

KEMPS CREEK WAREHOUSE AND LOGISTICS HUB

Social Impact Assessment



Prepared for Frasers Property and Altis
Property Partners

Contents

1.0	Introduction	6
1.1	Secretary's Environmental Assessment Requirements.....	6
1.2	Defining social impacts	7
1.3	Assessment methodology	7
1.4	Impact assessment framework	8
2.0	The Proposal	12
2.1	The Subject Site.....	12
2.2	Proposal	12
3.0	The Surrounds	16
3.1	The Surrounds.....	16
3.2	Access.....	16
3.3	Planned infrastructure development.....	17
4.0	Strategic Policy Context	19
4.1	Western Sydney City Deal	19
4.2	Greater Sydney Region Plan.....	19
4.3	Western City District Plan	20
4.4	Broader Western Sydney Employment Area	20
4.5	The Western Sydney Aerotropolis	22
5.0	Community Profile	24
5.1	Study Area.....	24
5.2	Demographic snapshot	24
5.3	Social Advantage and Disadvantage	27
5.4	Employment.....	28
5.5	Business Statistics	29
5.6	Crime 'hot spots'	30
5.7	Summary of key findings.....	31
6.0	Existing Social Infrastructure	33
6.1	What is social infrastructure?	33
6.2	A catchment approach.....	33
7.0	Stakeholder views	40
7.1	Stakeholder Identification.....	40
7.2	Key Consultation Outcomes.....	42
7.3	Future Consultation	42
8.0	Social Impact Assessment	45
8.1	Scoping.....	45
8.2	Area of influence	45

8.3	Amenity impacts	46
8.4	Access.....	50
8.5	Built Environment	51
8.6	Heritage.....	52
8.7	Community.....	52
8.8	Economic.....	54
8.9	Natural Environment.....	55
8.10	Mitigation Measures and Monitoring	55
9.0	Conclusion.....	60
	Appendix A : Scoping tool.....	61
	Appendix B : Light Spill Maps.....	63

Quality Assurance

Report Contacts

Alex Peck

Consultant

B Sci, B SocSci, M Plan, PIA (Assoc.)

Alexander.Peck@hillpda.com

Supervisor

Elizabeth Griffin

Principal

B A (Geography) M Urb. Pl. MPIA

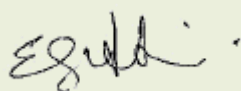
Elizabeth.Griffin@hillpda.com

Quality Control

This document is for discussion purposes only unless signed and dated by a Principal of HillPDA.

Reviewer

Signature



Dated

10/05/19

Report Details

Job Number P19027

Version 7.0

File Name P19027-Kemps Creek Warehouse and Logistics Hub SIA

Date Printed 15 May 2019

INTRODUCTION

1.0 INTRODUCTION

HillPDA has been engaged by Frasers Property and Altis Property Partners to prepare a Social Impact Assessment (SIA) to accompany an Environmental Impact Statement for consideration by NSW Department of Planning and Environment. The proposed development comprises subdivision of a 118 hectare site at 657-769 Mamre Road, Kemps Creek NSW 2178 and construction of a 163,671 sq m warehousing and logistics hub, associated parking, an internal access road and related road works.

The SIA has been developed to align with the Planning Secretary's Environmental Assessment Requirements and aims to identify both potential positive and negative social impacts associated with the proposed development. This report also suggests mitigation measures which will help to maximise social benefits and minimise negative impacts, to the community.

1.1 Secretary's Environmental Assessment Requirements

The Secretary's Environmental Assessment Requirements (SEAR's) dated 14 September 2018 indicate that the following information is to be provided in this report:

Table 1: Planning Secretary's Environmental Assessment Requirements

Requirement	Relevant Section of this Social Impact Assessment (SIA)
Identifies and analyses the potential social impacts of the development, from the points of view of the affected community/ies and other relevant stakeholders, i.e. how they expect to experience the project	Section 7
Considers how potential environmental changes in the locality may affect people's: <ul style="list-style-type: none"> • way of life • community • access to and use of infrastructure, services, and facilities • culture • health and wellbeing • surroundings • personal and property rights • decision-making systems • fears and aspirations Consider how each impact could disproportionately affect different groups	Section 8
Assesses the significance of positive, negative, and cumulative social impacts considering likelihood, extent, duration, severity/scale, sensitivity/importance, and level of concern/interest.	Section 8
Includes mitigation measures for likely negative social impacts, and any proposed enhancement measures	Section 8.10
Details how social impacts will be adaptively monitored and managed over time	Section 8

1.2 Defining social impacts

A social impact can be defined as the net effect of an activity on a community and the well-being of individuals and families. This Social Impact Assessment has been prepared to align with the NSW Department of Planning and Environment Social Impact Assessment Guideline. The Guideline is designed to establish a clear, consistent and rigorous framework for identifying, predicting, evaluating and developing responses to the social impacts of those projects, as part of the overall environmental impact assessment. The guideline establishes that social impacts arise from changes that impact people in one of nine key areas:

- **way of life**, including:
 - how people live, for example, how they get around, access to adequate housing
 - how people work, for example, access to adequate employment, working conditions and/or practices
 - how people play, for example, access to recreation activities
 - how people interact with one another on a daily basis
- **community**, including its composition, cohesion, character, how it functions and sense of place
- **access to and use of infrastructure, services and facilities**, whether provided by local, state, or federal governments, or by for-profit or not-for-profit organisations or volunteer groups
- **culture**, including shared beliefs, customs, values and stories, and connections to land, places, and buildings (including Aboriginal culture and connection to country)
- **health and wellbeing**, including physical and mental health
- **surroundings**, including access to and use of ecosystem services, public safety and security, access to and use of the natural and built environment, and its aesthetic value and/or amenity
- **personal and property rights**, including whether their economic livelihoods are affected, and whether they experience personal disadvantage or have their civil liberties affected
- **decision-making systems**, particularly the extent to which they can have a say in decisions that affect their lives, and have access to complaint, remedy and grievance mechanisms
- **fears and aspirations** related to one or a combination of the above, or about the future of their community

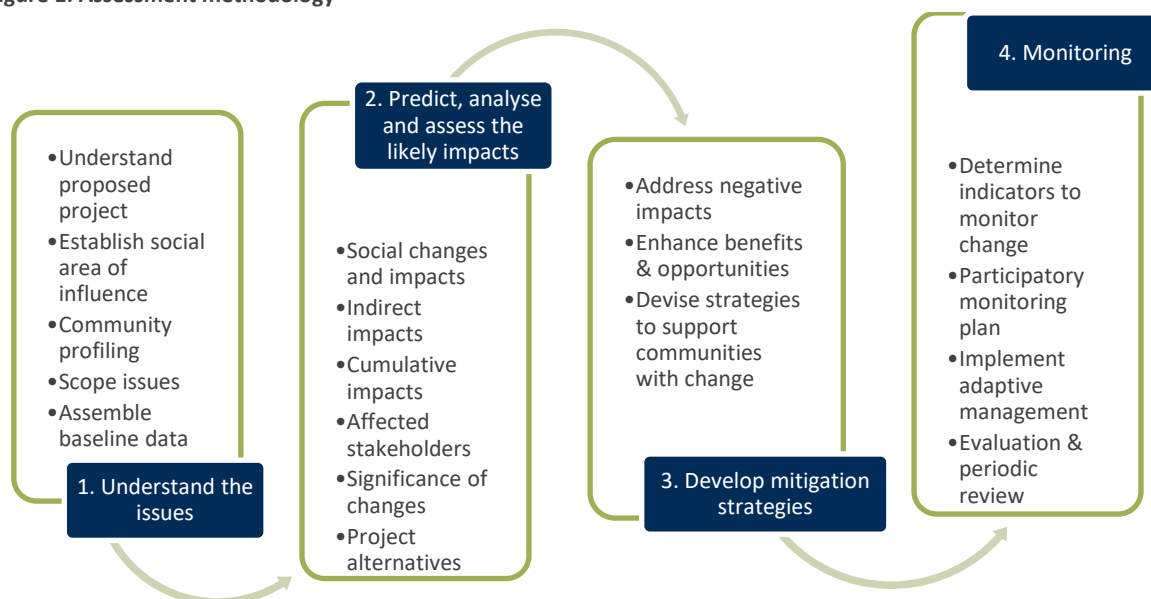
Source: NSW Planning & Environment (2017)

The proposed development is to be assessed having regard for the matters above.

1.3 Assessment methodology

Figure 1 presents the key steps and tasks undertaken as part a Social Impact Assessment.

Figure 1: Assessment methodology



Adapted from Vanclay, F., et al. (2015): p. 7

1.4 Impact assessment framework

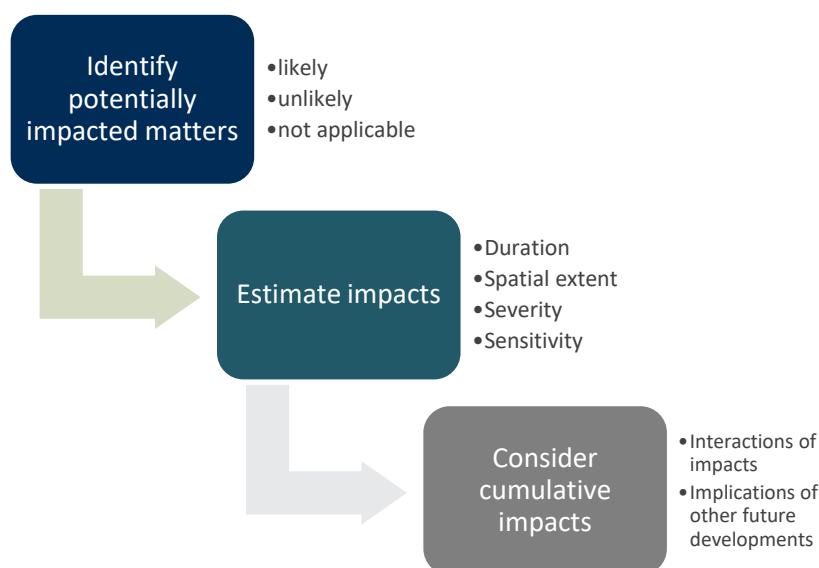
The impact assessment presented in this report identifies and evaluates changes to existing social conditions due to the project. This includes the assessment of direct and indirect benefits and effects/impacts, as well as consideration of any cumulative impacts.

These changes can be **positive** or **negative**; **tangible** or **intangible**; **qualitative** or **quantitative**; **direct**, **indirect** or **cumulative**; and **subjectively experienced**.

The likelihood of social impacts arising from each social and environmental matter assessed as part of the scoping process.

Figure 2 reflects the scoping process that was undertaken to estimate the overall significance of impacts prior to performing more detailed assessment. The following sections outline the criteria that underpin each of the assessment components that contribute to the assessment framework. Professional judgement and experience is applied on a case-by-case basis to identify the significance of impact on the social environment.

Figure 2: Social Impact Assessment scoping process



1.4.1 Level of impact

Table 2 outlines the criteria for rating the material effect of an impact, across the four areas defined in Department of Planning and Environment's guidelines: duration, spatial, severity and sensitivity.

Table 3 identifies the overall the level of impact rating which is comprised of multiple combinations of duration, spatial and severity outcomes.

Table 2: Criteria for rating the material effect of an impact

Impact	Duration	Impact	Spatial extent	Impact	Severity of impact
Short term	Less than one year Low frequency	Direct Property	Individual/household	Negligible	No discernible positive or negative changes to baseline conditions
Medium term	One to six years Medium intermittent frequency	Locality	Small number of households	Small	Minimal positive or negative changes to baseline conditions
Long term	Less than six years Consistent frequency	Suburb	Large part of/ whole community Suburb as defined by ABS	Medium	Moderate positive or negative changes to baseline conditions
		Municipality	Local Government area or greater	Large	Major positive or negative change to baseline conditions

Table 3: Level of impact

Category	Significance
Minimal	■ No discernible positive or negative changes to baseline condition.
Minor	■ Small change to baseline condition, generally short or short-medium term,

Category	Significance
	confined to a locality or suburb and is able to be mitigated or enhanced.
Moderate	<ul style="list-style-type: none"> Medium change to baseline condition that may be short, medium, or long term. The spatial extent may vary, however impacts would usually respond to mitigation or enhancement.
Major	<ul style="list-style-type: none"> Large change to baseline condition usually resulting in medium to long-term effects. Spatial extent is generally at a LGA or regional level with the potential for substantial effects on the social or economic environment. Negative impacts would require extensive mitigation.
Catastrophic	<ul style="list-style-type: none"> A reasonable worst case scenario in the circumstances of the proposed development.

1.4.2 Likelihood of impact

The significance of which potential social impacts and benefits would occur as a result of the proposal is assessed by comparing the level of impact (low, moderate and high) against the likelihood of impact occurring. The criteria used to determine the likelihood of an impact are described in Table 4.

Table 4: Likelihood of impact

Likelihood	Description	Probability
Near certain	Expected to occur, almost frequently	90 per cent
Likely	Could occur in many instances	70 per cent
Possible	Just as likely to happen as not	50 per cent
Unlikely	Very limited occurrence	30 per cent
Rare	Unlikely to occur	10 per cent

1.4.3 Significance of impact

Potential impacts are identified as part of the scoping process (see Section 8.1). They are then analysed based on the nature of the impact and its predicted severity. A mitigation strategy is proposed if necessary and finally both impacts are assigned a Social Risk Rating (SRR) for a scenario with and a scenario without mitigation. The matrix used to calculate SRR is contained below in Table 5. Using this rating system, the Social Risks for the proposed development are assessed as follows:

Table 5: Social Risk Matrix

			Consequence				
			1	2	3	4	5
			Minimal	Minor	Moderate	Major	Catastrophic
Likelihood	A	Near certain	A1	A2	A3	A4	A5
	B	Likely	B1	B2	B3	B4	B5
	C	Possible	C1	C2	C3	C4	C5
	D	Unlikely	D1	D2	D3	D4	D5
	E	Rare	E1	E2	E3	E4	E5

Social Risk Rating: ■ Low ■ Moderate ■ High ■ Extreme

Source: NSW Planning & Environment (2017) | Vanclay, F; Esteves, A; Aucamp, I; Franks, D (2015)

THE PROPOSAL

2.0 THE PROPOSAL

2.1 The Subject Site

The Subject Site is located at 657-769 Mamre Road, Kemps Creek NSW 2178, within the Penrith City LGA. The site's eastern side fronts Mamre Rd for 1.1 km. The site is bounded by the Sydney Catchment Area Pipeline and an easement for the Western Sydney Freight line corridor to the north and South Creek to the west.

Figure 3: The Subject Site



LEGEND

Site Boundary

Not to scale

HillPDA
CONSULTING

Source: NearMap, 2018

2.2 Proposal

Approval is being sought for the construction of a warehouse and logistics hub at 657-769 Mamre Road, Kemps Creek comprising:

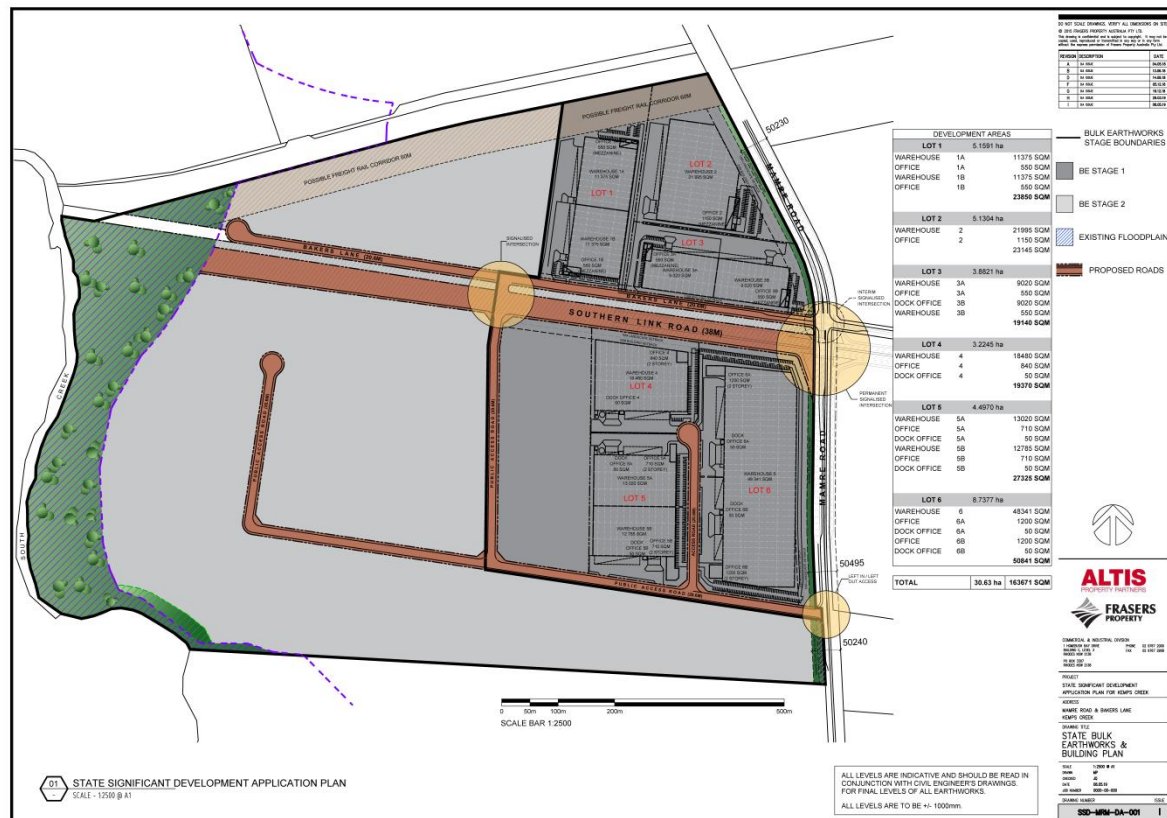
- Stage 1 development including construction of 163,671 sq m of warehouse space with associated office and space for warehousing and logistics uses, 816 car parking spaces.

2.2.1 Stage 1 development

Stage 1 of the proposal includes:

- Construction of 163,671 sq m of warehouse space with associated office and space for warehousing and logistics uses, 816 car parking spaces
- Construction of an internal access road from Mamre Road
- Subdivision to create eight lots
- Bulk earth works
- Site utilities and services.

Figure 5: Layout of Proposed Development within Subject Site



Source: Frasers Property

Internal estate roads will be constructed in a staged manner as new developments are added. The roads are to be constructed in a manner consistent with Penrith City Council requirements and will be of sufficient size and capacity to accommodate B-double trucks.

Included on the site is the construction of the future Southern Link Road, while the specific alignment of the road is presently unknown beyond the present intersection of Bakers Lane and Mamre Road, provision has been made in the proposal to allow for its future construction and operation.

The proposed development will construct building pads to provide flexibility for the design of future facilities and, as such, the proposed development does not seek consent for the future building footprints themselves.

The proposed development includes a bio-retention within the lower topography of the site.

Figure 6: Artists impression of completed logistics hub



Source: Frasers Property and Altis Property Partners

2.2.2 Operational hours

The proposed development will operate 24 hours a day, seven hours a week.

2.2.3 Employment generation

Estimated job creation stemming from the proposal is as follows:

- Stage 1 (this SSDA application):
 - 800 operational jobs
 - 500 construction jobs (this is elevated due to the large amount of civil works)
- Whole development (subject to future applications)
 - 2,500 operational jobs
 - 1,500 construction jobs.

This provides for overall construction jobs generated by the proposed development in the order of 1,500. These jobs will be related to the extensive civil works required in addition to the construction of the facilities.

In the order of 2,500 operational jobs are anticipated at full development of the warehouse and logistics hub with around 800 jobs created at the completion Stage 1.

THE SURROUNDS

3.0 THE SURROUNDS

3.1 The Surrounds

The region surrounding the site is historically rural in usage, but is in an ongoing state of development relating to Western Sydney Airport and the surrounding Aerotropolis. The Western Sydney Employment Area (WSEA) has the primary aim of integrating state and local planning inputs in the area to promote the provision of industrial lands and economic growth. As a result, the area immediately surrounding the site is a mix of remanent rural and residential land use, interspersed with more recent industrial development.

To the north of the site, beyond the SCA pipeline is the Mamre West Precinct, which was rezoned in 2016, with new planning controls introduced to enable industrial development within the Western Sydney Employment Area. The site is currently being developed by Altis into a warehousing and logistics hub, as part of the First Estate development, which includes three warehouse buildings between 9,400 m² and 41,500 m² in size and 357 car parking spaces. Notably, the First Estate development is largely consistent with the profile and objectives of the proposal for the Subject Site.

Diagonally opposite the site to the north on Mamre Road is Erskine Business Park, which includes a variety of logistical and industrial businesses operating on a 24/7 basis, including CEVA logistics, CSR, Woolworths and Alvaro Transport. Rural and residential land holdings lie to the west of South Creek, with the nearest substantial residential development lying 2 km north at Erskine Park (Figure 3).

Mamre Anglican School is located 500 metres east on Bakers Lane. Trinity Primary School, Emmaus Catholic College and Emmaus Retirement Village are closely located further along the same road.

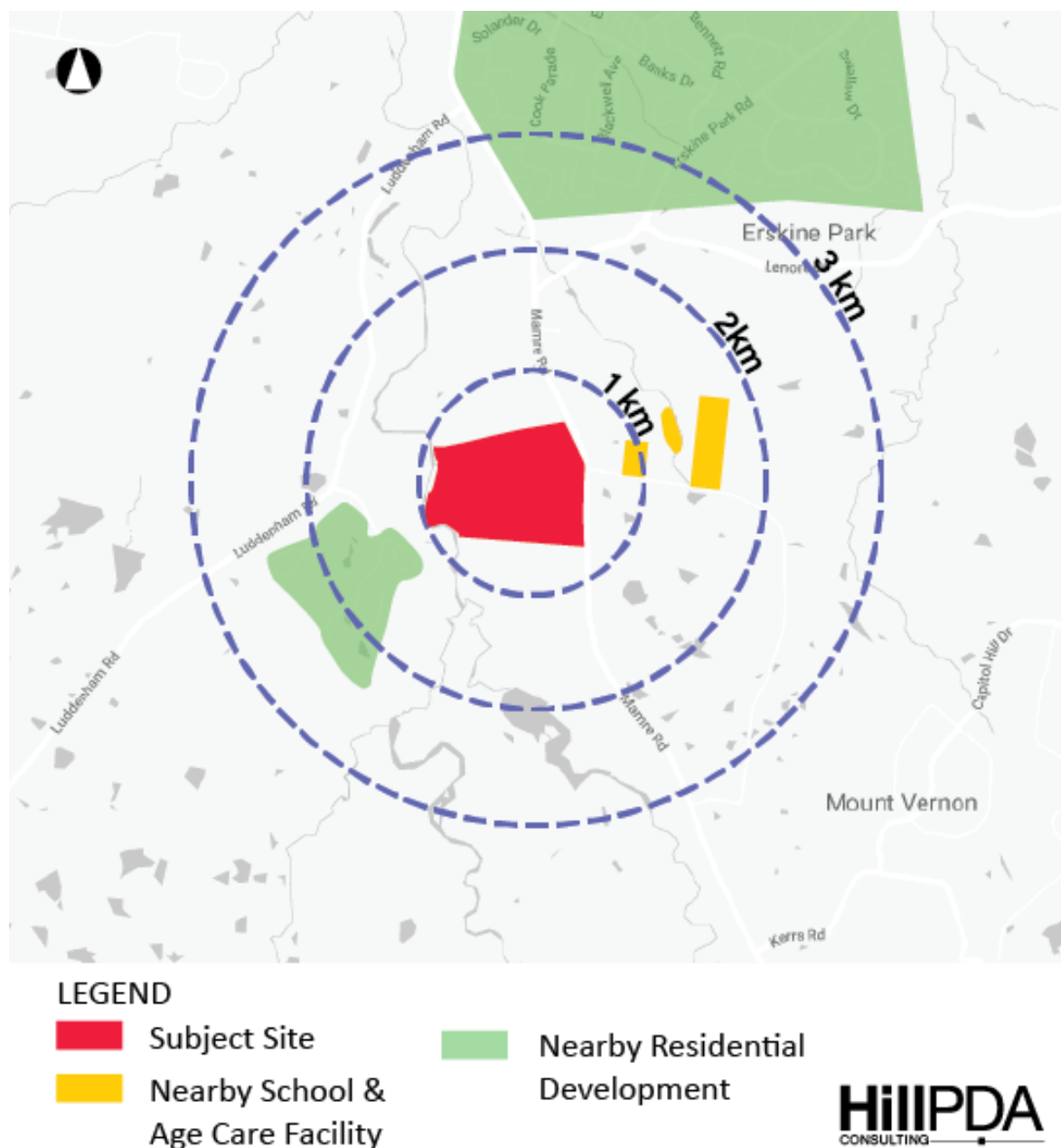
To the west of South Creek are Twin Creeks Golf and Country Club and an attached residential estate of the same name. The next closest major residential area is Erskine Park, which lies over 1.7 km north on Mamre Road.

3.2 Access

The site is in an accessible location for the purposes of the proposed development, with appropriate parking and road access in place. As it stands, the site is currently accessible via Mamre Road, which links directly to the M4 in the north and the M7 via Elizabeth Drive in the south.

Currently there are no public transport links nearby, with the nearest bus route, the 779, serving warehouses 1 kilometre to the north along James Erskine Drive.

Figure 3: Major residential developments, schools and aged care facility near the Subject Site



3.3 Planned infrastructure development

Significant improvements to local transport infrastructure are being undertaken to assist the economic development of the WSEA, Western Sydney Airport and the associated Aerotropolis. This includes a proposed duplication of Mamre Road between the site and the M4 interchange and the construction of the M12 motorway to Western Sydney Airport to the south of the site. Further significant enhancement to local road networks has also been proposed. Most notably this includes the transformation of Bakers Lane into a significant East-West road link, an extension of which passes through the Subject Site and has been incorporated into the proposal.

STRATEGIC POLICY CONTEXT

4.0 STRATEGIC POLICY CONTEXT

This section reviews the planning and legislative context for the Proposed Development based on State and local government planning guidelines. The following strategic policy documents have been reviewed.

4.1 Western Sydney City Deal

The Western Sydney City Deal was signed between the NSW and Australian Governments in March 2018. It outlined a tri-level partnership between Federal, State and Local Governments to deliver an agreed set of commitments across the Greater Western Sydney region. The agreement has been articulated to support the objectives of the Western Sydney District Plan and the Greater Sydney Region Plan, most notably the vision of people of Greater Sydney living within 30 minutes of their jobs, education and health facilities, services and great places.

The priorities of the City Deal as relevant to this study include:

- A commitment to construct the northern segment of the North South Rail Link between Western Sydney Airport and Penrith by the time the airport becomes operational. The rail link will pass through region west of the Subject Site
- A commitment to establish rapid bus links from the Aerotropolis and Liverpool, Penrith and Campbelltown
- A commitment to support the development of a world-class employment sector for jobs in aviation, aerospace, defence industries and advanced manufacturing. This includes the establishment of a Development Authority to commence delivery of 200,000 jobs, over 20 years.

4.2 Greater Sydney Region Plan

The Greater Sydney Region plan identifies the Subject Site as being part of the Western City District. The plan outlines priorities for this region as centring on achieving quicker and easier access to a wider range of jobs, housing types and activities for residents. The plan hinges on encouraging significant economic development in the context of Western Sydney Airport and the Aerotropolis. These objectives are to be supported through the delivery of commitments made in the Western Sydney City Deal and through the prioritisation of enhancements to the District's lifestyle and environmental assets.

Central to this is the identification of the Western Economic Corridor, which aims to maximise development opportunities arising from the construction of the North-South rail. This is particularly relevant to the subject site because of its proximity to Stage 1 - St Marys to the Western Sydney Airport.

Objective/ Strategy	Extracts from the Plan
Objective 20 – Western Sydney Airport and Badgerys Creek Aerotropolis are economic catalysts for Western Parkland City	<ul style="list-style-type: none"> The emerging new city will be driven by economic opportunities created by the Western Sydney Airport and Badgerys Creek Aerotropolis and significant population growth, which will bring city-scale infrastructure and new advanced manufacturing, logistics and research industries providing hundreds of thousands of jobs over the long term.
Objective 22 - Investment and business activity in centres	<ul style="list-style-type: none"> The Western Parkland City is an emerging city with a north-south geography extending for 54 kilometres. The presence of three long established centres provides the opportunity for a

Objective/ Strategy	Extracts from the Plan
	polycentric urban structure. Here, a cluster of four centres will deliver the metropolitan functions of providing concentrations of higher order jobs and a wide range of goods and services.
Objective 24 – Economic sectors are targeted for success	<ul style="list-style-type: none"> Australian, NSW and local governments are working together to drive key industry and economic developments that will create a highly skilled workforce able to access high quality local jobs, with a variety of industry and cross-sectoral initiatives are being implemented to encourage development. Particular focus is given to initiatives encouraging growth and economic development around key precincts, like the Western Sydney Aerospace Precinct.

4.3 Western City District Plan

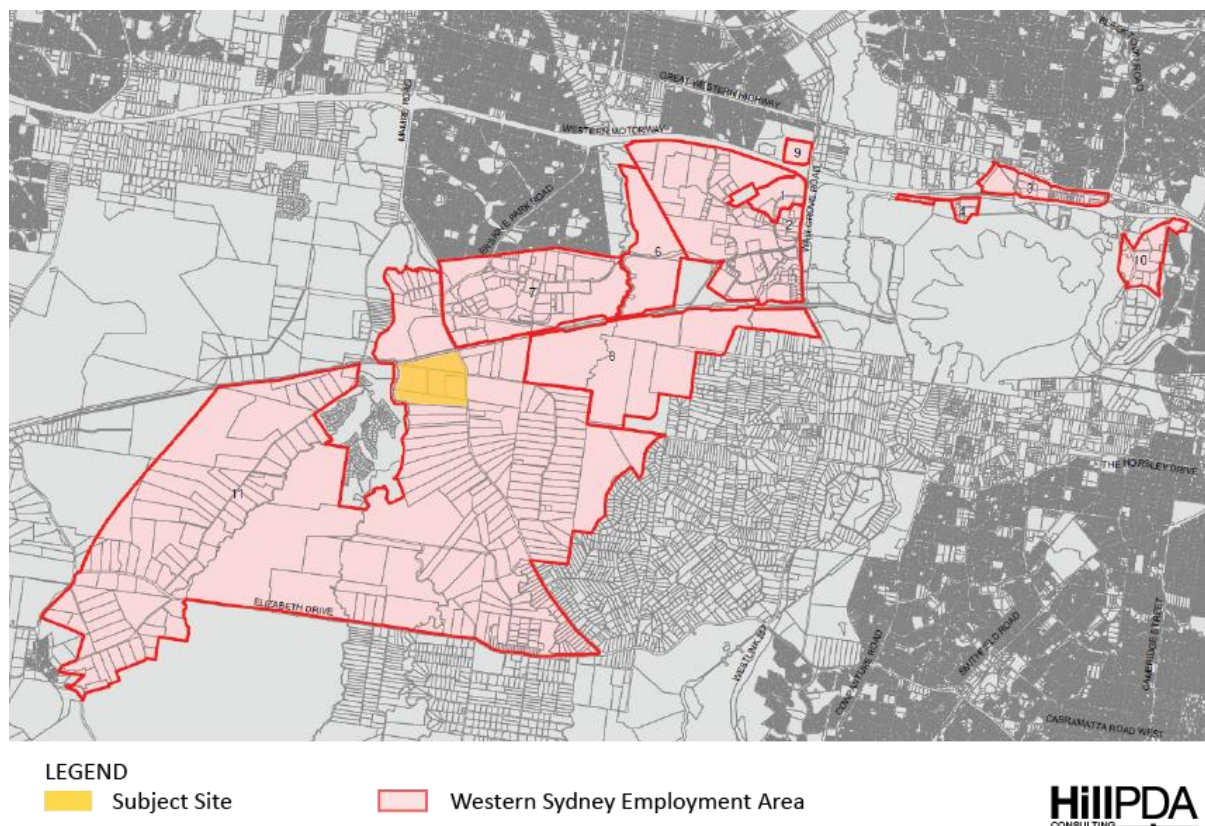
The Western City District Plan was updated in March 2018 with the signing of the Western Sydney City deal to better align the strategic priorities for that District, with the commitments outlined in the City Deal. Key planning priorities relevant to this study include:

- Providing housing supply, choice and affordability, with access to jobs, services and public transport
- Economic sectors are targeted for success
- Investment and business activity in centres
- Maximising freight and logistics opportunities and planning and managing industrial and urban services land
- Growing investment, business opportunities and jobs in strategic centres

4.4 Broader Western Sydney Employment Area

The Subject Site is located within the Penrith City Council LGA. It is subject to the Western Sydney Employment Area SEPP, defined as part of the Broader Western Sydney Employment Area. As Stage 1 of the development exceeds the \$50 million threshold in Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011, the development is considered State Significant. Although the WSEA SEPP identifies the Subject Site as being subject to the instrument it remains unzoned.

Figure 4: Subject Site in the context of the Western Sydney Employment Area



Source: NSW Planning & Environment, Hill PDA

The key objectives of the WSEA as defined in the WSEA State Environmental Planning Policy are:

- 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
- to provide for the co-ordinated planning and development of land in the Western Sydney Employment Area
- to rezone land for employment or environmental conservation purposes
- to improve certainty and regulatory efficiency by providing a consistent planning regime for future development and infrastructure provision in the Western Sydney Employment Area
- 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
- to conserve and rehabilitate areas that have a high biodiversity or heritage or cultural value, in particular areas of remnant vegetation.

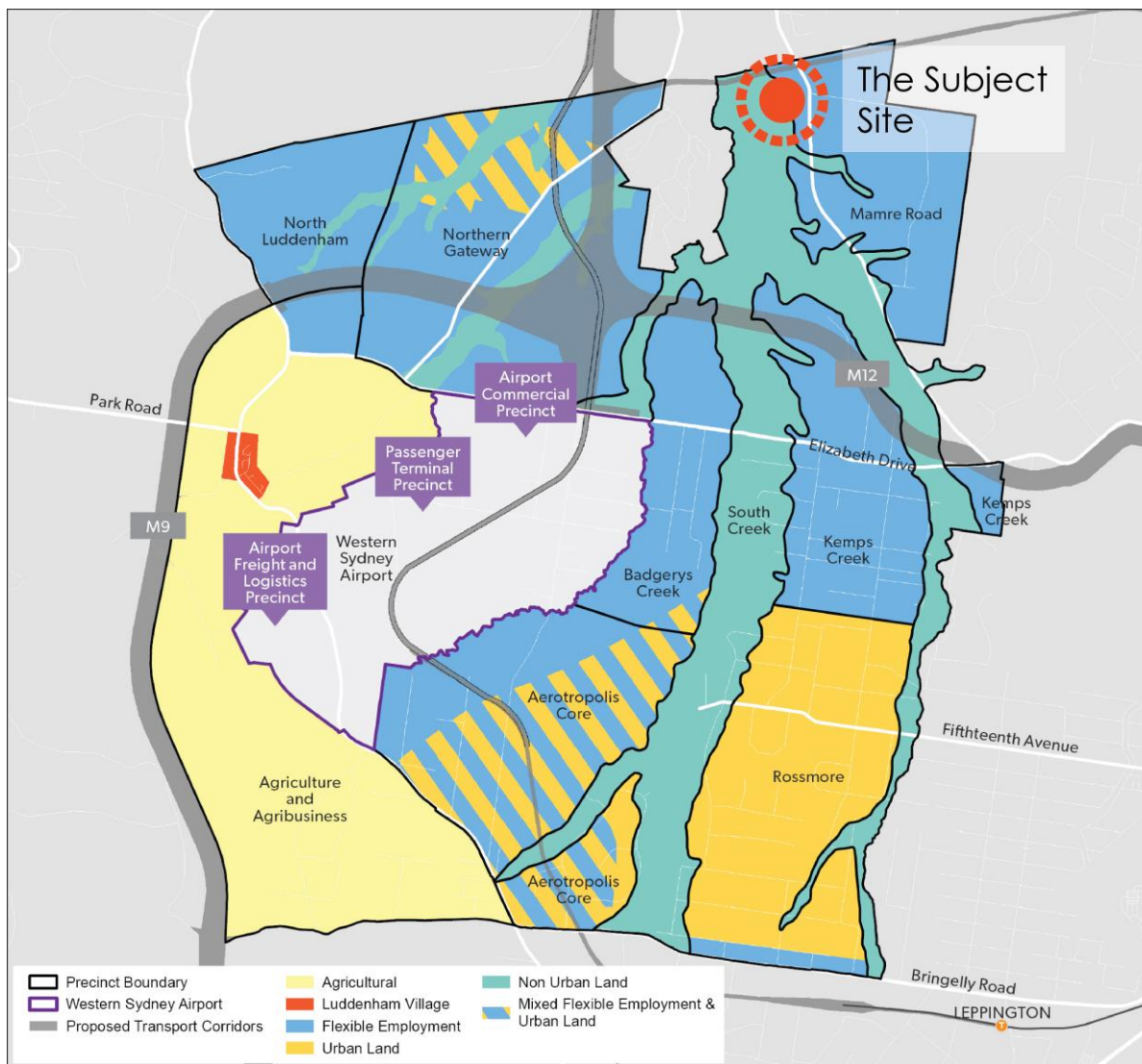
The Structure Plan for the Broader WSEA (2016) identified the objective of making over 2,100 hectares available for employment within the Broader WSEA over a 30 year period, generating approximately 57,000 jobs. Furthermore the vision of the Broader WSEA is to deliver employment and investment opportunities to surrounding local and regional areas.

4.5 The Western Sydney Aerotropolis

The Subject Site is located within the extended envelope of the Western Sydney Aerotropolis, an area defined by its proximity to the future Western Sydney Airport. The objective of the Aerotropolis is to create an accessible, innovative 24-hour city, connected globally, nationally, locally and digitally, and a prime location for investment. It is intended to become an innovation precinct and a home for technology, science and the creative industries, thereby making a significant contribution to employment across Greater Western Sydney.

The region is intended to be a significant contributor to jobs for the region.

Figure 5: Diagram of the subject site in the context of Western Sydney Aerotropolis and proposed accompanying infrastructure



Source: NSW Planning & Environment, Hill PDA

COMMUNITY PROFILE

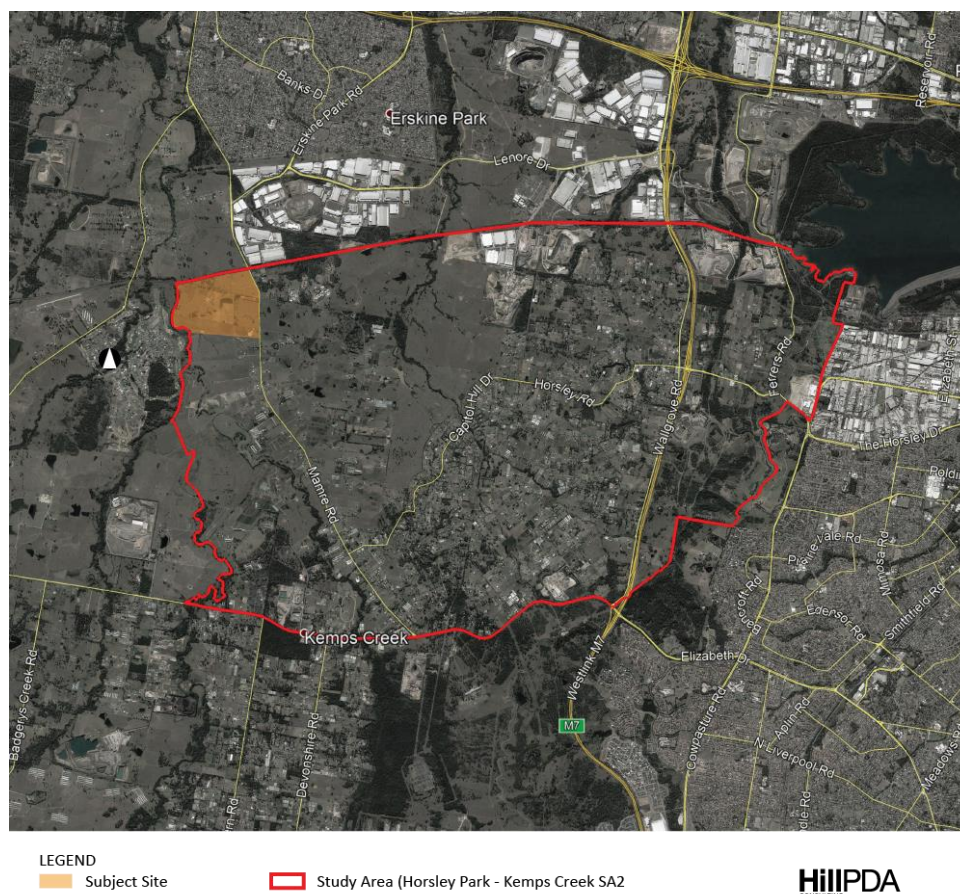
5.0 COMMUNITY PROFILE

The section provides a snapshot of the socio-economic characteristics of the study area to better understand the underlying and emerging social needs of the community and potential social impacts of the Proposed Development.

5.1 Study Area

For the purposes of this assessment, the study area has been defined as Horsley Park - Kemps Creek SA2 under the Australian Bureau of Statistics Main Statistical Area Structure.

Figure 6: Horsley Park – Kemps Creek SA2



Source: ABS, Google Maps

5.2 Demographic snapshot

A summary of key demographic characteristics is provided over page.

KEMPS CREEK

COMMUNITY PROFILE

HORSLEY PARK - KEMPS CREEK (SA2)

POPULATION

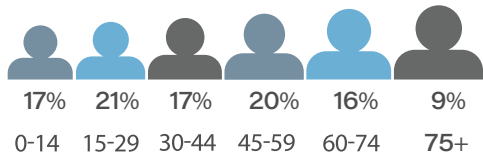
GREATER SYDNEY (GCCSA)

TOTAL

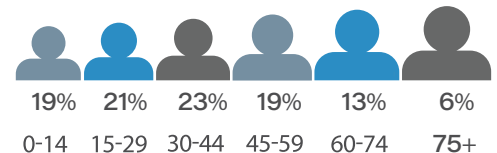
4,422

TOTAL

4,823,991



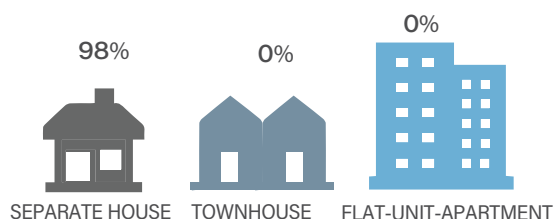
18% AGED 65+ 0.55 DEPENDANCY RATIO



14% AGED 65+ 0.48 DEPENDANCY RATIO

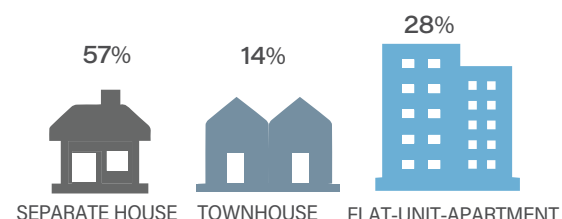
DWELLINGS

1,334

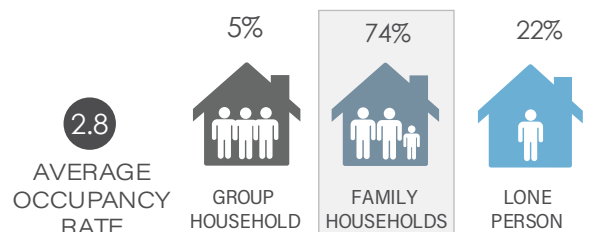
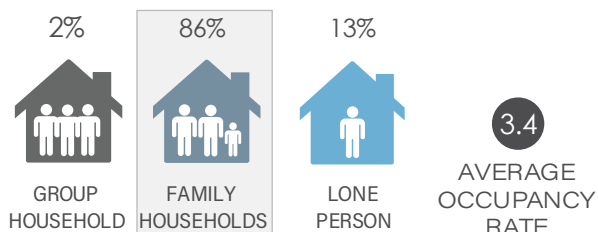


DWELLINGS

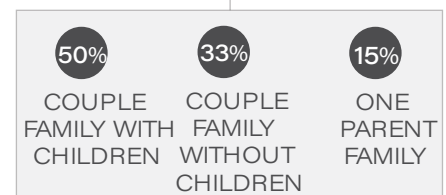
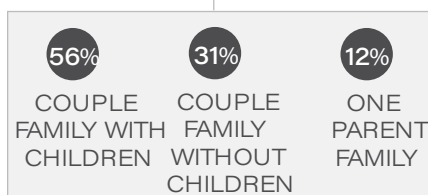
1,855,734



HOUSEHOLDS



FAMILIES



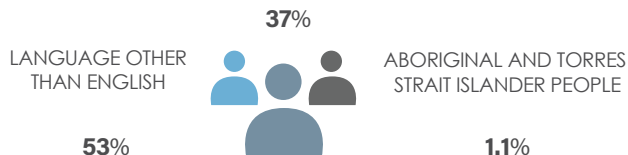
SOURCE: ABS 2016

HORSLEY PARK - KEMPS CREEK (SA2)

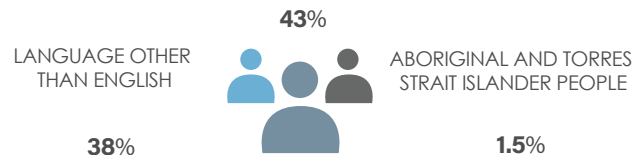
PEOPLE

GREATER SYDNEY (GCCSA)

PEOPLE BORN OVERSEAS

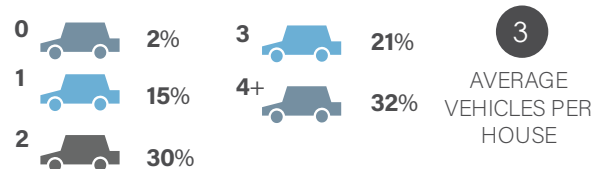


PEOPLE BORN OVERSEAS

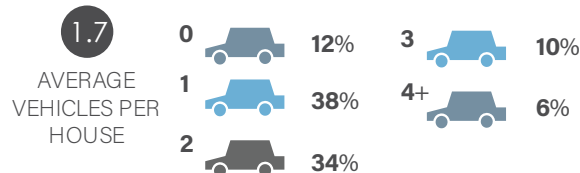


VEHICLES

NUMBER OF MOTOR VEHICLES PER HOUSEHOLD



NUMBER OF MOTOR VEHICLES PER HOUSEHOLD



MONEY

MEDIAN INCOME (PER WEEK)



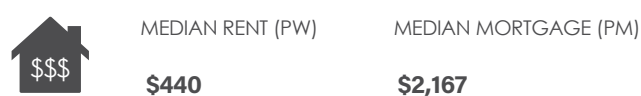
MEDIAN INCOME (PER WEEK)



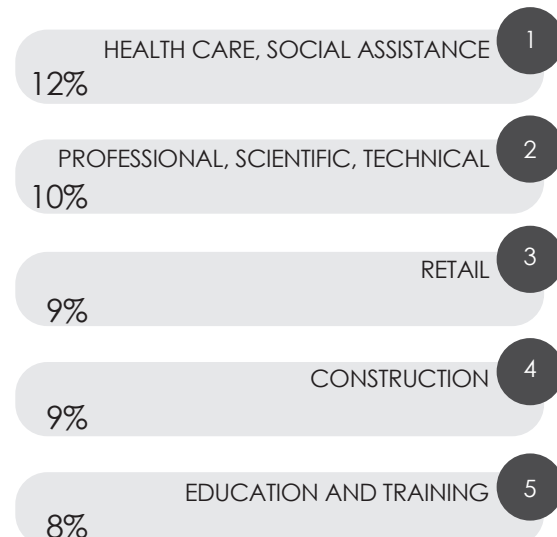
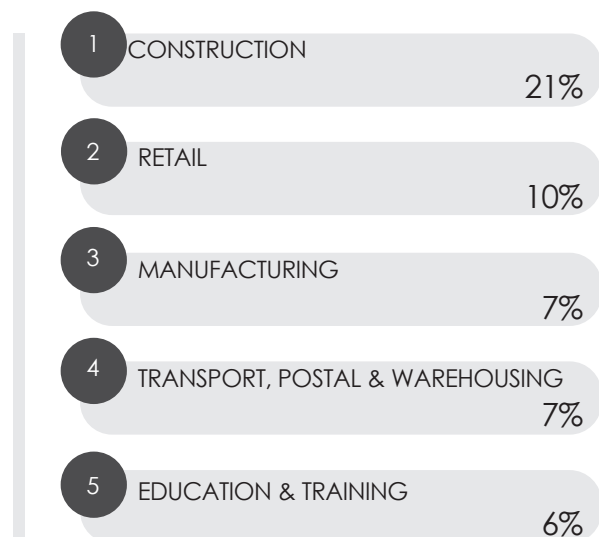
MEDIAN



MEDIAN



TOP FIVE INDUSTRIES OF EMPLOYMENT



5.3 Social Advantage and Disadvantage

The Socio-Economic Indices for Areas (SEIFA) has been developed by the ABS to provide an overview of social and economic wellbeing and welfare of communities across a range of spatial scales. The SEIFA measures the relative level of socio-economic advantage and disadvantage based on various census characteristics, such as income, education, unemployment and occupations. In the context of this Index, a lower score indicates an area that is relatively disadvantaged compared to an area with a higher score. Table 7 below identifies the index rankings and quantiles.

Table 7: SEIFA rankings and quantiles

Measure	Interpretation
Rank	To determine the rank of an area, all the areas are ordered from lowest score to highest score. The area with the lowest score is given a rank of 1; the area with the second-lowest score is given a rank of 2 and so on, up to the area with the highest score which is given the highest rank.
Decile	Deciles divide a distribution into ten equal groups. In the case of SEIFA, the distribution of scores is divided into ten equal groups. The lowest scoring 10% of areas are given a decile number of 1, the second-lowest 10% of areas are given a decile number of 2 and so on, up to the highest 10% of areas which are given a decile number of 10.
Percentile	Percentiles divide a distribution into 100 equal groups. In the case of SEIFA, the distribution of scores is divided into 100 equal groups. The lowest scoring 1% of areas are given a percentile number of 1, the second-lowest 1% of areas are given a percentile number of 2 and so on, up to the highest 1% of areas which are given a percentile number of 100.

Table 8: Horsley Park –Kemps Creek SEIFA score and decile

Horsley Park - Kemps Creek SA2						
	Australia			NSW		
	Rank	Decile	Percentile	Rank	Decile	Percentile
Advantage and disadvantage	1,391	7	64	358	7	65
Disadvantage	1,323	7	61	364	7	66
Economic resources	2,043	10	94	499	9	90
Education and occupation	886	5	41	243	5	44

Source: ABS, 2016

The area was ranked within the top half of SA2s for all advantage and disadvantage when compared with other SA2s across NSW and Nationally. This is likely a reflection of the distance of the SA2 from key financial and economic centres of greater Sydney. With the development of the Western Sydney Aerotropolis intended to bring a substantial amount of economic and social development into the immediate region, it is realistic to predict that this score will improve over time.

Economic resources are the factors used in producing goods or providing services. In other words, they are the inputs that are used to create things or help you provide services. The economic resources index analyses 15 variables to measure a wide range of concepts, such as: household income, housing expenditures (e.g. rent)

and wealth (e.g. home ownership). At 90 per cent, Horsley Park - Kemps Creek 'economic resources' when compared with other statistical areas across NSW.

5.4 Employment

Data from Census 2016 indicates that the main employing industry for residents of the Horsley Park – Kemps Creek SA2 is Construction, with over 21% of all employed residents working in that industry. Unemployment in the SA2 is relatively low, with 3.98% of residents in the SA2 unemployed, well below Penrith LGA on 5.71% and Greater Sydney 6.04% (Census 2016).

With population in the Penrith LGA projected to grow by 46.7% by 2036 (NSW Planning and Environment), it will be important to ensure the continuing availability of local employment in the region.

Table 9: Comparison of employment by industry

	Horsley Park - Kemps Creek SA2		Penrith City LGA		Greater Sydney (GCCSA)	
	Total	Percent	Total	Percent	Total	Percent
Health Care & Social Assistance	122	6.39%	10,384	11.56%	263,356	12.21%
Professional, Scientific & Technical Services	123	6.45%	4,092	4.56%	223,711	10.37%
Retail Trade	190	9.96%	10,012	11.15%	211,889	9.83%
Construction	403	21.12%	11,045	12.30%	186,331	8.64%
Education & Training	124	6.50%	6,841	7.62%	182,767	8.48%
Accommodation & Food Services	69	3.62%	5,592	6.23%	151,828	7.04%
Financial & Insurance Services	58	3.04%	4,061	4.52%	144,809	6.72%
Manufacturing	130	6.81%	7,483	8.33%	130,831	6.07%
Public Administration & Safety	60	3.14%	6,735	7.50%	124,434	5.77%
Transport, Postal & Warehousing	130	6.81%	6,714	7.48%	114,597	5.31%
Wholesale Trade	81	4.25%	3,674	4.09%	81,477	3.78%
Administrative & Support Services	83	4.35%	3,124	3.48%	81,397	3.77%
Other Services	119	6.24%	3,748	4.17%	80,899	3.75%
Information Media & Telecommunications	16	0.84%	1,213	1.35%	63,422	2.94%
Rental, Hiring & Real Estate Services	55	2.88%	1,522	1.69%	44,182	2.05%
Arts & Recreation Services	18	0.94%	1,285	1.43%	37,956	1.76%
Electricity, Gas, Water & Waste Services	10	0.52%	1,349	1.50%	17,757	0.82%
Agriculture, Forestry & Fishing	104	5.45%	725	0.81%	9,922	0.46%
Mining	10	0.52%	183	0.20%	4,774	0.22%
Total	1,908	100.00%	89,800	100.00%	2,156,300	100.00%

Source: ABS, 2016

Residents within the Study Area are evenly split between classification of employment, with 18.4% of residents employed as Clerical or Administrative Workers, and only slightly less employed as Managers (18%) and Technicians and Trades Workers (17.4%). The high proportion of residents classified as Managers is of most

significance compared to the wider Penrith LGA and Greater Sydney region, which both have a substantially lower proportion.

Table 10: Comparison of employment by classification of occupation

	Horsley Park - Kemps Creek SA2		Penrith City LGA		Greater Sydney	
	Total	Percent	Total	Percent	Total	Percent
Managers	360	17.98%	9,604	10.32%	311,765	13.99%
Professionals	265	13.24%	14,073	15.12%	597,804	26.83%
Technicians & Trades Workers	349	17.43%	14,052	15.10%	265,056	11.89%
Community & Personal Service Workers	133	6.64%	9,947	10.69%	218,209	9.79%
Clerical & Administrative Workers	370	18.48%	16,843	18.10%	331,136	14.86%
Sales Workers	175	8.74%	9,079	9.76%	205,054	9.20%
Machinery Operators & Drivers	162	8.09%	10,285	11.05%	128,021	5.74%
Labourers	176	8.79%	9,162	9.85%	171,450	7.69%
Total	2,002	100.00%	93,049	100.00%	2,228,483	100.00%

Source: ABS, 2016

The 2016 Census showed that residents within the study area tended to travel less for work, which may be evidence of existing jobs in the area. Residents in the wider Penrith City LGA travelled comparatively further to their place of work, with over 62% of the residents of working age commuting at least 10 km to their place of work and 28% travelling at least 30 km (Census 2016).

Table 11: Comparison of distance to from usual place of residence to place of work via road

	Horsley Park - Kemps Creek SA2		Penrith LGA		Greater Sydney GCCSA	
	Total	Percent	Total	Percent	Total	Percent
Road distance from residence to place of work						
Nil distance	277	14.62%	4,483	4.97%	131,505	5.96%
Over 0 km to less than 2.5 km	96	5.07%	5,477	6.07%	219,956	9.97%
2.5 km to less than 10 km	373	19.68%	23,586	26.16%	688,643	31.22%
10 km to less than 30 km	880	46.44%	31,336	34.75%	851,928	38.62%
30 km to less than 50 km	249	13.14%	18,063	20.03%	197,615	8.96%
50 km to less than 250 km	18	0.95%	6,782	7.52%	99,303	4.50%
250 km and over	7	0.37%	433	0.48%	16,816	0.76%
Total	1,895	100.00%	90,164	100.00%	2,205,765	100.00%

Source: ABS, 2016

5.5 Business Statistics

As at 30 June 2017, the Horsley Park – Kemps Creek SA2 contained 963 registered businesses, of which 98 had 5 or more employees. Of the industries operating in the area, approximately 27.4% were in Construction,

followed by 17.1% in Rental, Hiring and Real Estate Services, 9.3% in Transport, Postal and Warehousing and 9.2% in Agriculture, Forestry and Fishing.

Construction also accounts for the largest number of jobs in the area, with 403 employees in that sector or 20% of all jobs with their place of work within in the Horsley Park – Kemps Creek SA2. This is comparable to the wider region, with Construction accounting for over a quarter of all businesses registered within the Penrith LGA.

Table 12: Regional comparison of number of registered businesses by industry

Description	Horsley Park - Kemps Creek SA2		Penrith City LGA		Greater Sydney GCCSA	
	Total	Percent	Total	Percent	Total	Percent
Agriculture, Forestry & Fishing	90	9.35%	260	1.92%	5,523	1.06%
Mining	5	0.52%	23	0.17%	810	0.16%
Manufacturing	24	2.49%	724	5.35%	17,617	3.39%
Electricity, Gas, Water & Waste Services	0	0.00%	59	0.44%	1,309	0.25%
Construction	267	27.73%	3,369	24.90%	81,685	15.71%
Wholesale trade	36	3.74%	459	3.39%	22,018	4.24%
Retail trade	49	5.09%	749	5.54%	29,786	5.73%
Accommodation & food services	21	2.18%	376	2.78%	20,288	3.90%
Transport, Postal & Warehousing	91	9.45%	1,512	11.17%	39,229	7.55%
Information media & telecommunications	3	0.31%	75	0.55%	7,632	1.47%
Financial & insurance services	70	7.27%	819	6.05%	52,857	10.17%
Rental, Hiring, & Real Estate Services	167	17.34%	1,419	10.49%	62,774	12.07%
Professional Scientific & Technical Services	39	4.05%	1,098	8.11%	79,279	15.25%
Administrative & support services	34	3.53%	567	4.19%	23,352	4.49%
Public administration & safety	5	0.52%	62	0.46%	2,280	0.44%
Education & training	8	0.83%	191	1.41%	7,944	1.53%
Health care & social assistance	17	1.77%	648	4.79%	31,972	6.15%
Arts & recreation services	5	0.52%	162	1.20%	7,008	1.35%
Other services	30	3.12%	804	5.94%	19,682	3.79%
Currently unknown	14	1.45%	142	1.05%	6,860	1.32%
Number of Businesses by Industry - Total	963	100.00%	13,532	100.00%	519,902	100.00%

Source: ABS, 2017

5.6 Crime ‘hot spots’

According to data from the Bureau of Crime Statistics and Research (BOSCAR), there are no crime ‘hot spots’ located within the Horsley Park – Kemps Creek SA2. The site is situated some distance from densely populated areas and, as such it is understandable that the prevalence of activity would be lower.

5.7 Summary of key findings

- The Horsley Park - Kemps Creek SA2 had a population of 4,637 (Census 2016)
- 37.9% of the population in Horsley Park – Kemps Creek SA2 speak a language other than English at home (Census 2016)
- The most represented industry amongst businesses in the Horsley Park – Kemps Creek SA2 is Construction, which is also the industry employing the greatest proportion of individuals whose place of work in that SA2
- Local residents across the Penrith Local Government Area generally travelled greater distances to work, with 28% of the population travelling over 30 km, indicating that less employment is less available locally.

SOCIAL INFRASTRUCTURE

6.0 EXISTING SOCIAL INFRASTRUCTURE

The following section provides an overview of the social infrastructure and open space located within the study area. This audit has been informed by a desktop analysis of geographical data and resources, including:

- Penrith City Council Website
- Penrith City Council Draft Open Space Masterplan
- mychild.gov.au
- careforkids.com.au
- ArcGIS Online.

The audit is indicative and based on the data available at the time of preparing this report. The purpose of the social infrastructure audit is to understand strengths and weaknesses of existing social infrastructure and to determine what has potential to accommodate future population growth.

6.1 What is social infrastructure?

Social infrastructure is an asset that accommodates social services or facilities. Social infrastructure is an important aspect of society as it provides the community with tangible or perceived benefits linked to the safety, health and wellbeing of that community. It also links to the economic growth and the sustainability of the community, therefore playing a critical role in society.

Specifically, this report has been produced to address the needs of particular baseline infrastructure types, which include the following:

- Childcare
- Active and passive recreation – such as parks, sporting ovals and social clubs, halls etc.
- Community and culture – libraries and community centres.

For the purposes of clarity, this report excludes businesses such as retail or commercial services. While these facilities provide a valuable social function, the future provision of these businesses in any area is typically market-led and access to these services may involve a cost which can prevent some from accessing the services provided.

6.2 A catchment approach

Social infrastructure facilities generally operate at three levels of provision. These are local, regional and district. The different scales of infrastructure service different sized catchments. Catchments refer to both geographical areas and the size of the population serviced. For example, a primary school is intended to serve the local population, usually within walking distance. However, a university will cater for a much wider population.

In conducting the audit of social infrastructure, local and district facilities have been identified. Table 13 identifies the facilities included in the audit and the catchments that they serve.

Table 13: Social infrastructure parameters of provision

	Local (generally up to 20,000 people)	District (generally up to 50,000 people)
Childcare and educational facilities	Primary school Long day care Preschool Out of school hours care	Specialist school Secondary school Combined school
Community and cultural facilities	Branch library Meeting space Community centre	District library Multipurpose community centre/community hub
Active open space	Playground Outdoor sport court i.e. tennis and basketball Oval/sport field	Multi-purpose community/ neighbourhood sports centre Indoor sport facilities
Passive open space	Neighbourhood open space and parks	

The proposed development will not have any direct implications on the demand for school places. Consequently, they have been excluded from the analysis.

6.2.1 Childcare

There is a variety of childcare and education facilities in close proximity to the Subject Site. In total, 33 childcare facilities are present, 29 of which have capacity to take on new enrolments. There are seven primary schools, four independent and three public. All of these schools have capacity to take on new enrolments. There are four public secondary schools, one independent secondary school and one independent combined school, all of which have capacity to take on new enrolments. There are also three specialist schools, which all have capacity. The locations of these facilities are shown in Figure 3 and the details are outlined in

Figure 12: Childcare facilities

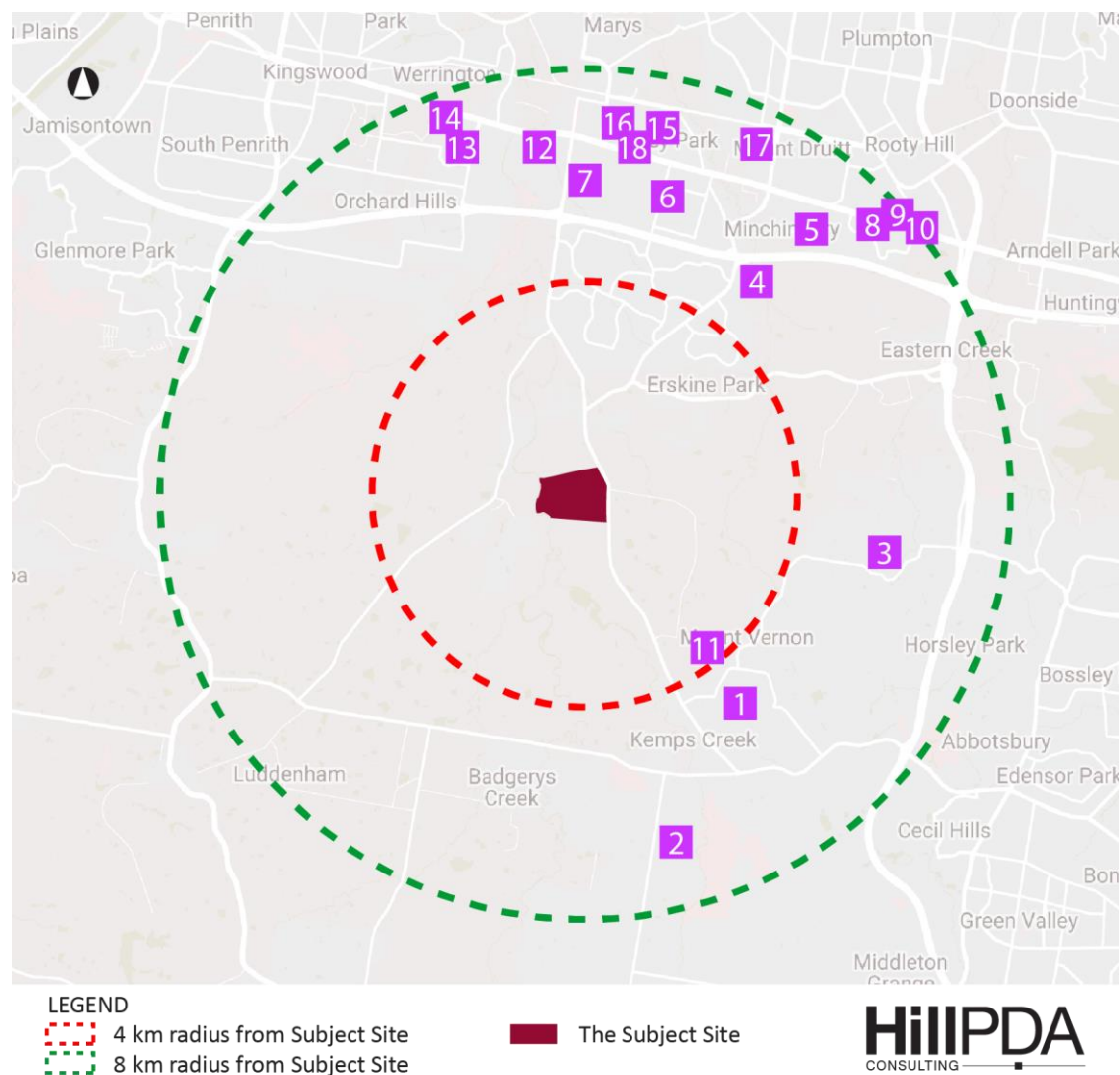


Table 6: Childcare facilities

Category	Map ID	Name	Address	Total capacity	Places available (Oct 2018)
Long Day Care	1	Little Smarties Childcare Centre	45-49 Bakers Lane Kemps Creek NSW 2178	86	Yes
	2	The Grove Academy	35 Floribunda Road Kemps Creek NSW 2178	76	Yes
	3	Horsley Kids Early Childhood Centre	145 -161 Horsley Rd Horsley Park NSW 2175	86	Yes
	4	Sunny Patch Preparatory School	23 Warbler St Erskine Park NSW 2759	20	Yes
	5	Early Milestones Long Day	110 McFarlane Dr	20	Yes

Category	Map ID	Name	Address	Total capacity	Places available (Oct 2018)
	Care Minchinbury NSW 2770				
	6	Keymer Childcare Centre	27-29 Bentley Rd Colyton NSW 2760	70	Yes
	7	St Paul's Lutheran Kindergarten	289 Desborough Rd St Marys NSW 2760	40	Yes
	8	Kids Early Learning Blacktown	46 Minchin Dr Minchinbury NSW 2770	40	N/A
	9	Minchinbury Preschool and Nursery	202-204 Minchin Dr Minchinbury NSW 2770	46	Yes
	10	St Anthony's Early Learning Centre	46-48 Eskdale St Minchinbury NSW 2770	75	Yes
	11	Do-Re-Mi Childcare Centre	162 Kerrs Rd Mt Vernon NSW 2178	66	Yes
	12	My First School Child Care Centre	36 Putland St St Marys NSW 2760	39	Yes
	13	Lifetime Learners Long Day Care & Preschool	36 Myrtle Rd Claremont Meadows NSW 2747	64	Yes
	14	Sunflower Childcare Centre	35 Sunflower Drive Claremont Meadows NSW 2747	24	Yes
	15	Uniting Susanna Early Learning	57 Brisbane St Oxley Park NSW 2760	25	Yes
	16	Busy Bees Long Day Childcare Centre	146 Glossop St St Marys NSW 2760	81	Yes
	17	Angels Kindergarten	39 Durham St Mt Druitt NSW 2770	28	Yes
	18	St Marys Blinky Bill's Preschool	263 Great Western Highway St Marys	28	Yes

6.2.2 Open space

There are 26 active open spaces in the vicinity of the Subject Site. Some of these facilities offer shaded areas and seating, while some playgrounds are fenced and others are not. There is one Oval/sport field located near the Subject Site in Erskine Park, which offers playing fields, netball courts, changing rooms and public amenities. The locations and details are outlined in Table15.

Table 15: Active open space

Category	Name	Address	Description
Open Space	Spica Place Reserve	Spica Place Erskine Park NSW 2759	Shaded green open space. Play system, scale swing with mulch Softfall.
	Warbler Street Reserve	Warbler St Erskine Park NSW 2759	Shaded green open space.
	Fantail & Whistler Crescent Reserve	Fantail & Whistler Crescent Erskine Park NSW 2759	Shaded green open space. Modern multi age play equipment with rubber Softfall.
	Chameleon Park	Chameleon Dr Erskine Park NSW 2759	Shaded green open space. Sports fields. Netball courts. Amenities block, consisting of two toilet units, an accessible toilet, a unisex ambulant facility, a small service area and a store room.
	Andrew Thompson Park	Ford Pl Erskine Park NSW 2759	Shaded green open space.
	Mohawk & Sennar Reserve	Sennar Rd Erskine Park NSW 2759	Shaded green open space.
	Weaver Street Reserve	Weaver Street Erskine Park NSW 2759	Shaded green open space.
	Aquarius Crescent Reserve	Aquarius Cr Erskine Park NSW 2759	Shaded green open space.
	Kestrel Crescent Reserve	Kestrel Crescent Erskine Park NSW 2759	Shaded green open space. Modern multi age play equipment with rubber softfall.
	Capella Street Park	Capella Street Erskine Park NSW 2759	Shaded green open space.
	Columba Place Reserve	Columba Place Erskine Park NSW 2759	Shaded green open space.
	Pacific & Phoenix Reserve	Pacific Rd Erskine Park NSW 2759	Shaded green open space. Modern multi age play equipment with rubber softfall.
	Peppertree Park	Gough & Lucas Street Erskine Park NSW 2759	Shaded green open space. Modern multi age play equipment with rubber softfall.
	Tipani Place Reserve	Tipani Place Erskine Park NSW 2759	Shaded green open space.
	Ridgeview Crescent Reserve	Ridgeview Crescent Erskine Park NSW 2759	Shaded green open space. Play system, swings with mulch softfall.
	Skylark Crescent reserve	Skylark Crescent Erskine Park NSW 2759	Shaded green open space. Slides, spring animal, leap frog, log roll, balance beam, and swings with mulch softfall.
	Mount Vernon Tennis Courts	Bowood Drive Mount Vernon NSW 2178	Shaded green open space. Modern multi age play equipment with rubber softfall.
	Banks Drive Reserve	Banks Drive St Clair NSW 2759	Shaded green open space. Modern multi age play equipment with rubber softfall.
	Denver Road Reserve	Denver Road St Clair NSW 2759	Shaded green open space. Modern multi age play equipment with rubber softfall.
	Dorothy Radford Reserve	Daniel Parade St Clair NSW 2759	Shaded green open space. Play equipment, swings with mulch softfall.
	Explorers Way & Henley Grove Reserve	Explorers Way & Henley Grove St Clair NSW 2759	Shaded green open space. Multi age play equipment with mulch softfall.

Category	Name	Address	Description
	Lexington Avenue & Topeka Glen Reserve	Lexington Avenue & Topeka Glen St Clair NSW 2759	Shaded green open space. Play equipment, swings with mulch softfall.
	Mark Leece Sporting Complex	Endeavour Avenue St Clair NSW 2759	Shaded green open space. Modern multi age play equipment with rubber softfall.
	Shakespeare Drive Reserve	Shakespeare Drive St Clair NSW 2759	Shaded green open space. Modern multi age play equipment with rubber softfall.
	Timesweep Drive Reserve	Timesweep Drive St Clair NSW 2759	Shaded green open space. Play equipment, swings with mulch softfall.
	Windrush Circuit Reserve	Windrush Circuit St Clair NSW 2759	Shaded green open space. Modern multi age play equipment with rubber softfall.

STAKEHOLDER VIEWS

7.0 STAKEHOLDER VIEWS

Willowtree Planning have undertaken a consultation process with government and community stakeholders. Under the SEARs, a detailed community and stakeholder engagement strategy is required for the Proposed Development. The consultation strategy was formulated in three key steps: stakeholder identification, consultation, addressing issues raised and reporting on consultation strategy outcomes and an outline for future consultation to be undertaken.

The key plank of the consultation strategy is providing information on the Proposed Development through various communication tools and activities. The intent of the consultation strategy is to outline the way in which open, transparent and ongoing (key stakeholder and community) engagement will continue to occur as the Proposed Development motions through its progressive stages.

7.1 Stakeholder Identification

The consultation undertaken with community groups, individuals and Government agencies focused on providing general project information with regard to the proposed development. The following stakeholders were identified:

- Local Government
 - Penrith City Council
- State Government
 - Greater Sydney Commission
 - Roads and Maritime Services
 - Transport for NSW
 - Office of Environment and Heritage
 - Environment Protection Authority
 - Fire and Rescue NSW
 - NSW Rural Fire Service
 - Department of Industry – Crown Lands and Water
 - WaterNSW
 - Sydney Water
- Local Community Members
 - See 7.1.3 Local Community Members.

All interactions throughout the process were recorded, with records included with the consultation strategy.

7.1.1 Local Government

Penrith City Council, as only LGA covering the Subject Site, was contacted as part of the consultation strategy. An initial Pre-DA meeting was arranged in March 2018 to inform Council of the Proposed Development, with two subsequent meetings following in August.

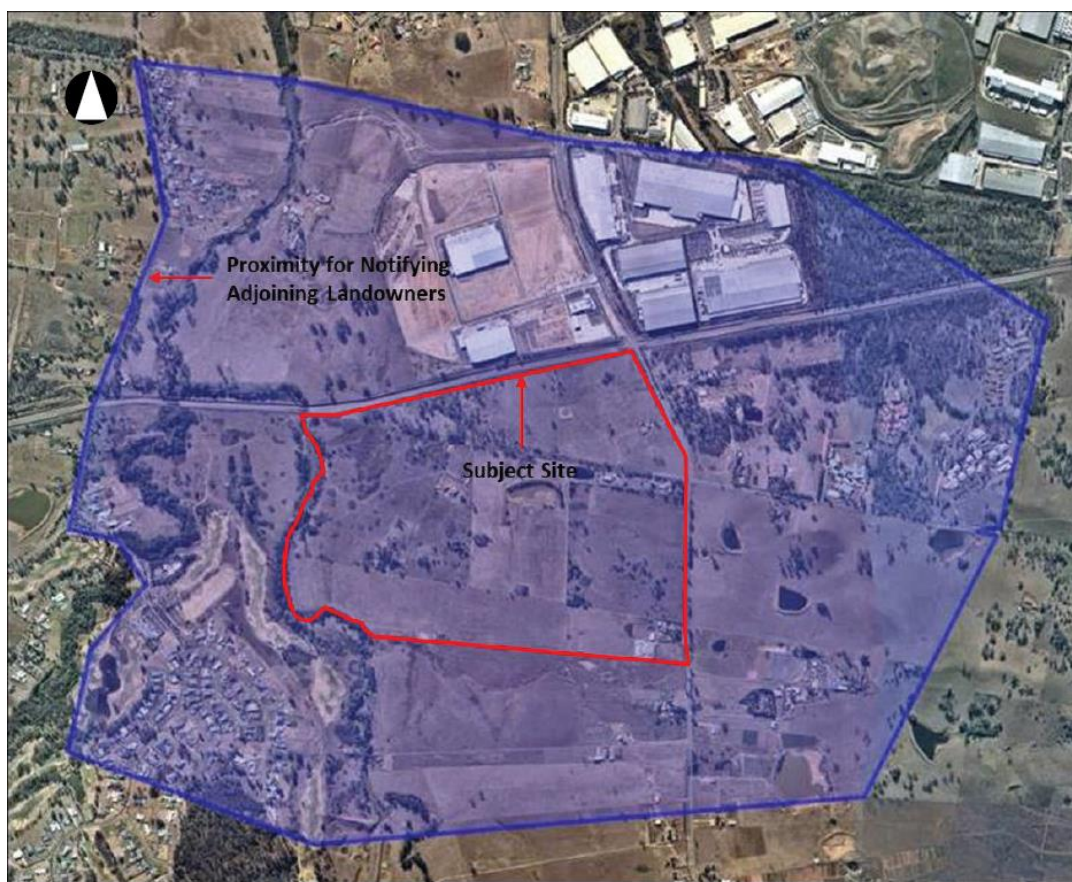
7.1.2 State Government Agencies

A formalised briefing was arranged with each of the following State Government Agencies: NSW Department of Planning and Environment, Greater Sydney Commission, NSW Roads and Maritime Services, NSW Department of Transport and Sydney Water. These briefings were primarily informational in nature, with any concerns arising being incorporated as part of the ongoing development of the proposal.

7.1.3 Local Community Members

Community consultation was undertaken in the form of two community information sessions held at the nearby Twin Creeks Golf and Country Club on 22 and 25 September 2018. At these meetings community members and businesses had the opportunity to view architectural plans for the Proposed Development and raise any issues with representatives from the proponents. Notification was provided through local newspaper advertisements and a letterbox to surrounding residences and businesses with addresses specified in the SEARs (Figure 7). A detailed list of the properties that were notified of the two information sessions is provided in the Consultation report Section 4.7.1. Regarding attendance at the two sessions, there was a total of one (1) attendee recorded on 22 September 2018 and a total of three (3) attendees recorded on 25 September 2018.

Figure 7: Range of community notification letterbox drop undertaken 14 September 2018



LEGEND

- Subject Site Boundary
- Letterbox drop range (14 September 2018)

Source: Willowtree Planning

A summary of the findings of the community consultation follows:

- No objections were raised at either of the community consultation sessions
- General questions arose around traffic, particularly how increased traffic along Mamre Road and Bakers Lane would affect the schools to the east on Bakers Lane
- General questions arose around the proposed uses of the warehouses themselves (e.g. what would be stored therein)
- Overall, there was a positive response at the two sessions, which demonstrated a low level of concern arising from the proposal.

7.2 Key Consultation Outcomes

Queries and feedback arising throughout the consultation process were incorporated into the Proposed Development. A summary of key matters arising from the consultation process follows:

Table 16: Summary of key matters for consideration arising from the consultation and engagement process

Issue	Detail
Traffic & Parking	A comprehensive Traffic Impact Assessment would be undertaken as part of the SSDA and assess the relevant topics discussed with DP&E, RMS and TfNSW with regard to the Subject Site and implications on traffic and parking.
Height	The proposed height of buildings throughout the proposed development would be built to complement and transition the wider Western Sydney Employment Area (WSEA).
Views	Aesthetically pleasing architectural landscaped designs would form part of the proposed development. As part of the SSDA, proposed buildings would not be higher than 15 m; therefore, views would not be compromised. Additionally, consideration would be given to solar access, overshadowing, and privacy & amenity impacts.
Heritage	Further archaeological testing / surveying is currently being undertaken by a specialised consultant. Any mitigation measures and recommendations would be adhered to accordingly.
Flora & Fauna	A Biodiversity Impact Assessment Report is currently being undertaken by a specialised consultant. Any mitigation measures and recommendations would be adhered to accordingly.
Engagement	Engagement would be ongoing with affected community members and key agencies involved.

Source: Willowtree Planning

7.3 Future Consultation

In progressing beyond lodgement, it is required that the EIS for the Proposed Development be publically exhibited for 28 days. It is anticipated that the public exhibition would also include wider notification by means of newspaper advertisements, notice on the NSW Planning & Environment website and further written correspondence to surrounding landowners.

In addition to this, in the event of approval, the proponents have stated their intent to continue with ongoing community consultation in the interest of transparency, aligning with the wider aspiration for the Proposed Development. This would entail a range of future communication activities taking place.

SOCIAL IMPACT ASSESSMENT

8.0 SOCIAL IMPACT ASSESSMENT

This section details the potential social impacts to arise from the proposed development. The assessment is informed by the analysis from the previous chapters and scoping of potential impacts using the Department of Planning and Environment's scoping template.

The assessment of social impacts uses the methodology described in section 1.4. Each potential impact is assessed having regard for the level of impact (section 1.4.1), the likelihood of impact (section 1.4.2) and the significance of impact (section 1.4.3).

8.1 Scoping

The social impacts to arise from the proposed development will be influenced by the existing situation, the eventual consequences of the proposed development and measures put in place to mitigate against any negative impacts and enhance positive impacts.

Social issues already in existence are relevant only as context, within which, the impacts of the proposed subdivision must be examined.

Issues have been assessed based on their impact during the construction and operational period of the development.

Social impacts can involve changes to:

- Way of life
- Community
- Access to and use of infrastructure, services and facilities
- Culture
- Health and wellbeing
- Surroundings
- Personal and property rights
- Decision making systems
- Fears and aspirations.

The Department of planning and Environment's Social Impact Assessment Guidelines contains a scoping tool which has been applied to the proposed development. The completed scoping tool is included in Appendix A.

8.2 Area of influence

Social impacts of the proposed development may extend beyond the immediate surrounds.

Table 17: Area of influence of potential impacts

Impact type	Local Community	Broader Community
Amenity	<ul style="list-style-type: none"> ● Noise ● Lighting ● Odours 	<ul style="list-style-type: none"> ● Increased truck movements on road network
Access	<ul style="list-style-type: none"> ● New local roads 	<ul style="list-style-type: none"> ● Increased access to goods

Impact type	Local Community	Broader Community
		Improved efficiencies in supply chains and distribution of goods
Built environment	<ul style="list-style-type: none"> Visual impact 	<ul style="list-style-type: none"> Ongoing design improvements in logistics and warehousing
Heritage	<ul style="list-style-type: none"> No european heritage items are present. Aboriginal artifacts identified will be salvaged in accordance with the Local Aboriginal Land council and in accordance with OEH guidelines 	<ul style="list-style-type: none"> No european heritage items are present. Aboriginal artifacts identified will be salvaged in accordance with the Local Aboriginal Land council and in accordance with OEH guidelines
Community	<ul style="list-style-type: none"> Health Safety Increased demand for local services and facilities 	<ul style="list-style-type: none"> Increase demand for district and regional facilities and services
Economic	<ul style="list-style-type: none"> Job creation Livelihood Increased local spending 	<ul style="list-style-type: none"> Job creation
Natural Environment	<ul style="list-style-type: none"> Urbanisation of semi-rural land Enhancement of local natural features 	<ul style="list-style-type: none"> Increased carbon emissions through increased truck movements

Each of the above impacts has been considered in the context of the area of influence, with finding outlined below.

8.3 Amenity impacts

Amenity has its meaning of pleasantness, but also has a physical (or tangible) component. This includes the character and appearance of buildings, proximity to commercial or recreational facilities, quality of infrastructure and absence of noise, unsightliness or offensive odours. It also has a psychological or social component.

Amenity is what makes one location feel different from another, but it also contributes to a place's identity and can be what makes our physical surroundings worth caring about. Amenity can affect the ability of a resident, a visitor or the community to enjoy or undertake activities within the local area.

8.3.1 Impact of construction

The construction process has the potential to affect the amenity of sensitive receivers within the surrounding area. Sensitive receivers generally relate to residents but may also include child care centres, places of worship, community and recreational facilities or businesses (such as cafes and restaurants) that rely on the amenity of a locality to attract customers.

During construction, the following may affect local amenity:

- The removal of established vegetation
- The introduction of construction facilities to the environment
- Noise and dust arising from construction activities
- Unpleasant odours
- Increased traffic volumes and/or congestion.

Short term reduction in amenity may impact the existing residential properties within the immediate vicinity of the site, however due to the distance of nearby properties disruption is likely to be minimised. Construction impacts on local amenity are generally contained within close proximity to construction sites. Best practice for construction in established residential areas is to include consultation with neighbouring residents to outline expectations and standards.

A range of mechanisms can be applied to minimise any potential construction impacts on amenity. Such mechanisms are typically required as a condition of development consent and are employed by most building contractors and implemented through a Construction Management Plan. Such plans tend to focus on issues such as demolition and construction staging, noise, air and water quality, construction traffic management, pedestrian safety and site management. They include simple but effective measures such as screening, noise mitigation at source and varying work hours.

These mechanisms can be as simple as avoiding noisy or disruptive construction activities during the hours when residents are likely to want to enjoy surrounding open space or rest, for example on evenings and weekends. Overall, the social impacts arising from construction are considered to be “minor” in the circumstances.

With these mechanisms in place, it is deemed that the impacts would be minor and “unlikely” to affect those nearby, presenting “low” social risk, with mitigation according to the social risk matrix (section 1.4.3).

8.3.2 Noise

Exposure to environmental noise may also affect the function of social and business services (both positively and negatively), especially those that are dependent on a quiet environment. Noise impacts may also affect the way people use space, their ability to communicate and the way individuals undertake daily activities. This includes heightened annoyance, stress and sleep disturbance.

An acoustic assessment undertaken by Acoustic Works, dated November 2018 provides an assessment of the noise impacts to arise from the Proposed Development. The surrounding area is primarily affected by road traffic from Mamre Road and noise from existing nearby commercial/industrial activities.

The report considered existing ambient noise levels with readings taken at key sensitive locations surrounding the Subject Site.

Figure 8: Receiver and noise monitoring locations



Source: Acoustic Works 2018

These ambient noise levels and those projected to arise from the Proposed Development were then considered against Penrith City Council requirements, Secretary's Environmental Assessment Requirements and the NSW Noise Policy for Industry 2017.

The acoustic assessment concluded that measures outlined in the master plan are viable. Given that the site will operate 24 hours a day, 7 days a week, the report makes a number of recommendations regarding the management of operational noise and vibration, including the following:

- That an acoustic barrier be constructed at the interface between easternmost loading dock and the setback adjoining Mamre Road
- That a construction noise management plan is prepared and submitted to council prior to construction certification, in accordance with the *NSW Interim Construction Guideline*
- That any vibrating equipment used onsite is adequately isolated to prevent vibration issues to nearby receivers or reviewed by a qualified acoustic consultant
- Owing to the Proposed Development being limited to the erection of building pads and not extending to the footprints or proposed uses of the buildings themselves, the report also notes that additional individual acoustic assessments may be required to ensure that proposed building construction will adequately attenuate internal noise sources, especially where industrial use or factory production is proposed for any of the warehouses
- The report similarly recommends that any mechanical plant equipment undergo an assessment by qualified acoustic consultant be conducted prior to installation to determine any requirements for acoustic treatments.

On the basis of the findings of the acoustic assessment, HillPDA identifies noise as an “unlikely” and “minor” negative impact. Adoption of the measures identified in the acoustic assessment will help mitigate any potential negative social impacts stemming from noise in the immediate area. As such, noise is deemed to present “low” social risk on the social risk matrix (section 1.4.3).

8.3.3 Noise Arising from Additional Traffic

The properties most likely to be affected by increased vehicle noise are identified as those to the north and south of the Proposed Development on Mamre Road. Businesses along Mamre Road are largely industrial in nature. Housing along Mamre Road to the north of the Proposed Development is set back from the road and as such less susceptible to vehicle noise.

An acoustic assessment of the Proposed Development has been undertaken by Acoustic Works dated November 2018. It identifies that the Proposed Development is predicted to produce an additional 14,000 vehicle movements per day. The existing annual average daily traffic volume for Mamre Road is approximately 20,000 vehicles per day. The acoustic assessment carried out an evaluation using the methodology outlined in RMS *Guide to Traffic Generating Developments*. The assessment concludes that:

The existing annual average daily traffic volume for Mamre Road is approximately 20,000 vehicles per day. In accordance with the RTA Guide to Traffic Generating Developments, the proposed warehouse development is predicted to produce an additional 14,000 vehicle movements per day.

*Therefore, based on the available information, the predicted increase in daily LAeq(15hr) for receivers near Mamre Road is calculated to be 3dB(A) due to traffic generation by the proposed development, **which complies** with the criterion of +12dB(A). (our emphasis)*

The Proposed Development will result in a significant increase in road movements compared to the current situation, such that there is likely to be a noticeable increase in traffic noise. However, based on the results of the acoustic assessment, the noise impacts arising from additional traffic are not likely to have an unacceptable impact to neighbouring businesses and residents. Consequently, the potential impact of the Proposed Development is rated as “moderate” using the criteria outlined in Section 1.4.

As the predicted noise arising from the increase in traffic is within acceptable limits, the traffic noise arising from the proposed development presents an “unlikely” social risk using the criteria outlined in section 4. This is based on the findings of Acoustic Works which indicates that at the sensitive receivers, including residences, traffic noise will be below the criteria for acceptable noise limits.

Overall, the significance of potential impacts arising from traffic noise associated with the proposed development is considered to be “moderate” using the social risk matrix in section 1.4.3.

Monitoring of the impacts on surrounding residences could be undertaken to ensure that noise is not impacting on residents way of life and if so that effective management steps be undertaken (e.g. imposing curfews on vehicle movements or the introduction of physical noise breaks). Future development of the site will be subject to further development applications, providing an opportunity for further assessment and monitoring of traffic noise impacts. In the longer term, planning for noise mitigation devices will also be considered by RMS as part of its proposed expansion of Mamre Road.

8.3.4 Light

Light spill maps have been produced and are provided at Appendix B. The maps demonstrate that the proposed development complies with the relevant Australian Standards. On this basis, it is considered unlikely that the Proposed Development would produce any impacts to amenity through light spill. Further, the proposed development will not impact on surrounding properties or residents through obtrusive light glare or

spill. Based on feedback received through the consultation process, neither community nor government stakeholders raised any issues with proposed lighting.

Based on light spill maps, light is assessed to of “minimal” consequence and an “unlikely” impact, presenting a “low” social risk using the social risk mix in section 1.4.3.

The Proponent has committed to managing light spill through the strategic location and direction of outdoor lighting. With consideration to the distance of surrounding neighbours, the proponent is considered to be able manage any potential light spill through sensitive design.

8.3.5 Odour

It is unlikely that the Proposed Development will impact amenity in the surrounding area through odour. No impacts from odours have been identified from the operations of the Proposed Development and no concerns in this regard have been raised as part of the consultation process.

An Air Quality assessment has been prepared by North Star Air Quality, dated October 2018, which concluded that:

- There was a low risk of health or nuisance impacts during construction works
- The operation of the Proposal does not cause any exceedances of the air quality criteria, even with the addition of background air pollutant concentrations representative of the area.

Further, the air quality report suggests that the application should not be refused on the grounds of air quality. As air quality is expected to remain within acceptable standards, the Proposed Development is unlikely to adversely impact on people’s way of life, health or wellbeing. The potential for impacts to arise from odours is considered to be “minimal” and “unlikely”. Overall, odour presents a “low” social risk on the social risk matrix at section 1.4.2.

As this application concerns the establishment of building pads within the Warehousing and Logistics Hub, the proposed individual uses on site will be subject to future development assessments, providing a future opportunity to consider potential impacts to amenity from odour.

8.4 Access

8.4.1 Access to Property

The Proposed Development is likely to positively impact upon access to public or private property.

Regarding vehicular traffic, the warehouses and offices in Proposed Development will only be accessed via the internal estate roads, meaning there will be no obstruction on existing roads. During the community consultation, the Proposed Development’s impact on access to the nearby schools on Bakers Lane to the east was queried.

For vehicles, the short term improvements to the intersection of Bakers Road and Mamre Road will be positive. At present, the intersection is signalised in only three directions, with a stop sign facing the western approach. The addition of a fourth traffic signal will improve the functioning and safety of this intersection.

Pedestrian access will also be positively impacted by the Proposed Development. Presently the intersection of Mamre Road and Bakers Lane has no signalised pedestrian crossing facility. Works included as part of the Proposed Development will result in the upgrade of this intersection and the addition of a signalised pedestrian crossing, thereby improving pedestrian access, which is particularly important given the presences of the schools and college on Bakers Lane.

As such, the proposal is deemed to present a “low” social risk, with some positive impacts on access.

8.4.2 Utilities

The Proposed Development is unlikely to negatively impact access to utilities. Utilities are available from Mamre Road, including water, sewer, electricity and communications. The Proposed Development also includes rainwater tanks on site to collect run-off from the roof areas for re-use on site and thereby minimise the amount of potable water consumed. The proponent is consulting with Sydney Water and NSW Water. Overall, the potential impact is negligible. The proposal presents “low” social risk.

8.4.3 Road, Rail and Public Transport

A Traffic Impact Assessment has been prepared by Ason Group in relation to the Proposed Development. The report details modelling undertaken to assess the impact of the proposal on the performance of the road network in the proximity of the Subject Site and, where required, identify necessary upgrades to mitigate any adverse impacts.

The report concluded:

- That the proposed traffic volumes arising from Stage 1 of the Proposed Development will not have a material impact on the surrounding road network
- That parking provided for each land parcel will generally provide more than sufficient car parking spaces to satisfy RMS parking requirements
- That future development in the area may require the acceleration of planned road upgrades by RMS, to accommodate additional road traffic, particularly proposed upgrades to Mamre Road.

An assessment of impacts on access to rail or public transport access is not applicable as neither is present near the Subject Site.

With consideration of these points, the potential impacts to transport are “minor.” The likelihood of transport impacts is considered “possible” pending road upgrades in the area. The overall social risk to transport is considered to be “moderate”. It will be important for authorities to monitor development of the surrounds so that improvements to the road network are appropriately scheduled to minimise the potential for impacts.

8.5 Built Environment

8.5.1 Public Domain

The audit of existing social infrastructure found that there are no parks or public spaces with proximity to the subject site that would be materially affected by the activities proposed in the Proposal. Any potential impacts to the public domain will be confined to roadways and the amenity of the domain immediately surrounding them (eg footpaths).

The traffic management and acoustic reports cited above indicate that any amenity impacts are likely to be minimal on these areas which are not presently used by pedestrians, and traffic impacts have been effectively managed in the Traffic Impact Assessment. As such, the impact on the public domain is assessed as being “minor” with an “unlikely” likelihood and is deemed to present “low” social risk.

Landscaping proposed as part of the street works along the Mamre Road frontage could yield some improvement to the public domain. The addition of the estate roads will extend the public domain within the Subject Site, where there is presently little existing.

The impact of the proposed development to public domain is considered to be “unlikely” and with a “minor” level of consequence. Overall the Proposed Development presents a “low” social risk to the public domain on the social risk matrix.

8.5.2 Public infrastructure

The proposed development is likely to positively impact on public infrastructure. The proposed enhancements to the local road network with landscaping along Mamre Road and improvements to the traffic lights at the intersection of Mamre Road and Bakers Lane offer substantial improvements to those existing pieces of infrastructure. Further improvements accompanying later stages of the development further add to these potential positive impacts. The possible impacts in this regard are largely positive, with low social risks.

8.6 Heritage

There are no known heritage items or artefacts on site and therefore the Proposed Development is unlikely to negatively impact upon heritage.

The SEARs require an Aboriginal Cultural Heritage Assessment Report to be considered as part of the EIS.

The SEARs also require the proponent is required to carry undertake an assessment of European Heritage including potential impacts on the surrounding site and surrounding area, including any built landscape items, conservation areas, views and settings.

The conclusion of this segment is contingent upon the findings of those reports.

8.7 Community

8.7.1 Health

The potential for increased risk to health has been considered including risk arising from disposal of waste, increased traffic emissions and dust during construction. There are no waste activities associated with the Proposed Development that will impact on surrounding properties. Traffic movements could potentially generate additional emissions, which could impact on the health of communities surrounding Mamre Road to the north and south, however this presents a low level of risk due to the minimal number of pedestrianised areas that front this road and the relative isolation along the length that would be impacted by additional traffic. In relation to dust during constructions, the air quality report by Northstar Air Quality reports that:

The assessment showed there to be a low risk of health or nuisance impacts during construction works.

And further:

The sensitivity of the surrounding area to health effects and dust soiling may be identified as being low.

Overall, the potential health impacts to arise from the Proposed Development are considered to present an “unlikely” risk to the community of “minimal” level impacts using the criteria in section 1.4. Overall, the Proposal presents a “low” social risk to the health and wellbeing of the wider community (section 1.4.3). It will be important for waste management procedures and operational practices to ensure that the potential for health impacts to workers is minimised.

8.7.2 Safety

Developments can increase or decrease perceived and actual safety. The earlier investigation of the community identified no crime in the immediate area, which was a likely outcome of the relative remoteness of the region

and its semi-rural character. The Proposed Development is unlikely to change this, with the proposed warehouses being secure and illuminated. The activation of the area as an industrial and logistics precinct may also restrict the development of negative perceptions of safety in the area.

The Traffic Impact Assessment (Appendix 8) prepared as part of the EIS confirms that the design conforms to standards required for emergency vehicle access, confirming that *“the design includes consideration for emergency vehicles, in particular the provision of a fire trail (where required) around the perimeter of each warehouse building.”*

Potential flood impacts have been analysed as part of the Overland Flow Report by Costin Roe Consulting dated December 2018. This report includes modelling of flooding events with 5 per cent, 2 per cent, 1 per cent and 0.5 per cent annual exceedance probability (AEP), advice on the conformity of the flood planning level in accordance with Penrith Council guidelines, and confirmation of the probable maximum flood (PMF) storm event with discussion around evacuation in that scenario.

The Overland Flow Report states that there is sufficient capacity and time for either safe egress of occupants offsite or to an onsite refuge during a major flood event. The levels over the site are proposed at greater than 500mm above the 1% AEP storm event which allows several hours of flood warning response time. Also, at least 80% of the developed site will be above the PMF flood event. Given there is less than 1 kilometre from the flood affected zone to a PMF free area of the site, occupants could move to flood free land in only minutes.

On the basis of the above, the potential risks to safety of the proposed development are considered to be “unlikely” with “minimal” level of impact. The Proposed Development presents a “low” social risk in terms of safety on the social risk matrix (section 1.4.3).

8.7.3 Services and Facilities

The Proposed Development concerns the construction of warehousing and logistics facilities being a place of employment. Given the limited social infrastructure offer in the immediate area, it is anticipated that employees would be accessing some social infrastructure at their area of residence.

The long day care and preschool facilities in the wider area have capacity to cater for the potential extra demand from before and after work pickup and drop-off. Consequently the impact of the additional workers would be minimal. It is also feasible that with the staged nature of the Proposed Development, and the warehouses and offices themselves being constructed on an individual basis, the increase in demand for relevant services and facilities will be gradual.

Overall, the proposed development is likely to result in a modest increase to the demand for social infrastructure in the local community. A slight mismatch between demand and supply could occur in the short term, however, plans to provide social infrastructure on-site would remedy this. The existing social infrastructure in the surrounds has capacity to accommodate short term needs. On this basis, the proposed development is considered to have an “unlikely” and “minor” level of impact. On the social risk matrix, the proposed development presents a “low” risk in terms of social infrastructure.

8.7.4 Cohesion, capital and resilience

Community cohesion refers to the connections and relationships between individuals and their neighbourhoods. A socially cohesive society is one which works towards the wellbeing of all its members, fights exclusion and marginalisation, creates a sense of belonging, promotes trust and offers its members the opportunity of upward mobility.

The Proposed Development concerns the construction of a warehouse and logistics hub in a sparsely populated semi-rural area undergoing a rapid process of industrialisation. The Subject Site is identified as part of the

Broader Western Sydney Employment Area and the Western Sydney Aerotropolis, both regions earmarked for substantial growth and economic development. As such, the Proposed Development is in line with broader changes throughout the region, as well as in keeping with the growing logistics and warehousing developments to the north and north-east of the Subject Site.

Based on feedback gathered through the community and stakeholder engagement process, the Proposed Development is seen as encouraging for the local and wider regional community, who stand to benefit from the extra employment. In creating additional employment opportunities, the Proposed Development will positively impact on cohesion by adding to opportunities for meaningful engagement in the workforce. The proposed development also creates more opportunities for residents in the area to work closer to home, thereby adding to time that they can spend in their families and communities.

Overall, the Proposed Development is considered “likely” to have “major” positive impacts on the wider community. Consequently, the proposed development has an “extreme” but positive social risk on the social risk matrix (section 1.4.3).

8.7.5 Housing

The community survey revealed that residents in the Penrith LGA tend to commute further to their place of work. The Proposed Development creates employment opportunities in that region, closer to workers’ homes. Moreover Western Sydney has an expanding population and the Subject Site is strategically located in a region intended to supply employment for that housing expansion.

The Proposed development is not anticipated to negatively impact on housing and therefore presents a “rare” and “minimal” level of impact for housing. The Proposed Development presents a “low” social risk on the social risk matrix (section 1.4.3).

8.8 Economic

The proposal would affect the local and regional economy both during construction and operation. The extents of economic effects are discussed in the following sections.

8.8.1 Natural Resource Use

No significant natural resources have been identified on the Subject Site with the exception of South Creek along its western border. The Proposed Development includes measures to mitigate the developments impact on South Creek including the construction of a storm water detention and bio-retention basin, planting throughout the site and revegetation of areas along the creek bank, thereby providing natural filtration and enhancing the ecological value of the waterway. The proposed rainwater tanks will also assist with the volume of unfiltered runoff into the creek.

Overall, the Proposed Development may positively impact natural resources by preserving South Creek and enhancing its ecological value. The proposed development is considered to present a “likely” and “moderate – positive impact. It is assessed to have “high” but positive social impact on the social risk matrix (section 1.4.3).

8.8.2 Livelihood

Livelihood is defined as a person's ability to make a living. In the context of the proposed development it is useful to consider these impacts as generated during the construction phase and then during operation.

The construction of the development is expected to have short and long-term benefits with respect to construction employment and the purchase of materials. During construction, the proposed development

would generate additional construction jobs. Local centres are also likely to benefit from increased construction related trade.

The construction industry is a significant component of the economy, accounting for 6.7% of Gross Domestic Product (GDP) and employing almost one million workers across Australia. The industry has strong linkages with other sectors, so its impact on the economy goes further than the direct contribution of construction. It is also the largest employer of residents in the Horsley Park – Kemps Creek SA2.

It is projected that the construction of Stage 1 of the Proposed Development will generate in the order of 500 full time jobs, with a further 1,000 construction jobs to be generated by subsequent stages (subject to future applications).

With regard to the operation of the Proposed Development, Stage 1 of the proposed warehouse and logistics hub is projected to generate in the order of 800 jobs when completed with the potential for around 2,500 at full development.

The secondary benefits of this new employment will be money invested into businesses and services across the region. This new expenditure will benefit and grow local economies, generating further employment in service industries.

The Proposed Development stands to make a very positive contribution to the livelihood of residents across the wider region, creating new employment opportunities closer to residents' homes. The proposed development is considered "likely" to have a "moderate" level of impact and as such, presents a "high" and positive social impact for livelihood (section 1.4.3).

8.8.3 Opportunity cost

Opportunity cost is defined as the real marginal cost of a resource or action, or the value forgone by using the resource or by acting in one way rather than another. The Subject Site has historically been used for rural/residential purposes. The low intensity of this usage means that virtually all economic and employment opportunities are foregone by not acting. In the context of Western Sydney's current rapid expansion and the opportunities that arise from the establishment of Western Sydney Airport, the opportunity cost of not acting would be substantial.

8.9 Natural Environment

For the purposes of Social Impact Assessment, impacts to the natural environment are considered in the way that peoples' surroundings are affected, including access to and use of ecosystem services, public safety and security, access to and use of the natural and built environment and their aesthetic value and/or amenity.

The Environmental Impact Statement includes a plan of management for the site that effectively addresses potential impact arising from air, biodiversity, land and water on site.

8.10 Mitigation Measures and Monitoring

As part of the preparation of an EIS for the Proposed Development, comprehensive reporting has been undertaken in a variety of possible short and long term impacts by construction and operation. Owing to the Subject Site's relative isolation and the Proposed Development not concerning the usage of the warehouses themselves, the need for ongoing monitoring is minimal until subsequent development is undertaken on the constituent blocks.

The assessment of potential social impacts to arise from the Proposed Development has been outlined above. Opportunities to enhance the positive impacts and minimise the potential negative social risks have been considered. Key actions in this regard are outlined in Table 7.

Table 7: Proposed Mitigating Measures

Action / Purpose / Target	Considerations
Construction Management Plan: <ul style="list-style-type: none"> To minimise the risk of negative impacts during construction Target Neighbouring residents and businesses 	<p>The CMP could address potential social impacts, including reducing stress and inconvenience to neighbouring businesses and residents, by:</p> <ul style="list-style-type: none"> Identifying construction vehicle traffic routes that minimise impacts to neighbours, as far as possible Providing arrangements for parking of worker and construction vehicles on-site Storing all equipment on site Identifying management practices to minimise and manage interruptions to traffic flows establishing practices to maintain traffic and pedestrian safety to local residents minimising disruption proposed road closures, temporary traffic routes, loss of pedestrian or cyclist access or reversing manoeuvres Providing queueing space onsite for the standing of vehicles Providing clear signage to direct construction vehicles Provide signage on site that provides a contact number for residents to direct enquiries and report incidents (e.g. theft or break and enter to the site while unattended), should they occur.
Noise amelioration: <ul style="list-style-type: none"> To minimise disturbance and discomfort during operation Target Neighbouring residents and businesses 	<ul style="list-style-type: none"> Minimise noise disturbance to local residents and businesses during construction by implementing the recommendations of the Acoustic Assessment including: <ul style="list-style-type: none"> Preparation of a Construction Noise Management Plan in accordance with the <i>NSW Interim Construction Guideline</i>. Minimise noise disturbance to local residents and businesses during operation by implementing the recommendations of the Acoustic Assessment including: <ul style="list-style-type: none"> Constructing an acoustic barrier between easternmost loading dock and the setback adjoining Mamre Road Adequately isolating any vibrating equipment used onsite to prevent vibration issues to nearby receivers. Note the need for future acoustic assessments to be undertaken in relation to future applications relating to building construction and use of the site, to ensure that proposed building construction will adequately attenuate internal noise sources, especially where industrial use or factory production is proposed for any of the warehouses. Note the need for mechanical plant equipment installed on site to undergo an assessment by qualified acoustic consultant be conducted prior to installation to determine any requirements for acoustic treatments.
Traffic management: <ul style="list-style-type: none"> To minimise inconvenience and risks to pedestrians and 	<p>Minimise the risks to residents from increased movement of vehicles (including heavy vehicles) by implementing the recommendations of the Traffic Impact Assessment report by Ason Group (dated October 2018)</p>

Action / Purpose / Target	Considerations
motorists <ul style="list-style-type: none"> Target local residents and businesses 	and <p>Note the longer term need for RMS to review road planning in the area to accommodate employment growth including:</p> <ul style="list-style-type: none"> Expanding the capacity of Mamre Road Improving the intersection of Mamre Road / Bakers Lane Implement the RMS Mamre Road Upgrade project and plan for a potential a longer term need for additional capacity on Mamre Road.
Lighting: <ul style="list-style-type: none"> To confirm the development does not result in unacceptable light spill Target neighbouring residents 	Monitor potential light spill impacts by inspecting the site (during night time) after construction and confirm compliance with the relevant Australian Standard.
Social infrastructure delivery : <ul style="list-style-type: none"> To provide adequate social infrastructure for future workers on the site 	Recognise the limited social infrastructure in the area for future workers and plan to deliver social infrastructure as part of the ongoing development of the site.
Community liaison: <ul style="list-style-type: none"> To inform neighbours of construction activity To provide an avenue for conflicts to be addressed 	<ul style="list-style-type: none"> Undertake to establish good relations with neighbours by regularly liaising with neighbours to: <ul style="list-style-type: none"> Advise them of the construction timeframe and construction activity Monitor impacts to neighbouring residents and businesses Provide neighbours with contact details to report incidents or voice complaints Establish clear responsibility within the construction team for neighbourhood liaison.
Safety: <ul style="list-style-type: none"> To ensure safety during flood events 	Implement the recommendations of the Overland Flow Report prepared by Costin Roe Consulting (dated October 2018) to ensure: <ul style="list-style-type: none"> Each facility has a plan which sets out flood warden, evacuation zones and responsible persons Users of the each facility are registered to able to receive flood warning messages via SMS from the NSW SES The evacuation framework, including the evacuation route, (set out in the overland flow report is understood and adapted to each specific facility. A copy or copies of the evacuation route and plan are kept at several locations on site.

It is suggested that monitoring should be undertaken to:

- gauge to cumulative impacts of additional truck movements along Mamre Road following construction
- monitor possible impacts to residents and public domain users to the north along Mamre Road (e.g. air quality, noise)

- Monitor traffic levels to ensure that the efficiency of the road network is maintained ahead of any planned further enhancement
- Monitor the need for road maintenance in the surrounds.

Ongoing responsive community engagement will assist in determining if existing mitigation measures are sufficient for those communities upstream.

Ongoing monitoring should be considered as part of any future additions to the Proposed Development, particularly for any future uses that might negatively impact upon the surrounding area.

CONCLUSIONS

9.0 CONCLUSION

Approval is being sought for the construction of a warehouse and logistics hub at 657-769 Mamre Road, Kemps Creek. Stage 1 development including construction of 163,671 sqm of warehouse space with associated office and space for warehousing and logistics uses, 816 car parking spaces.

The proposal has been assessed having regard for the requirements of the Department of Planning and Environment's Social Impact Assessment Guidelines, local demography and the community's views. The potential for negative impacts to arise from construction, noise and increased traffic has been identified. However, these impacts are able to be appropriately managed and mitigated. Mitigation measures have been proposed.

Potential benefits arising from the development include:

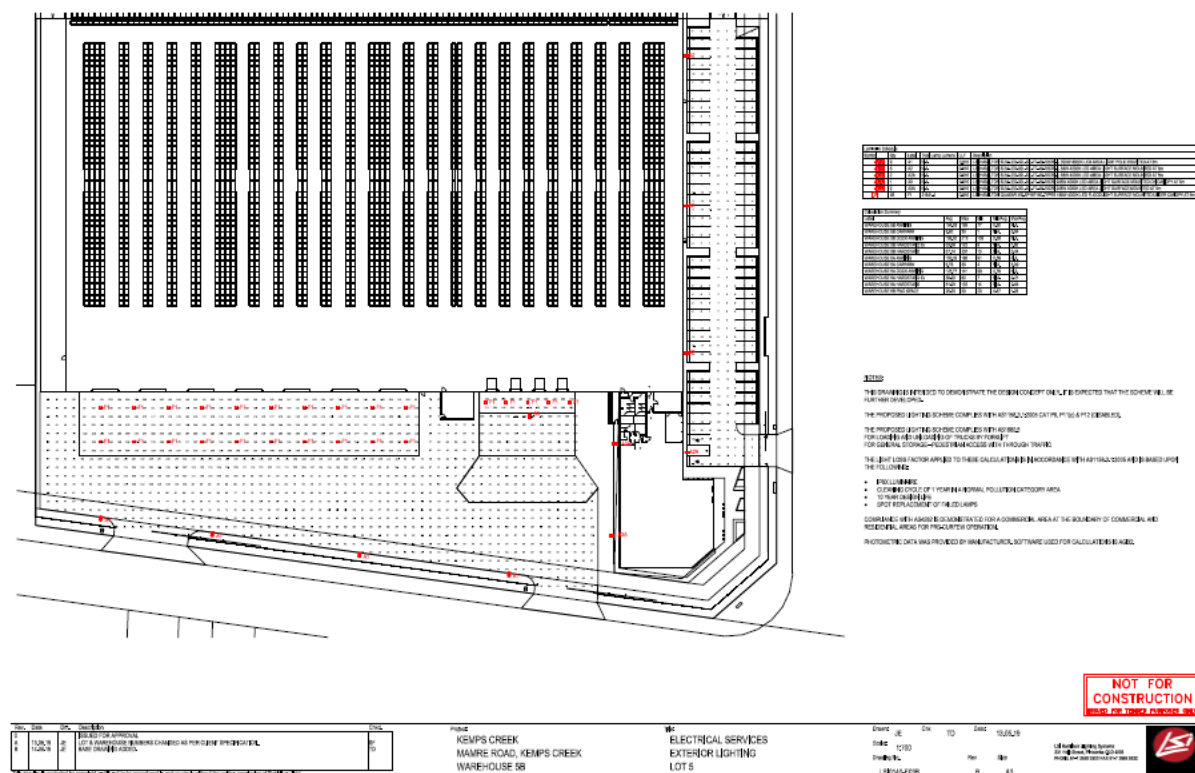
- Job creation, with a projected 500 jobs created during construction and a further 800 when operational
- Improved work-life balance for residents in the region where commutes are typically longer through the creation of local employment opportunities.

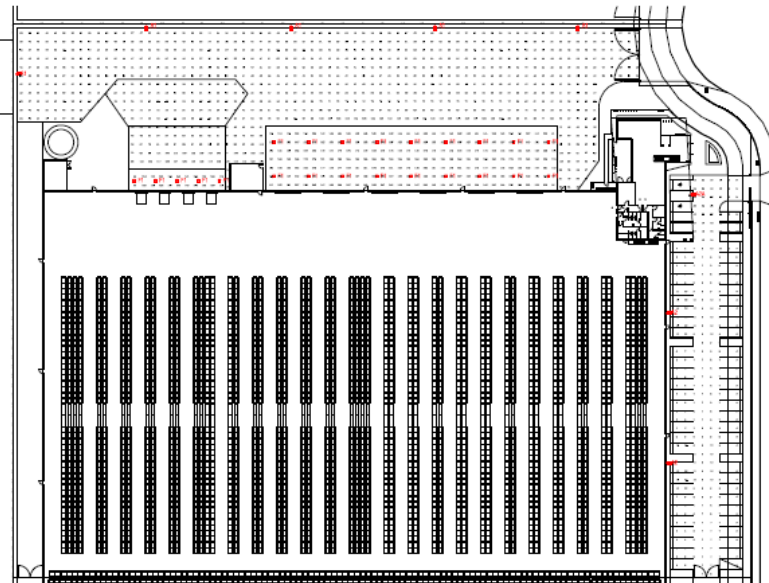
Overall, the proposal is supported.

APPENDIX A: SCOPING TOOL

Social and environmental matters			Without any mitigation, is the proposal likely to impact on the matter?	Cause of impact
What does the proposal mean for people?	AMENITY	acoustic	Likely	Construction, additional vehicle movements
		visual	Likely	Light, built structure
		odour	Unlikely	
		microclimate	Unlikely	
	ACCESS	access to property	Unlikely	
		utilities	Unlikely	
		road and rail network	Likely	Additional vehicle movements on Mamre Road, proposed enhancement to local road network
		offsite parking	Unlikely	
	BUILT ENVIRONMENT	public domain	Likely	Enhancement to public domain in and around site, improvements to pedestrian amenity at Mamre Road intersection, additional vehicle movements along Mamre Road in built up areas to the north and south
		public infrastructure	Likely	Additional vehicles on road, enhancement to local infrastructure
		other built assets	N/A	
	HERITAGE	natural	Unlikely	
		cultural	Unlikely	
		Aboriginal cultural		
		built	Unlikely	
	COMMUNITY	health	Unlikely	
		safety	Likely	Worker and employee safety during emergency events, enhancement to public safety at Mamre Road intersection
		services and facilities	Likely	Additional usage of local facilities by workers (primarily long day care and parks)
		cohesion, capital and resilience	Unlikely	

Social and environmental matters			Without any mitigation, is the proposal likely to impact on the matter?	Cause of impact
What does the proposal mean for the natural environment?	ECONOMIC	housing	Unlikely	
		natural resource use	Unlikely	
		livelihood	Likely	Improved local employment opportunities for local residents
		opportunity cost	Likely	Forgoing a potential substantial increase in local employment opportunities
	AIR	particulate matter	Likely	Additional vehicle movements during construction and operation, potential subsequent uses within site
		gases	Unlikely	
		atmospheric emissions	Unlikely	
	BIODIVERSITY	native vegetation	Unlikely	
		native fauna	Unlikely	
	LAND	stability and/or structure	Unlikely	
		soil chemistry	Unlikely	
		capability	Unlikely	
		topography	Unlikely	
	WATER	water quality	Unlikely	
		water availability	Unlikely	
		hydrological flows	Unlikely	
What risks does the proposal face?	RISKS	coastal hazards	N/A	
		flood waters	Likely	Site lies near to a catchment, flooding is a risk
		bushfire	Unlikely	
		undermining	Unlikely	
		steep slopes	Unlikely	





Fixture ID	Fixture Type	Power (W)	Height (m)	Beam Angle (deg)	Mounting Height (m)	Mounting Type	Notes
1	High Bay	1500	12	60	12	Recessed	Warehouse 5A
2	High Bay	1500	12	60	12	Recessed	Warehouse 5A
3	High Bay	1500	12	60	12	Recessed	Warehouse 5A
4	High Bay	1500	12	60	12	Recessed	Warehouse 5A
5	High Bay	1500	12	60	12	Recessed	Warehouse 5A
6	High Bay	1500	12	60	12	Recessed	Warehouse 5A
7	High Bay	1500	12	60	12	Recessed	Warehouse 5A
8	High Bay	1500	12	60	12	Recessed	Warehouse 5A
9	High Bay	1500	12	60	12	Recessed	Warehouse 5A
10	High Bay	1500	12	60	12	Recessed	Warehouse 5A

NOTES

THE DRAWING IS INTENDED TO DEMONSTRATE THE DESIGN CONCEPT ONLY. IT IS EXPECTED THAT THE SCHEME WILL BE FURTHER DEVELOPED.

THE PROPOSED SCHEME COMPOSED OF THE FOLLOWING:

- 1. EXTERIOR LIGHTING
- 2. EXTERIOR LIGHTING
- 3. EXTERIOR LIGHTING
- 4. EXTERIOR LIGHTING
- 5. EXTERIOR LIGHTING
- 6. EXTERIOR LIGHTING
- 7. EXTERIOR LIGHTING
- 8. EXTERIOR LIGHTING
- 9. EXTERIOR LIGHTING
- 10. EXTERIOR LIGHTING

COMPARISON WITH ASSUMED CONCENTRATION FOR A COMMERCIAL AREA AT THE BOUNDARY OF COMMERCIAL AND RESIDENTIAL AREAS FOR PRELIMINARY DESIGN.

PHOTOGRAPHIC DATA WAS PROVIDED BY MANUFACTURER, SOFTWARE USED FOR CALCULATED RESULTS.

Rev	Desc	Date	By	App
1	Issue for construction	10/10/19	10/10/19	10/10/19

KEMPS CREEK
MAIRE ROAD, KEMPS CREEK
WAREHOUSE 5A

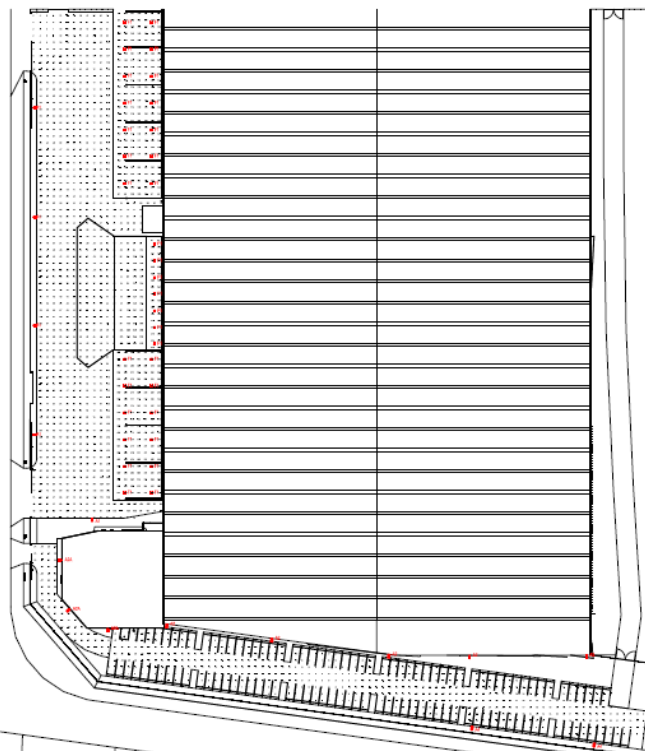
ELECTRICAL SERVICES
EXTERIOR LIGHTING
LOT 5

DATE: 10/10/19
BY: 10/10/19
APP: 10/10/19

10/10/19
10/10/19
10/10/19



NOT FOR CONSTRUCTION
HILLPDA CONSULTING



Fixture ID	Fixture Type	Power (W)	Height (m)	Beam Angle (deg)	Mounting Height (m)	Mounting Type	Notes
1	High Bay	1500	12	60	12	Recessed	Warehouse 5B
2	High Bay	1500	12	60	12	Recessed	Warehouse 5B
3	High Bay	1500	12	60	12	Recessed	Warehouse 5B
4	High Bay	1500	12	60	12	Recessed	Warehouse 5B
5	High Bay	1500	12	60	12	Recessed	Warehouse 5B
6	High Bay	1500	12	60	12	Recessed	Warehouse 5B
7	High Bay	1500	12	60	12	Recessed	Warehouse 5B
8	High Bay	1500	12	60	12	Recessed	Warehouse 5B
9	High Bay	1500	12	60	12	Recessed	Warehouse 5B
10	High Bay	1500	12	60	12	Recessed	Warehouse 5B

NOTES

THE DRAWING IS INTENDED TO DEMONSTRATE THE DESIGN CONCEPT ONLY. IT IS EXPECTED THAT THE SCHEME WILL BE FURTHER DEVELOPED.

THE PROPOSED SCHEME COMPOSED OF THE FOLLOWING:

- 1. EXTERIOR LIGHTING
- 2. EXTERIOR LIGHTING
- 3. EXTERIOR LIGHTING
- 4. EXTERIOR LIGHTING
- 5. EXTERIOR LIGHTING
- 6. EXTERIOR LIGHTING
- 7. EXTERIOR LIGHTING
- 8. EXTERIOR LIGHTING
- 9. EXTERIOR LIGHTING
- 10. EXTERIOR LIGHTING

COMPARISON WITH ASSUMED CONCENTRATION FOR A COMMERCIAL AREA AT THE BOUNDARY OF COMMERCIAL AND RESIDENTIAL AREAS FOR PRELIMINARY DESIGN.

PHOTOGRAPHIC DATA WAS PROVIDED BY MANUFACTURER, SOFTWARE USED FOR CALCULATED RESULTS.

Rev	Desc	Date	By	App
1	Issue for construction	10/10/19	10/10/19	10/10/19

KEMPS CREEK
MAIRE ROAD, KEMPS CREEK
WAREHOUSE 5B

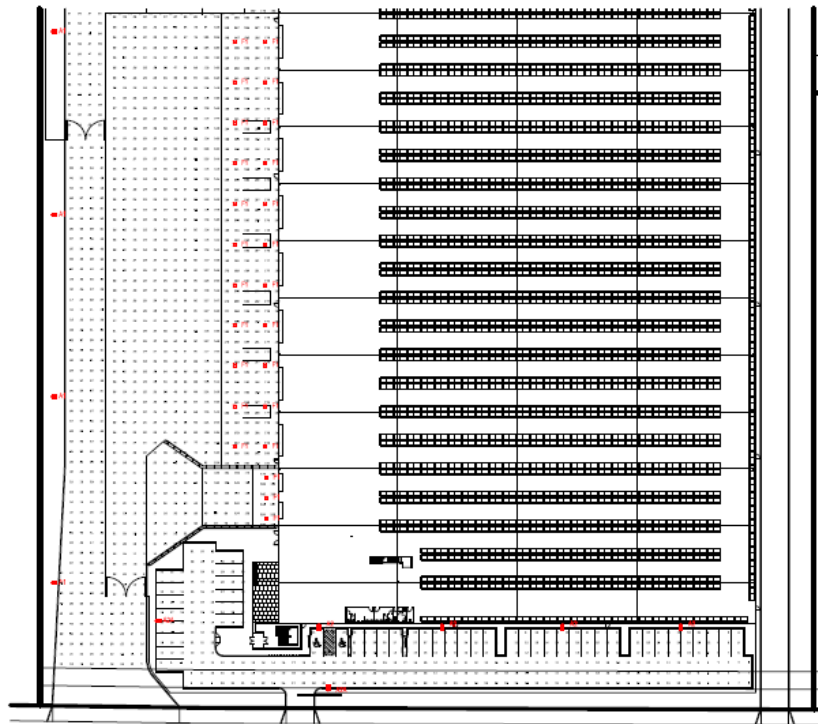
ELECTRICAL SERVICES
EXTERIOR LIGHTING
LOT 6

DATE: 10/10/19
BY: 10/10/19
APP: 10/10/19

10/10/19
10/10/19
10/10/19



NOT FOR CONSTRUCTION
HILLPDA CONSULTING



Item	Description	Quantity	Unit	Value
1	100W LED Floodlight	10	ea	100
2	50W LED Floodlight	20	ea	200
3	25W LED Floodlight	40	ea	400
4	15W LED Floodlight	60	ea	600
5	10W LED Floodlight	80	ea	800
6	5W LED Floodlight	100	ea	1000
7	100W LED Floodlight	10	ea	100
8	50W LED Floodlight	20	ea	200
9	25W LED Floodlight	40	ea	400
10	15W LED Floodlight	60	ea	600
11	10W LED Floodlight	80	ea	800
12	5W LED Floodlight	100	ea	1000

NOTES

THE DRAWING IS INTENDED TO DEMONSTRATE THE DESIGN CONCEPT ONLY. IT IS EXPECTED THAT THE SCHEME WILL BE APPROVED BY THE LOCAL AUTHORITY.

THE PROPOSED LIGHTING SCHEME COMPLIES WITH THE IESNA RECOMMENDATIONS FOR THE PROPOSED LIGHTING SCHEME.

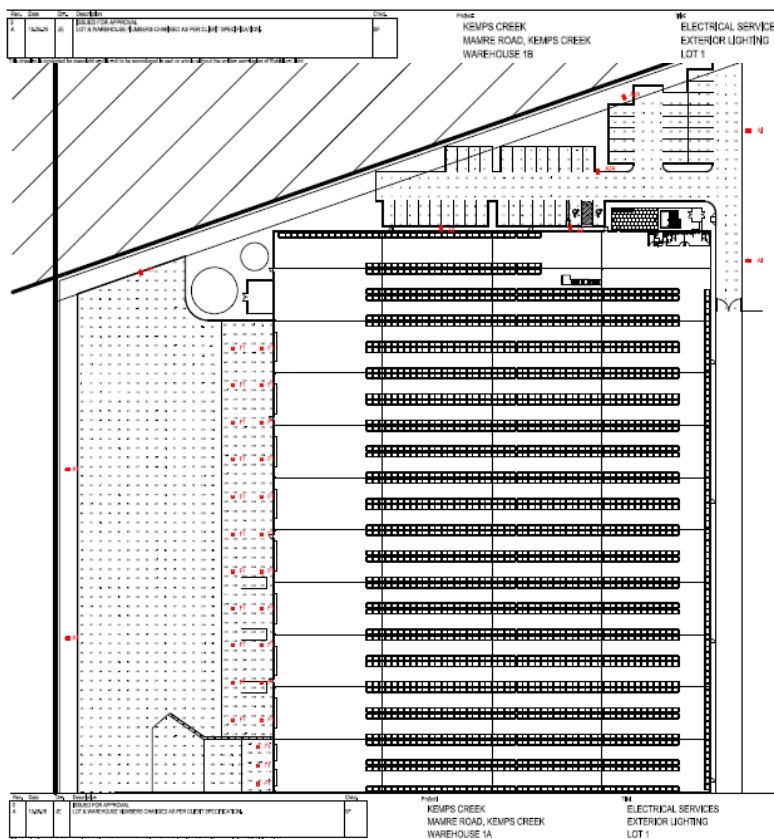
THE PROPOSED LIGHTING SCHEME COMPLIES WITH THE IESNA RECOMMENDATIONS FOR THE PROPOSED LIGHTING SCHEME.

THE LIGHT LOSS FACTOR APPLIED TO THESE CALCULATIONS IS ACCORDANCE WITH THE IESNA RECOMMENDATIONS FOR THE PROPOSED LIGHTING SCHEME.

COMPLIANCE WITH THE IESNA RECOMMENDATIONS FOR THE PROPOSED LIGHTING SCHEME.

PHOTOMETRIC DATA WAS PROVIDED BY THE MANUFACTURER, SOFTWARE USED FOR CALCULATIONS IS IESNA.

NOT FOR CONSTRUCTION
DRAWN FOR THE PROPOSED PROJECT



Item	Description	Quantity	Unit	Value
1	100W LED Floodlight	10	ea	100
2	50W LED Floodlight	20	ea	200
3	25W LED Floodlight	40	ea	400
4	15W LED Floodlight	60	ea	600
5	10W LED Floodlight	80	ea	800
6	5W LED Floodlight	100	ea	1000
7	100W LED Floodlight	10	ea	100
8	50W LED Floodlight	20	ea	200
9	25W LED Floodlight	40	ea	400
10	15W LED Floodlight	60	ea	600
11	10W LED Floodlight	80	ea	800
12	5W LED Floodlight	100	ea	1000

NOTES

THE DRAWING IS INTENDED TO DEMONSTRATE THE DESIGN CONCEPT ONLY. IT IS EXPECTED THAT THE SCHEME WILL BE APPROVED BY THE LOCAL AUTHORITY.

THE PROPOSED LIGHTING SCHEME COMPLIES WITH THE IESNA RECOMMENDATIONS FOR THE PROPOSED LIGHTING SCHEME.

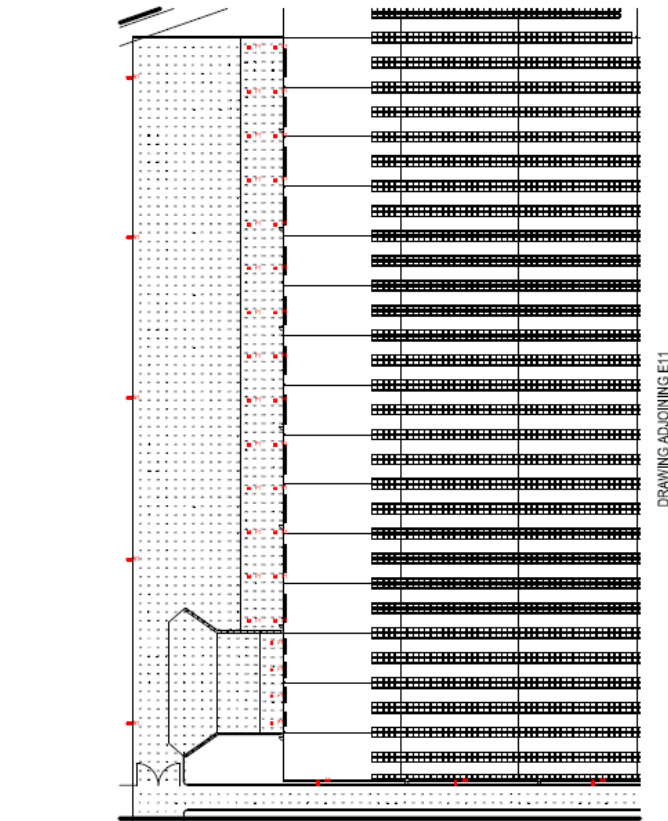
THE PROPOSED LIGHTING SCHEME COMPLIES WITH THE IESNA RECOMMENDATIONS FOR THE PROPOSED LIGHTING SCHEME.

THE LIGHT LOSS FACTOR APPLIED TO THESE CALCULATIONS IS ACCORDANCE WITH THE IESNA RECOMMENDATIONS FOR THE PROPOSED LIGHTING SCHEME.

COMPLIANCE WITH THE IESNA RECOMMENDATIONS FOR THE PROPOSED LIGHTING SCHEME.

PHOTOMETRIC DATA WAS PROVIDED BY THE MANUFACTURER, SOFTWARE USED FOR CALCULATIONS IS IESNA.

NOT FOR CONSTRUCTION
DRAWN FOR THE PROPOSED PROJECT



DRAWING ADJOINING E11

REVISION	DATE	BY	CHKD	DESCRIPTION
1	15/06/18	JP	JP	ISSUED FOR CONSTRUCTION

NOTES

THE DRAWING IS INTENDED TO COMPLEMENT THE DESIGN CONCEPT ONLY. IT IS EXPECTED THAT THE SCHEME WILL BE FURTHER DEVELOPED.

THE PROPOSED LIGHTING SCHEME COMPLIES WITH AS/NZS 1300 FOR LIGHTING OF BUILDINGS AND AS/NZS 1300 FOR LIGHTING OF BUILDINGS FOR GENERAL STORAGE - PROVISIONS ACCESS WITH THROUGH TRAFFIC.

THE LIGHT LOSS FACTOR APPLIED TO THESE CALCULATIONS IS 0.85, AS RECOMMENDED WITH AS/NZS 1300 AND BASED UPON THE FOLLOWING:

- POLLUTION FACTOR
- CLEANING CYCLE OF 1 YEAR IN A NORMAL POLLUTION CATEGORY AREA
- 10 YEAR LUMEN MAINTENANCE
- 80% REPLACEMENT OF FILLED LAMPS

COMPLIANCE WITH AS/NZS 1300 IS CONFIRMED FOR A COMMERCIAL AREA AT THE BOUNDARY OF COMMERCIAL AND INDUSTRIAL AREAS FOR PROPOSED OPERATIONS.

PHOTOMETRIC DATA PROVIDED BY MANUFACTURER, SOFTWARE USED FOR CALCULATIONS IS AGES.

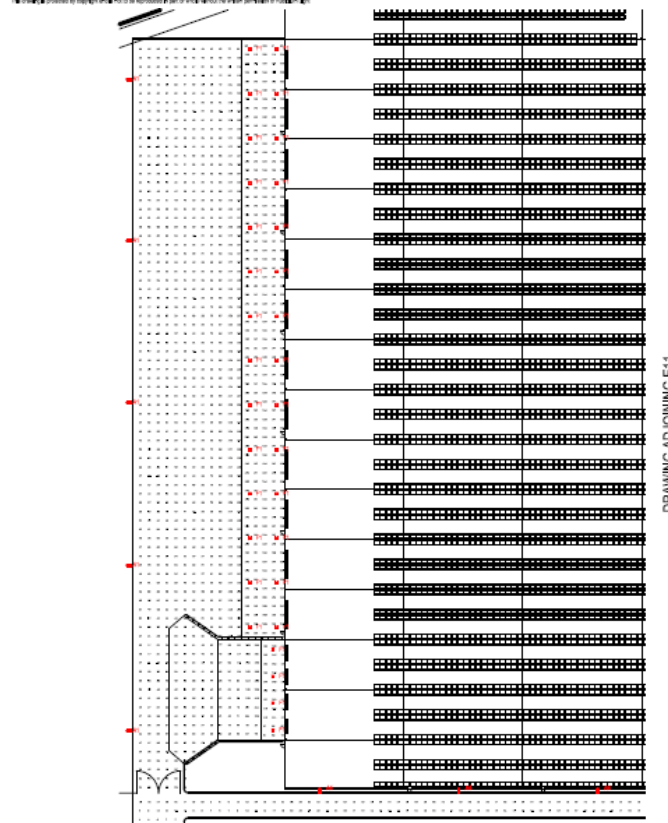
NOT FOR CONSTRUCTION
Hill PDA Pty Ltd, Sydney, NSW

REV	DATE	BY	CHKD	DESCRIPTION
1	15/06/18	JP	JP	ISSUED FOR CONSTRUCTION

**ELECTRICAL SERVICES
EXTERIOR LIGHTING
LOT 2**

Drawn: JE
Scale: 1:100
Title: LOT 2
Project: KEMPS CREEK WAREHOUSE 2

15/06/18
Per: JP
Rev: A3



DRAWING ADJOINING E11

REVISION	DATE	BY	CHKD	DESCRIPTION
1	15/06/18	JP	JP	ISSUED FOR CONSTRUCTION

NOTES

THE DRAWING IS INTENDED TO COMPLEMENT THE DESIGN CONCEPT ONLY. IT IS EXPECTED THAT THE SCHEME WILL BE FURTHER DEVELOPED.

THE PROPOSED LIGHTING SCHEME COMPLIES WITH AS/NZS 1300 FOR LIGHTING OF BUILDINGS AND AS/NZS 1300 FOR LIGHTING OF BUILDINGS FOR GENERAL STORAGE - PROVISIONS ACCESS WITH THROUGH TRAFFIC.

THE LIGHT LOSS FACTOR APPLIED TO THESE CALCULATIONS IS 0.85, AS RECOMMENDED WITH AS/NZS 1300 AND BASED UPON THE FOLLOWING:

- POLLUTION FACTOR
- CLEANING CYCLE OF 1 YEAR IN A NORMAL POLLUTION CATEGORY AREA
- 10 YEAR LUMEN MAINTENANCE
- 80% REPLACEMENT OF FILLED LAMPS

COMPLIANCE WITH AS/NZS 1300 IS CONFIRMED FOR A COMMERCIAL AREA AT THE BOUNDARY OF COMMERCIAL AND INDUSTRIAL AREAS FOR PROPOSED OPERATIONS.

PHOTOMETRIC DATA PROVIDED BY MANUFACTURER, SOFTWARE USED FOR CALCULATIONS IS AGES.

NOT FOR CONSTRUCTION
Hill PDA Pty Ltd, Sydney, NSW

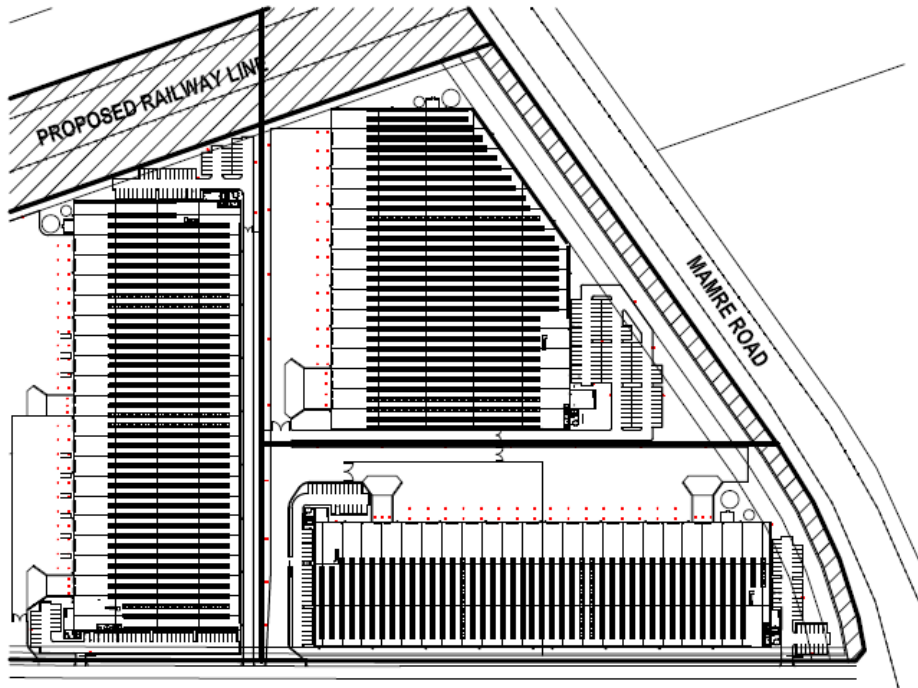
REV	DATE	BY	CHKD	DESCRIPTION
1	15/06/18	JP	JP	ISSUED FOR CONSTRUCTION

**ELECTRICAL SERVICES
EXTERIOR LIGHTING
LOT 2**

Drawn: JE
Scale: 1:100
Title: LOT 2
Project: KEMPS CREEK WAREHOUSE 2

15/06/18
Per: JP
Rev: A3





Obtrusive Light - Compliance Report
AS 4282-1997, Pre-Curtain, Commercial
Filename:
13/05/2019 4:31:27 PM

Luminous Intensity (Cd) Per Luminaire
Maximum Allowable Value: 7500 Cd
Control Angle: 83 Degrees

Luminaire Locations Tested (179)
Test Results: PASS

Threshold Increment (TI)
Maximum Allowable Value: 20 %

Calculations Tested (4):

Calculation Label	Adaptation Luminance	Test Results
FREIGHT RAILWAY LINE WEST	10	PASS
FREIGHT RAILWAY LINE EAST	10	PASS
MAMRE ROAD NORTH	10	PASS
MAMRE ROAD SOUTH	10	PASS

NOTES
THIS DRAWING IS INTENDED TO DEMONSTRATE THE DESIGN CONCEPT ONLY. IT IS EXPECTED THAT THE DESIGN WILL BE FURTHER DEVELOPED.
CONTRACTORS ARE ADVISED TO CONSIDER THE DESIGN AT THE BOUNDARY OF COMMERCIAL AREAS. THE DESIGN IS NOT INTENDED FOR CONSTRUCTION OF A BUILDING.
PHOTOGRAPHIC DATA WAS PROVIDED BY HILL PDA CONSULTING, SOFTWARE USED FOR CALCULATIONS IS HILL PDA.

**NOT FOR
CONSTRUCTION**
HILL PDA CONSULTING

Rev	Date	Description	Drawn
1		ISSUED FOR APPROVAL	

PROJECT
KEMPS CREEK
MAMRE ROAD, KEMPS CREEK
AS4282 CALCULATIONS

W/C
ELECTRICAL SERVICES
EXTERIOR LIGHTING
LOT 1, 2, 3

Drawn: JC
Date: 12/10/2018
Checked: LBB/MS/2018
Scale: A3

Lighting Design Services
100 High Street, Perth WA 6000
Phone: 08 9447 1000 Fax: 08 9447 1001



Disclaimer

1. This report is for the confidential use only of the party to whom it is addressed ("Client") for the specific purposes to which it refers and has been based on, and takes into account, the Client's specific instructions. It is not intended to be relied on by any third party who, subject to paragraph 3, must make their own enquiries in relation to the issues with which this report deals.
2. HillPDA makes no representations as to the appropriateness, accuracy or completeness of this report for the purpose of any party other than the Client ("Recipient"). HillPDA disclaims all liability to any Recipient for any loss, error or other consequence which may arise as a result of the Recipient acting, relying upon or using the whole or part of this report's contents.
3. This report must not be disclosed to any Recipient or reproduced in whole or in part, for any purpose not directly connected to the project for which HillPDA was engaged to prepare the report, without the prior written approval of HillPDA. In the event that a Recipient wishes to rely upon this report, the Recipient must inform HillPDA who may, in its sole discretion and on specified terms, provide its consent.
4. This report and its attached appendices are based on estimates, assumptions and information provided by the Client or sourced and referenced from external sources by HillPDA. While we endeavour to check these estimates, assumptions and information, no warranty is given in relation to their reliability, feasibility, accuracy or reasonableness. HillPDA presents these estimates and assumptions as a basis for the Client's interpretation and analysis. With respect to forecasts, HillPDA does not present them as results that will actually be achieved. HillPDA relies upon the interpretation of the Client to judge for itself the likelihood of whether these projections can be achieved or not.
5. Due care has been taken to prepare the attached financial models from available information at the time of writing, however no responsibility can be or is accepted for errors or inaccuracies that may have occurred either with the programming or the resultant financial projections and their assumptions.
6. This report does not constitute a valuation of any property or interest in property. In preparing this report HillPDA has relied upon information concerning the subject property and/or Proposed Development provided by the Client and HillPDA has not independently verified this information except where noted in this report.
7. In relation to any valuation which is undertaken for a Managed Investment Scheme (as defined by the Managed Investments Act 1998) or for any lender that is subject to the provisions of the Managed Investments Act, the following clause applies:

This valuation is prepared on the assumption that the lender or addressee as referred to in this valuation report (and no other) may rely on the valuation for mortgage finance purposes and the lender has complied with its own lending guidelines as well as prudent finance industry lending practices, and has considered all prudent aspects of credit risk for any potential borrower, including the borrower's ability to service and repay any mortgage loan. Further, the valuation is prepared on the assumption that the lender is providing mortgage financing at a conservative and prudent loan to value ratio.
8. HillPDA makes no representations or warranties of any kind, about the accuracy, reliability, completeness, suitability or fitness in relation to maps generated by HillPDA or contained within this report.

Liability limited by a scheme approved under the Professional Standards Legislation



SYDNEY

Level 3, 234 George Street
Sydney NSW 2000
GPO Box 2748 Sydney NSW 2001
t: +61 2 9252 8777
f: +61 2 9252 6077
e: sydney@hillpda.com

MELBOURNE

Suite 114, 838 Collins Street
Docklands VIC 3008
t: +61 3 9629 1842
f: +61 3 9629 6315
e: melbourne@hillpda.com

WWW.HILLPDA.COM