STAGED RESIDENTIAL SUBDIVISION 24 DUCKENFIELD ROAD, 29 STILLWATER PARADE, 40 GOLDRING STREET, 3 CALDERA STREET, 18 DARKMOUTH STREET, 16 DARKMOUTH STREET, 9 ROCKMASTER STREET, EMPEROR PARADE AND 261 SETTLERS BOULEVARD, CHISHOLM

STATEMENT OF ENVIRONMENTAL EFFECTS AVID PROPERTY GROUP JUNE 2023



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# **Document Control Sheet**

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А	Draft to Client	29 <sup>th</sup> May 2023	BJI	SVD
В	Final to Council	5 <sup>th</sup> June 2023	BJI	SVD

#### 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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# **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			
Applicant:	Avid Residential Estates Pty Ltd		
Development:	282 lot Torrens Title Residential Subdivision in three (3) stages		
Site Description:	Proposed Lot 2 of Lot 112 DP734271, Lot 6121 DP1268036, Lot 6140 DP1284398, Lot 3001 DP1264314, Lot 2726 DP1237666, Lot 2531 DP1224018, Lot 2425 DP1224017, Lot 4 DP1222785 and Proposed Lot 6284 of Lot 6131 DP1268036		
	24 Duckenfield Road, 29 Stillwater Parade, 40 Goldring Street, 3 Caldera Street, 18 Darkmouth Street, 16 Darkmouth Street, 9 Rockmaster Street, Emperor Parade and 261 Settlers Boulevard, Chisholm		
Owner:	Avid Residential Estates Pty Ltd & Roslyn Maree Jensen		
Development Cost:	\$27,457,183		
Development Standards/Controls			
Zone:	R1 General Residential C2 Environmental Conservation RU2 Rural Landscape		
Definition:	Subdivision		
Permissibility:	Permissible with Consent (Maitland Local Environmental Plan (LEP) 2011 – Section 2.6)		
Minimum Lot Size:	450m² (LEP – Section 4.1) 40ha (LEP – Section 4.1B)		
Urban Release Area:	Thornton North Stage 2		
External Referrals			
Bushfire:	Yes – Residential Subdivision within bushfire prone land (Rural Fire Service (RFS) – Integrated)		
Waterfront land:	Yes – The proposed subdivision is within 40m of a watercourse (Natural Resources Access Regulator (NRAR) – Integrated)		
TfNSW	Yes – The proposed development is over 200 residential lots		



# Summary

The proposed subdivision achieves all key planning controls.



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# 1.0 Introduction

ADW Johnson has been engaged by Avid Residential Estates Pty Ltd ("Avid") to prepare and lodge a Development Application (DA) with Maitland City Council ("Council") for a 282-lot staged residential subdivision over proposed Lot 2 of Lot 112 DP734271, Lot 6121 DP1268036, Lot 6140 DP1284398, Lot 3001 DP1264314, Lot 2726 DP1237666, Lot 2531 DP1224018, Lot 2425 DP1224017, Lot 4 DP1222785 and Proposed Lot 6284 of Lot 6131 DP1268036, 24 Duckenfield Road, 29 Stillwater Parade, 40 Goldring Street, 3 Caldera Street, 18 Darkmouth Street, 16 Darkmouth Street, 9 Rockmaster Street, Emperor Parade and 261 Settlers Boulevard, 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 282 residential lots which will sit within the north western portion of the Thornton North Urban Release Area and the final stages of the Waterford County North Precinct Plan. The proposal also includes three (3) residue lots and two (2) drainage lots which will be delivered in three (3) stages.

As part of this application, consent is also sought for the construction of roads, connection of stormwater through to the basins, vegetation removal, bulk earthworks/regrading, retaining 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 stormwater basins are located within the *RU2* Rural Landscape Zone (RU2 zone), where subdivision is also permissible but where a minimum lot size of 40ha exists. In this regard, as the development proposes stormwater infrastructure to be dedicated to Council over this lot, it is exempt from the minimum lot size provisions. Portions of some residential perimeter lots traverse the RU2 zone, however this will not impact upon the objectives of the RU2 zone and has been consistently undertaken within the surrounding Waterford developments.

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 falls under the Waterford County North Precinct Plan and the design of the subdivision is generally in accordance with the Precinct Plan.

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.



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.

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# 2.0 The Site

# 2.1 LOCATION

The subject site is located in the north western portion of the Waterford Development. It is to the west of McFarlanes Road and south of Duckenfield Road at Berry Park.

The site is approximately 4km to the east of East Maitland Town Centre and 1km north of the new village centre, in a growing residential area where numerous DAs have been lodged and/or constructed (see Figure 1).

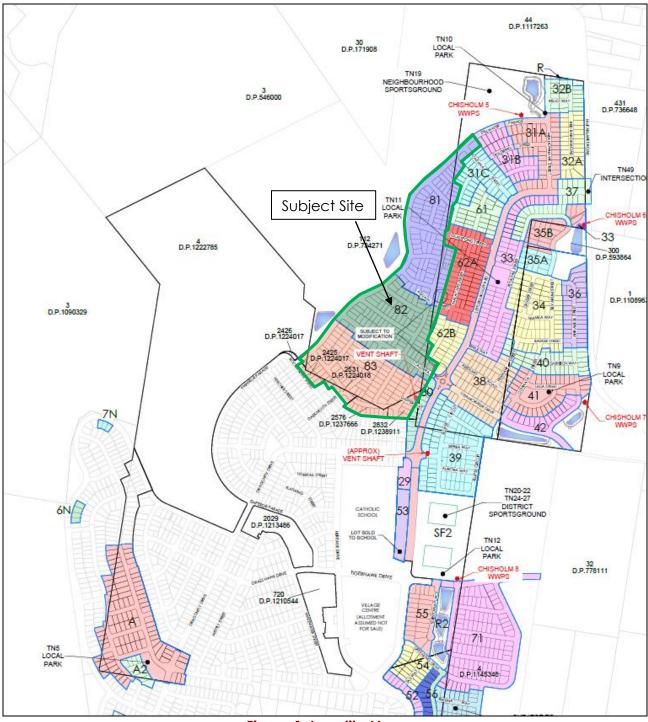


Figure 1: Locality Map

Statement of Environmental Effects – Residential Subdivision 24 Duckenfield Road, 29 Stillwater Parade, 40 Goldring Street, 3 Caldera Street, 18 Darkmouth Street, 16 Darkmouth Street, 9 Rockmaster Street, Emperor Parade and 261 Settlers Boulevard, Chisholm. (Ref: 190433Jensen)



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

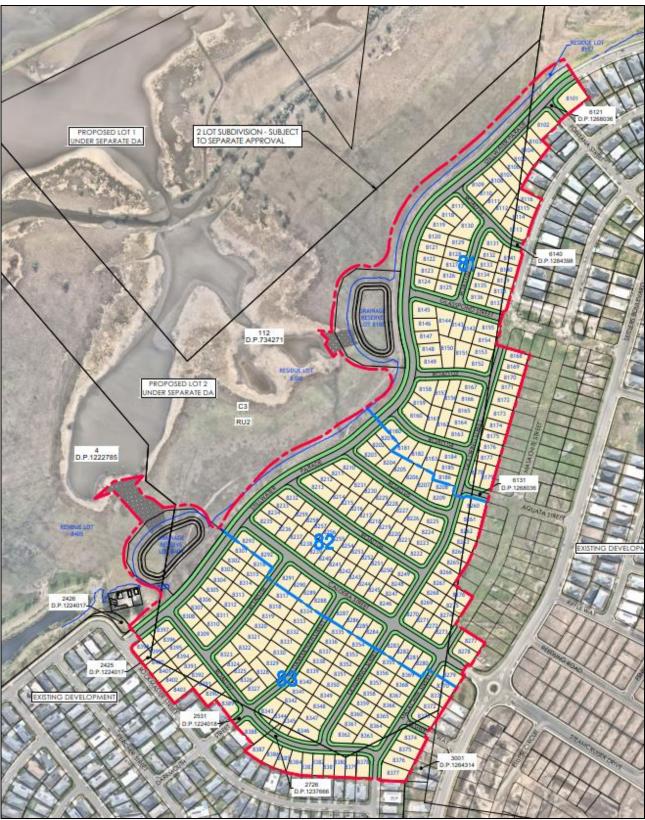


Figure 2: Waterford Context Map

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## 2.2 LAND TITLE

The subject site is identified as the following allotments

- Proposed Lot 2 of Lot 112 DP 734271 (known as the "Jensen Land") (DA/2022/985);
- Lot 6121 DP 1268036;
- Lot 6140 DP 1284398;
- Lot 3001 DP 1264314;
- Lot 2726 DP 1237666;
- Lot 2531 DP 1224018;
- Lot 2425 DP 1224017;
- Lot 4 DP 1222785;
- Proposed residue Lot 6284 of Lot 6131 DP 1268036 (DA/2018/2020:4).

Figure 2 provides the locations of the existing and proposed lots above.

The Jensen 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 south and east.

Copies of the Deposited Plans is provided in Appendix 2.

## 2.3 OWNERSHIP

Lot 112 DP 734271 is owned by Roselyn Maree Jensen – whose consent to the lodgement of this DA is provided as a letter of authority attached to the application form.

Lot 6121 DP 1268036, Lot 6140 DP 1284398, Lot 3001 DP 1264314, Lot 2726 DP 1237666, Lot 2531 DP 1224018, Lot 2425 DP 1224017, Lot 4 DP 1222785 and Proposed residue Lot 6284 of Lot 6131 DP 1268036 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 at the north western portion of the Waterford Development. The site will be accessed through multiple points within the existing and approved subdivision to the south and east where the road network will be extended into the proposed development.

The land use of the site comprises of farm land from the previous land owner. The land also includes Four Mile Creek and associated waterbody (see Figure 3).





Figure 3: Aerial Photo of Site

## 2.4.2 Context

The site is located within Stage 2 of the TNURA within the Waterford County North Precinct. The site provides the final piece within the Waterford Development. In a contextual sense, the proposed development will provide for the last portion of the Waterford development (see Figure 2).

## 2.4.3 Access

Access to the subject site will be gained through the extension of the local streets (Fontana, Glasspond, Goldring, Caldera, Dasher, Darkmouth, Spotwing, Aquata and Caldera) from the south and the east.

Access to Raymond Terrace Road will be gained via Settlers Boulevard. Access to the north would also be provided through Settlers Boulevard and Stillwater Parade towards Duckenfield Road.



#### 2.4.4 Watercourses

The subject site contains Four Mile Creek which traverses through Lot 112 DP734271 (see Figure 4). The subject site also includes a non-perennial waterbody which will be the point of discharge for the proposed stormwater basins. Land surrounding Four Mile Creek is flood affected but the proposed development will not be affected by the 1% AEP flood event as Stillwater Parade which acts as the perimeter road will be constructed at approximately 7.5m AHD being higher than the 1% AEP Flood Level.

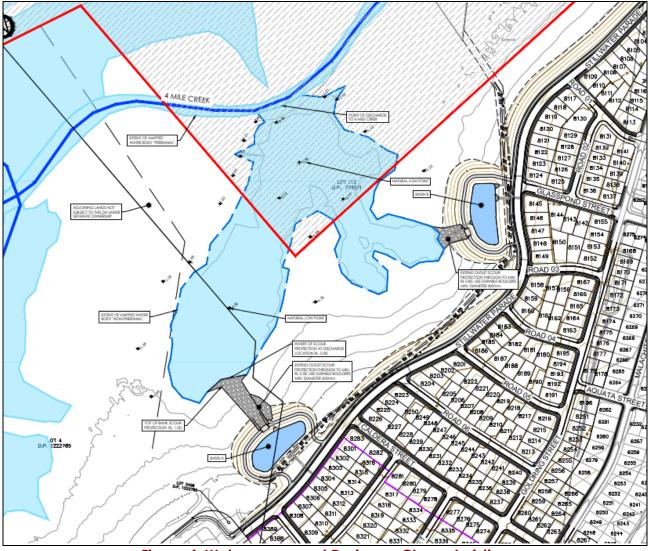
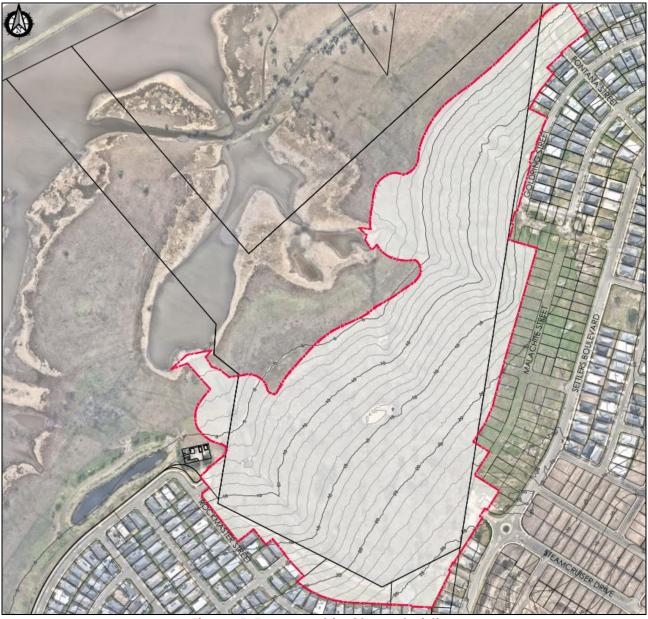


Figure 4: Watercourse and Drainage Characteristics

## 2.4.5 Topography

The site falls from 25m AHD at the southern boundary towards the abovementioned Four Mile Creek at approximately 5m AHD at the edge of the works area. This topography allows the entire site to drain north west towards the proposed basins (see Figure 5).





# Figure 5: Topographic Characteristics

## 2.4.6 Vegetation

As demonstrated by the aerial photograph within Figure 3, the site presents as a largely cleared paddock with some scattered mature trees.

Photos of the site are provided overleaf.





Photo 1: Subject Site from Existing Subdivision



Photo 2: Waterbody in Jensen Site from Emperor Parade

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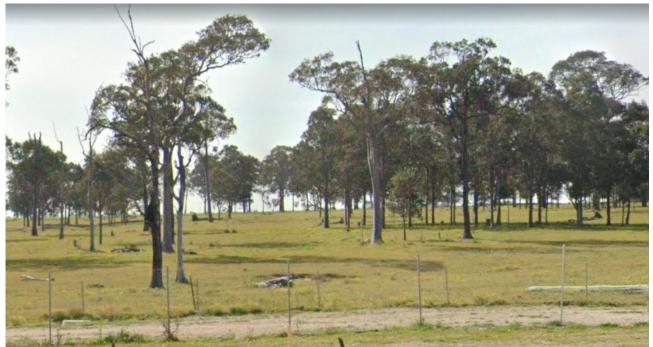


Photo 3: Existing Vegetation







Photo 4: Low Point looking towards existing Waterford Subdivision







Photo 5: Low Point looking towards Vegetation and existing Waterford Subdivision





# 3.0 Description of the Proposed Development

## 3.1 DEVELOPMENT PARTICULARS

The proposed development comprises the following elements:

- Bulk earthworks, lot regrading, including lot benching and retaining, and vegetation removal over the entire development footprint;
- Importation of an estimated 142,450m<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;
- 282 Torrens Title residential lots and three (3) residue lots and two (2) drainage lots delivered in three (3) stages as follows:
  - Stage 81 = 86 residential lots, one (1) drainage reserve lot and one (1) residue lot;
  - Stage 82 = 93 residential lots;
  - Stage 83 = 103 residential lots one (1) drainage reserve lot and two (2) residue lots;
- Construction of local roads with 1.5m wide footpaths along one (1) side;
- Construction of a 2.5m shared path along Fontana Street and Caldera Street;
- Construction of a 3m Shared path along Stillwater Parade;
- Provision of underground water, sewer, communication (NBN) and electrical services as required;
- Provision of stormwater infrastructure and connections, including two (2) stormwater basins; Creation of asset protection zones; and
- Creation of any necessary easements; and
- Street trees.

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 stormwater 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 south and east.

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 750m<sup>2</sup>. The following table provides an overview of the lot variety proposed:

Lot Range (m <sup>2</sup> )	Quantity
450-550	51
550-650	147
650-750	54
750+	30

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. Lots along the perimeter road have been design to be deeper for the future dwellings to be better distanced from a perimeter road. Lot depths of 30m however, have been provided closer to the approved and existing stages to better tie in with the existing layout.

With consideration to future development within the area, wider lots have been provided within the subdivision layout. Within the Maitland LEP 2013, the minimum lot size for dual occupancy or multi dwelling housing is 300m<sup>2</sup> for each resulting lot. This lot size has been provided throughout the subdivision and orientating the lots along block ends in some cases for possible future terrace housing or dual occupancies.





# 4.0 Planning Controls

# 4.1 ENVIRONMENTAL PLANNING INSTRUMENT (\$4.15(1)(A)(I))

# 4.1.1 Maitland Local Environmental Plan 2011

# Zoning

The site is located within the R1 General Residential Zone, RU2 Rural Landscape Zone and C2 Environmental Conservation Zone as shown in Figure 6. The development area is generally within the R1 Zone and with minor works within the RU2 and C2 Zones.

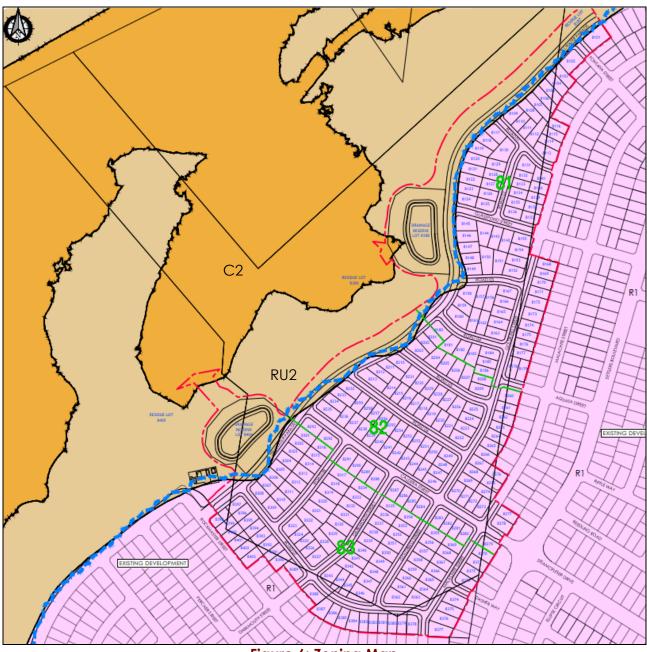


Figure 6: Zoning Map

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.





The majority of the site is located within the *R1* General Residential Zone; however, portions of some residential lots and roads which border the flood level, as well as the stormwater basin, traverse the *RU2* Rural Landscape Zone (see Figure 6). Whilst the RU2 Zone boundary in the wider Chisholm area generally follows the 1% AEP flood level, in the subject case, it is beyond this and it is noted that the proposed perimeter road will be raised to above the 1% AEP flood level making the flood planning area over 20m from the proposed lots (see Figure 9). For example, the RU2 zone boundary forms an acute angle at the intersection of proposed Road 3 and Stillwater Parade. To maintain a smooth and practical perimeter road west of the zone boundary such that small areas of the proposed lots are partly located in the RU2 Zone. The RU2 portion of the lot is outside of the building envelope and only impacts on the front set back.

For this reason, it is considered appropriate to have lots which are partly located within the RU2 Zone for the sake of a rational road and lot layout. It is also noted that split zoned lots have been approved throughout the Harvest and Waterford developments for the same reason, in order to promote orderly and economic development.

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" and "water supply systems" which the basins fall under, are permissible with consent under the RU2 zone and "water reticulation systems" are permissible with consent under the C2 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.

Some aspects of the development, including portions of residential lots, roads and the stormwater basins, are partly located within the RU2 zone, where the following relevant objectives have been addressed:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To maintain the rural landscape character of the land.
- To provide for a range of compatible land uses, including extensive agriculture.
- To provide for a range of non-agricultural uses where infrastructure is adequate to support the uses and conflict between different land uses is minimised.





Given the close proximity of the RU2 portion of the site to Four Mile Creek and being within flood prone land, it would be difficult to conduct production works on land that may become inundated with flood. This portion of the site is therefore not conducive for primary production and as such, the proposed development will not hinder the attainment of these objectives.

The subject site also includes a portion of the proposed stormwater basin within the C2 Environmental Conservation. With this in mind, the following objectives of the zone have been addressed:

- To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.
- To prevent development that could destroy, damage or otherwise have an adverse effect on those values.
- To ensure that development and management of the land has minimal impact on water quality and environmental flows of receiving waters.
- To permit limited extensive agricultural uses where such uses do not compromise the ecological values of the wetland.

The proposed development has a small portion within the C2 zoned land. This work would not cause adverse impacts on the C2 land as the works within this area is minimal and only to create the legal point of discharge. The discharge to the waterbody would be treated by the proposed stormwater basins to ensure quality. The basins also control the flows in which the water is discharged ensuring that the amount of water being discharged is not excessive and in turn reducing the impacts to the downstream waterbody and Four Mile Creek.

Therefore, the proposed development is consistent with the objective by ensuring that the stormwater will be treated and controlled before entering the receiving waters.

## 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 RU2 (see Figure 7). All residential allotments have a lot size over 450m<sup>2</sup> and the lots containing RU2 or C2 zoned land contain stormwater basins, the subdivision of which is considered "exempt development" (see Section 4.1.2). The proposed subdivision therefore adheres to the provisions of Clause 4.1.

It is also noted that some residential lots contain portions of RU2 zoned land. This situation has occurred frequently throughout the TNURA as the zone boundary was generally set by the flood level. As this results in an "irregular" alignment, it is not conducive to providing an orderly and rational subdivision layout. For this reason, as part of this development some lots are located within the 40ha controlled area. This has been accepted by Council for numerous developments in similar situations and is not considered to hinder the attainment of objectives under either the R1 or RU2 zones for reasons mentioned previously.





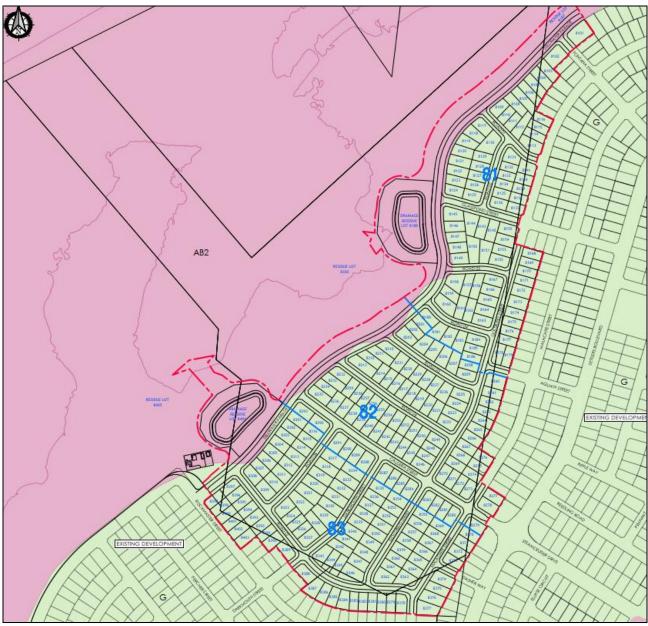


Figure 7: Lot Size Map

# Clause 4.3 – Height of Buildings

N/A – There are no building height controls for this site.

# 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 Jensen portion of the site which concludes that due to the close proximity to Four Mile Creek and the overall landscape there may be archaeological potential within the subject site (see Figure 8).





It is recommended that an Aboriginal Cultural Heritage Assessment (ACHA) including subsurface excavations is to be conducted (refer to Appendix 6B).



Figure 8: Archaeological Potential Location

# Clause 5.16 – Subdivision of, or Dwellings on, Land in certain Rural, Residential or Conservation Zones

The proposal complies with the objects of this Clause, there will be no conflict of land uses between the existing and proposed developments as the proposed subdivision is only procedural and does not involve any physical works.

## 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 of the residential areas and within the proposed locations of the basins (see Figure 9). As discussed above, Stillwater Parade will be raised over above the 1% AEP level within the Chisholm area with all residential lots being at a higher level than Stillwater Parade. Figure 9 overleaf depicts the post development flood level being approximately 20m from any of the proposed residential lots.



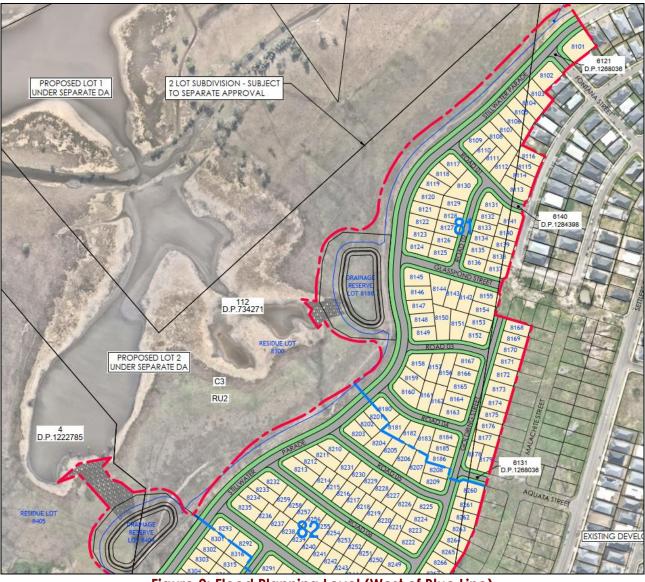


Figure 9: Flood Planning Level (West of Blue Line)

## 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).





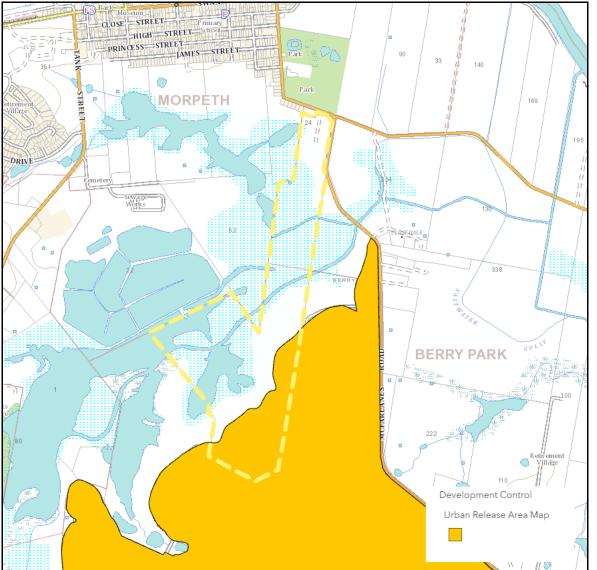


Figure 10: Urban Release Area Map

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 1A.

The proponent has lodged an application to seek a Notice of Formal Requirements for the development and a copy of the requirements and Hunter Water Stamped Plans have been provided as 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 passive and active 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 now included within Part F of the DCP. Within this DCP, a portion of the site is subject to the Waterford County North Precinct Plan ("Precinct 5") which addresses the above items and thereby adheres to Clause 6.3.

- 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) The proposed development has a included a landscape plan in which has included enhancements to the areas surrounding the stormwater basins connection to the waterbody and Four Mile Creek;
- d) A walkability plan is provided which identifies a network of pathways. Stillwater Parade also has a 3m wide shared path on the one side looking onto open space acting as passive open space;
- 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 bushfire prone land and would require a Bushfire Threat Assessment;
- g) Key development sites have been identified on the land use pattern plan; the site includes a perimeter road on land that adjoins flood prone land;
- h) Section 1.8 details where higher density living should occur;
- i) Sections 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.

## Section 7.1 – Acid Sulfate Soils

Section 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 Class 2 and Class 5 acid sulfate soils (see Figure 11) with portions of the proposed development within areas where acid sulfate soils may be present and as such an Acid Sulfate Management Plan (ASSMP) has been recommended by the Preliminary Site Investigation (PSI) prepared by EP Risk.

A copy of the PSI has been provided as Appendix 14.





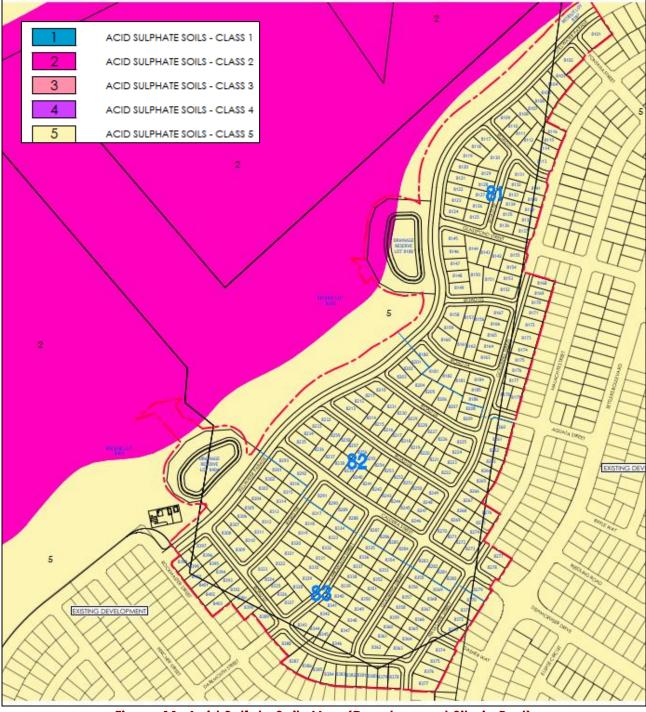


Figure 11: Acid Sulfate Soils Map (Development Site in Red)

# 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 Section 7.2 of the LEP, the following is provided:

- a) The earthworks have been designed in a wholistic 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) The proposed works will not cause adverse impacts to Four Mile Creek and associated waterbodies. Construction management measures outlined within the Biodiversity Development Assessment Report will be adopted to minimise impacts on the adjoining waterbody and vegetation.

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

## Clause 7.4 – Riparian Land and Watercourses

The subject site contains Four Mile Creek and the proposed development is within 40m of this watercourse and non-perennial waterbody (see Figure 4).

Clause 7.4 states:

- (3) Before determining a development application to carry out development on land to which this clause applies, the consent authority must consider whether or not the development—
  - (a) is likely to have any adverse impact on the following—
    - (i) the water quality and flows within the watercourse,
    - (ii) aquatic and riparian species, habitats and ecosystems of the watercourse,
    - (iii) the stability of the bed, shore and banks of the watercourse,

(iv) the free passage of fish and other aquatic organisms within or along the watercourse,

(v) any future rehabilitation of the watercourse and its riparian areas, and

(b) is likely to increase water extraction from the watercourse.





In response to Clause 7.4 of the LEP, the following is provided:

- a)i) The proposed development will not have any adverse impacts to the water quality and flows of the watercourse as the stormwater basins will treat the flows before discharging into the waterbodies.
- ii) The proposed development would not impact on the habitats or ecosystems of the watercourse as the works area does not have habitats or ecosystems of the watercourse.
- iii) The proposed development would not have works within the bed, shore and banks of the watercourse.
- iv) N/A
- v) N/A
- b) No extraction proposed from that watercourse.

## 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).

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

## 4.1.2 SEPP (Exempt and Complying Codes) 2008

As discussed above, the drainage reserve lot which contains RU2 and C2 zoned land which do not meet the minimum 40ha lot size with drainage lot 8188 being 1.2ha and drainage lot 8404 being 1.1 ha (see Appendix 1B). As this lot will contain a stormwater basin which will be dedicated to Council, its subdivision from the development lands is "exempt development" pursuant to Section 2.75 as follows:

## Subdivision 38 Subdivision

2.75 Specified development

The subdivision of land, for the purpose only of any one or more of the following, is development specified for this code:

(f) excising from a lot land that is, or is intended to be, used for public purposes, including drainage purposes, rural fire brigade or other emergency service purposes or public toilets.

## 4.1.3 SEPP (Transport and Infrastructure) 2021

## Chapter 2 – Traffic Generating Development

Chapter 2 of the SEPP provides that any development listed within Schedule 3 is classified as "traffic generating development" and requires a referral to Transport for 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.

As the proposed subdivision provides an additional 282 lots, it is classed as traffic generating development pursuant of Section 2.122 of the SEPP and will require the concurrence of Transport for New South Wales (TfNSW).

## 4.1.4 SEPP (Planning Systems) 2021

The proposed development does not constitute State Significant Development under Chapter 2 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 6 and as such, does not require the Joint Regional Planning Panel to become the consent authority.

## 4.1.5 SEPP (Resilience and Hazards) 2021

## Chapter 2 – Coastal Management

Chapter 2 of the SEPP aims to promote an integrated and coordinated approach to land use planning in the coastal zone in a manner consistent with the objects of the Coastal Management Act 2016. This chapter applies to land within the coastal zone which includes coastal wetlands and littoral rainforests area, coastal vulnerability areas, coastal environment areas and coastal use areas. The subject site is not within any of the aforementioned areas.

## Chapter 4 – Remediation of Land

Section 4.6 (2) of SEPP states:

Before determining an application for consent to carry out development that would involve a change of use on any of the land specified in subsection (4), the consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines.

A PSI was prepared by EP Risk and has recommended that the following be undertaken to make the site suitable for residential purposes:

- Additional investigation of the imported fill material should be undertaken. Investigation of this material should occur prior to redevelopment of the site;
- 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 PSI can be included as conditions of consent.

A copy of the PSI is provided within Appendix 14.

## 4.1.6 SEPP (Biodiversity and Conservation) 2021

## Chapter 4 – Koala Habitat Protection 2021

Chapter 4 of the SEPP applies to all local government areas (LGAs) listed in Schedule 2, which includes Maitland LGA and therefore the subject site.

The aim of the Chapter 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 Chapter 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 which notes that there was only one (1) record of koalas within 2.9km of the site and no evidence of this species on site following detailed koala surveys, including SATs, nocturnal surveys, call playback and passive Song Meter recording. The BDAR conducted a Tier 2 Assessment which concluded that the site is not considered to be core koala habitat and it is not anticipated that the proposal will impact koalas in the present or future.

Full details in this regard are provided within the BDAR in Appendix 10.

## 4.2 DRAFT ENVIRONMENTAL PLANNING INSTRUMENTS (\$4.15(1)(A)(II))

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

## 4.3 DEVELOPMENT CONTROL PLANS (\$4.15(1)(A)(III))

## 4.3.1 Maitland Development Control Plan 2011

The site is located within the Thornton North Urban Release Area; within the Waterford County North Precinct which was adopted by council on the 11<sup>th</sup> September 2018.

How the site sits within the draft precinct plan is provided overleaf (see Figure 12).





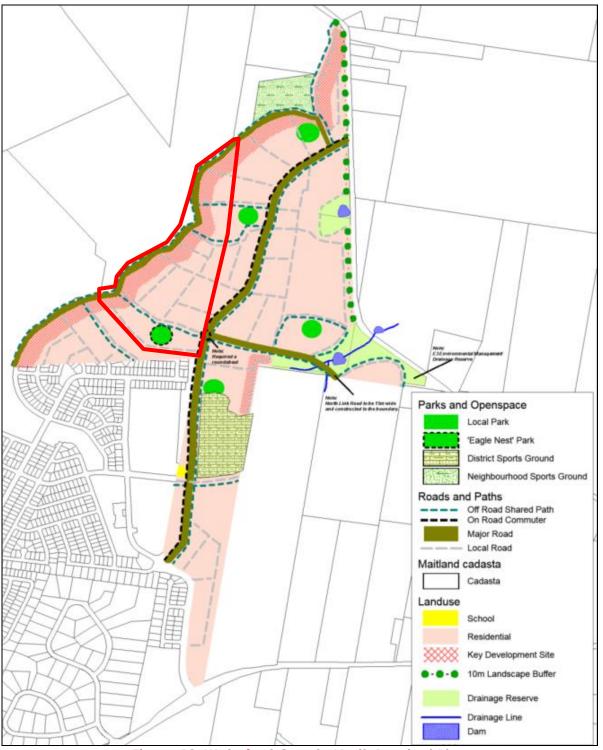


Figure 12: Waterford County North Precinct Plan

The proposed subdivision provides the following main elements, as depicted under the Waterford County North Precinct Plan:

- A Major Road (Stillwater Parade) has been provided to the development acting as a perimeter road and connection to the existing developments.
- A 3m wide off road shared pathway has been provided along the Major Road.
- Two (2) 2.5m wide shared pathway connections have been provided connecting to the existing development to the east.





The proposed subdivision complies with all relevant controls under the Waterford County North Precinct with the following exceptions:

## Passive & Active Recreational Areas

2. The "Eagle Nest" local park is to be developed for passive open space recreational purposes. A landscape plan is to be developed showing enhancement of the area with local tree species.

The subject site includes the "Eagle Nest" Local Park which has been confirmed through consultation with Stephen Debus (White-Bellied Sea Eagle Expert) and Council that the park is no longer required due to the migration of the Eagle to an alternate location north. This location will provide protection to the eagle as the nest location is within flood prone land and would not be disturbed.

A copy of the Eagle Report by Stephen Debus has been provided within Appendix 15.

## DC.1.1 Residential Lot Design

Provide a range of lot sizes to suit a variety of dwelling and household types. No more than 40% of the lot frontages within each street block may have the same lot width type. For the purpose of this control a lot width type is determined by any range of plus or minus 1.0m (for example, lots between 17m and 19m might be classed as one width type). Provide a lot width table for each street block including lot width groups, percentage and number. Other variables such as access and configuration can be considered as creating variation in the street.

The proposed subdivision design is generally in accordance with this control with the exception of two (2) out of 16 street blocks. The table below depicts the two (2) street blocks that exceed the 40% control. A complete table with all blocks has been provided as Appendix 18.

Blocks and Frontage width	Number	Percentage (%)
Block 14	18 lots	
15m – 16m	1	6
16m – 17m	1	6
17m – 18m	8	44
18m – 19m	1	6
19m – 20m	4	22
20m – 21m	2	11
22m+	1	6
Block 15	11 lots	
15m – 16m	6	55
16m – 17m	4	36
20m - 21m	1	9

Notwithstanding this, it is considered to achieve the objective of the control which states:

## Objective:

To ensure all new lots have a size and shape appropriate to their proposed use, and to allow for the provision of necessary services and other requirements.





The proposed subdivision layout and lots are appropriately shaped and sized for the future use of a residential dwelling and for some lots to accommodate dual-occupancies or terrace style development.

## 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 subject site is in close proximity to Four Mile Creek and the proposed development will be required to be raised above the 1% AEP Flood level. 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 (\$4.15(1)(A)(IIIA)) AND CONTRIBUTION PLANS

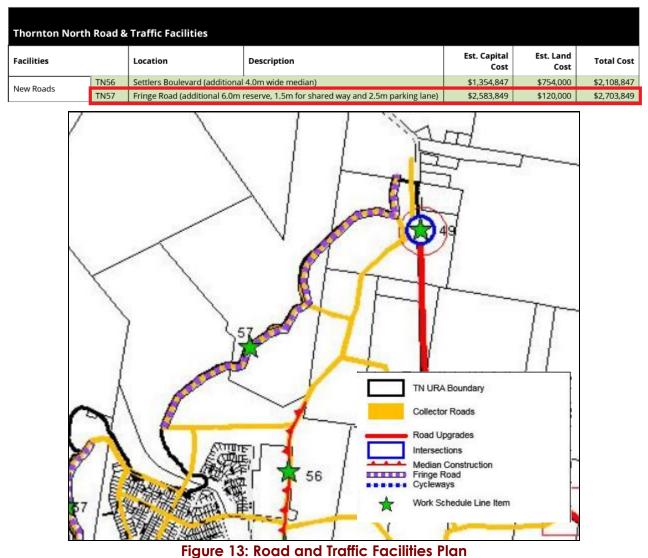
## 4.4.1 Thornton North Contributions Plan

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 Figure 13):







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 THE HUNTER REGIONAL PLAN 2041

The Hunter Regional Plan was recently released in December 2022. 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.

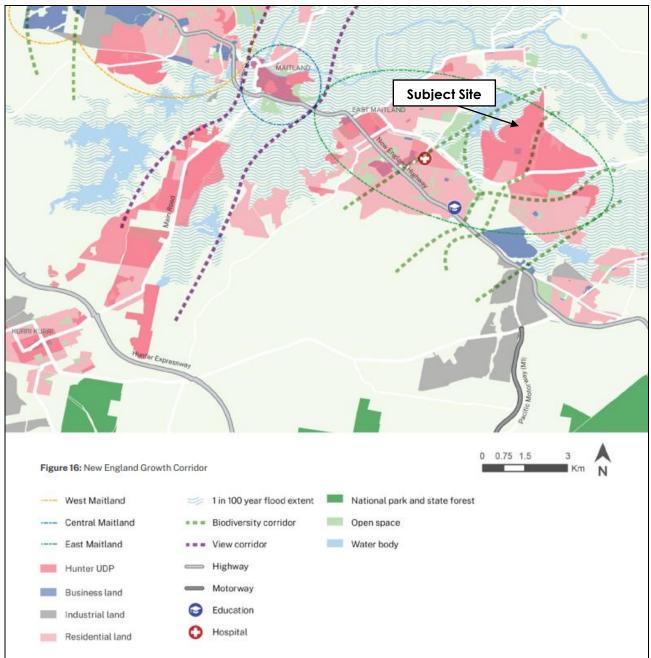
The plan sets out a vision and priorities for the region's growth over the next 20 years, with a focus on improving liveability, sustainability, and economic opportunities.

The subject site is within the New England Corridor within the emerging strategic centre of East Maitland which is also home to the new Maitland Hospital. The proposed development will provide 282 residential lots within the identified urban development program (UDP) 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 14).

The Hunter Regional Plan projects the population of the Hunter Region to 949,850 people by 2041 which requires an additional 101,800 dwellings. Maitland Local Government Area (LGA) is projected to require an additional 25,200 dwellings by 2041.







## Figure 14: Hunter Regional Plan

## 4.6 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.

## 4.7 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.





## 4.8 INTEGRATED DEVELOPMENT

The proposed development is classified as "Integrated Development" under Section 4.8 of the Environmental Planning and Assessment Act 1979, as it requires the separate approval of the following:

- Rural Fire Service (RFS) under the Rural Fires Act 1997;
- Transport for New South Wales (TfNSW) under Section 2.122 of the SEPP (Transport and Infrastructure) 2021;
- Natural Resources Access regulator (NRAR) under the Water Management Act 2000.





# 5.0 Environmental Assessment

## 5.1 THE LIKELY IMPACTS OF DEVELOPMENT (\$4.15(1)(B))

## 5.1.1 Context and Setting

## Area Context

The Waterford County North Precinct has been strategically located through detailed studies and future planning undertaken as part of the original rezoning process. 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 final 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 subject site will be gained through the extension of the local streets from the south and the east. Stillwater Parade would provide the north/south connection along the perimeter of the subdivision.

## 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 Stillwater Parade, Glasspond Street, Fontana Street and Cadlera Street, these will all acts as local roads and have been designed in accordance with Council's Manual of Engineering Standards (MoES) as follows:

Fontana Street has been designed to continue the existing street layout connecting to the subdivision.

<b>Road Reserve</b>	Carriageway	Verge Width	Footpath	Shared pathway
20m	9m	5.5m&5.5m	1.5m: 1 side	2.5m: 1 side

Caldera Street has been designed to be a collector road which provides connection to the perimeter road and requires a carriageway of at least 10.5m.





<b>Road Reserve</b>	Carriageway	Verge Width	Footpath	Shared pathway
20m	11m	4.5m &4.5m	1.5m: 1 side	2.5m: 1 side

Glasspond Street has been designed as a connection road which has the requirement of a 10.5m carriageway as outlined within the Pre-Lodgement meeting (dated: 6<sup>th</sup> October 2022).

<b>Road Reserve</b>	Carriageway	Verge Width	Footpath
20m	10.5m	4.75m &4.75m	1.5m: 1 side

Stillwater Parade will be designed as a Major Road in accordance with the Waterford County North Precinct Plan.

<b>Road Reserve</b>	Carriageway	Verge Width	Footpath	Shared pathway
21m	10.5m	6m &4.5m	1.5m: 1 side	3m: 1 side

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

## 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 2,538 vehicle trips per day. Intersect Traffic have undertaken a growth analysis and SIDRA modelling using a growth rate of 3% up to 2033 and made the following conclusions:

- SIDRA modelling of the Raymond Terrace Road / Harvest Boulevard signalised intersection, the Raymond Terrace Road / Settlers Boulevard signalised intersection and the McFarlanes Road / Settlers Boulevard priority-controlled T-intersection has shown that with the additional traffic from the proposed subdivision and other approved developments in the area included, these intersections will operate with satisfactory levels of service at least until 2033;
- By 2033 the Raymond Terrace Road / Harvest Boulevard signalised intersection may reach its capacity for the current layout and this intersection layout may need to be reviewed at some time in the future. In reality however, it is unlikely to fail before 2033 as there is spare capacity within both the Settlers Boulevard accesses to Waterford County off Raymond Terrace Road and McFarlanes Road; therefore, as the Harvest Boulevard access gets more congested, traffic will be diverted to the other two (2) accesses;
- There is ample mid-block capacity along all roads 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 future and existing bus routes along Settlers Boulevard.

## 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;
- 3m wide off-road shared pathways along Stillwater Parade; and
- 2.5m wide off-road shared pathway on Fontana Street and Caldera Street.

## 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. The development will also complete the Waterford Country North Precinct which will allow for an interconnected suburb, facilitating access to existing and approved open spaces.

#### 5.1.4 Utilities

#### Water

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

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

#### Sewer

There is capacity in the current network with the northern portion of the site will have the sewer transported to the existing Chisholm 5 WWPS and the southern portion of the site to existing Chisholm 2 WWPS.

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

## 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

The eastern boundary of the development site follows a natural ridgeline draining the site from east to west.





Another natural ridgeline spanning east to west through the middle of the site divides the site in to a northern catchment and southern catchment. The proposed development will drain to the proposed basins with each catchment as depicted within Figure - 20.

A Stormwater Management Plan (SWMP) has been prepared for the development which addresses both stormwater quantity and quality requirements for the catchments. This is achieved through the construction of two (2) permanent basins to service the development.

Detention storage has been modelled using the XPRAFTS software and designed to limit the peak runoff from the post developed catchment to less than or equal to the peak runoff of the pre developed catchments.

A MUSIC model was used to simulate pollutant source elements for the proposed development. A water quality system consisting of rainwater tanks, gross pollutant traps and basins at each discharge point from the site was then modelled to control pollutants discharging from the proposed development. The water quality pollutant reduction targets have been met at all discharge points prior to runoff leaving the site.

Controlled discharge from the basins will be provided to the "non-Perennial" waterbody. This will create a "legal" point of discharge and represents the only practical outcome with regards to the discharge of stormwater flows from the site through to Four Mile Creek.

Full details with regards to the above are discussed within the SWMP located within Appendix 4.

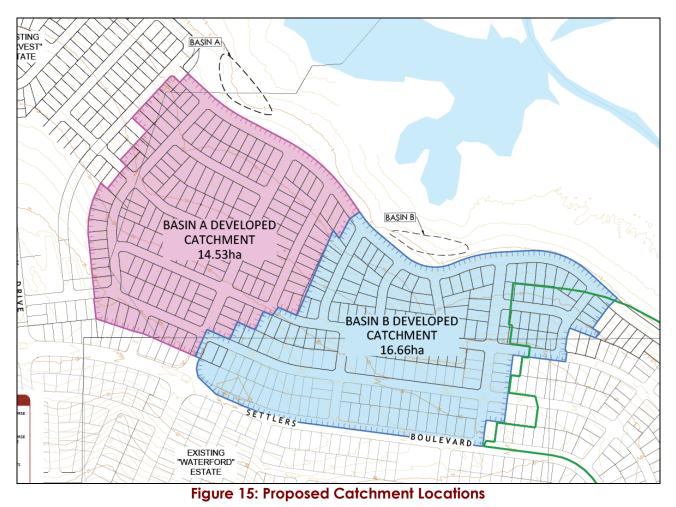










Figure 16: Concept Basin A Design





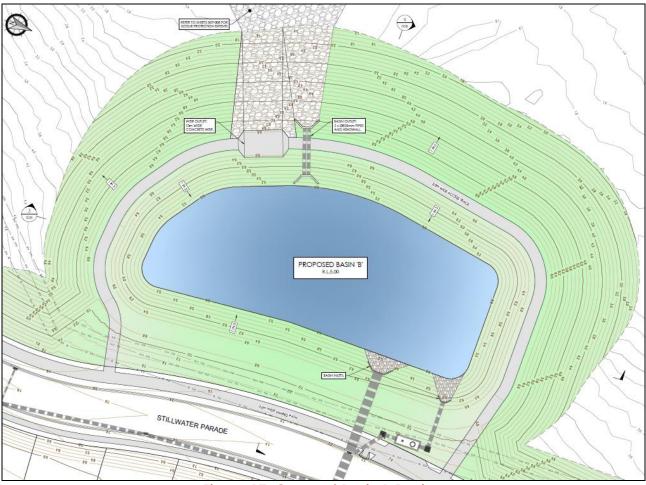


Figure 17: Concept Basin B Design

## 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 1A.

## 5.1.7 Flora and Fauna

The proposed development will impact upon the following vegetation:

- 24.17 ha of exotic vegetation; and
- 5.95ha of degraded condition Plant Community Type (PCT) 1600 (Spotted Gum Narrow-leaved Ironbark Grey Box shrub-grass open forest of the lower Hunter).

See Figure 18.





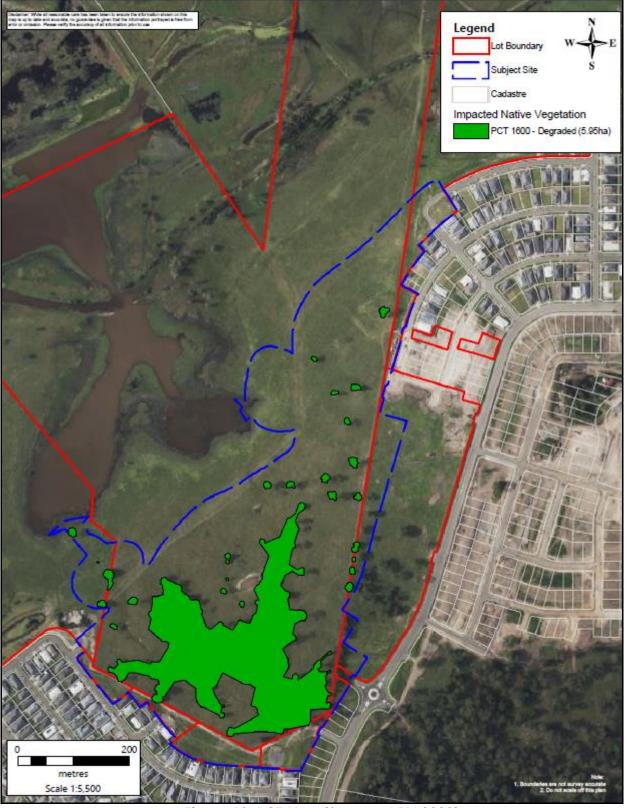
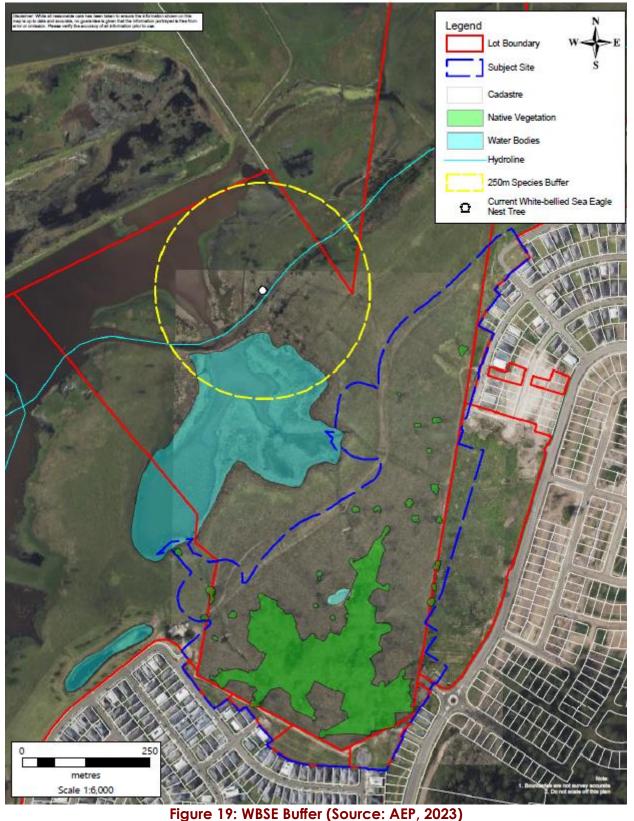


Figure 18: PCT Map (Source: AEP, 2023)

As mentioned previously, the development footprint previously contained a white-bellied sea eagle (WBSE) nest which was identified to be retained within a local park. The WBSE has since relocated to a tree further north-west, outside of the development footprint. To ensure no impacts occur to this nest as a result of the development, a 250m buffer has been provided around this tree (see Figure 19).







As the proposed development will impact upon vegetation, a BDAR has been prepared to assess the development against the Biodiversity Conservation Act.

The BDAR has assessed the removal of vegetation across the entire site; however, it is noted that this is appropriate in the context of the urban release area owing to the vegetation characteristics described above.





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:

Vegetatio Zone	n Conditio	on Impact Area (ha)	Future VIS	Vegetation Integrity Score Loss	Biodiversity Risk Weighting	Credit Requirements
PCT 1600	Degrade	d 5.95	-	29.9	2	89

## Table 24 – Ecosystem Credit Requirements

## Table 25 – Species Credit Requirements

РСТ	Condition	Impact Area (ha)/count	Biodiversity Risk Weighting	Credit Requirements	
Myotis Macropus (Southern Myotis)					
PCT 1600	Degraded	5.95	2	58	

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 within 4.1.1.

## 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 permanent APZs will be required to minimise the bushfire hazard to the grassland vegetation to the west. These will be accommodated along roads and front building setbacks (see Figure 20).

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





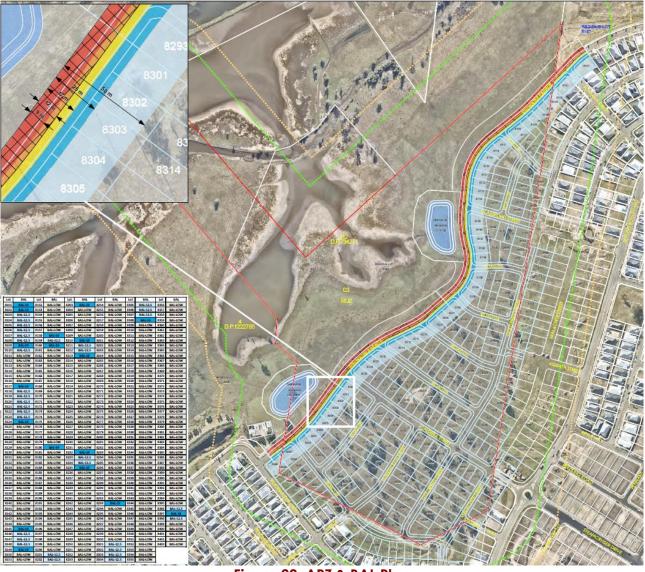


Figure 20: APZ & BAL Plan

## Flooding

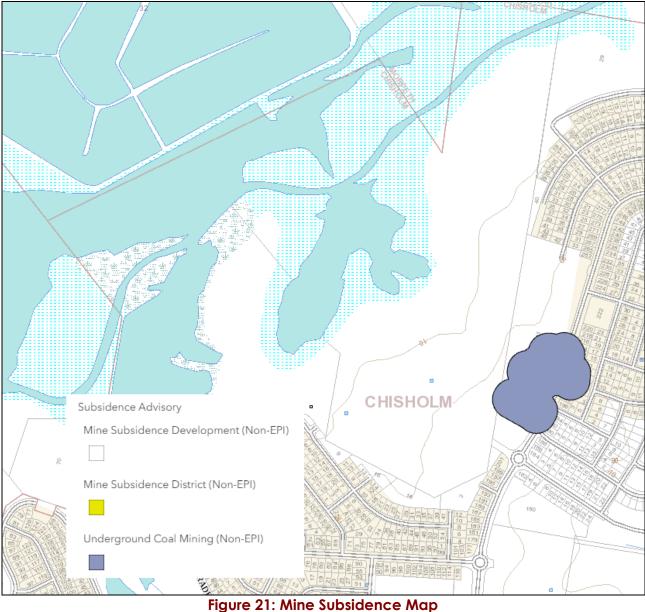
Matters pertaining to flooding have been discussed previously and are further detailed within the SWMP located within Appendix 4.

## Mine Subsidence

The site is not identified as being within a mine subsidence district but is affected by underground coal mining (see Figure 21). This has been resolved within a previous Development Application and correspondence and agreement with the Subsidence Advisory NSW has been provided as Appendix 16.







# 5.1.10 Noise and Vibration

The site does not front Raymond Terrace Road or any other potential sources of significant noise.

The site is likely to contain low strength rock in some areas and as such, constructionbased noise and vibration impacts are likely. Equipment used during construction of the proposed works may include excavators, trucks, generators and compactors – all machines likely to emit noise.

As the subject site contains the only remaining existing residence in the area, construction noise is not expected to have any significant impact.

## 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 2041 has projected the requirement of 25,200 additional dwellings in the Maitland LGA by 2041 in which the subject development will assist with the ongoing housing affordability and supply crisis.

The subject development is likely to result in over \$107 million dollars of investment in the local economy (\$27 million from subdivision construction and \$80 million in dwelling construction).

The subdivision will accommodate approximately 750 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

Discussed above within Section 4.1.6.

## **Geotechnical Considerations**

Preliminary Geotechnical Investigations undertaken by EP Risk for the site included 13 test pits and revealed the following with regards to the geotechnical characteristics:

- Sandstone was encountered at depths from 0.7m below ground level and was extremely weathered and recovered as clayey sand;
- There is imported fill located in the northern portion of the development area (see Figure 22);
- Groundwater was not encountered during investigation but may be situated at the low-lying parts of the northern area of the subject site;
- The site classification of the subject site is Class M, moderately reactive to Class H2, highly reactive with this to alter after the site regrade.

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.





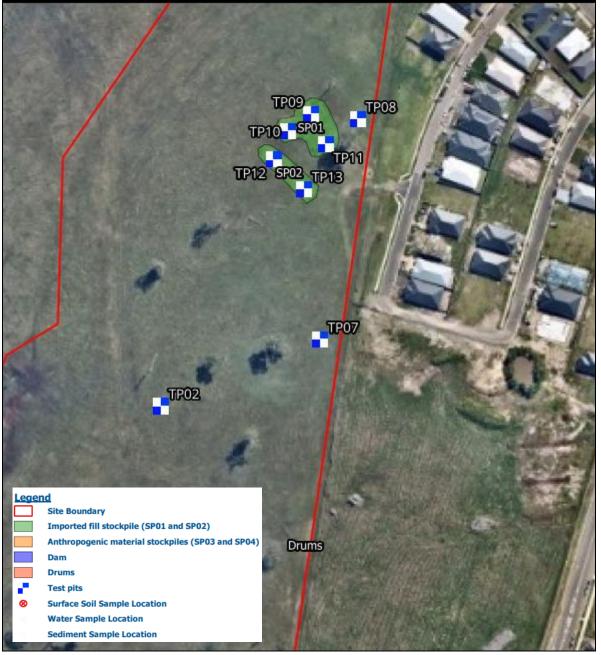


Figure 22: Test Pit Locations

A copy of the Preliminary Geotechnical Assessment within Appendix 12.

## 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 east and south.

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 prefabricated 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.

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 (\$4.15(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 (\$4.15(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

The proposed subdivision will create 282 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 development will also complete the Waterford Country North precinct which will allow for an interconnected suburb, facilitating access to existing and approved open spaces.

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 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. The design of the subdivision is generally in accordance with the Waterford North Precinct Plan.

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.















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