Frasers Property Australia Pty Ltd &
Altis Property Partners Pty Ltd

Kemps Creek - Ag Impact Assessment

Agricultural Impact Assessment

October 2018

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1. Introduction

GHD was contracted by Frasers Property Industrial Constructions Pty Ltd / Altis Property Partners Pty Ltd to complete an Agricultural Impact Assessment for the proposed Mamre Road, Kemps Creek State Significnat Development project.

The proponents are seeking to develop the site for a warehouse & logistics hub and have recently obtained the Planning Secretary's Environmental Assessment Requirements (SEARs) for the this State Significant Development (SSD 9522). In issuing the SEARs, the Department of Planning & Environment has requested (among other issues) the:

- Completion of an Agricultural Impact Assessment – assessment of agricultural value of the site and justification of loss of agricultural farm land;
- Complete a Land Use Conflict Risk Assessment; and
- Assessment of biosecurity impacts and mitigation options.

1.1 Overview

The land that is the subject of the planning proposal is situated at Kemps Creek in the Penrith Local Government Area (LGA) and is zoned RU2 Rural Landscape as defined in the Penrith Local Environmental Plan (LEP) 2010. The study area is also subject to local planning directions under Section 117 of the NSW Environmental Planning and Assessment Act 1979 with respect to two components:

1. Subsection 1.2 Rural Zones. The objective of this direction is to protect the agricultural production value of rural land; and
2. Subsection 1.5 Rural Lands. The objectives of this direction are to:

a. protect the agricultural production value of rural land; and

b. facilitate the orderly and economic development of rural lands for rural and related purposes.

The study reviews existing policies (see section 2), while section 3 examines land capability and land use including an overview of agriculture of the study area and the broader region. Section 4 provides a land use conflict risk assessment to ensure that the proposed development does not impact on the continuing ability of properties to pursue agricultural production. Section 5 provides and analysis of the Rural SEPP Criteria and further commentary with respect to the proposed development from RU2.

1.2 Description of the study area

Information provided by the proponent[1] states that the site has a total area of 112 hectares with direct frontage to Mamre Road of 1.1km. The subject site comprises of five large allotments, with the following legal property titles:

Lot 34 in DP1118173

Lot X in DP421633

Lot 1 in DP1018318

Lot Y in DP421633

[1] WillowTree Planning (2 August 2018) – Request for Secretary's Environmental Assessment Requirements – Proposed Warehouse & Logistics Hub

Lot 22 in DP258414

Figure 1 shows the location of the site and some of the existing attributes of the area. The site is bounded by:

- SCA Warragamba pipeline to the north (and adjacent to the pipeline is Erskine Business Park which also contains the NSW Fire and Rescue Emergency Services Academy).
- Mamre Road to the east;
- Existing rural/residential to the south; and
- South Creek bounds the site to the west. Twin Creeks Golf and Country Club is located to the south-west of the site and is bordered by the Western Sydney Airport Growth Area.

Vehicle access to the subject site is directly from Mamre Road or Bakers Lane. The land use of the site is discussed in further detail in Section 3.

The site is located within the north-eastern corner of the Western Sydney Airport Growth Area (WSAGA) which is proposed to deliver jobs within and around the future Western Sydney Airport.

GHD has not undertaken consultation with community, individuals and organisations / agencies that are directly impacted or within close proximity to the Subject Site as we have relied on the extensive Community Consultation Report undertaken by Willowtree Planning.

1.3 Scope and limitations

This report: has been prepared by GHD for Frasers Property Australia Pty Ltd & Altis Property Partners Pty Ltd and may only be used and relied on by Frasers Property Australia Pty Ltd & Altis Property Partners Pty Ltd for the purpose agreed between GHD and the Frasers Property Australia Pty Ltd & Altis Property Partners Pty Ltd as set out in section one of this report.

GHD otherwise disclaims responsibility to any person other than Frasers Property Australia Pty Ltd & Altis Property Partners Pty Ltd arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

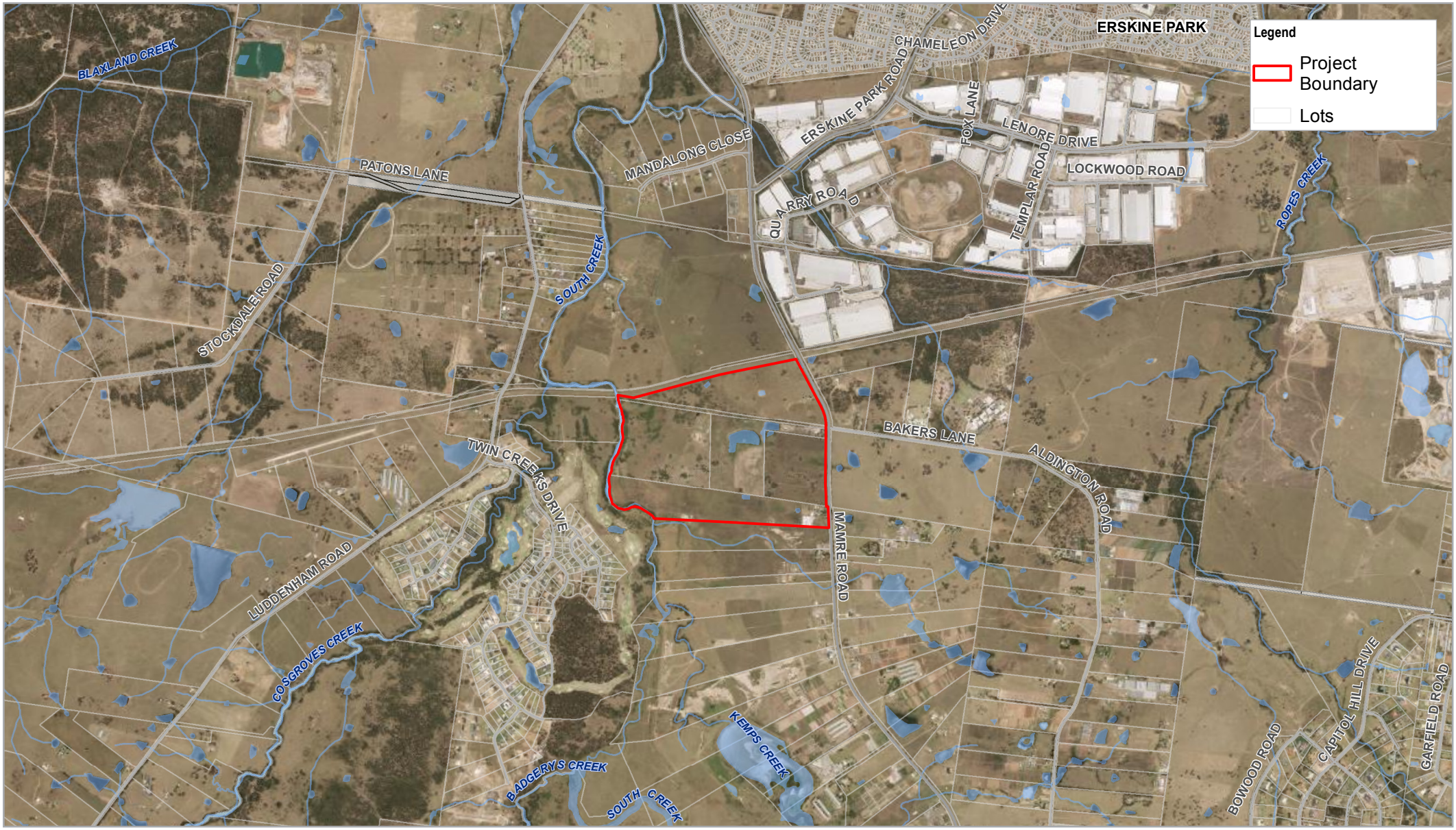
The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer section(s) one of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by Frasers Property Australia Pty Ltd & Altis Property Partners Pty Ltd and others who provided information to GHD (including Government authorities)], which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

GHD has not been involved in the preparation of the Environmental Impact Statement and has had no contribution to, or review of the Environmental Impact Statement other than in the Agricultural Impact Assessment. GHD shall not be liable to any person for any error in, omission from, or false or misleading statement in, any other part of the Agricultural Impact Assessment.



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GHD

Frasers Property Australia and Altis Property Partners
Agricultural Impact Assessment
Kemps Creek

Project No. **21-27705**
Revision No. **A**
Date **05/10/2018**

Site Overview Map

FIGURE 1

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Print date: 12 Oct 2018 - 13:58

Data source: LPI NSW - Base data. . Created by: kqvelasco

2. The Planning Context

Following is an overview of policies at the NSW state level that concern the protection of agricultural land with particular reference to land in the Sydney basin.

2.1 Relevant NSW legislation, policies and guidelines

2.1.1 Legislation

The Environmental Planning and Assessment (EP&A) Act 1979 provides the legislative framework overseeing the assessment and determination of development proposals and for rural planning and development control in New South Wales. The Section 117 Directions with regard to 1.2 Rural Zones and 1.5 Rural Lands as described in further detail in section 2.2 are within the purview of this Act.

NSW DPI advises consent authorities about the agricultural impacts of a proposal, including:

- rules established by the planning system for the locality;
- impact on the long-term sustainability of agriculture in the locality;
- potential for conflict between residential and farming neighbours; and
- impact on land and water resources used for agriculture.

Other legislation impacting on farming activities include:

- Protection of Environment Operations Act 1997
- Native Vegetation Act 2003
- Pesticides Act 1999
- Soil Conservation Act 1938
- Contaminated Land Management Act 1997
- Water Management Act 2000
- Noxious Weeds Act 1993
- Rural Lands Protection Act 1998

2.1.2 State Environment Planning Policy (Rural Lands) 2008

The aims of this policy were described earlier in section 1.1, and Clause 7 “Rural Planning Principles” are the most relevant with respect to this rural lands study. The Rural Planning Principles are as follows:

c. the promotion and protection of opportunities for current and potential productive and sustainable economic activities in rural areas,

d. 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,

e. 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,

f. in planning for rural lands, to balance the social, economic and environmental interests of the community,

g. 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,

h. the provision of opportunities for rural lifestyle, settlement and housing that contribute to the social and economic welfare of rural communities,

i. the consideration of impacts on services and infrastructure and appropriate location when providing for rural housing,

j. ensuring consistency with any applicable regional strategy of the Department of Planning or any applicable local strategy endorsed by the Director-General.

2.1.3 State Environment Planning Policy (Western Sydney Employment Area) 2009

The subject site falls within the Western Sydney Employment Area and the aim of this policy is to protect and enhance the land to which this Policy applies (the Western Sydney Employment Area) for employment purposes. The particular aims of this Policy are as follows:

a. to promote economic development and the creation of employment in the Western Sydney Employment Area by providing for development including major warehousing, distribution, freight transport, industrial, high technology and research facilities,

b. to provide for the co-ordinated planning and development of land in the Western Sydney Employment Area,

c. to rezone land for employment or environmental conservation purposes,

d. to improve certainty and regulatory efficiency by providing a consistent planning regime for future development and infrastructure provision in the Western Sydney Employment Area,

e. to ensure that development occurs in a logical, environmentally sensitive and cost-effective manner and only after a development control plan (including specific development controls) has been prepared for the land concerned,

f. to conserve and rehabilitate areas that have a high biodiversity or heritage or cultural value, in particular areas of remnant vegetation.

2.1.4 Greater Sydney Commission –Western City District Plan

The Western City District Plan released by the Greater Sydney Commission in March 2018 is a 20-year plan to manage growth in the context of economic, social and environmental matters to achieve the 40-year vision for Greater Sydney. This plan is a guide to implementing the Greater Sydney Regional Plan, A Metropolis of Three Cities, at a district level and is a bridge between regional and local planning.

The Western City District Plan explores the future productivity of the region and outlines a vision for the area to leverage industry opportunities from the Western Sydney Airport and Badgerys Creek Aerotropolis and the broader Western Sydney Employment Area, a regional resource of industrial and employment land serving Greater Sydney. The Plan also outlines how a new Western Sydney intermodal terminal will be investigated by 2036 and while the location is yet to be determined, it should be within close proximity of the Western Sydney Freight Line.

2.1.5 NSW right to farm policy

The NSW Government has developed a comprehensive, State-wide approach to deal with the issue of 'right to farm'.

The concept of 'right to farm' has multiple facets but the common interpretation – and the one used in this policy - relates to a desire by farmers to undertake lawful agricultural practices without conflict or interference arising from complaints from neighbours and other land users.

This policy brings together a suite of responses including:

- Reinforcing rights and responsibilities
- Establishing a baseline and ongoing monitoring and evaluation of land use conflicts
- Strengthening land use planning, ensuring ongoing reviews of relevant environmental planning instruments include consideration of options to ensure best land use outcomes and to minimise conflicts
- Improving education and awareness on management of land use conflicts, considering potential future legislative options, should additional Government intervention be required.

2.1.6 A Plan for Growing Sydney

The Plan for Growing Sydney was developed from the draft Metropolitan Strategy for Sydney – Vision for Sydney in 2031 – describes a series of actions which are designed - in close cooperation with communities, business and local government – to achieve the vision for Sydney as a strong global city and liveable local city in 2031.

The Plan includes a description of Sydney's Metropolitan Rural Area (MRA) and Action 4.1.2 references the preparation of a strategic framework for the MRA to enhance and protect its broad range of environmental, economic and social assets. The framework will assist decision making by establishing a range of criteria, including minimising the adverse economic impacts on existing primary industry and productive agriculture.

The Plan states that the MRA contains most of Sydney's conservation and significant agriculture and extractive industries, and that in 2010–11, the gross value of agricultural commodities produced in the Sydney Metropolitan Area was $591.8 million, contributing around five per cent of NSW's total agricultural production by value. More than one-third of the total value of the State's vegetables are produced in the Sydney Metropolitan Area in market gardens. Sydney's agricultural sector provides local jobs and reduces the transport costs of moving produce to markets.

2.1.7 Living and Working in Rural Areas – A handbook for managing land use conflict issues on the NSW North Coast

The handbook provides an integrated and holistic approach to managing and avoiding conflicts associated with changes in land use and between neighbouring land uses in rural areas. The handbook outlines the principles for strategic land use planning with the aim of limiting the possibility of land use conflict and interface issues in the future:

- Ecologically sustainable development, precaution and community development;
- Consistency throughout the planning system;
- Protection of natural resources;
- Protection of environmental assets;
- Recognition of indigenous values;
- Avoiding incompatibility; and
- Avoiding and reconciling land use conflict.

The handbook describes how land use buffers can be used as part of the planning process to increase certainty in the planning approval process and minimise the potential for conflict to occur. There are a number of types of buffers:

- Separation;
- Biological and vegetation;
- Landscape and ecological;
- Property management; and
- Other.

The separation buffers recommended between primary industries and residential areas / urban developments are outlined in the above document. For the purposes of this assessment the recommended minimum buffers for select primary industries and residential areas are:

  - Grazing of stock 50 metres
  - Greenhouse and controlled environment horticulture 200 metres
  - Cropping and horticulture 300 metres

A Land Use Conflict Risk Assessment (LUCRA) was completed to assess risks and recommend if any actions are required along with consideration of buffers (distance, topographic and vegetative) when assessing potential conflict.

2.1.8 Land Use Conflict Risk Assessment Guide

This factsheet produced by the NSW Department of Primary Industries provides guidance on the measures to use when conducting a Land Use Conflict Risk Assessment (LUCRA). It may assist landholders, developers and regulators with improved knowledge to avoid and manage land use conflicts.

2.2 Local Government

Local governments are the consent authorities for delivering many of the planning features of the EP&A Act through Local Environmental Plans (LEPs). In the broadest terms, these responsibilities include:

- Zoning of land - the Standard Instrument LEP Program aims to have one LEP for each local government area, using a standard suite of 35 land use zones which include a number of rural zones;
- For each zone, the LEP will identify its objectives, activities that are permissible without development consent and those permissible only with development consent, and those activities that are prohibited;
- Each zone will generally have at least one minimum lot size for the subdivision of land; and
- For some zones there will be additional Development Control Plans on the nature of developments including possible buffer distances from adjacent land uses.

2.2.1 Penrith Local Environmental Plan 2010

The study area is zoned as RU2 Rural Landscape within the Penrith Local Environmental Plan 2010. The objectives and land uses relevant for the RU2 zone are shown below.

Table 1 Zone RU2 Rural Landscape – Penrith LEP 2010

Zone RU1 Primary Production	
1 Objectives of zone	To encourage sustainable primary industry production by maintaining and enhancing the natural resource base. To maintain the rural landscape character of the land. To provide for a range of compatible land uses, including extensive agriculture. To minimise conflict between land uses within the zone and land uses within adjoining zones. To preserve and improve natural resources through appropriate land management practices. To ensure development is compatible with the environmental capabilities of the land and does not unreasonably increase the demand for public services or public facilities.
2 Permitted without consent	Extensive agriculture; Home occupations
3 Permitted with consent	Agricultural produce industries; Agriculture; Animal boarding or training establishments; Building identification signs; Business identification signs; Cellar door premises; Cemeteries; Community facilities; Crematoria; Dual occupancies; Dwelling houses; Environmental facilities; Environmental protection works; Farm buildings; Flood mitigation works; Forestry; Funeral homes; Helipads; Home-based child care; Home businesses; Home industries; Information and education facilities; Places of public worship; Public administration buildings; Recreation areas; Recreation facilities (outdoor); Roads; Roadside stalls; Rural supplies; Schools; Secondary dwellings; Stock and sale yards; Tourist and visitor accommodation; Veterinary hospitals
4 Prohibited	Hotel or motel accommodation; Serviced apartments; Any other development not specified in item 2 or 3

3. Current Land Use

For the following sections on land capability in the study area and land use, GHD completed a visual inspection from publicly accessible areas only and has therefore relied on data obtained from public sources and aerial photographs of the study area and its surrounds and general information regarding the study area known by the consultants.

3.1 Rural land use in the Sydney Basin

There is a complexity of rural land use in the Sydney Basin which includes viable production agriculture (e.g. market gardens, glass houses), enterprising businesses (e.g. horse training and agistment, farm-gate sales, agri-tourism) and social interests (hobby farms, community gardens). Table 2 on the following page provides a typology of the various forms of 'urban agriculture and outlines the value and benefits that these provide. The lot sizes for the agricultural enterprises (e.g. livestock grazing) are generally too small to enable standalone viable businesses and therefore off-farm income is essential to maintain family income, except for intensive industries such as egg and chicken production, or vegetable, floriculture or other horticultural production.

Horticulture production varies by the type of produce, but the Sydney Basin is a major production region for leafy Asian vegetables.

GHD has analysed various aspects of agricultural production in the Penrith LGA when completing recent projects, and data sourced from the Australian Bureau of Statistics (ABS) have shown the following:

- A decline in the number of poultry businesses from 22 in 2005-06 to 18 in 2010-11
- A decline in the number of horses (stud and non-stud) from 509 in 2005-06 to 76 in 2010-11.
- A decline in the number of beef cattle from 4,014 in 2005-06 to 2,283 in 2010-11. Over the same period the number of farms declined from 67 to 52.
- In the 2016 Census, agriculture was the third smallest industry of employment with 716 employees for the Penrith LGA.
- Within the ABS statistical area of 'Kemps Creek State Suburb' only 106 people were employed in agriculture, forestry and fishing industry with 57 of those people nominating vegetable growing (outdoors) as their main industry of employment.

Table 2 Rural land use in the Sydney Basin

	Forms of Urban Agriculture	Values/Benefits
SOCIAL ENTERPRISING PRODUCTION	Backyard	Recreation, human health on all dimensions, seed banks, supplementary food supply
	Community and Communal Gardens	Social cohesion through cooperative endeavour, education, food access, food equity, productive use of communal land
	Rooftop	Corporate involvement, worker wellbeing, efficient use of space
	School/Agriculture Plots	Education, connection with farming practices and culture
	Historical	Heritage, conservation and collection of artefacts, repository, education, research
	Lifestyle/Hobby	Environmental management, recreation, diversity of lifestyle, supplemental incomes, niche production, small scale production
	Boutique/Cottage/Niche	Diversity, rural open space, small business, specialty production
	Farm Gate	$$ remain locally; 80% profit from 20% of farm sales, reconnecting with community, visitor experiences, education, alternative distribution channel, new markets.
	Agritourism	Income diversification; inter-industry leverage – hospitality, tourism, agriculture; home/farm based value added agribusiness; producer/consumer relationship benefits.
	Equine - Recreation - Studs/Training	Recreation; landscape visual aesthetics; bloodstock industry; horse culture and history $ multiplier for support industries.
	Flood Plain - Market Gardens - Dairy - Turf - Orchards - Fodder Crops	Intergeneration equity; food security; greatest inherent sustainability – soils and soil cycles, water access, landform, biodiversity (riparian, wetlands); water effluent and green recyclables. Hydrological system, micro and macro climate effects, sequestration of urban wastes, green belts, aesthetic contribution to rural commons
	Flood Free - Market Gardens - Dairy - Orchards - Fodder Crops/Agro-Forestry	Retention of a natural resource to meet future and perhaps yet unknown needs and considerations (e.g. as a result of global warming) and technologies such as nanotechnology; sustainable urban agriculture as a NRM instrument particularly when land use is matched to agricultural suitability; community cultural diversity – people of culturally and linguistically diverse (CALD) backgrounds; carbon credits.
	Controlled Environment/High-Tech - Greenhouse Horticulture - Nurseries - Poultry - Fixed Pad Dairies - Mushrooms - Protected Cropping	$ Multiplier for support industries, e.g. mushrooms >5; fresh perishable foods grown close to market; reduced emissions due to less transport distances, high productivity and efficiency, controlled waste, pesticide, water and energy systems

Source: Mason and Docking (2005) Agriculture in Urbanising Landscapes – A Creative Planning Opportunity

3.2 Land and soil capability

Land in NSW is commonly classified according to the capability of land to remain stable under particular land uses. The land and soil capability assessment scheme uses the biophysical features of the land and soil including landform position, slope gradient, drainage, climate, soil type and soil characteristics to derive detailed rating tables for a range of land and soil hazards.

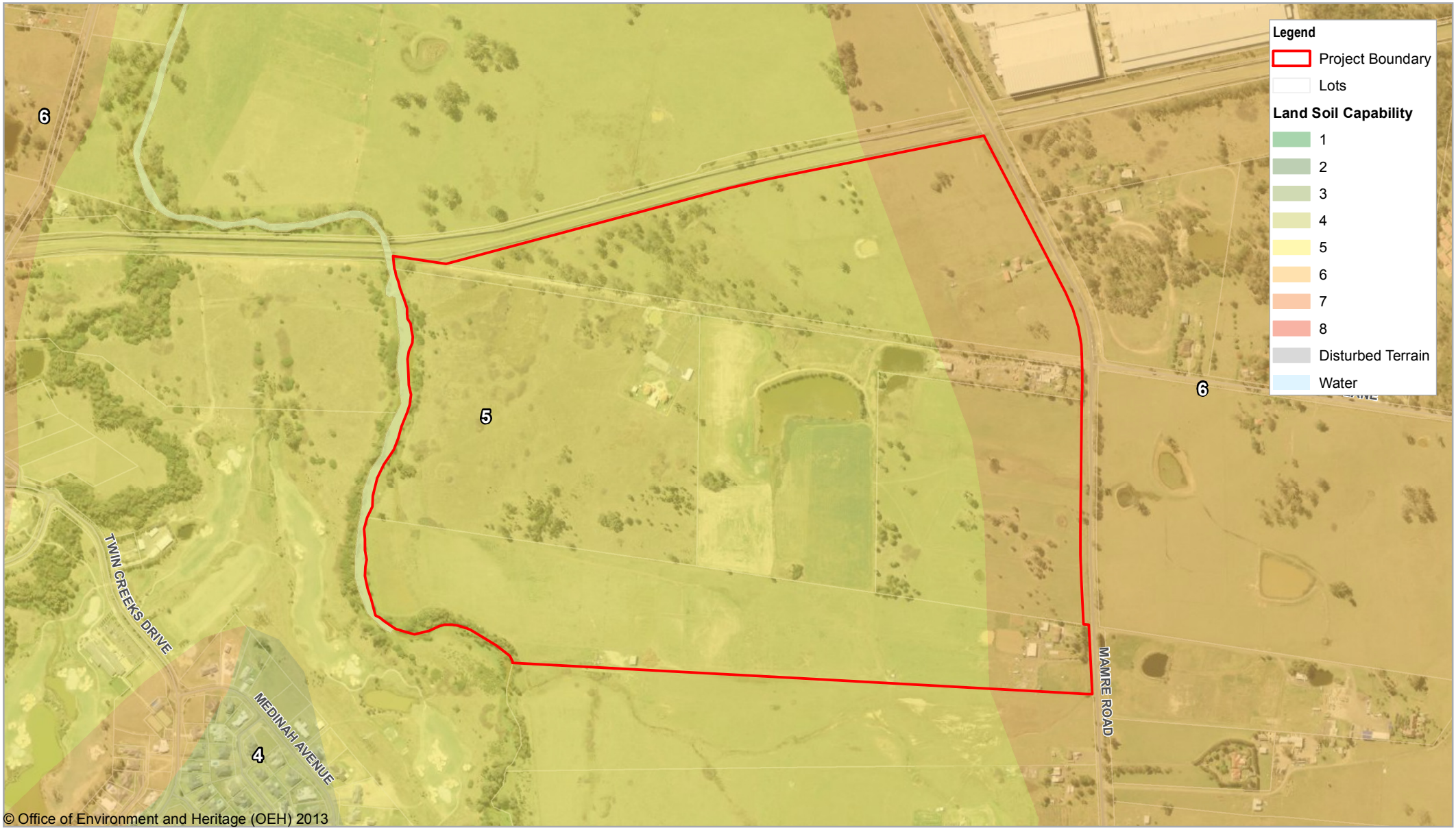
Note that this is a broad scale mapping tool that may not take into account the actual land capability for specific sites.

A key to sustainable agricultural production is to manage land in accordance with its capability to reduce the risk of degradation of resource both on- and off-site, potentially leading to a decline in natural ecosystem health, agricultural productivity and infrastructure functionality. The 8-class classification is shown in Table 3 and Figure 2. Land within the study area is classed as either Class 5 (93 ha, 80%) or Class 6 (24 ha, 20%) land. This land is classed as low capability land as per definition in Table 3, and has high limitations for high-impact land uses and land use is largely restrict to grazing.

Table 3 Land and soil capability

Broad category	LSC Class	General definition
Land capable of being regularly cultivated and used for a wide variety of landuses (cropping, grazing, horticulture, forestry, nature conservation)	1	**Extremely high capability land:** Land has no limitations. No special land management practices required. Land capable of all rural land uses and land management practices.
	2	**Very high capability land:** Land has slight limitations. These can be managed by readily available, easily implemented management practices. Land is capable of most land uses and land management practices, including intensive cropping with cultivation.
	3	**High capability land:** Land has moderate limitations and is capable of sustaining high-impact land uses, such as cropping with cultivation, using more intensive, readily available and widely accepted management practices. However, careful management of limitations is required for cropping and intensive grazing to avoid land and environmental degradation.
Land capable of a variety of land uses (cropping with restricted cultivation, pasture cropping, grazing, some horticulture, forestry, nature conservation)	4	**Moderate capability land:** Land has moderate to high limitations for high-impact land uses. Will restrict land management options for regular high-impact land uses such as cropping, high-intensity grazing and horticulture. These limitations can only be managed by specialised management practices with a high level of knowledge, expertise, inputs, investment and technology.
	5	**Moderate–low capability land:** Land has high limitations for high-impact land uses. Will largely restrict land use to grazing, some horticulture (orchards), forestry and nature conservation. The limitations need to be carefully managed to prevent long-term degradation.
Land capable for a limited set of land uses (grazing, forestry and nature conservation, some horticulture)	6	**Low capability land:** Land has very high limitations for high-impact land uses. Land use restricted to low-impact land uses such as grazing, forestry and nature conservation. Careful management of limitations is required to prevent severe land and environmental degradation
Land generally incapable of agricultural land use (selective forestry and nature conservation)	7	**Very low capability land:** Land has severe limitations that restrict most land uses and generally cannot be overcome. On-site and off-site impacts of land management practices can be extremely severe if limitations not managed. There should be minimal disturbance of native vegetation.
	8	**Extremely low capability land:** Limitations are so severe that the land is incapable of sustaining any land use apart from nature conservation. There should be no disturbance of native vegetation.

Source: NSW OEH (2012) The land and soil capability assessment scheme – second approximation



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Kemps Creek

Project No. **21-27705**
Revision No. **A**
Date **05/10/2018**

Land Soil Capability

FIGURE 2

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Print date: 12 Oct 2018 - 14:01

Data source: LPI NSW - Base data. Imagery - Sixmaps . Created by: kqvelasco

3.3 Land use at the study area

Current land use was assessed during a site inspection on 6 October 2018 with access only available from public roads. The aerial photograph (Figure 1) depicts the different land uses surrounding the subject land. Illustrations of the different land uses are provided via a selection of photos (Appendix A). Nominal classifications for land use have been used based on the experience of the consultant.

Current land use is extensive beef cattle grazing on semi-improved pastures (quality of pastures varies between allotments). Aerial photography also shows the subject site may have been used for opportunistic cropping for the production of hay and/or silage. Historical agricultural land uses on the subject site is unknown.

Pasture improvement associated with past land uses has meant that the land has been mostly cleared of trees, although there are some stands of timber and scattered trees throughout the property to provide for livestock shade and shelter (see photo 2 Appendix A).

There are a number of farm dams throughout the subject site (capacity not measured) with their main use being for livestock drinking water. A large dam exists in the centre of the site and it is unknown if irrigation from this dam has occurred in the past.

The subject site has at least three residences and several other buildings and a set of livestock handling yards (condition not assessed). A rural produce store is also located on the corner of Mamre Road and Bakers Lane.

The properties are subdivided into a number of paddocks to assist with pasture and grazing management. Paddock and boundary fencing was generally stock proof however there was evidence of some fences being near the end of their useful life (see photo 3).

Pastures are semi-improved and current pasture growth is poor due to recent climate conditions and prolonged periods with below average annual rainfall. Pastures would require renovation to increase density of improved species if a more productive livestock enterprise was established in the future.

3.3.1 Other surrounding land

As for rural land in the Sydney Basin, surrounding land use in the study area includes a range of uses from intensive animal production (horse facilities) through to non-intensive grazing of livestock on pastures.

Land adjacent to the eastern boundary of the subject site is currently used for extensive grazing (see photo 4) and a small equine facility.

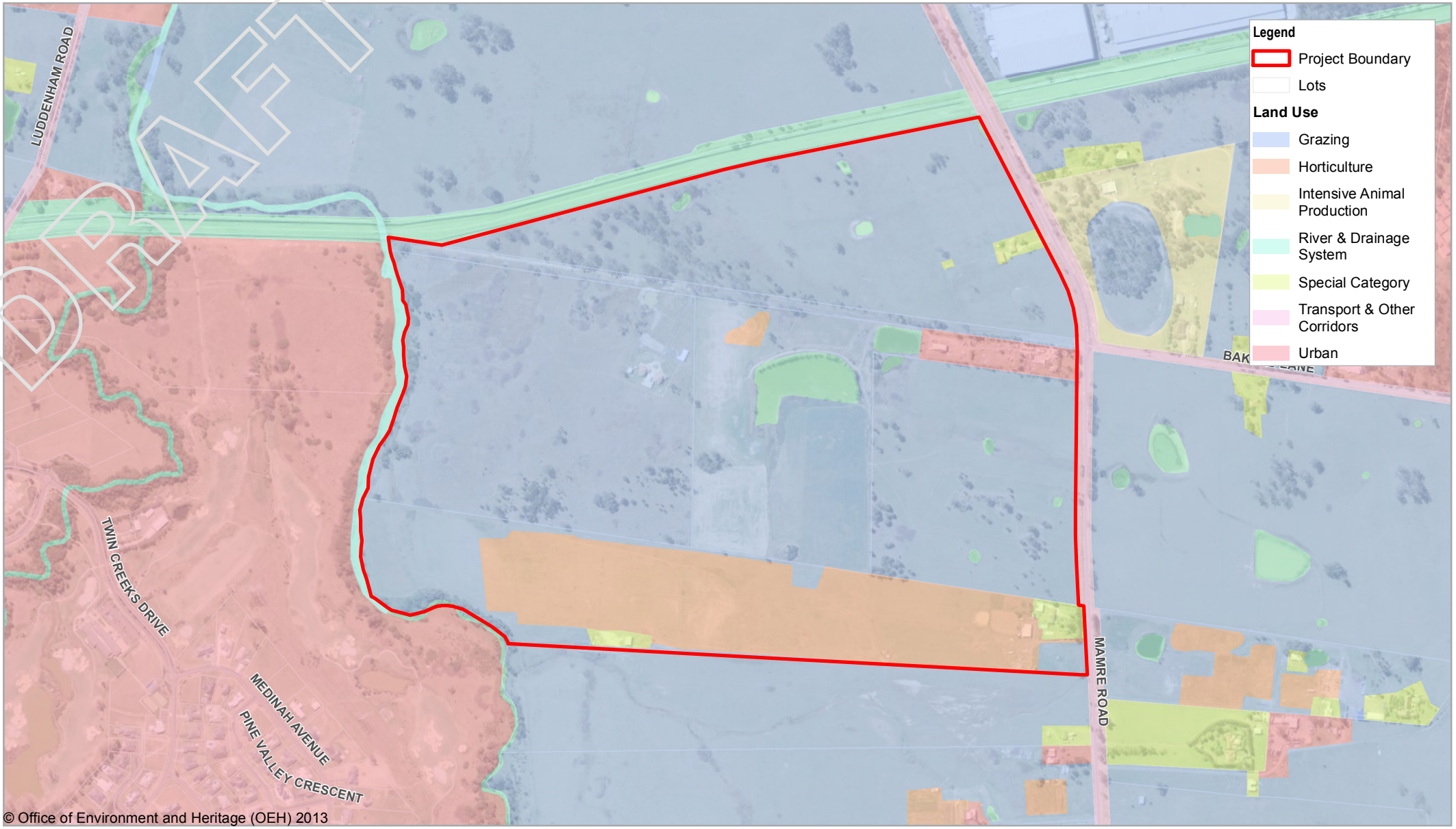
Land adjacent to the southern boundary (see photo 1) is also extensive grazing and there was evidence of market gardens further south along Mamre Road.

South Creek runs along the western boundary of the subject site with the land on the western side of South Creek the Twin Creeks Golf & Country Club (see photo 2)

The northern boundary of the site adjoins the SCA Warragamba pipeline and an industrial site (see photo 5). The Structure Plan for the subject site also contains the provision for a 60m future railway dedication zone along the northern boundary.

Figure 3 shows the land use of the subject site using data obtained from NSW Office of Environment and Heritage (OEH). The majority of land use of the subject site is classified as grazing which was consistent with the site inspection. Visual inspection of land use on adjacent sites was also consistent with the NSW OEH land use mapping as shown in the below figure. The southern parcel of the subject site is mapped as horticulture, however this land use was not evident at the time of the site inspection and may reflect the land use at the time when the land

use mapping was undertaken by NSW OEH. Land adjacent to the norther boundary is now also classified as industrial (see photo 5) and was previously mapped as grazing.



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Meters

Horizontal Datum: GDA 1994
Grid: GCS GDA 1994

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Frasers Property Australia and Altis Property Partners
Agricultural Impact Assessment
Kemps Creek

Land Use

Project No. **21-27705**
Revision No. **A**
Date **05/10/2018**

FIGURE 3

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Data source: LPI NSW - Base data. Imagery - Sixmaps . Created by: kqvelasco

4. Land Use Conflict Risk Assessment

As the operation of the proposal is an activity that differs from the agricultural activities on surrounding properties, it is important that the warehouse and logistics hub does not impact on the continuing ability of properties to pursue agricultural production. A land use conflict risk assessment (LUCRA) is a tool that can assess the potential of any negative impacts on surrounding land use and provide options for mitigation of potential impacts.

As described in section 3, any potential for incompatible land use requires assessment to ensure that agricultural land is preserved to the extent that is required in the planning policies and strategies.

4.1 Land use conflict risk assessment matrix

The following risk assessment matrix (Table 4) has been adopted to assess potential land use conflict risks from the residential development.

Table 4 Land use matrix

Likely consequence from a dispute or conflict arising over the land use or activity	Likelihood of a dispute or conflict arising over the land use or activity		
	Very likely	Likely	Unlikely
Major consequences and impacts likely	HIGH	HIGH	MEDIUM
Modest or periodic consequences and impacts likely	HIGH	MEDIUM	LOW
Minimal consequences and impacts likely	MEDIUM	LOW	LOW

Source: Living and Working in Rural Areas – A handbook for managing land use conflict issues on the NSW North Coast. DPI (2007)

4.2 Land use conflict risk assessment

Table 5 lists the potential sources of land use conflict from the proposal, assesses the risk based on the above matrix, and suggests management strategies to reduce possible conflicts. The list is adapted from the DPI Living and Working in Rural Areas handbook (NSW DPI 2007). A number of issues listed in the DPI document are considered to pose a negligible risk for the proposal and have been assessed as not applicable (N/A).

Table 5 Land use conflict risk assessment

Issue	Assessment	Issue management
Agricultural aerial spraying	N/A	There is very limited cropping activities across the Sydney Basin that would require any aerial spraying.
Catchment management	Low	The development will have nil to minimal impact on natural resource management of surrounding agricultural properties. The proponent is responsible for ensuring site plans (eg stormwater) meet guidelines for discharges into waterways. The Structure Plan for the development includes a riparian buffer zone to South Creek. A flood impact assessment is being prepared separately to this assessment.

Issue	Assessment	Issue management
Dogs	N/A	Stray dogs could disturb grazing livestock but the added risk from the development would be minimal considering the close proximity of existing residential/ industrial areas. Future management will be achieved through Council regulations on dog control.
Drainage	Low	See catchment management.
Dust	Low	Routine agricultural operations (eg cultivation for market gardens) could have an impact on new industrial areas. However, agriculture up to the southern and eastern boundary is predominantly cattle and horse grazing rather than cropping resulting in less dust. Management of potential conflict is via appropriate buffers (distance and vegetative screenings) to minimise impact. The 500 metre distance from residences to the grazing area in the north and west combined with the riparian buffer along South Creek remove the risk of conflict.
Dwellings	N/A	The development is adjacent to an existing residential area to the west and industrial areas to the north and will have minimal additional impact on existing rural pursuits or routine land use practices on surrounding agricultural land. Photo 2 shows existing residences on the western boundary of the subject site.
Erosion	N/A	Topography of the site is relatively flat and these issues will be considered in the stormwater strategy for the site.
Fencing	Low	Fences with adjoining agricultural land will need to be maintained in a condition to avoid the possibility of livestock straying. The maintenance of shared boundary fencing is the responsibility of land owners. Consideration could be given to upgrading the fence along the southern boundary as part of development consent.
Flies	N/A	Surrounding land use is extensive grazing of beef cattle and horses and although their manure promotes the breeding of flies, the extensive nature means this will be low impact.
Lights	Low	Routine agricultural activities on the surrounding grazing areas will be mainly conducted during daylight hours. Lights from cultivation and haymaking at night could potentially be an issue but there does not appear to be any evidence of these activities on adjoining land. As the subject site will be used for a warehouse and logistics hub, any lights from agricultural activities means the potential conflict is assessed as low.
Noise	Low	As per lights.
Odours	N/A	The extensive livestock grazing means that odours of any significance will be of little concern. It is unlikely that intensive livestock enterprises will be established in the future and the impact that such an activity would have on water quality flowing into South Creek. Livestock handling yards will be a source of some odour but there is appropriate distances and a vegetative buffers to reduce the impact.
Pesticides	Low	Extensive livestock grazing and market gardens to the south and east may require only occasional and infrequent use of pesticides for weed control. Application of pesticides need to be in accordance with the Pesticides Act 1999 such that only registered pesticides are used based on label instructions that are designed to minimise impacts on health, the environment and trade, and which are based on good agricultural practice.
Straying livestock	Low	See Fencing.

Issue	Assessment	Issue management
Theft/vandalism	N/A	The extensive nature of large livestock grazing (cattle, horses) in surrounding agricultural land means there is a low risk of theft. Machinery and equipment is mainly located close to rural residences on Mamre Road.
Visual amenity	Low	The subject area is adjacent to existing residential and industrial developments and it therefore has minimal additional impact on visual amenity (see photo 5). A separate visual impact assessment will be prepared which will give full consideration of all resultant visual impacts of the proposed warehouse facilities.
Weeds and pests	Low	Weed and pest control, including for noxious weed and pests, will be subject to ongoing routine monitoring and management. See also biosecurity below.

4.3 Biosecurity impacts

The productivity and profitability of agricultural production depends in part on the management of pests and diseases, including the prevention of incursion of pests and diseases onto properties. Biosecurity is a term that is commonly used for such management and the set of measures adopted to protect a property from the entry and spread of pests, diseases and weeds.

Farms generally prepare an on-farm biosecurity plan based on industry guidelines such as those available on the website: farmbiosecurity.com.au. The guidelines include risk assessments and control options to minimise impacts. The major biosecurity risks from this proposal relate to the movement of people, vehicles and machinery. Table 6 outlines the potential biosecurity risks and potential measures that may mitigate the risks.

Table 6 Biosecurity risks and mitigation options

Biosecurity risk	Potential mitigation measures
People	Limit entry points to the property Vehicles, machinery, equipment and work boots will be inspected and cleaned prior to moving to new locations. Limit worker contact with livestock or plant materials as much as possible and eliminate any unnecessary contact altogether. Keep a visitor register.
Vehicles	Limit the number of entry and exit points (one is preferable). Clearly sign and lock restricted access areas. Ensure construction vehicles are clean and are parked in a designated area away from livestock. Establish a vehicle high pressure wash down facility well away from livestock and crops to clean vehicles and equipment which need to enter the property. Ensure construction vehicles remain on designated tracks
Equipment	Clean machinery and equipment from the top down and dismantle it as far as possible to gain access to areas not readily visible.

Source: Adapted from farmbiosecurity.com.au website (accessed October 2018)

5. Analysis of Rural SEPP Criteria

Using information from the above land use, land capability, lot size and employment statistics, GHD provides commentary below on the Section 117 directions, specifically those relevant to Subsection 1.2 Rural Zones and Subsection 1.5 Rural Lands. This includes consideration of the aims of the State Environmental Planning Policy (Rural Lands) 2008 (the Rural SEPP) in Table 7 and the Planning Principles listed in the Rural SEPP in Table 13.

Table 7 Analysis against the aims of the Rural SEPP

Aims of the Rural SEPP	Commentary with respect to the proposed rezoning from RU1
To facilitate the orderly and economic use and development of rural lands for rural and related purposes.	While the study area is zoned RU2 and is currently used for rural and related purposes, apart from the rural produce business the balance of the land appears to be used mainly for rural residential purposes and for sub-economic livestock production that requires owners to have off-farm income. While the extensive grazing land would have the potential to be converted to more intensive agricultural uses (e.g. poultry, glasshouses, market gardens), such conversion would require substantial capital investment and GHD is unaware if there are businesses willing to invest in these forms of agriculture in this location. In addition, the land capability classification (Class 5 and 6) indicates that the land has high limitations for high-impact land uses and would mostly be restricted to grazing. Note, however, that this classification is based on large-scale mapping and that finer-scaled analysis could indicate better suitability for cultivation and therefore market gardens. Given that extensive grazing is not a financially viable at the scale of the holdings within the study area, intensive enterprises appear to be the only economically viable agricultural land use, however these require access to reliable water and energy (gas and/or electricity) and the current availability of these services in the vicinity of the study area is not known by the consultant. In addition, it appears that plans to increase intensive agriculture in NSW favours localities outside of the Sydney Basin, presumably due to the high cost of purchasing suitable land and the risk of land use conflict in a peri-urban location. For example, in a report on ABC Rural dated 9 November 2016, Ingham's chicken producer stated that it was cutting costs but expanding in South Australia and Queensland, with the Queensland investment including: contracts with more growers in south-east Queensland and northern NSW; and expanding processing in northern NSW. While the consultant has not completed a detailed review of agricultural investment in the study area, because the subject site is located within the boundary of the WSAGA, it is likely that there has been an increase in land prices and that the resulting high level of capital investment required for establishing viable agricultural businesses means that proponents are more likely to consider less expensive locations outside of the Sydney Basin as exemplified by Ingham’s poultry plan discussed above.
To identify the Rural Planning Principles and the Rural Subdivision Principles so as to assist in the proper management, development and protection of rural lands for the purpose of	See Table 8 below for a commentary against each of the rural planning principles.

promoting the social, economic and environmental welfare of the State.	
To implement measures designed to reduce land use conflicts.	Land adjacent to the study area appears to be currently used for a mix of rural (extensive grazing and market gardens). The structure plan outlines how the site will be developed in two stages and will need to consider how the proposed development will minimise land use conflict on the adjacent land. As such, the design will need to satisfy the "right to farm" principles as described in section 2.1.5, including the ability of farmers to undertake lawful agricultural practices without conflict or interference arising from complaints from neighbours and other land users. This could include setbacks or other suitable buffers to minimise potential conflict. A LUCRA has been included in section 4.
To identify State significant agricultural land for the purpose of ensuring the ongoing viability of agriculture on that land, having regard to social, economic and environmental considerations.	Not applicable - the study area and its surrounds has not been identified as State significant agricultural land and are part of the WSAGA.
To amend provisions of other environmental planning instruments relating to concessional lots in rural subdivisions.	Not applicable - the issue of concessional lots does not apply.

Table 8 Analysis of Rural SEPP rural planning principles

Rural SEPP planning principles	Commentary with respect to the proposed rezoning from RU1
The promotion and protection of opportunities for current and potential productive and sustainable economic activities in rural areas	Sustainable economic activities are likely to be those associated with intensive animal production and intensive horticulture, although substantial investment in infrastructure would be required to ensure viable economic returns. In addition, such enterprises may only be economically viable at scale and the ability to expand in scale to achieve economies of scale would need to also consider the likely high purchase price of land for that expansion. It is possible that the desired scale needed to provide lot sizes for viable agricultural production could be achieved through the amalgamation of existing lots, however GHD has no data on the demand by investors for such amalgamations. In addition, the consultant is not aware of the availability of reliable water and energy supplies that are necessary for intensive enterprises, and if these services need to be provided there will be an added capital cost to be considered for any potential agricultural businesses. As such, and subject to further information becoming available, investment in increasing agricultural activities by external investors is unlikely given the likely increase in land values due to location within WSAGA and recent development in adjacent areas as well as the capital costs for providing water and energy services.
Recognition of the importance of rural lands and agriculture and the changing nature of agriculture and of trends, demands and	In general, agriculture in the broader area has declined although it is difficult to obtain reliable data to confirm this (see section 3). It is predicted that agricultural production would have further declined between 2011 and 2016, however statistics for 2016 are not available. Examples of the decline include changes to

issues in agriculture in the area, region or State	land use in nearby areas where land zoned as rural has been included in residential growth areas, including the South West Priority Growth Area, Western Sydney Priority Growth Area, WSAGA. While accurate and up-to-date statistics are not available, anecdotal evidence is that viable agricultural business enterprises have declined in the area over the last decade.
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	Employment in the Agriculture, forestry and fishing sector in the Penrith LGA was 663 in 2001 and only slightly increased to 716 in 2016 (an 8% increase while working population over same period increased by 38%). Recent statistics are not available, although it is anticipated that this trend will continue, due to change in land-uses and increase in land value.
In planning for rural lands, to balance the social, economic and environmental interests of the community	The proposed airport at Badgerys Creek and expansion of industrial areas in WSAGA provides opportunities for jobs in non-rural industries.
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	These aspects are addressed in a separate Flora and Fauna Assessment.
The provision of opportunities for rural lifestyle, settlement and housing that contribute to the social and economic welfare of rural communities	Not applicable as it would be inconsistent with the aims of the State Environment Planning Policy (Western Sydney Employment Area) 2009
The consideration of impacts on services and infrastructure and appropriate location when providing for rural housing	Not applicable as it would be inconsistent with the aims of the State Environment Planning Policy (Western Sydney Employment Area) 2009
Ensuring consistency with any applicable regional strategy of the Department of Planning or any applicable local strategy endorsed by the Director-General	The proposal is for an industrial development and is considered to be compatible with the objectives of the State Environment Planning Policy (Western Sydney Employment Area) 2009 and is consistent with the aims of this policy.

6. Summary and Conclusion

The proposed rezoning of RU2 Rural Landscape land at Kemps Creek to a warehouse and logistics hub has been assessed for its impact on the preservation of agricultural land at the study area and in the vicinity of the study area. This assessment considered the various policies at the NSW state level that concern the protection of agricultural land with particular reference to land in the Sydney metropolitan region.

Using information combining land use, land capability, lot size and employment statistics, GHD provided commentary on the Section 117 directions, specifically those relevant to Subsection 1.2 Rural Zones and Subsection 1.5 Rural Lands. This included consideration of the aims of the State Environmental Planning Policy (Rural Lands) 2008 (the Rural SEPP) and the Planning Principles listed in the Rural SEPP.

The subject site is currently used primarily for rural-residential and extensive grazing purposes and consists of five allotments. Each allotment is separately owned so there are no economies of scale to run a financially viable agricultural enterprise based on its current land use.

While it is possible that more intensive agricultural land uses (e.g. poultry and glasshouse horticulture) could be economically viable, such enterprises are likely to require extensive capital inputs for the infrastructure required as well as the need to expand the scale of operations via the amalgamation of existing lots under a single ownership. This would also potentially require consideration of significant water requirements that are currently not evident at the subject site. GHD is not aware of the demand by investors to establish viable enterprises under these conditions.

The land capability of the site has been assessed as being moderate to low capability land with the land having high limitations for high-impact land uses. Land use is largely restricted to grazing and limitations need to be carefully managed to prevent long-term degradation.

Having regard to the information available, including the general knowledge of agriculture in the area by the consultant, it is clear that the majority of land within the study area has limited agricultural capability and viability in its current form.

Economic viability of agriculture in the area would likely be limited to intensive industries such as poultry and or “protected” – glasshouse – horticulture, however these industries would require reliable supplies of water, the status of which is unknown. The economic viability of more intensive agricultural enterprises is also likely to be constrained by the further potential capital costs required as a result of the need to acquire other suitable areas of high value land to achieve appropriate economies of scale.

A LUCRA was completed and this indicated the likelihood of potential conflict was low and that current agricultural land use on surrounding land could continue with no impact.

Appendices

Appendix A – Site Photographs

Photo 1: Southern boundary of subject site looking south-west

Photo 2: Looking west across the subject site demonstrating the extensive grazing on the site. Residential areas can be seen in the distance.

Photo 3: Looking north-west from Bakers Lane from intersection of Mamre Road showing extensive grazing on the property.

Photo 4: Adjacent property on the eastern side of Mamre Road demonstrating existing land use and existing buffer zones.

Photo 5: This industrial estate is located adjacent to the northern boundary of the subject site on Mamre Road and is evidence of similar warehouse and logistics hubs being built on land that was previously classed as RU2 Rural Landscape.

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