

Edwards Road Industrial Precinct

Economic and Employment Assessment

The Hills Shire Council

April 2012





**SGS Economics and Planning Pty
Ltd**

ACN 007 437 729

12/50 Reservoir Street
Surry Hills NSW 2010

P: + 61 2 8307 0121

F: + 61 2 8307 0126

E: sgsnsw@sgsep.com.au

W: www.sgsep.com.au

©SGS Economics & Planning Pty Ltd [2011]. All rights reserved; these materials are copyright. No part may be reproduced or copied in any way form or by any means without prior permission. The proposals, ideas, concepts and methodology set out and described in this document are and remain the property of SGS Economics & Planning Pty Ltd and are provided in confidence. They may not be used or applied by the recipient or disclosed to any other person without the prior written consent of SGS Economics & Planning

1	Introduction	1
1.1	Project Overview	1
1.2	Project Context	1
2	Employment and economic trends and drivers	3
2.1	Employment	3
2.2	Employment lands need	8
2.3	The Industrial Land Market	10
2.4	Current and Future Industrial Land Geography	13
2.5	Industrial Land Hierarchy	15
2.6	Summary	17
3	Development Context	18
3.1	Recent industrial development in the Hills Shire	18
3.2	Development trends	21
4	Development prospects	39
4.1	Consultation	39
4.2	Scenario testing	41
5	Conclusion and recommendations	48
5.1	Recommended Land Uses	49
5.2	Recommended Development Controls	51
	Appendix 1 - Development Feasibility Assumptions	53
	Appendix 2 – Consultation	54
5.3	Landowner and developer consultation	54
5.4	Real Estate Agent Consultation	57

1 Introduction

1.1 Project Overview

SGS Economics and Planning has been commissioned by The Hills Shire Council (THSC) to conduct an Economic and Employment Assessment for the Edwards Road Precinct of the Annangrove Industrial Area to inform a Master plan for the Edwards Road Precinct.

Flora and Fauna and Traffic and Accessibility studies are also being completed and will inform the masterplan.

The objectives for the Economic and Employment Assessment are to provide the following:

- *Review the provision of existing and proposed employment land and development using existing studies and new data where relevant in the relevant vicinity of the Annangrove Light Industrial Area and benchmark against Council's existing Employment Lands Direction.*
- *Identify current trends in employment based development and benchmark against existing land use / built form controls and recommend amendments required to suit.*
- *Recommend the most appropriate employment based land use (industrial, commercial office etc) having regard to existing and future supply, the spatial location of Edwards Road Precinct relative to other employment centres and existing / future residential development in proximity to the Precinct.*
- *Estimate the potential floorspace and employment capacity under the alternative land use and built form controls versus the existing case; and*
- *Provide case studies of where similar land use and built form controls have resulted in successful development outcomes.*

1.2 Project Context

The Annangrove Road Light Industrial Area is a 120 hectare industrial precinct located between Rouse Hill and Box Hill. The industrial area is currently zoned 'Light Industrial 4(b)' under *Baulkham Hills Local Environmental Plan 2005*. It is zoned 'IN2 Light Industrial' under the *Draft The Hills Local Environmental Plan 2010* and is subject to a minimum lot size of 8,000m².

The focus of this brief is the Edwards Road Precinct which extends south along Annangrove Road to Withers Road with Cattai and Second Ponds Creek forming the eastern boundary.

The Edwards Road Precinct is adjacent to the future Box Hill Industrial precinct. The Edwards Road Precinct is delineated in red and existing industrial development in the Annangrove Road is to the south. It is anticipated that when fully developed, the Box Hill and Box Hill Industrial Precincts will provide for some 10,000 dwellings to accommodate 28,000 people and employment for approximately 16,000 people.

Figure 1. Box Hill and Box Hill Industrial Precincts



Source: Growth Centres Commission (2008).

The Annangrove Road Light Industrial Area was established in 1991 and has been unsuccessful in attracting new industrial businesses. A number of constraints have functioned to inhibit development including fragmented ownership, existing bushland, topography and outlying location.

There is also anecdotal information from developers and land owners within the precinct that points to the existing zoning and development controls as being the underlying cause for the slow take up of industrial land. This study seeks to identify the root causes preventing the Precinct from attracting investment.

The Council's *Employment Lands Direction (ELD)* recognises that there is a significant opportunity to provide employment growth within the industrial area due to its proximity to Windsor Road, Rouse Hill Town Centre and the proposed Box Hill precinct. To overcome the existing constraints to development, a master plan for the Edwards Road Precinct is required to establish a clear vision and concept for the precinct. The master plan will provide an indicative layout of the Precinct to assist with the selection of appropriate land uses, minimum lot size and associated development controls.

A separate Flora and Fauna and Traffic and Accessibility Assessment are being prepared for the master plan.

2 Employment and economic trends and drivers

2.1 Employment

Existing Employment

The data contained within this section provides an overview of the current employment structure of the Baulkham Hills LGA. Three distinct Statistical Local Areas (SLAs) exist within the LGA including:

- Baulkham Hills - Central
- Baulkham Hills - North
- Baulkham Hills - South

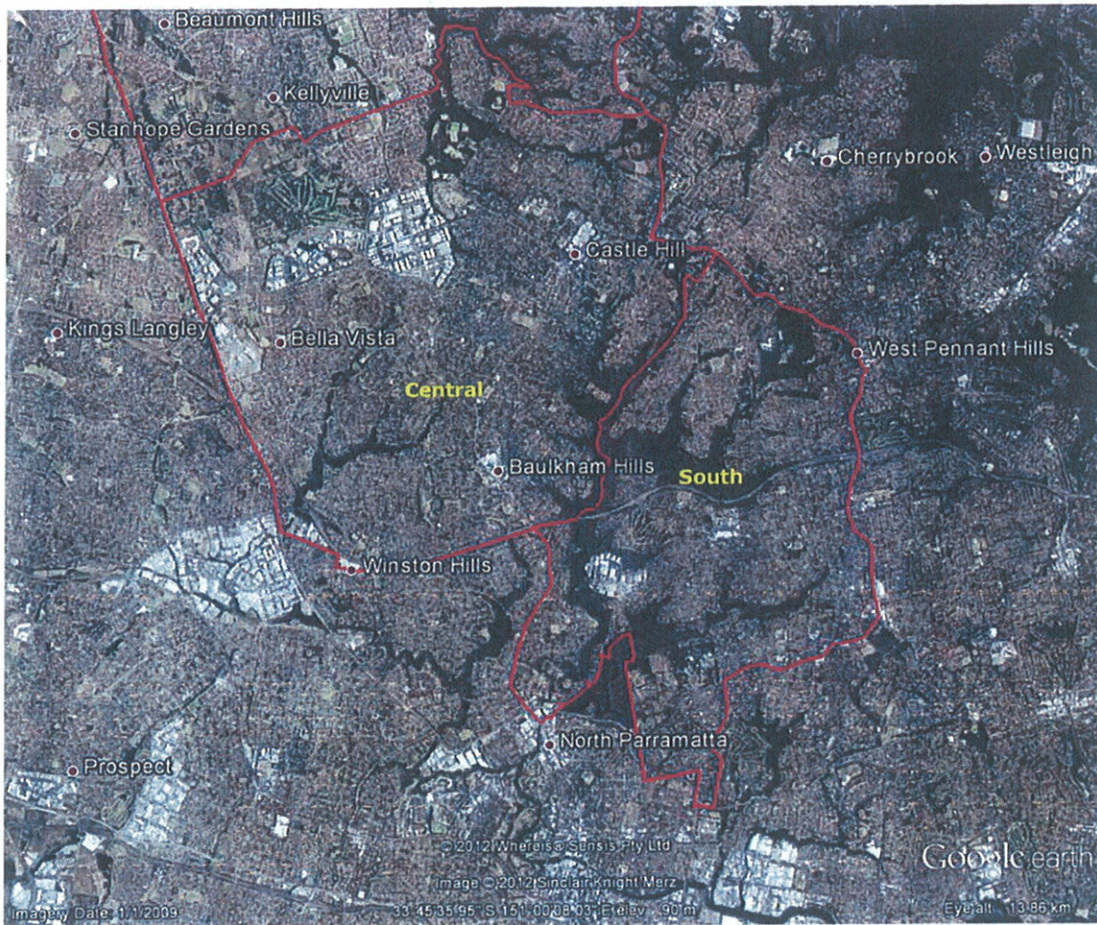
Figure 2 depicts the Baulkham Hills Central, North and South SLAs. A more detailed map of the Central and South Baulkham Hills SLAs is displayed in Figure 3.

Figure 2. Baulkham Hills North, South and Central SLAs



Source: ABS (2011)

Figure 3. Baulkham Hills South and Central SLAs



Source: ABS (2006)

Using data from the most current NSW Bureau of Transport Statistics (BTS) projections, which is adapted from Australian Bureau of Statistics (ABS) Journey to Work (JTW) data, the following tables help to generate an understanding of the current employment picture in the Baulkham Hills. In 2006, retail trade was the largest employer of workers who reported working in the Baulkham Hills LGA, accounting for 19 percent of jobs followed by Professional, Scientific and Technical Services at 10 percent and Construction at 9.1 percent.

Table 1 Top 5 Employing Industries, Baulkham Hills, 2006

Rank	Industry	No.	%
1	Retail Trade	11,890	19%
2	Professional, Scientific and Technical Services	6,244	10%
3	Construction	5,764	9%
4	Manufacturing	5,604	9%
5	Education and Training	5,492	9%

Source: BTS, Journey to Work Data (2006)

Table 2 includes a count of existing jobs in each of the three SLAs in 2006, defined using the 2006 one digit level Australian and New Zealand Statistical Industrial Classification (ANZSIC) system. The Baulkham Hills – Central SLA contained the highest number of jobs at 40,209 or 63.6 percent of all jobs followed by Baulkham Hills – North SLA at 11,972 jobs or 18.9 percent closely followed by Baulkham Hills – South SLA at 10,998 jobs or 17.4 percent of all jobs in the LGA.

Table 2 Employment by Industry by Statistical Area (Data Baulkham Hills 2006)

	North BH SLA	Central BH SLA	South BH SLA	Total	Percentage Share
Agriculture, Forestry and Fishing	557	64	114	736	1%
Mining	49	72	11	132	0%
Manufacturing	604	4,002	997	5,604	9%
Electricity, Gas, Water and Waste Services	61	52	86	200	0%
Construction	1,896	3,098	771	5,764	9%
Wholesale Trade	750	3,583	590	4,923	8%
Retail Trade	1,352	9,405	1,133	11,890	19%
Accommodation and Food Services	820	2,307	369	3,496	6%
Transport, Postal and Warehousing	264	442	197	903	1%
Information Media and Telecommunications	84	472	44	601	1%
Financial and Insurance Services	274	1,794	187	2,255	4%
Rental, Hiring and Real Estate Services	408	741	185	1,335	2%
Professional, Scientific and Technical Services	825	2,945	2,474	6,244	10%
Administrative and Support Services	345	1,085	219	1,649	3%
Public Administration and Safety	169	1,168	106	1,443	2%
Education and Training	1,474	2,254	1,765	5,492	9%
Health Care and Social Assistance	981	3,361	758	5,101	8%
Arts and Recreation Services	149	510	70	730	1%
Other Services	543	1,628	609	2,780	4%
Unclassified	366	1,226	309	1,901	3%
Total	11,972	40,209	10,998	63,179	

Employment self-containment is a ratio of the number of jobs located in an area against the number of employed residents in the same area. A value over 1 or 100 percent indicates that more jobs in an industry exist in the area than residents employed in that industry, indicating a net inflow of workers from surrounding regions. In 2006, there were a greater number of employed residents living in the LGA than there were jobs, which is a common characteristic of suburban areas. Industries where local jobs exceeded employed residents in those industries included agriculture, forestry and fishing at 141 percent, retail trade at 123 percent and mining at 119 percent. Industries where employment self-containment was lowest included Electricity, Gas, Water and Waste Services at 28 percent, Information Media and Telecommunications at 29 percent and Transport, Postal and Warehousing at 31 percent.

Industry	Hill PDA	BTS	Difference
	736	522	141%
	132	111	119%
	5,604	7,893	71%
	200	714	28%
	5,764	6,702	86%
	4,923	6,154	80%
	11,890	9,667	123%
	3,496	3,842	91%
	903	2,913	31%
	601	2,072	29%
	2,255	5,125	44%
	1,335	1,804	74%
	6,244	8,005	78%
	1,649	2,290	72%
	1,443	3,900	37%
	5,492	7,226	76%
	5,101	8,502	60%
	730	1,014	72%
	2,760	3,349	83%
	1,901	1,960	97%
	63,179	84,239	75%

Changes in Employment and Projected Employment

We have assessed the employment projections outlined in the Hill PDA report *Baulkham Hills Employment Lands Demand Analysis for Baulkham Hills Council* (November 2008) against the most recent BTS projections.

The projections produced by Hill PDA are entirely sourced from BTS with the exception of the retail industry where Hill PDA used their own in-house modelling techniques to supplement the official figures. As an initial benchmark, the Draft North West Subregional Strategy sets a target of 47,000 jobs for Baulkham Hills LGA between 2001 and 2031 which represents a 105 percent increase over this period (2001-2031) and a 90 percent increase or an increase of 42,300 from 2006. The Hill PDA figures projected an increase of 40,881 jobs between 2006 and 2031. The difference between the Hill PDA projections and the current BTS projections for the year 2006 is 6,564 and 21,403 jobs for the 2031 projection as per the far column of the table below. Difference values for each industry are also given with a negative value indicating that the Hill PDA value was less than that of the current BTS projections.

It should be noted that Hill PDA used a custom industry classification based on the older ANZSIC93 system and in order to adapt this old classification to the new ANZSIC06 as currently used by BTS, SGS approximated a concordance table to reclassify the Hill PDA projections. The Bureau of Transport Statistics does not release employment projections in any form other than one digit ANZSIC06. Given that the ANZSIC06 system splits the old Property and Business Services category into three new categories at the one digit level, it was not possible to disseminate the Hill PDA

projection for this industry and subsequently projected jobs in the corresponding BTS projection has been combined. Therefore, whilst every effort has been made to ensure that the comparison below is accurate, the shifting categories between 1 digit classification will lead to some unavoidable inaccuracies.

It's clear from the data that the growth trend for all industries will be much weaker, with a jobs expectation 20,000 lower than previously reported (approximately 19 percent). The pink highlighted rows indicate the industries that typically locate in industrially zoned land. Interestingly, the number of jobs forecast for manufacturing and wholesale trade will actually decrease over the next 20 years, while transport, postal and warehousing will reverse its fortunes and experience an increase (Table 4).

Table 4: Comparison of projected jobs in the Hill PDA forecasts (2006-2031) and the most recent BTS projection (2009-2031)

	Hill PDA 2006-2031		BTS 2009-2031		Difference		Percent Change
	2006	2031	2009	2031	2006-2009	2006-2031	
Agriculture, Forestry and Fishing	1,306	1,722	736	885	-570	-837	-49%
Mining	40	39	132	180	92	141	362%
Manufacturing	7,167	8,887	5,604	5,536	-1,563	-3,351	-38%
Electricity, Gas, Water and Waste Services	184	264	200	235	16	-29	-11%
Construction	6,777	9,658	5,764	7,624	-1,013	-2,034	-21%
Wholesale Trade	5,510	7,835	4,923	4,729	-587	-3,106	-40%
Retail Trade	14,163	28,882	11,890	21,450	-2,273	-7,432	-26%
Accommodation and Food Services	3,142	6,500	3,496	7,804	354	1,304	20%
Transport, Postal and Warehousing	924	781	903	1,463	-21	682	87%
Information Media and Telecommunications	850	971	601	807	-249	-164	-17%
Financial and Insurance Services	2,160	3,493	2,255	3,094	95	-399	-11%
Rental, Hiring and Real Estate Services							
Professional, Scientific and Technical Services	12,504	21,320	9,228	12,729	-3,276	-8,591	-40%
Administrative and Support Services							
Public Administration and Safety	647	224	1,443	2,436	796	2,212	988%
Education and Training	4,585	5,897	5,492	9,103	907	3,206	54%
Health Care and Social Assistance	4,721	7,274	5,101	7,973	380	699	10%
Arts and Recreation Services	977	1,034	730	923	-247	-111	-11%
Other Services	2,807	4,448	2,780	4,048	-27	-400	-9%
Unclassified	1,279	1,395	1,901	3,168	622	1,773	127%
Total	69,743	110,624	63,179	89,221	-6,564	-21,403	-19%

The difference in the Hill PDA forecasts, which are derived from the November 2006 BTS data release, and the most recent BTS data (October 2009) occurs because of the use of different assumptions. The latest release of data is based on different trend periods – 1991-2006 as opposed to the original 1981-2001 trend period – and workforce participation and unemployment

rates. The most recent workforce participation and unemployment rates data has been influenced by the Global Financial Crisis.

2.2 Employment lands need

Supply and Demand

Based on the Hills Shire *Employment Lands Direction* and Hill PDA's *Box Hill Retail and Employment Study* there is approximately 652.8 hectares of zoned employment land in the LGA. This comprises 221.3 hectares of business parks, 387.1 hectares of light industrial zoned land and 44.4 hectares dedicated for commercial purposes (Table 5).

Table 5: Employment Land Supply and Demand by Precinct

Precinct	Employment Land Type	Employment Land Supply (ha)	Employment Land Demand (ha)	Supply as % of Demand
Norwest Business Park	Specialised Business park, bulky goods retail	143.70	19.58	14%
Balmoral Business Road Release Area Existing	Business park, light industry	17.50	17.52	100%
Box Hill Industrial Precinct	Business park	60.10	60.10	100%
Total Business Park Land		221.3	97.202	44%
Castle Hill	Light industry, bulky goods retail	135.7	4.961	4%
Annangrove Road	Light industry	119.6	102.72	86%
North Rocks	Light industry, warehousing	46.8	0.01	0%
Northmead	Light industry, bulky goods retail	4.9	0.01	0%
Winston Hills	Light manufacturing, light industry	14.7	8.071	55%
Mile End Road	Light industry	5.3	-	-
Box Hill Industrial Precinct	Light industry	60.10	60.10	100%
Total Light Industrial Land		387.1	175.872	45%
Castle Hill Major Centre	Commercial, vacant	6.1	2.651	43%
Rouse Hill Major Centre	Retail Commercial	n/a	n/a	n/a
Caddies Creek Commercial	Light industry, vacant	7.6	7.61	100%
Baulkham Hills Town Centre	Commercial	3.7	0.01	0%
Coonara Avenue	High technology, commercial	25.9	0.01	0%
Lloyds Avenue	Commercial	1.1	-	-
Total Commercial Land		44.4	10.25	23%
Total Employment Land		652.8	283.3	43%

According to the *Box Hill Retail and Employment Study* there are five key areas proposed for industrial and employment lands development in the North West Growth Centre to 2031 (Table 6).

Table 6: Industrial and Employment Land Supply in the North West Growth Centre to 2031

Industrial Precinct	Anticipated Use/Function	Estimated Land/Demand (ha)	Estimated Land/Supply (ha)
Box Hill Industrial	Light industrial and business park	120.2	-
Riverstone	Light industrial	14	-
	Business Park	16	-
Riverstone West	General Industrial	72	12,000
	Light Industrial	16	-
Marsden Park	Business Park	303	10,000
Vineyard	Employment Areas	-	-
Total		541.2	22,000

On the demand side, the *Box Hill Retail and Employment* study indicated that there will be a need for approximately 477.5 hectares of industrial land and 112.4 hectares of business park land by 2036 based on demand from Baukham Hills North, Blacktown North and Hawkesbury SLAs. This results in an undersupply of approximately 73.9 hectares for industrial land and an oversupply of approximately 31.1 hectares for business park land. These figures do not include Edwards Road Precinct which is an additional 56.3 hectares of gross industrial supply.

Table 7: Industrial and Business Park Land Supply Versus Demand to 2036

	Industrial (ha)	Business Park (ha)
Forecast Demand	477.5	112.4
Planned Supply		
Box Hill	60.1	60.1
Riverstone	14	-
Riverstone West	88	16
Marsden Park	241.5	67.4
Vineyard	-	-
Subtotal Planned Supply	403.6	143.5
Supply Versus Demand	-73.9	31.1

However, it should be noted that these above demand figures are an adjusted forecast based on an employment self-containment ratio of 75 percent. The original baseline forecasts for additional industrial and business park land are 163.5 and 42.8 hectares, respectively, which equates to a total of 206.3 additional hectares of employment land for these purposes (Table 8).

The adjusted figures (using the higher self-containment target of 75 percent) are much higher for both industrial and business park land requirements at 477.5 and 112.4, respectively. This equates

to an increase of 192 percent and 163 percent for the forecast required amount of industrial and business park land, respectively (Table 9).

Table 9: Forecasted Demand for Industrial and Business Park Land

	2016	2036	Change
Industrial	305.7	469.2	163.5
Business park	63.2	106.0	42.8
Total	368.9	575.2	206.3

Source: Council Planning Department

Table 10: Forecasted Demand for Industrial and Business Park Land with Self-Containment Target

	2016	2036	Change	% Increase
Industrial	313.3	790.8	477.5	192%
Business park	63.2	175.6	112.4	163%
Total	376.5	966.4	589.9	186%

Source:

Using the original baseline forecasts (i.e. not including the self-containment target) to determine the supply-demand gap there is an oversupply of 240.1 hectares and 143.5 hectares for both industrial and business park land by 2036. Again, these figures do not include Edwards Road Precinct which is an additional 56.3 hectares of gross industrial supply.

Table 11: Forecasted Demand for Industrial and Business Park Land

	2016	2036
Forecast Demand	163.5	42.8
Planned Supply		
Box Hill	60.1	60.1
Riverstone	14	-
Riverstone West	88	16
Marsden Park	241.5	67.4
Vineyard	-	-
Subtotal Planned Supply	403.6	143.5
Supply Versus Demand	240.1	100.7

Therefore, based on the baseline demand forecasts there is sufficient supply of industrial and business park land in the Hills Shire over the next 20-25 years.

2.3 The Industrial Land Market

To appreciate the type of economic factors that might affect the Edwards Road Precinct we have reviewed the most current information on the industrial land market and considered changing industrial geographies and the industrial hierarchy below.

BIS Shrapnel - Sydney Industrial Property: Market Forecasts and Strategies 2010-2020

Generally the mood of this report is positive, suggesting that the Sydney industrial property market is at the base of an upswing of demand as the effects of the GFC dissipate. This recovery is expected to run to 2018. BIS Shrapnel analysts believe this is the case as:

- industrial producers have responded well to both state and federal government stimulus measures, despite languishing consumer spending, and
- increased levels of distribution, transport and wholesale trade due to greater container traffic through the ports (exports and imports)

Many new industrial development commitments have occurred in outer Sydney areas including Eastern Creek, Greystanes, Erskine Park and Huntingwood. Generally no changes occurred in monthly industrial land sales between September 2008 and September 2010.

Growth in demand for industrial land for further construction is not likely to occur in the near future as demand for industrial space is met by the current oversupply of industrial property. BIS Shrapnel speculate that demand will continue to rise over the short to medium term, outstripping additional supply from current planned construction and placing further downward pressure on vacancy rates. This increasing demand is expected to translate into higher rents over the short to medium term.

The high Australian dollar has increased the demand for warehousing to hold imports whereas manufacturing demand has reduced due to greater international competitiveness. This is likely to mean greater take up of existing warehouse space and construction of new sites and an oversupply of manufacturing space as producers relocate overseas.

Importantly, BIS Shrapnel believe that there is currently no shortage of zoned industrial land in the outer region meaning that turning a profit through development and lot production will be a difficult prospect in the short to medium term. There is expected to be a 10 -20 year supply, assuming an 80 percent land yield. This corresponds to the above supply and demand analysis we found based on the local Hills Shire and Box Hill industrial reports.

The report lists the combined Baulkham Hills, Annangrove, Castle Hill and North Rocks as having 323ha of zoned industrial land, which comprises 3 percent of the total land area with the outer Sydney region.

CBRE MarketView - Sydney Industrial, Second Quarter 2011

This document paints a similar situation to the BIS Shrapnel appraisal of lingering effects of the GFC still dampening the industrial property market in the second quarter of 2011. The report describes average rent levels having fluctuated little during the start of 2011, whereas the number of leases increased which has placed upward pressures on rent to increase in the near future. Most new industrial land developments have been driven by pre-commitments with little speculative building occurring, meaning that supply has seen modest increases. Demand for Australian exports is creating buoyancy in the post GFC recovery period, buffering demand for manufacturing and

warehousing space along respective supply chains. This trend aligns with higher than anticipated industrial production in 2010 than suggested by historic figures.

As consistent with the overall report, pre-commitments in the outer North West region were the primary drivers of the construction of industrial space, primarily those of large retailers and logistic companies. Additional industrial floor space produced in 2010 was recorded at 163,425 square metres, which was well below that of the five year average of 338,757 square metres. However, completed construction in 2011 and 2012 is expected to be significantly higher at 359,413 square metres and 723,468 square metres, respectively. The report stated that warehouse rent prices increased due to a lack of some stock types, particularly warehouse property with close access to the M7 Motorway, whereas rents for most other property types remained static. Land values are expected to increase gradually over the year as the recovery continue and demand increases with access to the M7 Motorway again spurring on this growth in value.

Jones Lang LaSalle – Industrial Investor Survey, 2011

This survey was conducted amongst 42 industrial investors from across Australia and provides an understanding of the current insight into the market; although does not directly represent the sentiments of industrial investors in the Outer North West sub-region. The general opinion of respondents is that investment in and development of industrial properties will rise over the coming years with warehousing and distribution facilities being the most sought after property type. Many of the respondents stated that they viewed a lack of available development sites as being a significant discouraging factor (the exact percentage of respondents was not stated).

Savills – Sydney Industrial, October 2011

This research report reviews all industrial land within the Sydney metro area and is valuable as it compares data from a series of pre-determined precinct areas. The Hills Shire is contained in the North West Sydney Precinct alongside Seven Hills, King Park and Blacktown.

The most sought after floor area per lease across all of Sydney were for properties with floorspace greater than 15,000 square metres; accounting for 34 percent of all leases over the year leading up to September 2011. The wholesale sector was the largest lease body, accounting for 64 percent of all new leases over this lease period. Savills analysts acknowledge that the wholesale sector will continue to take the lion's share of industrial leases. Between September 2001 and September 2011, rent costs in the North West precinct have remained largely unchanged rising to \$120 per square metre in 2003 then dropping to \$110 per square metre post GFC. Savills analysts predict that rent levels will increase as small amounts of new supply are introduced and demand gradually increases. Some of the key market indicators addressed in the report are contained in the table below.

TABLE 11 – Key Financial Indicators – Industrial Land

	Inner Sydney	Outer Sydney	Greenfield	Suburban
Rental Net Face (\$/sq m)	95	115	70	90
Yield – (% Net Face Rental)	8	9	9	10
IRR (%)	9	10	10	10
Outgoings – total (\$/sq m)	18	25	18	25
Capital Values (\$/sq m)	1,100	1,300	700	950

2.4 Current and Future Industrial Land Geography

Industrial floorspace demand is being influenced by global economic trends and concomitant restructuring of the Australian economy. These trends and increasing competition from higher value uses has seen a general spatial redistribution of industrial land activity from inner city area to areas closer to the urban fringe. Traditionally land intensive uses such as factories and warehouses are gradually being replaced by more land efficient industrial land uses and different uses altogether, such as retail and residential. According to BIS Shrapnel, the outer region is planned to be home to an increasing number of large, distribution-related industrial businesses and manufacturers seeking to minimise the cost of accommodation, while also locating close to major transport corridors.²

The strategic approach of government is a mix between promoting expansion through infrastructure provision along the western Sydney Growth Areas and beyond whilst also protecting existing sites from being displaced by competing uses. BIS Shrapnel predict strong competition for industrial land for other uses in South Sydney, particularly around Zetland and Green Square where flexible zoning provisions easily facilitate a change of use. Very little greenfield land remains for industrial uses in either the northern or southern Sydney regions with most development that occurs being brownfield redevelopments.

Growing demand for employment lands in the outer subregions of Sydney has also been the result of numerous 'push' and 'pull' factors. These factors are listed as follows:

- Push Factors (from inner areas):
 - Increasing rents and outgoings
 - Lack of appropriately zoned industrial land
 - Small lot sizes³
- Pull Factors (to outer areas):
 - Release of SEPP 59 lands (designated employment lands located in and around Erskine Park, Eastern Creek, Greystanes)
 - Availability of serviced land
 - Improved transport opportunities and infrastructure
 - Lower rents and cheaper land

- Growing population and customer base

These factors have reshaped Metropolitan Sydney's industrial structure, in particular the traditional inner city industrial areas which are now characterised by new types of commercial and industrial development, or have been converted for residential usage⁴. Lower rents and cheaper land would be the major pull factors at play for Annangrove Road. A growing population and customer base would have an effect on locational decisions once development at Box Hill begins.

The North West Subregional Plan highlights the following characteristics of the North West Region as being key factors contributing to the changing nature of the region:

- Employment areas are currently established along the M4 Motorway, Great Western Highway, which provide direct road links to export points for manufacturers and producers.
- Job types are expected to diversify in line with greater investment in transport and services in strategic centres. The Hills Shire is expected to see an emergence of a diversified workforce including skilled technical and managerial staff which will influence the choice of industry and business to develop in the LGA.
- Infrastructure items such as the Western Sydney Orbital and the proposed North West Rail Link, which will link Rouse Hill and Castle Hill to the Global Economic Corridor.
- Increased investment in road infrastructure and land prices have increased the desirability of North West industrial properties for manufacturers looking to relocate from currently established inner city industrial areas. This is further supported by a diversifying resident workforce.

The Subregional Plan outlines the function of all currently planned employment land in the North West Region. Specifically in The Hills Shire, the following future roles of employment land precincts were identified:

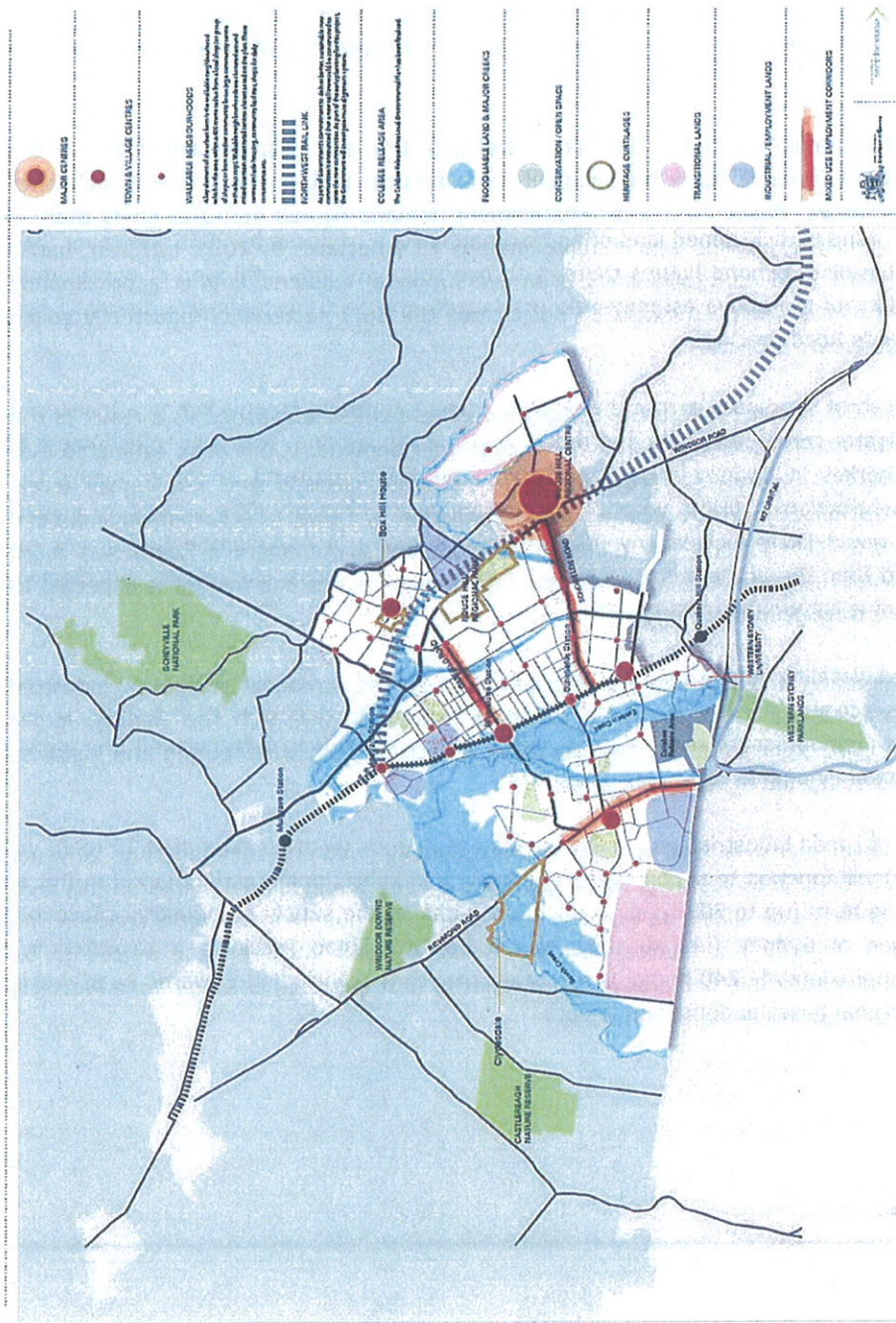
Employment Land Precinct	Future Roles				
	Local Industry	Green Industry	High Tech Industry	Light Manufacturing	Business Services
Castle Hill (135.7 Ha)	✓	✓			
Annangrove (119.5 Ha)	✓				
North Rocks (47.2 Ha)	✓		✓		
Northmead (4.5 Ha)	✓	✓			
Winston Hills (14.7 Ha)	✓			✓	

All of the areas mentioned in the table above are earmarked in the plan as land to be retained for industrial purposes at the intensity allowed under the current applicable zonings. Industrial land in Castle Hill in the vicinity of the Hills Centre Station and part of Rouse Hill has been identified as having potential to allow for a wider range of uses and greater future employment generation capacity.

2.5 Industrial Land Hierarchy

The 2006 *North West Structure Plan: Growth Centres Development Code* indicates that the study site lies within designated industrial/employment land. The structure plan states the purpose of this site is to provide employment for light industry with a limited number of heavy industrial areas where appropriate with many of these areas being appropriately located on the outer edges of the North West and South West areas but with good access to town centres and major transport routes.⁵ The Rouse Hill Regional Centre to the south-east is listed as a major centre and Box Hill to the north as a town centre in the structure plan hierarchy. The centre hierarchy from this plan is outlined in the figure below.

Figure 4. North West Structure Plan Centres Hierarchy



Source: North West Department of Planning (2000)

2.6 Summary

The industrial market in North West Sydney appears to have slowed down considerably over the past couple of years with reduced demand forecasts for employment and slower development rates for industrial land.

The updated BTS job forecasts are considerably lower than reported in the *Baulkham Hills Employment Lands Demand Analysis* and as a corollary there will be reduced demand for employment lands. An important trend to note is that the total number of manufacturing jobs is forecast to decline.

The demand forecast for an additional 590 hectares of industrial and business zoned land in the *Box Hill Retail and Employment Study* is a self-containment target that is almost four times higher than the actual estimates. Based on the self-containment demand figures from this study there is an undersupply of industrially zoned land of approximately 73.9 hectares by 2036. However, based on the original baseline demand figures there is an oversupply of industrial land of approximately 240 hectares. Both of the above estimates do not include the 56.3 hectares of industrially zoned land in the Edwards Road Precinct.

Demand for industrial floorspace across the Sydney industrial market languished as a result of the GFC based on tighter credit conditions and reduced consumer demand. It has been estimated that the industrial market in Sydney is recovering with moderate demand and low supply levels resulting in a contraction of prime vacancies and stabilisation of rents. The secondary industrial market (which would likely include any potential development in Annangrove Road) was more strongly affected than the prime industrial market and recovery in this sub market is expected to take longer to come through in most regions⁶.

Warehousing, wholesaling and logistics are anticipated to be the strongest sectors of industrial demand and to account for the majority of industrial leases. In line with this finding, larger floorplates up to 15,000 square metres, such as those associated with warehousing and logistics, are most suggested by agents to be sought after.

The abundance of zoned industrial land in Outer Western Sydney (with an estimated 10 to 20 years worth of supply) will function to suppress rental growth and keep the industrial market in this area tight⁷. In the long term (up to 2036), as we have seen above, the supply of industrial space in The Hills Shire region of Sydney (i.e. surrounding the Edwards Road Precinct) is expected to be sufficient with approximately 240 hectares of spare capacity (not including Edwards Road Precinct) based on the original baseline demand numbers.

3 Development Context

The preceding section provided a background of larger national macroeconomic factors as well as regional economic and employment that may affect the fortunes of future development in the Edwards Road Precinct. This section sharpens the focus to empirically examine recent industrial developments at the local scale. Recent development applications across the Hills Shire as well as in the Edwards Road Precinct are assessed to ascertain the strength of the local market. The planning controls of similar successful industrial precincts are then compared and contrasted to measure any significant differences and gauge whether any amendments might be applied to the planning controls at Edwards Road to facilitate development.

3.1 Recent industrial development in the Hills Shire

We have examined current development applications, recent development approvals for the Annangrove Road Industrial Area in particular and the Hills Shire in general.

Table 13 displays the commercial and industrial development approvals in the Hills Shire since 2010. There were only nine approvals over that time, with two being for industrial development and two for quasi-industrial Bunnings Warehouses.

Table 13: Commercial and Industrial Development Approvals in the Hills Shire since 2010

Address	Application Description	Approval Date	Approval Status
27 Victoria Avenue Castle Hill	Bulky Goods Premises for Sale of Fish Tanks and Ancillary Items	24/03/2010	Approved
250-254 Old Northern Road Castle Hill	Construction of a Retail Development including a Liquor Store and Speciality Shops	14/12/2010	Approved
2A Victoria Avenue Castle Hill	Demolition of Existing Structures on Part of the Site for Construction of a Staged Motor Showroom and Dealership Development	22/09/2011	Approved
22 Brookhollow Avenue Baulkham Hills	Multi Storey Mixed Use Commercial Development including Restaurant, Commercial Office Floor Area and 106 Serviced Residential Apartments	23/09/2010	Approved
Norwest Marketown 4 Century Circuit Baulkham Hills	Demolition of Existing Buildings and Parking on Pad Sites 1 & 2 and Construction of New Retail and Commercial Tenancies, Provision of Additional Car Parking and Occupation and Fitout of One Tenancy (Pad Site 2) for 1st Choice Liquor.	3/05/2011	Approved
352 Annangrove Road Rouse Hill	Demolition of existing structures and construction of a Bulky Goods Premises	5/08/2010	Approved
14 Victoria Avenue Castle Hill	The proposed development is for the demolition of existing structures and construction of a bulky goods retail development for Bunnings Warehouse.	5/08/2010	Approved
Lot 2 DP 251094 Mile End Road	Construction of a Staged Warehouse and Commercial Development with Associated Car Parking	23/09/2010	Approved
11 Gibbon Road Winston Hills	Proposed industrial Development in two (2) stages as follows: Stage 1 - Bulk earthworks and retaining walls Stage 2 - Construction and use of two (2) industrial buildings and offices, access road, car parking, signage and landscaping.	19/12/2011	Approved

Drilling down further to the Edwards Road Precinct, we can see that a total of eight applications have been lodged since 2004, with one returned and one being withdrawn (Table 14). Only one development has been completed – the 27 strata lot development. Based on consultation the lack of development for the other approvals partly reflects the lack of feasibility for industrial development.

Table 14: Edwards Road Precinct Applications since 2004

Address	Proposal	Outcome	Settlement/Completion	Status
332 - 334 Annangrove Road	A subdivision creating two lots.	Approved	8/08/2011	Not yet commenced
324 Annangrove Road	15 Industrial Units with Ancillary Offices and Associated	Appeal Approved	30/03/2006	Lapsed
322 Annangrove Road	Light Industrial Warehouse and Associated Offices - 27 Strata lots + Community Lot	Approved	9/12/2004	Constructed
320 Annangrove Road	Erection of a staged development comprising 21 light industrial and warehouse units with ancillary office components, two (2) shops and a restaurant. Total floor area of 7,594sqm. DA has lapsed.	Approved	2/08/2005	Lapsed
316 Annangrove Road	An industrial warehouse and associated offices	Approved	9/12/2004	Not constructed
314 Annangrove Road	two unit industrial unit complex	Approved	12/03/2009	Not constructed
290-312 Annangrove Road	A Subdivision creating 49 Lots including demolition and new road	Returned	N/A	N/A
31 Edwards Road	A proposed industrial subdivision creating 56 lots, using proposed lot numbers 1 - 56.	Withdrawn	24/11/2008	N/A

The southern portion of Annangrove Road, south of Withers Road, has been more successful in attracting industrial development (Table 15), with the most recent development being the bulky goods outlet Bunnings Warehouse at 352 Annangrove Road.

14.7 Annangrove Road Precinct

Address	Proposal	Development Status	Date of Approval	Status	Comments
352 Annangrove Road	Demolition of existing structures and construction of a Bulky Goods Premises - Bunnings	Approved	9/01/2007	Under construction	Site Area: 19,050 - Floor Area: 15,979sqm
350 Annangrove Road	Proposed Hotel, Brewery and Hotelier's Licence - The Australian Brewery	Approved	19/09/2006	Constructed	Site Area: 16,530 - Floor Area: 2,571 incl mezzanine
348 Annangrove Road	A proposed community title subdivision creating 6 lots, using proposed lot numbers 1-6.	Approved	23/11/2005	Lapsed	Currently a garden nursery. In 2009 a prelodgement meeting was held for a Proposed Transport Terminal – Bus Depot accommodating up to 250 buses, and parking for up to 265 cars.
340 Annangrove Road	Community Title Subdivision. 1 lot into 4. Lot 1 access road plus 3 industrial buildings- One on each lot. Use for lots 3 and 4.	Approved	5/06/2008	CC application lodged however was withdrawn due to the sale of the property	

An industrial subdivision was approved in 2005 for Money Close, Rouse Hill (Table 16). This subdivision is on the opposite side of Second Ponds Creek from the Edwards Road Precinct. From recent inspections the majority of lots have remained unsold.

14.8 Money Close Road Precinct

Address	Proposal	Development Status	Date of Approval	Status	Comments
Lot 12 DP 860753 Mile End Road	A proposed subdivision to create 9 lots, using proposed lot numbers 1-9. (8 lots & 1 residue)	Approved	29/03/2005	Completed	Money Close Subdivision
Lot 2 DP 251094 Mile End Road	A proposed subdivision creating five lots, using proposed lot numbers 1 to 5.	Approved	14/03/2011	Not Completed	

The actual on the ground development in the Hills Shire and the Edwards Road Precinct has provided empirical confirmation of the theoretical estimation of supply and demand outlined above in Section 2. The study area appears to be a microcosm of the North West subregion to the extent that demand appears to be languishing while there is sufficient available supply. In addition to the more regional market forces of supply and demand, there are likely to be more localised issues such as planning controls and development feasibility. These are discussed in turn below.

3.2 Development trends

The following section compares the planning conditions in place in a select number of case study industrial areas compared to those applicable to development on the Edward Road Industrial Precinct. We have assessed development trends in successful similarly zoned areas. The land use and built form controls of these areas have been benchmarked against the existing controls for the Edwards Road Precinct found in The Hills Shire *Development Control Plan – Light Industry*. Any significant differences between the plans have been noted and are used to inform any amendments to the controls at Edwards Road Precinct.

The case study sites were chosen for their 'success' and 'similarity'. For this study these concepts have been defined in the following ways:

- Similarity: in terms of proximity to major commuter arterial roads (that serve mostly a commuter focus rather than a freight focus) and residential areas, heavily vegetated and urban fringe
- Factors of success: the employment land area is fulfilling its role and has successfully attracted development.

It is acknowledged that no single industrial precinct is exactly as alike as another, but by identifying similar sites we are aiming to isolate all other factors that may have affected development and focus only on planning controls. All other things being equal the different planning controls will have resulted in any diverse development outcomes.

In conjunction with The Hills Shire Council we chose the following industrial precincts as comparable benchmarks:

- Dural Service Centre, Hornsby LGA
- Mount Kuring-Gai, Hornsby LGA
- Salisbury Road and Leighton Place, Hornsby LGA
- Charmhaven, Wyong LGA

Analysis of each case study area includes a description of current development including uses and tenants, a description of the applicable planning controls that influence development and a comparison of the quantitative planning controls. An assessment of the lots sizes and appearance of each precinct has been provided in the summary.

Dural Service Centre, New Line Road, Hornsby LGA

The Hornsby LEP lists the Dural Service Centre as a district centre that provides 'a range of service and light industrial activities for the wider community'⁸. The development contained within this zoning entity is diverse, consisting of a mix of:

- business parks

- restaurants and fast food retailers
- general retailers including car products and electrical
- privately operated recreational facilities
- a bus depot
- landscape supplies
- bulky goods retail such as pools and furniture
- mowers and chainsaws
- commercial services
- an Australia Post distribution centre, and
- hardware including a Bunnings Warehouse.

The Wakefield Business Park and Dural Park, located adjacent to one another on the eastern side of New Line Road, are typical examples of the business parks along New Line Road. Buildings contained within the site are predominantly double-storey light industrial row units that line a service road into the site at an approximate 90 degrees from the road. Current tenants include a smash repairer, bulky good wholesalers and direct to public sales and a café among others.

The Dural Service Centre industrial precinct is landscaped and generally well maintained. In the southern part of the industrial area some uses contain car parks that abut the New Line Road (Figure 5).

Figure 5. Dural Service Centre - amenity

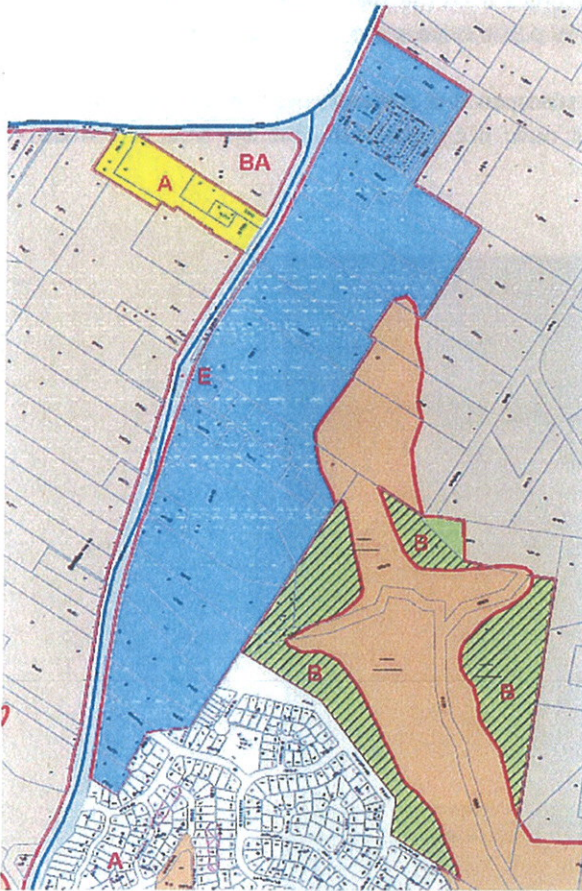


Source: Google (2010)

It should be noted that although the Dural Service Centre has been successful in attracting development, the precinct does not have a strong industrial profile with a mix of retail, commercial and industrial uses.

The aforementioned developments and many other surrounding allotments are located within the Business E (Service Centre) zone. The Figure 6 below is sourced from the Hornsby LEP zoning maps and illustrates the extent of the Business Centre Zoning (shaded blue) along the eastern side of New Line Road. Other surrounding uses include Environmental Protection B (River Catchment) (brown), Open Space B (Public Recreation – District) (green), Special Uses A (Community Purposes) (yellow), Residential A (low density) (pink) and Rural BA (Small Holdings Agricultural Landscapes) (light brown) surrounding the majority of the site.

Figure 6. Dural Service Centre, Hornsby LGA



Source: Hornsby LEP 11264

Development Control Plans exist in Hornsby LGA in three forms as follows:

- Zone DCPs: addresses the controls of a specific zone
- Issue DCPs: addresses the controls of a specific land use, and

- Area DCPs: addresses the controls of a specific locality.

In this case, the applicable DCPs to the Dural Service Centre include an Area DCP (Dural Service Centre DCP) with no Zone DCP or Issue DCP being applicable.

Table 17 below compares the relevant LEP and DCPs of this precinct with that of the Edward Road Precinct. An analysis of the differences between Dural Service Centre and the Edwards Road Precinct is provided in the summary section below.

Table 17: Comparison of LEP and DCPs of this Precinct with that of the Edward Road Precinct

	Dural Service Centre DCP	Edward Road Precinct
Maximum floorspace ratio	0.7:1	1:1
Minimum Lot Size		8000sq m
Maximum office floorspace share	30%	50%
Minimum floorspace		Up to 50% of buildings/units between 100 and 150sqm. All other minimum 150sqm per building/unit
Max site coverage	35%	
Minimum road frontage		60m
Front Setbacks:		
- Main Roads	15m	20m
- Local Roads	10m	20m
Other Setbacks:		
- Side	5m	5m
- Rear	15m	5m
- Bushland	Additional 10m	n.a.
- Creek corridor	40m	40m
Max height	2 storeys	16m above ground
Development Value where model required	\$2mil	
Landscaping – tree clearance	Within building envelope plus an additional 3m	
Carparking:		
Light Industrial – Factories, industrial units, warehouses, distribution centres	1 space/100m sq GFA	1 space/50m sq GFA OR 1 space per 2 employees (whichever is greater)
Light Industrial – Vehicle Repair	1 space/100m sq GFA + 1 space per employee + work bays must fit 3 vehicles	1 space/50m sq GFA OR 1 space per 2 employees (whichever is greater)
Light Industrial – Bulky goods workshop	1 space/50msq plus car trailer provisions	1 space/50m sq GFA OR 1 space per 2 employees (whichever is greater)
Trees per car space	6	
Minimum parking space dimensions	2.5m x 5.5m with min headroom of 2.3m	
Fire Safety	Fuel reduced zone (buffer) of 10m	

Other General DCPs, codes and policies that apply include the:

- Car Parking DCP
- Code of Practise for Sound Insulation – External Noise Component
- Code of Practise for Sound Insulation – Internal Noise Component
- Hornsby Shire Council Policy and Guidelines for Noise and Vibration Generating Developments

Mount Kuring-Gai – Hornsby

Located adjacent to the west of the Pacific Highway and F3 Freeway, the Mount Kuring-Gai Industrial Area contains a branching street design and is home to a variety of light industrial, freight and logistics, light manufacturing and wholesalers. The site is constrained by a sloping topography and is bordered by vegetation on most sides and retains much remnant vegetation on many of the lots. Types of development vary significantly and include:

- small to large scale warehousing and distribution centres
- landscaping supplies
- vehicle depots for buses and trucks
- construction material production and distribution depots
- food manufacture and storage, and
- other industrial uses.

It was suggested on the marketing website for the estate that rental and sales prices in the Mount Kuring-Gai Industrial Area tend to be 10-15 percent below Hornsby and 25-40 percent below Artarmon or Lane Cove for equivalent industrial space.

The Mount Kuring-Gai industrial precinct is landscaped and generally well maintained. The streetscape of most of the precinct is dominated by mature remnant trees (Figure 7).

Figure 7. Mount Kuring-Gai Industrial Area - amenity



Source: Google (2010)



The Mount Kuring-Gai Industrial Area is zoned as Industrial B (Light) with pockets of conservation land zone, specifically Conservation Zone B (River Catchment) bordering the outer fringes of the site. No Land DCP exists for the site and the only applicable DCP is the Industrial Lands DCP. These zones can be seen in the map below in Figure 8.

Figure 8. Mount Kuring-Gai Industrial Area, Hornsby LGA

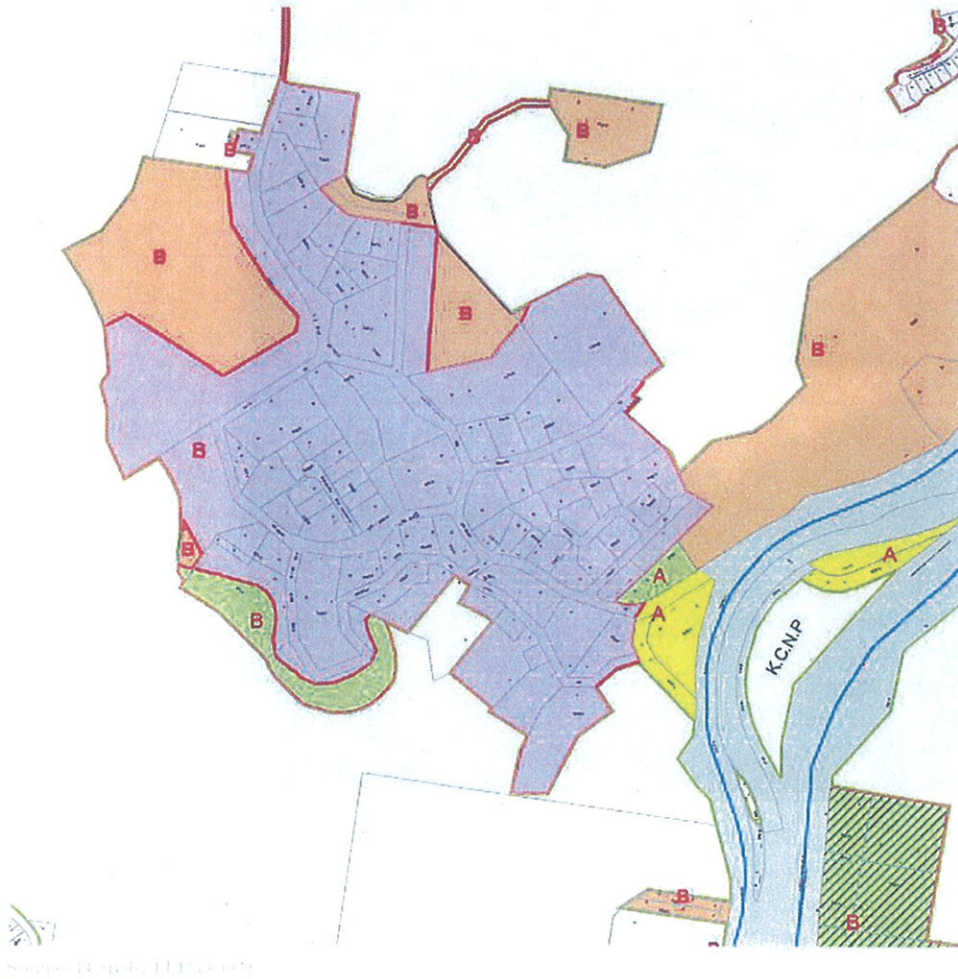


Table 18 compares the applicable planning controls as contained within the Hornsby LGA Industrial Lands DCP against the planning controls of the Edward Road Precinct. An analysis of the differences between Mt Kuring-Gai industrial area and the Edwards Road Precinct is provided in the summary section below.

	Hornsby LGA Industrial Lands DCP	Edward Road Precinct
Maximum floorspace ratio	1:1	1:1
Maximum office floorspace share	N/A	
Front Setbacks:		
- Main Roads	5m	20m
- Local Roads	3m	20m
- Laneways	0m	n.a.
Other Setbacks:		
- Side	10m	5m
- Rear	0m	5m
- Creek corridor	40m	40m
Max height	2 storeys	16m above ground
Development value where model required	\$2mil (1:100 model)	
Outdoor Eating Space Area	1sq m/employee, min total area of 10sq m	
Carparking:		
- Light Industrial – Factories, industrial units, warehouses, distribution centres	1 space/100sq m	1 space/50m sq GFA OR 1 space per 2 employees (whichever is greater)
- Light Industrial – Vehicle Repair	1 space per 100 sq m GFA + 1 space per employee plus 3 vehicles per work bay	1 space/50m sq GFA OR 1 space per 2 employees (whichever is greater)
- Light Industrial – Bulky goods workshop	1 space / 50 sq m + space for car trailers	1 space/50m sq GFA OR 1 space per 2 employees (whichever is greater)
Parking Spaces	2.5mx5.5m with 2.3m headroom	
Loading Bays	3mx7m	
Width of driveways	8m	
	0.5sq m/m of road frontage	
Total Advertising Area	0.25sq m/m of road frontage (multiple sides)	

Other relevant planning provision documents include:

- Hornsby Shire Council Landscape Code for Development Applications
- Code of Practise for Sound Insulation – External Noise Component
- Code of Practise for Sound Insulation – Internal Noise Component

Hornsby Industrial Park – Hornsby

The industrial area based around Salisbury Road and Leighton Place is an older, more established industrial location. The site contains a mixture of well established local light industrial and some business park uses of generally good amenity and low vacancies. The most common incumbent uses include:

- self-storage

- auto repairs
- light manufacturing
- good wholesalers
- construction supplies and services, and
- equipment hire and offices.

The Hornsby industrial precinct is landscaped and generally well maintained. The streetscape in the Hornsby industrial precinct more closely resembles the built-form of a mainstreet with smaller setbacks and buildings engaging the street front (Figure 9).

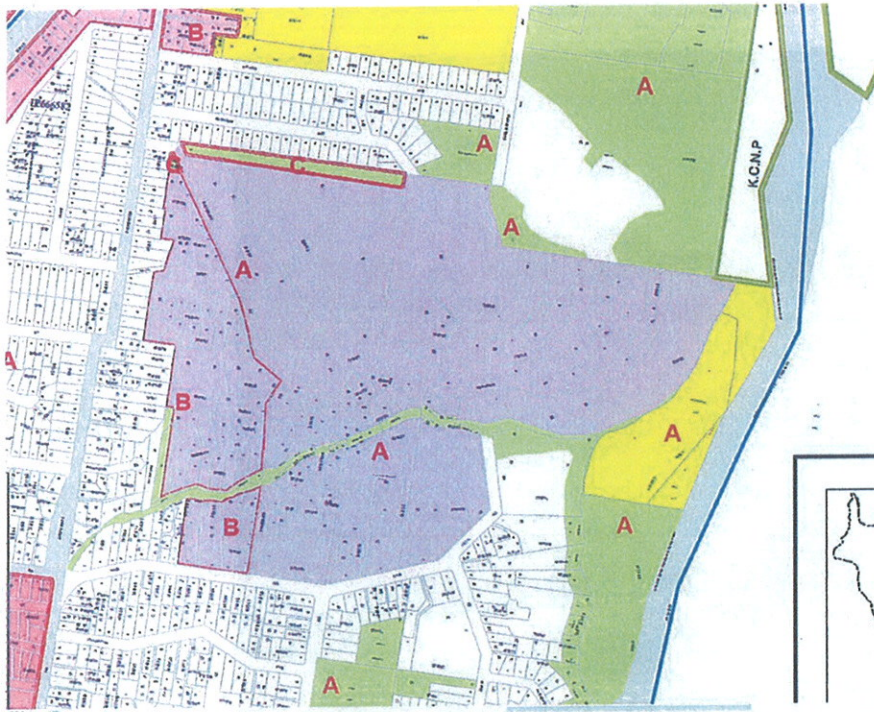
Figure 9. Hornsby Industrial Park - amenity



Source: Google (2016)

The Hornsby Industrial Park is predominantly zoned Industrial A - General, with a section along the western side of the site zoned as Industrial B (Light). The Industrial area is bisected by a spur of open space land around a creek which is zoned Open Space A (Public Recreation – Local). This is evident in the zoning map sourced from the Hornsby LEP contained in Figure 10 below.

Figure 10. Hornsby Industrial Park - Hornsby LGA



Source: Hornsby, 2011 (1994)

Like the Mount Kuring-Gai Industrial Area, no Land DCP applies to the site and the Industrial Lands DCP is the only applicable DCP in this case. Therefore, refer to Table 18: Planning Controls, Mount Kuring-Gai Industrial Area for relevant planning control comparisons to the Edward Road Precinct. An analysis of the differences between Hornsby Industrial Park and the Edwards Road Precinct is provided in the summary section below.

Charmhaven – Wyong

The Charmhaven Industrial park is home to a variety of industrial uses including a cement plant, offices and showrooms, warehousing, auto parts, electrical supplies, construction and appliance wholesaling and printing businesses as well as some non-industrial uses such as community services (private swimming school and a gymnastics centre). A significant quantity of land in the North West corner of the central triangle remains undeveloped and is currently covered in bushland. A large concrete and metal fabrication plant exists along the northern edge of the central triangle area along with some large warehouses.

The Charmhaven industrial precinct is landscaped and generally well maintained (Figure 11).

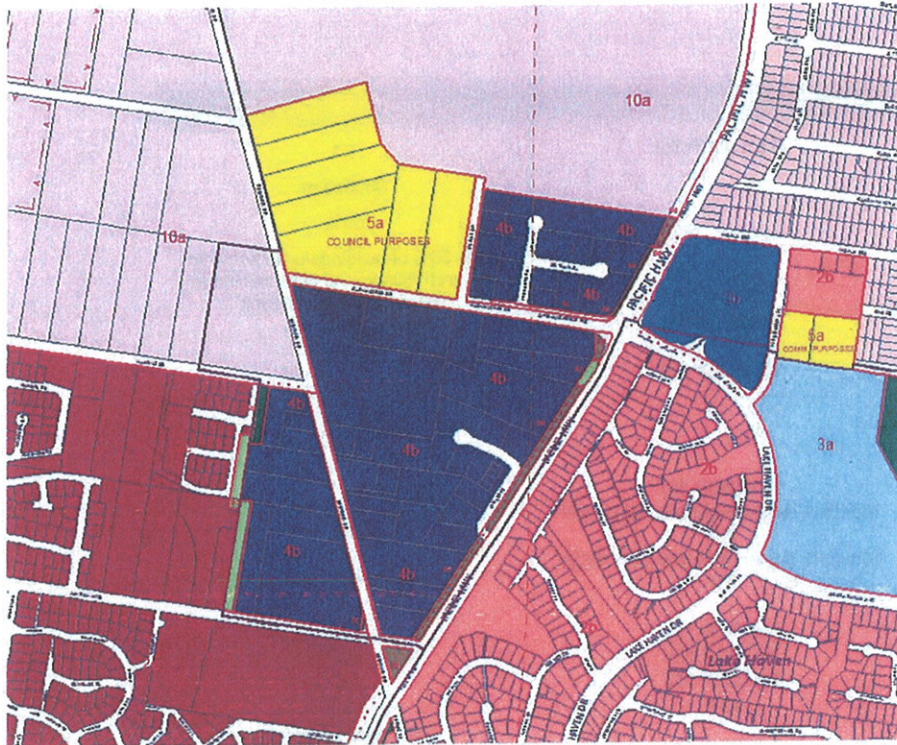
Figure 11. Charmhaven industrial - amenity



Source: Google (2010)

Charmhaven Industrial Estate is currently zoned 4b – Light Industry under the Wyong LEP (Figure 12). A specific instrument that governs development within the site is the *DCP 34 - Charmhaven Industrial Estate*. This estate is within close proximity to a number of non-industrial land uses including multiple dwelling residential zone 2b (pink), centre support zone 3b (blue), special use zone 5a (yellow), an investigation precinct zone 10a (light purple) and a future urban release zone 2e (dark red). Although a specific DCP applies to the site, most provisions that influence development in Charmhaven are contained with *DCP 75 - Industrial Development* document.

Figure 12. Charmhaven Industrial Wyong LGA



Source: Wyong LEP (1991)

The planning controls contained in the Wyong column in the table below are sourced from a series of relevant documents as followed:

- DCP 34 - Charmhaven Industrial Estate
- DCP 61 - Carparking
- DCP 75 - Industrial Development



An analysis of the differences between Hornsby Industrial Park and the Edwards Road Precinct is provided in the summary section below.

Table 1: Comparison of Planning Parameters

	Wyong	Edwards Road Precinct
Maximum floorspace ratio	0.8:1 (DCP 75)	1:1
Minimum Lot Size		8000sq m
Maximum office floorspace share		50%
Minimum floorspace		Up to 50% of buildings/units between 100 and 150sqm. All other minimum 150sqm per building/unit
Max site coverage	50%(DCP 75)	
Max share of GFA for Ancillary Retail Display	20% (DCP 34)	
Minimum road frontage		60m
Front Setbacks:		
- Pacific Motorway	15m (DCP 34)	
- State Roads	15m (incl. 5m landscape buffer) (DCP 75)	20m
- Local Roads	10m (incl. 5m landscape buffer) (DCP 75)	20m
Other Setbacks:		
- Side	5m (DCP 75)	5m
- Rear	5m (DCP 75)	5m
- Bushland	5m (DCP 75)	n.a.
- Creek corridor	40m	40m
Max height		16m above ground
Max External Reflective Glass	20% of surface area (DCP 75)	
Carparking:		
- Light industrial – factories	1 space/75sqm GFA (DCP 61)	1 space/50m sq GFA OR 1 space per 2 employees (whichever is greater)
- Light industrial - warehouses	1 space/300sq m GFA (DCP 61)	1 space/50m sq GFA OR 1 space per 2 employees (whichever is greater)
- Light Industrial – vehicle repair	0.75 per 100sq m site area + (DCP 61)	1 space/50m sq GFA OR 1 space per 2 employees (whichever is greater)
- Bulky good retail	1 space per 50sq m GFA (DCP 61)	1 space/50m sq GFA OR 1 space per 2 employees (whichever is greater)
Fire Safety		
Rainwater Tank Capacity	10L/sq m of roof area (DCP 75)	

Other relevant local planning documents include:

- Wyong Shire Council Landscape Policy L1
- Wyong Council DCP 50 – Advertising Signs
- Wyong Council DCP 67 – Engineering Requirements
- Wyong Council Policy E1 – Erosion and Sediment Control from Building Sites
- Wyong Council DCP 69 – Site Controls for Waste Management.

Relevant State Environmental Planning Policies (SEPP) include:

- SEPP No.1: Development Standards
- SEPP No.4: Development Without Consent
- SEPP No.11: Traffic Generating Developments
- SEPP No.33: Hazardous and Offensive Development
- SEPP No.34: Major Employment-Generating Industrial Development
- SEPP No.45: Permissibility of Mining
- SEPP No.48: Major Putrescible Landfill Sites
- SEPP No.55: Remediation of Land

Lot sizes

The lot sizes of the case study industrial estates in Hornsby have been recorded (Table 20). The most common lot range in the Hornsby industrial estates is 0-2,000 square metres at 34 percent, followed by 2,000 to 4,000 square metres with 21 percent of total lot numbers. There were also a relatively large number of lots above 12,000 square metres (15 percent). If a minimum lot size of 8,000 square metres was applied to the Hornsby case study precincts then, all other things being equal, up to 78 percent of the existing industrial development may not have been completed.

TABLE 20: Lot sizes of industrial estates in Hornsby

Lot Size Range (sqm)	Number of Lots	Percentage of Total Lots	Percentage of Total Area
< 2000	76	34%	34%
2,000-4,000	47	21%	55%
4,000-6,000	38	17%	72%
6,000-8,000	14	6%	78%
8,000-10,000	6	3%	81%
10,000-12,000	8	4%	85%
12,000 >	34	15%	100%
Total	223		100%

The lot sizes of the Charmhaven industrial estate have been recorded (Table 21). The majority of lots for Charmhaven were between the lot ranges of 2,000 to 4,000 square metres (45 percent). Again for Charmhaven there were also a significant proportion of lots larger than 12,000 square metres (21 percent). If a minimum lot size of 8,000 square metres was applied to the Charmhaven precinct then, all other things being equal, up to 73 percent of the existing industrial development may not have been completed.

Lot Size (sqm)	Number of Lots	Percentage of Total	Percentage of Area
< 2000	10	13%	13%
2,000-4,000	34	45%	59%
4,000-6,000	6	8%	67%
6,000-8,000	5	7%	73%
8,000-10,000	3	4%	77%
10,000-12,000	1	1%	79%
> 12,000	16	21%	100%
Total	75	100%	100%

For all case studies, almost one-third of lots were less than 2,000 square metres (29 percent), and more than a quarter were between 2,000 to 4,000 square metres. There were also quite a large number of lots above 12,000 square metres (17 percent). In terms of implications for the Edwards Road Precinct, based on historical industrial development pattern a large portion of the industrial market could be excluded via the implementation of an 8,000 square metre minimum lot size.

Lot Size (sqm)	Number of Lots	Percentage of Total	Percentage of Area
< 2000	86	29%	29%
2,000-4,000	81	27%	56%
4,000-6,000	44	15%	71%
6,000-8,000	19	6%	77%
8,000-10,000	9	3%	80%
10,000-12,000	9	3%	83%
> 12,000	50	17%	100%
Total	298	100%	100%

Summary

The Edwards Road Precinct has the most generous floorspace ratio compared to the other precincts. The lack of maximum site coverage also provides greater flexibility for development than in Dural or Wyong. However, the car parking requirements for Edwards Road Precinct are more rigid than the other industrial areas, with up to twice as many car spaces required compared to those industrial precincts in the Hornsby LGA. Furthermore, no other industrial area applied minimum lot sizes, minimum road frontage or minimum floorspace requirements. These stringent requirements function to effectively reduce potential subdivision as well as the ability to achieve maximum floorspace for each site in the Edwards Road Precinct.

As a whole, the planning controls for the Edwards Road Precinct are stricter than the comparable case study areas. The findings from consultation (see Section 4.1) confirm this observation, with a strong agreement among landowners, potential developers and real estate agents that the planning controls were one of the predominant reasons development was not feasible in the Edwards Road Precinct.

The current planning requirements for the Edwards Road Precinct are similar to other industrial areas in The Hills Shire, including Castle Hill, and have been implemented to achieve a 'park like' environment. The feasibility of these controls has been tested below in Section 4.2.

As a sense check we have tested the current development controls applying to the Edwards Road Precinct and a hybrid of the more flexible controls from the case study areas. Given that the median sized lot in the Edwards Road Precinct is approximately 16,800 square metres we have applied the controls to a lot of this size. We have run two different lot dimension scenarios including 60 metres by 280 metres and 80 metres by 210 metres. The results demonstrate that the net developable area of a lot could be reduced to between 28 percent and 39 percent of the original size lot and that further subdivision using the 8,000 square metre minimum lot size was not possible. Under the hybrid controls the yield was considerably higher between 69 and 70 percent (Table 24). The lot yield from a subdivision into 1,500 square metres and 2,000 square metres size lots (based on theoretical local light industry requirements) has been tested. Between 5 and 8 lots could be subdivided as a result of hybrid controls. The number of lots for a subdivision between 2,000 and 4,000 square metres could be between 2 and 6 lots.

The potential to subdivide was tested because it is often crucial for higher return on investment. This is important for two broad reasons. Firstly it allows the more efficient use of infrastructure by allowing for the costs of infrastructure to be spread across development as well as potentially staged to reduce the upfront costs of development; hence a double cost saving can be achieved via subdivision. Secondly, as a general rule higher sales price per square metres are able to be attained from smaller lots and so a higher overall income can be achieved. A more market based consideration is that the large minimum lot sizes exclude smaller operators that are more suitable to small, self-contained lots than strata titled businesses (such as those at 322 Annangrove Road).

Strata subdivision is also another option that could be built using the existing development controls (as seen at 322 Annangrove Road). However, the upfront construction and infrastructure costs associated with this type of development result in a higher risk profile than standard Torrens title subdivision and therefore can potentially deter smaller investors.

TABLE 11: Comparison of development controls under the proposed planning scheme

Development Control	Proposed Planning Scheme	Development Control			
		Standard Torrens Title	Standard Torrens Title	Standard Torrens Title	Standard Torrens Title
Planning Controls	FSR	1:1	1:1	1:1	1:1
	Front Setback (m)	5	5	5	5
	Side Setback (m)	20	5	20	5
	Rear Setback (m)	5	5	5	5
	Street Setback (m)	40	40	40	40
	Maximum Lot Coverage (%)	60	n.a.	60	n.a.
	Minimum Lot Size (sqm)	8,000	n.a.	8,000	n.a.
Site Details	Site Width (m)	60	60	80	80
	Site Length (m)	280	280	210	210
	Site Area (sqm)	16,800	16,800	16,800	16,800
	Maximum Permissible Area (sqm)	4,700	11,750	6,600	11,550
Potential Use (Abuse Case)	Ratio	n.a.	2.94	n.a.	3
	FSR	n.a.	5.875	n.a.	5.8
Abuse Case	FSR	n.a.	7.8	n.a.	7.7

4 Development prospects

Following on from our assessment of the local development context in the Hills Shire and the Annangrove Road industrial area, this section examines the issues affecting the Edwards Road Precinct. Consultation with landowners, developers and real estate agents as well as development feasibility testing provides first-hand insight into factors affecting development in the Edwards Road Precinct.

An analysis of future employment and floorspace scenarios for the Edwards Road Precinct has also been conducted to outline the possible future development scenarios.

4.1 Consultation

SGS has consulted existing owners, developers and industrial real estate agents to determine the issues inhibiting industrial development in the Edwards Road Precinct. We have tested issues such as lot fragmentation, planning controls, environmental and other constraints as well as development feasibility. The landowner/potential developer questions included the following:

- What is your site currently used for?
- What are your intentions for the site?
- What are the pre-conditions for the attraction/retention of the industrial development for the Edwards Road Precinct?
- What role do planning and development controls play in industry attraction and development, and how are they barriers to development?
- What are the main industry relationships and what would be the most appropriately targeted industries for future expansion?
- What would be a realistic role for Council in attracting those industries and strengthening the local market place?
- What are the industrial vacancy rates like in the region?

Real estate agents were asked the following questions:

- How are other similar industrial precincts in the area performing? Are there examples of comparable precincts (in terms of urban fringe location, size, etc.) that are successful?
- What are industrial vacancy rates like in the region?
- What other industrial area's would be the main competitors to Annangrove Road industrial?
- What type of uses do you think would be suited to the Annangrove Road? i.e. Business Park, Local service industrial?
- What do you think might be an achievable sale price per square metre for Annangrove Road:
 - Warehouse
 - Warehouse/office
 - Office
- What do you think might be an achievable lease price per square metre for Annangrove Road:
 - Warehouse
 - Warehouse/office
 - Office

- What do you see as the main weaknesses of this precinct?
- What type of planning controls hinder development?
- What needs to happen to get development occurring at Annangrove Road?
- Anything else you would like to add?

The results from the consultation area summarised below:

Landowner and developer consultation

A number of key themes were distilled from consultation with landowners and potential developers. These themes reoccurred across all questions and can be categorised as either relating to the Hills Shire Council's role or the local planning controls. The main points raised have been summarised below, while a comprehensive list of issues can be found in Appendix 2.

There was a general agreement amongst the stakeholders that the development approval system can at times be 'frustrating and time consuming, making investment in an area unattractive'. Although, SGS research indicates that The Hills Shire Council has relatively fast commercial development assessment times, ranking 13th out of the 42 Sydney Region Councils. It was suggested that the Council should be more flexible, dynamic and more responsive to the economics of development. In general, greater assistance and a more proactive approach to development were considered necessary.

There were a number of planning controls that were seen as inappropriate and antiquated for the Edwards Road Precinct including the minimum lot size, car parking requirements, setbacks and Section 94 contributions.

The 8000 square metre minimum lot size (MLS) was seen as an inhibitor to development. It was suggested that the current MLS reduces the attractiveness of the area to small business, which make up the largest part of potential demand, and that banks believed 8000 square metres lot developments too risky. A number of MLS's were suggested with 1500 to 2000 square metres being the most common. This was confirmed by the lot size data from the case study industrial precincts where the most frequently occurring lot sizes were those less than 2000 square metres.

Setbacks and carparking controls were also seen as too restrictive, with suggestions that these be reduced to align with other nearby Council's controls.

There was a feeling that current Section 94 rates are too high and that upgrades to the road should be partly funded by Council or that contributions could be staggered so that developers didn't have the burden of higher upfront costs.

In terms of suitable land uses for the Edwards Road Precinct, light industrial and business park type uses (similar to 322 Annangrove Road) were suggested as being the most appropriate. It was also suggested that small businesses, rather than large businesses, were most appropriate for the Edwards Road Precinct.

Real estate agent consultation

Consultation with real estate agents revealed important information on the current state of the industrial market. Details on vacancies, similar areas and factors of success, achievable sales and lease prices, development controls and appropriate land uses were provided. The main points raised have been summarised below, while a comprehensive list of issues can be found in Appendix 2.

Agents suggested industrial vacancies across the North West were very high for the years immediately following the GFC and have recently declined to historical levels. Similar industrial areas to the Edwards Road Precinct were suggested as Castle Hill, Seven Hills, Eastern Creek and Glendenning. The success of these areas was attributed to the following reasons:

- effective use of strata titling to attract smaller businesses
- access to adjacent local workforce
- close access to major transport routes
- critical mass effect created by large anchor tenants
- favourable economic conditions
- low cost location for both purchase and leasing, and
- small scale space for small scale businesses.

Competing industrial areas were defined as Riverstone, McGrath Hill, Seven Hills, Eastern Creek and Glendenning.

In terms of land uses, small local service industry was is the most in demand for development as well as business park type uses with a high office content. Strata titled industrial development and smaller logistics businesses were also suggested as suitable land use formats and uses.

Agents indicated that minimum lot size, frontage and development contributions were the most inhibiting planning controls to the site.

There was agreement on the achievable sale and lease prices of the Edwards Road Precinct from all industrial agents. Importantly, one agent indicated that there may not be strong enough demand for feasible development at the site and that development won't be feasible for 'at least the next 5 years'.

4.2 Scenario testing

Future development scenarios

To test likely future floorspace we have prepared a future floorspace development scenario based on an expected development intensity and job density ratio. First we have determined the position of the precinct on a league ladder of light industrial areas considered to be competing sites. The league ladder includes existing and future industrial precincts with a similar profile to the Edwards Road Precinct (which is zoned light industrial) and helps provides an approximate indication of the potential timing of development at Edwards Road Precinct. Secondly, we have then estimated the

potential employment and floorspace of the Edwards Road Precinct based on a likely development density scenario.

To rank the other competing areas we have evaluated their light industrial specialisation, location, level of servicing and access to population and infrastructure. The Edwards Road Precinct came in sixth place behind North Rocks industrial area (Table 25).

Table 25: League Ladder

EXISTING AND RELEASED INDUSTRIAL PRECINCTS				
Existing Precincts				
Castle Hill	Light industry, bulky goods retail	135.7	5.0	4
Annangrove Road	Light industry	59.4	57.8	6
North Rocks	Light industry, warehousing	46.8	0.0	1
Northmead	Light industry, bulky goods retail	4.9	0.0	5
Winston Hills	Light manufacturing, light industry	114.7	8.1	3
Mile End Road	Light industry	5.3	5.3	2
Release Precincts				
Box Hill Industrial	Light industrial and business park	147	147	7
Riverstone	Light industrial	14	14	8
Riverstone West	Business Park, General Industrial, Light Industrial	104	104	9
Total			315.6	

Based on this league ladder the Edwards Road Precinct faces strong competition with other industrial precincts in the Hills Shire LGA, as well as those other precincts identified in consultation. The servicing of the whole Edwards Road Precinct could take several years and demand is likely to be distributed more evenly around the LGA. If the rate of industrial development as seen in Section 3.1 remains constant, and if achievable sales prices for the precinct aren't feasible for another 5 years as agent consultation suggested, then it is likely that the Edwards Road Precinct won't be completely developed until the mid-2020s.

The employment and floorspace development scenario for the Edwards Road Precinct is based on an anticipated job and floorspace density of development of the precinct.

The Hills Shire *Employment Lands Direction* anticipates an actual development floorspace ratio for Annangrove Road of 0.5:1⁹. Empirical research that SGS has completed in Wyong has revealed that the actual FSR for the industrial precincts of Charmhaven, Tuggerah Business Park and Tuggerah Straight is approximately the 0.5:1 indicated in the *Employment Lands Direction*. Therefore, the FSR benchmark of 0.5:1 has been used to forecast floorspace. The recommended maximum FSR for the Edwards Road Precinct is likely to be higher to account for variations in actual FSRs, where some uses will be below 0.5:1, such as 0.2:1, and others will be above this actual benchmark, for example at 0.8:1.

The total vacant area of the Edwards Road Precinct is 57.8 hectares (assuming that all non-industrial uses count as vacancy). The provision of internal roads and stormwater for those lots north of 314 Annangrove Road (anything including and south of 314 Annangrove Road is not assumed to have internal roads and stormwater), would reduce the development area from

419,096 square metres to 335,277 square metres. Therefore the above FSR is applied to the combined area of 494,437 square metres; comprising 335,277 square metres for the northern portion and 159,160 square metres for the southern portion. The resulting industrial floorspace is 247,218 square metres (Table 26).

Table 26: Future Industrial Floorspace

FSR	0.5:1
Floorspace	247,218

As a caveat it is important to note that this floorspace estimate would be lower once any environmental and physical constraints are considered including flooding, flora and fauna and transmission easements. SGS are aware that the Edwards Road Precinct is environmentally constrained but did not have access to this information at the time of the study. The Flora and Fauna study that has been run in conjunction to this study will reveal the extent of any constraints.

The Hills Shire Council *Employment Lands Direction* suggests that a relevant employment yield for the Annangrove Road precinct would be 1 job per 70 square metres of Gross Floor Area (GFA)¹⁰. As a comparison the *Box Hill Retail and Employment Study* suggests that an appropriate employment ratio for industrial is 1 job per 93 square metres. Our own research suggests that around 1 job per 100 square metres is typical for industrial development, while around 1 job per 70 square metres is suitable to business park type industrial uses. Given that Annangrove Road is expected to have a business park type built form, we have used the job density benchmark of 1 job per 70 square metres of GFA. The resultant number of jobs expected for the Edwards Road Precinct is 3,532 (Table 27).

Table 27: Future Industrial Jobs

Floorspace	247,218	70	3,532
------------	---------	----	-------

The Hills Shire Council *Employment Lands Direction* has a forecast employment capacity of 6,175 jobs for the Annangrove Road Industrial Area. This is based on 86.45 hectares of vacant land, an FSR of 0.5:1 and a resultant 432,250 square metres of floorspace. Our estimates are based on 57.8 hectares of vacant land and result in 247,218 square metres of future industrial floorspace.

Development feasibility

Demand for industrial floorspace across the Sydney industrial market has diminished since the GFC. Demand has been particularly slow for secondary industrial space across Western Sydney. At a local scale the low number of industrial development approvals across the Hill Shire for the past three years indicate relatively weak demand compared to supply – there appears to be sufficient supply of industrial land in the Hills Shire to last up to 2036. However, agent consultation indicates that there has been a reduction in the vacancy rate in the region, with vacancies reducing in areas such as Dural Service Centre and Castle Hill in the Hills Shire. Consultation with local agents also

suggests that site specific factors, such as lot size and permissible land uses are affecting the take-up of development at the local scale.

We have tested the planning controls against development fundamentals to determine whether viable light industrial and business park type development is feasible in the Edwards Road Precinct. We have used a Return on Investment (RoI) model that tests the profitability of development. We have used the following components in our model:

- Costs
 - cost of building (based on Rawlinsons Construction Handbook 2011)
 - current land prices (based on Council rates data)
 - site preparation costs (including demolition and site earth works)
 - professional fees
 - s94 costs
- Revenue
 - rental returns and yields (from consultation and market reports)
 - sales prices

A feasible rate of return (profit margin) for a developer has been assumed to be 15 percent. All assumptions for our feasibility testing have been outlined in the Appendix 1.

As previously stated the ability to subdivide is important for development feasibility to minimise costs (i.e. maximise the use of infrastructure) and maximise revenues. However, in testing development feasibility we have found that to be able to develop a site into at least two lots a developer would have to have a site at least 18,000 square metres to account for setbacks. We found that 12 out of 19 sites in the Edwards Road Precinct are under 18,000 square metres, while 15 of the 19 are 21,000 square metres or smaller. Therefore, it is immediately evident that the 8,000 square metre minimum lot size does not allow for feasible subdivision for the majority of the sites in the Edwards Road Precinct.

In addition to the above financial perspective, the ability to subdivide is important to capture small businesses, not necessarily suited to strata type development.

Below we have assessed development feasibility for light industrial and a small-scale business park type development (similar to the existing development at 322 Annangrove Road). We have tested three different size offerings including 250, 500 and 1,000 square metre floorplates.

Table 28 depicts the feasibility for a single storey light industrial and two storey business park type development on a median sized lot in the Edwards Road Precinct. It can be seen that once all costs and revenues are accounted for the 250 square metre light industrial development provides a profit of 17.8 percent, while the business park provides a marginal return of 14.7 percent. As expected the light industrial and business park products with the higher floorspace achieve a lower rate of return as the sale price per square metre decreases for larger floorplates (as noted in the red text in Table 28). The 1,000 square metre product has the lowest return with the light industrial and business park developments making a loss of 0.6 and 2.2 percent, respectively.

In terms of the total developable floorspace we have assumed an actual FSR of 0.5:1 for the industrial development and an actual FSR of 0.75:1 for the business park type development. Existing industrial development in the precinct has an FSR between 0.5 and 0.6 to 1. Hence the light industrial development is assumed to have a total floorspace of 8,400 square metres and the business park development has a total floorspace of 12,600 square metres. The different size offerings (250, 500 and 1,000 square metres) are assumed to be either strata products within one or more larger buildings or separate buildings on separate lots that have a combined floorspace of 8,400 or 12,600 square metres.

It is important to note that this development feasibility testing is sensitive to a multitude of factors and that small changes in a lot size and dimensions or in the market price can affect the feasibility of development.

Table 28 Development feasibility model

	250 Square Metre Product		500 Square Metre Product		1,000 Square Metre Product	
	Light Industrial	Business Park	Light Industrial	Business Park	Light Industrial	Business Park
Front Setback (m)	20	20	20	20	20	20
Side Setback (m)	5	5	5	5	5	5
Rear Setback (m)	5	5	5	5	5	5
Creek Setback (m)	40	40	40	40	40	40
Minimum Lot Frontage (m)	60	60	60	60	60	60
Minimum Lot Size (sqm)	8,000	8,000	8,000	8,000	8,000	8,000
Site Width	60	60	60	60	60	60
Site Length	280	280	280	280	280	280
Site Area	16,800	16,800	16,800	16,800	16,800	16,800
Net Developable Area	11,000	11,000	11,000	11,000	11,000	11,000
Car spaces	168	252	168	252	168	252
Total Building area	8,400	12,600	8,400	12,600	8,400	12,600
Cost of land	\$3,029,148	\$3,029,148	\$3,029,148	\$3,029,148	\$3,029,148	\$3,029,148
s94 Costs	\$858,312	\$1,287,468	\$858,312	\$1,287,468	\$858,312	\$1,287,468
Site preparation	\$104,257	\$104,257	\$104,257	\$104,257	\$104,257	\$104,257
Professional Fees	\$546,447	\$286,234	\$546,447	\$286,234	\$546,447	\$286,234
Building costs (\$/sqm)	\$650	\$935	\$650	\$935	\$650	\$935
Car parking cost	\$479,640	\$719,460	\$479,640	\$719,460	\$479,640	\$719,460
Total Building cost	\$5,939,640	\$12,500,460	\$5,939,640	\$12,500,460	\$5,939,640	\$12,500,460
Total Costs	\$10,957,444	\$17,927,027	\$10,957,444	\$17,927,027	\$10,957,444	\$17,927,027
Sale price (\$/sqm)	\$1,600	\$1,700	\$1,500	\$1,600	\$1,350	\$1,450
Sale Price	\$13,440,000	\$21,420,000	\$12,600,000	\$20,160,000	\$11,340,000	\$18,270,000
Expected profit	\$1,944,956	\$2,636,173	\$1,138,556	\$1,426,573	-\$71,044	-\$387,827
Profit %	17.8%	14.7%	10.4%	8.0%	-0.6%	-2.2%

Source: Valuer-General, 2018, Appendix 1

As a sense check we have tested the amount of floorspace required to achieve a return of 15 percent. The amount of floorspace required to achieve a feasible return of at least 15 percent for light industrial and business park type development is 7,750 and 12,800 square metres respectively (Table 29). The amount of floorspace required to make a feasible return for a light industrial development (7,750 square metres) is achievable under the current controls as the Net Developable Area (NDA) is approximately 11,000 square metres in our theoretical examination. The amount of floorspace required to make a business park type development viable (12,800 square metres) is more than the NDA of the site.

Table 29: Theoretical Feasible Return of 15 Percent for Light Industrial and Business Park Type Development

		Light Industrial	Business Park
Site Details	Site Width	60	60
	Site Length	280	280
	Site Area	16,800	16,800
	Net Developable Area	11,000	11,000
	Car spaces	155	256
	Building Area	7,750	12,800
Costs	Cost of land	\$3,029,148	\$3,029,148
	GFV Costs	\$791,895	\$1,307,904
	Site preparation	\$104,257	\$104,257
	Professional Fees	\$504,162	\$286,234
	Building costs (\$/sqm)	\$650	\$935
	Car parking cost	\$442,525	\$730,880
	Total Building cost	\$5,480,025	\$12,698,880
	Total Costs	\$10,352,012	\$18,157,303
Revenue	Site price (\$/sqm)	\$1,600	\$1,700
	Sell price	\$12,400,000	\$21,760,000
	Residual profit	\$1,551,988	\$2,732,297
	Return %	15.0%	15.0%

Alternatively, if carparking requirements were 50 percent less than they currently are then feasibility would be considerably improved. For example, the 250 square metre offering, which originally yielded a marginal 17.8 and 14.7 percent return for the light industrial and business park type development, would return a profit of 23.4 and 19.5 percent, respectively (Table 30).



10. The following table shows the estimated costs of the proposed development and the expected profit.

		All Items Proposed	
		Item 1 (m2)	Item 2 (m2)
Planning Controls	Front Setback (m)	20	20
	Side Setback (m)	5	5
	Rear Setback (m)	5	5
	Street Setback (m)	40	40
	Minimum Lot Frontage (m)	60	60
	Minimum Lot Size (sqm)	8,000	8,000
Site details	Site Width	60	60
	Site Length	280	280
	Site Area	16,800	16,800
	Net Developable Area	11,000	11,000
	Car spaces	84	126
	Building area	8,400	12,600
Costs	Cost of land	\$3,029,148	\$3,029,148
	DT Costs	\$858,312	\$1,287,468
	Site preparation	\$104,257	\$104,257
	Professional Fees	\$524,383	\$286,234
	Building costs (Net)	\$650	\$935
	Decorating cost	\$239,820	\$359,730
	Item Building cost	\$5,699,820	\$12,140,730
	Total Costs	\$10,455,740	\$17,207,567
Revenue	Sale price (sqm)	\$1,600	\$1,700
	Sale Price	\$13,440,000	\$21,420,000
	Expected profit	\$2,446,660	\$3,355,633
	Profit %	23.4%	19.5%

5 Conclusion and recommendations

The following section distils the major findings and provides recommendations for appropriate land uses and development controls for the Edwards Road Precinct.

Broader market...

The industrial market in the Sydney Region and North West Sydney appears to have slowed down considerably over the recent years following the GFC with reduced demand forecasts for employment and slower development rates for industrial land.

Local development...

Assessment of development in the Hills Shire and the Edwards Road Precinct has provided empirical confirmation that industrial demand has slowed. The study area reflects the pattern in the rest of the of the North West subregion to the extent that demand appears to be languishing while there is abundant available supply.

Planning controls...

The planning controls of the Edwards Road Precinct are restrictive compared to the case study areas. This finding was supported by consultation that suggested the strict planning controls are inhibiting development. The most onerous planning controls were found to be:

- car parking requirements
- setbacks
- minimum lot size
- minimum road frontage
- minimum floorspace requirements.

Consultation...

Consultation with landowners and potential developers revealed that The Hills Shire Council should adopt a more proactive approach to development and that the current planning controls should be more flexible. Real estate agents generally reflected the sentiments of the landowners and indicated that although vacancies have improved, sluggish demand for industrial space is adversely affecting feasible development in the Edwards Road Precinct and that this is likely to be the case for the short-term future.

Future development scenarios...

Based on the likely FSR and job density scenario the future industrial floorspace for the Edwards Road Precinct is expected to be 247,218 square metres. The number of jobs expected for the Edwards Road Precinct is 3,532.

Feasibility...

Development for light industrial and business park type development at the site is currently unfeasible given the current planning controls. Our development feasibility scenario indicates that, once all costs and revenues are accounted for, the 250 square metre light industrial development provides a profit of 17.8 percent, while the business park provides a marginal return of 14.7 percent. The larger 1,000 square metre product has the lowest return with the light industrial and business park developments making a loss of 0.6 and 2.2 percent, respectively

Based on all of these findings we have suggested the most appropriate employment based land uses and development controls for the site.

5.1 Recommended Land Uses

Our recommended land uses are based on findings from the broad economic and employment trends, local level development approval data, consultation and feasibility. The higher level economic and employment trends as well as the local approval data only provide an indication of the level of demand from different uses. For example, based on the broad economic trends we could suggest that there is unlikely to be strong demand from manufacturing. However, these broader factors cannot rule out the types of uses. Instead, more detailed information at the precinct and lot level has been used to indicate the most appropriate uses for the Edwards Road Precinct (Table 31).

Table 31 below indicates that urban services and freight and logistics would not be suited to the Edwards Road Precinct given the existence of residential development in the area, the location away from the freeway as well as the existing smaller lot sizes. Furthermore, the size of the floorplates required for warehousing and logistics render these uses unlikely.

Local light industrial and business park type are likely to be the most appropriate and sensitive uses to the site as indicated from the local and regional planning studies, the case study areas and consultation. The exact type of zone should be at the Council's discretion.

Activity	Characteristics	Suitability
Freight and Logistics	<ul style="list-style-type: none"> Warehousing and distribution activities. Includes buildings with a number of docking facilities; 'hard stand' areas with trucks or goods awaiting distribution; and large storage facilities. Warehousing and distribution is a metro level issue with activities preferably locating close to air, sea and inter-modal inland ports, or with access to the motorway system. 	Large scale is not suitable due to size of lots and location away from motorway. Small scale may be suitable.
Local light industrial and urban support	<ul style="list-style-type: none"> Car service and repair; joinery, construction and building supplies; and domestic storage. Wide range of businesses that service other business (components, maintenance and support) and Subregional populations. Needed at local (LGA) to Subregional level. 	Suitable.
Manufacturing – Heavy	<ul style="list-style-type: none"> Large scale production activity. Likely to be characterised by high noise emission; emission stacks; use of heavy machinery; and frequency of large trucks. Heavy manufacturing is in decline in Sydney, but will continue to cluster in some locations such as Wetherill Park, Campbelltown/ Ingleburn etc. There are strong arguments for collocation in terms of raw material delivery and to concentrate externalities (though impacts on surrounding uses are generally moderate). 	Not suitable due to proximate residential development and smaller lot sizes.
Manufacturing – Light	<ul style="list-style-type: none"> Clothing manufacturing, boat building and electrical equipment manufacturing Small scale production with lower noise and emission levels than heavy manufacturing. 	Suitable.
Urban Services	<ul style="list-style-type: none"> Concrete batching, waste recycling and transfer, construction and local and state government depots, sewerage, water supply, electricity construction yards. These typically have noise dust and traffic implications and need to be isolated or buffered from other land uses. Needed in each sub-region. 	Not suitable due to proximate residential development and smaller lot sizes.
Office	<ul style="list-style-type: none"> Administration, clerical, business services, research. Office buildings that are independent (i.e., are not ancillary to another use on site) and likely to accommodate a significant number of administration staff (>10 people). 	Straight office type development is not suitable due to fringe location, lack of supporting population and to protect industrial nature of area. Also, inconsistent with NSW planning framework.
Business / Office Parks	<ul style="list-style-type: none"> Integrated warehouse, storage, R&D, 'back-room' management and administration with typically a higher office component. Campus style environments such as the IBM site in West Pennant Hills 	Smaller business park type uses are suitable. Larger campus style business parks are not suitable.
Retail Bulky Goods	<ul style="list-style-type: none"> Typically large, one-story buildings surrounded by car-parking, usually located out of centre and in high exposure (main road) locations. 	Not suitable. Inconsistent with NSW planning framework.

5.2 Recommended Development Controls

The recommended development controls for the Edwards Road Precinct have been based on the similar case studies and consultation. These development controls should also align with the typical built form of the aforementioned recommended land use types.

There was a strong agreement among landowners, potential developers and real estate agents that the strict planning controls were one of the predominant reasons development was not feasible in the Edwards Road Precinct. Feasibility testing indicated, however, that it is theoretically possible to achieve a marginal return at the site with the current controls.

We have veered away from the more restrictive 'minimum' controls, such as minimum lot size, minimum site frontage and minimum floorspace. The diversity in lot sizes and good amenity at the case study precincts indicates that the absence in minimum controls can result in orderly development. Apart from a reduction in the front setback, other setbacks remain unchanged and are similar to setback controls found in other industrial precincts; hence site coverage will be largely unaffected by the new controls. A front setback of 10 metres should be adequate to achieve an appropriate balance between amenity and efficient site coverage.

Smaller lot sizes do not necessarily result in a more intensive development density given that strata development on existing lot sizes can result in high density development, for example 322 Annangrove Road includes 27 different uses. For example, it is unlikely that the subdivision of a similar size lot to 322 Annangrove Road (15,450 square metres) would create 27 lots. It is also likely that subdivided lots would share a common internal road or driveway connecting to either Annangrove or Edwards Road and hence traffic generation would not necessarily be any higher with smaller lots.

Importantly, smaller lot sizes would encourage interest from smaller developers, as the high cost of developing strata subdivision would be avoided.

Recommended carparking controls are in-line with the case study areas.

Our recommendations can be found in Table 32. Council should use their discretion to calibrate these controls to provide an optimal outcome.

Table 2: Proposed Development Parameters for Light Industrial

	1:1	1:1
Maximum floorspace ratio	1:1	1:1
Minimum Lot Size (m)	No MLS	8000 sqm
Maximum office floorspace share	50%	50%
Minimum floorspace	No minimum floorspace	Up to 50% of buildings/units between 100 and 150 sqm. All other minimum 150 sqm per building/unit
Minimum road frontage (m)	No minimum frontage control	60
Front Setback (m)	10	20
Side Setback (m)	5	5
Rear Setback (m)	5	5
Creek corridor Setback (m)	20	40
Max height (m)	16m above ground	16m above ground
Carparking: Light Industrial – Factories, industrial units, warehouses, distribution centres	Factories: 1 space/75 sqm GFA Warehouses: 1 space/100 sqm GFA	1 space/50 sqm GFA OR 1 space per 2 employees (whichever is greater)
Carparking: Light Industrial – Vehicle Repair	1 space per 75-100 sqm GFA	1 space/50 sqm GFA OR 1 space per 2 employees (whichever is greater)
Carparking: Light Industrial	1 space/50 sqm GFA OR 1 space per 2 employees (whichever is greater)	1 space/50 sqm GFA OR 1 space per 2 employees (whichever is greater)

Appendix 1 - Development Feasibility Assumptions

- Net Developable Area: The net lot size arrived at by applying the development controls to the site.
- Car spaces: Based on DCP controls of 1 space per 50 square metres of GFA
- Building area: Based on a buildings envelope that is the same size as the NDA
- Cost of land: Based on Council's rate data
- s94 Costs: Based on Council's section 94 rate or \$102 per square metre
- Site preparation: Based on Rawlinsons Construction Handbook 2011
- Professional Fees: Based on industry standard of 3 percent of building costs
- Building costs (\$/sqm): Based on Rawlinsons Construction Handbook 2011 and adjustments based on local knowledge
- Car parking cost: Based on Rawlinsons Construction Handbook 2011
- Total Building cost: Based on Building and car park costs
- Sale price (\$/sqm): Based on agent consultation and sense-checked with empirical data
- Sale Price: Based on per square metre price and building area.
- Expected profit: Total revenue – (Total costs + sales expenses i.e. legal, commission, marketing)
- Profit %: A percentage of the total profit over the Total Costs

Appendix 2 – Consultation

Below are summaries of consultation with landowners, potential developers and real estate agents. While some comments are verbatim, most comments have been paraphrased.

5.3 Landowner and developer consultation

There was a strong level of agreement among the landowners and potential developers. There was a high participation rate for the survey and the following answers were provided.

1. *What are the pre-conditions for the attraction/retention of the industrial development for the Edwards Road Precinct? i.e. What needs to happen to get development occurring in Annangrove Road*
 - Less enforcement of planning restrictions and more encouragement to bring economic development to The Hills.
 - Upgrade of Edward Road from a dirt track to a minimum standard of a rural road.
 - Remove the minimum 8000 square metres lot size restriction for the area. This would attract the many businesses that would like small stand alone premises and minimum lots of 1500 square metres / 2000 square metres. Many Industrial Real Estate Agents have stated that the majority of reasonably sized business would be very interested with these sizes. Also Realtors have stated that since the GFC Banks/ Financers are very reluctant to lend towards these 8000 square metres lot size developments.
 - The creation of an Owners Corporation via a Community Scheme to provide a framework to allow maintenance costs to be appropriately shared
 - Council needs to:
 - Provide greater assistance and cooperate with Landowners
 - Reduce the minimum lot size from 8,000 to 500-1000 square metres
 - Foster a sense of certainty
 - Assist developers with the development of Edward Road in terms of provision and cost
2. *What role do planning and development controls play in industry attraction and development, and how are they barriers to development?*
 - Hills Shire Council LEP's & DCP's have the absolute influence on development and they need to ensure a reasonable level of economic feasibility of development. Other Western Sydney based Councils, including Blacktown and Hawkesbury, have offered a variety of lot sizes for the past 30 years such as 1500square metres in parts of their Industrial zones. Just like residential block, sizes now vary between 350 square metres – 700 square metres in order to provide different needs and realistic/ affordable markets. This approach could be used by The Hills Shire at the Annangrove Road Site.
 - The approval layers of local government and in some instances State Government are frustrating and time consuming, making investment in an area unattractive. There are a number of instances where local government areas have set aside a number of sites/areas for

- a single purpose with applications being fast tracked due to user friendly development control plans and preapproval processes etc.
- Lot sizes of 1,500 and 2000 square metres would be more appropriate. Even 4,000 square metres would be too much
 - The environmental controls are too prohibitive
 - The current minimum lot size of 8,000 reduces the attractiveness of the area to small business which makes up the largest part of potential demand
 - Large minimum subdivision size drives away small businesses
 - The section 94 rates are \$100.00 per square metres therefore section 94 payment for 4000sqm of building is \$400,000.00
 - Parking is 1:50 for building area = 52 spaces and 1:25 for mezzanine area = 43 spaces for total car spaces of 95. This should be 1:75 for the total area.
 - The setbacks are 20m and should be 10m.
 - Trigger for the upgrade of Edwards Road:
 - Council has stated that no development will be approved until Edward Road is improved however no effort has been made on behalf of council to improve the road.
 - This means that the only way that a single site could be granted planning approval is if they construct an entire road before approval is even given which is an unappealing proposition.
 - Landowner suggests that council could invest in developing the road to a minimum standard without kerbs and required industrial widths and then charge industry development contributions under the Section 94 plan.
 - Current setback requirements overly reducing developable area:
 - Currently any development is required to incorporate a front setback of 20m and rear setbacks of 5m
 - If the minimum lot size of 8,000sq m is developed, it would lose 2950sq m in site area or a loss of 37% of potential building area, before other considerations are factored in such as carparking
 - There is no incentive for proprietors to maintain excessive setback landscaping so these areas fall into disrepair which further reduces visual amenity
 - Minimum lot subdivision area of 8,000 square metres
 - The area is considered a small business zone yet the minimum of 8,000
 - Subsequent development costs in the multimillions is doing to effectively deter most potential small business occupants
 - Not all demand is for strata titled tenancies derivable from large lots
 - Several Edward Road residents have proposed minimums from between 2000 and 4000square metres based on site specific characteristics
 - Need for an Edwards Road Specific Development Plan
 - Allows for an intermediate upgrade of Edwards Road as described above and result in more accurate infrastructure charging
 - Current broad-brush contribution requirements are too high and deters development

3. *What are the main industry relationships and what would be the most appropriately targeted industries for future expansion?*

- Small businesses rather than attempting to attract large businesses
- Light industrial – hire units, repair shops, bulky goods, mower shops, etc.
- Business park type development like 322 would be most appropriate
- Motor vehicle sales.
- Motor vehicle repairs and maintenance.
- Furniture removals depots as well as the smaller incubator type of light industries e.g. small machinery repair shops. Also an industry hub would be appropriate.
- Small warehouses
- Service industries/ trades; and
- E-business premises (e-based commerce & distribution is the future as manufacturing declines)

4. *What would be a realistic role for Council in attracting those industries and strengthening the local market place?*

- A greater synergy between planning codes and economic development. This would hasten the development process. An example of this would be if this area was identified as a hub for a specific line of businesses such as "auto alley" "IT capital of Australia" "Film Australia" "Sydney's Boat Scene." These businesses are like businesses and can attract funding. Council could develop a DCP for the area that is both planning / economic development friendly, including ancillary business and the economic development section of Council could "sell" the hub.
- The council could be more positive towards developers and be more helpful rather than a hindrance
- Smaller lot sizes and broader scope of businesses
- The upfront development levies are quite high and the staggering of development levies over the delivery of the project would be beneficial
- The Council need to fix up Edwards and Withers Road
- The Council should raise the height limit from 2 to 3 storeys
- Review the current minimum lot sizes
- Re-look at the current DCP and perhaps the LEP
 - This area was rezoned/ gazetted in 1991 with very little occurring.
 - Council needs to have a more flexible and dynamic approach to realistic commercial needs and developments.
 - They should act in a more proactive way/role in promoting the area, instead of their negative current attitude - an area with too many difficulties/ constraints without any formal studies/ investigations.
 - Develop a masterplan for the site that provides greater certainty and direction for landholders and developers
 - Reduce excessive regulatory requirements

5. *What are the industrial vacancy rates like in the region?*

- Quite low or unsure.

5.4 Real Estate Agent Consultation

1. How are other similar industrial precincts in the area performing? Are there examples of comparable precincts (in terms of urban fringe location, size, etc.) that are successful?

The Castle Hill Trading Area:

- Home to 650 to 700 businesses which have progressively developed over the last 30 years.
- Key factors that led to success included:
 - effective use of strata titling to attract smaller businesses
 - access to adjacent local workforce
 - close access to transportation
 - higher office quality and quantity
 - critical mass effect (large anchor tenants who attracted more businesses)
 - favourable economic conditions.

Seven Hills Industrial Area:

- Development here is typified by smaller lots 1,500 sqm (significantly less than the 8,000sqm at Rouse Hill/Annangrove Road.
- Key factors that led to success included:
 - low cost location for both purchase and leasing
 - provides affordable small scale space for small scale businesses.

Other areas include Eastern Creek and Glendenning. The key factors for success in these areas were listed as:

- better access to the highways
- cheaper price, and
- the offering of 200 to 400sqm lots small lots for use by small business.

2. What are industrial vacancy rates like in the region?

- The Dural Service Centre expanded significantly leading up to the GFC after which the location suffered high vacancy rates however in recent years the vacancy rate has dropped down close to zero.
- Vacancy at Castle Hill has been more persistent:
 - leading up to 2008, 200 additional buildings were constructed for tenants on top of the existing 550 already present on the site.
 - the 200 additional tenancies were constructed in 3 complexes and currently the largest of these complexes is 100% occupied, the second 50% occupied and the third 20% occupied.
- The nearby Money Place in Rouse Hill was deemed to be unsuccessful for the following reasons:
 - offers 8000 square metre blocks
 - almost entirely suited to owner occupiers (does not lend itself well to leasing)
 - price is a big factor
 - surrounding residential development is a major discouragement for many occupants as they are concerned as to the potential impact their operations will have on the nearby residents



3. What other industrial area's would be the main competitors to Annangrove Road industrial?

- Eastern Creek and Glendenning industrial areas are the largest competitors for developers
- Riverstone, Blacktown
- McGrath Hill Vineyard, Hawkesbury
- Potentially with Seven Hills if the minimum lot size allowed is reduced

4. What type of uses do you think would be suited to the Annangrove Road? i.e. Business Park, Local service industrial?

- Small local service industry is the most in demand for development.
- Business Park with a much higher office content than what is currently allowed including a flexible zoning arrangement to allow for pure office development
- Limited manufacturing
- Small logistical operations run by small businesses that are suitable for small lot tenancies that facilitate the loading of small vehicles such as vans. Medium to large scale logistics is not as desirable as the access to the motorways is not as good as in other places.
- Strata titled industrial development

5. What do you think might be an achievable sale price per square metre for Annangrove Road:

Sale price estimates are largely based on sale prices achieved at 322 Annangrove Road plus other recent sales. The 322 Annangrove Road sale consisted of warehouses all less than 350 square metres selling for \$1,800 per square metre and 5 office / warehouses spaces at 430 square metres each selling for \$2,000 per square metre.

It was suggested that developers need to be selling at \$1,800 to be breaking even on a typical development that could occupy the Annangrove Road site. A significant gap between these figures is expected to exist for at least the next 5 years.

However given current market conditions, the following price estimates have been suggested as realistic for the current site:

Use	Area (sqm)	Price (\$/sqm)	Notes
Warehouse	250	\$1,600	
	500	\$1,500	
	1,000	\$1,350	
Office Warehouse	250	\$1,700	322 Annangrove Road
	500	\$1,600	
	1,000	\$1,450	
Office	250	\$3,000	Roughly 30% less than Norwest Business Park
	500	\$2,800	Roughly 30% less than Norwest Business Park
	1,000	-	No foreseeable demand

6. What do you think might be an achievable lease price per square metre for Annangrove Road:

The achievable lease prices are indicated in Table 34.

Warehouse	250	\$115	\$115	
	500	\$110	\$110	
	1,000	\$95	\$105	
Office Warehouse	250	\$125	\$130	
	500	\$120	\$120	
	1,000	\$105	\$115	
Office	250	\$200	\$200	Few precedents so estimate rough
	500	\$200	\$200	
	1,000	\$200	\$200	Unrealistic – not feasible

7. *What do you see as the main weaknesses of this precinct?*

- The current lot dimensions and frontage space prevent many uses. Many lots contained within the Edwards Road Precinct are very narrow with limited street access. This influences building sizes, turning and manoeuvring space and turning circles for vehicles. This is fine for large scale companies but many of these are already established and land for large scale operations is not in high demand
- The current configuration does not lend itself well to strata titling
- Does not attract the development of premises for small local businesses
- Poor access to major road that create links with key destinations such as export and import port facilities and others. Trucks leaving the site are required to travel 15 minutes up Windsor Road and, whilst this might not be excessively constraining it is a greater inconvenience compared to competitor industrial sites with closer access.

8. *What type of planning controls hinder development?*

- The current minimum lot size of 8,000 square metres is seen as the largest inhibitor of development
- Zoning and development types allowed (particularly in regards to allowing commercial and office uses)
- Difficulties in developing strata title
- Many developers abandon or do not attempt projects due to high developer contribution costs. Also the large amount of roadwork required to get the site functioning is also discouraging.

9. *What needs to happen to get development occurring at Annangrove Road?*

- Reduction in lot size
- Alter planning provisions to make the prospect of small businesses occupying the site more appealing
- Reduced developer contributions
- A increase in demand and subsequently price to ensure a profitable return for developers

10. *Anything else you would like to add?*

- The Hills Shire Council values the aesthetic qualities of industrial development more than some other shires which is important in creating good quality industrial developments