



Wyong Shire Council
Planning Proposal
171-175 Sparks Road
Halloran

RZ/7/2015;
March 2016



Planning Proposal
171-175 Sparks Road
[Click here to enter text.](#)
RZ/7/2015
Date: March 2016
Consultation Version

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Generic Name

Lot 1 DP 796730 (171-175 Sparks Road), Halloran

File No. RZ/7/2015

Introduction & Locality Context	2
Part 1 Objectives or Intended Outcomes	2
Part 2 Explanation of Provisions	3
Part 3 Justification	3
<i>Section A – Need for the Planning Proposal</i>	3
<i>Section B – Relationship to strategic planning framework</i>	3
<i>Section C – Environmental, Social and Economic Impact</i>	7
<i>Section D – State and Commonwealth Interests</i>	10
Part 4 Mapping	12
Part 5 Community Consultation	12
Part 6 Project Timeline	13
Supporting Documentation	14

Introduction & Locality Context

The subject site is located on the north western corner of Sparks Road and Mountain Road Halloran.

A portion of the area to be rezoned, generally referred to as the 'triangle', contains a small amount of native vegetation including the River-Flat Eucalypt Forest on Coastal Floodplains EEC and is within the 1% flood level. Figure 1 provides the locality and existing land uses, and the Buttonderry Creek watercourse which is located to the south of the property.

The landowner has identified a portion of the site adjoining the industrial land which the proponent claims has development potential (the triangle portion). The triangle portion is currently zoned E2 Environmental Conservation and is intended to be rezoned to increase the IN1 General Industrial zoned land in the locality.



Figure 1 Contextual Locality Plan

Part 1 Objectives or Intended Outcomes

The objective of this proposal is to rezone the land from E2 Environmental Conservation to IN1 General Industrial

The intended outcome of the proposal is to expand the existing land uses currently in operation on the site.

Part 2 Explanation of Provisions

The outcome will be facilitated by an amendment to Wyong Local Environmental Plan (LEP) 2013. The following table identifies the proposed amendments:

Existing Provision	Proposed Amendment
Land Reservation Acquisition Map (Extract of 8550_COM_LRA_007A_020_20131219)	- Remove the Land Acquisition Provisions from the area of the site proposed to be rezoned to IN1 General Industrial
Land Zoning Map (Extract of 8550_COM_LZN_007A_020_20140512)	- Rezone Part of Lot 1 DP 796730 from E2 Environmental Conservation to IN1 General Industrial
Lot Size Map (Extract of 8550_COM_LSZ_007A_050_2020140512)	- Remove the minimum lot size from that part of the land that is to be rezoned to IN1 General Industrial

Table 1 – Explanation of Map and Instrument Amendments

Part 3 Justification

Section A – Need for the Planning Proposal

1. Is the Planning Proposal a result of any Strategic Study or report?

No. The site is located within the Wyong Employment Zone (WEZ) which was the subject of a state significant site study, however the planning proposal will provide additional land to expand the existing uses currently carried out on the site and could provide a catalyst for future development of the WEZ.

2. Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

Yes. The current zone does not allow for the expansion of the existing businesses located on the site. Therefore the intended objectives cannot be achieved by any other mechanism than a planning proposal.

Section B – Relationship to strategic planning framework

Where a regional or sub-regional strategy is in place:

3. Is the planning proposal consistent with the objectives and actions contained within the applicable regional or sub-regional strategy (including the Sydney Metropolitan Strategy and exhibited draft strategies)?

Central Coast Regional Strategy

The Central Coast Regional Strategy (CCRS) was released in 2008. The CCRS identifies the population potential of the Central Coast expected over the next 25 years, and expected employment capacity targets. The strategy also identifies actions to ensure ongoing growth and prosperity of the region,

including actions for centres and housing, economy and employment, environment and natural resources, natural hazards, water supply, regional infrastructure and regional transport.

The CCRS promotes regional employment self-containment, furthermore, the CCRS encourages the investigation of options to expand existing employment nodes to ensure future development on employment lands is not fragmented. Increasing the amount of IN1 General Industrial zone on this site will assist in providing additional employment and will negate any fragmentation of the employment land.

Draft Central Coast Regional Plan

The draft Central Coast Regional Plan (dCCRP) intends the WEZ to provide a range of diverse employment activity in the future and provide for up to 6,000 jobs. It is identified as the main economic gateway for the northern half of the Central Coast region. The proposal has the potential of providing additional employment land which is in accordance with Direction 2.6 Enhance the Warnervale Employment Lands of the dCCRP.

North Wyong Shire Structure Plan

The site is located within the North Wyong Shire Structure Plan area and the majority of the site (that part that is zoned IN1) is identified on the staging map as short term. The area proposed to be rezoned is within the green corridor and habitat network, it is anticipated that the riparian corridor along Buttonderry Creek will not be impacted by the proposal. It is proposed to retain some higher quality elements of vegetation qualifying as River-Flat Eucalypt Forest on Coastal Floodplains EEC and protect Buttonderry Creek by ensuring the IN1 zone is a minimum of 50 metres from the bank of the creek. It is considered that the proposal will not impede the function of the corridor and is consistent with the NWSSP objectives.

4. [Is the planning proposal consistent with the local Council's Community Strategic Plan, or other local strategic plan?](#)

The proposal can be directly related to:

- 7 There will be a strong sustainable business sector and increased local employment built on the Central Coast's business strengths.
 - 7a) providing a coordinated approach to business generation, employment and development for the region
 - 7i) ensuring adequate and appropriate employment land in the Shire

5. Is the planning proposal consistent with applicable state environmental planning policies?

The proposal has been considered against the relevant State Environmental Planning Policies (SEPP) as detailed below.

State Environmental Planning Policy	Comment
SEPP No. 44 – Koala Habitat	
Aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline: (a) by requiring the preparation of plans of management before development consent can be granted in relation to areas of core koala habitat, and (b) by encouraging the identification of areas of core koala habitat, and (c) by encouraging the inclusion of areas of core koala habitat in environment protection zones	As the area subject to the proposal has a vegetated area greater than 1 hectare, the provisions of State Environmental Planning Policy 44 – Koala Habitat are triggered. Lot 1 DP 796730 contains some vegetation, the ecological assessment did not identify any koala present on the site and no habitat trees were recorded in the area. It is considered that the proposal will not impact on any likely koala habitat
SEPP 55 – Remediation of Land	
Aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment (a) by specifying when consent is required, and when it is not required, for a remediation work, and (b) by specifying certain considerations that are relevant in rezoning land and in determining development applications in general and development applications for consent to carry out a remediation work in particular, and (c) by requiring that a remediation work meet certain standards and notification requirements.	The Phase 1 Contamination Assessment by Coffey Geosciences concluded that no areas of environmental concern were identified that would impact on the proposed industrial development of the south east precinct of the WEZ. Due to previous land uses on the site to the north for brick manufacturing the assessment recommended that a phase 2 Environmental Site Assessment should be carried out during redevelopment of the land. The site is considered suitable for industrial uses.

Table 2 – SEPP Assessment

6. Is the planning proposal consistent with applicable Ministerial Directions (s.117 directions)?

The proposal has been considered against the relevant Ministerial Section 117 Directions as summarised below. The full assessment of these Directions is contained within the Attachments of this proposal.

No.	Direction	Applicable	Consistent
Employment & Resources			
1.1	Business & Industrial Zones	Y	Y
1.2	Rural Zones	N	N/A
1.3	Mining, Petroleum Production and Extractive Industries	N	N/A
1.4	Oyster Aquaculture	N	N/A
1.5	Rural Lands	N	N/A
Environment & Heritage			
2.1	Environmental Protection Zones	Y	Y
2.2	Coastal Protection	N	N/A
2.3	Heritage Conservation	Y	Y
2.4	Recreation Vehicle Areas	Y	Y
Housing, Infrastructure & Urban Development			
3.1	Residential Zones	N	N/A
3.2	Caravan Parks and Manufactured Home Estates	Y	Y
3.3	Home Occupations	Y	Y
3.4	Integrating Land Use & Transport	Y	Y
3.5	Development Near Licensed Aerodromes	Y	Y
3.6	Shooting Ranges	N	N/A
Hazard & Risk			
4.1	Acid Sulphate Soils	Y	Y
4.2	Mine Subsidence and Unstable Land	N	N/A
4.3	Flood Prone Land	Y	TBD

No.	Direction	Applicable	Consistent
4.4	Planning for Bushfire Protection	Y	Y
Regional Planning			
5.1	Implementation of Regional Strategies	Y	Y
5.2	Sydney Drinking Water Catchments	N	N/A
5.3	Farmland of State and Regional Significance on the NSW Far North Coast	N	N/A
5.4	Commercial and Retail Development along the Pacific Highway, North Coast	N	N/A
5.8	Sydney's Second Airport: Badgery's Creek:	N	N/A
Local Plan Making			
6.1	Approval and Referral Requirements	Y	Y
6.2	Reserving Land for Public Purposes	Y	Y
6.3	Site Specific Provisions	Y	Y
Metropolitan Planning			
7.1	Implementation of A Plan for Growing Sydney	N	N/A
7.2	Implementation of Greater Macarthur Land Release Investigation	N	N/A

Table 3 – S117 Ministerial Direction Compliance

Section C – Environmental, Social and Economic Impact

7. Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

Flora and Fauna

A small portion of River-Flat Eucalypt Forest on Coastal Floodplains EEC will be impacted by the proposal. It has been recommended that this area be excluded from the proposed IN1 zone. Further discussions with the proponent will be held should the proposal receive a positive gateway determination to finalise the zone boundary position. Figure 2 provides the location of River-Flat Eucalypt Forest on Coastal Floodplains EEC. The ecological assessment will require updating post gateway to reflect the current flora and fauna conditions on the site and discuss potential offsetting options.

The ecological assessment prepared by Forest Fauna Surveys P/L, Eastcoast Flora Survey in 2007 to support the WEZ rezoning recommended that two potential corridor routing options exist for

establishing a regional wildlife corridor in the location in the vicinity of Sparks Road, Warnervale. This corridor is required to provide an effective connection to link Porters Creek Wetland to the extensive natural areas which exist in the Wallarah Creek catchment. This forms the only major north-south wildlife corridor located to the east of the F3 – Freeway. Based on this information a large area of Lot 1 DP 796730 is identified as 'green corridor' within the North Wyong Shire Structure Plan including the 'triangle site'. In order to ensure the continued functionality of the riparian corridor along Buttonderry Creek it is proposed to retain the E2 Environmental Conservation zone at a minimum of 50 metres from the creek line and ensure that the proposed IN1 General Industrial zone does not encroach on the corridor.

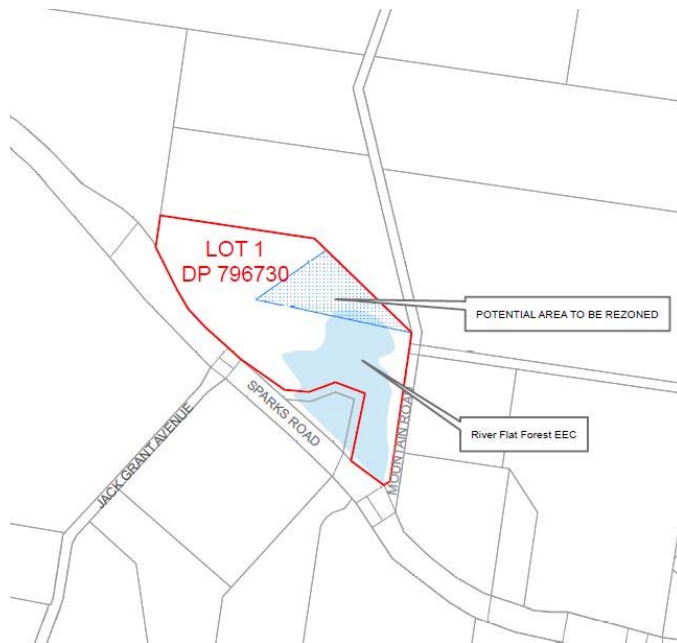


Figure 2 Location of River-Flat Eucalypt Forest on Coastal Floodplains EEC

8. Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

Bushfire

The site is bushfire prone containing vegetation Category 1 and vegetation buffer (see Figure 3). There are minimal setbacks required for industrial developments, and by their nature they are usually fire resistant type buildings (concrete tilt-up, colourbond etc) or have large setbacks adjacent to the bush used for storage, truck parking etc.

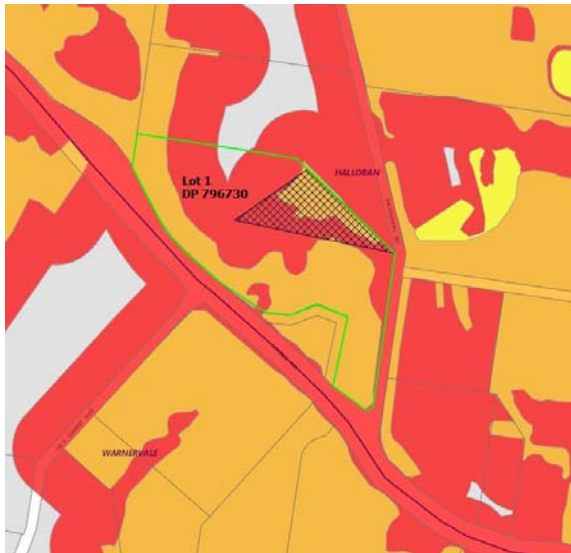


Figure 3 Bushfire Prone Land

Legend

- Vegetation Buffer
- Vegetation Category 1
- Vegetation Category 2

Aboriginal and European Cultural Heritage Items

An Indigenous heritage survey was conducted by Archaeological Surveys and Reports Pty Ltd in conjunction with the Darkinjung Local Aboriginal Land Council in March 2004 to support the rezoning of the WEZ. This survey concluded that no items of Indigenous significance were found in the area. A search of Schedule 5 of WLEP 2013 indicates no items of European significance are located on the site.

Contaminated Land and Acid Sulphate Soils

The Phase 1 Contamination and Acid Sulphate Soil Assessment by Coffey Geosciences concluded that no areas of environmental concern were identified that would impact on the proposed industrial development of the south east precinct of the WEZ. Due to previous land uses on the site to the north for brick manufacturing the assessment recommended that a phase 2 Environmental Site Assessment should be carried out during development of the land. Lot 1 DP 796730 could contain potential Acid Sulphate Soil (ASS). The report also recommended that an ASS assessment be carried out prior to any significant works that could disturb the subsurface profile. This is a matter that can adequately be dealt with during DA process.

Flooding and Drainage

Part of the area proposed to be rezoned to IN1 General Industrial is impacted by the 1% flood level (see Figure 4).

The triangle site has previously been identified for a constructed wetland under Porters Creek Stormwater Harvesting Scheme (PCSHS). The PCSHS is currently being reviewed by consultants with a view to reducing the extent and cost of the scheme while achieving stormwater retention and water quality targets. The preliminary review undertaken by Council's consultants' BMT WBM confirms that the whole site is not required for stormwater treatment infrastructure in this catchment. Therefore a portion of the site could be rezoned for development noting that alternative water quality facilities will be required to be provided.

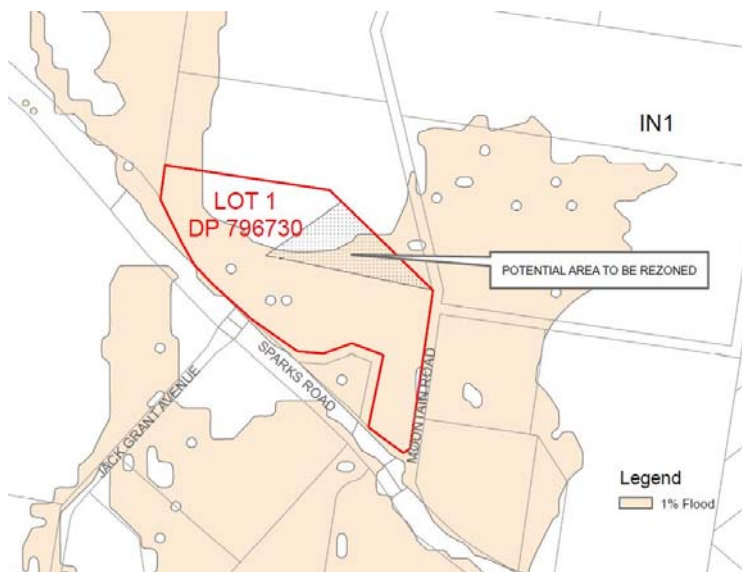


Figure 4 Land affected by the 1% Flood level

Should the planning proposal be supported by Council, the proponent will be requested to provide detail of the final location and quantum of the revised stormwater infrastructure in order to facilitate the rezoning. This is to be confirmed through a flood study which examines the extent of fill required to progress the proposal post gateway. The investigations should also explore any impacts the filling would create to adjoining properties.

9. Has the planning proposal adequately addressed any social and economic impacts?

Social Issues

The increase of area for industrial purposes on this site will provide additional land to expand the existing established businesses on the site. The expansion of these businesses will provide additional local employment opportunities – based on 20 employees per hectare this could provide between 30-40 employees depending on the final configuration of the Industrial zone and the intended land use.

Section D – State and Commonwealth Interests

10. Is there adequate public infrastructure for the planning proposal?

Traffic and Transport

The site is accessed from Mountain Road via Sparks Road, a classified road under the *Roads Act 1993* which is managed and financed by RMS, therefore consultation with that authority will be undertaken. Public transport in the form of a regular bus service is available along Sparks Road and Warnervale Railway Station is 1.5 km from the site. The increase in industrial land should not detrimentally impact on the existing transport infrastructure.

Warnervale Aerodrome

Council's preliminary planning for the upgrade of Warnervale Aerodrome will not impact on the site provided buildings are restricted to a height to ensure building heights will not penetrate the

Limitation or Operations Surface for the aerodrome. Other restrictions imposed by the operation of the airport include:

- The development does not emit smoke, steam or dust that could reduce visibility.
- Any floodlighting is arranged to ensure that it will not distract or cause glare for pilots.
- No heat or gas efflux generation (chimneys) are permitted.

Services (Water, Sewer, Gas & Electricity)

Water services are available to the site, other services such as electricity, gas and telephone are available, it is not expected that the proposed expansion of the existing businesses will have significant impact on the existing water infrastructure. The proponent will need to demonstrate that adequate on site sewer arrangements are to Council's satisfaction.

11. What are the views of State and Commonwealth public authorities consulted in accordance with the gateway determination?

Consultation with the following agencies is proposed, based on the identified triggers and site constraints:

Agency	Trigger/Constraint
NSW Rural Fire Service	- The land is bushfire prone
Office of Environment & Heritage (Planning)*	- Under S34A
Office of Environment & Heritage (Water Floodplains & Coast)	- Flooding Issues
Roads and Maritime Services	- Sparks Road – Classified Road
Transport for NSW	- Sparks Road – Classified Road

Table 4 – Proposed Agency Consultation List

* NOTE: Section 34A of the EP&A Act requires the RPA to consult with the Director-General (Secretary) of the Department of Environment, Climate Change and Water (OEHS) if, in the opinion of the RPA, critical habitat or threatened species, populations or ecological communities, or their habitats may be adversely affected by the proposed instrument.

- The consultation is to commence after a Gateway Determination is issued unless the Regulations specify otherwise.
- The period for consultation is 21 days unless agreed differently between the RPA & the DG or by the Regulations.

Part 4 Mapping

Map	Map Title
A.	Locality Plan
Existing Provision	
B.	Land Reservation Acquisition Map (Extract of 8550_COM_LRA_ 007A_020_20131219)
C.	Land Zoning Map (Extract of 8550_COM_LZN_ 007A_020_20140512)
D.	Lot Size Map (Extract of 8550_COM_LSZ_ 007A_050_2020140512)
Proposed Provisions	
A.	Land Reservation Acquisition Map (Extract of 8550_COM_LRA_ 007A_020_20160117)
B.	Land Zoning Map (Extract of 8550_COM_LZN_ 007A_020_20160117)
C.	Lot Size Map (Extract of 8550_COM_LSZ_ 007A_020_20160117)

Table 5 – Existing and Proposed Provisions

Part 5 Community Consultation

The proposal will be made available for community/agency consultation and undertaken in accordance with any determinations made by the Gateway.

It is expected that the proposal will be made available at the following locations:

- Wyong Shire Administration Building, 2 Hely Street, Wyong
- Council's website (On Exhibition page and Consultation Hub page) www.wyong.nsw.gov.au.

Additionally, notification of the exhibition of the proposal will be provided to adjoining landholders prior to its commencement.

Part 6 Project Timeline

Action	Period	Start Date	End Date
Anticipated commencement date (date of Gateway Determination)	4 weeks	24/03/2016	22/04/2016
Anticipated timeframe for the completion of required technical information	6 months	22/04/2016	21/10/2016
Timeframe for government agency consultation (pre and post exhibition as required by Gateway determination)	21 days	29/04/2016	20/05/2016
Commencement and completion dates for public exhibition	2/11/2016 to 16/11/2016	2/11/2016	16/11/2016
Dates for public hearing (if required)	10/11/2016	10/11/2016	10/11/2016
Timeframe for consideration of submissions	14 Days	18/11/2016	2/12/2016
Timeframe for consideration of a proposal post exhibition	8 Weeks	14/12/2016	15/02/2017
Date of submission to the Department to finalise LEP	10/03/2017	10/03/2017	10/03/2017
Anticipated date RPA will make the plan (if delegated)	31/03/2017	31/03/2017	31/03/2017
Anticipated date RPA will forward to the Department for notification	31/03/2017	31/03/2017	31/03/2017

Table 6 – Key Project Timeframes

Supporting Documentation

No.	Document
01 Assessment and Endorsement	
A.	Council Report and Minutes – 10 March 2016.
B.	Section 117 Ministerial Direction Assessment
02 Land Use Provisions	
A.	Land Use Tables - Wyong LEP 2013
03 Agency Responses	
04 Mapping	
A.	Locality Plan
Existing Provisions	
B.	Land Reservation Acquisition Map (Extract of 8550_COM_LRA_ 007A_020_20131219)
C.	Land Zoning Map (Extract of 8550_COM_LZN_ 007A_020_20140512)
D.	Lot Size Map (Extract of 8550_COM_LSZ_ 007A_050_2020140512)
Proposed Provisions	
E.	Land Reservation Acquisition Map (Extract of 8550_COM_LRA_ 007A_020_20160117)
F.	Land Zoning Map (Extract of 8550_COM_LZN_ 007A_020_20160117)
G.	Lot Size Map (Extract of 8550_COM_LSZ_ 007A_020_20160117)
05 Supporting Studies	
A.	Ecological and Hydrological review of the proposed Wyong Employment Zone Zoning March 2008 – Parsons Brinkerhoff
B.	Review of Ecological Constraints and Development Potential for the HTH Holdings Pty Ltd site Warnervale – February 2011 – Parsons Brinkerhoff
C.	Site Visits Results and Ecological Advice PEA Consulting August 2011
D.	Wyong Employment Zone Additional Flooding Assessment – November 2006 – DHI Water & Environment

Table 7 – Supporting Documentation to the Planning Proposal

01

Assessment & Endorsement



Wyong
Shire
Council

2.2 RZ/7/2015 Rezoning of 171-175 Sparks Road Halloran to expand the IN1 General Industrial Zone

TRIM REFERENCE: RZ/7/2015 - D12174459

MANAGER: Tanya O'Brien, Manager

AUTHOR: Chris Ferry; Strategic Planner

SUMMARY

Council is in receipt of a request to amend Wyong Local Environmental Plan (WLEP) 2013 by rezoning a small portion of land directly south of the existing industrial development at 171-175 Sparks Road Halloran. The proposal seeks to rezone part of the site from E2 Environmental Conservation to IN1 General Industrial to facilitate expansion of the current industrial uses on the site.

An assessment of the request has been undertaken, which identifies that there is sufficient strategic justification for Council to initiate the rezoning process by preparing a Planning Proposal and referring it to the Department of Planning and Environment (DP&E) for a gateway determination.

Proponent:	Trehy Ingold Neate for HTH Holdings Pty Ltd
Owners:	HTH Holdings Pty Ltd
Description of Land:	Lot 1 DP 796730
Address:	171-175 Sparks Road Halloran
Site Area:	12.96ha – Proposed area to be rezoned 2.07ha
Current Zoning:	E2 Environmental Conservation
Proposed Zoning:	IN1 General Industrial
Existing Use:	Vacant Land
Employment Generation:	Approximately 40

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RECOMMENDATION

- 1 That Council prepare a Planning Proposal to amend Wyong Local Environmental Plan 2013, pursuant to Section 55 of the Environmental Planning and Assessment (EP&A) Act 1979 to enable the rezoning of part of Lot 1 DP 796730 (171-175 Sparks Road Halloran) to the IN1 General Industrial zone.*
- 2 That Council forward the Planning Proposal to the Department of Planning and Environment (DP&E) accompanied by a request for a gateway determination, pursuant to Section 56 of the EP&A Act 1979.*
- 3 That Council request the Acting Chief Executive Officer to apply to accept plan making delegations for the LEP Amendment.*
- 4 That Council undertake community and government agency consultation in accordance with the requirements of the gateway determination.*

5 That Council consider a further report on results of the community consultation.

ORDINARY MEETING HELD ON 10 MARCH 2016

RESOLVED unanimously on the motion of Councillor EATON and seconded by Councillor TROY:

240/16 That Council prepare a Planning Proposal to amend Wyong Local Environmental Plan 2013, pursuant to Section 55 of the Environmental Planning and Assessment (EP&A) Act 1979 to enable the rezoning of part of Lot 1 DP 796730 (171-175 Sparks Road Halloran) to the IN1 General Industrial zone.

241/16 That Council forward the Planning Proposal to the Department of Planning and Environment (DP&E) accompanied by a request for a gateway determination, pursuant to Section 56 of the EP&A Act 1979.

242/16 That Council request the Acting Chief Executive Officer to apply to accept plan making delegations for the LEP Amendment.

243/16 That Council undertake community and government agency consultation in accordance with the requirements of the gateway determination.

244/16 That Council consider a further report on results of the community consultation.

FOR: CRS GB BEST, DE EATON, B G GRAHAM, KG GREENWALD, AT TROY AND DV VINCENT

AGAINST: NIL

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BACKGROUND

HTH Holdings Pty Ltd (the land owner) own approximately 23.6 hectares of land located at 171-175 Sparks Road Halloran which consist of Lot 1 DP 796730, Lot 2 DP 796730, Lot 7 DP 239691, and Lot 74 DP 755245. Lot 1 DP 793760 is currently zoned part E2 Environmental Conservation and part IN1 General Industrial and the industrial portion is developed with an industrial building and related hardstand.

The landowner has identified a portion of the site adjoining the industrial land which the proponent claims has development potential (the triangle portion). The triangle portion is currently zoned E2 Environmental Conservation and is intended to be rezoned to increase the IN1 General Industrial zoned land in the locality. Figure 1 provides the current ownership and land zonings for the site.

Two long term tenants who employ approximately 100 people occupy the existing building that adjoins site to be rezoned. In order to cater for increased business demand the tenants require additional industrial land to increase their business operations. The proposed IN1 General Industrial zone will facilitate this expansion and seek retain these local employers in the shire.

The site was previously zoned 10(a) Investigation under Wyong LEP 1991 as it was identified as a precinct 13 as part of the draft Sydney Regional Environmental Plan – Wyong Development Areas and Coal Mining. In 2008 SEPP (Major Development) – Amendment 21 was introduced which rezoned the land E2 Environmental Conservation zone due to the placement of a water quality and water quantity facility proposed by the previous Porters Creek Water Cycle Management Strategy. This zone was adopted for Wyong LEP 2013.

The land owner has had extensive consultation with Council since 2005 with regard to the zoning of the site including proposing it to be rezoned for industrial purposes. Until the issue with the placement of the water quality and water quantity could be resolved no action could be taken in regard to rezoning the site for industrial purposes.



Figure 1 Current Land Ownership and Zoning

Part of Lot 1 DP 796730 and Lot 74 DP 755245 are currently being leased by two long term tenants who occupy the existing building and adjoining land.

THE SITE

The area proposed to be rezoned is a triangular portion of land contained within Lot 1 DP 796730 and located off Mountain Road within the Wyong Employment Zone (WEZ). The part of the site proposed to be rezoned adjoins industrially zoned land, contains a small portion of River Flat Forest Endangered Ecological Community (EEC) vegetation and a portion is located below the 1% flood level. Figure 2 shows the location of the site and existing land uses.



Figure 2 – Site Location and Land Uses

THE PROPOSAL

The Planning Proposal seeks to rezone 2.07 hectares known as the 'triangle' site from E2 Environmental Conservation under Wyong Local Environmental Plan 2013 (WLEP) to IN1 General Industrial, to allow the range of land uses permitted under to the IN1 zone to facilitate expansion of the existing long term uses.

The applicant's intention is to rezone the area known as the 'triangle' to IN1 General Industrial to expand the available industrial zoned land on the site which adjoins the leased area, and which has development potential.

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ASSESSMENT OF KEY ISSUES

An assessment of the rezoning request and relevant studies submitted in its support have been undertaken having regard for the existing features of the land and the potential impacts the proposed future land use may have.

Hydrology and Flooding

Part of the area proposed to be rezoned to IN1 General Industrial is impacted by the 1% flood level, figure 3 shows the extent.

The triangle site has previously been identified for a constructed wetland under Porters Creek Stormwater Harvesting Scheme (PCSHS). The PCSHS is currently being reviewed by consultants with a view to reducing the extent and cost of the scheme while achieving stormwater retention and water quality targets. The preliminary review undertaken by Council's consultants' BMT WBM confirms that the whole site is not required for stormwater treatment infrastructure in this catchment. Therefore a portion of the site could be rezoned for development noting that alternative water quality facilities will be required to be provided.

Should the planning proposal be supported by Council, the proponent will be requested to provide detail of the final location and quantum of the revised stormwater infrastructure in order to facilitate the rezoning. This is to be confirmed through a flood study to which examines the extent of fill required to progress the proposal post gateway. The investigations should also explore any impacts the filling would create to adjoining properties.

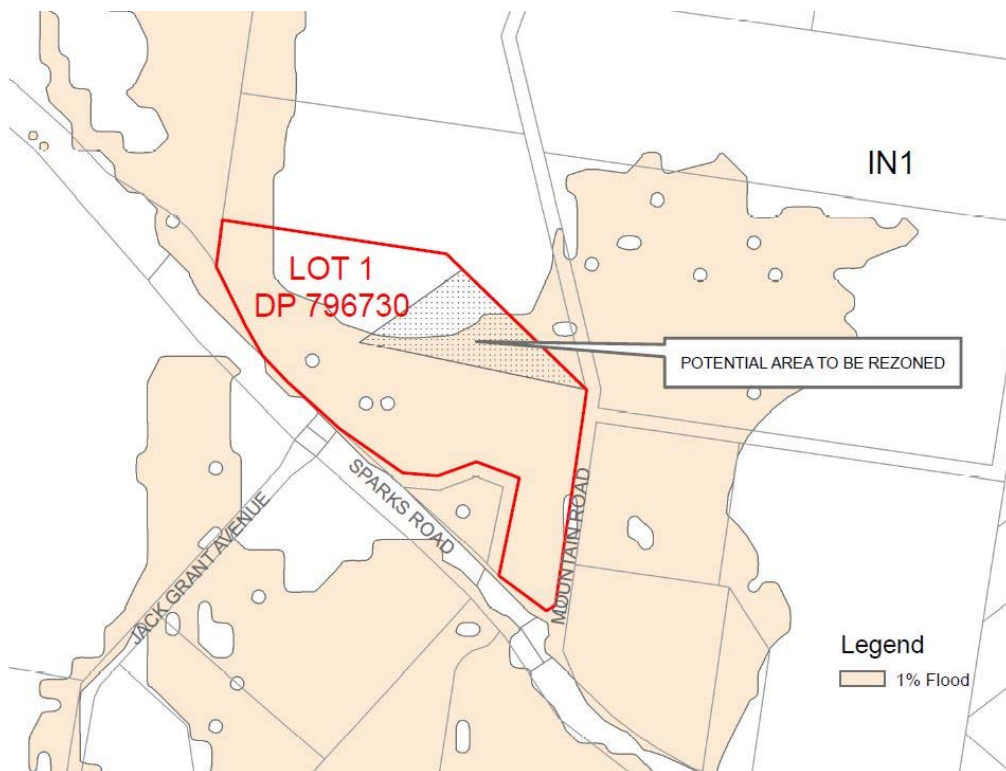


Figure 3 1% flood levels

Bushfire

The site is bushfire prone containing vegetation Category 1 and vegetation buffer. There are minimal setbacks required for industrial developments, and by their nature they are usually fire resistant type buildings (concrete tilt-up, colourbond etc) or have large setbacks adjacent to the bush used for storage, truck parking etc. The RFS will be consulted should the proposal be supported by Council and receive a positive gateway determination to determine width and location of APZ. Figure 4 is an extract from the bushfire prone land map.

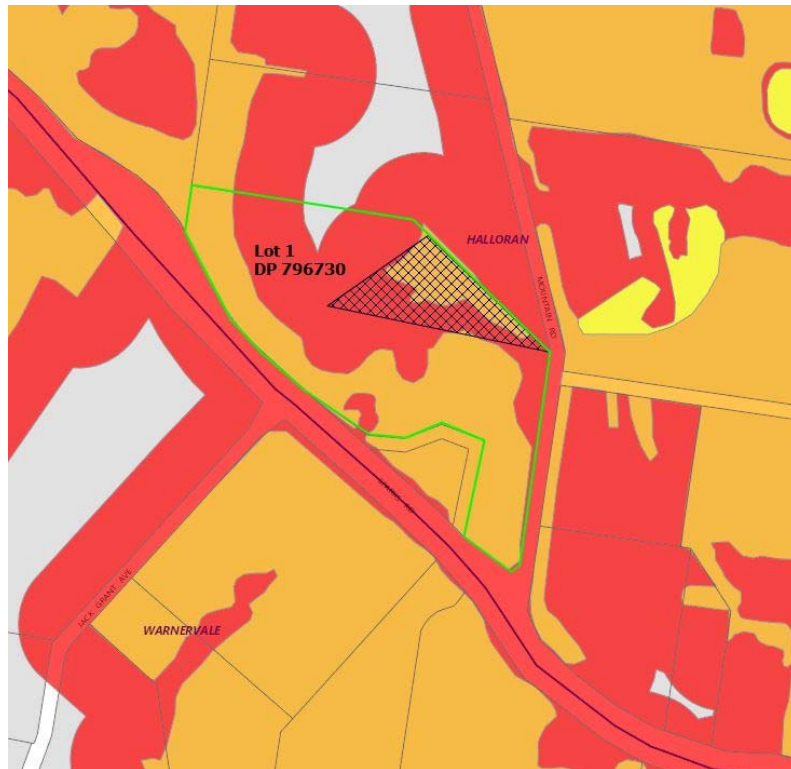


Figure 4 Bushfire Prone Land Map

Ecology

The ecological assessment by Parsons Brinkerhoff in 2008 mapped the extent vegetation on the site. The assessment identified 4.55 hectares of River Flat Forest EEC on the site and that approximately 1800 square metres will be impacted by the proposed IN1 General Industrial Zone. No other EECs were identified on the site which has highly disturbed regenerating vegetation. Figure 5 shows the extent of the EEC and the impact within the triangle site. The ecological assessment would be updated post gateway to reflect the current flora and fauna conditions on the site and discuss potential offsetting options.

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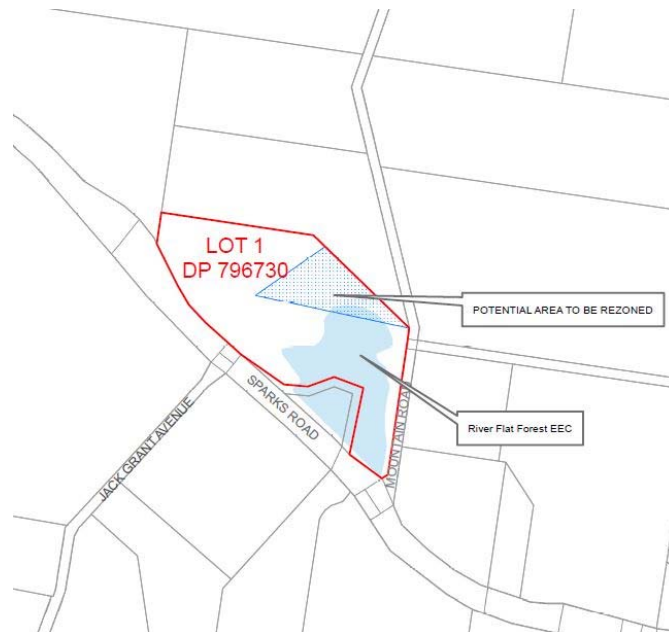


Figure 5 River Flat Forest EEC – Extract from

The 1800 square metre portion of land which contains EEC may need to be excluded from the proposed rezoning to IN1 General Industrial Zone if loss of the vegetation is unable to be offset. The E2 Environmental Conservation Zone may be the most appropriate zone for this portion of the site in that case. Therefore it is recommended that the final location of the zone boundaries will be determined after agency consultation and the revised studies have been provided.

ASSESSMENT

The proposal to rezone part of the site to IN1 General Industrial has merit on condition that that the proponent can provide suitable alternative onsite stormwater retention, ensure the protection to the EEC located within the triangle by retaining the E2 Environmental Conservation Zone on part of the site and plan for appropriate APZ setbacks. Should the proposal be supported by Council and receive a positive gateway determination the following additional information will be requested from the proponent:

- A development concept to determine the ultimate redevelopment plan for the site which includes appropriate APZ.
- Updated ecological assessment as part of the site contains the River Flat Forest EEC as the study provided by the proponent is 8 years old.
- Revised hydrological study to determine the most appropriate location for re-siting of the water quality treatment facility and water quality detention.
- Revised flood study to determine if any filling of the triangle will impact on other properties.

STRATEGIC CONTEXT AND LINKS

Local Plans, Policies and Strategies

An assessment of the request and relevant studies submitted in its support has been undertaken having regard for Council's local strategic planning framework.

Wyang LEP 2013

Lot 1 DP 793760 is proposed to be zoned part IN1 General Industrial and part E2 Environmental Conservation. The proposal is consistent with several objectives of the LEP including:

- to foster economic, environmental and social well being so that Wyong continues to develop as a sustainable and prosperous place to live, work and visit,
- to encourage a range of housing, employment, recreation, human services and appropriately located tourism-related development in Wyong to meet the existing and future needs of residents and visitors,
- to conserve, protect and enhance the environmental and cultural heritage (both indigenous and non-indigenous) values of Wyong,

The purpose of the E2 zone is to:

- 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 protect endangered ecological communities, coastal wetlands and littoral rainforests.
- To enable development of public works and environmental facilities if such development would not have a detrimental impact on ecological, scientific, cultural or aesthetic values.

In respect of this site the current zoning seeks to protect known EECs occurring in the riparian corridor along Buttonderry Creek.

The purpose of the IN1 General Industrial Zone is to:

- To provide a wide range of industrial and warehouse land uses.
- To encourage employment opportunities.
- To minimise any adverse effect of industry on other land uses.
- To support and protect industrial land for industrial uses.
- To enable other land uses that provide facilities or services to meet the day-to-day needs of workers in the area.

Settlement Strategy

The Settlement Strategy includes considerations such as supporting and encouraging opportunities for employment generating industries. The current land use provides approximately 100 local jobs. The proposed expansion of the IN1 General Industrial zone will allow these industries to create additional jobs in the area. Based on typical job numbers for industrial land of 20 jobs per hectare the increase of 2 hectares would equate to an additional 40 local jobs.

Wyong Development Control Plan 2013

Chapter 2.12 – Industrial Development currently applies to all industrial land and provides controls to deal with developments that are anticipated as part of this planning proposal. A draft DCP Chapter for the WEZ is being developed, to provide guidance for land owners and developers to develop land in the WEZ. This draft chapter is proposed to be finalised when land use strategies in the area have been determined.

Section 94 Contributions

The Warnervale District Contributions Plan is currently collecting for drainage and water quality facilities, road and traffic management including the upgrade of Mountain Road with a new bridge over Buttonderry Creek and intersection upgrades along Sparks Road in the vicinity of the WEZ. The proponent will be required to provide an alternate stormwater management facility in and altered configuration to the one originally shown by the WEZ Integrated Water Cycle Management, a VPA would not be required as this will be included as a development requirement for any future development of the site.

State Plans, Policies and Strategies

An assessment of the request and relevant studies submitted in its support has been undertaken having regard for the state government strategic planning framework.

Central Coast Regional Strategy (CCRS)

The CCRS promotes regional employment self-containment, furthermore, the CCRS encourages the investigation of options to expand existing employment nodes to ensure future development on employment lands is not fragmented. Increasing the IN1 General Industrial zone for this site will assist in providing additional employment and will negate any fragmentation of the employment land.

Draft Central Coast Regional Plan

The draft Central Coast Regional Plan (dCCRP) intends the WEZ to provide a range of diverse employment activity in the future and provide for up to 6,000 jobs. It is identified as the main economic gateway for the northern half of the Central Coast region. The proposal has the potential of providing additional employment land which is in accordance with Direction 2.6 *Enhance the Warnervale Employment Lands* of the dCCRP.

Special Infrastructure Contribution (SIC)

A SIC applies to the WEZ at a rate of \$70,945 per net development hectare. This will apply to any new development on the site.

State Environmental Planning Policies (SEPPs)

The proposal has been assessed having regard for relevant State Environmental Planning Policies (SEPPs).

SEPP 44 – Koala Habitat

The ecological assessment by Parsons Brinkerhoff (2008) did not identify any koala present on the site and no habitat trees were recorded in the area. Therefore it is considered that the proposal will not impact on koala habitat.

SEPP 55 – Contaminated Land

The Phase 1 Contamination Assessment by Coffey Geosciences concluded that no areas of environmental concern were identified that would impact on the proposed industrial development of the south east precinct of the WEZ. Due to previous land uses on the site to the north for brick manufacturing the assessment recommended that a phase 2 Environmental Site Assessment should be carried out during development of the land. The site is considered suitable for industrial uses.

Section 117 Directions

The proposal has been assessed against relevant Section 117 Ministerial Directions.

The consistency of the proposal against a number of Section 117 Directions is subject to the outcomes of a number of additional or updated studies including an updated ecological assessment, revised stormwater management study and a revised flood assessment will be required to be undertaken by the proponent.

The proposal is generally consistent with the Directions with minor exceptions to the following:

2.1 Environmental Protection Zones – The applicant seeks to rezone the whole triangle site to IN1 General Industrial which would impact on 1800 square metres of EEC, and this would be inconsistent with this direction. It is instead recommended that this boundary be confirmed following a flora and fauna study. The zone boundary is to be adjusted accordingly to minimise impact on the EEC, thereby achieving consistency with the 117 direction.

4.1 Acid Sulphate Soils – The Phase 1 Contamination and Acid Sulphate Soil Assessment by Coffey Geosciences identified Lot 1 DP 796730 as potential Acid Sulphate Soil (ASS). The report recommended that an ASS assessment be carried out prior to any significant works that could disturb the subsurface profile. This is a matter that can adequately be dealt with during DA stages. These actions will provide consistency with this 117 direction.

4.3 Flood Prone Land – the triangle site is impacted by the 1% flood level and is within Flood Precinct 3 – Flood Storage and Precinct 4 High Hazard. Should the proposal be supported the proponent will be required to prepare a flood study to determine the location of zone boundaries, the extent of fill required to progress the proposal and any impacts the filling may have on downstream properties.

CONSULTATION

The proposal was referred to the following internal Council units for comment:

- Property Management – Ecology

- Property Development –Airport Development and Operations
- Property Development – Transportation
- Development Assessment – Design Engineering
- Waterways and Asset Management
- Contracts and Project Management
- Senior Planner – Natural Environmental Assets
- Property Development - Contributions

Specialist Council staff concur that the proposal has merit and identified that additional supporting information would be necessary to further advance the planning proposal if it is supported by Council. The issues raised have been discussed earlier in this report.

Should the proposal receive a positive gateway determination, community and agency consultation will be in accordance with that determination.

OPTIONS

Option 1 Proceed as proposed

Not Recommended

It would not be considered prudent to rezone the entire triangle to IN1 General Industrial as it contains constraints such as EEC, flooding, water quality and water quantity infrastructure facilities. In order to ensure these constraints are managed appropriately, the proposed zone boundaries should be modified to reflect the revised studies and agency consultation.

Option 2 Proceed with the request (with amendments)

Recommended

Reason:

A portion of the site (particularly the northern part) is capable of being developed without substantial impacts. Constraints such as EEC, flooding, water quality, water quantity and bushfire can be managed on-site through planning controls. Zone boundaries will need to be verified following consideration of revised studies and consultation. The development of the 'triangle' site could stimulate development of additional employment land within the WEZ and is therefore supported.

Option 3 Refuse the request

Not Recommended

Reason:

The site is acknowledged to have some development potential, if the proposal is not supported, the land owner will not have an opportunity to generate a commercial return on this part of the site. The review undertaken to date establishes that the site has some development potential (to be confirmed through further studies) and that there is no need for the whole triangle area to be retained within the E2 Environmental Conservation zone. In order to protect the riparian corridor along Buttonderry Creek it is proposed to retain the E2 Environmental Conservation zone in that area.

The proposal seeks to support expansion of employment generating uses while appropriately protecting environmental outcomes on the site. The rezoning should be progressed to facilitate orderly and economic development of the site in accordance with the objectives of the EP&A Act 1979.

GOVERNANCE

Consideration of s.23A guidelines

The Chief Executive of the NSW Office for Local Government has issued guidelines titled *"Council Decision Making during Merger Proposal Periods"* pursuant to s.23A(1) of the *Local Government Act 1993* ("LG Act"). The Council must consider those guidelines when making decisions during the "merger proposal period", which commenced on 6 January 2016 and will conclude on the date on which a proclamation is made to amalgamate the Wyong and Gosford local government areas or the Minister for Local Government determines that he will not proceed with the proposal for that amalgamation: s.23A(3) of the LG Act. Councillors have been provided with a copy of those guidelines and have been given advice concerning those guidelines. The decisions that are proposed as part of this report comply with those guidelines.

CONCLUSION

An assessment of the application to rezone land at 171-175 Sparks Road Halloran to increase the IN1 General Industrial zone has been undertaken having regard for the existing strategic framework and the potential impacts of the proposed future land use.

This assessment has identified that the request has sufficient strategic justification and it is recommended that Council prepare a planning proposal in relation to the rezoning request.

DRAFT

ATTACHMENTS

- 1 Attachment 1 Ministerial Section 117 Directions D12180511

Ministerial Section 117 Directions

Direction	Comment
Employment & Resources	
1.1 Business & Industrial Zones	
Aims to encourage employment growth in suitable locations, protect employment land in business and industrial zones and to support the viability of identified strategic centres. Applies when a planning proposal affects land within an existing or proposed business or industrial zone.	Applicable The proposal intends to increase an existing industrial zone but does not affect land within an existing or proposed business or industrial zone. It is therefore considered that the proposal is consistent with this direction.
1.2 Rural Zones	
Aims to protect the agricultural production value of rural land. Applies when a planning proposal affects land within an existing or proposed rural zone.	Not Applicable The planning proposal does not intend to alter or impact an existing or proposed rural zone.
1.3 Mining, Petroleum Production and Extractive Industries	
Aims to ensure that the future extraction of State or regionally significant reserves of coal, other minerals, petroleum and extractive materials are not compromised by inappropriate development. Applies when a planning proposal would have the effect of prohibiting the mining of coal or other minerals, production of petroleum, or winning or obtaining of extractive materials, or restricting the potential of development resources of coal, other mineral, petroleum or extractive materials which are of State or regional significance by permitting a land use that is likely to be incompatible with such development.	Not Applicable The proposal will not prohibit or restrict potential development of coal or other minerals, production of petroleum or extractive minerals.
1.4 Oyster Aquaculture	
Aims to ensure that Priority Oyster Aquaculture Areas and oyster aquaculture outside such an area are adequately considered, and to protect Priority Oyster Aquaculture Areas and oyster aquaculture outside such an area from land uses that may result in adverse impacts on water quality and the health of oysters and consumers. Applies when a planning proposal could result in adverse impacts on a Priority Oyster Aquaculture Areas or current oyster aquaculture lease in the	Not Applicable There are no Priority Oyster Aquaculture Areas within the Wyong LGA.

Direction	Comment
national parks estate or results in incompatible use of land between oyster aquaculture in a Priority Oyster Aquaculture Area or current oyster aquaculture lease in the national parks estate and other land uses.	
1.5 Rural Lands	
Aims to protect the agricultural production value of rural land; and facilitate the orderly and economic development of rural lands for rural and related purposes. Applies to local government areas to which State Environmental Planning Policy (Rural Lands) 2008 applies and prepares a planning proposal that affects land within an existing or proposed rural or environment protection zone.	Not Applicable This Direction does not apply to the Wyong LGA.
Environment & Heritage	
2.1 Environmental Protection Zones	
Aims to protect and conserve environmentally sensitive areas. Applies when the relevant planning authority prepares a planning proposal.	Applicable 1800 sq metres of River Flat Forest EEC will be impacted by the proposal. It is intended to exclude this area from the IN1 General Industrial Zone and retain the E2 Environmental Conservation Zone over this area. It is therefore considered that the proposal will be consistent with this direction.
2.2 Coastal Protection	
Aims to implement the principles in the NSW Coastal Policy. Applies when a planning proposal applies to land in the coastal zone as defined in the <i>Coastal Protection Act 1979</i>.	Not Applicable The site is not within a coastal zone.
2.3 Heritage Conservation	
Aims to conserve items, areas, objects and places of environmental heritage significance and indigenous heritage significance. Applies when the relevant planning authority prepares a planning proposal.	Applicable An Aboriginal Heritage Assessment was conducted by John Appleton Archaeological Surveys & Report Pty Ltd in April 2005. The study concluded that no items or sites of Indigenous or European heritage occur on the site. It is therefore considered that the proposal will be consistent with this direction.

Direction	Comment
2.4 Recreational Vehicle Areas	
Aims to protect sensitive land or land with significant conservation values from adverse impacts from recreational vehicles. Applies when the relevant planning authority prepares a planning proposal.	Applicable The proposal does not seek to enable development for recreational vehicle use. It is therefore considered that the proposal is consistent with this Direction.
Housing, Infrastructure and Urban Development	
3.1 Residential Zones	
Aims to encourage a variety and choice of housing types to provide for existing and future housing needs, to make efficient use of existing infrastructure and services and ensure that new housing has appropriate access to infrastructure and services, and to minimise the impact of residential development on the environmental and resource lands. Applies when a planning proposal affects land within an existing or proposed residential zone, and any other zone in which significant residential development is permitted or proposed to be permitted.	Not Applicable The proposal does not impact on any existing or proposed residential zone. The nearest Residential zone is approximately 1 km from the site.
3.2 Caravan Parks and Manufactured Home Estates	
Aims to provide for a variety of housing types and provide opportunities for caravan parks and manufactured home estates. Applies when the relevant planning authority prepares a planning proposal.	Applicable The proposal does not change provisions that permit caravan parks in certain zones. It is therefore considered that the proposal is consistent with this direction.
3.3 Home Occupations	
Aims to encourage the carrying out of low impact small business in dwelling houses. Applies when the relevant planning authority prepares a planning proposal.	Applicable The proposal will not change the provisions for home occupations. It is therefore considered that the proposal is consistent with this direction.
3.4 Integrating Land Use & Transport	
Aims to ensure that urban structures, building forms, land use locations, development designs, subdivision and street layouts to achieve: improving access to housing, jobs and services by walking, cycling and public transport; increasing choice of available	Applicable The proposal will increase the area of land zoned for industrial purposes and will be consistent with the objectives of the relevant guidelines and policies.

Direction	Comment
transport and reducing transport on cars; reducing travel demand; supporting efficient and viable public transport services; and provide for efficient movement of freight. Applies when a planning proposal creates alters or moves a zone or provision relating to urban land, including land zoned for residential, business, industrial, village or tourist purposes.	It is therefore considered that the proposal is consistent with this direction
3.5 Development Near Licensed Aerodromes	
Aims to ensure the effective and safe operation of aerodromes, their operation is not compromised by development which constitutes an obstruction, hazard or potential hazard to aircraft flying in the vicinity, development for residential purposes or human occupation (within the ANEF contours between 20 & 25) incorporates appropriate mitigation measures so that the development is not adversely affected by aircraft noise. Applies when a planning proposal creates, alters or removes a zone or provision relating to land in the vicinity of a licensed aerodrome.	Applicable The proposal is in the vicinity of Warnervale Aerodrome but it will not adversely impact on its operation. Building heights will not penetrate the Limitation or Operations Surface for the aerodrome. It is therefore considered that the proposal is consistent with this direction.
3.6 Shooting Ranges	
Aims to maintain appropriate levels of public safety and amenity when rezoning land adjacent to an existing shooting range, to reduce land use conflict arising between existing shooting ranges and rezoning of adjacent land, and to identify issues that must be addressed when giving consideration to rezoning land adjacent to an existing shooting range. Applies when a relevant planning authority prepares a planning proposal that will affect, create, alter or remove a zone or a provision relating to land adjacent to and/ or adjoining an existing shooting range.	Not Applicable The proposal does not adjoin a shooting range.
Hazard & Risk	
4.1 Acid Sulfate Soils	
Aims to avoid significant adverse environmental impacts from the use of land that has a probability of containing acid sulfate soils. Applies when a planning proposal applies to land	Applicable The Phase 1 Contamination and Acid Sulphate Soil Assessment by Coffey Geosciences identified Lot 1 DP 796730 as potential Acid Sulphate Soil (ASS). The

Direction	Comment
having a probability of containing acid sulfate soils on the Acid Sulfate Soils Planning Maps.	report recommended that an ASS assessment be carried out prior to any significant works that could disturb the subsurface profile. If ASS are identified an ASS management plan will be required to manage the disturbances. It is considered that the proposal is consistent with this direction.
4.2 Mine Subsidence & Unstable Land	
Aims to prevent damage to life, property and the environmental on land identified as unstable or potentially subject to mine subsidence. Applies when a planning proposal permits development on land which is within a mine subsidence district, or identified as unstable in a study or assessment undertaken by or on behalf of the relevant planning authority or other public authority and provided to the relevant planning authority.	Not Applicable The site is not within a mine subsidence area.
4.3 Flood Prone Land	
Aims to ensure: development on flood prone land is consistent with NSW Government's Flood Prone Land Policy and principles of the Floodplain Development Manual 2005; and provisions of an LEP on flood prone land are commensurate with flood hazard and include consideration of the potential flood impacts both on and off the subject land. Applies when a planning proposal creates, removes or alters a zone or provision that affects flood prone land.	Applicable Part of the area proposed to be rezoned to IN1 General Industrial is impacted by the 1% flood level. Should the proposal be supported by Council and the gateway the proponent will be required to prepare a flood study to determine the extent of fill required to progress the proposal. The investigations should also explore any impacts the filling would create to adjoining properties. The proponent will be required to demonstrate that the filling can occur without negative impact on flood levels. Consistency with this direction will be determined once the impacts are identified and mitigation measures have been determined.
4.4 Planning for Bushfire Protection	
Aims to protect life, property and the environment from bushfire hazards, and encourage sound management of bushfire prone areas. Applies when a planning proposal affects or is in proximity to land mapped as bushfire prone land.	Applicable The site contains vegetation buffer and Category 1 Vegetation. Bushfire protection measures such as appropriate APZ, vehicular access, construction standards and landscaping are to be provided.

Direction	Comment
	It is considered that the proposal is consistent with this direction.
Regional Planning	
5.1 Implementation of Regional Strategies	
Aims to give legal effect to the vision, land use strategy, policies, outcomes and actions contained within regional strategies. Applies when the relevant planning authority prepares a planning proposal that is located on land addressed within the Far North Regional Strategy, Lower Hunter Regional Strategy, Central Coast Regional Strategy, Illawarra Regional Strategy & South Coast Regional Strategy.	Applicable. The CCRS encourages the investigation of options to expand existing employment nodes to ensure future development on employment lands is not fragmented. Increasing the IN1 General Industrial zone for this site will assist in providing additional employment and will negate any fragmentation of the employment land. The Draft Central Coast Regional Plan (DCCRP) intends the WEZ to provide a range of diverse employment activity in the future and provide for up to 6,000 jobs. It is identified as the main economic gateway for the northern half of the Central Coast region. The proposal has the potential of providing additional employment land which is in accordance with Direction 2.6 Enhance the Warnervale Employment Lands of the DCCRP. It is considered that the proposal is consistent with this direction.
5.2 Sydney Drinking Water Catchments	
Aims to protect water quality in the hydrological catchment. Applies when a relevant planning authority prepares a planning proposal that applies to Sydney's hydrological catchment.	Not Applicable. The proposal is not located within Sydney's hydrological catchment.
5.3 Farmland of State and Regional Significance on the NSW Far North Coast	
Aims to: ensure that the best agricultural land will be available for current and future generations to grow food and fibre; provide more certainty on the status of the best agricultural land, assisting councils with strategic settlement planning; and reduce land use conflict arising between agricultural use and non-agricultural use of farmland caused by urban encroachment into farming areas.	Not Applicable. The proposal is not located within the Far North Coast Region.

Direction	Comment
Applies to Ballina, Byron, Kyogle, and Tweed Shire Councils, Lismore City Council and Richmond Valley Council.	
5.4 Commercial and Retail Development along the Pacific Highway, North Coast	
Aims to manage commercial and retail development along the Pacific Highway, North Coast. Applies to all councils between and inclusive of Port Stephens and Tweed Shire Councils.	Not Applicable. The proposal is not located between Port Stephens and Tweed Shire Councils.
5.8 Second Sydney Airport: Badgerys Creek	
Aims to avoid incompatible development in the vicinity of any future second Sydney Airport at Badgerys Creek. Applies to land located within the Fairfield, Liverpool and Penrith City Council and Wollondilly Shire Council Local Government Areas.	Not Applicable. The proposal is not located within the Fairfield, Liverpool and Penrith City Council or Wollondilly Shire LGA.
Local Plan Making	
6.1 Approval and Referral Requirements	
Aims to ensure that LEP provisions encourage the efficient and appropriate assessment of development. Applies when the relevant planning authority prepares a planning proposal.	Applicable The planning proposal does not seek to include provision which require concurrence from other agencies It is therefore considered the proposal is consistent with this Direction
6.2 Reserving Land for Public Purposes	
Aims to facilitate the provision of public services and facilities by reserving land for public purposes, and facilitate the removal of reservations of land for public purposes where land is no longer required for acquisition. Applies when the relevant planning authority prepares a planning proposal.	Not Applicable The proposal does not seek to alter or create land for public purposes It is therefore considered the proposal is consistent with this Direction
6.3 Site Specific Provisions	
Aims to discourage unnecessarily restrictive site specific planning controls. Applies when the relevant planning authority prepares a planning proposal to allow particular development to be carried out.	Applicable The proposal does not seek to alter or create unnecessary restrictive site planning control. It is therefore considered the proposal is consistent with this Direction

Direction	Comment
Metropolitan Planning	
7.1 Implementation of A Plan for Growing Sydney	
Aims to give legal effect to the planning principles, directions and priorities for sub regions, strategic centres and transport gateways contained in A Plan for Growing Sydney	Not Applicable. This Direction does not apply to Wyong LGA.
7.2 Implementation of Greater Macarthur Land Release Investigations	
Aims to ensure development within the Greater Macarthur Land Release Investigation Area is consistent with the Greater Macarthur Land Release Preliminary Strategy and Action Plan.	Not Applicable. This Direction does not apply to Wyong LGA.

02

Land Use Provisions



Wyong
Shire
Council

Zone IN1 General Industrial

1 Objectives of zone

- To provide a wide range of industrial and warehouse land uses.
- To encourage employment opportunities.
- To minimise any adverse effect of industry on other land uses.
- To support and protect industrial land for industrial uses.
- To enable other land uses that provide facilities or services to meet the day-to-day needs of workers in the area.

2 Permitted without consent

Nil

3 Permitted with consent

Depots; Food and drink premises; Freight transport facilities; Garden centres; General industries; Hardware and building supplies; Industrial training facilities; Kiosks; Landscaping material supplies; Light industries; Liquid fuel depots; Neighbourhood shops; Places of public worship; Plant nurseries; Roads; Rural supplies; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Eco-tourist facilities; Educational establishments; Entertainment facilities; Environmental facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Function centres; Heavy industries; Heavy industrial storage establishments; Home-based child care; Home businesses; Home occupations; Home occupations (sex services); Information and education facilities; Jetties; Marinas; Mooring pens; Moorings; Open cut mining; Passenger transport facilities; Public administration buildings; Recreation facilities (indoor); Recreation facilities (outdoor); Registered clubs; Residential accommodation; Tourist and visitor accommodation; Water recreation structures; Wharf or boating facilities

Zone E2 Environmental Conservation

1 Objectives of zone

- 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 protect endangered ecological communities, coastal wetlands and littoral rainforests.
- To enable development of public works and environmental facilities if such development would not have a detrimental impact on ecological, scientific, cultural or aesthetic values.

2 Permitted without consent

Nil

3 Permitted with consent

Eco-tourist facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Recreation areas; Research stations; Roads; Water reticulation systems

4 Prohibited

Business premises; Hotel or motel accommodation; Industries; Multi dwelling housing; Recreation facilities (major); Residential flat buildings; Restricted premises; Retail premises; Seniors housing; Service stations; Warehouse or distribution centres; Any other development not specified in item 2 or 3

03

Agency Responses



Wyong
Shire
Council

04

Mapping



Wyong
Shire
Council



LOT 1
DP 796730

The image is an aerial photograph of a rural area. A large property is outlined with a red line. Inside this red boundary, a smaller area is filled with yellow diagonal hatching. The text 'LOT 1' and 'DP 796730' is written in red over the hatched area. Three roads are labeled in yellow: 'JACK GRANT AVENUE' runs diagonally from the bottom left towards the center; 'SPARKS ROAD' runs horizontally across the middle; and 'MOUNTAIN ROAD' runs vertically on the right side. To the right of the red boundary, there are several dark, irregular shapes representing ponds or water bodies. In the top right corner, the text 'IN 1' is visible. A white rectangular box with a pointer line is located on the right side of the image, containing the text 'POTENTIAL AREA TO BE REZONED'. The pointer line originates from the yellow hatched area and points towards this box. The surrounding landscape is mostly green with trees and some cleared land.

POTENTIAL AREA TO BE REZONED

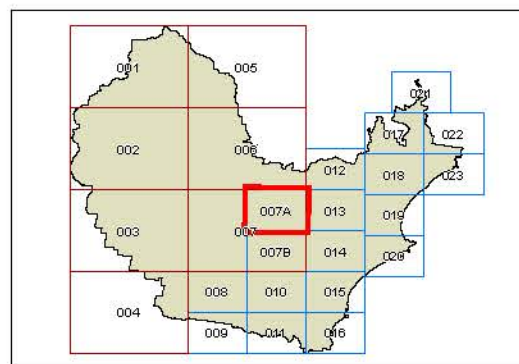


Land Reservation Acquisition Map -
Sheet LRA_007A

- Carpark (B4)
- Classified road (SP2)
- Environmental conservation (E2)
- Health services facilities (SP2)
- Local open space (RE1)
- Local road (SP2)
- National Park (E1)
- Regional open space (E2)
- Sewer buffer (SP2)
- Stormwater management (E2)
- Stormwater management (E3)
- Stormwater management (SP2)

Cadastre

Cadastre 25/11/13 © Land and Property Information (LPI)

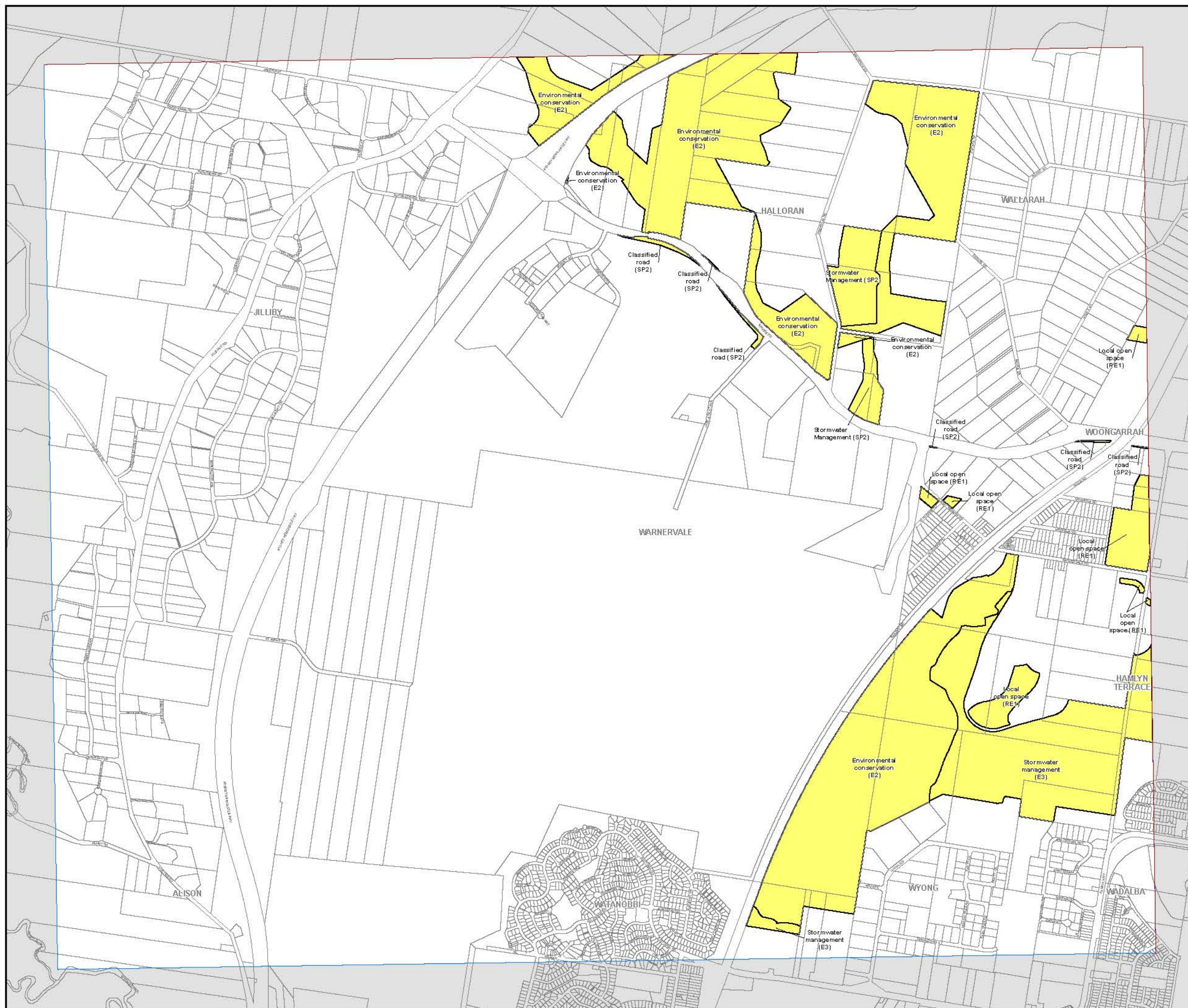


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Projection: GDA 1994
Zone 56

Map Identification Number:
8550_COM_LRA_007A_020_20131219





Wyong
Shire
Council

Wyong Local Environmental Plan 2013

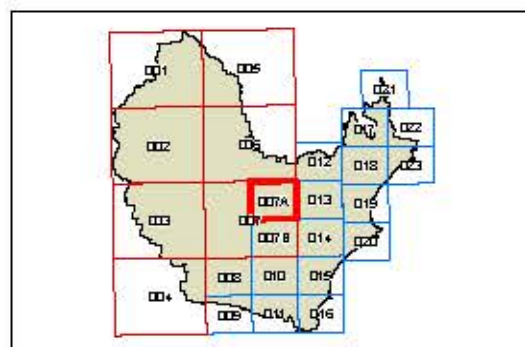
Land Zoning Map - Sheet LZN_007A

Zone

- B1 Neighbourhood Centre
- B2 Local Centre
- B3 Commercial Core
- B4 Mixed Use
- B5 Business Development
- B6 Enterprise Corridor
- B7 Business Park
- E1 National Parks and Nature Reserves
- E2 Environmental Conservation
- E3 Environmental Management
- E4 Environmental Living
- IN1 General Industrial
- IN2 Light Industrial
- R1 General Residential
- R2 Low Density Residential
- R3 Medium Density Residential
- R5 Large Lot Residential
- RE1 Public Recreation
- RE2 Private Recreation
- RU1 Primary Production
- RU2 Rural Landscape
- RU3 Forestry
- RU4 Primary Production Small Lots
- RU5 Village
- RU6 Transition
- SP1 Special Activities
- SP2 Infrastructure
- SP3 Tourist
- W1 Natural Waterways
- W2 Recreational Waterways
- DM Deferred Matters

Cadastre

- Cadastre 20/07/08 © Land and Property information (LPI)

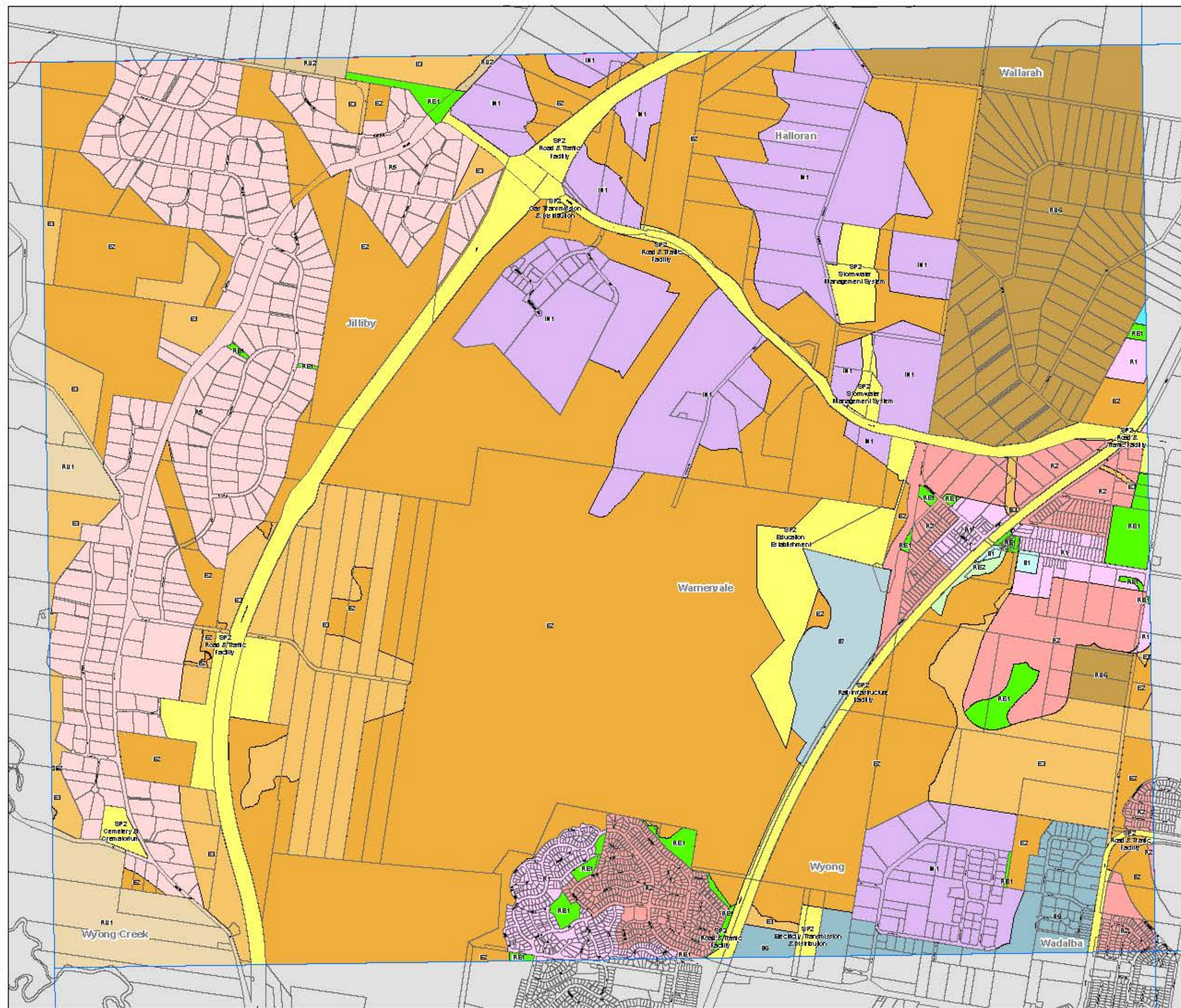


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MGA Zone 56

Map Identification number:
2560_COM_LZN_007A_020_20140512





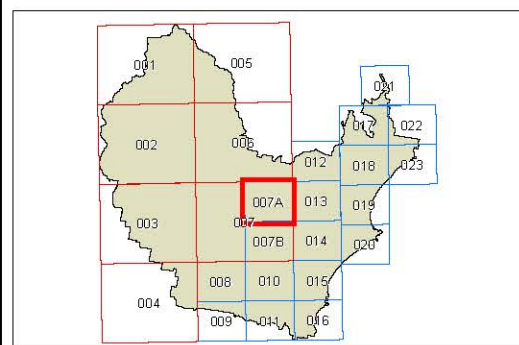
Lot Size Map - Sheet LSZ_007A

Minimum Lot Size (sq m)

G	450
V	2500
Z	2 ha
AA	8 ha
AB1	20 ha
AB2	40 ha

Cadastral

Cadastral 20/07/08 © Land and Property information (LPI)

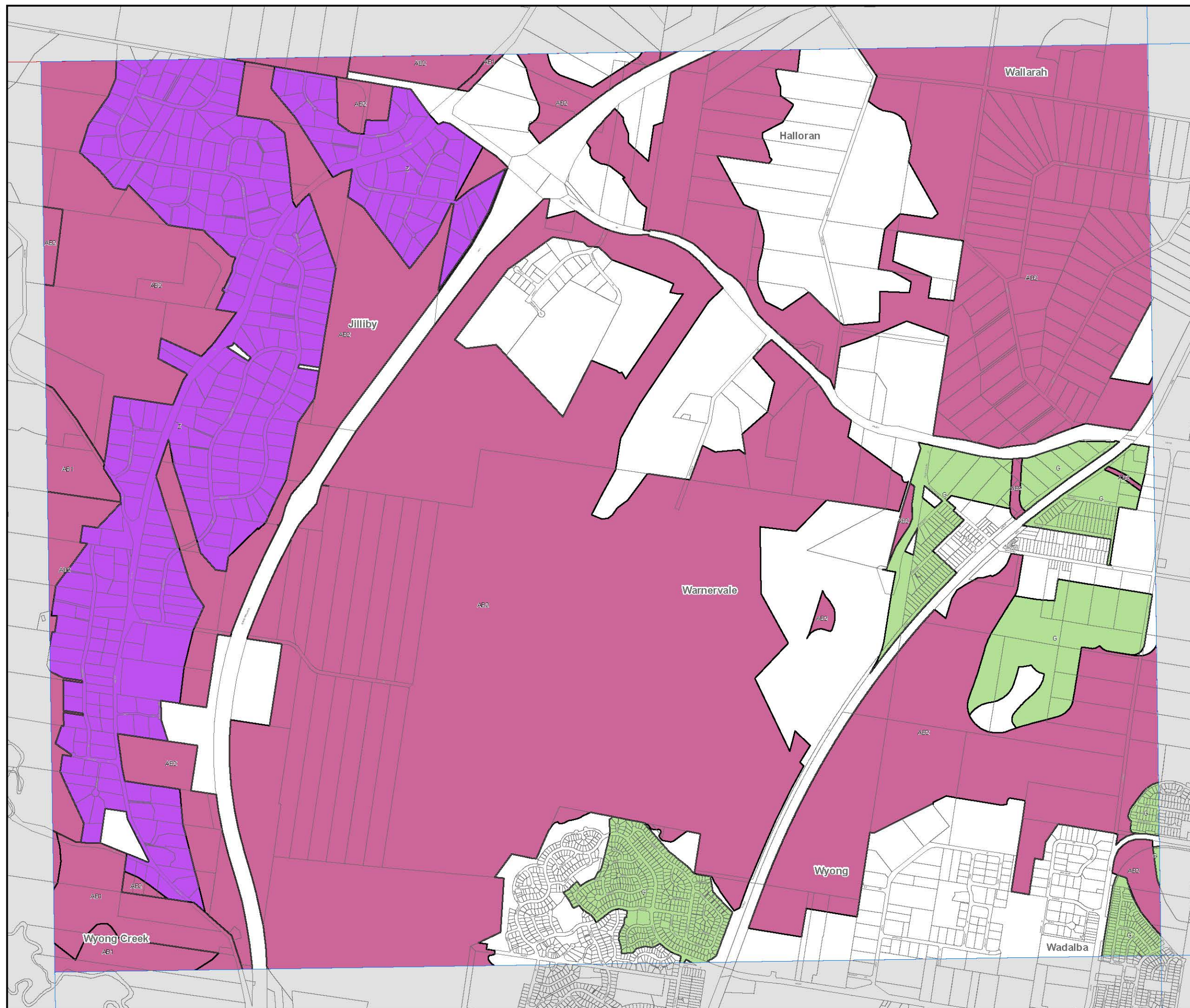


Projection: GDA1994
MGA Zone 56

0 200 400 600 800
Metres

Scale: 1:20,000 @ A3

Map identification number:
8550_COM_LSZ_007A_020_20140512





Wyong
Shire
Council

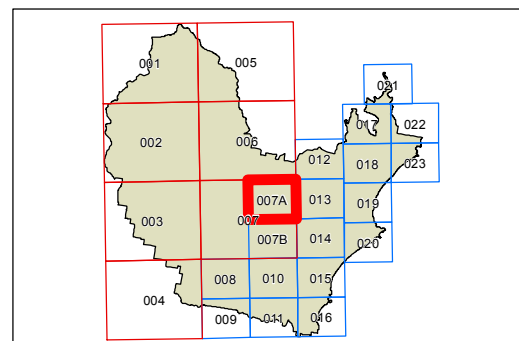
Wyong Local Environmental Plan 2013

Land Reservation Acquisition Map - Sheet LRA_007A

- Carpark (B4)
- Classified road (SP2)
- Environmental conservation (E2)
- Health services facilities (SP2)
- Local open space (RE1)
- Local road (SP2)
- National parks and nature reserves (E1)
- Regional open space (E2)
- Sewer buffer (SP2)
- Stormwater management (E2)
- Stormwater management (E3)
- Stormwater management (SP2)

Cadastral

Cadastral 1/11/2015 © Land and Property Information (LPI)

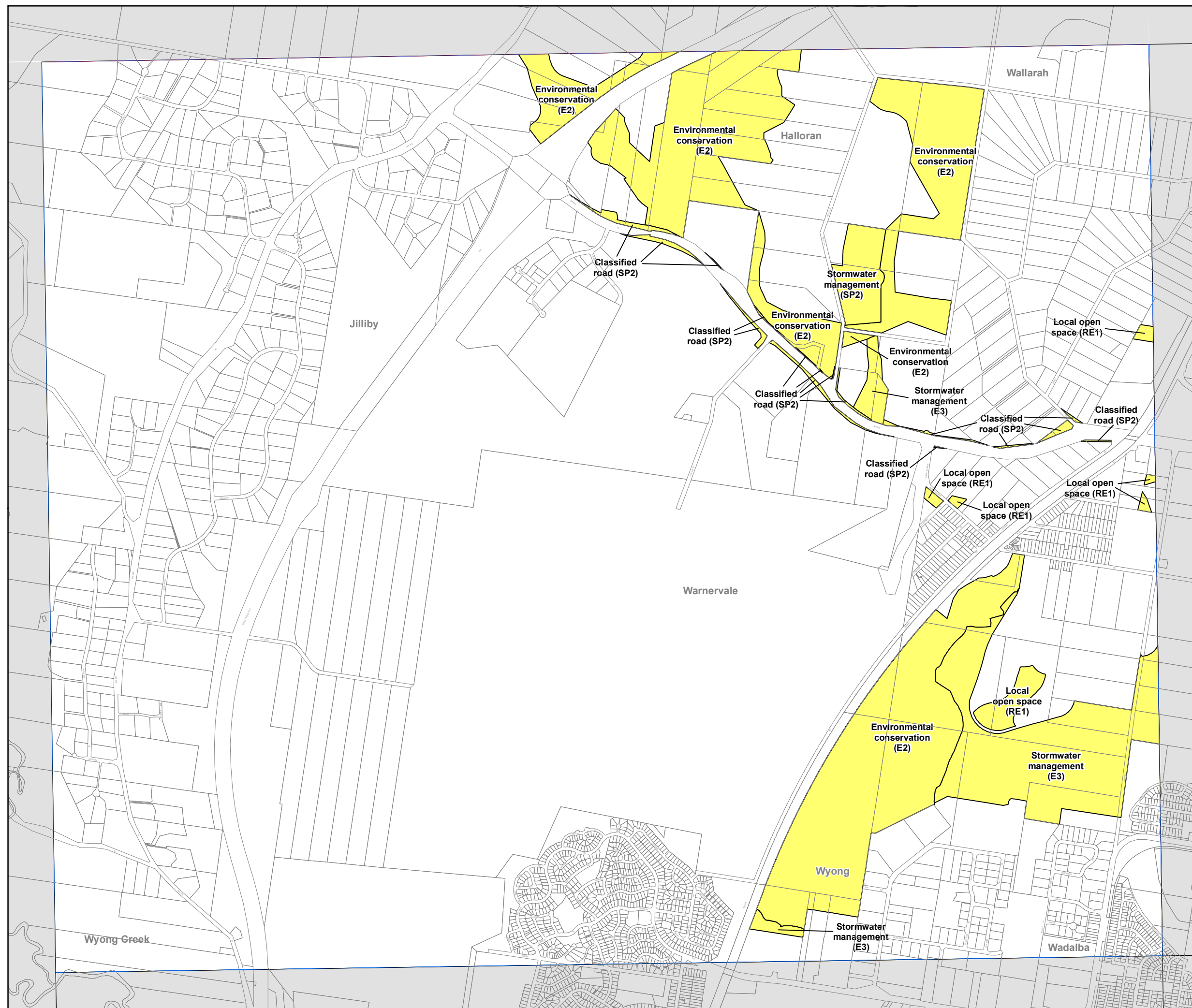


Projection: GDA 1994
MGA Zone 56

0 200 400 600 800
Metres

Scale: 1:20,000 @ A3

Map identification number:
8550_COM_LRA_007A_020_20160117





Wyong
Shire
Council

Wyong Local Environmental Plan 2013

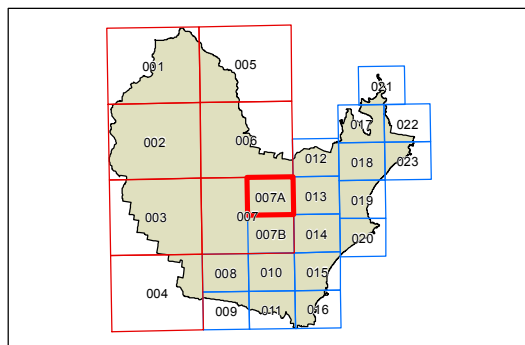
Land Zoning Map - Sheet LZN_007A

Zone

- B1** Neighbourhood Centre
- B2** Local Centre
- B3** Commercial Core
- B4** Mixed Use
- B5** Business Development
- B6** Enterprise Corridor
- B7** Business Park
- E1** National Parks and Nature Reserves
- E2** Environmental Conservation
- E3** Environmental Management
- E4** Environmental Living
- IN1** General Industrial
- IN2** Light Industrial
- R1** General Residential
- R2** Low Density Residential
- R3** Medium Density Residential
- R5** Large Lot Residential
- RE1** Public Recreation
- RE2** Private Recreation
- RU1** Primary Production
- RU2** Rural Landscape
- RU3** Forestry
- RU5** Village
- RU6** Transition
- SP1** Special Activities
- SP2** Infrastructure
- SP3** Tourist
- W1** Natural Waterways
- W2** Recreational Waterways
- DM** Deferred matters

Cadastre

□ Cadastre 1/11/2015 © Land and Property Information (LPI)

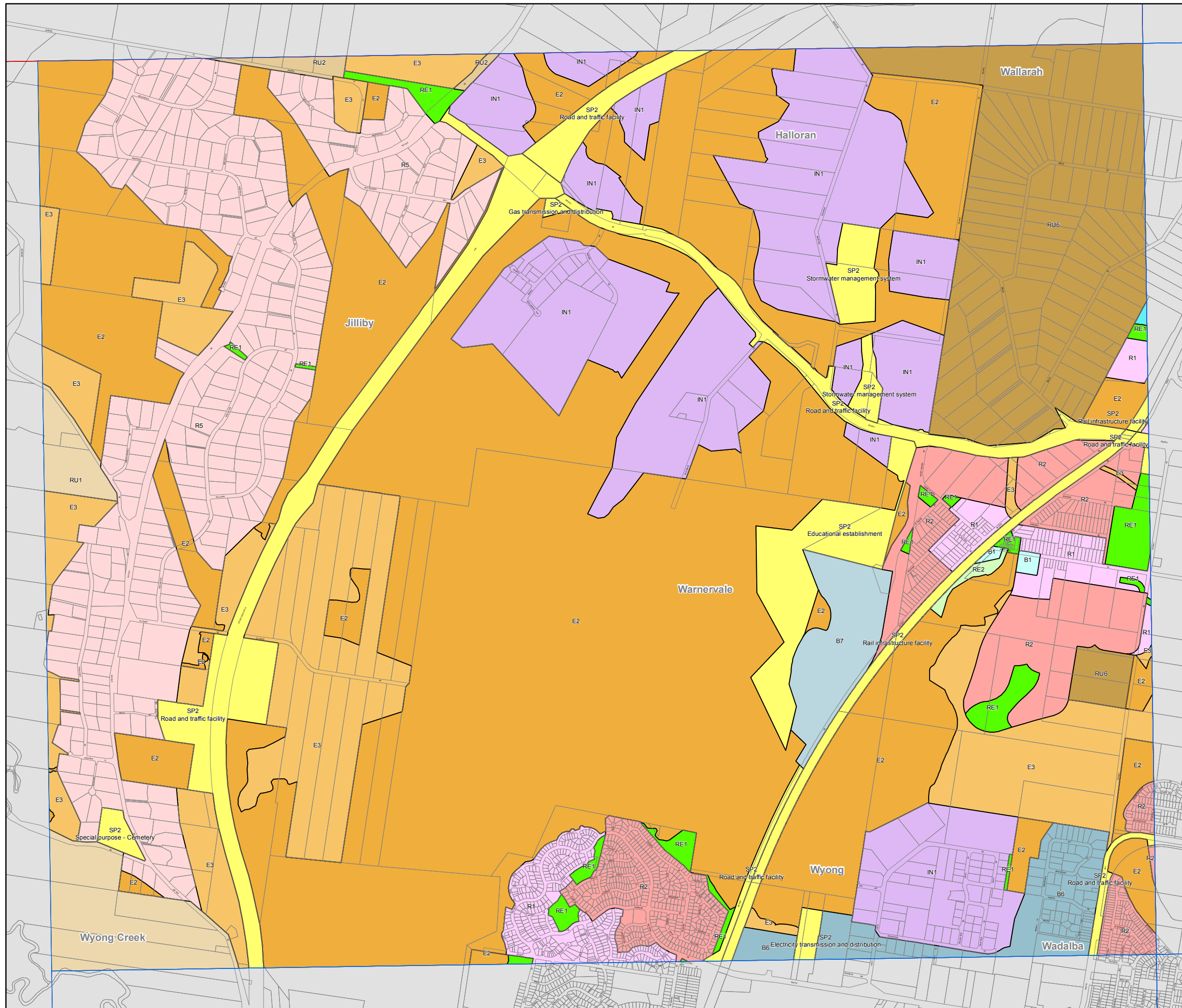


0 200 400 600
Metres

Projection: GDA 1994
MGA Zone 56

Scale: 1:20,000 @ A3

Map identification number:
8550_COM_LZN_007A_020_20160117



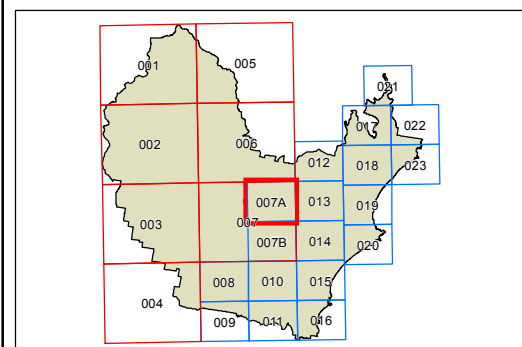
Lot Size Map - Sheet LSZ_007A

Minimum Lot Size

	G	450 m ²
	V	2500 m ²
	W	4000 m ²
	Z	2 ha
	AA	8 ha
	AB1	20 ha
	AB2	40 ha

Cadastre

 Cadastre © 1/11/2015 Land and Property Information (LPI)

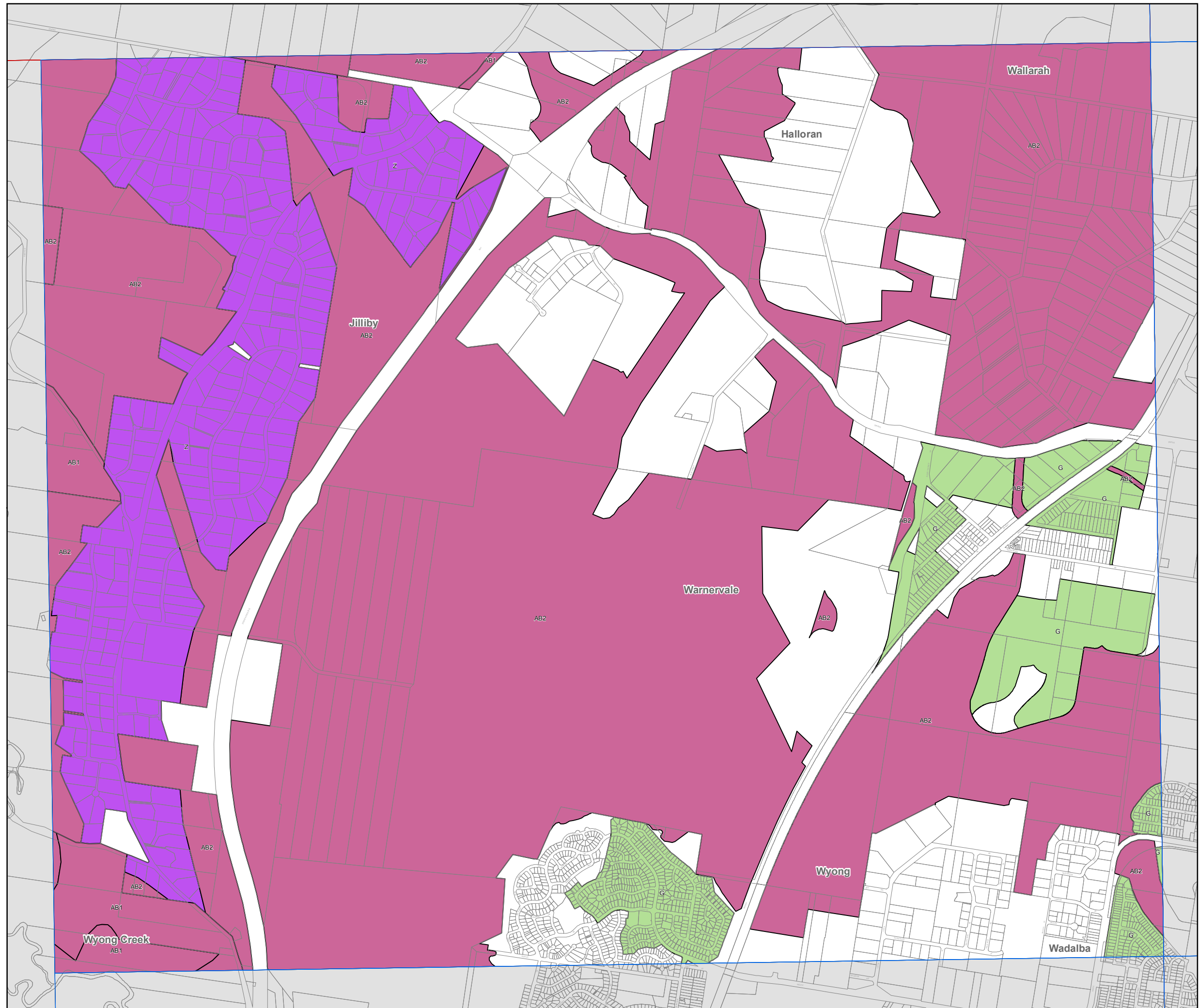


Projection: GDA 1994
MGA Zone 56

0 200 400 600 800
Metres

Scale: 1:20,000 @ A3

Map identification number:
8550_COM_LSZ_007A_020_20160117



05

Studies



Wyong
Shire
Council

Ecological and hydrological review of the proposed Wyong Employment Zone zoning

March, 2008

Hudson Pacific Group



Parsons Brinckerhoff Australia Pty Limited ABN 80 078 004 798

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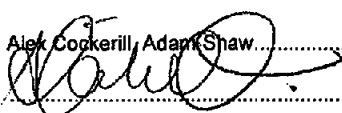
NCSI Certified Quality System ISO 9001

2118844A PR_0201

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Author: Alex Cockerill, Adam Shaw

Signed: 

Reviewer: Selga Harrington

Signed:

Approved by: Brad Sneddon

Signed:

Date: 13 March 2008

Distribution: Hudson Pacific Group, PB File

Contents

	Page Number
1. Introduction	1
2. Methodology	3
2.1 Desk-top analysis	3
2.2 Aerial photograph interpretation	3
2.3 Site inspection	4
3. Summary of Previous Finding	5
3.1 Existing Landscape	5
3.2 Identified Ecological Characteristics	5
3.2.1 <i>Vegetation Communities</i>	6
3.2.2 <i>Threatened Species</i>	10
3.2.3 <i>Fauna Habitats</i>	10
3.2.4 <i>Corridors</i>	10
4. Review of supporting documents	13
4.1 Ecological reports	13
4.1.1 <i>Ecological constraint issues</i>	13
4.1.2 <i>Corridor issues</i>	14
4.2 Hydrology and water management	15
4.2.1 <i>Development-wide issues</i>	15
4.2.2 <i>Local site issues</i>	16
5. Proposed modification to zoning in Draft LEP.....	19
5.1 Modification A	19
5.1.1 <i>Vegetation</i>	19
5.1.2 <i>Threatened species and fauna habitats</i>	20
5.1.3 <i>Corridors</i>	22
5.1.4 <i>Reserve Design and Restoration Management.</i>	22
5.2 Modification B	23
5.3 Modification C	23
5.3.1 <i>Vegetation type and condition</i>	23
5.3.2 <i>Threatened species and fauna habitats</i>	23
5.3.3 <i>Corridors</i>	24
5.3.4 <i>Reserve Design and Restoration Management.</i>	24
5.4 Improve Maintain Assessment of Zoning Modifications	24
6. Key outcomes and recommendations	27
6.1 Ecological recommendation	28
6.2 Hydrological recommendations	28
7. References	30

List of tables

Table 3-1	Vegetation communities and their conservation status	6
Table 5-1:	Improve or maintain assessment of modified zoning	26
Table 6-1	Ecological Comparison of proposed zoning	27

List of figures

Figure 1	Draft LEP zoning of the Hudson Pacific Group site (Wyong Shire Council 2007)	2
Figure 2	Sites Vegetation Communities and Threatened Species Locations	9
Figure 3	Wildlife Corridors	12
Figure 4	Recommended Modified Zoning of Hudson Pacific Group Lands	21

1. Introduction

Parsons Brinckerhoff (PB) was commissioned by Humphrey and Edwards Pty Ltd to complete an expert review of the ecological and hydrological documentation supporting the rezoning of Hudson Pacific Group lands (the subject site) within the Wyong Employment Zone. The subject site encompasses Lot 74 DP 755245, Lot 1 DP 796730, Lot 2 DP 796730, Lot 7 DP 239691 and Lot 67 DP 755245, located within **Precinct 11 & 13** of the Wyong Employment Zone.

Specifically, PB was requested to provide:

A review of the Department of Planning's supporting documentation, with regard to the zoning of Environmental Conservation or Water Management Infrastructure.

The proposed rezoning of the subject site by the Draft Local Environment Plan (LEP) (Wyong Shire Council 2007) is provided in Figure 1.

The Wyong Employment Zone (the study area) is a 700 hectare site comprising a number of planning precincts identified for development and regional employment within the Warnervale Jiliby area. It is proposed that these precincts are rezoned under a draft Local Environment Plan (LEP) (Wyong Shire Council 2007) and be incorporated in Schedule 3 of the State Environmental Planning Policy (Major Projects), 2005. Given the relatively high biodiversity values, the Draft LEP, aims to create a balance between the zoning of employment lands and "significant conservation outcomes" (Murray and Bell 2007). The study area also incorporates a number of significant water courses, wetlands, significant swamp forest vegetation and hydrological systems of importance to the regionally significant Porters Creek Wetlands.

This report will support a submission to the Department of Planning (DoP) in response to the Draft Wyong Employment Zone State Significant Site notification and rezoning.

The format of the report consists of an outline of the methodology utilised within this review in Section 2 and a summary of the ecological characteristics identified by Murray and Bell (2007) within the subject site in Section 3. Section 4 of the report provides a critical review of the relevant reports as they relate to the site's ecological and hydrological characteristics. A recommended modification to the existing Draft LEP zoning for the subject site is provided in Section 5, including a maintain and improve justification of the Bio-certification.



Legend

-  Site boundary
-  Conservation (22.59ha)
-  Industrial (14.40ha)
-  Water Management (8.02ha)

Disclaimer: While all reasonable care has been taken to ensure the information contained on this map is up to date and accurate, no warranty is given that the information contained on this map is free from error or omission. Any reliance placed on such information shall be at the sole risk of the user. Please verify the accuracy of the information prior to using it.

Title:

**Proposed Zoning
(Wyong Council Draft LEP 2007)**

Datum: GDA 1994 MGA Zone 56 Scale: 1:4,500

Project: UPL - WEZ Ecological Review

Drawn: MC Date: 10 Mar, 08

Client: Hudson Pacific Group

Designed: AC Date: 10 Mar, 08

Proj. No: TBA Layout Size: A3

Checked: AC Date: 10 Mar, 08

GIS Proj: J:\Standards\GIS\Newcastle_GIS2\Forms\GIS\Warnervale Ecology

Data Source: PB Fig. No. 1

2. Methodology

This review combined a detailed desktop analysis of relevant expert reports supporting the Draft LEP rezoning, aerial photograph interpretation and limited site inspections within the subject site. Details of the methods used are provided below.

2.1 Desk-top analysis

A desktop analysis of relevant expert reports supporting the proposed Draft LEP rezoning was completed for the subject site. The reports reviewed included:

- *Bio-certification Report – Wyong Employment Zone (WEZ Rezoning)* (Wyong Shire Council, 2007)
- *Ecological Investigations (Version 2) Wyong Employment Zone*, a Report to Wyong Shire Council (Murray & Bell, 2007)
- *Vegetation mapping of the Wyong LGA* (Bell, 2002)
- *Hydrological Report* (Ecological Engineering, 2007)
- *Wyong Shire Councils local corridor mapping* (Payne 2002, Smith 2002)
- *Integrated Water Cycle Management Strategy – Wyong Employment Zone* (Ecological Engineering, November 2006)

A review of the threatened biodiversity recorded previously, or predicted to occur, in the locality was also obtained from various databases as part of the preliminary ecological assessments, including:

- Department of Environment and Climate Change *Atlas of NSW Wildlife* (Department of Environment and Climate Change 2008).
- *BioNet* (Department of Environment and Climate Change, Department of Primary Industries 2008)

Also:

- *DECC survey guidelines* (Department of Environment and Conservation 2004)
- *LHCCREMS survey guidelines* (NPWS 2003)

2.2 Aerial photograph interpretation

Vegetation community boundaries were initially identified using aerial photo interpretation (API). Analysis of the aerial photographs identified past land use practices, disturbance and native vegetation regrowth, changes in vegetation structure and floristics throughout the study area. This provided an initial split of vegetation communities into simple structural and disturbance classifications to be validated during the site inspection.

2.3 Site inspection

A site inspection was carried out by Alex Cockerill on the 4th of March 2008. This inspection included field validation and familiarisation of some of the ecological constraints and vegetation communities identified in the desktop review. Field validation (ground truthing) of the initial vegetation classification identified from API and existing vegetation mapping (Murray and Bell 2007) was undertaken to determine characteristics of the vegetation structure, dominant species, native diversity and condition. The inspection incorporated random meanders survey methods (Cropper 1993) along the transition of vegetation community boundaries and across the site. Incidental observations of fauna habitat features and vegetation condition were also completed.

3. Summary of Previous Finding

3.1 Existing Landscape

The study area is encompassed by Lot 74 DP 755245, Lot 1 DP 796730, Lot 2 DP796730, Lot 7 DP 239691 and Lot 67 DP 755245, located within Precinct 11 & 13 of the WEZ. A large proportion of the subject site has been impacted by a variety of high level disturbances including, industrial development, residential building and landscaping, clearing for agriculture, disused sandstone and clay quarries and large areas of fill emplacement. The site is also bisected by Mountain Road, which runs in a north-south direction through the centre of the site and bound along the south-western boundary by Sparks Road (Figure 1).

The southern and eastern portions of the subject site contains naturally vegetated lands in varying condition classes, a locally significant wetland and Buttonberry Creek. These areas are generally occupied by low lying poorly drained soils associated with the wetland and drainage line. The north-eastern corner and south-eastern boundary are occupied by well drained sandstone derived soils and high quality native vegetation. The majority of the western portion and remaining areas of the site are occupied by highly disturbed industrial land, fill, cleared grasslands and quarries.

3.2 Identified Ecological Characteristics

The ecological characteristics of the study area have been investigated in detail by Murray & Bell (2007) in a report to Wyong Shire Council. This report utilised a combination of the survey results from previous investigation on the Warnervale Business Park (Murray & Bell 2004), targeted surveys as part of this study within Precinct 14 and previous ecological studies of the Precinct 11 & 13 by SKM (2004).

Murray & Bell (2007) specifically investigated:

- the type condition and conservation value of natural vegetation communities
- the presence of threatened species, endangered populations and endangered ecological communities listed under Federal (*Environmental Protection and Biodiversity Conservation Act 1999*) and State (*Threatened Species Conservation Act 1995*) legislation
- fauna habitat and corridor values.

Each of these ecological values, as they relate to the subject site is discussed in detail below.

3.2.1 Vegetation Communities

Murray & Bell (2007) identified six vegetation communities and cleared land within the study area. Four of these communities correspond with natural vegetation communities while two are identified as highly disturbed or regrowth communities. A summary table of each of the communities, their extent within the site and conservation status is provided in Table 3-1.

Table 3-1 Vegetation communities and their conservation status

Map unit ¹	Vegetation Community Name	Conservation Status	Fauna Habitats	Extent (Ha)	Extent within WEZ (Ha)
15b	Alluvial Footslopes Redgum Forest	Endangered Ecological Community (EEC), River flat Eucalypt Forest on Coastal Floodplains	Open Forest	4.98	7.7
15xr	Alluvial Footslopes Redgum Forest (Canopy only)	Endangered Ecological Community (EEC), River flat Eucalypt Forest on Coastal Floodplains	Open Forest (Canopy only)	0.36	2.01
18a	Alluvial Floodplain Swamp Paperbark Thicket	Endangered Ecological Community (EEC), Swamp Sclerophyll Forest on Coastal Floodplain	Open Forest	4.19	4.46
20a	Alluvial Floodplain Shrub Swamp Forest	Endangered Ecological Community (EEC), Swamp Sclerophyll Forest on Coastal Floodplain	Swamp Forest	3.68	67.65
20f	Alluvial Floodplain Shrub Swamp Forest (Sedge Scrub)	Endangered Ecological Community (EEC), Swamp Sclerophyll Forest on Coastal Floodplain	Wet Heath	3.46	21.22
28	Narrabeen Buttonderry Footslopes Forest	Adequately Conserved- Not threatened	Open Forest	6.09	7.7
Xs	Unspecified Rerowth	Not Applicable	Regrowth	1.25	22.15
Cleared land	Cleared land	Not Applicable	Not Applicable	22.6	NA

Notes: 1) Murray and Bell (2007)

The distribution of these communities within the study area, as mapped by Murray and Bell (2007), has been provided in Figure 2, while a description of each of the vegetation communities is provided below.

MU 15b: Alluvial Footslopes Redgum Forest

Within Wyong LGA, Alluvial Footslopes Redgum Forest is highly restricted and has suffered from fragmentation and clearing, with estimates of 86% loss (Bell 2002). Within the regional classification of NPWS (2000), this community falls into the Wyong Paperbark Swamp Forest (MU43). Alluvial Footslopes Redgum Forest can be considered part of the endangered ecological community (EEC), River Flat Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South-East Corner bioregions listed under the Threatened Species Conservation Act 1995.

MU 18a: Alluvial Floodplain Swamp Paperbark Thicket (floodplain variant)

Small areas of Alluvial Floodplain Swamp Paperbark Thicket occur in the disused brickworks off Mountain Road. It is likely that these areas are the result of previous disturbance, where Swamp Paperbark (*Melaleuca ericifolia*) has successfully colonised. Dense thickets of this vegetation occur in the wettest parts of the drainage line, together with sedges such as *Lepidosperma quadrangulatum* and *Schoenus brevifolius*. Approximately 400 ha have been mapped within Wyong LGA (Bell 2002) and the equivalent regional vegetation community is MU Qa13 (NPWS 2000). This community can be considered part of the EEC, Swamp Sclerophyll Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South-East Corner bioregions listed under the Threatened Species Conservation Act 1995..

MU 20: Alluvial Floodplain Shrub Swamp Forest

Alluvial Floodplain Shrub Swamp Forest occurs at two main locations in the study area. In the centre of the study area, the broad drainage line (a tributary of Buttonderry Creek) supports vegetation variously dominated by *Eucalyptus amplifolia* subsp. *amplifolia*, *Eucalyptus robusta*, *Angophora floribunda* and *Eucalyptus resinifera*, with a sub-canopy of *Melaleuca linariifolia* and *Melaleuca decora*. The understorey is characterised by a dense layer of sedges and grasses, and a scattered shrub layer of *Leptospermum juniperinum*, *Gahnia clarkei*, and juvenile *Melaleuca linariifolia* and *Eucalyptus* species. Alluvial Floodplain Shrub Swamp Forest, as described in Bell (2002), is highly variable depending on depth to water table, soil type and other factors. Estimates of 67% loss have been made for this vegetation type (Bell 2002). Within the regional classification of NPWS (2000), this community falls into either the Swamp Mahogany – Paperbark Swamp Forest (MU37) or the Wyong Paperbark Swamp Forest (MU43). This community can be considered part of the EEC, Swamp Sclerophyll Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South-East Corner bioregions listed under the Threatened Species Conservation Act 1995.

MU 20f: Alluvial Floodplain Shrub Swamp Forest (Sedge-scrub variant)

Sizeable areas of the southern portion of the study area, on the fringes of Porters Creek Wetland, support a wet heath/ sedgeland. Other similar areas occur along the north-south tributary of Buttonderry Creek. This vegetation type is highly restricted in the region, being present only within the Porters Creek catchment, although related vegetation occurs in the impeded swamps around Gwandalan to the north (Bell in prog.). Within the Wyong LGA

vegetation mapping, this vegetation type was included as a variant (MU20f) of the Alluvial Floodplain Shrub Swamp Forest because only limited data was available at that time (Bell 2002). Subsequent data collection and analysis has established this variant as a new community (a distinct wet heath) in its own right, however for the sake of consistency it is kept within MU20f for this report. The floristic composition in this community is variable, but typically includes a dominance of *Xanthorrhoea fulva*, *Schoenus brevifolius*, *Melaleuca thymifolia* and *Baumea articulata*, with a scattered emergent layer of *Melaleuca sieberi* or *Melaleuca linariifolia*.

MU 28: Narrabeen Buttonderry Footslopes Forest

Occurring along the ridgeline in the south-east and north-east corner and in scattered locations adjoining Mountain road. This community is characterised by *Angophora costata*, *Syncarpia glomulifera* subsp. *glomulifera*, *Eucalyptus umbra*, *Melaleuca decora*, and *Eucalyptus fibrosa* in the canopy. Understorey vegetation includes such species as *Banksia spinulosa*, *Melaleuca nodosa*, *Bossiaea obcordata*, *Epacris pulchella*, *Leptospermum trinervium*, *Goodenia heterophylla*, *Lomandra obliqua*, *Themeda australis*, and *Entolasia stricta*. In some areas, soils are notably more sandstone-based than others, and this is reflected in the local understorey composition (eg: *Banksia spinulosa*, *Lomandra obliqua*, *Grevillea sericea*, *Comesperma ericinum* are present in sandy soils). East of the disused brickworks, a small stand of *Eucalyptus haemastoma* and some *Angophora inopina* are present.

Within the context of regional vegetation studies, this vegetation community may be considered as part of the Coastal Plains Scribbly Gum Woodland (MU31: NPWS 2000). Within Wyong Shire, it has been estimated that 47% of the community has been cleared (Bell 2002).



Legend

- | | |
|---|---|
| <ul style="list-style-type: none"> Site boundary Endangered Ecological Communities - River Flat Eucalypt Forest on Coastal Floodplains Swamp Sclerophyll Forest on Coastal Floodplains * Threatened Species * Wallum Froglet ▲ Angophora inopina | <ul style="list-style-type: none"> 15b 15kR 18a 20a 20f 28 Xs |
|---|---|

*Source: Murray and Best 2007

Disclaimer: While all reasonable care has been taken to ensure the information contained on this map is up to date and accurate, no warranty is given that the information contained on this map is free from error or omission. Any reliance placed on such information shall be at the sole risk of the user. Please verify the accuracy of the information prior to using it.

Title:

**Vegetation Communities
and Threatened Species**

Project: UPL - WEZ Ecological Review

Client: Hudson Pacific Group

Proj. No. TBA Layout Size: **A3**

GIS Proj: /Users/parsons/Projects/0127/eng/015/Warnervale Ecology

Datum: GDA 1994 MGA Zone 56 Scale: 1:4,500

Drawn: MC Date: 10 Mar, 08

Designed: AC Date: 10 Mar, 08

Checked: AC Date: 10 Mar, 08

Data Source: PB Fig. No. 2

3.2.2 Threatened Species

Detailed targeted threatened species surveys have been completed throughout the study area over five years (Murray and Bell 2007). These were generally completed in accordance with the Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities (Working Draft) (Department of Environment and Conservation 2004) and Guidelines for flora and fauna surveys Lower Hunter and Central Coast Regional Environmental Management Strategy (NPWS 2003). Within the study area these surveys located one threatened fauna species, Wallum Froglet and one threatened flora species, *Angophora inopina*. Each of these species is discussed below;

Angophora inopina

This species is currently listed as Vulnerable under both state and federal legislation. Four separate populations were identified within the study area, the largest of which, occurring within Precinct 14, contained 50-100 plants. All but the two small stands of this species observed within the north-eastern corner of the study area have been identified for retention within the proposed conservation zoning of the WEZ. The distribution of this species within the subject site is provided in Figure 2. This species and its habitats have been well represented within the local conservation lands and are unlikely to be significantly impacted by the proposed WEZ rezoning (Murray and Bell 2007).

Wallum Froglet

This species has been recorded in large number throughout the low lying poorly drained areas of the WEZ, generally associated with the swamp forest vegetation habitats. Within the subject site this species was recorded from the wetland areas in the east, currently identified for retention. The distribution of this species within the subject site is provided in Figure 2. This species and its habitats have been well represented within the local conservation lands and Porter Creek wetland to the south and are unlikely to be significantly impacted by the proposed WEZ rezoning (Murray and Bell 2007).

3.2.3 Fauna Habitats

The Fauna Habitats observed within the WEZ study area were generally split into broad vegetation community types. Within the subject site five fauna habitats were identified (refer to Table 2-1), these include Open Forest, Swamp Forest, Regrowth Forest Woodland, Wet Heath and Water.

The proposed Draft LEP will retain the majority of the sites Swamp Forest and Wet Heath habitats, however, the majority of the "High Quality" Open Forest Habitat has been identified for industrial development.

3.2.4 Corridors

The study area has been heavily constrained by the location of two regional Wildlife corridors. The southern vegetated lands adjoining Sparks Road and associated with Buttonderry Creek have been identified as part of a major regional corridor within the WEZ. This corridor links the Porters Creek wetlands in the south to larger remnants located in the Wallarah Creek Catchments to the north. A secondary corridor is also located in the eastern portion of the

site. This corridor crosses Mountain Road, passes east through the wetland and north across the highly disturbed sandstone quarry. Figure 3 depicts the local corridors within the subject site and the study area while a detailed discussion of the identification of these corridors is provided in Section 4.1.2.



Legend

- | | |
|---------------------------|------------------------|
| Site boundary | Proposed Zoning |
| Fencing | Conservation |
| Wildlife corridors | Industrial |
| Major Corridor | Water Management |
| Interim Major Corridor | |
| Secondary Corridor | |

Disclaimer: While all reasonable care has been taken to ensure the information contained on this map is up to date and accurate, no warranty is given that the information contained on this map is free from error or omission. Any reliance placed on such information shall be at the sole risk of the user. Please verify the accuracy of the information prior to using it.

Title:

**Local and Regional
Wildlife Corridors**

Datum: GDA 1994 MGA Zone 56 Scale: 1:15,000

Project: UPL - WEZ Ecological Review

Drawn: MC Date: 18 Mar, 08

Client: Hudson Pacific Group

Designed: AC Date: 18 Mar, 08

Proj. No. TBA Layout Size: A3

Checked: AC Date: 18 Mar, 08

GIS Proj: J:\Standards\GIS\wezc\wezc_GIS\Temp\GIS\Documents\Ecology

Data Source: PB Fig. No. 3

4. Review of supporting documents

4.1 Ecological reports

The ecological characteristics of the study area have been thoroughly investigated by a range of studies over the last 5 years. These studies have been incorporated in the Ecological Investigations report prepared by Murray and Bell (2007). PB detailed review of this report identified that the investigations have been generally completed in accordance with industry standard best practise ecological survey and assessment requirements, corresponding with the Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities (Working Draft) (Department of Environment and Conservation 2004) and survey guidelines for flora and fauna surveys Lower Hunter and Central Coast Regional Environmental Management Strategy (NPWS 2003).

Despite adequate surveys being completed (Murray and Bell 2007) a number of minor issues have been identified in relation to the ecological constraints identified within the site and the proposed wildlife corridors. These are discussed below.

4.1.1 Ecological constraint issues

A number of minor issues with this report have been identified in relation to the ecological constraints mapping and characteristics for the subject site. These are generally associated with the resolution of the constraints mapping. While the surveys completed are more than adequate for a large scale ecological investigation such as the WEZ, surveys and assessments of this nature are often subject to anomalies in community descriptions, habitat and vegetation condition classes and vegetation boundaries when investigated at finer site specific scales.

During the field investigations of the study area, PB identified a number of minor discrepancies in the extent and condition of the vegetation communities and fauna habitat of the subject site. These discrepancies included;

- Inaccurate vegetation community boundaries in the south-west of the site, particularly, the extent of the Xs regrowth community are greater than have been mapped and should incorporate more of the 20a and 15b communities.
- Incorrect identification of the map unit 28 in the southern portion of the site and areas of the map unit 20a community which are more representative of Map unit 15b and 15xr.

These inspections also identified a number of highly disturbed areas currently proposed for conservation within the Draft LEP that are unlikely to ever be viable or suitable of restoration and rehabilitation management activities. These areas were most notably associated with the existing fill and industrial development in the south-western corner of the site and cleared sandstone quarry in the north-eastern corner. Both of these areas are identified for restoration as part of the corridor linkages within the site. The proposed modifications to the Draft LEP zoning identified in Section 5 take into consideration these minor alterations resulting from the observations during the site inspections.

4.1.2 Corridor issues

A number of significant issues with the proposed route selection and preferred major regional wildlife corridor network within the WEZ area have been identified.

The first relates to the identification and location of the primary regional corridor. It is accepted that an important regional corridor is required within the WEZ lands for the linkage of Porters Creek Wetlands in the south with the extensive natural areas located within the Wallarah creek catchment in the north. It is also acknowledged that this corridor is the only major north-south linkage east of the F3 freeway in the region. The preferred Primary corridor is currently located east of the Warnervale Airport lands in the south of the study area. It subsequently crosses Sparks road at the junction with Mountain road and follow Buttonderry creek west and then north. The approximate location of this corridor is identified in Figure 3.

This location of this corridor within the central portions of Precinct 11 & 13 and south of Sparks road incorporates a number of significant ecological attributes, however the required 600 metre link of this corridor along the northern boundary of the Warnervale Airport Precinct cleared lands and Buttonderry creek is highly questionable for the following reasons:

- Unviable/Unpractical for restoration or rehabilitation

This stretch of the corridor requires significant restoration of large cleared areas containing only highly degraded exotic grasslands, compacted fill, landscaped gardens, roads and residential dwellings. The long term success and viability of restoring areas of such highly degraded vegetation, that provides functional fauna habitat values is unlikely.

- High Edge to Area ratio and poor design

While it is accepted that any corridor within an urban environment will have a high edge to area ratio, the location of this corridor adjoining industrial development to the north and running parallel with approximately 500 metres of Sparks road is likely to significantly impact the long term viability of this option. Particularly, given that this road is a major arterial transport route within the central coast and likely to be flagged for future upgrade.

The location of the adjoining road is also likely to significantly increase the spread of weeds and edge effects along this stretch of the corridor and increase the potential for vehicle fatalities to resident fauna species.

- Existing limiting Bottle neck of <100 metres

This preferred option has a limiting bottle neck within the corridor of <100metres between the existing industrial development to the north and Sparks road in the south. This is likely to be further reduced in the future through the expansion and upgrade of Sparks Road. This bottle neck falls well short of the minimum required corridor width of 250 metres identified by Smith (2002) for major regional corridors.

An alternative option of a major corridor north-south link within the WEZ was identified as an "Interim" corridor by Murray and Bell (2007) and is located between the Warnervale Airport Precinct and Warnervale Business Park Precinct.

This corridor was not identified by Murray and Bell (2007) as the preferred option due to the following reasoning:

- presence of only regrowth open forest/ woodland habitat with limited essential habitat attributes for several fauna groups
- obligate hollow dependent fauna have limited roost and nesting sites
- this resource will not develop naturally for many decades
- not providing habitat attributes for resident fauna
- proximity to existing and proposed developments and likely degradation of habitats
- very high maintenance

On reviewing the Ecological Investigation (Murray and Bell 2007) it is PB's view that the justification for choosing option 1 over option 2, based on the above reasoning is unsubstantiated.

The interim corridor, if located along the western boundary of the existing industrial development of Warnervale Business Park Precinct, can provide at least 100 metres of relatively high quality vegetation comprising a mixture of Open Forest, Swamp Forest communities and high quality habitats supported by an additional width of 150 metres of regrowth open forest / woodland habitat with potential for natural regeneration. This would potentially allow for a 250 metre wide corridor for the entire length of the study area.

This potential alternative route would also reduce the edge effects and impacts from vehicles to resident fauna species by significantly reducing the corridors boundary with Sparks Road.

This Interim corridor has been identified by Murray and Bell (2007) as an interim measure, to ensure connectivity until the Regional Corridor Strategy for Wyong Shire is implemented. However, the report provides no timeline for the interim period, no performance review or criteria for identifying if the Regional Corridor Strategy for Wyong Shire has been successfully implemented, or requirements on how this strategy will be implemented.

If the preferred Primary corridor is supported these issues must be dealt with prior to the rezoning of the WEZ lands.

4.2 Hydrology and water management

PB has reviewed relevant sections of the Integrated Water Cycle Management Strategy – Wyong Employment Zone (Ecological Engineering, November 2006) herein referred to as the "Strategy". The following discussion relates to issues with the proposed Strategy on a development-wide (WEZ) scale, as well as local-issues on the Hudson Pacific Group site.

4.2.1 Development-wide issues

There is little doubt that management of stormwater from the WEZ is fundamental to assessment of the development proposal due to the sensitivity of downstream wetlands. The proposed Strategy may provide one possible mechanism for achieving the required outcomes. However, if not already undertaken, it would be worthwhile investigating alternatives. As demonstrated in many residential and industrial estates in NSW and Australia, there are a number of ways in which stormwater management objectives can be achieved. The proposed Strategy for WEZ has considered extensive use of constructed

wetlands for water quality treatment, local storages for stormwater detention and retention, and employs a number of pump stations.

Constructed wetlands require significant land uptake, beside from the capital investment and ongoing maintenance costs particularly during the establishment phases. Pump stations also require significant capital expenditure as well as high ongoing operation and maintenance costs. This has no doubt become apparent at subsequent stages of the development process when cost estimates have been produced.

The following might be considered during a review of the proposed IWCMS:

- The balance between regional and local water storage should be reviewed. This may result in future development outside the subject site being responsible for more of their own water, thereby reducing the burden on Hudson Pacific Management of stormwater on each lot is likely to result in smaller wetlands, or alternative wetland substitutes that are more responsive to the individual circumstances of the development sites, and also a lower maintenance responsibility for Council. Council's residual management responsibility may be reduced to cater for road areas only. The need for public pump stations may also be reduced in this arrangement. Policy and implementation issues surrounding this method of stormwater management, given that there will be a variety of different types of industries with varying requirements, could be resolved during more detailed development of the Strategy.
- Precinct (catchment) scale water sharing plans and local storage and re-use could be considered to supplement on-lot storage. Given that each catchment consists of a number of larger lots that could be subdivided into smaller business parks in future, this may also be a reasonable alternative.
- Increased opportunity for consultation with affected landowners, who are committed to delivering appropriate environmental outcomes, but also be cognisant of the broader economic and social implications of the strategy. To this end, the current strategy is too heavily weighted towards environmental outcomes, and is unbalanced in its approach to the triple bottom line.

4.2.2 Local site issues

There are a number of local site issues relating to the study area, assuming that the proposed Strategy proceeds in concept. These issues relate to three main components of the Strategy in Catchments I and H, viz:

- regional storage
- local storage
- arrangement of wetlands in Catchment "I"
- proposed wetland in Catchment "H"

The following discussion is based on a number of figures and sections from the Strategy report, with references provided where appropriate.

Regional storage

The "Brickworks" regional storage reservoir is described as a critical component of the Strategy. However, the proposed regional storage is located on private property. The landowner of the subject property, Hudson Pacific Group, has indicated a willingness to negotiate release of a portion of the property for construction of regional water management structures if the proposed Strategy were to proceed in concept. However, the possibility of increasing storage on upstream allotments should be investigated. This could potentially result in a reduced burden for Hudson Pacific Group, as well as shifting the responsibility for maintenance of the pumping infrastructure to other private landowners, rather than burdening Council.

It should be noted that Hudson Pacific Group were not consulted during the preparation of the Strategy and were not given an opportunity to provide input to the decision making process, particularly in relation to the portions of their land that they would be willing to sell for the greater benefit of the study area.

Notwithstanding the above, the Strategy sets aside approximately 1.5ha of Hudson Pacific Group's land for regional storage, specifically sited in the former clay pits. However, there are alternative strategies available to achieve a reasonable storage volume, whilst making more efficient use of available land area.

One possible strategy might include partial filling of the existing reservoir, and providing an equivalent volume of excavation to the east and north within the proposed modified water management zone identified as Modification B in Section 5 this report. This preferred arrangement would result in an additional 100m offset of industrial zoning (Figure 4).

Note that the areas nominated as "local storage" and "peripheral wetlands" would need to be adjusted or removed, discussed further below.

Local Storages

Immediately upstream of the "Brickworks" regional storage, and located on the subject site, 3.0ha of land has been provided for capture of local runoff from Catchment I, Catchment H, and the external catchment. The local storage area comprises a number of key elements (pp108), including:

- active storage, to "provide temporary storage of waters in excess of that required to preserve the hydrologic objectives of the adjacent wetlands"
- stream stability retardation storage, to "preserve the pre-development channel forming flows within Buttonderry Creek"
- permanent pool, to "minimise the risk of water quality related problems, such as algal blooms". The volume of the permanent pool is proposed for recirculation through the adjacent proposed constructed wetlands.

The active storage provided in this location is approximately 19,000m³ (Ecological Engineering, November 2006; p88), which is by far the largest active storage volume of any of the proposed active storages. It appears that the required storage may be excessive, and doubling up of the storage at a local and then regional level seems to have occurred. This results in a net inefficiency of storage that is impacting on Hudson Pacific Group's developable yield. Given that the regional storage would provide for detention of flows from

the local drainage catchments, there is an opportunity to review the volume of active storage provided in this location. Even if the permanent pool volume is required for recirculation to reduce the risk of algal bloom within the regional storage, there may still be an opportunity to substantially reduce the footprint of these local storages compared to those shown on the figures in the Strategy. This could provide further area for expansion of the existing ponds to provide the required volume of regional storage.

Arrangement of Wetlands in Catchment "I"

The total area of Catchment I is 66.4ha (Ecological Engineering, November 2006; Table 5.2, P69), with development area of 49.6ha. The proposed wetland area is 3.4ha, calculated by an assumption of 4% of the contributing catchment area. Firstly, the actual required wetland sizing is based on a range of hydrologic parameters as well as nutrient loadings, and 4% can only be used as a guide for high-level strategies. Secondly, even if 4% is adopted, the area of wetland as shown on Figure 5.13 (p103) appears grossly out of proportion compared to the size of contributing catchments as shown. There may be an opportunity to review the actual footprint of the wetland required with (a) detailed analysis of wetland area required and (b) detailed analysis of local topography and feasibility of the proposed arrangement, and (c) drawing the final wetland footprint to scale.

The existing 7G wetland currently receives flows from the upstream external catchment. Figure 5.13 (p103) shows an additional proposed constructed wetland outside of the WEZ. A proportion of the outflows from the proposed external constructed wetland will be directed to the existing 7G wetland. Approximately 1.25ha of peripheral wetland is proposed on the Hudson Pacific Group Site, and appears to coincide with provision of the "local storage" for Catchment H and I, discussed earlier. The peripheral wetland will receive flows in excess of those required for hydrologic maintenance of the 7G wetland by means of a diversion structure. Given that the external catchment is already being treated by the proposed external wetland, and stormwater from Catchments I and H will be treated by the 3.4ha wetland discussed in the previous paragraph, we query whether the peripheral wetland is actually required to achieve the objectives of the IWCMS. This could provide further area for expansion of the existing ponds to provide the required volume of regional storage.

Proposed Wetland in Catchment "H"

The location of constructed wetlands in Catchment "H" shown in Figure 5.3 of the IWCMS (p67) will be confirmed with Council and land owners. The effective drainage area of Catchment "H" is almost entirely composed of the subject site. Stormwater management from the subject site would be subject to a detailed stormwater management strategy in the future, which may also consider alternative treatment methods to constructed wetlands. Accordingly, it is not considered reasonable to impose a Council maintained wetland on subject site, and thus the implied restriction on land use is not appropriate or reasonable at this time.

5. Proposed modification to zoning in Draft LEP

PB acknowledge that the proposed conservation zoning within the subject site currently incorporates a number of significant environmental characteristics, however there are also a number of areas that are clearly of limited ecological value and should be reconsidered based on this review. This analysis may provide opportunities for alteration to the proposed zonings for better outcomes, in terms of useable envelopes for industrial land use as well as conservation. The existing proposed conservation zoning within the subject site are provided in Figure 1.

Three proposed changes in the conservation and industrial zoning are recommended as part of this review. These changes are based site inspections conducted by PB and Murray and Bell (2007) on vegetation community significance and condition, habitat value, corridor function/viability, landuse management and reserve design. The three modifications are identified as modification A, B and C and have been depicted in Figure 4. Details of these modifications are provided below.

5.1 Modification A

The existing conservation zoning of the Draft LEP incorporates a triangle of vegetation within the western portion of the subject site that currently encroaches significantly into the industrial zoning and disturbed areas. This area also incorporates part of the site currently utilised for industrial purposes. This vegetation has not been identified as being of any ecological significance by Murray and Bell (2007).

Modification A will result in a minor alteration in shape and increase the size of industrial zoned lands within the subject site into a more usable and viable building envelope. These alterations will also provide an improvement in the edge area ratio of the conservation zoned lands and correspond with realistic areas for rehabilitation and restoration. The area of Modification A is provided in Figure 4

The ecological characteristics of the area identified as Modification A are provided below;

5.1.1 Vegetation

This area of land zoned by the Draft LEP for conservation is dominated by highly disturbed vegetation of limited conservation value incorporating approximately 0.95 ha of disturbed regrowth, 1.5 ha of cleared land. The remaining 0.7 ha of this area is occupied by MU 28 Open forest, which is widespread and adequately conserved within the study area and central coast region. This area also includes 0.3 ha of the River Flat Forest on Coastal Floodplains endangered ecological community and has been identified for removal. These small areas are subject to considerable existing disturbance and are restricted to the outer margins of the larger remnant in the south. Over 90% of the remaining extent of River Flat Forest on Coastal Floodplains endangered ecological community is retained on site (Murray and Bell 2007).

5.1.2 Threatened species and fauna habitats

No threatened species were recorded and it provides only marginal potential habitat for locally occurring threatened species. No habitat trees were recorded in this area and it was attributed as having either no ecological constraint or only "lower quality habitat" ranking in the summary of potential ecological constraints to development by Murray and Bell (2007).



Legend

- | | |
|---------------------------|----------------|
| Site boundary | Modification A |
| Conservation (20.91ha) | Modification B |
| Conservation (offsite) | Modification C |
| Industrial (18.01ha) | |
| Water Management (5.59ha) | |

Disclaimer: While all reasonable care has been taken to ensure the information contained on this map is up to date and accurate, no warranty is given that the information contained on this map is free from error or omission. Any reliance placed on such information shall be at the sole risk of the user. Please verify the accuracy of the information prior to using it.

Title:

**Proposed Zoning
(PB 2008)**

Datum: GDA 1994 MGA Zone 56 Scale: 1:4,500

Project: UPL - WEZ Ecological Review

Drawn: MC Date: 11 Mar, 08

Client: Hudson Pacific Group

Designed: AC Date: 11 Mar, 08

Proj. No. TBA Layout Size: A3

Checked: AC Date: 11 Mar, 08

SIS Proj J:\standards\GIS\Warnervale_GASZC\emp\GIS\Warnervale Ecology

Data Source: PB Fig. No. 4

This ranking gave detailed consideration to a list of ecological criteria including:

- extent of vegetation cover
- condition of vegetation and potential for regeneration of disturbed areas
- conservation significance of vegetation
- habitat values
- connectivity
- presence of flora or fauna of conservation significance.

When considering the following:

"The draft LEP for the WEZ was generally based on the conservation of areas of High habitat qualities, maintaining connectivity of habitats and protecting areas of particular threatened species values" (Bell and Murray 2007)

The inclusion of this area within the conservation zoning by the Draft LEP is not supported by the ecological studies of the subject site.

5.1.3 Corridors

The secondary corridor that runs along Mountain road and heads east will not be reduced in size or constrained by the proposed Modification A. The major corridor that follows Buttonderry Creek along the southern boundary of the study area is currently highly degraded and constrained by existing industrial lands, residential and landscaped gardens, cleared exotic grasslands, and Sparks Road to the south. This corridor has an existing minimum bottle neck of approximately 60 metres while the proposed conservation zoning within the Draft LEP will theoretically increase this to approximately 90 metres with significant rehabilitation. Detailed site inspections of these lands, particularly along the western boundary subject site, identify that the proposed corridor includes areas of industrial fill and compacted hard surfaces currently utilised for industry. These areas are unlikely to ever be rehabilitated to viable natural vegetation and contribute to the corridor function. The Modification A will maintain the existing vegetated areas of the corridor and increase the minimum bottle neck to approximately 85 metres associated with the edge of the highly disturbed industrial lands and areas more suitable for rehabilitation.

5.1.4 Reserve Design and Restoration Management.

The areas identified by the Draft LEP for conservation within Modification A will currently require significant rehabilitation and restoration. A large proportion of this area is either disturbed regrowth, highly disturbed exotic grassland or industrial fill, compacted hard surfaces. The long term viability of portions of this area ever being rehabilitated is considered to be very low.

Conservation zoned lands within Modification A will also intrude into the exiting lands utilised for industrial purposes and significantly increase the edge to area ratio of the conservation zoned lands adjoining industrial lands. This is likely to further compromise the long term viability of the lands and significantly reduces the viable development envelope within the

remaining industrial zoned lands. In natural reserve design it is generally preferable to reduce the edge to area ratio of the conserved lands.

5.2 Modification B

The existing water management zoning of the Draft LEP incorporates a significant portion of the study area to the east of the Mountain Road. The majority of this water management zone is associated with the highly disturbed exiting clay and sandstone quarries with some small fingers of the EEC, SSFCF. The retention of these fingers of River Flat Forest on Coastal Floodplains endangered ecological community however was "not considered justified due to the physical dimensions" (Murray and Bell 2007).

Based on this review (Section 4) it is considered that proposed alterations identified within Modification B are potentially viable in regards to the desired Water management outcomes for the study area.

Modification B will result in an alteration in the shape and increase size of industrial zoned lands within the study area, by consolidating the industrial zoning and providing an additional building envelope to the east of Mountain Road (Figure 4). These alterations will also extend the north-eastern edge of the water management zone into the highly disturbed clay and sandstone quarries.

5.3 Modification C

The existing zoning of the Draft LEP identifies two portions of industrial land within the north-eastern and south-eastern corners of the subject site. These relatively undisturbed areas include identified high quality habitats, the threatened species *Angophora inopina*, important buffers to identified wetlands and Endangered Ecological Communities and additional corridor values. They also potentially require the construction of roads and industrial facilities across identified corridors and high conservation value lands for access.

Modification C (Figure 4) is a proposed conservation offset to the Modifications A and B, which will result in a significant consolidation and increased area of the conservation zoned lands within the east of the site. These alterations will also provide an improvement in the edge area ratio of the conservation zoned lands and correspond with realistic areas for rehabilitation and restoration.

5.3.1 Vegetation type and condition

This area of proposed industrial land is dominated by relatively undisturbed vegetation of high conservation value incorporating approximately 3.45 ha of MU 28 Open forest, which is widespread and adequately conserved within the study area and central coast region.

5.3.2 Threatened species and fauna habitats

One of the four populations of the threatened species, *Angophora inopina* observed within the study area was recorded within this area and it is considered to provide potential habitat for a wide variety of other locally occurring threatened species. A relatively high density of habitat trees were identified in this area and it was attributed as having "High quality habitat"

ranking in the summary of potential ecological constraints to development (Murray and Bell 2007). When considering the following:

"The draft LEP for the WEZ was generally based on the conservation of areas of High habitat qualities, maintaining connectivity of habitats and protecting areas of particular threatened species values" (Murray and Bell 2007)

These lands are suitable for conservation offsets within the site.

5.3.3 Corridors

The areas identified for conservation within Modification C will contribute significantly to the identified local corridor network. The secondary corridor that runs along Mountain Road and heads east is currently constrained within the zoning of the Draft LEP by a narrow bottle neck of approximately 55 metres. The alterations as part of Modification C will increase this bottle neck to approximately 62 metres. Furthermore the existing proposed corridor requires the rehabilitation and restoration of a significant cleared area associated with the previous sandstone quarry. The alterations as part of Modification C will utilise the existing high quality fauna habitat in the north-east with the area requiring rehabilitation to provide a more viable and functional corridor.

5.3.4 Reserve Design and Restoration Management.

The two portions of land within the eastern section of the study area that are currently zoned by the Draft LEP for industrial will result in significant intrusions and increased edge to area ratios within the sites conservation zones. These areas contain high quality habitat, as identified by Murray and Bell (2007) and the threatened flora species, *Angophora inopina* within the subject site.

The proposed Modification C will result in the consolidation of the conservation areas> It will also significantly increase the size and reduce the edge to area ratio of this conservation zone, providing a more desirable and manageable reserve design. The alterations made to the northern portion of this modification will also reduce the restoration and rehabilitation works currently required to implement the secondary corridor.

5.4 Improve Maintain Assessment of Zoning Modifications

Wyang Shire Council has prepared a Bio-certification Report (Wyang Shire Council 2007) in accordance with the Working Draft Guidelines for Biodiversity Certification of Environmental Planning Instruments (Department of Environment and Climate Change 2007). This report provides a more strategic approach to conservation of threatened species habitat within the WEZ study area. Bio-certification of this area is required to stream-line the statutory processes for administering the threatened species legislation.

Bio-certification fundamentally requires planning instruments to demonstrate an improvement or maintenance of biodiversity values. To demonstrate that the proposed alteration to the Draft LEP zoning for the study area, summarised in the modifications A, B and C, will not significantly affect the outcomes of the Bio-certification report (Wyang Shire Council 2007),

PB completed a revised improve or maintain assessment of the biodiversity values within the subject site (Table 5-1).

Table 5-1: Improve or maintain assessment of modified zoning

Biodiversity value	Lost	Maintained or Improved	% Maintained
Remnant Vegetation	1.3 ha	21.1 ha	94%
High Habitat Quality	0 ha	Approximately 4 ha	100%
Habitat Trees	3 trees	17 trees	85%
EEC, SSFCF	1.7 ha	6 ha	78%
EEC, RFEFCF	0.3 ha	5.4 ha	95%
Threatened Species	0	Retained population of <i>Angophora inopina</i>	100%
Corridor (Primary)	5 metres from the minimum width	Minimum width 85 metres	Improved minimum width
Corridor (Secondary)	0	Minimum width 62 metres	Improved minimum width

6. Key outcomes and recommendations

A summary table comparing the biodiversity outcomes for the Draft LEP zoning and modified zonings within the subject site is provided in Table 6-1.

Table 6-1 Ecological Comparison of proposed zoning

Biodiversity Value	Draft LEP	Proposed Zoning Modification
Threatened species	Loss of entire <i>Angophora inopina</i> population within the study area	Retention of <i>Angophora inopina</i>
Remnant vegetation	5.4 ha (24%) loss	1.3 ha (6%) loss
Disturbed regrowth	No loss	1 ha loss
High quality habitat	3 ha loss	No loss
Habitat trees	Loss of 14 trees (70%)	Loss of 3 trees (15%)
EEC, SSFCF	1.7ha (22%) loss	1.7ha (22%) loss
Endangered Ecological Community, River Flat Eucalypt Forest on Coastal Floodplains	0 ha loss	0.3ha (5%) loss
Consolidation of Industrial/conservation zones	Three separate industry parcels	One parcel of industry land
Corridor (Primary)	Minimum width 90 metres	Minimum width 85 metres
Corridor (Secondary)	Minimum width 55 metres (maintained)	Minimum width 62 metres (Improved)
Edge to area ratio of conservation zone	High	lower
Zoning		
Conservation	22 ha	21 ha
Water Management	8 ha	5.6 ha
Industrial	14.6 ha	18 ha

The above tables clearly demonstrate that the majority of the subject sites biodiversity values will be significantly improved by the proposed modifications. In particular, these modifications will significantly improve the retention of remnant vegetation, high quality habitat, recorded threatened species and habitat trees. These improved retentions rates will primarily be offset by the loss of highly disturbed regrowth vegetation, improved design and consolidation of the industrial and conservation zoned lands.

The relatively minor proportional increase in the loss of the Endangered Ecological Community, River Flat Eucalypt Forest on Coastal Floodplains and the slight reduction in the Primary corridor width in line with a realistic potential area for rehabilitation, is adequately compensated for by these proposed biodiversity benefits. In addition, these modifications will also result in the following improvements:

- a reduced edge to area ratio of the industrial/conservation zones
- reduction in the potential edge effects to conservation lands
- improved buffers of up to 250 metres to locally significant wetlands
- maintain and improved the viability of the primary and secondary wildlife corridors with realistic rehabilitation options. .

6.1 Ecological recommendation

A number of areas within the study area identified by the Draft LEP for conservation are clearly of limited ecological value.

- It is recommended that the proposed Draft LEP zoning of the subject sites conservation areas be altered in accordance with Modifications A, B and C to provide a more appropriate environmental outcome. These recommended Modifications will provide better quality outcomes, in terms of useable envelopes for industrial land use and conservation.

In reviewing the Ecological Investigation (Murray and Bell 2007) and other local area studies it is PB's view that the justification for the preferred Primary wildlife corridor (option 1), is questionable.

- It is recommended that a detailed independent investigation of the two Primary corridor options be completed.

The Interim corridor has been identified as an interim measure to ensure connectivity until the Regional Corridor Strategy for Wyong Shire is implemented. However the report provided no time line for the period of interim, no performance review or criteria for identifying if the Regional Corridor Strategy for Wyong Shire has been successfully implemented, or requirements on how this strategy will be implemented.

- If the preferred Primary corridor is supported these issues must be dealt with prior to the rezoning of the WEZ lands.

6.2 Hydrological recommendations

The work undertaken to date on the WEZ, Integrated Water Cycle Management Strategy's not of sufficient detail to make a reasonable decision regarding the boundaries of the proposed water management zone within the study area. The proposed rezoning alterations identified as Modification B and C (see Section 5) are recommended and considered appropriate, subject to more detailed assessment. Such assessment may include the following:

- review of alternatives to the proposed WEZ Integrated Water Cycle Management Strategy's discussed earlier.

Assuming the above step results in the WEZ Integrated Water Cycle Management Strategy proceeding in its current form:

- undertake more thorough assessment of local contributing catchments to assess the actual wetland area required, given the estimated hydrologic and nutrient loading characteristics from future development.
- develop the concept designs of these structures, in conjunction with the above step, and using more detailed contour information, to more accurately estimate the actual footprint of these structures. This should also consider opportunities for meet the requirements of the IWCMS within the available area, whilst improving the developable area for Hudson Group Pacific
- redraw zoning boundaries around the actual footprint of stormwater management structures once the preliminary engineering (concept) designs have been developed further.

7. References

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AS/NZS 4801

A+ GRI Rating: Sustainability Report 2009

Our reference: SCW VC AU/A678/LT_0060

2 February 2011

Juliana Tan
Director
HTH Holding Pty Limited
Level 2, 131 Macquarie Street
SYDNEY NSW 2000

Dear Juliana

Review of ecological constraints and development potential for the HTH Holdings Pty Ltd site Warnervale

PB was commissioned by HTH Holding Pty Limited to complete a review of the ecological constraints within Lot 74 DP 755245, Lot 1 DP 796730, Lot 2 DP796730, Lot 7 DP 239691 and Lot 67 DP 755245, (the subject site).

In particular, the review included:

- desktop review on eastern site as to the potential industrial zoned area
- review and provide comment on SP2 Water Mgt zoned areas
- review and provide comment on apparent inconsistencies with WEZ zoning for the site
- review western site as to how to increase industrial zoned area, including existing use of the house, which is on the same title as Lot 1
- proposed area around the existing dwelling within Lot 1.

Details addressing each of these requirements are provided under the corresponding headings 1.1 to 1.5 below.

To assist in the review discussion of the above comments, an ecological constraints summary for the site has been provided (Figure 1). This summary has been prepared based on the ecological characteristics of the site only as determined within the previous PB ecological review (PB 2008) and does not give consideration of the recent rezoning of the site for the Warnervale Employment Zone (WEZ).

The ecological constraints summary concentrated on the quality/distribution of ecological attributes within the site and how onsite ecological characteristics relate to surrounding lands. This summary also provided a preliminary assessment of the quality of vegetation communities and determined their relative value as endangered ecological communities (EEC) and/or their value to locally occurring Threatened flora and fauna species.

A summary of the ecological attributes considered for the High, Moderate or Low ecological constraint areas is provided below.

High value ecological areas are judged so by possessing the following attributes:

- vegetation that is considered good condition EEC
- represents important linkages/corridors between existing habitat areas
- good quality vegetation containing a significant number of habitat trees
- good quality vegetation containing habitat attributes that are currently sustaining local threat-listed flora or fauna species
- can be isolated vegetation that is large enough to support a diversity of threat-listed flora or fauna species.

Moderate value ecological areas are judged so by possessing the following attributes:

- vegetation that is disturbed regrowth EEC or non-threat-listed remnant native vegetation
- disturbed vegetation representing habitat for threat-listed flora or fauna
- represents vegetation that is not a significant portion of a corridor or linkage
- can be isolated vegetation that is large enough to support a limited number of threat-listed flora or fauna species.

Low value ecological areas are judged so by possessing the following attributes:

- vegetation that is highly disturbed
- isolated non-threat-listed vegetation not capable of supporting threat-listed flora or fauna species.