LOCAL ENVIRONMENTAL STUDY

IN SUPPORT OF A PLANNING PROPOSAL

PROPOSAL TO AMEND THE ORANGE LOCAL ENVIRONMENTAL PLAN 2011 IN RESPECT OF LAND AT LEEDS PARADE, CLERGATE

PREPARED FOR:

ROSEDALE GARDENS ESTATE PTY LTD

AUGUST 2019



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Report Title:	Local Environmental Study
Project:	In Support of a Planning Proposal
Client:	Rosedale Gardens Estate Pty Ltd
Report Ref.:	215322_LES_001C.docx
Status:	Final (revised post Gateway)
Issued:	5 August 2019

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The preparation of this report has been in accordance with the project brief provided by the client and has relied upon the information, data and results provided or collected from the sources and under the conditions outlined in the report.

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ABBREVIATIONS

ACHA	Aboriginal Cultural Heritage Assessment
AHD	Australian Height Datum
AHIP	Aboriginal Heritage Impact Permit
APZ	Asset Protection Zone
BOC	Blayney Cabonne Orange Sub Regional and Industrial Land Use Strategy
BLEP	Blayney Local Environmental Plan 2012
CBD	Central Business District
CCA	Controlled Activity Approval
D&PE	NSW Department of Planning & Environment
CLEP	Cabonne Local Environmental Plan 2012
EP&A Act	Environmental Planning and Assessment Act 1979
EPA	Environment Protection Authority
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
LES	Local Environmental Study
LGA	Local Government Authority
PBFP	Planning for Bush Fire Protection 2006
OLEP	Orange Local Environmental Plan 2011
PCT	Plant Community Type
RMS	Roads and Maritime Services
SA2	BOC Lifestyle Allotment Strategic Area 2 (University)
SAB	BOC Industrial Strategic Area B (North Clergate)
SEPP	State Environmental Planning Policy
SSS	Sustainable Settlement Strategy
TSC Act	Threatened Species Conservation Act 1995



Introduction

1.1 OVERVIEW

Rosedale Gardens Estate Pty Ltd owns land located at Leeds Parade Orange and seeks to subdivide for the purposes of large lot residential land use.

The site is currently zoned a mixture of IN1 – General Industrial and RU1 – Primary Production and the vast majority is currently occupied by the applicant for grazing purposes only. The southern portion of the site is occupied by the former Orange abattoir buildings which have been unused since approximately 2002.

Geolyse has been engaged by Rosedale Gardens Estate Pty Ltd to prepare this local environmental study (LES) to support a planning proposal to amend the Orange Local Environmental Plan 2011 to enable the proposed rural residential subdivision to proceed.

1.2 SCOPE OF THIS REPORT

By reference to local planning direction 1.1, pursuant to section 117 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), a study is required to support a planning proposal which proposes to reduce the areas of existing and potential industrial land. Any such study must give consideration to the objective of direction 1.1.

Similarly, by reference to local planning direction 1.2, a planning proposal which seeks to rezone land from rural to residential must be supported by a study which gives consideration to the objectives of direction 1.2.

Similar references are made with respect to local planning directions 3.1 and 3.4, both of which are also relevant to this planning proposal.

This study has been prepared to provide an assessment of the planning proposal including specific consideration of the above noted local planning directions. This study is set out in the following format:

- Section 2 provides a description of the statutory framework;
- Section 3 provides a summary of environmental characteristics;
- Section 4 provides analysis of the environmental constraints;
- Section 5 concludes the report.



Statutory Planning

2.1 STATE ENVIRONMENTAL PLANNING POLICIES

The planning proposal is broadly compliant with all relevant State Environmental Planning Policies (SEPPs). The following specific comments are made in relation to applicable SEPPs.

2.1.1 STATE ENVIRONMENTAL PLANNING POLICY NO 44 – KOALA HABITAT PROTECTION

State Environmental Planning Policy 44 - Koala Habitat Protection (SEPP44) aims to:

...encourage the proper conservation and management of areas of natural vegetation that provide habitat for Koalas, to ensure permanent free-living populations over their present range and to reverse the current trend of population decline...

This policy applies to all LGAs within the known state wide distribution of the Koala, including the Orange LGA. SEPP 44 defines 'potential koala habitat' as vegetation that incorporates a minimum of 15 percent of tree species (listed in Schedule 2 of SEPP 44) in the 'upper or lower strata of the tree component'.

An ecological assessment of the site including site survey has been completed and only one tree of a tree species listed in Schedule 2 of SEPP44 as Koala feed tree species were located on site. In addition no Koalas were identified on site, nor any Koala scratches or scats.

On this basis, the planning proposal is considered to be considered to be consistent with the aims of SEPP44. Further consideration of the provisions of SEPP44 are not considered to be warranted.

2.1.2 STATE ENVIRONMENTAL PLANNING POLICY NO 55 – REMEDIATION OF LANDS

State Environmental Planning Policy 55– Remediation of Lands (SEPP55) 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...

This policy applies to the whole of the State, including the Orange LGA. SEPP55 defines 'contaminated land' as per the definition in Part 5 of the *Contaminated Land Management Act 1997 No 140* as the presence in, on or under the land of a substance a concentration above the concentration at which the substance is normally present in, on, or under (respectively) land in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment.

Geolyse has completed a stage 1 Contamination Assessment including site walkover and sampling, attached to this planning proposal as **Appendix A**. This assessment involved confirmation of previous land uses known to have been undertaken, review of topographic maps, public notices, aerial photographs and historic parish maps.

This report identified the following recommendations and conclusions:

- Based on current operations at the site, and observations of the site during the inspection in January 2016, it is considered that the site is suitable, or may be made suitable, for the proposed land uses permitted under 'large lot residential' zoning, with consideration to the following:
 - 1 Stormwater flow onto the site from properties beyond the site's boundaries may have impacted waterways at the site;
 - 2 Potential leaking of septic waste water storage tank(s) on-site, if present, may have impacted soil and groundwater at the site;



- 3 Storage and use of chemicals associated with maintenance of farm machinery has resulted in localised soil contamination within the footprint of the machinery shed;
- 4 Historic irrigation of effluent has resulted in localised soil contamination at the base of former ponds to the south of the former orchard area;
- 5 Weathering of construction materials in structures potentially containing asbestos may have resulted in contamination. Spills and/or leaks resulting from operation or decommissioning of the electrical substation / transformer may have impacted soil and groundwater at the site;
- 6 Groundwater impacts (zinc and nitrate) may present a low and acceptable risk to aquatic ecology.
- Further assessment and/or remediation of potentially contaminated areas of the site is not considered to be a requirement of rezoning the site from its current IN1 (general industrial) and RU1 (primary production) zonings to rural residential zoning, based on the following:
 - Developments permitted under the rural residential zoning without development consent do not include uses considered likely to "increase the risk of harm to health or the environment from contamination"; and
 - SEPP 55 contains a general provision that requires consideration of contamination for all development proposals which require development consent, at which point assessment and/or remediation of specified items 1-6 above may be considered, as appropriate.
- Notation of the above items may be required to be recorded on Section 149(5) Planning Certificates to be prepared for the subdivided lots, as necessary.

2.1.3 STATE ENVIRONMENTAL PLANNING POLICY (RURAL LANDS) 2008

In accordance with Clause 4 of Ministerial Direction 1.5 – Rural Lands, where a rezoning effects land located within a rural or environmental protection zone, the planning proposal must be consistent with the Clause 7 – Rural Planning Principles contained in the State Environmental Planning Policy (Rural Lands) 2008.

Below is a summary of the proposal's compliance with the Rural Planning Principles;

(a) The promotion and protection of opportunities for current and potential productive and sustainable economic activities in rural areas;

The site proposed for rezoning is predominantly located within RU1 – Primary Production zone.

An ecological assessment completed in respect of the site (refer **Appendix B**) provides recommendations to ensure the protection of local vegetation through reservation from development (mapped EEC) and application of an E4 – Environmental Living zone in areas of marginal quality but which contribute to the ecological value of the site.

More broadly, the majority (62%) of the RU1 portion of the site has been identified via the BOC as being strategically suitable for rural residential land use and therefore the loss of primary production land is considered generally acceptable. Consideration of the loss of employments land is provided in **Appendix G**.

(b) Recognition of the importance of rural lands and agriculture and the changing nature of agriculture and of trends, demands and issues in agriculture in the area, region or State;

The land is not identified as including strategic agricultural land and is mapped as land class 4 in the context of land suitability. It is not therefore not considered to represent highly valuable agricultural land.

The endorsed BOC identifies it for strategic redevelopment for urban purposes.

(c) Recognition of the significance of rural land uses to the State and rural communities, including the social and economic benefits of rural land use and development;

88% of the land is currently zoned RU1 – Primary Production under the LEP with a minimum lot size of 100 hectares, however 62% has been identified as future rural residential land by the BOC. This is a



reflection of the changing nature of the agriculture and development trends and requirements in the area.

(d) In planning for rural lands, to balance the social, economic and environmental interests of the community;

Given the fragmented nature of the subdivision plan in the locality, the reallocation of the land use from primary production to rural residential represents a logical pattern of development that is consistent with the strategic plan for the broader sub-region.

(e) The identification and protection of natural resources, having regard to maintaining biodiversity, the protection of native vegetation, the importance of water resources and avoiding constrained land,

The ecological assessment provides recommendations and mitigations to ensure the protection of the vegetation on site (refer **Appendix B**). Consistency with these recommendations would ensure that the planning proposal would not result in significant impacts to threatened flora, fauna or communities.

(f) The provision of opportunities for rural lifestyle, settlement and housing that contribute to the social and economic welfare of rural communities

This planning proposal provides an opportunity for provision of additional rural residential lifestyle blocks, consistent with the strategic aims of the BOC and in line with the BOC Rural Residential Update 2012 which identifies a shortfall in blocks of this nature and the 2010 Update to the OSSS which identifies increased demand for lots of around the 4,000 square metres.

(g) The consideration of impacts on services and infrastructure and appropriate location when providing for rural housing

The planning proposal as conceived is serviceable with all external services (electricity, telecommunications, water and sewer) being available to the site.

(h) Ensuring consistency with any applicable regional strategy of the Department of Planning or any applicable local strategy endorsed by the Director-General.

As previously stated, the planning proposal is generally consistent with the provisions of the BOC, endorsed by the Director-General of the Department of Planning, and the Rural Residential Update to the BOC (2012).

2.2 SECTION 117 DIRECTIONS

2.2.1 DIRECTION 1.1 – BUSINESS AND INDUSTRIAL ZONES

This direction applies where a planning proposal will affect any existing or proposed business or industrial zone. As the planning proposal proposes the rezoning of land that is currently zoned IN1 (Lot 15 – current abattoir site) and future industrial (Lots 2 & 3), this direction is considered to be applicable.

The objectives of the direction are:

- a) encourage employment growth in suitable locations,
- b) protect employment land in business and industrial zones, and
- c) support the viability of identified strategic centres.

A planning proposal must retain existing areas of industrial zoned land and must not reduce potential industrial floor space. A planning proposal may only be inconsistent with this direction where it is:

- a) justified by a strategy which:
 - *i* gives consideration to the objective of this direction, and
 - *ii identifies the land which is the subject of the planning proposal (if the planning proposal relates to a particular site or sites), and*
 - iii is approved by the Director-General of the Department of Planning, or (



- b) justified by a study (prepared in support of the planning proposal) which gives consideration to the objective of this direction, or
- c) in accordance with the relevant Regional Strategy or Sub-Regional Strategy prepared by the Department of Planning which gives consideration to the objective of this direction, or
- d) of minor significance.

This planning proposal is supported by a study prepared in support of the planning proposal. Consideration to the objectives of this direction are provided in **Table 2.1**; therefore the partial inconsistency with this direction is considered acceptable by reference to point (b) above.

Objective	Consideration
Encourage employment growth in suitable locations	As shown throughout this study and the accompanying specialist reports, the site is poorly suited for provision of employment uses and is better suited for rural residential living.
Protect employment land in business and industrial zones	The abattoir site has lain idle for other 10 years and despite aggressive marketing, a suitable use for the site that is commensurate with the location and proximity to the University and general residential land to the south-west, there has been suitable options produced. This conclusion is demonstrated throughout Appendix G .
Support the viability of identified strategic centres	The development of the site for rural residential purposes would ensure the viability of the city of Orange and more specifically, the North Orange shopping centre. The development would enable growth to occur broadly in line with the intent of the BOC in that it would involve the development of identified future urban land for urban purposes.

2.2.2 DIRECTION 1.2 – RURAL ZONES

This direction applies when a relevant planning authority prepares a planning proposal that will affect land within an existing or proposed rural zone. The objective of the direction is to protect the agricultural production value of rural land.

A planning proposal must not rezone land from a rural zone to a residential, business, industrial, village or tourist zone unless the relevant planning authority can satisfy the Director-General of the Department of Planning that the provisions of the planning proposal that are inconsistent are:

- a) justified by a strategy which:
 - *i* gives consideration to the objectives of this direction,
 - *ii identifies the land which is the subject of the planning proposal (if the planning proposal relates to a particular site or sites), and*
 - iii is approved by the Director-General of the Department of Planning, or
- b) justified by a study prepared in support of the planning proposal which gives consideration to the objectives of this direction, or
- c) in accordance with the relevant Regional Strategy or Sub-Regional Strategy prepared by the Department of Planning which gives consideration to the objective of this direction, or
- d) is of minor significance.

The proposal demonstrates that it would result in the loss of rural land. 62% of this land is identified via the BOC as being suitable for future rural residential land use. Approximately 12% is currently zoned industrial and the remainder (approximately 26%) is identified as future industrial. It is noted that Orange Council has resolved not to pursue this future industrial use.



The proposal is therefore predominantly consistent with the strategic position and is therefore able to be inconsistent with this direction by reference to point (c) above.

The remainder of the site is the subject of a study which supports this planning proposal which finds that the development of the primary production land identified for rural residential use is justified, and is therefore able to be inconsistent with this direction by reference to point (d) above.

The subject site borders one property in the north-western extent, that is currently in use for broad acre agriculture. Appropriate buffers to the land are able to be accommodated within the site and would be implemented and maintained. This is discussed in additional detail in the Land Use Risk Conflict Assessment provided at **Appendix H**. This assessment concludes that risk levels are low subject to appropriate controls. The preparation of the LUCRA has been completed post issue of the altered Gateway approval following discussions with DP&E staff and officers from the Department of Primary Industries (Agriculture).

2.2.3 DIRECTION 1.3 – MINING, PETROLEUM AND EXTRACTIVE INDUSTRIES

This direction applies when a relevant planning authority prepares a planning proposal that would have the effect of:

(b) restricting the potential development of resources of coal, other minerals, 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.

The site is not known to contain any resources that are of state or regional significance.

2.2.4 DIRECTION 1.5 – RURAL LANDS

In accordance with the following Clause 3(a) of Ministerial Direction 1.5 – Rural Lands as follows:

"This direction applies when:

- (a) "A relevant planning authority prepares a planning proposal that would affect land within an existing or proposed rural or environmental protection zone (including the alteration of any existing rural or environmental protection zone boundary)" or
- (b) "A relevant planning authority prepares a planning proposal that changes the existing minimum lot size on land within a rural or environmental protection zone.

This direction is applicable to the planning proposal as the area of land proposed to be rezoned is currently zoned as RU1 – Primary Production. Furthermore, the rezoning of the land to R5 would entail reducing the minimum lot size permissible for development from 100 hectares to 4,000 square metres.

As per Clause 4 of Ministerial Direction 1.5 – Rural Lands:

"A planning proposal to which clauses 3(a) or 3(b) apply must be consistent with the Rural Planning Principles listed in State Environmental Planning Policy (Rural Lands) 2008"

As Clause 3(a) of the Ministerial Direction 1.5 is applicable, the development must demonstrate consistent with the rural planning principles of the Rural Lands SEPP.

A proposal may be inconsistent with Direction 1.5 if any of the following applies;

"A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the provisions of the planning proposal that are inconsistent are:

- (a) Justified by a strategy which:
 - gives consideration to the objectives of this direction,



- identifies the land which is the subject of the planning proposal (if the planning proposal relates to a particular site or sites, and
- is approved by the Director-General of the Department of Planning and is in force, or
- (b) Is of minor significance".

The planning proposal is predominantly consistent with the BOC in that it relates to land strategically identified as being suitable for the loss of rural land.

Additionally, an assessment has been undertaken against the Rural Planning Principles contained in the *State Environmental Planning Policy (Rural Lands) 2008* in **Section 2.1.3**. The proposal has been found to be consistent with the Rural Planning Principles.

2.2.5 DIRECTION 2.3 – HERITAGE CONSERVATION

Ministerial Direction 2.3 is applicable to a planning proposal when an item of local heritage significance is located on the site.

"A planning proposal must contain provisions that facilitate the conservation of:

- (a) items, places, buildings, works, relics, moveable objects or precincts of environmental heritage significance to an area, in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item, area, object or place, identified in a study of the environmental heritage of the area,
- (b) Aboriginal objects or Aboriginal places that are protected under the National Parks and Wildlife Act 1974, and
- (c) Aboriginal areas, Aboriginal objects, Aboriginal places or landscapes identified by an Aboriginal heritage survey prepared by or on behalf of an Aboriginal Land Council, Aboriginal body or public authority and provided to the relevant planning authority, which identifies the area, object, place or landscape as being of heritage significance to Aboriginal culture and people".

Neither the LEP nor the State Heritage Register identifies the site as containing any items of local or state heritage significance. Three sites are located near to the site, however the separation of the site from these items is sufficient, and the nature of the proposed land use is suitably benign, that the ultimate development of the land for rural residential purposes would not lead to any impact to the significant of these items.

A due diligence assessment of the site, including site walkover, to determine the likely existence of sites of Aboriginal heritage significance has been completed – refer **Appendix C**. As artefacts and PADs were identified to exist on site, further investigations would be required to ensure that the artefacts and sites known to exist can either be avoided (preferred) or impacted (subject to gaining an Aboriginal Heritage Impact Permit). The due diligence assessment confirms that the site is suitable for the proposed land use and that the Aboriginal heritage values do not pose any constraint in regard to a rezoning and future subdivision proposal.

2.2.6 DIRECTION 3.1 – RESIDENTIAL ZONES

Ministerial Direction 3.1 – Residential Zones is applicable to existing or proposed residential zoned land.

- (1) A planning proposal must include provisions that encourage the provision of housing that will:
 - (a) broaden the choice of building types and locations available in the housing market, and
 - (b) make more efficient use of existing infrastructure and services, and
 - (c) reduce the consumption of land for housing and associated urban development on the urban fringe, and
 - (d) be of good design.



- (2) A planning proposal must, in relation to land to which this direction applies:
 - (a) contain a requirement that residential development is not permitted until land is adequately serviced (or arrangements satisfactory to the council, or other appropriate authority, have been made to service it), and
 - (b) not contain provisions which will reduce the permissible residential density of land.

The planning proposal contain a requirement (voiced by these terms) that residential development is not permitted until land is adequately serviced (or arrangements satisfactory to the council, or other appropriate authority, have been made to service.

2.2.7 DIRECTION 3.4 – INTEGRATING LAND USE AND TRANSPORT

This direction applies when:

a relevant planning authority prepares a planning proposal that will create, alter or remove a zone or a provision relating to urban land, including land zoned for residential, business, industrial, village or tourist purposes.

The objectives of the direction is to:

ensure that urban structures, building forms, land use locations, development designs, subdivision and street layouts achieve the following planning objectives:

- (a) improving access to housing, jobs and services by walking, cycling and public transport, and
- (b) increasing the choice of available transport and reducing dependence on cars, and
- (c) reducing travel demand including the number of trips generated by development and the distances travelled, especially by car, and
- (d) supporting the efficient and viable operation of public transport services, and
- (e) providing for the efficient movement of freight.

A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the provisions of the planning proposal that are inconsistent are:

- (a) justified by a strategy which:
 - (i) gives consideration to the objective of this direction, and
 - (ii) identifies the land which is the subject of the planning proposal (if the planning proposal relates to a particular site or sites), and
 - (iii) is approved by the Director-General of the Department of Planning, or
- (b) justified by a study prepared in support of the planning proposal which gives consideration to the objective of this direction, or
- (c) in accordance with the relevant Regional Strategy or Sub-Regional Strategy prepared by the Department of Planning which gives consideration to the objective of this direction, or
- (d) of minor significance.

The proposed ultimate subdivision of the land would contain a high level of amenity through the provision of high quality pedestrian environments and the provision for cycleways and has been designed to facilitate the future provision of public transport (through minimisation of the use of cul-de-sacs). The close proximity to the urban areas of the town and the North Orange shopping centre mean that the extension of public transport to this area would be logical and economically viable. This would be unique for a rural residential development in Orange or the sub-region.

2.2.8 DIRECTION 4.4 – PLANNING FOR BUSH FIRE PROTECTION

The objectives of this direction are:



- (a) to protect life, property and the environment from bush fire hazards, by discouraging the establishment of incompatible land uses in bush fire prone areas, and
- (b) to encourage sound management of bush fire prone areas.

In the event this direction applies the relevant planning authority must:

This direction is applicable to the subject site on the basis that parts of the site are mapped as bush fire prone land by reference to the Orange Bush Fire Prone land map.

- (3) In the preparation of a planning proposal the relevant planning authority must consult with the Commissioner of the NSW Rural Fire Service following receipt of a gateway determination under section 56 of the Act, and prior to undertaking community consultation in satisfaction of section 57 of the Act, and take into account any comments so made,
- (4) A planning proposal must:
 - (a) have regard to Planning for Bushfire Protection 2006,
 - (b) introduce controls that avoid placing inappropriate developments in hazardous areas, and
 - (c) ensure that bushfire hazard reduction is not prohibited within the APZ.
- (5) A planning proposal must, where development is proposed, comply with the following provisions, as appropriate:
 - (a) provide an Asset Protection Zone (APZ) incorporating at a minimum:
 - (i) an Inner Protection Area bounded by a perimeter road or reserve which circumscribes the hazard side of the land intended for development and has a building line consistent with the incorporation of an APZ, within the property, and
 - (ii) an Outer Protection Area managed for hazard reduction and located on the bushland side of the perimeter road,
 - (b) for infill development (that is development within an already subdivided area), where an appropriate APZ cannot be achieved, provide for an appropriate performance standard, in consultation with the NSW Rural Fire Service. If the provisions of the planning proposal permit Special Fire Protection Purposes (as defined under section 100B of the Rural Fires Act 1997), the APZ provisions must be complied with,
 - (c) contain provisions for two-way access roads which links to perimeter roads and/or to fire trail networks,
 - (d) contain provisions for adequate water supply for firefighting purposes,
 - (e) minimise the perimeter of the area of land interfacing the hazard which may be developed,
 - (f) introduce controls on the placement of combustible materials in the Inner Protection Area.

A bushfire assessment of the site has been prepared which demonstrates that the site can be developed in accordance with this direction. In addition, the following specific comments are provided:

- (a) The area of the site mapped as bush fire prone has been recently cleared and is no longer a bush fire threat
- (b) Those lots which are within 140 metres of the mapped vegetation on site (notwithstanding that it is not itself mapped as bush fire prone) would be required to provide and maintain asset protection zones;
- (c) Proposal does not relate to infill development;
- (d) A two way access road is proposed that provides a connection to Leeds Parade. No fire trails are proposed;
- (e) Individual properties within 140 metres of mapped vegetation would be required to provide a minimum of 20,000 litres of dedicated water supply for fire-fighting purposes; to be addressed via a specific bush fire assessment in relation to a future subdivision development application
- (f) Development density is proposed that is commensurate to the bush fire threat applying to the land (ie, low);



(g) Controls would be imposed over the land in relation to a future development application via a section 88b instrument attached to the future land titles.

The planning proposal is considered to be consistent with the direction on this basis.

2.2.9 DIRECTION 6.1 – APPROVAL AND REFERRAL REQUIREMENTS

Ministerial Direction 6.1 – Approval and Referral Requirements applies to all Planning Proposal's forwarded for Gateway Determination by a local authority.

To be compliant with Direction 6.1, a planning proposal must be consistent with the following provisions;

"A planning proposal must:

- (a) Minimise the inclusion of provisions that require the concurrence, consultation or referral of development applications to a Minister or public authority, and
- (b) Not contain provisions requiring concurrence, consultation or referral of a Minister or public authority unless the relevant planning authority has obtained the approval of:
 - The appropriate Minister or public authority, and
 - The Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General), prior to undertaking community consultation in satisfaction of section 57 of the Act, and
- (a) Not identify development as designated development unless the relevant planning authority:
 - Can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the class of development is likely to have a significant impact on the environment, and
 - Has obtained the approval of the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) prior to undertaking community consultation in satisfaction of section 57 of the Act".

Those matters requiring concurrence are minimised by the undertaking of detailed site investigations at planning proposal stage. Outstanding matters deferred to the post Gateway phase are limited to the undertaking of a further investigations into Aboriginal heritage, which would be completed prior to the gazettal of the amending LEP. This would ensure that the future development of the land is not limited by the need to gain further approvals or concurrence.



Environment Characteristics

3.1 GENERAL

The site has an area of approximately 290 hectares and the primary access is from Leeds Parade, which terminates in the south of the site – refer **Figure 1**.

The site is bounded by the Main Western Railway Line to the west, Pearce Lane (a partly closed local road) to the north, private agricultural land to the east and a mixture of vacant and university land to the south and south-east.

The university land to the south-east is occupied by Charles Sturt University Orange Campus and has a land area in excess of 338 hectares. The majority of the university land is undeveloped and used for ancillary agricultural operations to the support the educational facility. The BOC identified the suitability of the university land for future rural residential development.

The vacant land directly to the south of the site is zoned for B7 – Business Park and land to the southwest (on the western side of the railway line) is zoned and predominantly developed as IN1 – General Industrial. The residential area of Orange known as Waratah's is located approximately one kilometre to the south-west of the site. This is residential land at a higher density to the proposed development, with lots typically around 750 square metres in size.

Pearce Lane forms the boundary between Orange and Cabonne Local Government Areas (LGAs) and is a local road that is understood to be maintained by Orange City Council. The central section of the road (between Clergate and Ophir Roads) has been recently closed by Orange City Council to deter 4WDing in the area and initial discussions with Orange City Council suggest it could be available for formal closure and purchase. To the west Pearce Lane joins Clergate Road on the eastern side of the railway line on a 90 degree bend. Clergate Road crosses the railway line in this location and features an active crossing arrangement (boom gates and warning lights). To the east Pearce Lane joins Ophir Road and provides access to one private dwelling and one farm shed in this area.





Figure 1: The subject site (Source: Six Maps)



3.2 WATER

A large number of first, second and third (Strahler) order waterways and farm dams are scattered throughout the property, with the primary (third order) creek line running approximately east-west through the bottom third of the site. Waterways in the site are predominantly ephemeral and drain to this main creek line, which itself drains to the east towards Summer Hill Creek – refer **Figure 2**. It is noted that none of these are mapped via the LEP as sensitive watercourses. It is however noted that some of the waterways are mapped as key fish habitat.

A number of groundwater bores are noted to be located in southern extent of the property (refer **Figure** 2) and within 500 metres of the property a total of 21 bores are identified (refer **Figure 3**). A summary of available bore data is provided in **Table 3.1**.











Bore ID	Standing Water Level (m)	Purpose
GW021545	4.6	Stock, domestic
GW026199	Not provided	Stock, irrigation
GW015108	Not provided	Stock, irrigation
GW015887	Not provided	Industrial
GW015239	10	Stock, domestic
GW015948	2.7	Industrial
GW021554	14.3	Stock, domestic
GW015886	Not provided	Industrial
GW057555	Not provided	Stock, domestic
GW043665	11.5	Stock, domestic
GW045058	Not provided	Stock, domestic
GW800811	Not provided	Stock, domestic
GW015888	Not provided	Industrial
GW015885	Not provided	Industrial
GW062696	Not provided	Stock, domestic
GW019062	2.4	Industrial
GW023655	Not provided	Irrigation
GW803880	Not provided	Test bore
GW803881	Not provided	Test bore
GW803879	Not provided	Test bore

Table 3.1 - Groundwater bores within 500 metres of the property (log details)

Source: Department of Primary Industries (Water) (allwaterdata.water.nsw.gov.au)

3.3 TOPOGRAPHY

The fall of the land is generally from the north-east to the south-west, at an approximate peak elevation of 940 metres Australian Height Datum (mAHD) in the north-east, falling to 860 mAHD in the south-west. To the north of the site is a slightly higher peak, located in the Cabonne LGA, which is the highest point in the immediate locality at approximately 948 mAHD. **Figure 4** provides topographical details and **Figure 5** provides an analysis of slope across the site.

General slopes in the western extent of the are between 0-5% however there is significant variation in the central and southern sections to between 10-15%. The north-eastern extent is steeper again with areas exceeding 30% - refer **Figure 5**.









Figure 5: Slope analysis

3.4 SOILS AND GEOLOGY

Pearce's Lane represents an approximate boundary between two distinct soil landscapes; being the brown clays and shallow soils landscapes – refer **Figure 6**.





Naturally occurring asbestos (NOA) is known to be found in areas to the south of the site, however, as the subject site is located within the oakdale formation, it is considered that the likelihood of encountering



NOA is low – refer **Figure 7**. NOA is more typically found in the ultramafic cumulates formation, located to the south and south-east of the site, and in resulting shear zones.





3.5 STORMWATER

As a north-south aligned ridge line is present in the eastern portion of the site, the catchment of drainage gullies is not likely to extend beyond the site's eastern boundary. Some flow from beyond the site's northern boundary is anticipated.

Based on the regional and site topography, it is considered that the majority of site stormwater would be captured by drainage gullies across the site and discharge into various holding dams on the site or eastward into Summer Hill Creek.

It is proposed that stormwater could be harvested at the suburb scale for re-distribution to the Orange City Council harvested stormwater scheme. This would enable the development to operate to be neutral from a water security perspective. This would be achieved via introduction detention basins within the riparian zone of the creek area. This would serve dual recreation, stormwater management and flood control devices.

3.6 NATURAL HAZARDS

The site is not generally low lying or is not mapped as flood prone by virtue of LEP mapping. It is acknowledged that some localised flooding may occur around the drainage and creek lines. Sufficient capacity has been designed into the width of the riparian zones to ensure that water is contained without posing a risk to residential areas.

An area in the north-west of the site that is mapped as bush fire prone – refer **Figure 8**. A bush fire assessment has been completed which demonstrates that the vegetation source previously contributing to the bush fire prone land status has been removed in recent years. The assessment however has conservatively provided recommendations for proposed housing in close proximity to mapped vegetation to ensure the future protection of all residents.



ORANGE _ Legend Subject site 200 400 m n Bushfire prone land Figure 8: Mapped bushfire prone land

CABONNE

3.7 LAND USE

The site is currently in use for primary production, primarily grazing, purposes. A review of land capability identifies that the site is class 4 agricultural land – refer **Figure 9**. The surrounding land to the west and south-west is zoned and largely developed for industrial purposes and the land to the south is zoned, but currently vacant, B7 (business park). Land to the north (within Cabonne Council) and to the east is in use for primary production and quasi rural residential purposes.

Strategic Regional Land Use Policy – Strategic Agricultural Land (Biophysical) mapping has also been reviewed and this confirms that the site is mapped as strategic agricultural land – refer **Figure 10**.









Figure 10: Strategic Regional Land Use Policy – Strategic Agricultural Land (Biophysical) mapping

3.8 **BIODIVERSITY**

The site features a number of areas of mapped sensitive biodiversity - refer Figure 11.



CABONNE



An ecological assessment of the site has been completed by Dr Colin Bower of FloraSearch. A copy of this report is provided attached as **Appendix B**. A list of observed flora species are provided within Appendix B. A field inspection was carried out by Dr Bower of which the following was noted:

A preliminary inspection of the Project area was undertaken on 17 December 2015.



All patches of remnant native trees on the project area were identified to species in order to determine the original native vegetation communities that formerly occurred there. This approach is feasible because native forest and woodland communities are defined and named by the dominant trees in the uppermost vegetation stratum.

Most of the project area is cleared land. The ground cover flora was inspected across the whole site to determine whether it is in 'good' or 'low' condition as defined by the BioMetric methodology (Gibbons et al. 1995). Ground vegetation is considered to be in 'low' condition if more than 50 percent of cover comprises introduced species, or in 'good' condition if more than 50 percent of cover is native species.

Opportunistic observations were made of native fauna while moving around the project area to record any threatened species that may be present.

This report confirms that, based on the species noted, two areas of the site retain remnants of two plant communities that are noted to be endangered ecological communities, being the;

- The Box-Gum Woodland EEC/CEEC, and
- The Tablelands Snow Gum Grassy Woodland EEC.

As well as these communities there was noted to be a number of planted native and introduced species that are not endemic to the area. The overall vegetation condition was identified as:

Visual inspection of the project area showed that the native vegetation has been grossly modified following over 150 years of farming and grazing. The health of the native trees within most remnants is good and there are signs of tree regeneration in the large patch in the south west corner. Some native shrub cover survives on the steep slopes of Lot 25, mainly Silver Wattle (Acacia dealbata), but is absent elsewhere. Significant numbers of mature, old growth trees are present, some with hollow trunks and limbs that would provide nesting opportunities for birds, possums, gliders, microbats and reptiles. These are an important wildlife resource to maintain in the environment.

The ground cover was observed to be in poor or 'low' condition over most of the project area. The ground cover has been almost entirely replaced by a range of introduced pasture grasses including Phalaris (Phalaris aquatica), Cocksfoot (Dactylis glomerata), Perennial Ryegrass (Lolium perenne) and Fescues (Vulpia spp.). Paterson's Curse (Echium plantagineum) is also present. Few areas dominated by native grasses were observed and included Wallaby Grasses (Rytidosperma spp.) and Weeping Grass (Microlaena stipoides).

Overall, the remnant trees are the most important natural elements remaining on the site. The original shrub and ground layer vegetation has been almost completely lost. Except in a few limited areas there is little capacity for natural recovery of the native vegetation to close to its original condition.

Additionally, four broad habitat types were noted:

- Exotic grassland/forbland.
- Native woodlands
- Permanent water storages
- Ephemeral creeks and wetlands

One threatened fauna species, the Superb Parrot, was noted on site.

In the context of Koala and their habitat, it was noted that:

The flora survey detected one koala food tree listed under Schedule 2 of SEPP 44, the Ribbon Gum (Eucalyptus viminalis). However, there is no evidence of a breeding koala population on the project area and none has been recorded in the surrounds. Consequently, the project area is not core koala habitat and a SEPP 44 Plan of Management is not required.



3.9 HERITAGE

3.9.1 ABORIGINAL HERITAGE

An assessment of the site has been conducted by Biosis in accordance with the Department Environment, Climate Change and Water (DECC) *Due Diligence Code of Practise for the Protection of Aboriginal Objects in New South Wales*, attached as **Appendix C** and recommendations summarised in **Section 4.8**. The Biosis report provides a comprehensive summary of the landscape context. The report concludes that:

The archaeological assessment located and recorded 20 Aboriginal sites within the Project Area. If these sites can not be avoided by the proposed development, then an AHIP must be sort under Part 6 of the Parks and Wildlife Act 1974. The Project Area is suitable for rezoning once all conditions under the relevant legislation have been meet.

3.9.2 EUROPEAN HERITAGE

A review of available information confirms that the site does not contain any mapped items of local or state heritage significance. However, it is noted that the site shares boundaries with three properties containing historically significant developments – as reflected on **Figure 12**.

The heritage significance of the three mapped properties is described in the Orange City Council heritage inventory and summarised in **Table 3.2**.

Property description	Heritage significance
Wyelba "Dwelling"	 Statement of significance: Wyelba is a large face brick bungalow with hipped roof, dating from the inter war period, which retains the original character, including the distinctive verandah and Eternit slate roofing. It is set within a mature garden, including early cultural plantings. Historical Notes: Originally belonged 10 the Auberson family. Sold in the 1990s. The homestead was built in the early 1920s. The property is physically described as: Brick Bungalow style brick building with return verandah supported off large square tapered timber posts down 10 capped brick rectangular piers. The sloping verandah roof is an extension from the main hipped roof. The roof is clad in diamond patter fibro dark grey 'Eternit slates'. The rafters are expressed externally at the eaves. The windows are timber framed double hung sliding sash set in bays. The main protruding bay includes a bay of three with decorative sill on brackets and flat awning hood. The gable infill is expressed board strapwork with rendered infill. And a timber lined eave to the projecting gable. The ridges include decorative terra cotta finials. There are 3 large rectangular brick painted chimneys. The building is set within a landscaped garden. with a range of large mature trees, probably of a similar age as the dwelling. The property is described as being in good condition and have good integrity.

Table 3.2 – Mapped European heritage



Table 3.2 – Mapped European heritage

Property description	Heritage significance
Rosedale Homestead	 Statement of significance: The Rosedale property provides a very rare example of a homestead complex encompassing substantial architecturally designed residence from 1878, adjoining service wing and vernacular ancillary structures set within an entirely appropriate garden and rural setting, capable of fully interpreting a fully evolved agricultural enterprise. Historical Notes: Rosedale Mansion was built by William Dale in 1877-78, on land which was purchased from William Lane in 1865. It was a portion of Lane's 'Rosehill' properly, which Dale had leased from 1841-1865. Wheat and other cereals were grown on the property. In 1965, a campaign for an Agricultural College in Orange began, but it was not established until 1968 on the property known as Rosedale Park, which sold off some of its land. It officially opened in 1973, primarily offering courses relating to the management of Agricultural business. It was linked to the University of New England between 1990 and 1994, before becoming a part of Sydney University. In 2000, Orange Agricultural College was officially dissolved as an entity, but retained its status as a campus of Sydney University. This situation remained until it became a campus of Charles Sturt University in 2006, and now offers teaching and state of the art facilities in a broad range of subjects. The property is physically described as: A large two storey Victorian Colonial house constructed with local brown English bond bricks. Parallel corrugated iron hipped roofs and lower skillon roofed verandah on all sides, supported on flat cast iron columns. A lower two storeyed wing extends to the south. Upper level now painted and rendered at the rear. Render banding occurs on the corres above the verandah and under the eaves, and rendered moulding surrounds add emphasis 10 the openings of the double hung sask windows and double leafed panelled entrace door. A bay window extends to the eastern verandah. Close corbelled brick under the eav
Canobolas Wool topmaking	 Statement of significance: The Canobolas Wool Topmaking plant was established at the initiate of prominent Country Party politician and wool grower Rowland Smith and is one of the last remaining structures associated with the Commonwealth initiative: The Bathurst Orange Development Corporation, where industries such as the wool-tops processing plant was subsidised to set up in this regional location. Historical Notes: Robert Baron Rowland "Bob" Smith (born 15 October 1925) is a former Australian politician. He was a National Party member of the New South Wales Legislative Council from 1974 until 1999. Born in Sydney, Rowland Smith was educated at Knox Grammar School, graduating in 1942. He served in the Royal Australian Navy from 1943 to 1947 and in the Naval Volunteer Reserve 1947-60, with the rank of lieutenant. After one year at the University of Sydney he became a wool grower and processor, joining the Country Party in 1956. He was Chairmar of the Australian Merino Wool Campaign Committee and the Wool Buyers' Association. He was also the founder of Canobolas Wool Topmaking Pty Ltd in Orange. In 1974, Rowland Smith was appointed to the New South Wales Legislative Council in 1978 and Deputy Leader of the Government in 1988, when the Greiner Coalition won government. He was Minister for Sport, Recreation and Racing until 1991. He remained in the Council until his retirement in 1999; he was granted retention of the title "The Honourable" for life. The property is physically described as: Canobolas Wool Topmaking Pty Ltd wool processing plant and associated at Ministration and storage and distribution facilities The property is described as being in fair condition and to have fair integrity.





3.9.3 TRAFFIC

Primary access to the property is from Leeds Parade in the south, with Leeds parade transitioning into the sealed driveway that formerly provided heavy vehicle access to the abattoir buildings.

Historically abattoir staff are understood to have accessed the abattoir via a single lane bridge over the Main Western Railway Line, which staff used to walk over after parking on the land on the western side



of the rail line. The bridge is accessed from private land owned by the applicant but not forming part of this application.

The site also currently benefits from a single lane rail crossing from Clergate Road and a number of gateway accesses to Pearce Lane in the north.

Figure 13 shows the south-western corner of the site and the three current (known) accesses into the property in this area.

Leeds Parade is a two lane, two way sealed local road with no line marking and a marked speed limit of 50km/hr where it meets the site.

Clergate Road is a two lane, two way sealed local road with a marked centre line but no edge marking and a marked speed limit of 80km/hr.

Pearce Lane is a two lane, two way gravel sealed local road which historically connected to Ophir Road, but which has recently been partly closed by Orange City Council and there is no intention at this time to reopen this portion of the road. The eastern and western end of the lane provide access to a number of private properties with the centre section closed by signage and physical obstructions.






3.9.4 SERVICING

The site currently features two large capacity water main connections (from Leeds Parade) to the Councils potable water supply which are understood to have previously supplied the abattoir. It is anticipated that infrastructure credits are likely to apply to these connections that could be realised in future development applications.

The site is not connected to the reticulated sewer system but it is understood that provision for future connections have been identified in the Council's Developer Servicing Plan.

It is intended as an element of this project that potable reticulated water and reticulated sewer services would be provided to all resulting lots within the development.

A range of electrical infrastructure crosses the property (as depicted in **Figure 14**). It is intended that the services would be rationalised and placed underground to support the future proposed large lot residential subdivision (with the exception of the high voltage 132kV ETL which would be protected by an easement).

Gas and telecommunications services are available to the site and are to be augmented and extended as necessary to support the proposed development.







Environmental Analysis

4.1 **BIODIVERSITY**

An ecological assessment of the site has been completed by FloraSearch (refer **Appendix B**). This report confirms that the site retains remnants of two endangered ecological communities, being the;

- The Box-Gum Woodland EEC/CEEC, and
- The Tablelands Snow Gum Grassy Woodland EEC.

It is noted that:

Subdivision of the project area for housing may potentially impact on threatened biodiversity in the following ways;

Reduction in area of the two EECs via tree removal and suppression of regeneration.

Loss of habitat for the Superb Parrot, which in addition to requiring tree hollows for nesting, feeds on grass seeds on the ground.

Threat of predation on the Superb Parrot (and other threatened species) by wandering domestic cats.

By way of mitigation and avoidance, the following recommendations are provided:

Watercourse corridors

All the creeks and major drainage lines on the site would protected by riparian corridors excluded from development. These corridors would be planted progressively with endemic native trees and shrubs appropriate to the specific sites. These would be predominantly species listed in Table 4. Planting of these riparian zones would provide wildlife habitat and corridors for wildlife movement between remnant woodlots on the site.

Reservation from development

The most significant remnant of Box-Gum Woodland is the large patch in the south west corner of the Project area immediately to the north west of the old abattoir. This patch has a relatively continuous tree canopy and is large enough to support viable local populations of some bird and other wildlife species. Although the ground cover is in low condition the tree density and good canopy health makes it an important remnant. It is recommended that this remnant be reserved from development.

E4 Environmental Living zoning

A second smaller Box-Gum Woodland remnant, to the north of the large one discussed above, also has value, although more fragmented. It is recommended that this remnant be protected through an E4 Environmental Living zoning and be linked to the above remnant via plantings of appropriate native tree and shrub species within the watercourse corridor connecting them. Appropriate tree species are those listed as naturally occurring on Lot 3 in Table 4.

The scattered remnants of mainly Yellow Box trees south of Mendhams Creek are particularly healthy examples of the species and would provide prolific sources of nectar in good seasons. While these trees are too scattered to provide permanent habitat for most Box-Gum Woodland wildlife species, they would be an important resource for nomadic species. It is recommended they be protected under an E4 Environmental Living zoning.

The remnants of the Tablelands Snow Gum Grassy Woodland EEC are fragmented, patchy and occur on steep slopes in Lot 25. The exposed location means these trees suffer high winds and are in poorer condition than those on the lower areas of the site. Nevertheless, there are numbers of habitat trees with hollows that are worth protecting. It is recommended that an E4 zoning also be extended to these patches.

The recommendations of the ecological report have been incorporated into the finalisation of the master plan. On this basis, it is considered that the ecological environment does not pose a barrier to the development proceeding.



4.2 SUPPLY AND DEMAND

Appendix G to this study provides an analysis of supply/demand in relation to the provision of rural residential lots in the Orange, Cabonne and Blayney subregion.

It is noted that the 2012 Rural Residential update to the BOC identified a predicted shortfall of 119 lots within the twenty year time frame of the BOC to 2032.

This development would assist in meeting this shortfall and would provide additional options for residents looking for rural residential blocks within commuting distance of Orange.

The release of lots would be staged to ensure that market saturation does not occur.

Given the uniqueness of the site and the dearth of lots of this size in the market, it is considered that this development would fill a niche that is not otherwise catered for. It will be attractive to people who may not wish to be a long way from the amenities of town but still wish to have the space and amenity afforded by a rural residential development. It is therefore not anticipated that this development would impact greatly upon other sub-markets within the region.

4.3 TRAFFIC AND ACCESS

The proposed development would generate approximately 450 additional lots on the land by reference to the master plan – refer to **Drawing TP04**.

A traffic study has been prepared by Geolyse to consider the impacts of this additional traffic on to Leeds Parade and the Northern Distributor Road. Particular consideration has been given to the operation of the Leeds Parade/NDR intersection and the University access road intersection – refer **Appendix E**.

The traffic study concludes that the development would have limited impact on the affected intersections, and would in certain instances result in an improvement to the level of service of some vehicle movements. The additional traffic generated by the development (at full development scale) would remain within the capacity of the existing road network to accommodate. For the avoidance of doubt, this traffic assessment takes account of the traffic generated by the development of land adjacent to the NDR for the new North Orange Bunnings and Highway Service Centre.

All property accesses would be designed to ensure compliance with Austroads standards together with the engineering standards of Orange City Council.

4.4 WATER QUALITY

The proposal has the potential to impact water quality in a number of ways, including changes to stormwater management as a result of increased impervious areas, the potential for sedimentation or erosion as a result of construction activities and potential impacts to groundwater to as a result of increased development. Connection to the reticulated sewer network would ensure that impacts to the soil environment as a result of sewerage disposal would not occur.

4.4.1 KEY FISH HABITAT

As noted, parts of the site contain waterways that are mapped as key fish habitat. Existing waterways would typically be retained within riparian corridors with significant buffers to urban encroachment. There would be some impact in areas where crossings are required. The future development application for the subdivision would therefore be integrated development and require a Part 7 (dredging/reclamation) permit in accordance with the *Fisheries Management Act 1994*.



4.4.2 STORMWATER MANAGEMENT

A unique opportunity for the site is the potential to harvest stormwater from the area and feed this into the Orange Council stormwater harvesting and reuse scheme. Having consideration to the size of the site, this would result in the development being neutral from a water security perspective, in that in would impose no greater burden on Council. It is also noted that the historical use of the site for an abattoir has resulted in significant allocations of water to support that function, and these are able to be offset from/reallocated to the proposed development to further reduce the impacts. The sites location in close proximity to the Orange sewerage treatment plant and the tie in with the adopted DSP enables the development to proceed without any additional cost to the community.

This approach would also be effective in ensure water quality and environmental flows downstream are maintained.

Additional details are provided in the servicing strategy at Appendix D.

The following general mitigation measures in relation to stormwater management are noted:

- All proposed dwelling developments would be undertaken in accordance with the requirements of BASIX;
- Drainage for impervious areas would be provided including scour protection to ensure erosion is minimised;
- Standard erosion and sediment controls would be implemented during construction activities to minimise the impacts of sedimentation.

4.4.3 EROSION

The impacts of erosion during construction would be managed through preparation and implementation of a soil and water management plan for each construction certificate in accordance with the requirements of the Landcom. Standard measure to be incorporated would include but not be limited to:

- Minimise area of disturbance to the maximum necessary.
- Install erosion and sediment control devices where necessary; only to be removed once the area is stabilised.
- Prompt revegetation of areas exposed by construction.

4.4.4 GROUNDWATER

A review of available data is provided in **Section 3.2.** A review of the bore logs (**Table 3.1**) shows standing water levels between 2 - 14 metres.

Given the low density and rural residential (rather than rural) nature of the ultimately proposed development, it is considered that the likelihood of detrimental impacts to groundwater resources is low.

4.5 **RIPARIAN CORRIDORS**

Mapping associated with the LEP identifies that the site does not contain any mapped sensitive waterways. Notwithstanding, the proposed riparian corridors have been generously sized to provide ample opportunities for protection of natural resources, placement of stormwater management devices and the installation of cycle and walking tracks.

The creeks within the site are not identified by the Department of Primary Industries (Fisheries) as key fish habitat.

Any work conducted within forty metres of these creeks would require a controlled activity approval (CCA) in accordance with Section 91 of the *Water Management Act 2000*. Any dredging and reclamation within waterland (ie, the confines of either creek) would require a Part 7 permit from Department of



Primary Industries (Fisheries) in accordance with the *Fisheries Management Act 1994*. These matters would be addressed in conjunction with a future subdivision development application.

4.6 FLOODING

The site is not identified as flood prone. Given the undulating nature of the land scape, the width of the riparian corridors and the size of proposed stormwater it is not expected that any short term flood impacts associated with the creek would present any detrimental impacts to future land owners or occupants.

4.7 BUSH FIRE HAZARD

The site is mapped as bush fire prone by reference to the Orange Bush Fire Prone Land Map (refer **Figure 8**).

An assessment of impacts associated with the bush fire prone nature of the land, completed in the context of PBFP, has been completed at **Appendix F**. This assessment notes that the bush fire source vegetation has recently been removed, but also concludes that appropriate asset protection zones and building construction standards can be achieved, with a minimum of vegetation clearance, whilst still ensuring the safety of future occupants. Commentary surrounding the need for asset protection zones is provided in **Appendix F**.

Further assessment of the provisions of PBFP is unlikely to be required in relation to development application for those future dwellings located on mapped bush fire prone land. Review of the bush fire prone land map is requested via this application due to the change in the nature of the landscape in recent years.

4.8 HERITAGE

A review of available resources, including *Orange Local Environmental Plan 2011* (refer **Section 3.9**) notes a number of local heritage sites within the vicinity of the site however none are noted on the site itself. It is considered that the likelihood of unearthing previously undiscovered items of heritage significance in relation to site works is low.

An assessment of the likelihood of encountering items or sites of Aboriginal heritage significance on the site was completed Biosis– refer **Appendix C**. This assessment included a field survey which identified a number of Aboriginal artefacts and PADs across the site. The report concludes that:

The archaeological assessment located and recorded 20 Aboriginal sites within the Project Area. If these sites can not be avoided by the proposed development, then an AHIP must be sort under Part 6 of the Parks and Wildlife Act 1974. The Project Area is suitable for rezoning once all conditions under the relevant legislation have been meet.

The following specific recommendations are provided:

Recommendation 1: Further archaeological assessment

Areas identified as having a Potential Archaeological Deposit (PAD) (OA03, OA04, OA05, OA06, OA11, OA12, OA13, PAD 01, PAD 02, PAD03, PAD 04, PAD05 and PAD 06) should be avoided wherever possible. If impact to these areas cannot be avoided subsurface investigations (test excavations), undertaken in accordance with the code, will be required prior to the commencement of works. Consultation with Aboriginal stakeholders according to the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW 2010) ('the consultation requirements') will be required for the development to proceed.

Recommendation 2: Application for an Aboriginal Heritage Impact Permit (AHIP) for the entire Project Area

If the proposed works cannot avoid harm to OA01, OA02, OA03, OA04, OA05, OA06, OA07, OA08, OA09, OA10, OA11, OA12, OA13, OA14, PAD 01, PAD 02, PAD03, PAD 04, PAD05 and PAD 06 it is recommended that an application be made to the Office of Environment and Heritage (OEH) for an area



based Aboriginal Heritage Impact Permit (AHIP) for the entirety of the Project Area. The AHIP should include the following conditions:

Impact can occur to the Aboriginal cultural heritage sites OA01, OA02, OA03, OA04, OA05, OA06, OA07, OA08, OA09, OA10, OA11, OA12, OA13, OA14, PAD 01, PAD 02, PAD03, PAD 04, PAD05 and PAD 06. All of the sites occur within the proposed works area.

The isolated artefacts (Sites OA01, OA02, OA07, OA09 and OA10) should be relocated prior to ground disturbance and moved outside of the impact area, but within their original landscape context.

At sites OA03, OA04, OA05, OA06, OA11, OA12, OA13 and OA14, the surface artefacts should be relocated prior to ground disturbance and moved outside of the impact area, but within their original landscape context. Any subsurface archaeological material located within the impact area, with the exception of human remains, can be destroyed.

Impact within the limits of the area based destruction AHIP for any further Aboriginal objects encountered during construction unless human remains are involved.

For information about AHIPs and their preparation, see below.

Advice preparing AHIPs

An AHIP is required for any activities likely to have an impact on Aboriginal objects or Places or cause land to be disturbed for the purposes of discovering an Aboriginal object. The OEH issues AHIPs under Part 6 of the National Parks and Wildlife Act 1974 (NPW Act).

AHIPs should be prepared by a qualified archaeologist and lodged with the OEH. Once the application is lodged processing time can take between 8-12 weeks. It should be noted that there will be an application fee levied by the OEH for the processing of AHIPs, which is dependent on the estimated total cost of the development project.

Where there are multiple sites within one project area an application for an AHIP to cover the entire project area is recommended.

Recommendation 3: Discovery of Aboriginal ancestral remains

Aboriginal ancestral remains may be found in a variety of landscapes in NSW, including middens and sandy or soft sedimentary soils. If any suspected human remains are discovered during any activity you must:

Immediately cease all work in the vicinity and not further move or disturb the remains.

Notify the Coroner's Office and NSW Police immediately. Following this, contact OEH's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location. The find must also be reported to the Aboriginal parties.

Not recommence work at that location unless authorised in writing by OEH.

Recommendation 4: Discovery of Unanticipated Historical Relics

Relics are historical archaeological resources of local or State significance and are protected in NSW under the Heritage Act 1977. Relics cannot be disturbed except with a permit or exception/exemption notification. Should unanticipated relics be discovered during the course of the project, work in the vicinity must cease and an archaeologist contacted to make a preliminary assessment of the find. The Heritage Council will require notification if the find is assessed as a relic.

For the avoidance of doubt, it is proposed to proceed with further investigations concurrently to the Orange City Council and Department of Planning & Environment consideration of the planning proposal with a view to ensuring these matters recommendations are satisfied prior to the lodgement of the future subdivision development application.



4.9 CONTAMINATION

A Phase 1 contamination assessment including site walkover and sampling has been completed by Geolyse – refer **Appendix A**. The assessment concluded that the site is generally suitable for the future proposed rural residential land use. The assessment recommends the following:

- The site is located on the urban fringe of Orange and the main structures include the currently abandoned abattoir facility and caretaker's residence. Other smaller structures are present, ancillary to these main structures;
- The fall of the land is generally from the north-east to the south-west, at an approximate peak elevation of 940 metres Australian Height Datum (mAHD) in the north-east, falling to 860 mAHD in the south-west. It is considered that the majority of site stormwater would be captured by drainage gullies across the site and discharge into various holding dams on the site. Waterways at the site are predominantly ephemeral and drain to the east towards Summer Hill Creek.
- Based on the review of historic operations at the site, the site is considered to have only been utilised for the abattoir and agricultural purposes.
- Based on current operations at the site, and observations of the site during the inspection in January 2016, it is considered that the site is suitable, or may be made suitable, for the proposed land uses permitted under 'large lot residential' zoning, with consideration to the following:
 - 1 Stormwater flow onto the site from properties beyond the site's boundaries may have impacted waterways at the site;
 - 2 Potential leaking of septic waste water storage tank(s) on-site, if present, may have impacted soil and groundwater at the site;
 - 3 Storage and use of chemicals associated with maintenance of farm machinery has resulted in localised soil contamination within the footprint of the machinery shed;
 - 4 Historic irrigation of effluent has resulted in localised soil contamination at the base of former ponds to the south of the former orchard area;
 - 5 Weathering of construction materials in structures potentially containing asbestos may have resulted in contamination. Spills and/or leaks resulting from operation or decommissioning of the electrical substation / transformer may have impacted soil and groundwater at the site;
 - 6 Groundwater impacts (zinc and nitrate) may present a low and acceptable risk to aquatic ecology.
- Further assessment and/or remediation of potentially contaminated areas of the site is not considered to be a requirement of rezoning the site from its current IN1 (general industrial) and RU1 (primary production) zonings to rural residential zoning, based on the following:
 - Developments permitted under the rural residential zoning without development consent do not include uses considered likely to "increase the risk of harm to health or the environment from contamination"; and
 - SEPP 55 contains a general provision that requires consideration of contamination for all development proposals which require development consent, at which point assessment and/or remediation of specified items 1-6 above may be considered, as appropriate.
- Notation of the above items may be required to be recorded on Section 149(5) Planning Certificates to be prepared for the subdivided lots, as necessary.

For the avoidance of doubt, those areas identified via the above as being the subject of potential contamination would be remediated either prior to or as a component of any subdivision development application, to ensure that the Council may satisfied that the provisions of SEPP55 are satisfied.

4.10 VISUAL AMENITY

The environment of the proposed development is a unique area with a rolling landscape featuring vegetation and water land.



It is proposed that the development of the site would consider and enhance the qualities of the landscape via the following measures:

- any future development needs to protect watercourses, establish appropriate buffers and protect and augment existing riparian vegetation;
- Areas of significant vegetation in parts of the study area, particularly in the south-western extent, will be protected and appropriate zoning implemented to ensure the connection of vegetation.

4.11 LAND RESOURCES

4.11.1 PRIMARY PRODUCTION

The majority of the site is currently zoned for primary production purposes and as such the development of the land as proposed would result in the removal of this land from this purpose.

The site has largely been the subject of investigations via the BOC process and has been found generally suitable for transition to development for urban purposes. The proposal to develop the entirety of the land for rural residential purposes is not entirely consistent with the specific nature of this strategic position but does not seek to add any additional land and would therefore not result in the loss of any additional primary production land. As demonstrated in **Appendix G** to this study, the strategic position for the development of the area has transitioned over time and now it is largely acknowledged (via adopted developer servicing strategies and the 2012 BOC Update) that the eventual use of the site would be for rural residential purposes.

4.11.1.1 Constraints and management

The site borders primary production zoned land to the north, north-east and west.

The main western railway line provides a buffer to land to the west and it is noted that the majority of land to the north is in use for quasi-rural residential purposes. To the north-east the land is in use as a commercial orchard. This land is noted to be identified within the BOC as forming part of strategic area 2 (rural residential) and therefore will face pressure for redevelopment for rural residential purposes in the coming years.

Potential major intrusions between the proposed rural residential use and the existing primary production land uses (primarily those to the north-east) are likely to be spray drift, dust and noise. The topography of the landscape provides a natural buffer to this with a ridge line located in the north-east corner of the property. This protects the majority of proposed lots from potential impacts.

Consideration of a buffer would further reduce the likelihood of impact. A buffer may consist of separation, or separation with buffer elements such as planted vegetation. Detailed design of the subdivision at DA stage would ensure that an adequate buffer was implemented noting however that the land use make-up of the area is likely to be change, and as such the master plan contemplates development of the full extent of the site. Reduction in lot yield and provisions of separation/vegetated buffer would be a consideration of a future subdivision DA.

Other measures for consideration relating to the ongoing use of the land until it is developed include:

- retention of grazing rights until the land is to be used for urban development to ensure weed control and fire hazard reduction;
- restriction of cultivation on Class III land to grazing/grain crops in rotation with pastures; and
- steeper areas of the site would be developed in later stages of the development.

4.11.2 INDUSTRIAL LAND

The abattoir site (lot 15) has laid idle for nearly 15 years. Some interest in its redevelopment has emerged from a number of sources, but each time the constraints of the site have resulted in the



proposals not proceeding. The owner of the land considers that sufficient time has been spent pursuing a candidate for the site and that the time has come to pursue other options (refer Section 4.3 of **Appendix G**).

A number of strategic decisions have been taken since the BOC was released in 2008 which reflect that the suitability of the north-western portion of the site (adjacent to the railway) is low and the likelihood of this being utilised for industrial purposes is therefore also low. The current proposal before the DP&E for introduction of additional industrial land at the Orange Airport is supportive of this general position and would accommodate any perceived loss of employment land resulting from this proposal.

In any event, the proposed development of the site for rural residential purposes would be an employment generator in its own right and would offset any perceived employment losses.

As noted in Section 1.3 of the planning proposal, the vision for the site is to provide a high quality rural residential development that provides a lasting benefit to the sub-region and the local community.

The future use of the site for industrial purposes is shown via **Appendix G** to be unlikely and the applicant does not propose to further pursue this option. Given the conclusions reached in the land use analysis at **Appendix G** it is considered that the highest and best use of the site is for rural residential purposes and this should therefore be pursued.

4.11.3 CONCLUSION

To inform consideration of land use management, and to respond to condition 2(c) of the altered DP&E Gateway approval (Attachment A to the Planning Proposal), a Land Use Conflict Risk Assessment (LUCRA) has been completed – refer **Appendix H**. The LUCRA, prepared followed discussions with the Western Region DP&E and Department of Primary Industry officers, and in accordance with the provisions of the "Living and Working in Rural Areas" handbook ('the Handbook') (Learmonth et al. 2007), concludes that:

A number of the potential risks are already low due to intervening separation distances and the prevailing topography. In these cases, further mitigation is not required.

Where the potential for conflict is real, this can be significantly reduced through the implementation of a number of mitigation measures. All potential land use conflicts can be reduced to low through the implementation of the following measures:

- Noise, lighting and spray drift from the active orchard to the north can be reduced through the physical separation of land uses via the instatement of building envelopes and the installation of a vegetated buffer that is sufficiently mature as to be effective before the development reaches these areas. The specific requirements for this buffer would be contained within the proposed Development Control Plan to be prepared in respect of the land and would be consistent with the existing provisions contained within Section 6 of the Orange Development Control Plan 2004;
- Education of the community;
- Adoption of water sensitive urban design principles; and
- Legal controls through the community title management plan, relating to matters such as pet ownership and the like.
- Bushfire hazard can be addressed by complying with design and management practices contained in Planning for Bushfire Protection (2006).

The proposed mitigation measures are specific, easily understood, easily designed, and relatively easy to implement. With these measures in place the potential for land use conflict will be unlikely and of minimal consequence.

4.12 SERVICING

Servicing of the site is proposed in line with the provisions of the adopted Orange City Council Developer Servicing Plan, which considers the rural residential use of the subject (and adjacent) site with ultimate



development for in excess of 500 homes. The servicing strategy at **Appendix D** demonstrates that the site can be developed as proposed and that the supply of services is within the capacity of the current systems.

4.13 STAGING

The timing and staging of the development of the subdivision would be developed in consultation with Council to ensure that the objects of the Environmental Planning and Assessment Act 1979 are appropriately balanced with the desire to develop land to respond adequately to demand.

Careful consideration of the objects of the Act, including the promotion and co-ordination of the orderly and economic use and development of land, is required.

In general terms the following is noted:

- The overall timeframe of the development is considered to be 15-20 years;
- Staging may occur with consent for larger releases followed by staged construction of each release to respond to the market
- It would be too simplistic to assume yearly releases and instead it is expected that releases will be coordinated having regard to demand
- Staging would respond to the efficient installation of services to ensure that costs are appropriately balanced for the development.



Conclusion

5.1 CONCLUSION

The site offers a unique opportunity to provide a high quality rural residential development that is both close to town and provides the rural amenity and lifestyle that is highly sought after in Orange.

The proposed amendment to the Orange LEP will enable the land to be developed as proposed.

The land has been idle for over 10 years and the proposal would enable the land to be utilised for its highest and best use.

Appendix A CONTAMINATION ASSESSMENT



Appendix C Aboriginal Heritage Assessment

Appendix D CONCEPT SERVICING STRATEGY

Appendix E TRAFFIC IMPACT ASSESSMENT





Appendix H LAND USE CONFLICT RISK ASSESSMENT