area where numerous DAs have been lodged and/or constructed (see Figure 1).



**Figure 1: Locality Map**

More specifically, the development will adjoin approved or proposed stages of the Waterford development located to the west. How the site fits in with these subdivision layouts is demonstrated within Figure 2.





**Figure 2: Waterford Context Map**

## 2.2 LAND TITLE

The subject site is identified as Lot 4 DP1145348 ("CSR land"); Lot 5200 DP1247841 and Lot 3098 DP1246288 ("Avid land"). The CSR land is not burdened by any easements or restrictions. The Avid land is burdened by numerous easements which will require removal/modification as part of approved stages to the west.

Copies of the Deposited Plans is provided in Appendix 2.

## 2.3 OWNERSHIP

Lot 4 DP1145348 is owned by CSR Building Products Limited – whose consent to the lodgement of this DA is provided as a letter of authority attached to the application form. Lot 5200 DP1247841 and Lot 3098 DP1246288 are owned by Avid Residential Estates Pty Ltd – whose consent to the lodgement of this application is also provided as a letter of authority attached to the application form.

Copies of the Certificates of Title are provided in Appendix 3.



## 2.4 PHYSICAL DESCRIPTION

### 2.4.1 Site

The site for the proposed subdivision is located between Raymond Terrace Road to the south and existing, approved or proposed stages of the Waterford development to the west.

The land use of the site comprises of a former quarry area towards the centre of the site which is dominated by a deep excavation where clay was previously sourced for brickmaking. The remaining land is generally covered by vegetation. The southern portion of the development site, whilst vegetated, is in a disturbed state. To the north exists more intact vegetation, with this to be retained under its C3 zoning.

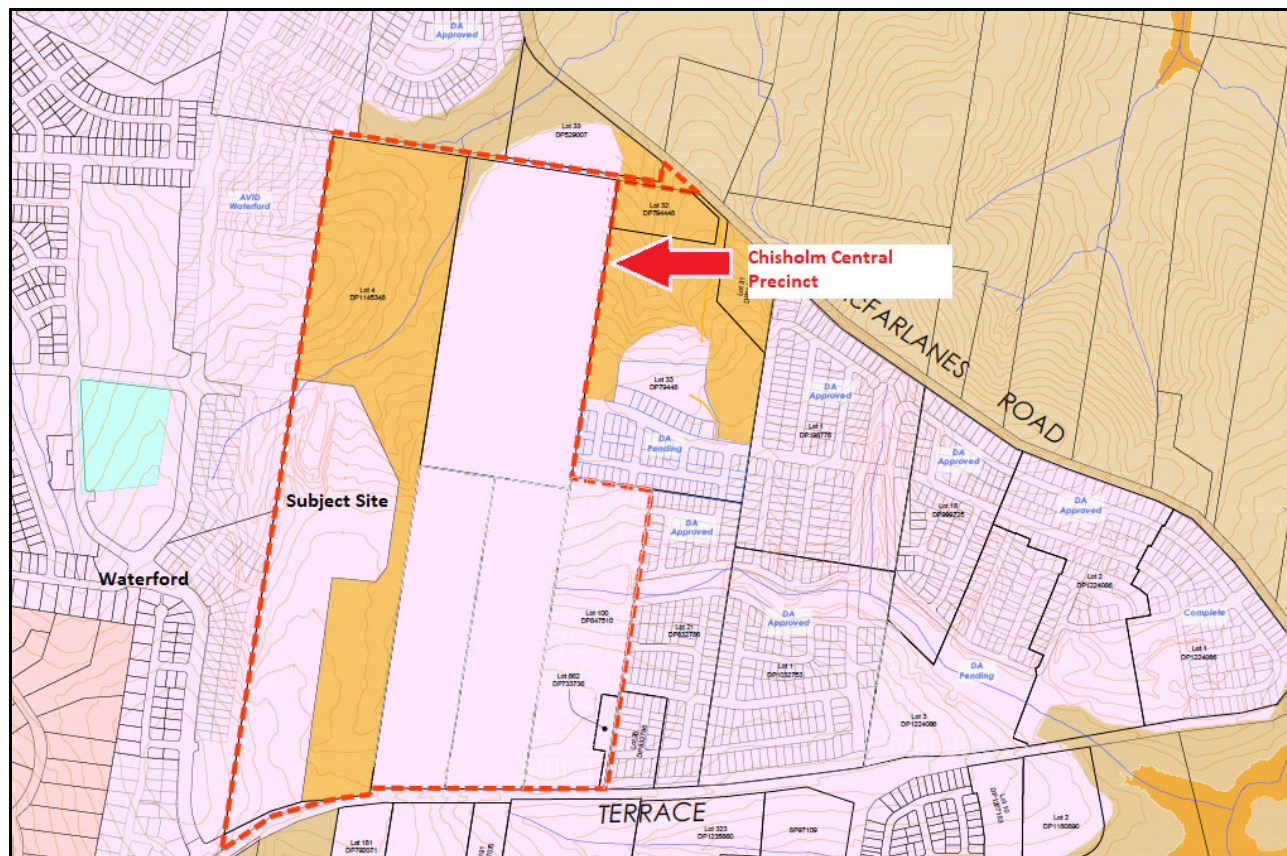


**Figure 3: Aerial Photo of Site**



## 2.4.2 Context

The site is located within Stage 2 of the TNURA within the Draft Central Precinct. The site provides a connection between the Waterford development in the west, to the numerous approved developments in the east, via a distributor road. In a contextual sense, the proposed development has greater linkages to the Waterford development than it does with those to the east due to its separation from these by the C3 zoned land. This is clearly demonstrated within Figure 4.



**Figure 4: Development Zoning Context**

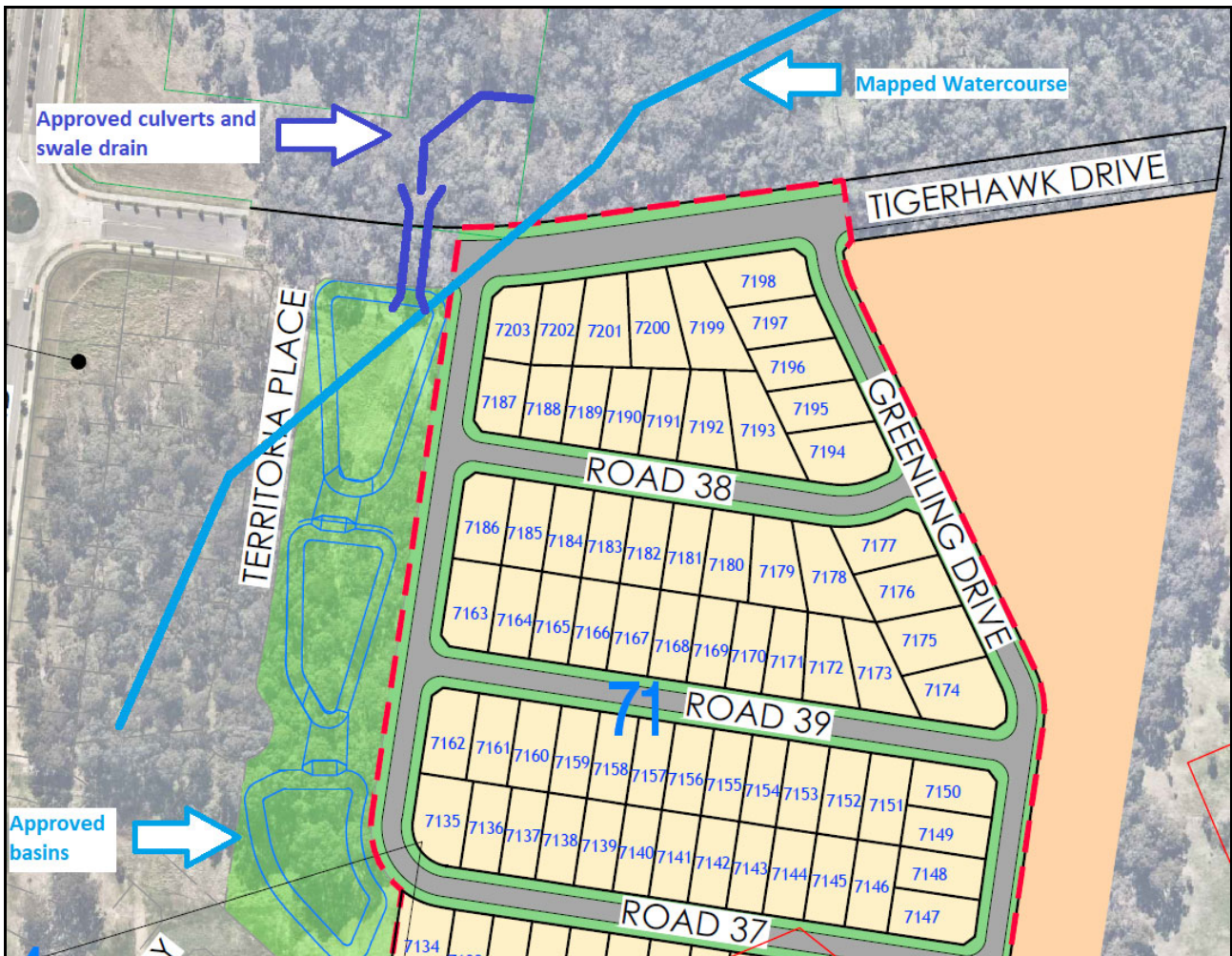
## 2.4.3 Access

Existing access to the CSR site is gained off Raymond Terrace Road via a gravel track which leads to the former quarry. This will be removed through the proposed subdivision and the main access to the site will be via the existing subdivision road network within the Waterford Development. Access to Raymond Terrace Road will be gained via Settlers Boulevard which feeds through to the east via Tigerhawk Drive approved under Stages 53 and 55 as a Distributor Road; and Greenling Drive approved under Stage 54 and extended through to the subject site via Stage 56. Additional connections will be provided via Regina Way and Cora Way.

Tigerhawk Drive will act as a Distributor Road providing a key east/west connection through the TNURA. Allowance for the future development of this connection has been provided within the proposed subdivision, through the dedication of the road reserve up to the east boundary.

## 2.4.4 Watercourses

There is a first order watercourse located in the north-western extremity of the site. The southern portion of this has been approved to be modified as part of the Stages 53 and 55 development to accommodate regional basins which service the surrounding catchment. Under the topographic maps, this watercourse is shown as crossing Tigerhawk Drive at the western boundary of the CSR land. In reality, the watercourse at this point is located further west and is approved to cross Tigerhawk Drive via culverts and a formalised swale drain (see Figure 5).



**Figure 5: Watercourse and Drainage Characteristics**

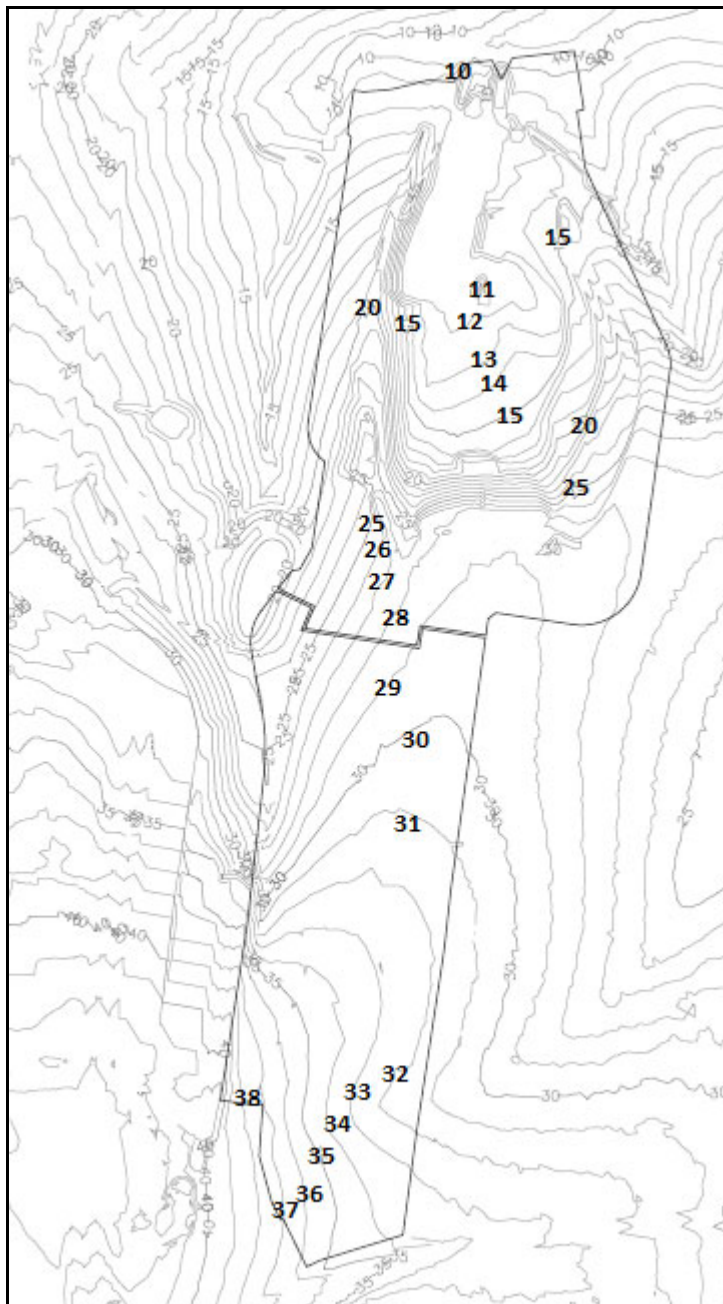
As part of the development assessment for Stage 52 (DA18-1254), Natural Resources Access Regular (NRAR) confirmed that this was not considered a watercourse at a point further south, and as such, did not require a Controlled Activity Approval (CAA) (refer to Appendix 16). Noting the subject site is further north along the watercourse, the proposed development may nonetheless require a CAA.

## 2.4.5 Topography

The site falls from 38m AHD at the southern boundary towards the abovementioned watercourse at approximately 10m AHD. This topography allows the entire site to drain north towards the regional basins within Stages 53 and 55. The exception to this is the large former quarry which dominates the northern portion of the development. This creates a large excavation in the site from approximately 25m AHD to 11m AHD (i.e. 14m deep).



As a consequence, this will require fill to get the site to provide appropriate grades for home construction and to tie into the adjoining developments to the west for road construction (see Figure 6).



**Figure 6: Topographic Characteristics**

## 2.4.6 Vegetation

As demonstrated by the aerial photograph within Figure 3, a large portion of the northern development footprint is located over a previous cleared quarry. The southern portion; however, is vegetated, consisting of Plant Community Type (PCT) 1600 Spotted Gum - Red Ironbark - Narrowleaved Ironbark - Grey Box shrub-grass open forest of the lower Hunter, in varying conditions. A small portion of PCT 1737 Typha rushland is also located within the north-western corner of the development site.

Photos of the site are provided overleaf.





**Photo 1: Existing Gravel Access Track**



**Photo 2: Existing Quarry Area**





**Photo 3: Existing Waterford Development – Stage 51 Display Village**



**Photo 4: Raymond Terrace Road Frontage**





**Photo 5: Southern Vegetated Portion of the Site**

## 3.0 Description of the Proposed Development

### 3.1 DEVELOPMENT PARTICULARS

The proposed development comprises the following elements:

- Demolition of all structures on site;
- Bulk earthworks, lot regrading and vegetation removal over the entire development footprint;
- Importation of an estimated 110,000m<sup>3</sup> of fill (amount to be determined prior to Construction Certificate). Fill will be sourced from the adjacent Waterford development where available. Any shortfall will be acquired from nearby construction sites;
- 193 Torrens Title residential lots and one (1) residue lot delivered in two (2) stages as follows:
  - Stage 1 = 103 residential lots;
  - Stage 2 = 90 residential lots;
- Extension of Tigerhawk Drive as a Distributor Road with 2.5m wide off road shared paths connecting to Settlers Boulevard to the west;
- Construction of local roads with 1.5m wide footpaths along one (1) side;
- Connection of stormwater to existing basins approved under Stages 53 and 55;
- Provision of underground water, sewer, communication (NBN) and electrical services as required;
- Creation of asset protection zones;
- Creation of any necessary easements; and
- Street trees and landscape buffer treatment to Raymond Terrace Road.

Plans of the proposed subdivision, including site plan, detailed lot layouts, servicing plans, and cut and fill plan, have been provided in Appendices 1A and 1B. Plans detailing the treatment for the water quality basins and landscaping are provided within Appendices 4 and 5 respectively.

### 3.2 DESIGN CONSIDERATIONS

The structure of the subdivision is generally set by the extent of the residential zoning and the need to, where possible, adopt a grid layout with north/south and east/west oriented allotments. The layout has also accommodated the existing lead-in roads to the west.

Allotments are generally regular in shape and are all over 450m<sup>2</sup>. Variety in lot size has been accommodated with smaller lots around 500m<sup>2</sup>, ranging up to larger lots around over 650m<sup>2</sup>. The following table provides an overview of the lot variety proposed:

Lot Range (m <sup>2</sup> )	Quantity
450-550	85
550-650	71
650+	37

Allotment size and configuration was chosen based on market demand. In this regard, regular rectangular lots provide the greatest ability to accommodate the greatest range of dwelling designs. The ideal range for lot dimensions in today's market is generally between 15-18m wide by 32m long.

Anything less than this starts to restrict dwelling design and anything more starts to waste land thereby not taking full advantage of the zoning and infrastructure. Lot depths of 30m have however, been provided within Stage 72 where the approved subdivision pattern to the west, and the C3 Zone to the west, restricts the available developable land.

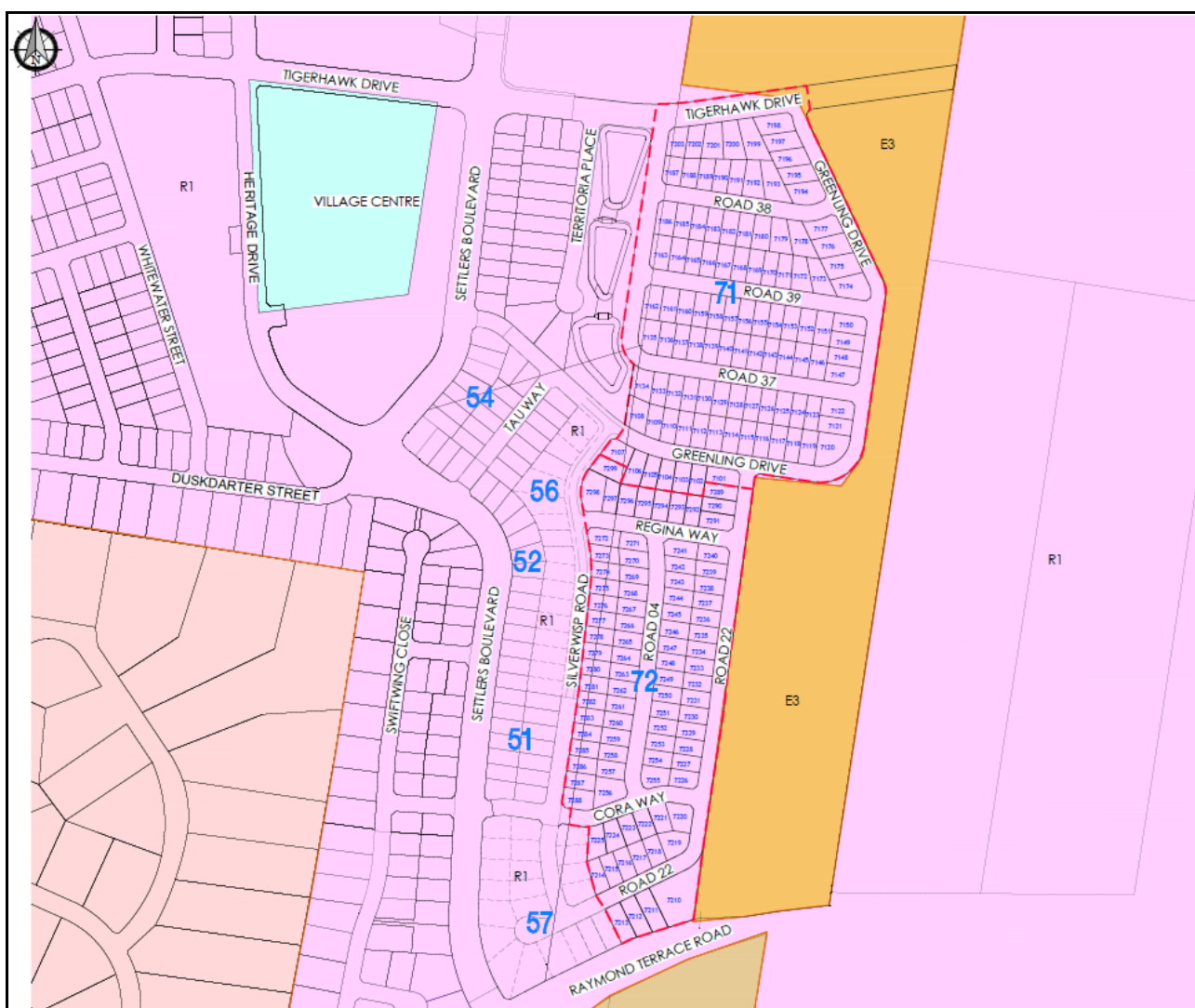
## 4.0 Planning Controls

### 4.1 ENVIRONMENTAL PLANNING INSTRUMENT (S4.15(1)(A)(I))

#### 4.1.1 Maitland Local Environmental Plan 2011

##### Zoning

The site is located within the R1 General Residential Zone and C3 Environmental Management Zone as shown in Figure 7. The development area is entirely within the R1 General Residential Zone, with the exception of a small portion of the Distributor Road which has been placed in accordance with the precinct plan.



**Figure 7: Zoning Map**

The proposed development, which is defined as a “subdivision”, is permissible with the consent of Council pursuant to Clause 2.6 of the LEP under all zones. It is also noted that “roads” are permissible with consent under the RU2 zone.



## Land Use Table

Clause 2.3 of the LEP stipulates that the consent authority must have regard to the objectives for a development in a zone when determining a development application in respect of land within the zone.

The proposed residential lots are located with the R1 zone, where the following relevant objectives have been addressed:

- *To provide for the housing needs of the community.*
- *To provide for a variety of housing types and densities.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*

The proposed subdivision will create residential allotments in a logical pattern, including a variety of lot sizes, within an area specifically planned for growth. For these reasons, the development is considered to achieve the objectives of the R1 Zone.

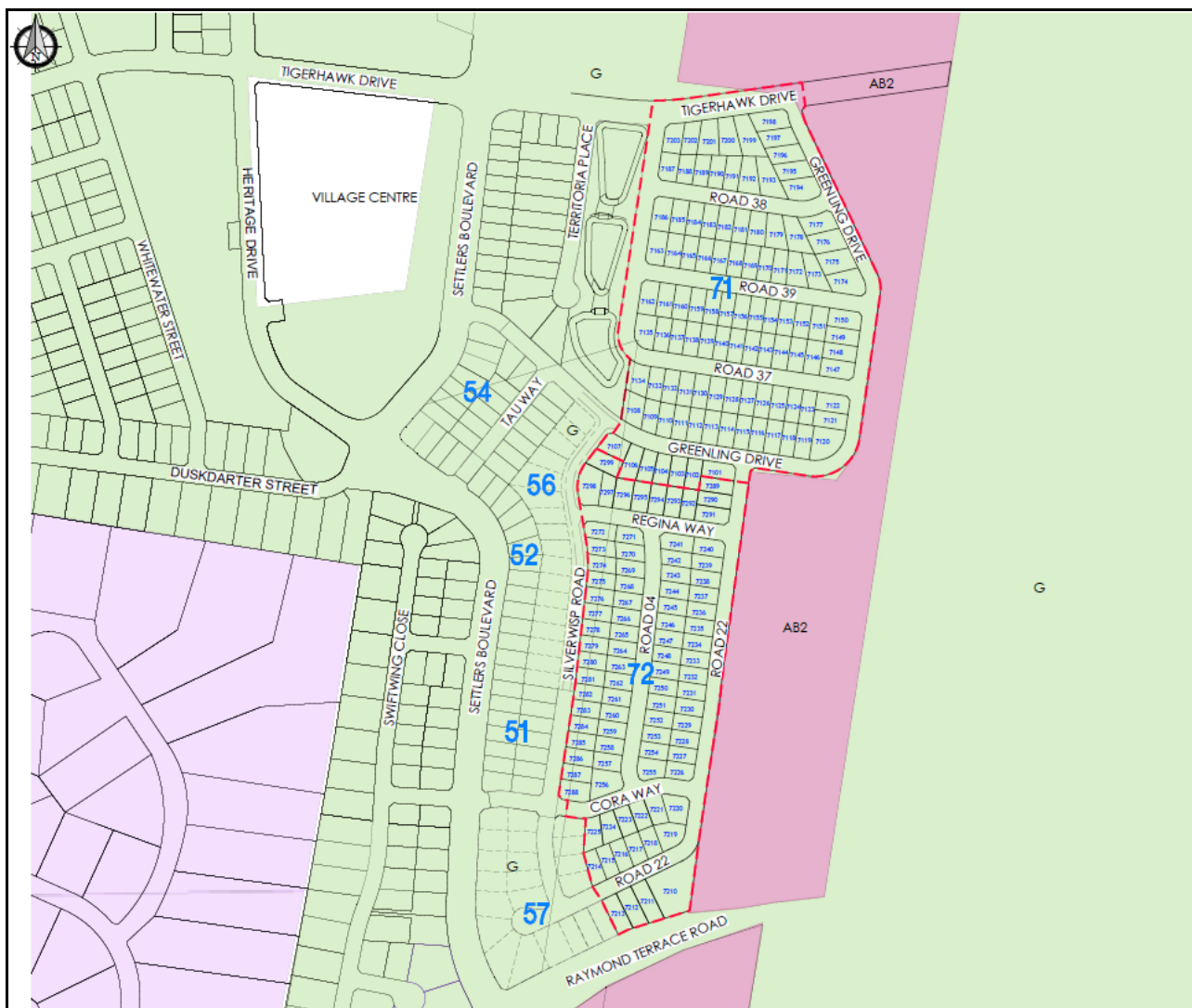
A small portion of the Distributor Road is located within the C3 Zone; however, the remainder will be retained. With this in mind, the following objectives of the zone have been addressed:

- *To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.*
- *To provide for a limited range of development that does not have an adverse effect on those values.*
- *To maintain and improve the connectivity of habitat between remnant areas of native vegetation.*

The C3 zoned land has largely been retained through placement of allotments and roads entirely within the residentially zoned portion of the site (with the abovementioned exception). Asset Protection Zones (APZs) have also been accommodated within the road reserves and front of the allotments. Retention of the C3 Zone will facilitate habitat connectivity through the site and beyond to the north and south. For these reasons, the development is considered to achieve the objectives of the C3 Zone.

### Clause 4.1 – Minimum Subdivision Lot Size

The subject site is shown on the Lot Size Map as having a 450m<sup>2</sup> minimum lot size for all land zoned R1 and a 40ha minimum lots size for land zoned C3 (see Figure 8). All residential allotments have a lot size over 450m<sup>2</sup> and the C3 zoned land will remain in one (1) retained allotment.



**Figure 8: Lot Size Map**

**Clause 4.3 – Height of Buildings**

No buildings are proposed as part of this application with the exception of fencing along Raymond Terrace Road.

**Clause 5.10 – Heritage Conservation**

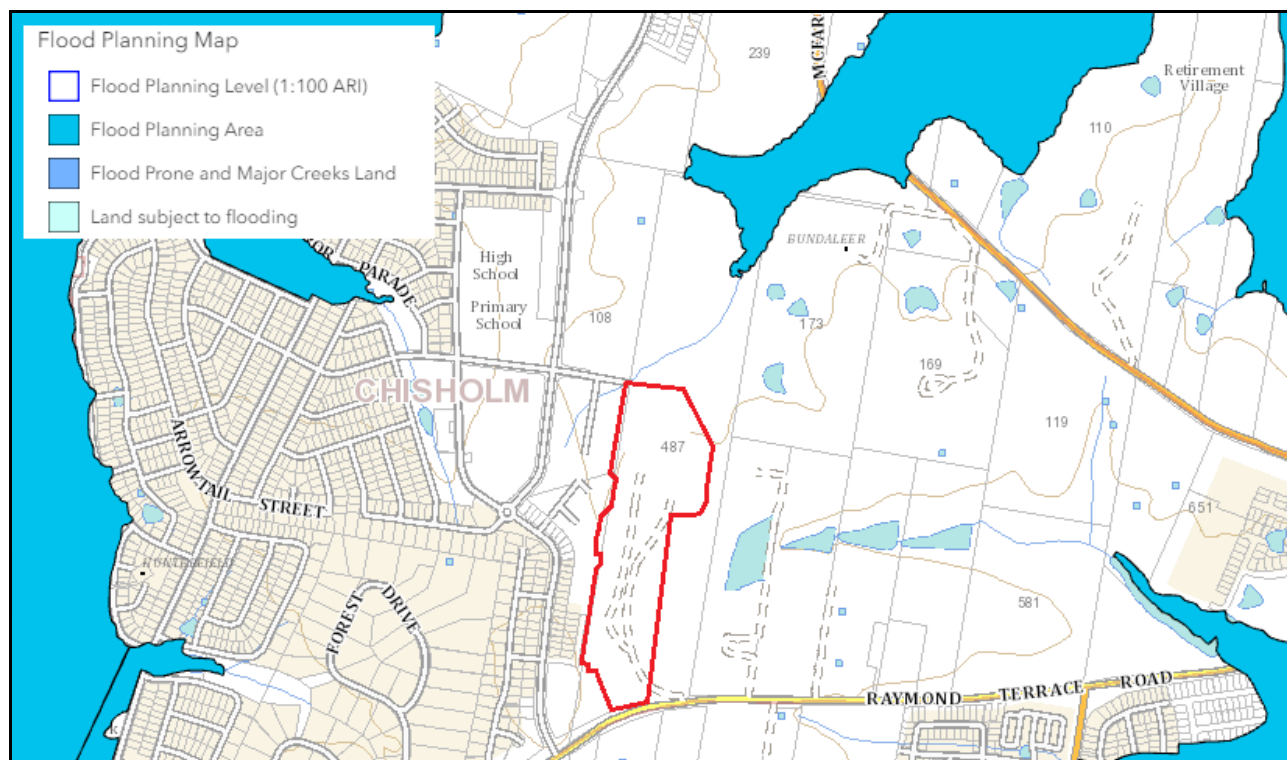
The site is not identified as containing, or being adjacent to a heritage item, nor as being located within a heritage conservation area.

The portions of the site owned by Avid Residential Estates are subject to an existing AHIP (C0001352). Works within these areas will be required to be undertaken in accordance with this, however it is noted that all artefacts in this regard have been salvaged (refer to Appendix 6A).

An Aboriginal Due Diligence Assessment has been undertaken for the CSR portion of the site which concludes that this land does not contain any Aboriginal objects or places and as such, does not require an Aboriginal Heritage Impact Permit (AHIP) (refer to Appendix 6B).

## Clause 5.21 – Flood Planning

Portions of the site are identified as being located within the flood planning level; however, these are located within the low point of the site to the north which is far removed from the proposed residential development (see Figure 9).



**Figure 9: Flood Planning Level (Subject Stages in Red)**

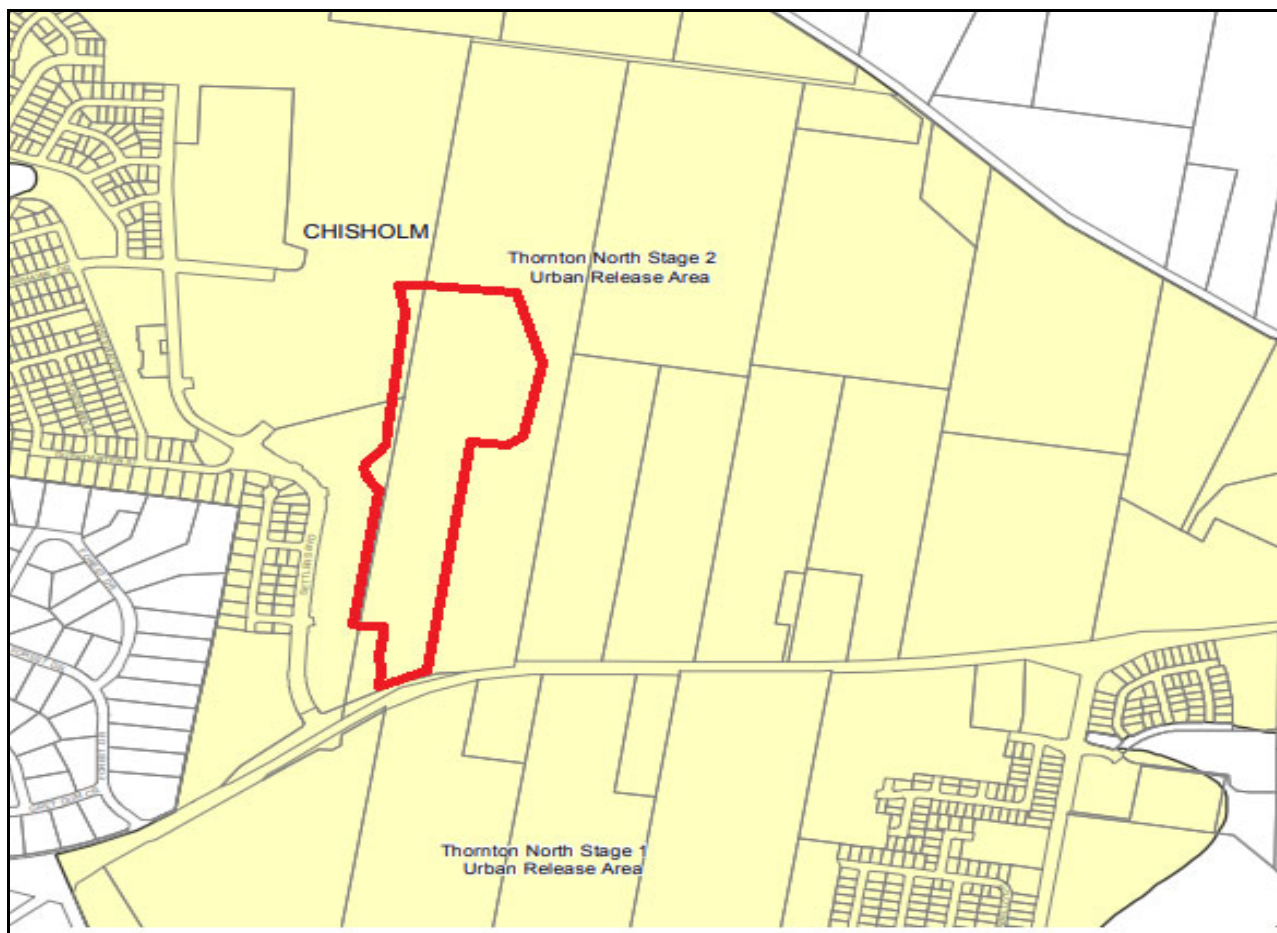
## Clause 6.1 – Arrangements for Designated State Public Infrastructure

The objective of Clause 6.1 is to require satisfactory arrangements to be made for the provision of designated State Public Infrastructure for the subdivision of land in an urban release area. In this regard, Clause 6.1 states:

- (2) *Development consent must not be granted for the subdivision of land in an urban release area if the subdivision would create a lot smaller than the minimum lot size permitted on the land immediately before the relevant date, unless the Director-General has certified in writing to the consent authority that satisfactory arrangements have been made to contribute to the provision of designated State public infrastructure in relation to that lot.*

The site is located within the Thornton North Stage 2 Urban Release Area (see Figure 10).





**Figure 10: Urban Release Area Map (Subject Site in Red)**

The Department of Planning, Environment and Infrastructure (DPIE) advised the following on 30<sup>th</sup> June 2015:

*"I write in connection with your requests for satisfactory arrangements certification dated 2 June 2015 and 19 June 2015 in support of your development application proposals in the Thornton North Stage 2 Urban Release Area.*

*Satisfactory arrangements certification will be issued by the Secretary to Maitland City Council having received a referral from Council in connection with a development application for the subdivision of land. This ensures that any satisfactory arrangements certification issued by the Secretary relates to a subdivision proposal for urban purposes, rather than with the land.*

*This is consistent with the attached letter from the Secretary dated 10 April 2015, which confirmed that developers in the Thornton North Stage 2 Urban Release Area will not be required to enter into planning agreements to contribute to State infrastructure.*

*The Department will ensure that satisfactory arrangements certification will be issued in a timely fashion for Council referrals triggered by clause 6.1 of the Maitland Local Environmental Plan 2011 in Thornton North Stage 2."*

A copy of this correspondence is provided within Appendix 13.

Once the subject DA has been lodged with Council, the proponent will contact DPIE to obtain a formal letter of Satisfactory Arrangements.

It is noted that this cannot be done until the development has a DA reference number.

### **Clause 6.2 – Public Utility Infrastructure**

Clause 6.2 states:

- (1) Development consent must not be granted for development on land in an urban release area unless the Council is satisfied that any public utility infrastructure that is essential for the proposed development is available or that adequate arrangements have been made to make that infrastructure available when it is required.*

Adequate arrangements have been made for the provision of all services to all residential allotments within the subdivision and as such, the proposal adheres to the provisions of Clause 6.2. Further information with regards to servicing is provided within Section 5 and the servicing plans provided in Appendix 1B.

The proponent has lodged an application to seek a Notice of Formal Requirements for the development which will be provided to Council once consent is received. A copy of the Hunter Water stamped plan is also provided within Appendix 7.

Taking the above into consideration, adequate arrangements have been or will be made for the provision of all services to all residential allotments within the subdivision and as such, the proposal adheres to the provisions of Clause 6.2.

### **Clause 6.3 – Development Control Plan**

Clause 6.3 states:

- (2) Development consent must not be granted for development on land in an urban release area unless a development control plan that provides for the matters specified in subclause (3) has been prepared for the land.*
- (3) The development control plan must provide for all of the following:*
- (a) a staging plan for the timely and efficient release of urban land, making provision for necessary infrastructure and sequencing,*
  - (b) an overall transport movement hierarchy showing the major circulation routes and connections to achieve a simple and safe movement system for private vehicles, public transport, pedestrians and cyclists,*
  - (c) an overall landscaping strategy for the protection and enhancement of riparian areas and remnant vegetation, including visually prominent locations, and detailed landscaping requirements for both the public and private domain,*
  - (d) a network of active and passive recreation areas,*
  - (e) stormwater and water quality management controls,*
  - (f) amelioration of natural and environmental hazards, including bush fire, flooding and site contamination and, in relation to natural hazards, the safe occupation of, and the evacuation from, any land so affected,*
  - (g) detailed urban design controls for significant development sites,*
  - (h) measures to encourage higher density living around transport, open space and service nodes,*
  - (i) measures to accommodate and control appropriate neighbourhood commercial and retail uses,*
  - (j) suitably located public facilities and services, including provision for appropriate traffic management facilities and parking.*

The Thornton North Area Plan was adopted by Council on 26<sup>th</sup> February 2008 and is included within Part F.7 of the DCP. Whilst the site is not currently subject to a Precinct Plan which has recently completed exhibition, the current DCP still addresses Clause 6.3 as follows:

- a) A staging plan is provided where the subject site is located within Stage 2;
- b) A road network plan is included which provides the major circulation and connection routes for the site;
- c) Landscape buffers have been identified on the land use pattern plan. The subject site is affected by a 10m landscape buffer along Raymond Terrace Road;
- d) A pedestrian and cycle links and recreation and community facilitates plan is provided which identifies a network of passive and active spaces. The subject site is identified as requiring passive open space in the north;
- e) Section 1.5 identifies stormwater and water quality management controls to be adopted for the site;
- f) Section 1.6 highlights the main hazards for the area, where the subject site is identified as a potential noise source from the quarry and Raymond Terrace Road from traffic noise;
- g) Key development sites have been identified on the land use pattern plan, the site does not contain any of these features;
- h) Section 1.8 details where higher density living should occur;
- i) Section 1.9 and 1.10 detail requirements for neighbourhood commercial and retail uses and public facilities and services.

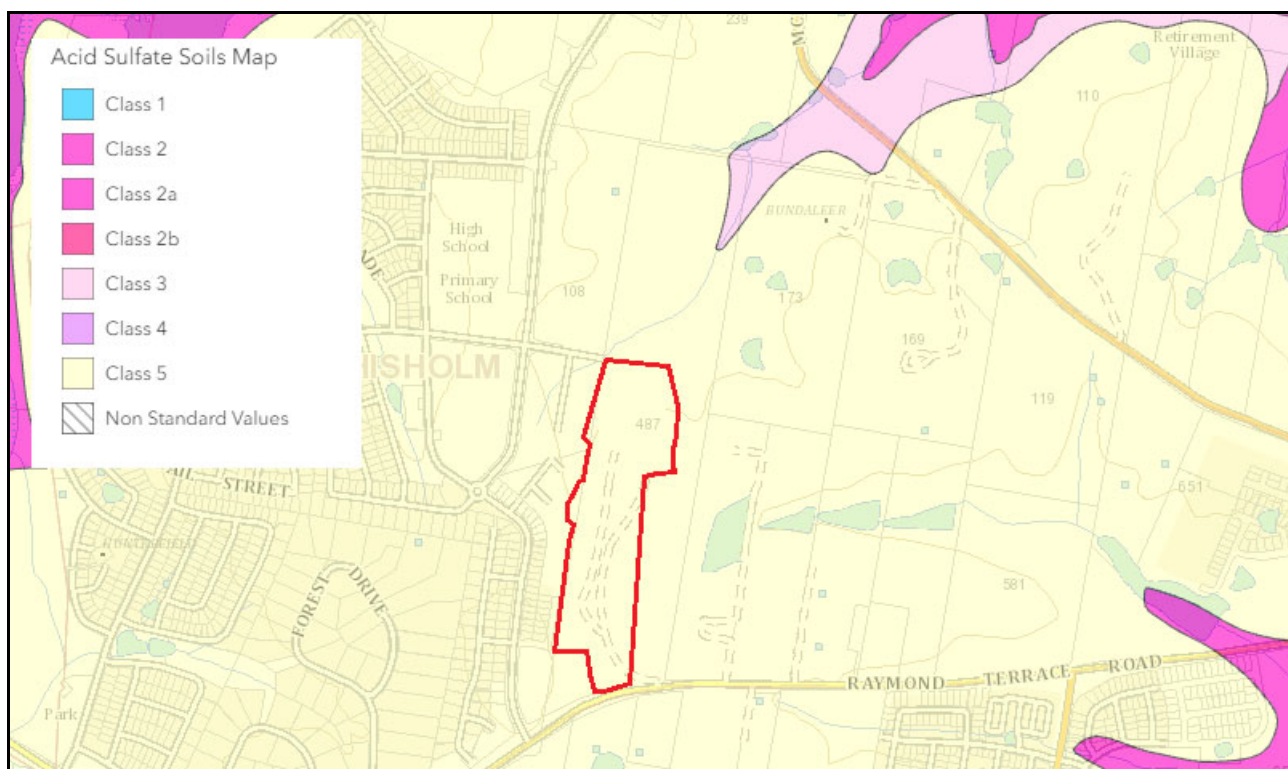
Taking the above into consideration, DCP – Part F.7 adheres to Clause 6.3.

### **Clause 7.1 – Acid Sulfate Soils**

Clause 7.1 states:

*(3) Development consent must not be granted under this clause for the carrying out of works unless an acid sulfate soils management plan has been prepared for the proposed works in accordance with the Acid Sulfate Soils Manual and has been provided to the consent authority.*

The subject site contains only Class 5 acid sulfate soils and as such, exposure of acid sulfate soils is highly unlikely noting the majority of the site requires filling (see Figure 11). Further discussion on the geotechnical characteristics of the site is included within Section 5.



**Figure 11: Acid Sulfate Soils Map (Subject Stages in Red)**

### Clause 7.2 – Earthworks

Clause 7.2 states:

(3) Before granting development consent for earthworks, the consent authority must consider the following matters—

- (a) the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality,
- (b) the effect of the proposed development on the likely future use or redevelopment of the land,
- (c) the quality of the fill or the soil to be excavated, or both,
- (d) the effect of the proposed development on the existing and likely amenity of adjoining properties,
- (e) the source of any fill material and the destination of any excavated material,
- (f) the likelihood of disturbing relics,
- (g) the proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.

In response to Clause 7.2 of the LEP, the following is provided:

- a) The earthworks have been designed in a holistic manner in coordination with the stormwater design to ensure there is no disruption or impacts on existing drainage patterns and soil stability;
- b) The earthworks are required to provide level building areas for future dwellings and therefore only improves the lands likely future use/redevelopment;
- c) Any fill will be clean engineering fill compacted under Level 1 supervision;
- d) The earthworks will ensure a smooth transition to adjoining allotments (i.e. site will not be artificially higher/lower than neighbouring sites). Minor construction based disruption would be expected but can be controlled through standard conditions of consent;



- e) Given the extent of fill required, it will be sourced offsite where it cannot be sourced from the excavation within the site or from the adjoining Waterford development. To reduce costs, this will be sourced from local areas where possible;
- f) All matters pertaining to heritage have been addressed above confirming no known relics will be disturbed;
- g) There are no watercourses, drinking catchments or environmentally sensitive areas within proximity to the proposed earthworks. Construction management measures outlined within the Biodiversity Development Assessment Report will be adopted to minimise impacts on the adjoining C3 Zone and associated vegetation.

Based on the above, the proposed earthworks are consistent with the requirements of Clause 7.2.

### Clause 7.5 – Significant Extractive Resources

The site is identified as land to which SEPP (Mining, Petroleum Production and Extractive Industries) 2007 applies (see Figure 12). This has been addressed below.



**Figure 12: Mineral Resources Map**

### Mapping

The following is noted with respect to the remaining mapping layers under the LEP:

- The land is not required for acquisition purposes (Clause 5.1); and
- The land is not identified as containing watercourse land (Clause 7.4).

Taking the above into consideration, the proposed development is consistent with the LEP.

#### 4.1.2 SEPP Infrastructure 2007 (“ISEPP”)

Clause 10 of the ISEPP provides that any development listed within Schedule 3 is classified as “traffic generating development” and requires a referral to Transport from New South Wales (TfNSW).

Schedule 3 provides the following:

Column 1 – Purpose of development	Column 2 – Size or capacity (site with access to any road)	Column 3 - Size or capacity—site with access to classified road or to road that connects to classified road (if access within 90m of connection, measured along alignment of connecting road)
Subdivision of land	200 or more allotments where the subdivision includes the opening of a public road.	50 or more allotments.

The proposed subdivision does not gain access to Raymond Terrace Road (or a road within 90m) and proposes less than 200 lots. For this reason, the development is not classified as traffic generating development.

#### 4.1.3 SEPP (State and Regional Development) 2011

The proposed development does not constitute State Significant Development under this SEPP and hence, the provisions relating to same are not relevant.

As the proposed development does not have a suitable value (over \$30 million) and is not located within the coastal zone, it is also not identified as Regionally Significant Development under Schedule 7 and as such, does not require the Joint Regional Planning Panel to become the consent authority.

#### 4.1.4 SEPP (Coastal Management) 2018

The SEPP applies to land within the coastal zone which includes coastal wetlands and littoral rainforest areas, coastal vulnerability areas, coastal environment areas and coastal use areas. The subject site does not fall within any of these areas.

#### 4.1.5 SEPP (Koala Habitat Protection) 2021

SEPP (Koala Habitat Protection) 2021 applies to all local government areas (LGAs) listed in Schedule 1, which includes Maitland LGA and therefore the subject site.

The aim of the SEPP is “to encourage the conservation and management of areas of natural vegetation that provide habitat for koalas to support a permanent free-living population over their present range and reverse the current trend of koala population decline”. The SEPP requires that development be consistent with an approved koala management plan that applies to the site, or where there is no such plan, make an assessment as to whether it is likely to have any impact on koalas or koala habitat. A Biodiversity Development Assessment Report (BDAR) has been prepared by Kleinfelder which concludes that the proposed development does not constitute core koala habitat.

#### 4.1.6 SEPP 55 Remediation of Land

Under this SEPP, Council must not consent to the carrying out of any development on land unless it has considered whether the land is contaminated and if so, whether after remediation, the site would be suitable for its intended use.

A Detailed Site Investigation (DSI) has been prepared by EP Risk. The report identified that the site had previously been used for quarrying purposes, the material from which was used to make bricks and tiles and which has also been used as fill to create access tracks across the site. The site had also been used for other activities which may have involved the use of pesticides, stockpiling, dumping of brick and coal waste and isolated demolition material.

Despite the above, EP Risk concluded that through undertaking standard management practices, including preparing and complying with a Remediation Action Plan (RAP) and Acid Sulphate Soils Management Plan (ASSMP), the land will be suitable for residential purposes. This is discussed in greater detail within Section 5 and the DSI located within Appendix 12.

#### 4.1.7 SEPP (Mining, Petroleum Production and Extractive Industries) 2007

Clause 13 of the SEPP requires the following:

- (2) Before determining an application to which this clause applies, the consent authority must—
- (a) consider—
- (i) the existing uses and approved uses of land in the vicinity of the development, and
  - (ii) whether or not the development is likely to have a significant impact on current or future extraction or recovery of minerals, petroleum or extractive materials (including by limiting access to, or impeding assessment of, those resources), and
  - (iii) any ways in which the development may be incompatible with any of those existing or approved uses or that current or future extraction or recovery, and
- (b) evaluate and compare the respective public benefits of the development and the uses, extraction and recovery referred to in paragraph (a)(i) and (ii), and
- (c) evaluate any measures proposed by the applicant to avoid or minimise any incompatibility, as referred to in paragraph (a)(iii).

In response to Clause 13 of the SEPP, the following is provided:

- a) The quarry located on the site has ceased operations for many years, with the site and surrounding area identified for residential development. With this in mind, the proposed development will be consistent with residential land uses in the vicinity;
- b) The site has been strategically identified for residential growth for many years. Its use will be in accordance with its residential zoning and regional plan for the area. As such, it is considered to be in the public benefit;
- c) N/A for reasons mentioned above.

Taking the above into consideration, the proposed development meets the requirements of the SEPP.

#### 4.2 DRAFT ENVIRONMENTAL PLANNING INSTRUMENTS (S4.15(1)(A)(II))

There are no draft SEPPs applicable to this type of development in this area.

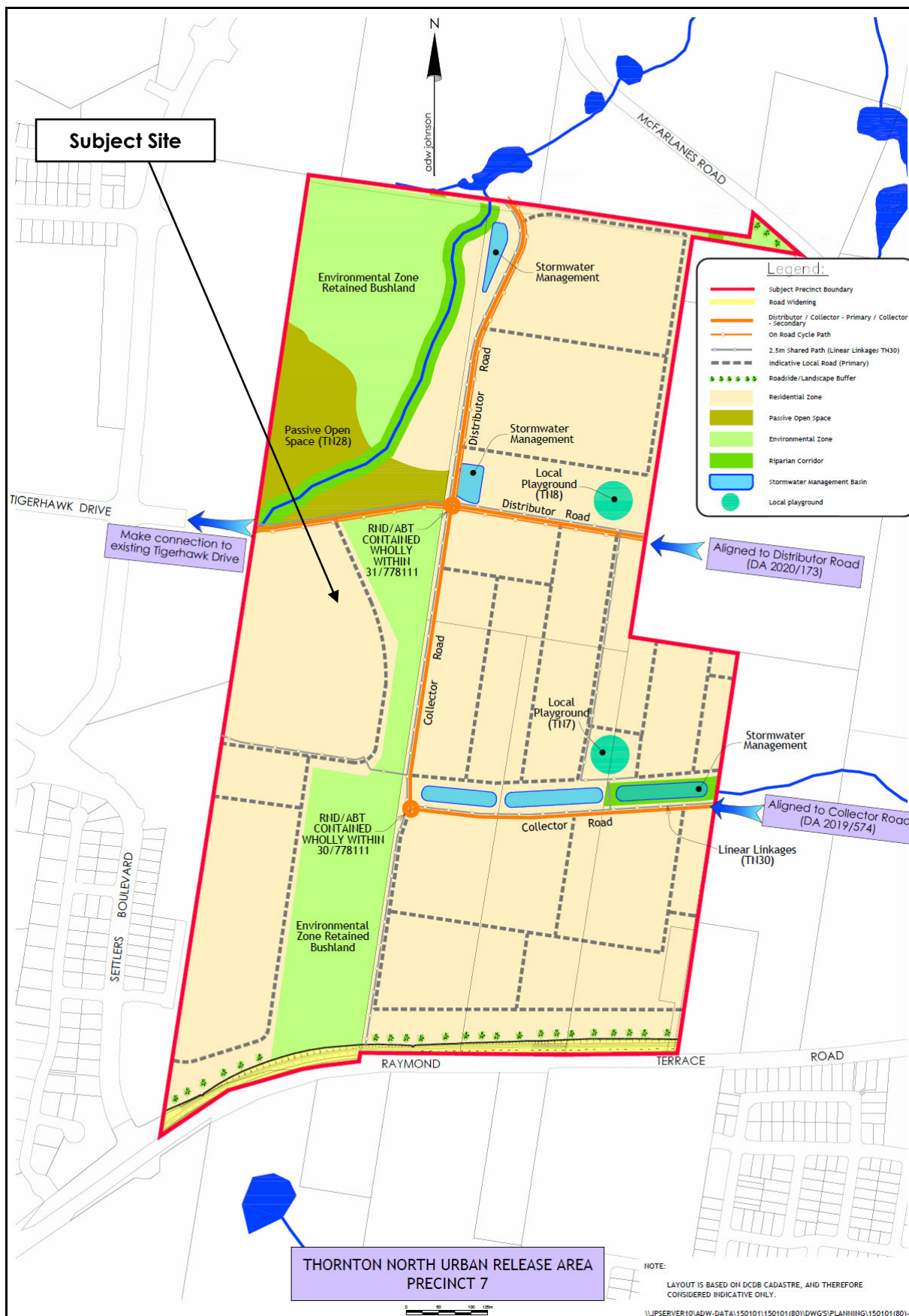


### 4.3 DEVELOPMENT CONTROL PLANS (S4.15(1)(A)(III))

#### 4.3.1 Maitland Development Control Plan 2011

The site is located within the Thornton North Urban Release Area; however, it is not currently addressed within a Precinct Plan. For this reason, a draft Precinct Plan ("Central Precinct Plan") has been prepared for the subject site and remaining undeveloped land to the east of the site and north of Raymond Terrace Road. The Precinct Plan was supported by Council on 28<sup>th</sup> September 2021 and completed public exhibition in November 2021. It is understood that consent to the development cannot be provided until the Precinct Plan is adopted.

How the site sits within the draft precinct plan is provided overleaf (see Figure 13).



**Figure 13: Draft Central Precinct Plan**

The proposed subdivision provides the following main elements, as depicted under the Draft Central Precinct Plan:

- A Distributor Road (Tigerhawk Drive) has been provided to the development extending from Settlers Boulevard to provide a connection to the existing developments to the east;
- A residue lot has been provided to retain environmental bushland and passive open space;
- Perimeter roads have been provided;
- 2.5m wide off road shared pathways have been provided along the Distributor Road and through the centre of the site. An additional off-road shared pathway has not been provided through the centre of the site providing a connection through to the west as there are no shared pathway connections within the existing/approved roads to the east. Provision of shared pathway in this location would also require greater disturbance to the environmentally zoned lands. It is also noted that this pathway is not required within the content of the Precinct Plan controls, unlike other mandatory pathways;
- A 10m wide landscaped buffer has been provided along Raymond Terrace Road.

The proposed subdivision complies with all relevant controls under the Draft Central Precinct Plan with the following exceptions:

### **Transport and Movement**

8. *Subdivision design is to provide for lot frontages addressing streets, reserves, open space and drainage areas. Allotments backing onto reserves, open space and drainage areas are discouraged. Where this is unavoidable, boundary fencing shall be of an open style and of consistent materials and colour. Fencing shall not form a prominent element in the landscape of this area.*

The reason for this control is to encourage casual surveillance over public spaces and to prevent unbroken lengths of fencing which facilitate and encourage graffiti and provide poor amenity towards public space.

Lot 7210 shares its side (east) boundary with the environmental bushland due to the inability to gain access to Raymond Terrace Road and the subsequent subdivision road layout. For this reason, the proposed lot is larger in size to accommodate APZs without impacting the environmentally zoned lands. The proposed lot will have boundary fencing, however given the majority of this land is bordered by roads, it is not considered to have impacts in terms of limiting casual surveillance.

Lots 7108 and 7134 also share their side (west) boundary with the approved drainage reserve to the east. This has occurred in a number of areas across the Waterford development and appropriate conditions can be applied with regards to fencing. Further, this area is bordered by roads for over 80% of its boundary and will consequently have adequate casual surveillance.

### **Key Development Sites**

2. *Batters for perimeter roads adjoining the E3 zoned land will be contained entirely within the residential zoned portion of the land. Additional verge width may be required to accommodate grades in such circumstances.*

A small batter is required for a short length of Tigerhawk Drive in order to grade the road southward allowing stormwater to enter the basins in the south-west. This has been minimised by reducing the pavement width to remove one (1) lane of on-road parking; however, a small length of approximately 30m is still required.

Given the topography in this area, and the need to grade the roads for drainage purposes, the only way to avoid the batter in this location completely would be to pull the road alignment south. This; however, would completely realign the Distributor Road which is not possible noting the speed environment and bus route nature of the road and safety issues surrounding this. Avoidance of batters could also be achieved with retaining walls; however, given the grade in this location, retaining would need to be over 2m. As this area is located over vegetation in a moderate condition (as opposed to moderate-good), a variation to this control is considered supportable.

*3. Retaining walls are not permitted within road reserve.*

1.5m high sandstone retaining walls have been proposed along Greenling Drive and Road 22 to avoid long lengths of batters within the C3 Zone adjoining moderate-good quality vegetation. Retaining walls could be avoided by widening the road reserve to accommodate wide batters; however, the road reserve width would need to extend up to 5m in some locations and this would require the reduction of lot depth from the desirable minimum of 30m which is required to provide a full range of housing options.

The provision of a narrow verge with small retaining walls (max 1.5m) provide both a suitable lot depth and minimal maintenance for Council. Further, the levels in Road 22 and Greenling Drive are fixed to drain stormwater north to the basins and allow on lot retaining walls to be kept to a maximum of 1.5m in accordance with Council's requirements.

Beyond the Precinct Plan, the proposed subdivision complies with all relevant controls under the DCP with the exception of the following:

**DC.8 Site Filling**

*General Requirements:*

*Earthworks require development consent of Council under the provisions of the Maitland LEP 2011, unless either exempt or complying development. Earthworks including site filling.*

*Where site filling is necessary or proposed, the materials used and extent and depth of fill must be detailed in the development application for the approval of Council prior to issue of a Construction Certificate. Council will take into account the provisions of AS 3798-1990, which provides guidelines on the specifying, execution and control testing of earthworks and associated preparation works within commercial and residential developments.*

*An absolute maximum fill depth of 2 metres will be considered by Council.*

As discussed above, the site is located partially over a former quarry. In order to accommodate level allotments, fill of up to 6.5m will be required. Whilst the proposed depth exceeds Council's 2m control, it is nonetheless considered to achieve the objective of the control which states:

*Objectives:*

*To ensure the environmental impact of site fill is properly assessed.*

The placement and compaction of the fill will be supervised to ensure the area is able to be established for future residential purposes.

Taking the above into consideration, due to the unique nature of this portion of the site, exceeding the Council control in this regard is considered worthy of support.

A complete compliance table against the DCP is provided as Appendix 9.

#### 4.4 PLANNING AGREEMENTS (S4.15(1)(A)(IIIA)) AND CONTRIBUTION PLANS

##### 4.4.1 Thornton North Contributions Plan

The site is not subject to any current or draft Planning Agreements, however is affected by the Thornton North Contributions Plan (CP) where the proposed residential lots require contributions at \$29,998 per lot. It is understood that a condition of consent will be applied to the development requiring the payment of contributions in accordance with this plan prior to the release of the Subdivision Certificate, with these funds going towards the below works (and others cited in the CP).

Works/land required under the CP on the subject site includes (see Figures 14 and 15):

- TN28: Stage 1 northern catchment passive open space (4.2ha): Land Value = \$319,371; Capital Costs = \$629,617 plus \$114,713 for half width road; and
- TN38 (partial): Raymond Terrace Road – Settlers Boulevard to Government Road.

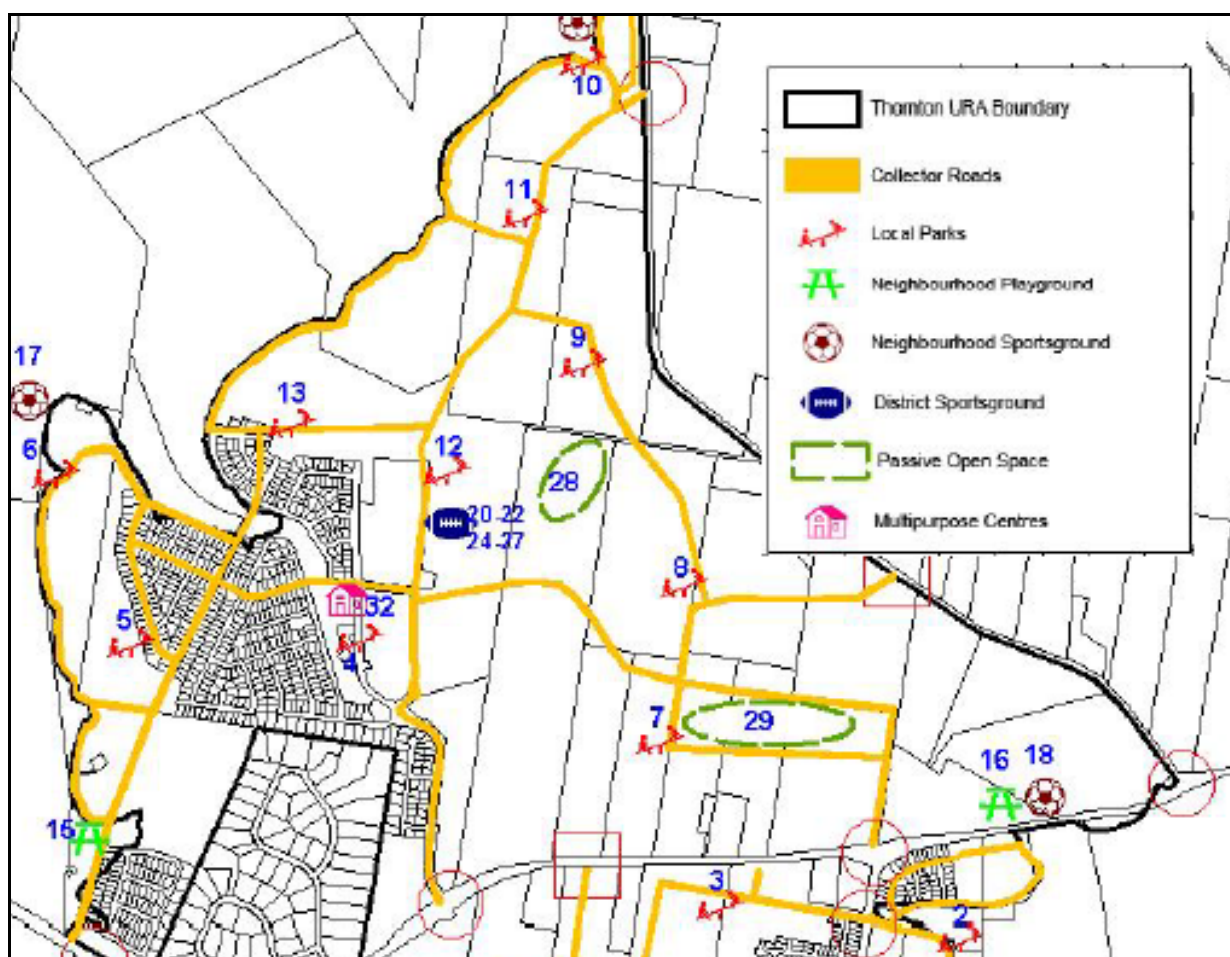
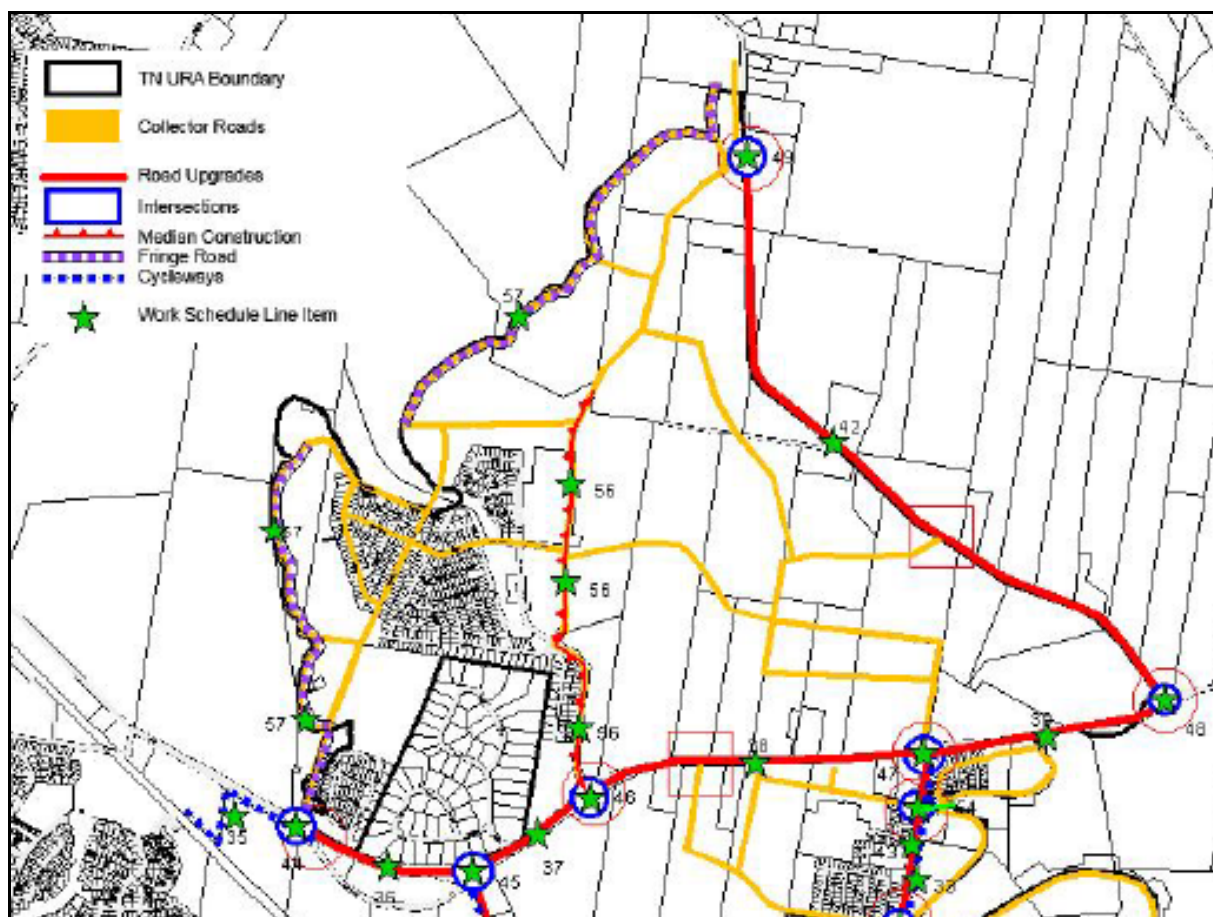


Figure 14: Recreation and Open Space and Community Facilities Plan





**Figure 15: Road and Traffic Facilities Plan**

It is understood that the land credit for TN28 will be applied as a reduction to the contributions payable. Embellishment of this area for passive open space will be the subject of a separate application. Road works completed as part of the above will have their total cost deducted from the applicable contributions through a Works in Kind Agreement.

#### **4.5 COASTAL ZONE MANAGEMENT PLAN (S4.15(1)(A)(IV))**

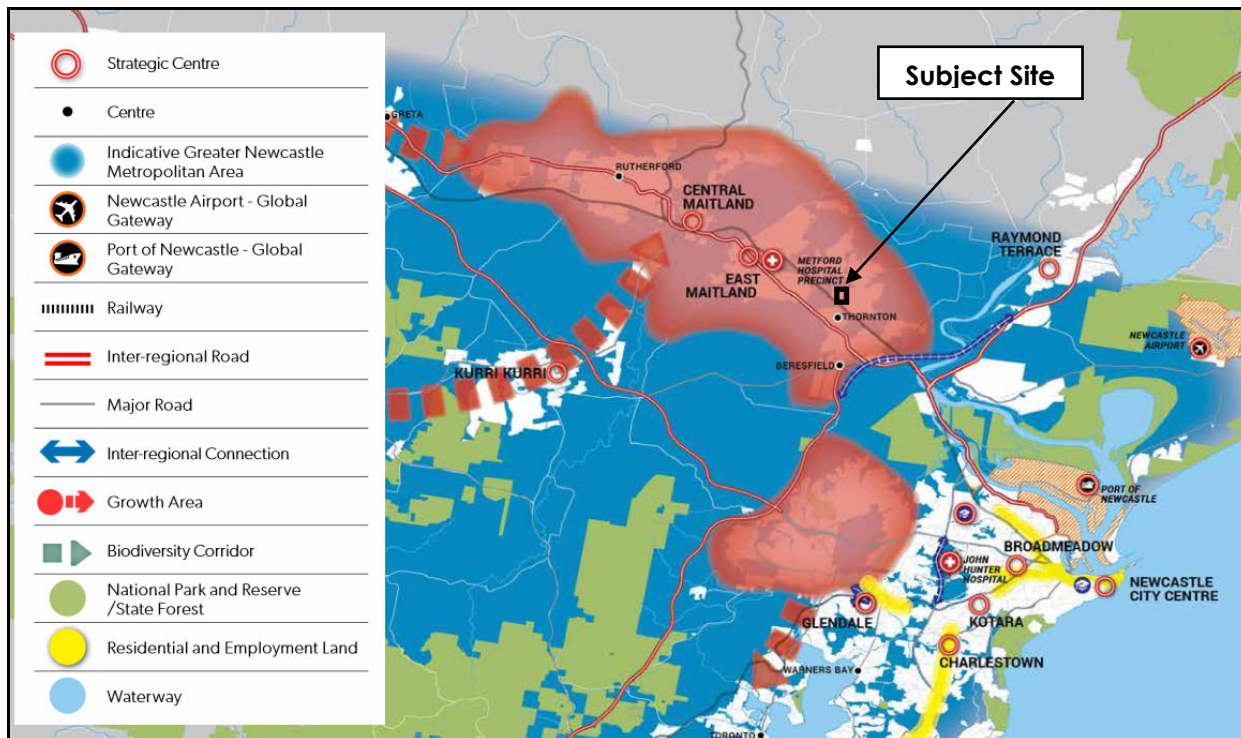
The Hunter Estuary Coastal Zone Management Plan exists; however, it has not been gazetted and as such, is not a consideration under Section 4.15.

#### **4.6 THE HUNTER REGIONAL PLAN 2036**

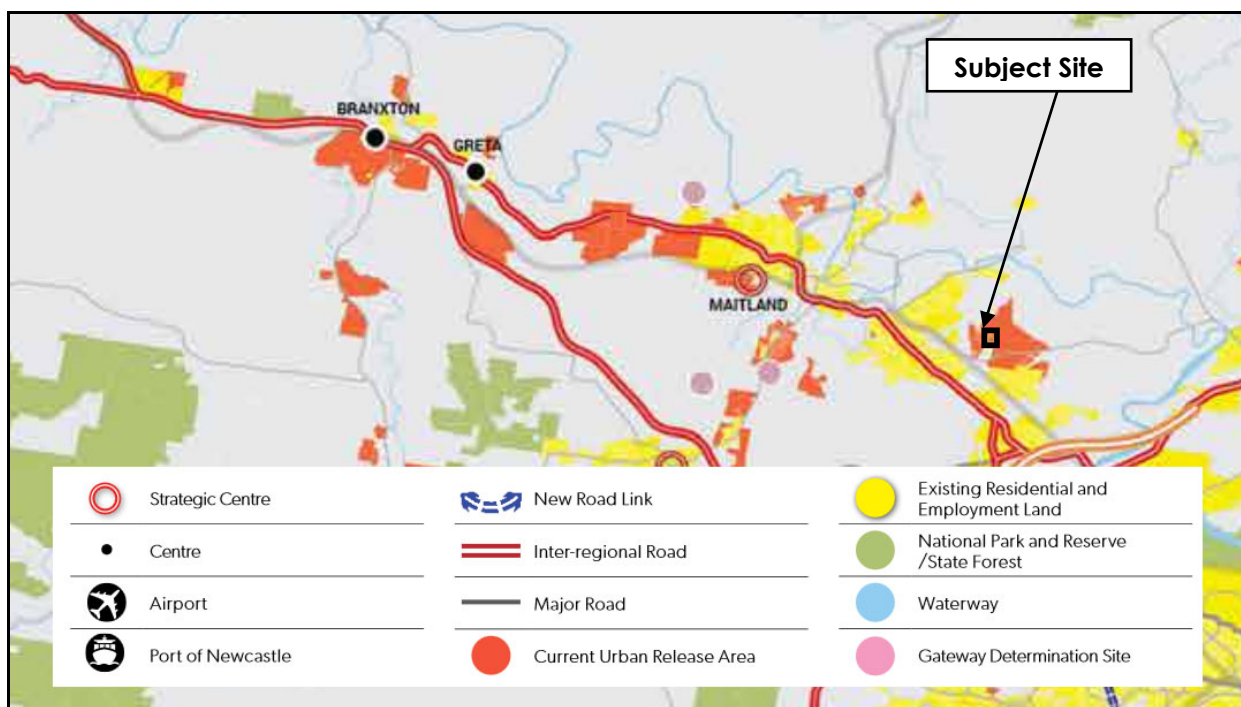
The Hunter Regional Plan was recently released in October 2016. The plan outlines the visions, goals and actions that are geared to growing the regional economy, accelerating housing supply, and protecting and enhancing the natural environment.

Greater housing choice is prioritised to satisfy the community's desire for smaller households. The plan places emphasis on providing new housing in existing and committed growth areas. To meet the projected housing demands over the next 20 years, an average of 3,000 new homes will need to be constructed each year.

The proposed development will provide 193 residential lots within an identified growth area for the future development of dwellings and as such, is consistent with visions, goals and actions for accelerating housing supply over the next 20 years in order to meet housing targets (see Figures 16 and 17).



**Figure 16: Hunter Regional Plan**



**Figure 17: Settlement Pattern Plan**

**4.7 ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT (EPBC ACT)**

The proposed development does not require a referral to Australian Government Department of the Environment as the proposal is not likely to have a significant impact on nationally listed threatened or migratory species or threatened ecological communities.

Further information in this regard is provided within the BDAR located within Appendix 10.



#### **4.8 BIODIVERSITY CONSERVATION ACT 2016**

A BDAR has been prepared which assesses the impacts of the development upon threatened entities under this Act, and required offsets to be retired to compensate for this impact (refer to Appendix 10). This is discussed in more detail within Section 5.

#### **4.9 INTEGRATED DEVELOPMENT**

The proposed development is classified as "Integrated Development" under Section 91 of the Environmental Planning and Assessment Act 1979, as it requires the separate approval of the Rural Fire Service (RFS) under the Rural Fires Act 1997 and Natural Resources Access regulator (NRAR) under the Water Management Act 2000.

## 5.0 Environmental Assessment

### 5.1 THE LIKELY IMPACTS OF DEVELOPMENT (S4.15(1)(B))

#### 5.1.1 Context and Setting

##### Area Context

The Draft Central Precinct has been strategically located through detailed studies and future planning undertaken as part of its development. For this reason, it is situated in close proximity to a range of supporting infrastructure/services, making it ideal for residential growth. Such services within 5km of the site include four (4) schools, two (2) train stations, sporting fields and a hospital. Within 10km of the site is the wider Maitland CBD, offering a full suite of supporting community and retail facilities.

##### Subdivision

The subject development represents the next subdivision to occur as part of the Avid land holdings.

The existing DAs lodged/approved surrounding the site provide a range of lot sizes, generally averaging around 600m<sup>2</sup>. The proposed lot sizes provide a greater variety to this with smaller lots around 500m<sup>2</sup> ranging to larger lots around 800m<sup>2</sup>. Given the growing nature of the area, it is considered that the subdivision fits cohesively within the existing and transforming context of the site.

#### 5.1.2 Access, Transport and Traffic

##### Access

Access to the site will be provided via Tigerhawk Drive, Greenling Drive, Regina Way and Cora Way, all roads approved or proposed under developments to the east.

##### Internal Road Design

Numerous new internal roads will be constructed as part of the proposed subdivision feeding off those mentioned above. With the exception of Tigerhawk Drive, these will all acts as local roads and have been designed in accordance with Council's Manual of Engineering Standards (MoES) as follows:

Road Reserve	Carrigeway	Verge Width	Footpath
17m	8m	4.5m	1.5m: 1 side

Tigerhawk Drive will be designed as a Distributor Road in accordance with the Draft Central Precinct Plan. In order to reduce impacts on the C3 zoned land, one of the on-road parking lanes has been removed as follows:

Road Reserve	Carrigeway	Verge Width	Footpath	Shared pathway
22.5m	12.5m	4.5m & 5.5m	1.5m: 1 side	2.5m: 1 side

The location, width and treatment of these roads is depicted within Appendix 1B.

## Traffic & Road Safety

The Traffic Impact Assessment (TIA) prepared by Intersect Traffic for the subject DA found that the proposed subdivision would generate an additional 1,421 vehicle trips per day. Intersect Traffic have undertaken a growth analysis and SIDRA modelling using a growth rate of 5% up to 2031 and made the following conclusions:

- There is ample mid-block capacity along all roads to accommodate the development as well as future growth for the next 10 years;
- There is ample capacity within the Raymond Terrace Road/ Settlers Boulevard signalised intersection to accommodate the development as well as future growth for the next 10 years;
- Planned upgrades for other intersections within the catchment will accommodate the proposed development, and contributions towards these as part of the \$7.11 contributions will satisfy the developers obligations in this regard;
- All new roads and intersections have adequate sight distances; and
- Traffic control devices, generally give-way controls, will be developed to direct traffic.

Full details with regards to the above are provided within the TIA within Appendix 11.

## Public Transport

The development will generate some public transport usage particularly regarding school bus services. All proposed lots are within 500m from existing bus routes along Raymond Terrace Road and Settlers Boulevard. Tigerhawk Drive may also become a bus route, once the remaining developments to the east are complete and the connection finalised.

## Pedestrian and Cyclist Facilities

Significant pedestrian and cyclist facilities are accommodated through this development to allow connection to the existing infrastructure including:

- 1.5m wide footpaths on one side of all local roads;
- 2.5m wide off-road shared pathways along Tigerhawk Drive; and
- On-road cyclist commuter lanes along Tigerhawk Drive.

### 5.1.3 Public Domain

The proposed development will have a beneficial effect on the public domain through the continuation of the strategically planned TNURA. It will provide attractive streetscapes through vibrant landscaping; footpaths and cycleways throughout; as well as the ability to provide future passive open space to the north of the development.

### 5.1.4 Utilities

#### Water

A water service will be provided to all lots feeding off the existing and approved sewer connections to the east.

## Sewer

The proposed development site falls to the north where sewerage will be transported to a new sewerage pump station (“Chisholm 8”) located opposite Stage 55. A sewer service will be provided to all lots feeding off the existing and approved sewer connections to the east.

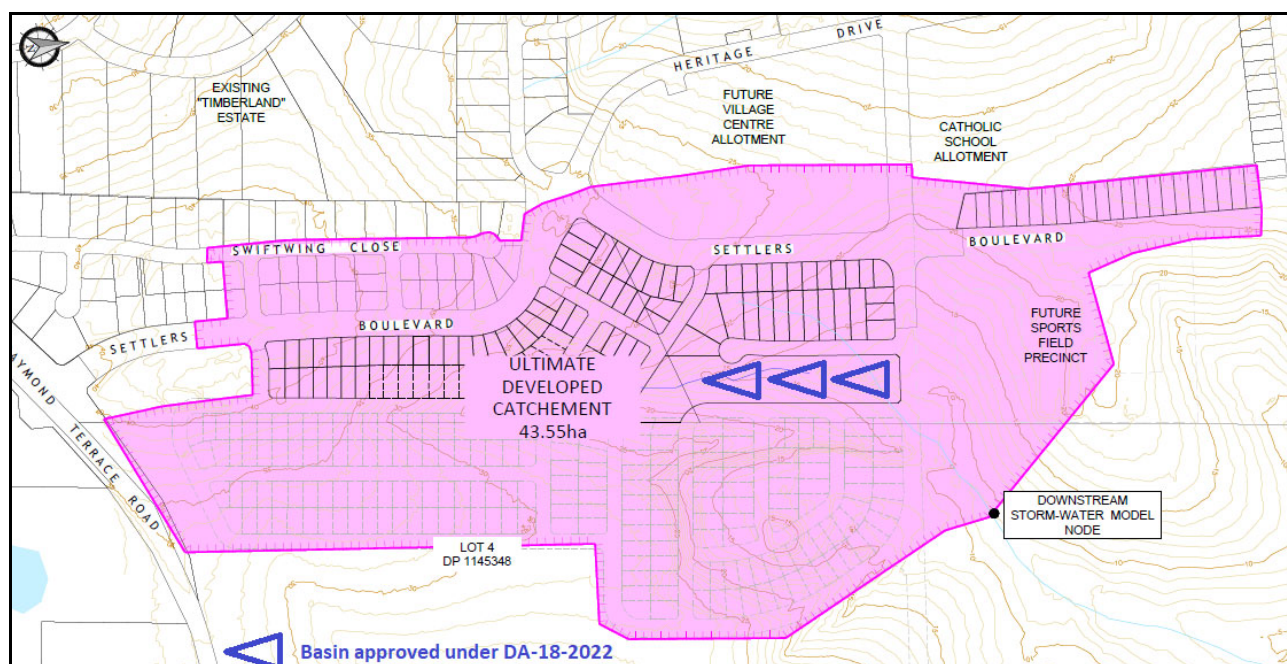
A services plan, showing the proposed location of sewer supply services within the subdivision, is provided in Appendix 1B.

## Electricity/Telecommunications/Gas

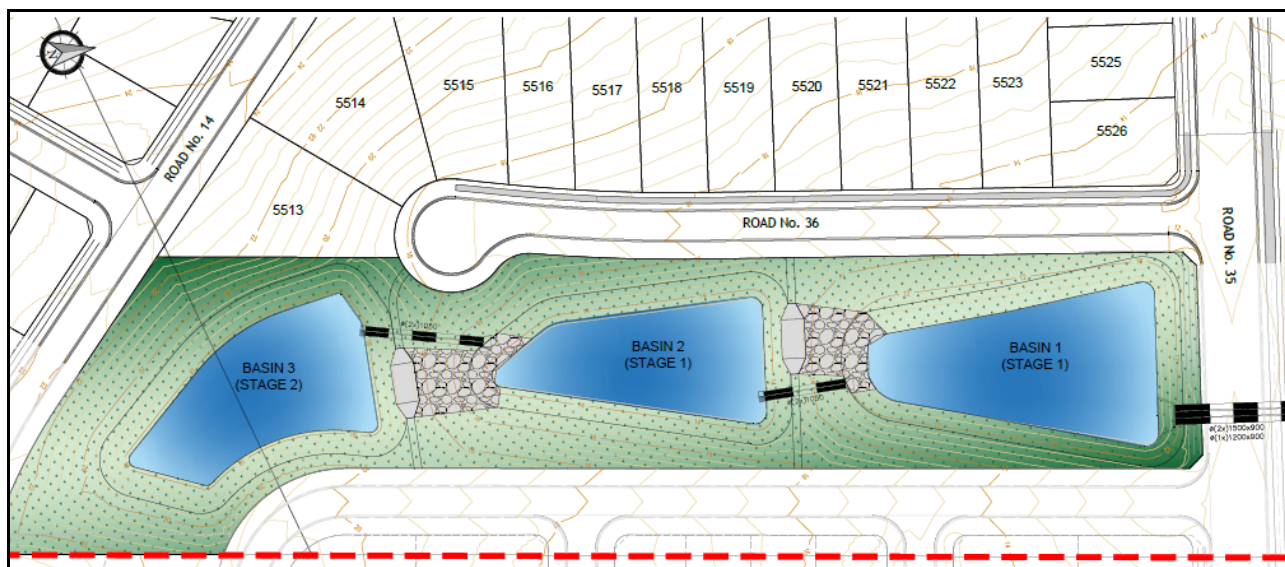
Electricity, telecommunication and gas facilities to service the proposed allotments will be provided underground within the footpath reservation and connect to existing reticulation in the neighbouring development.

### 5.1.5 Stormwater, Water Quality, Flooding

The proposed development will drain to the basins approved under Stages 53 and 55 (DA18-2022) which have been designed cater for the site (see Figures 18 and 19).



**Figure 18: Approved Basins under DA18-2022 and Contribution Catchment in Pink**



**Figure 19: Approved Concept Basin Design**

As the proposed development results in minor amendments to the original Stormwater Management Plan approved under DA18-2022, an Addendum Letter has been prepared demonstrating the suitability of the existing approved basin for this purpose (refer to Appendix 4).

### 5.1.6 Erosion and Sediment Control

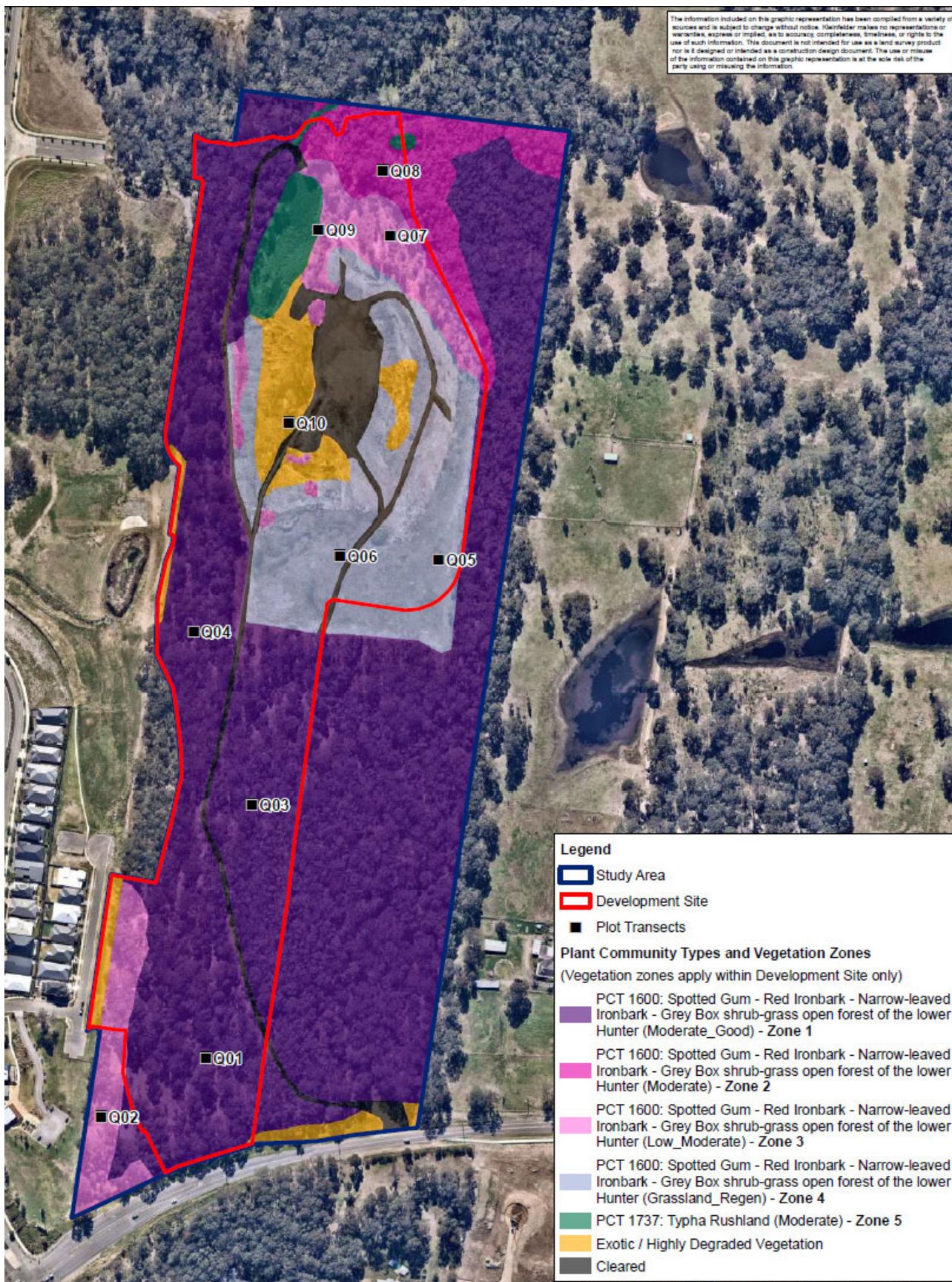
Erosion and sedimentation control devices will be implemented during the construction phase and can be imposed through conditions of consent in accordance with Council requirements and the Blue Book. Details in this regard are illustrated within Appendix 1B.

### 5.1.7 Flora and Fauna

The proposed development will impact upon the following vegetation (see Figure 20):

PCT	Vegetation Formation	Vegetation Class	Area (ha)
PCT 1600: Spotted Gum - Red Ironbark - Narrow-leaved Ironbark - Grey Box shrub-grass open forest of the lower Hunter (Moderate_Good)	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Hunter-Macleay Dry Sclerophyll Forests	12.63
PCT 1737: Typha Rushland (Moderate)	Freshwater Wetlands	Coastal Freshwater Lagoons	0.50
Exotic / Highly Degraded Vegetation	-	-	1.07
Cleared	-	-	1.36
<b>Total.</b>			<b>15.56</b>





**Figure 20: PCT Map (Source: Kleinfelder, 2021)**

As the proposed development will impact upon this vegetation, Kleinfelder have prepared a BDAR to assess the development against the Biodiversity Conservation Act.



The BDAR addresses the requirements of avoid, minimise and mitigate and concludes that residual impacts associated with vegetation removal will require the retirement of the following:

**Table 9: Summary of ecosystem credit requirements**

Vegetation Zone	Vegetation Zone Name	Area (ha)	Current Vegetation Integrity Score	Future Vegetation Integrity Score	Credits Required
1	1600 Moderate-Good	7.52	55.7	0	209
2	1600 Moderate	0.55	55.3	0	15
3	1600 Low-Moderate	1.32	42.5	0	28
4	1600 Grassland-Regen	3.25	7.2	0	0
5	1737 Moderate	0.50	57.4	0	14
<b>Total Credit Requirement</b>					<b>266</b>

The Biodiversity Credit Reports detailing like-for-like and variation options for credit retirement is provided in **Appendix E**.

**Table 10: Summary of species credit requirements**

Vegetation Zone	Vegetation Zone Name	Area (ha)	Biodiversity Risk Weighting	Credits Required
<b>Southern Myotis (<i>Myotis macropus</i>)</b>				
1	1600 Moderate-Good	2.02	2	53
2	1600 Moderate	0.99	2	15
3	1600 Low-Moderate	0.99	2	21
4	1600 Grassland-Regen	1.91	2	7
5	1737 Moderate	0.50	2	14
<b>Total</b>				<b>110</b>

Various mitigation measures are also recommended during construction, and it is assumed compliance these and the BDAR in general will be a condition of any future consent.

A copy of the BDAR is provided within Appendix 10.

### 5.1.8 Heritage

Discussed above.

### 5.1.9 Natural Hazards

#### Bushfire

As noted previously, the subject site is classified as “bushfire prone” land under the bushfire maps adopted by Council.

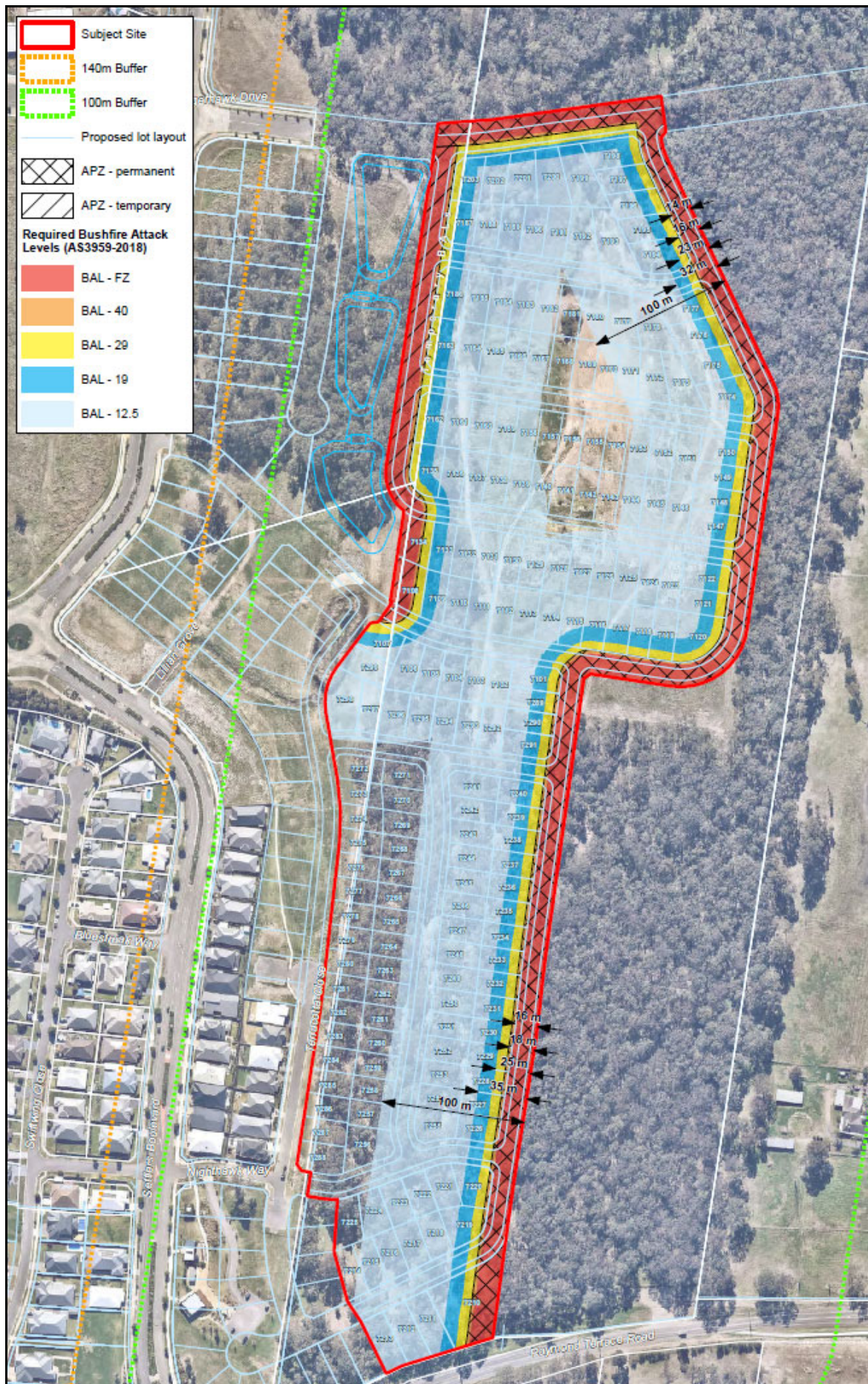
Given the proposed development is classified as a “Residential Subdivision” under the Rural Fires Act 1997, Council is required to refer the application to the RFS to gain their General Terms of Approval as per the “Integrated Development” provisions of Section 4.46 of the EP&A Act.

To identify the extent of bushfire threat and to assist the RFS in their assessment of the proposal, a Bushfire Assessment Report (BAR) has been prepared by Bushfire Planning Australia (BPA) (refer to Appendix 8).

To inform the BAR, BPA have conducted a slope and vegetation assessment which has concluded that temporary APZs will be required until such time as the vegetation to the west is cleared, and permanent APZs will be required to minimise the bushfire hazard to the retaining vegetation within the C3 Zone. These will be accommodated along roads and front building setbacks (see Figure 21).

Other recommendations relating to building standards, water supply, APZ management and access arrangements are provided within the BAR within Appendix 8.





**Figure 21: APZ & BAL Plan**

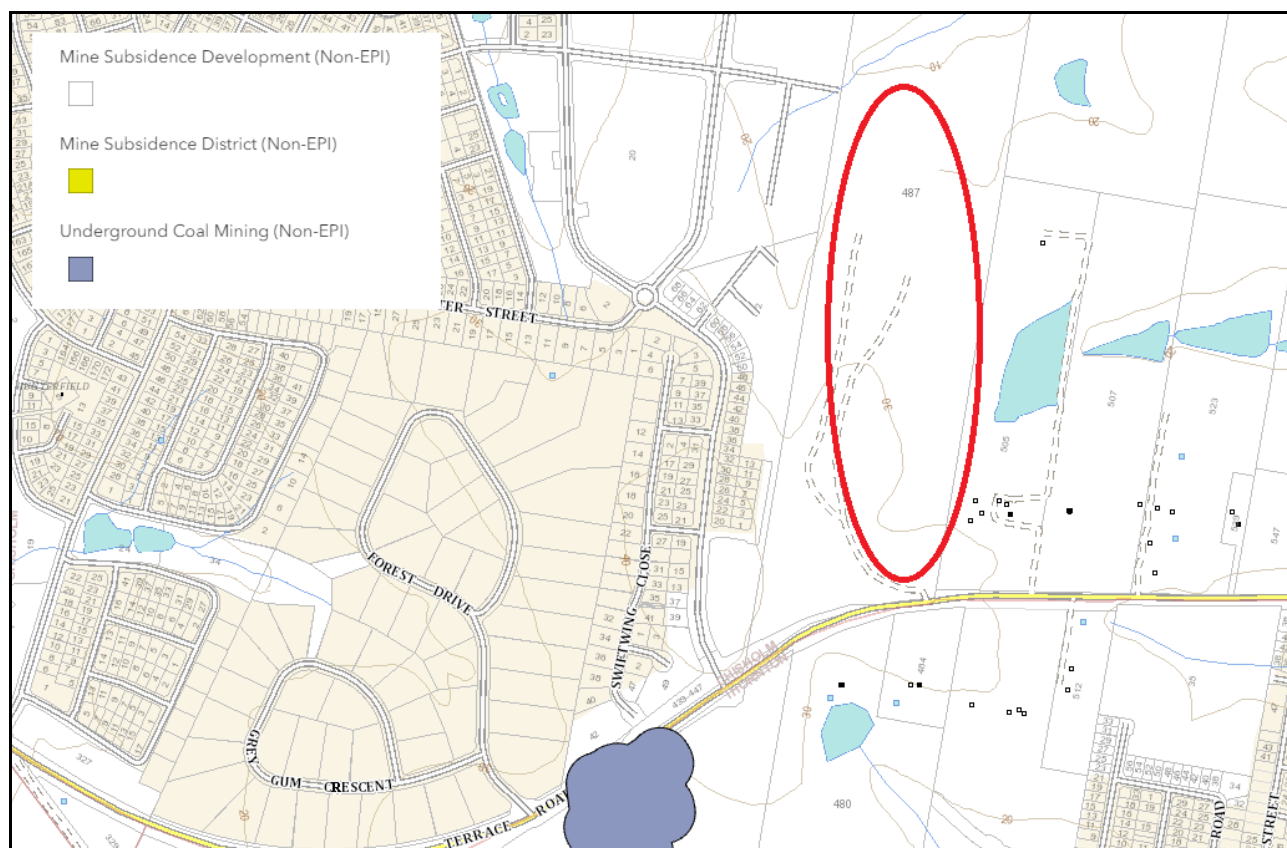


## Flooding

The site is not flood affected.

## Mine Subsidence

The site is not identified as being within a mine subsidence district or as being affected by underground coal mining (see Figure 22).



**Figure 22: Mine Subsidence Map**

### 5.1.10 Noise and Vibration

As the subject site fronts Raymond Terrace Road, an Acoustic Assessment has been prepared by Spectrum Acoustics. This identifies the potential level of traffic noise expected from this source (including background traffic growth of 35%) and the impact this may pose to future dwellings within the subdivision.

The NSW Road Noise Policy advises that development must meet the internal noise goals set out within the ISEPP where the following internal LAeq noise levels apply:

- Bedrooms: 35dB(A) between 10pm and 7am;
- Other Areas: 40dB(A) at any time.

Spectrum have advised that the noise attenuation from standard dwelling construction will be sufficient for future dwellings along Raymond Terrace Road to meet these levels.

This aside, the development has nonetheless proposed a 1.8m high acoustic fence to be erected along the boundary of Raymond Terrace Road.



Full details with regards to the above are provided within Appendix 14.

### 5.1.11 Social and Economic Impact

It is no secret that NSW is facing a housing crisis, with house prices continuing to rise year upon year. Whilst this trend is sometimes focussed around Sydney, the Hunter has seen almost a 20% increase in the median house price in the last year alone. The only way to alleviate this pressure is through supply and demand economics. More housing is needed to cover the demand and drive down prices.

As discussed above, the Hunter Regional Plan has set ambitious housing targets for the Hunter, requiring roughly 3,000 dwellings per year in an attempt to address this issue. The proposed development provides a significant contribution in this regard.

The subject development is likely to result in over \$67 million dollars of investment in the local economy (\$17 million from subdivision construction and \$50 million in dwelling construction).

The subdivision will accommodate approximately 500 additional residents, with around half of these within the work force. This additional population will drive up demand for existing and proposed services and businesses within the area which will have a cyclical impact on job and wealth creation. In addition to this, significant local employment opportunities will exist during the construction process.

The subdivision also provides a wide range of allotment sizes which in the future will accommodate a variety of housing styles. The ability to accommodate different dwelling types will bring a broad spectrum of residents to the area and this mix will add vibrancy, support and interest to the community.

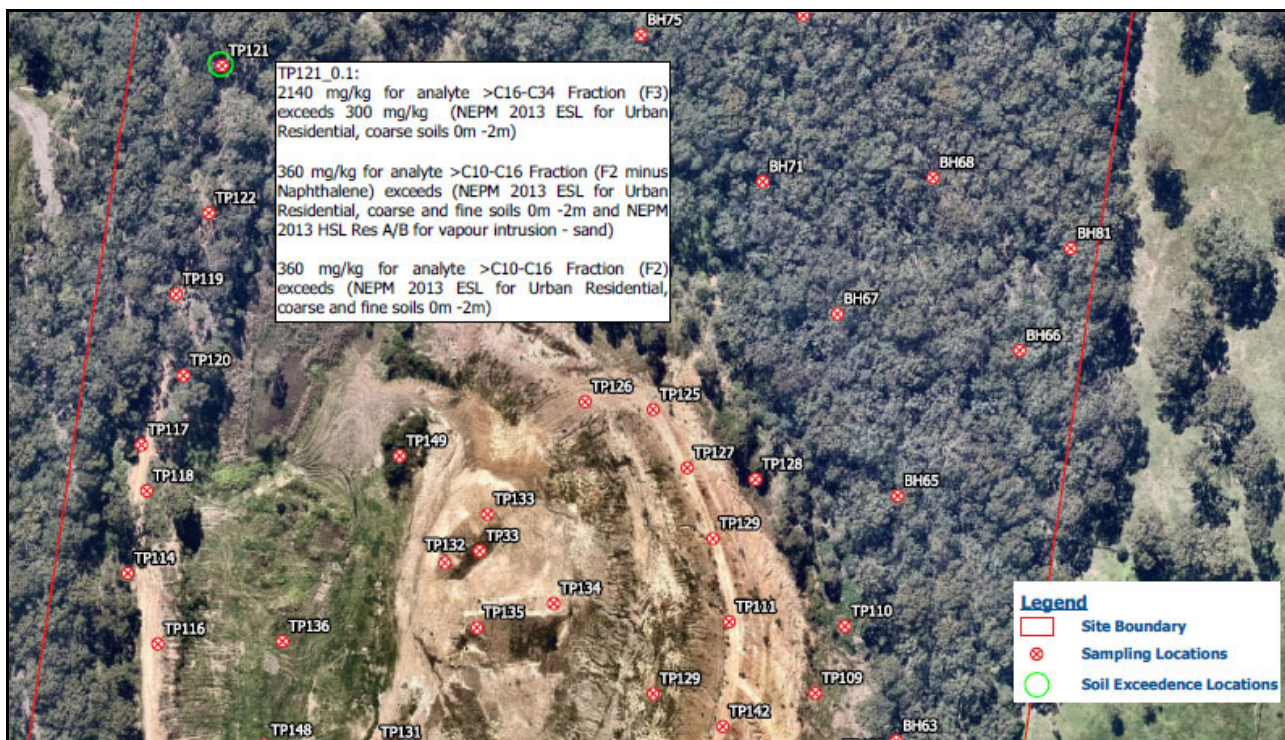
The proponent will also be required to pay local contributions which will be used towards important infrastructure and facilities for the wider benefit of the community.

### 5.1.12 Geotechnical Considerations

#### Contamination

A Detailed Site Investigation (DSI) has been prepared by EP Risk including soil testing (142 test pits and 25 boreholes) to ascertain the level of contamination across the site. From this testing, it was concluded that only three (3) locations had some level of contaminants (TP 121; TP06\_0.1; and TP165\_01) (see Figure 23). The site was also found elevated acidity in areas.





**Figure 23A: Soil Exceedance Map (Northern Portion of Site)**



**Figure 23B: Soil Exceedance Map (Southern Portion of Site)**

Based on the above results, EP Risk has recommended that following be undertaken to make the site suitable for residential purposes:

- Management / removal of anthropogenic materials from the site;
- Preparation and implementation of a Remediation Action Plan to address identified total recoverable hydrocarbon (TRH) in soil hotspots;



- Preparation and implementation of an Acid Sulfate Soil Management Plan to address the identified acid sulfate soils;
- Preparation and implementation of an unexpected finds protocol during construction of the proposed development to address any unidentified contamination that may be identified during the proposed redevelopment works.

Compliance with the recommendations of the DSI can be included as conditions of consent.

A copy of the DSI is provided within Appendix 12.

### **Geotechnical Considerations**

Preliminary Geotechnical Investigations undertaken by EP Risk for the site revealed the following with regards to the geotechnical characteristics:

- Weathered rock was encountered at depths from 0.4m below ground level and was estimated to be very low strength. Higher strength rock may be encountered which would require heavy rock breaking machinery;
- Groundwater was not encountered during investigation but may be situated at the low lying parts of the northern area of the subject site;
- There is a significant amount of fill across the site due to the previous operators/ owners of the quarry. It is estimated the bricks and tiles encountered at the site equates to 10,600m<sup>3</sup>.

A variety of construction requirements have been recommended with regards to the above in terms of road pavement design, retaining and construction. EP Risk have concluded that provided the recommendations of the report are followed, there are no constraints considered prohibitive to the proposed development.

A copy of the Preliminary Geotechnical Assessment within Appendix 15.

#### **5.1.13 Landscaping**

The landscape design proposed as part of this development will include street trees species generally selected from Council's Preferred Species List and which complement the existing street trees to the west.

In addition to the above, the design also includes 10m buffer planting and acoustic fencing along Raymond Terrace Road.

A copy of the landscape plans are provided within Appendix 5.

#### **5.1.14 Site Design and Internal Design**

Discussed within Section 3.2.

#### **5.1.15 Waste**

As with most best practice building projects, the amount of waste to be generated during the construction phase will generally be minimal by use of pre-ordered and pre-fabricated materials where possible.

In terms of waste management, during construction the majority of the waste produced will be from the removal of topsoil, and of trees. This will be re-used elsewhere by the contractors or where re-use is not possible or inappropriate, green waste will be disposed of at the local Waste Management Facility. A significant amount of brick, masonry and tile waste (estimated 10,600m<sup>3</sup>) material from the former quarry activities is also present on site. Where possible, brick will be crushed onsite and used as general fill under the direction of a Level 3 Geotechnical Supervisor. Excess material will be separated and taken to local recyclers.

In terms of ongoing waste management for future dwellings, all allotments have sufficient area to accommodate Council's garbage bins, and all lots front roads which will be able to accommodate Council's collection service.

### **5.1.16 Safety, Security and Crime Prevention**

The proposed street layout has been designed to be fully interconnected providing permeability throughout.

The proposed subdivision will provide additional casual surveillance to nearby public areas with all lots located along public roads (i.e. no new battle-axe lots), with ample street frontage, and with streets to be conditioned to be appropriately illuminated.

## **5.2 THE SUITABILITY OF THE SITE FOR THE DEVELOPMENT (S4.15(1)(C))**

The proposed subdivision is located on a site which is appropriately zoned, within a master planned urban release area, and adjoining similar existing/approved developments to the west. For these reasons, the subject site is considered to be entirely suitable for the proposed residential subdivision.

## **5.3 ANY SUBMISSIONS MADE IN ACCORDANCE WITH THE ACT (S4.15(1)(D))**

The proposed subdivision will require public notification with any relevant submissions to be addressed by Council.

## **5.4 THE PUBLIC INTEREST (S4.15(1)(E))**

The proposed subdivision will develop existing vacant land for the purposes for which it has been zoned and as such, is considered to be in the public interest through the long-term benefits of development and growth within a strategically appropriate location.

Beyond this, the development will also:

- Provide new pedestrian/cycle pathways which continue those built at Waterford County;
- Create jobs during construction;
- Enhance ongoing future business for locals; and
- Contribute significant funds towards the upgrade of a variety of community facilities, roads and infrastructure.

## 6.0 Conclusion

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The proposed subdivision will create 193 residential allotments in a logical pattern within an area strategically planned for growth and in accordance with all the relevant provisions of Maitland LEP 2011.

The proposed subdivision provides allotments of an appropriate size, shape and orientation to allow for the construction of a wide range of housing types. The subdivision incorporates wide streets that facilitate easy vehicular, cyclist and pedestrian access and connections to nearby public transport facilities, schools, community facilities and areas of open space.

The proposed subdivision has taken into account all site constraints including the existing former quarry, ecology, Aboriginal archaeology, contamination and bushfire and has developed mitigation measures to accommodate/manage all of these.

All necessary infrastructure and services are available or can be provided to the site, inclusive of water, sewerage, underground gas, electricity and telecommunication facilities and an industry best practice stormwater management system. In addition, footpaths, cycleways and extensive landscaping throughout the subdivision will also be provided, all of which combine to ensure a high-quality residential neighbourhood will be created for the benefit of future residents.

The development has been professionally designed and provides a natural progression to Stage 2 of the TNURA. Whilst a current Precinct Plan is not in place for the site, the Draft Central Precinct plan has completed exhibition, to which the propose development accords.

In summary, the development complies with the minimum lot size within the LEP and the applicable chapters of the Maitland DCP 2011. Where variations are requested, they have been adequately justified ensuring that the intent of the control is still achieved.

Taking the above into consideration, the proposal addresses all matters under Section 4.15 of the EP&A Act and on this basis, Council is requested to grant development consent to the application.