



ESQ 1818 Panthers Pty Ltd

ESQ 1818 at Panthers Socio-economic Study

April 2016

Executive summary

Introduction

The Panthers Precinct is home to the Penrith Panthers Football Club. Panthers plans to transform the Precinct into an integrated mixed use development including residential, retail, commercial, entertainment and leisure uses and facilities. The Precinct is located to the east of the Nepean River along Mulgoa Road. To the west of the Precinct and along the bank of the Nepean River is an established residential area primarily consisting of separate houses.

Located within the Panthers Precinct, ESQ 1818 is a proposed residential development by CABE. It would include 859 apartments, 3,300 m² of retail as well as recreational areas and pathways around the existing lake within the Precinct. Directly adjacent to the ESQ 1818 site is the Mountainview Aged Care and Retirement Village.

The ESQ 1818 development is permissible with consent of Penrith City Council. It is a proposed change of use from an outlet retail centre, which is identified within the Penrith Development Control Plan 2014 (DCP) for the site.

GHD has been engaged by CABE to prepare a socio-economic study to support a Development Application (DA) for the proposed ESQ 1818 development to determine the project's likely socio-economic benefits and risks. The study includes a social sustainability plan, which provides objectives for the development and recommended strategies to enhance the social sustainability of the development for existing and incoming communities.

Social policy context

Penrith is set to become one of Sydney's Strategic Centres and Regional City Centres, which will be the focus for additional housing, jobs and services. Penrith is expected to service surrounding communities, including the growing North West Growth Centre.

In order to support Penrith's growth and changing community needs, there is a need for a range of housing types, employment, recreation and lifestyle opportunities. By building on the existing night time economy, Penrith could become a vibrant, lively and safe destination within the region. State and local government policies emphasise the need for employment, infrastructure and services located close to homes to reduce travel times and retain young workers in the City.

The policies also highlight the need to enhance the public domain and open space, with opportunities to create shared pathways to link Penrith with the Nepean River and Great River Walk.

Existing community profile for the Riverlink precinct

The local study area comprises the ESQ 1818 site, Panthers Precinct site and surrounding land that may be indirectly impacted by the proposal (e.g. Mountainview retirement village). The local study area for this study is called 'Riverlink'. The Mountainview retirement village is located within Riverlink East. The established residential area to the west of the Panthers Precinct is located within Riverlink West.

The analysis of the existing community profile identified two different subsets of people living within the Riverlink precinct. The first is the old age and retirement community of Riverlink East. Almost 80% of the people living in this area are aged over 60 years, with 67.9% aged 70 years or over and a median age of 79. These people tend to live in single person households or as a couple without any children. Incomes are low, tending to be within the range of the age pension of \$300-399 per week (37.9%), with most people earning less than \$800 per week.

In Riverlink West, the median age decreases to 40 years, which is slightly above the median ages of Penrith (34) and the LGA (37). This community tends to be more wealthy than Riverlink East, Penrith, and the Local Government Area (LGA), with a high median weekly income of \$1,625 reflecting a greater number of people working in professional and managerial roles. Home ownership is comparatively high in Riverlink West and almost all households own at least one motor vehicle. Family households are common within Riverlink West, with over half of all families including children (56.7%), 45.7% of which are couple families with children.

The Riverlink precinct has low levels of cultural diversity and mobility. More than half the people living in Riverlink in 2011, lived in Riverlink five years previously. This is reflective of the broader region, with similar cultural diversity and mobility in both Penrith and the LGA.

Most people who live in Penrith LGA also work within the LGA and driving is the most common form of transport. Health care, retail, manufacturing and education are the most common industries of employment.

Existing workers and visitors

In the 2013/14 financial year there were approximately 70,400 people working in Penrith LGA. About 57,700 of these people were employed in full time jobs or the equivalent. Most employment in the LGA is in the health care, retail, manufacturing, and education sectors. However the greatest proportion of businesses is in the construction industry. This may indicate that there are a large number of sole traders or small construction businesses, as there is one construction business for every 1.8 people employed in the industry.

Key employment areas within Penrith LGA are around Penrith, Jamisontown and Emu Plains, with other employment centres located at St. Marys and on the outskirts of Erskine Park. Employment opportunities in these areas may relate to the presence of: a town centre, bulky retail (e.g. Bunnings, Harvey Norman etc.), industrial and business area, accommodation, restaurants or shopping centres.

The main reason for people visiting the LGA is to visit family and friends, followed by holiday and leisure. Most visitors are domestic and will visit for the day (approximately 83%), though a number will stay overnight (approximately 16%). Only one 1% of visitors to the LGA are international, with most visiting the LGA to see family and friends.

A major attractor in the region for holiday and leisure trips is the Panthers Club. The Club is also a large employer of jobs in hospitality, retail, administration and services. Both Panthers customers and workers are also likely to visit nearby attractions and facilities within the Precinct, such as the Great River Walk and Nepean River.

Nearby social infrastructure

The ESQ 1818 site has good access to a variety of social infrastructure within a few kilometres (e.g. education, health, sport and recreation, emergency services). Most are located further than 800 metres or a ten minute walk from the site. These are considered easily accessible by car.

Social infrastructure within close walking distance of ESQ 1818 (400 metres) includes the Panthers complex, Mountainview nursing home and Penrith Park. Infrastructure within 800 metres includes the SummitCare aged care facility, Great River Walk, Cables Wake Park, Penrith Showground, Penrith Paceway and Penrith Museum of Printing.

Future residents, workers and visitors

The ESQ 1818 development would result in around 1,700 new residents, 183 new workers and increased visitors to the site. This would lead to a significant increase in the population of the

local area. This would in turn lead to more people using local facilities and services and potential changes to the character and amenity of the neighbourhood.

Compared to the existing community of Riverlink, the majority of new residents are expected to be young adults, many with young children. This would change the demographic profile of the local area, and may have implications for community interaction and cohesion as well as demand for specific community facilities.

Summary of consultation outcomes

GHD consulted stakeholders for this project during February and March 2016 to understand the capacity of existing or planned social infrastructure that could service the ESQ 1818 development. Stakeholders included Penrith City Council, NSW Police, NSW Fire and Rescue, the NSW Department of Education, and the Nepean Blue Mountains Local Health District. Outcomes of the consultations included:

- There are opportunities to provide new community facilities within/outside the site, such as a men's shed, creative industries hub or a regional city community services facility.
- The area is well-serviced by district health facilities, including the Nepean Hospital Campus, and Penrith and Lemongrove Community Health Centres. Planned facilities (e.g. Primary Integrated Care Centres) would also meet the future demands of the district. However there is a recognised shortage of GPs in Penrith.
- Emergency services are likely to have capacity to service future residents and workers of the development.
- Local primary and secondary schools have existing capacity to service the future residents of the development.
- While there were no significant or unusual crime and safety issues identified for the development, it is important to incorporate CPTED principles in the design.
- The proposed development is located close to many recreational opportunities (e.g. Great River Walk, Nepean River). The development could build on these strengths by:
 - Enhancing the public domain.
 - Providing more recreational activities.
 - Connecting new residents to open spaces.
 - Promoting active transport and public transport.
- The development is likely to create a positive economic impact by creating jobs, especially opportunities for local residents. However there may be potential competition with businesses in Penrith CBD, including Nepean Square.
- The development has the potential to impact on housing affordability in Penrith.
- It is important to consider any cumulative impacts on local social infrastructure from the ESQ 1818 development as well other major proposed developments in the area.
- The Panthers Leagues Club is a gambling and drinking venue, which has the potential to cause conflicts of use with the proposed development.
- Access from the site to Penrith Station and Penrith CBD is an important consideration.

Key findings of the assessment

The key findings of the socio-economic study include:

Positive socio-economic impacts

- The development would contribute to increased supply and diversity of housing in Penrith, providing more options for different household types, such as single households, young families, couples without children, and older people looking to downsize.
- The development would increase the supply of smaller dwelling types (i.e. one, two, three and some four bedroom apartments) and may contribute to housing affordability in Penrith.
- The recreational facilities and dining and retail options provided as part of the development would benefit existing community members and improve the social amenity of the site, particularly opening up the lake for public access. These uses could help activate the lakefront and surrounding area particularly at night and contribute to growing the night time economy around the Panthers Leagues Club.
- The pathways, kick around area, and outdoor gym facilities would encourage active recreation. This would contribute to improved health and wellbeing outcomes for both new residents, workers and visitors, as well as existing community members.
- The development would provide pathways from east to west and north to south between blocks of buildings, ensuring that people can walk throughout to access the retail and dining options which front the lake. This would also encourage existing community members to visit the precinct.
- The development would encourage active modes of transport, including cycling, by providing 312 bicycle parking spaces. This would assist with reducing car trips, traffic and parking generation.
- Four car share spaces are proposed within the development to encourage the use of car share schemes and reduce the need for residents to have a privately owned vehicle.
- The development is expected to have a reasonable population of young people (12 to 24 years). The new retail and dining options within the development may be attractive to young people, and the recreation facilities proposed around the lake may contribute to health and wellbeing outcomes through encouraging healthy outdoor activities.
- The development would be close to the existing bus stop along Mulgoa Road outside the Panthers Club. Five key bus routes stop here, providing good access to Penrith City Centre, where a range of services and facilities, including entertainment and leisure options (e.g. Westfield) are located.
- The development is considered to deliver overall positive economic impacts in the area. The development would provide high density housing, close to jobs within the development and in nearby established employment areas (e.g. Penrith CBD). New residents would be able to access existing public transport to commute to other employment areas (e.g. Blacktown, Parramatta). Residents are also likely to spend in the local area, including Penrith CBD and Nepean Village shopping centre.

Negative socio-economic impacts

- The development would increase traffic in the local area. The development would however generate less traffic compared to an outlet retail centre.
- Local level community spaces are not within short walking distance of the site (more than a kilometre). Access to these spaces for children and young people who are yet to drive would be limited.
- The cumulative impact of the ESQ 1818 development with other major proposed developments in the area is likely to increase demand for existing child care services over time. Child care is prohibited within the zoning for the site under the Local Environment Plan. GHD considers that it could be permitted as an ancillary use associated with the residential or commercial components of the proposal. If not, a rezoning application could be considered to permit it.
- The cumulative population of ESQ 1818 and other major proposed developments in the area may exacerbate the current shortage of GPs in Penrith.
- The development may result in the closure of the Aqua Golf facility, which would negatively impact current users of the facility.
- Residents are likely to visit the adjacent Panthers Leagues Club for entertainment. It is a licensed venue and gaming facility, which raises the risk of people developing an alcohol or gambling addiction. Young people are considered more at risk of these.
- The development site is located close to hotspots for theft, domestic assault and malicious damage around the Penrith City Centre and the residential area of Jamistown, adjacent to the Penrith Panthers Precinct in the south-east. In terms of non-domestic assault, there were hotspots near the Penrith Panthers Club and Penrith City Centre. The risk of theft, assault and malicious damage may be of concern for ESQ 1818 residents, workers and visitors in their new environment.
- There may be some visual impact due to the proposed heights of buildings, which may impede views for some community members towards the Blue Mountains in the west and to the southwest. Residents of Mountainview are most likely to experience this impact, however the existing treeline which runs along the western boundary of the property is likely to block existing views. The inner areas of Penrith are all undergoing significant development, with many higher density developments underway or proposed for the suburb of Penrith. The ESQ 1818 development would therefore be consistent with other developments soon to be constructed, which may offset the potential impact of the development on the broader Penrith suburb.
- The development has the potential to create around 183 local jobs from restaurants and cafes only. This is around half the number of jobs that could be potentially created by a DFO.
- The development would increase the number of restaurants and cafes within the area, which may compete to an extent with existing restaurants particularly in Penrith CBD and Nepean Village shopping centre. This is considered a minor negative economic impact, as people are likely to continue to spend in Penrith CBD and Nepean Village. These places provide a range of other services, not available within the ESQ 1818 development. These include banking, shopping, major supermarkets, liquor stores and health services. People are likely to spend at existing restaurants while accessing other services in Penrith CBD and Nepean Village.

Social sustainability objectives

GHD has developed a set of social sustainability principles for ESQ 1818. The objectives will guide the social sustainability strategies and recommendations for ESQ 1818, to help create a vibrant, healthy, connected place to live, work and visit.

Principle	Characteristics
Healthy and active lifestyles	Local provision of high quality open space and recreation facilities will be provided to encourage active and healthy lifestyles and facilitate social interaction. Fresh food will be available at local shops and dining options, and there will be opportunities to grow fresh food and raise chickens. Access to public transport options, as well as active transport through cycling and walking, should be provided to encourage healthy lifestyles.
	Open space and associated facilities within the development including BBQs, outdoor kitchen gardens, kick about, tennis wall or basketball hoops and party spaces will be attractive and provide a variety of experiences. Shared play on a "common" will be a focal point for leisure and relaxation. Connected and low-cost locally-based recreation would be more socially rewarding, and desirable alternative to paid entertainment and gambling nearby. The Welcome Program recommended by GHD would foster these connections and combat social isolation which results in addictive behaviours.
	ESQ 1818 will be set in private open space that is open to the local community. With the exception of balconies and ground level service or courtyard structures the landscaped areas will be activated and accessible. A caveat or easement can be arranged to facilitate access and way finding signage can encourage connectivity.
Connected community	ESQ 1818 will be well connected to surrounding centres and jobs by high quality and safe pedestrian and cycle ways, allowing people to walk and cycle to shops, services, facilities and their workplace. Residents and workers will enjoy good access to public transport, including regular buses that connect to the Penrith CBD, as well as pedestrian and cycle routes to Penrith Station. The development will provide opportunities for residents to meet and make connections between generations and cultural backgrounds. Seating and landscaping will create intimate spaces for quiet conversation and tranquillity as well as inter-generational interaction. Pets will be accommodated further connecting apartment dwellers
	leading to reduced social isolation, especially for older people.
Safe and vibrant	Vibrant places are activated both during the day and at night, on weekdays and weekends. ESQ 1818 will provide a safe, interesting place to spend time, with a variety of things to do for all community members. All community members, from children to seniors, will feel safe to walk throughout and beyond the development at all times of the day.

Table 1 Social sustainability principles and characteristics

Principle	Characteristics
Diverse and integrated community	As a mixed community, residents, workers and visitors will interact daily, sharing the identity of ESQ 1818 as a friendly, integrated and vibrant community. A diversity of household types will be supported by a range of apartment sizes. As a child-friendly and seniors-friendly community, public spaces and streets will be safe and accessible and provide spaces for conversations and connections.
Connected to nature	The community will have access to high quality green spaces and Penrith's natural assets including the Nepean River. Recreational facilities and well-designed shared spaces in and between buildings will provide places for interaction and play. Features such as the lake boulevard and nature walk will provide a direct connection to the natural environment on a daily basis. Consideration will be given to planting of species of significance to
	local Aboriginal people including a bush tucker garden. Landscaping will encourage native birds to complement the remnant bushland and River corridor.

Social sustainability plan

GHD has developed a Social Sustainability Plan for ESQ 1818 based on the social sustainability objectives and the assessment of potential socio-economic issues arising from the development. Recommended strategies within the plan include:

- Providing information and programs for new residents through a Welcome Program to be delivered by a local community organisation. The Program would include information about local services, facilities and activities.
- Provide a multipurpose space within the development to promote social interaction and community use. A multipurpose space could include a creative industries hub, with offices, equipment and workshop spaces for hire. Activities under the recommended Welcome Program could be run in this multipurpose space.
- Connect the development with pedestrian and cycle paths to existing pathways along Mulgoa Road. These paths should have high amenity and be easily identified through planting, signage and pedestrian/bicycle priority while protecting them from increased traffic.
- Deliver the development's recreation and retail components early in the development to provide opportunities for new residents and visitors.
- Design additional apartments according to the universal design principles, in line with the *Liveable Housing Design Guidelines*. Liveable dwellings are suitable to a range of occupants, including older people and people with a disability. Liveable dwellings are easier to enter, safer to move around in, more capable of cost-effective adaptation, and designed to better anticipate the changing needs and abilities of occupants.
- Require all pathways, private and public open space, community facilities and public domain areas meet universal access guidelines.
- Incorporate Crime Prevention Through Environmental Design (CPTED) principles throughout the development.

• Prepare and implement a public art strategy to create a sense of identity for new communities while recognising the cultural heritage of the area.

Table of contents

1.	Introduction1		
2.	The ESQ 1818 development2		
	2.1	Surrounding areas	3
3.	Meth	nodology	5
	3.1	Social sustainability frameworks	5
	3.2	Socio-economic impact assessment guidelines	5
	3.3	Approach	7
	3.4	Study Area	8
4.	Soci	al policy context	10
	4.1	NSW Government	10
	4.2	Penrith City Council	10
	4.3	Key implications	16
5.	Com	munity Profile	17
	5.1	Existing residents	17
	5.2	Existing workers and visitors	25
	5.3	Existing Social Infrastructure	27
	5.4	Key Implications	35
6.	Futu	re Community Profile	36
	6.1	Indicative future residents	36
	6.2	Indicative future workers	37
	6.3	Indicative future visitors	39
	6.4	Key implications	39
7.	Cons	sultation	40
	7.1	Penrith City Council	40
	7.2	Emergency Services	41
	7.3	State government agencies	42
	7.4	Key implications	43
8.	Soci	al sustainability objectives for ESQ 1818	45
9.	Soci	o-economic impact assessment	48
	9.1	Demographic and population change	48
	9.2	Accommodation and housing	48
	9.3	Mobility, access and universal design	49
	9.4	Community and recreation facilities and services	51
	9.5	Cultural values and beliefs	55
	9.6	Community identity and cohesion	56
	9.7	Cohesion of the development and its surrounds	56
	9.8	Health	57

	9.9	Risk perception in the community and crime and public safety	.58
	9.10	Social amenity	.58
	9.11	Local economy and employment	.59
10.	Socia	I Sustainability Plan	.60
11.	Conclusion		
12.	Glossary and Abbreviations		
13.	Refer	ences	.69

Table index

Table 1 Social sustainability principles and characteristics	vi
Table 2 Proposed apartment mix	3
Table 3 Penrith Council key issues and policy	12
Table 4 Penrith City Council strategies and relevant objectives and actions	12
Table 5 Crime rates per 100,000 people, 2015	24
Table 6 Rate of alcohol and non-alcohol related assault offences per 100,000 people, 2015	24
Table 7 Schools in local catchment area, ACARA 2015	27
Table 8 Indicative age profile for ESQ 1818 residents compared to Penrith suburb and Penrith LGA	37
Table 9 Potential number of jobs for the ESQ 1818 development	38
Table 11 Social sustainability principles and characteristics	46
Table 12 Child care requirements	52
Table 13 Social sustainability plan	61

Figure index

Figure 1 Map showing location of the Penrith Panthers Precinct	2
Figure 2 Panthers Penrith Precinct concept plan identified in the Penrith DCP	3
Figure 3 Concept plan showing features and building heights in the ESQ 1818 development	1
Figure 4 Proposed landscape plan for the ESQ 1818 development and areas surrounding the lake (note: not all features labelled)	2
Figure 5 View across the Nepean River to existing residential area	3
Figure 6 Walker along the Great Western Highway near the Nepean River	4
Figure 7 Local Study Area	8
Figure 8 Penrith suburb	9
Figure 9 Penrith LGA	9
Figure 10 Age profile, 2011	18

Figure 11 Households, 2011	19
Figure 12 Families, 2011	19
Figure 13 Tenure, 2011	20
Figure 14 Occupations, 2011	21
Figure 15 Industries of occupation, 2011	22
Figure 16 Vehicle ownership, 2011	23
Figure 17 Existing business and employment in the LGA, 2013-14	25
Figure 18 Employment hotspots within the LGA, 2011	26
Figure 19 Mountainview Retirement and Aged Care	29
Figure 20 Nepean Belle Paddlewheeler on the Nepean River	30
Figure 21 Playground at Tench Reserve	31
Figure 22 Aqua Golf	32
Figure 23 Nearby social infrastructure	34
Figure 24 Social sustainability objectives for ESQ 1818	45
Figure 25 Hotspot for incidents of breaking and entering a dwelling	85
Figure 26 Hotspot for incidents of malicious damage to property	86
Figure 27 Hotspot for incidents of domestic assault	87
Figure 28 Hotspot for incidents of non-domestic assault	88
Figure 29 Hotspot for incidents of stealing from a motor vehicle	89

Appendices

- Appendix A Demographic Summary
- Appendix B Penrith Social Infrastructure
- Appendix C Bureau of Crime Statistics and Research (BOCSAR) Crime Maps

1. Introduction

The Panthers Precinct is home to the Penrith Panthers Football Club. Located close to the Nepean River, Panthers Club plans to transform the Precinct into an integrated mixed use development including residential, retail, commercial, entertainment and leisure uses and facilities.

Located within the Penrith Precinct, ESQ 1818 is a proposed residential development by CABE. It would include 859 apartments, $3,300 \text{ m}^2$ of retail as well as recreational areas and pathways around the existing lake within the Precinct.

The ESQ 1818 development is permissible with consent of Penrith City Council. It is a proposed change of use from what is identified within the Penrith Development Control Plan 2014 (DCP) for the site, which was previously identified as an outlet retail centre.

GHD has been engaged by CABE to prepare a socio-economic study to support a Development Application (DA) for the proposed ESQ 1818 development. The socio-economic study provides:

- A consideration of how the ESQ 1818 development may change the community's way of life and how they will live, work, play, and interact with one another.
- Identification of potential socio-economic benefits and risks resulting from the ESQ 1818 development, along with the stakeholder groups that may be affected by each impact and the significance of the impact.
- An assessment of the economic impacts of the proposed ESQ 1818 development .A social sustainability plan which identifies objectives for the development and recommended strategies to enhance the social sustainability of the development for existing and incoming communities.

2. The ESQ 1818 development

Located around one kilometre from the Penrith City Centre, the Panthers Precinct covers an area of approximately 68.1 hectares. Figure 1 shows the location of the Panthers Precinct.



Figure 1 Map showing location of the Penrith Panthers Precinct

(Source: ESQ 1818 The Residential Story, CABE and Turner)

The Precinct currently incorporates a range of entertainment and tourist facilities including:

- The Penrith Panthers Football Club with licensed restaurants, bars and lounges.
- Events and function space.
- Hotel accommodation.
- Sports and leisure facilities including Aqua Golf, iFly (indoor sky diving) and Cables Water Park.

The 2014 Penrith Development Control Plan (DCP), provides for the Panthers Penrith Precinct to be revitalised as an entertainment, leisure, lifestyle and sporting precinct. In addition to the existing facilities, the Panthers Precinct will also include:

- Restaurants and cafes.
- A mix of retail offerings including general retail.
- Hotel and serviced apartment accommodation.
- A multi-use events and exhibition centre.
- Residential and seniors living.
- Commercial uses comprised of office-style business developments.

The ESQ 1818 development will be located on lots 2, 3a and 3b. In the DCP, lot 2 was identified as a potential location for an outlet retail centre, most likely a Direct Factory Outlet (DFO). The

ESQ 1818 development is proposed as an alternative to the DFO. Figure 2 shows the lots and proposed uses identified in the Penrith DCP.



Figure 2 Panthers Penrith Precinct concept plan identified in the Penrith DCP

(Source: Penrith Development Control Plan 2014)

CABE is proposing to develop the site with 859 apartments with a range of bedrooms. The apartments would range in size, with one, two and three bedroom apartment types all offering a smaller and larger design.

The proposed apartment mix is shown in Table 2 below.

Table 2 Proposed apartment mix

Apartment type	Proportion	Total
1 bedroom	32%	278
2 bedroom	60%	513
3 bedroom	6%	53
4 bedroom	2%	15

(Note: Due to rounding to the nearest number, there may be some discrepancies in total numbers)

The concept plan for the ESQ 1818 development, prepared by Turner Architects, shows that the 859 apartments would be spread over 11 buildings, ranging in height from four to 14 storeys. The development would occur over five stages. Figure 3 shows the proposed concept plan and features within the development.

The ESQ 1818 development would include 3,300m² of retail space located on the ground floor of buildings facing the lake which would include dining options such as cafes and restaurants, and potentially a small fresh food market/deli (e.g. an IGA). A nature walk area would also be included at the northern edge of the development where the existing creek line of Showground Creek is located. An interior street east-west street and pedestrian pathways would transect groups of buildings to provide connections throughout.

CABE is also proposing that a pedestrian and cycle pathway could be provided around the lake. Other proposed features would include flexible passive recreation areas including:

- A kickabout area.
- Forecourt with seating in front of the Panthers Club.
- Fitness stations.
- Seating around the lake.
- An amphitheatre.
- Play spaces.

These features fall outside of the site boundary, so they could be provided by Panthers Group in the future. However, CABE is proposing that these facilities could be provided as part of the ESQ 1818 development. This would be in lieu of Section 94 Developer Contributions that may have otherwise been collected by Penrith City Council to provide social or physical infrastructure outside the precinct. As existing Section 94 plans do not anticipate the ESQ 1818 development CABE will work with Council to support a review of these plans or develop a voluntary planning agreement to meet the identified needs of the future community. Figure 4 provides a preliminary landscape plan showing these potential features. These facilities would be accessible to the broader community.



Figure 3 Concept plan showing features and building heights in the ESQ 1818 development



Figure 4 Proposed landscape plan for the ESQ 1818 development and areas surrounding the lake (note: not all features labelled)

2.1 Surrounding areas

According to the 2014 Penrith Development Control Plan (DCP), the Panthers Penrith Precinct lies within the Penrith Riverlink Precinct Plan. This area, on the eastern bank of the Nepean River, includes locations and types of future activity nodes, view corridors, key gateway locations and connections for the precinct. A vision has been established by Penrith City Council for the Riverlink Precinct which has the broad goal of creating a living, entertainment and working hub to link the City Centre to the Nepean River.

The Panthers Precinct is located to the east of the Nepean River along Mulgoa Road. Directly adjacent to the ESQ 1818 site is the Mountainview Aged Care and Retirement Village. Provided by Hardi Aged Care, the complex includes independent living units and a nursing home with 99 beds.

To the west of the Precinct and along the bank of the Nepean River (see Figure 5) is an established residential area primarily consisting of separate houses. This area lies to the south of the Great Western Highway which crosses the River via the Victoria Bridge. There is no public access to the River foreshore between the bridge for around one kilometre south.



Figure 5 View across the Nepean River to existing residential area

To the south of this existing residential area, the River foreshore is publicly available, with a pedestrian pathway leading to the Penrith Picnic Park, a large park with children's playground and picnic areas.

The pathway continues along the Nepean River and pedestrian walkways cross the River at the M4 Western Motorway bridge to connect with pedestrian links on the opposite bank. Here the pathway continues along the foreshore, and the river can again be crossed to the north at the Victoria Bridge. This loop is popular with many community members (see Figure 6). The pathway is part of the Great River Walk which aims to create a continuous walking trail for the entire length of the Hawkesbury Nepean river system from Goulburn to Broken Bay. Council has progressively funded and constructed stages of the Great River Walk (Clouston Associates, 2013).



Figure 6 Walker along the Great Western Highway near the Nepean River

3. Methodology

This socio-economic study identifies the potential socio-economic opportunities and risks resulting from the proposed ESQ 1818 development. It has been informed by leading practice frameworks for ensuring social sustainability is a key consideration and outcome of developments, and for socio-economic studies.

3.1 Social sustainability frameworks

The frameworks and guidelines which provide evidence-based requirements for social sustainability that have been used to inform this assessment are discussed below.

Green Star Communities

This Guide was developed by the Green Building Council of Australia as a resource for councils to encourage community development projects in their LGA. It explains how councils can use the *Green Star – Communities National Framework* and the *Green Star – Communities Rating Tool* to support and achieve improved economic, social and environmental outcomes across different elements of the built environment. The Guide details actions for developments such as embracing best practice community engagement and adopting a sustainable and long-term approach to the planning and provision of community infrastructure.

http://www.gbca.org.au/green-star/green-star-communities/

EcoDistricts

In the US, the EcoDistricts framework aims to create sustainable cities from the neighbourhood up. A new model of urban regeneration and community development, the EcoDistricts Protocol is a tool that supports and rewards district-scale projects in setting rigorous performance goal and management structures. Each step of the EcoDistricts approach is built around an interrelated set of environmental, economic, and social performance areas. http://ecodistricts.org/

Creating Stronger Communities

In the UK, the Berkley Group developed the Creating Stronger Communities framework, which measures the social sustainability of new housing and mixed use developments, including in inner city London.

http://www.berkeleygroup.co.uk/sustainability/social-sustainability

EnviroDevelopment

EnviroDevelopment is a national rating tool which provides independent verification of a project's sustainability performance. It is an initiative of the Urban Development Institute of Australia (Queensland) and was established to drive the delivery of more sustainable communities and spaces.

http://www.envirodevelopment.com.au/

3.2 Socio-economic impact assessment guidelines

Social Impact Assessment: Guidance for Assessing and Managing the Social Impacts of Projects (Vanclay et al, 2015)

The International Association for Impact Assessment (IAIA) defines Social Impact Assessment as the process of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment.

These guidelines provide a framework for the preparation of social impact assessments, which have informed GHD's approach.

Planning Institute of Australia Social Impact Assessment Position Statement (PIA, 2010)

The Planning Institute of Australia position on Social Impact Assessment states that:

- 1. Impact assessment is an important part of planning and decision making processes.
- 2. Proposals for change which require an environmental or economic impact assessment also require a social impact assessment.
- 3. Social impact assessment of policies or plans should be sufficiently robust to anticipate the impact of proposals made under the plan and minimise the need for further assessment.
- 4. Without limiting the matters in regard to which a social impact assessment may be appropriately required, proposals for:
- 5. larger developments, including: major retail, sports or social infrastructure proposals
- 6. a significant change of land use, including: new highways, loss of agricultural land
- 7. sale or rezoning of publically owned land
- 8. new planning policies and plan amendments to them, and/or
- 9. controversial uses or increases in intensity (e.g. brothels or gun shops, or of gaming and liquor outlets) should be fully assessed for their social impacts in a SIA.
- 10. Social impact assessment should be undertaken by appropriately trained and qualified personnel using rigorous social science methodologies and with a high degree of public involvement.
- 11. A social impact assessment should be a public document.

This position has been considered in the preparation of this SIA.

Penrith Development Control Plan (Penrith City Council, 2014)

The DCP defines the Riverlink precinct as having a "broad goal of creating a living, entertainment and working hub to link the city centre to the Nepean River" (Penrith City Council, 2014). It lists a number of objectives to achieve this goal such as improving connectivity, enhancing Showground Creek, encouraging design excellence, and creating a core of entertainment, leisure and lifestyle uses around the existing Panther's club.

Specifically to the Panthers' north-sub precinct, the DCP recommends outdoor dining, cafes and restaurants and ground level retail, rathers than an internalised mall. The aim of these recommendations is to utilise the views of the Blue Mountains and lakeside. Maintaining the privacy and amenity of existing, adjoining residences is also a key concern.

The DCP aims to encourage developers to consider the social needs of the local community as well as a development's potential social impacts. It requires that socio-economic impact assessments should discuss whether proposed developments will have a positive or negative impact on the locality, and provide mitigation measures to address any negative impacts.

According to the DCP an SIA must:

- 1. Identify the Community Identify the existing community and the proposed future community. This will include a demographic assessment of existing and proposed communities
- 2. Identify the Needs Identify the needs of the community based on the assumption made as part 1) above. This includes health, recreation, education, employment, etc
- Identify the Issues Identify the issues that will impact on those communities and needs particularly the ability of existing facilities to meet the needs of existing and proposed communities
- Develop Recommendations and Mitigating Measures Assess how the proposal will avoid or mitigate social impacts, including reference to any additional infrastructure proposed to be provided.

Economic impact assessments must:

- 1. Identify the likely spheres of impact (traditional retail, bulky goods, child care centres, etc.)
- 2. Identify the likely extent of impact, based on proximity, similarity of service, etc
- 3. Demonstrate that there is sufficient market for the proposed use or that the proposed use meets an unmet need in the area.

3.3 Approach

Based on these leading practice frameworks and guidelines, the following tasks have been undertaken to inform the assessment:

- Scoping of potential socio-economic impacts and opportunities with CABE and Penrith City Council's social and economic planners.
- Site visit to understand the existing environment.
- Review of the policy context including NSW Government and Penrith City Council strategies.
- Development of a community profile for existing communities within the Study Area. This has been based on analysis of Australian Bureau of Statistics (ABS) Census data for 2011. More information on the Study Area is provided in Section 3.4.1.
- Development of an indicative future profile for the development (see Section 6 for more information about the approach taken).
- An audit of existing and proposed community infrastructure, including a map to show their location in relation to the Panthers Precinct.
- Consultation with service providers including Penrith City Council, NSW Department of Education, NSW Health and emergency services.
- Assessment of potential social risks and opportunities that may result from the ESQ 1818 development.
- Identification of social sustainability priorities and recommendations outlined in a Social Sustainability Plan for the ESQ 1818 development.

3.4 Study Area

As discussed in Section 2, the ESQ 1818 development site is located in the Panthers Precinct. This section describes the study areas established for the socio-economic assessment. These include a local study area (where the site is located), suburb and Local Government Area (LGA). They have been defined according to the relevant Australian Bureau of Statistics (ABS) catchments. These are described below.

3.4.1 Local Study Area

The local study area for the socio-economic study was defined according to the communities with the potential to benefit or be impacted by the proposal. To understand the characteristics of these communities, the local study area was determined by establishing the ABS Statistical Area Level 1 (SA1) catchment which the site is located within. SA1s are the smallest levels of population data collection by the ABS.

The ESQ 1818 development and Panthers Precinct site are located within SA1 1146424. The adjacent SA1 (1146407) may also be most directly impacted or benefit from the proposal, and therefore has been included within the local study area. These two catchments have been combined to create the local study area, which for the purpose of this study is called 'Riverlink'. The local study area (Riverlink) and the SA1 boundaries are shown in Figure 7 below



Figure 7 Local Study Area

Given presence of the retirement village, key elements of the demographic analysis for the local study area are skewed in line with the profile of the retirement village residents. As ESQ 1818 is not targeted at aged care, GHD has analysed the SA1s separately where relevant in the community profile (Section 5). For ease of reading, these have been labelled as Riverlink East (where the site is located) and Riverlink West (the residential area located on the Nepean River).

3.4.2 Regional study areas

To understand the broader socio-economic opportunities and risks, and to provide a point of comparison, GHD has considered the ABS catchments for the suburb of Penrith and the Penrith LGA as the regional study areas. These are shown in Figure 8 and Figure 9 below.



Figure 8 Penrith suburb

Figure 9 Penrith LGA



4. Social policy context

This section provides a summary of key government policies and strategies related to the social sustainability of the proposed development. These include documents from the NSW Government and Penrith City Council.

4.1 **NSW Government**

4.1.1 A Plan for Growing Sydney, Department of Planning and Environment (2014)

A Plan for Growing Sydney is the NSW Government's overarching strategy that will guide land use planning decision in metropolitan Sydney for the next 20 years. The Plan sets down goals that Sydney will be:

- A competitive economy with world-class services and transport.
- A city of housing choice with homes that meet our needs and lifestyles.
- A great place to live with communities that are strong, healthy and well connected.
- A sustainable and resilient city that protects the natural environment and has a balanced approach to the use of land and resources.

Under the Plan, Penrith is identified as one of Sydney's Strategic Centres and Regional City Centres, which will be the focus for additional housing, jobs and services. Jobs growth will be focused particularly on professional services, health and education. Surrounding communities are also expected to access jobs, services and transport in Penrith, including the growing North West Growth Centre (Action 1.7.4). Penrith falls under the West Subregion and priorities which relate to Penrith include:

- Accelerate housing supply, choice and affordability and build great places to live.
- Protect the natural environment, including the Hawkesbury-Nepean River.
- Retain a commercial core in Penrith as required for long-term employment growth.
- Provide capacity for additional mixed-use development in Penrith including offices, retail, services and housing.
- Improve walking and cycling connections between Penrith and the Nepean River.
- Penrith is also a focus for improved public transport services and improved accessibility for walking and cycling, under the *Long Term Transport Master Plan (*Transport for NSW, 2012).

The Plan also identifies the Penrith Education and Health Precinct as a Strategic Centre. The NSW Government will support the growth of Education and Health Precincts, including planning for public transport connections and ensuring there is sufficient housing close by for workers and students (Action 1.10.2).

4.2 Penrith City Council

4.2.1 Penrith Community Plan, Penrith City Council (2013)

The *Community Plan* identifies the community's aspirations for Penrith City over the next 20 years, setting out long term community outcomes and strategies to achieve these. Based on the Plan's community outcomes, the community's goals and values include:

- We can work close to home.
- We plan for our future growth, including better community services and housing options for older people and community groups in the City.
- We can get around the City through improve roads, public transport, footpaths and cycleways.
- We are healthy and share strong community spirit. Access to outdoor areas, sport and recreational opportunities was important. Community, social and cultural services and facilities were also priorities.

Council has identified strategies to achieve these outcomes include:

- Facilitate quality development that encourages a range of housing types, employment, recreation and lifestyle opportunities.
- Ensure services, facilities and infrastructure meet the needs of a growing population.
- Improve the City's footpaths and shared pathway network.
- Improve our public spaces and places.
- Protect and improve our natural areas, the Nepean River and other waterways.
- Provide opportunities for our community to be healthy and active.

4.2.2 Penrith City Strategy, Penrith City Council (2013)

The *City Strategy* outlines Council's policy responses to the City's potential key issues over the next 10 to 20 years. The *City Strategy*'s issues and policy responses inform the *Community Plan* and *Delivery Program*.

The Strategy identified that greater diversity of housing types is needed to suit changing community needs. These include an ageing population and increase in single person households. According to the strategy, apartments, townhouses and smaller dwellings will meet some community needs, including younger residents as well as older residents who want to 'downsize' but stay in their own neighbourhoods. The number of people choosing to live in apartments and townhouses has increased in recent years and there has been a decrease in those choosing separate and medium density housing. The Strategy states that approximately 60% of new housing should be medium to high density development within 800 metres of a centre and 40% of new housing low to medium density development.

The Strategy identified that the dispersed nature of employment centres and the distance from public transport are critical issues. Residents want to work closer to home whilst reduce travel time.

Active transport (walking and cycling) is slowly becoming more popular for travel to school or work, and leisure. There is also increasing demand for open space that is accessible and meets the needs of different age groups.

Council's policy responses to key issues which are relevant to this study are listed in Table 3 below.

Issues	Policy responses		
Housing	 Plan for housing that meets community needs with regard to supply, choice, design quality, sustainability and affordability. 		
	 An additional 25,000 dwellings between 2006 and 2031. 		
	 A choice of housing that responds to a diverse community and changing household structures. 		
	 Medium and high density residential development located in and adjacent to the City's centres. 		
Jobs and economy	 Attract strategic investment, facilitate employment diversity and growth, promote job clusters and encourage local workforce skills and training. 		
Transport and access	 Improve the City's footpaths and shared pathway network. 		
Infrastructure delivery	 Social and public infrastructure meets the needs of the community. 		
Community wellbeing	Active recreation and leisure activities in the City.		

4.2.3 Strategies which informed the Penrith City Strategy

Council prepared several studies and strategies to inform the *Penrith City Strategy*. A summary of these documents and the objectives or actions which are relevant to this socio-economic study is provided in Table 4 below.

Table 4 Penrith Cit	y Council strat	egies and relevant	objectives and actions
----------------------------	-----------------	--------------------	------------------------

Strategy	Relevant objectives/actions
Penrith Open Space Action Plan (2007)	 Provide high quality recreational open space for all members of the Penrith community.
(,	 Progressively build upon the existing network of local/regional walking/cycling paths.
	 An opportunity for a network of off-road cycleways from Penrith Lakes with connections to Penrith City Centre, adjoining bushland and other recreational precincts along the Nepean River.
Penrith Accessible Trails Hierarchy	 To enhance the safety of the trails network by planning off-road shared pathways (where possible).
Strategy (PATHS) (2012)	• The Nepean River Recreational Path (Leland Street to Bellevue Road) is a priority trail, which may include part of the ESQ 1818development site.

Strategy	Relevant objectives/actions
Penrith Regional City Infrastructure Strategy (2008)	 Maximising liveability – High quality public domain including open spaces.
	 Open spaces will provide for recreation, cultural and leisure activities and promote a healthy lifestyle.
	Promoting economic development is also a priority.
Penrith Recreational and Cultural Strategy (2004)	Provide quality open space areas.
	 Progressively build upon the existing network of local and regional walking and cycling paths.
	 Develop an integrated paths strategy for walking, cycling and equestrian paths across the City.
Revitalising Penrith City Centre Plan (2007)	 Encourage increased residential densities within the city centre and in key locations adjoining the city, and investigate affordable housing opportunities.
	 The Strategy supports employment growth in Penrith, particularly locating businesses in the commercial core.
Penrith LGA Employment Lands Study Stages 1 and 2	 Council should encourage commercial/office space development and redevelopment within the Penrith CBD.

4.2.4 Penrith Economic Development Masterplan, Penrith City Council (2014)

This report outlines Penrith's economic development direction over 10 years. Aims of the report include strengthening the local economy, reducing commuting and attracting and retaining young workers in the City. The report identifies growth sectors, where Penrith can compete and create jobs:

- Lifestyle health (e.g. preventative health systems, senior health and wellbeing, allied health).
- Creative information, digital media and telecommunications.
- Advanced engineering, manufacturing and construction.
- Global advanced education (e.g. international service education, special education).
- Advanced logistics.

The Masterplan also looked at initiatives that could support economic development for Penrith:

- A mix of housing types are required to serve growing and diverse needs, including students, young professionals, ageing population and home buyers.
- Penrith could expand its already important leisure and lifestyle offering to encourage people to spend time within the local economy.
- Walkable neighbourhoods, including improved public domain, an enhanced river precinct and other urban woodlands and parks were identified as essential.

The Masterplan presented a potential Economic Development Masterplan, which includes the Penrith Panthers site. The Panthers Masterplan previously proposed the site would include:

- 500 units.
- 250 seniors living units.
- Serviced apartments.
- Entertainment facilities.
- 12,500 m² general retail.
- 25,000 m² of outlet shops.
- 25,000 m² of office space.
- An elite learning centre.
- Sporting fields.

The report states that the masterplan can be modified based on Council preferences and market demand but emphasises that the mix of land uses is critical for Penrith's future economic development.

4.2.5 Penrith Progression: A Plan for Action, Penrith City Council and Penrith Business Alliance (2015)

Penrith Progression is an initiative of Penrith City Council and the Penrith Business Alliance to transform the City Centre and deliver sustainable economic development. With a 2031 target of 40,000 new jobs and 35,000 dwellings, the vision for the City Centre is to connect people with jobs, investors with opportunities and businesses with people working or living in the City Centre.

The action plan was developed through the collaboration with community members, investors, government, art and education providers, and businesses. Ideas from the community, included:

- Foster investment and innovation.
- Make pedestrian and cycle friendly streets.
- A 24-hour city that is vibrant, lively and safe, with a night-time economy.
- More density and diversity, including smart mixed use design, cafes, restaurants, bars and more housing types.
- Connect to our River with a focus on accessibility, restaurants, cafes and a green corridor of parks for mixed use.

The Panthers Precinct is identified as a major attraction and gateway for many residents and visitors to the City. The plan recognises that the Precinct has the potential for growth in adventure, sports and living options around the edge of the City Centre. In addition, actions of the plan which are relevant to this study include:

- Activate the edges of the Nepean River, with restaurants and cafés along Tench Avenue, and events in the riverside parks.
- Promote high-density development on accessible sites that support sustainable travel options.
- Encourage public spaces and permeability in and around new developments.
- Improve pathways, public spaces and connections to encourage pedestrians and cyclists in the core of the City Centre.

4.2.6 Penrith Night Time Economy Study and Strategy, Penrith City Council (2015)

The vision of this strategy is for a night time economy in Penrith which is safe, diverse and busy. It aims to build on Penrith's current strengths, including:

- The existing night time economy, including well established licensed premises.
- Significant leisure and recreation assets, including the Panthers Precinct.
- Potential for growth by increasing populations within the City and opportunities generated by major developments.

The strategy principles which are relevant to the ESQ 1818 development, include:

- Diversification and growth, including forging more effective links with existing attractors in the region such as the Panthers Precinct.
- Activating the public domain by creating an attractive and safe place to be.

4.2.7 Penrith City Council Community Research, Penrith City Council (2012)

To inform its review of the *Penrith Community Plan*, Council conducted community engagement activities, including a City-wide survey to all residents of the LGA and focused consultation with targeted priority groups (e.g. young people, Culturally and Linguistically Diverse (CALD) people, people with a disability and Indigenous people). The community research found that the community valued:

- Improving residents' lifestyles: the provision of jobs closer to home and better community services were identified by residents as the key areas that would improve their lifestyle.
- Creating a more liveable city: To improve liveability, residents have a strong focus on improving roads and public transport. Footpaths and cycleways are identified as being in the '3rd line' of priority for a more liveable city.
- Retaining residents in the local area: A safe, friendly community, with quality services and local employment opportunities is identified as the key to retaining residents. The provision of increased housing would also contribute to retaining local residents.

4.2.8 Penrith Development Control Plan 2014 (2014)

The Development Control Plan 2014 (DCP) provides guidance on development within the City of Penrith. It aims to promote high quality, sustainable development which is consistent with Council's vision for Penrith and responds appropriately to the natural and built environment. The DCP provides sustainability principles which are relevant to this socio-economic study including:

Achieve long term economic and social security

- Encouraging the integration of housing with other land uses which provide employment, social and cultural opportunities.
- Encouraging the use of the principles of universal design, so that the public domain is accessible to people in all stages of life and with all levels of mobility.
- Encouraging a range of uses and employment opportunities to create a mixed income and mixed demographic community.

Expand and enable cooperative networks to work towards a common, sustainable future

- Encouraging the provision of community spaces, both (internal and external) for future developments within the City. Use of these spaces will help to encourage meeting and gathering and help develop a sense of community, which will in turn encourage people to have a say in how their community develops.
- Encouraging development to consider social needs and potential social impacts, to minimise and mitigate against potential impacts within both the existing and future communities.

Provide a long term vision for cities, based on sustainability; intergenerational, social, economic and political equity; and their individuality

• Integration of Penrith's Principles for a Sustainable City throughout the document.

The DCP includes the Riverlink Precinct Plan, which has been described in Section 2.1. The DCP outlines the vision for the Penrith Panthers Precinct:

- Contribute to the growth and character of Panthers Penrith Precinct as a cohesive and active entertainment, leisure, lifestyle (including sporting) precinct that will contribute to Penrith as a regional city.
- Deliver a balanced social, economic and environmental outcome.
- Protect and enhance the public domain.

In terms of connectivity, the Riverlink Precinct Plan includes pedestrian walkways and cycleways. It identifies a shared path along the eastern edge of the Nepean River through the Penrith Panthers Precinct. This will provide a link between the Great River Walk to the north and Jamison Road to the south.

4.3 Key implications

Penrith is set to become one of Sydney's Strategic Centres and Regional City Centres, which will be the focus for additional housing, jobs and services. Penrith is expected to service surrounding communities, including the growing North West Growth Area. In order to support Penrith's growth and changing community needs, there is a need for a range of housing types, employment, recreation and lifestyle opportunities. By building on the existing night time economy, Penrith could become a vibrant, lively and safe destination within the region. State and local government policies emphasise the need for employment, infrastructure and services located close to homes to reduce travel times and retain young workers in the City.

The policies also highlight the need to enhance the public domain and open space, with opportunities to create shared pathways to link Penrith with the Nepean River and Great River Walk.

5. Community Profile

This section presents the community profile for Riverlink, the local study area where the ESQ 1818 development site and Panthers Precinct are located. This has been compared to Penrith suburb and Penrith LGA. As discussed in Section 3.4, where relevant, the smaller areas within the local study area are also referenced where relevant. A summary of the key demographic indicators for the existing community is described in the sections below.

5.1 Existing residents

To gain an understanding of the existing resident community of the study area, data from the ABS Census 2011 has been analysed. Two census statistical areas (SA1 1146424 and SA1 1146407) were used to create an indicative profile of the existing community around the proposed development. As described in Section 3.4.1 above, these areas have been called Riverlink East and Riverlink West respectively, with the local study area collectively known as Riverlink.

At the time of the 2011 Census, there were 840 people living in Riverlink in 339 dwellings, comprising 7% of the total Penrith population. As discussed in Section 3.4.1, this includes:

- Riverlink West with the Mountainview retirement village and aged care complex
- Riverlink West made up of detached dwellings on large lots.

Very few people in the study area identified as Indigenous in the Census. However, significantly fewer people in Riverlink identified as Indigenous (0.4%), than in Penrith (4%) or in the LGA (3%).

5.1.1 Age profile

Riverlink East has a significantly higher proportion of people aged over 60 years than Penrith suburb and the LGA reflecting the presence of the retirement village in this area. Riverlink West has a much more similar age distribution to Penrith and the LGA. However, fewer people aged between 25-34 and more people aged between zero to four and 35 to 69 live in this area.

The age profile for each of these regions is shown in Figure 10.



Figure 10 Age profile, 2011

5.1.2 Cultural diversity

Cultural and linguistic diversity is demonstrated by the numbers of residents who were born in non-English speaking countries, and language spoken at home. Based on these indicators, Riverlink is slightly less culturally diverse compared to the suburb and the LGA, with less residents speaking a language other than English at home (7% compared to 14% for the suburb and 15% for the LGA) and less born in a country where English is not the dominant language (9% compared to 14% for the suburb and 13% for the LGA). There is no dominant language other than English spoken in the Riverlink area, with only 1% of people speaking any other given language. These languages include Italian, Arabic, Mandarin, Dutch, German, Maltese and Macedonian.

Seventy-three per cent of Riverlink residents identified themselves as Australian by birth, with a further ten per cent of residents born in the UK, Channel Islands or the Isle of Man. Very few people were born outside of these areas with the Netherlands being the next most common place of birth at two per cent.

5.1.3 Households and families

Most households within Riverlink East are lone person households (Figure 11). Riverlink West is similar to the LGA. The majority of households (71%) were family households, compared to 20% for the LGA. This distribution of household types is shown in Figure 11.

Figure 11 Households, 2011



In Riverlink East, there was a higher proportion of couples , compared to the LGA. No couples were living with children. There was a large proportion of single parent families within this area.

In Riverlink West, 46% of families are comprised of couples with children. This is more than Penrith in general (35%) but less than the LGA (50%). Riverlink West also has a higher than average proportion of couple families without children (39%). Compared to Penrith and the LGA, one parent families are not common in Riverlink West, comprising only 11% of all family types. This distribution of community family types is shown in Figure 12.



Figure 12 Families, 2011

5.1.4 Tenure

Most people within Riverlink fully own their own properties (65.9%). This is over double the amount who fully own their own properties within the LGA (27.5%), and almost three times those within Penrith suburb (22.7%). Rented properties and properties that are owned with a mortgage are both present at lower levels in Riverlink than in the LGA and Penrith suburb (Figure 13). While the high levels of home ownership can be seen to correspond most prominently with the Riverlink East, Figure 13 shows that the Riverlink West also has much higher levels of home ownership than the LGA or Penrith.



Figure 13 Tenure, 2011

5.1.5 Income

The average weekly income for households in Riverlink East is \$418 per week, which is significantly lower than the median weekly income for the Penrith suburb at \$949/week and the LGA at \$1,398/week. This average reflects the inclusion of the retirement village in the profile, with the majority of residents likely to be receiving a pension. The maximum standard basic pension rate in 2011 was approximately \$335.45 per week (Australian Government 2016).

In comparison, households in Riverlink West earnt higher incomes compared to the Penrith suburb and LGA averages. The median household income for Riverlink West in 2011 was \$1,625 per week. Just over half all Riverlink West households (51%) earnt more than \$1,500 per week.
5.1.6 Employment

People in Riverlink East tend to work in 'white collar' roles such as managerial, professional, clerical and administrative. Fewer people work in 'blue collar' occupations these areas in comparison to Penrith and the LGA (Figure 14). Blue collar occupations include technicians and trades, community and personal service, machinery operators and drivers, and labourers. No labourers or machinery operators and drivers were recorded as residing in Riverlink East.



Figure 14 Occupations, 2011

Occupational industries are broadly similar throughout Riverlink, Penrith and the LGA (Figure 15). Health care and social assistance is the most common industry of employment within Riverlink (14%) and Penrith suburb (12%). This is followed by construction (14%), and professional, scientific and technical services (12%). Significantly less people in Riverlink work in the manufacturing, retail, and transport, postal and warehousing industries, than people in Penrith and the LGA.



Figure 15 Industries of occupation, 2011

5.1.7 Mobility

More than half of Riverlink residents (53%) lived at the same address as they did five years ago. This is higher than Penrith suburb at 46.6% and slightly lower than the LGA at 57.8%.

Figure 16 shows that most households within Riverlink own at least one vehicle (71.3%). Households without a vehicle tend to be in the Riverlink East, reflecting the presence of the aged care facility and nursing home in this location. Vehicle ownership within Riverlink West (95%) is similar the LGA (92%), but higher than Penrith (79%).



Figure 16 Vehicle ownership, 2011

5.1.8 Crime in the community and public safety

Based on the Bureau of Crime Statistics and Research (BOCSAR) (2015) crime rates per 100,000 people, the suburb of Penrith had high rates of some crimes compared with the LGA and NSW rates. Crime rates which are above state and local averages include:

- Fraud.
- Stealing from retail store.
- Malicious damage to property.
- Assault non-domestic violence related.
- Assault domestic violence related.
- Break and enter dwelling.
- Stealing from a motor vehicle.

As shown in Table 5 incident rates in Penrith were well above the LGA and NSW rates.

Offence	Penrith suburb	Penrith LGA	NSW
Fraud	3274.8	776.7	681.6
Steal from retail store	3105	392.6	295.6
Malicious damage to property	3008	1110.5	882.5
Assault - non- domestic violence related	2013.4	529.1	422
Assault - domestic violence related	1212.9	549.4	396.9
Break and enter – dwelling	897.5	524.2	441.2
Steal from motor vehicle	549.9	280.3	201.4

Table 5 Crime rates per 100,000 people, 2015

Source: NSW Bureau of Crime Statistics and Research, 2015

In terms of assault, most offences were non-alcohol related although the rate of assults in the suburb of Penrith was higher than the LGA and NSW. The rate of alcohol related non-domestic assault was higher than alcohol related domestic violence.

Table 6 Rate of alcohol and non-alcohol related assault offences per 100,000people, 2015

Assault offences	Penrith suburb	Penrith LGA	NSW
Alcohol related	1245.2	285.1	287.8
Alcohol related non- domestic violence	703.5	132.7	144.3
Alcohol related domestic violence	420.5	131.6	124.8
Non-alcohol related	2126.6	829.2	564.8

Source: NSW Bureau of Crime Statistics and Research, 2015

Hotspot maps, which show the highest density of recorded crimes per square metre, show that the ESQ 1818 development is located close to two hotspots for theft, domestic assault and malicious damage. These hotspots are centred on the Penrith City Centre and the residential area of Jamistown, adjacent to the Penrith Panthers Precinct in the south-east. In terms of non-domestic assault, there were hotspots near the Penrith Panthers Club and Penrith City Centre.

5.2 Existing workers and visitors

In the 2013/14 financial year there were approximately 70,400 people with jobs in the LGA (Economy id). About 57,700 of these people were employed in full time jobs or the equivalent. Most employment in the LGA is in the health care, retail, manufacturing, and education sectors. However the greatest proportion of businesses is in the construction industry (Figure 17). This may indicate that there are a large number of sole traders or small construction businesses, as there is one construction business for every 1.8 people employed in the industry.





Over 50% of residents are employed in the LGA. Those who work outside the LGA are employed in other Western Sydney LGAs including Blacktown (13%) and the Blue Mountains.

Within Riverlink most people travel to work by car. This is followed by travel by train (7%). Very few people within Riverlink work at home (5%) or use other forms of transport such as the bus in their work commute.

Figure 18 below, shows that the key employment areas within the LGA focus around the suburbs of Penrith, Jamisontown and Emu Plains, with other employment centres located at St. Marys and on the outskirts of Erskine Park. Employment opportunities in these areas may relate to the presence of: a town centre, bulky retail (e.g. Bunnings, Harvey Norman etc.), industrial and business area, accommodation, restaurants or shopping centres.

Figure 18 Employment hotspots within the LGA, 2011



Source: Australian Bureau of Statistics, Census of Population and Housing 2011. Compiled and presented in economy.id by .id, the population experts.

.IC populatio

Statistics compiled by Tourism Research Australia show that the main reason people visit the LGA is to visit family and friends, followed by holiday and leisure (Economy id, n.d.). Most visitors are domestic and will visit for the day (approximately 83%), though a number will stay overnight (approximately 16%). Only one 1% of visitors to the LGA are international, with most visiting the LGA to see family and friends (Economy id, n.d.).

A major attractor in the region for holiday and leisure trips is the Panthers Club. The Club has ten restaurants, 223 hotel rooms, an 850-person capacity theatre, gaming, bars, and recreation facilities (e.g. Cables Wake Park, indoor skydiving).

The main Club opens daily from 9 am to 6 pm only, with some restaurants and bars open until late. The Club also runs regular activities throughout the week, including gentle exercises, line dancing classes, trivia and poker. Club members have access to a courtesy bus, with a daily service Monday to Saturday and night time pick-up only service on Sundays. The bus stops at key locations in Penrith, including the train station and Mountain View Nursing Home.

The Club attracts local residents as well as visitors from outside the area, resulting in many people travelling in and out of the Panthers Precinct particularly on weekends, evenings and public holidays. Workers at the Club also contribute to the many people passing through the Precinct daily. Based on Figure 18 above, the Club employs between 465 to 1,197 workers in areas including hospitality, retail, administration and services. Both Panthers customers and workers are also likely to visit nearby attractions and facilities within the Precinct, such as the Great River Walk and Nepean River.

5.3 Existing Social Infrastructure

This section provides a summary of the community facilities, services and programs located within the local study area and parts of Penrith suburb. GHD determined the study area catchment with boundaries including the Nepean River, railway, major roads and freeways. Approximately 100 different facilities were identified in this area. Figure 23 shows a map of the social infrastructure described below. A full list is provided in Appendix B.

The catchment includes social infrastructure that is within 800 metres or a ten minute walk of the site. This is generally considered to be the maximum distance most people will walk to reach a local destination such as a park or shops in suitable weather conditions. 400 metres or a five minute walk is considered an easy walking distance for most local destinations. A reasonable walking distance is considered to be around 1 km, provided that pathways are available and shade and benches for resting punctuate the route.

Education

Table 7 below shows the schools within the local study area of the proposed development. This includes four primary schools, one of which is a non-government school, and two public high schools. All of the primary schools are located between two and three kilometres away. The nearest secondary school, Penrith High School, is located 2.4 km away. However, this school is selective and takes few students from the local catchment area (L. Moodie pers. comm. 1 March 2016). Instead, Kingswood High School is the nearest non-selective government high school within the proposed development's local catchment area. This school is 4.4 km from the proposed development and is on the 789 and 770 bus routes.

School	Туре	Years*	Distance to proposed development	Attendance
Penrith Public School	Government	U, K-6	2.3 km	395
Penrith South Public School	Government	U, K-6	2.1 km	429
St Nicholas of Myra	Non-government	K-6	2.0 km	220
Jamisontown Public School	Government	K-6	2.5 km	320
Kingswood High School	Government	U, 7-12	4.4 km	759
Penrith High School	Government (selective)	7-12	2.4 km	931

Table 7 Schools in local catchment area, ACARA 2015

* U refers students and/or classes who cannot readily be allocated to a specific year of education, for example students with special needs (ACARA, 2015)

There are also seven tertiary education providers within this area, including Colleges and training centres. The Penrith Campus of the Western Sydney University is also nearby, approximately 5 km away, in the neighbouring suburb of Kingswood. The Western Sydney University offers undergraduate, postgraduate and research degrees as well as online courses. The campus has a range of services, including a library, meeting rooms, observatory, gym, shuttle bus and on-site parking.

Child care and early learning

GHD has identified 15 child care and early learning centres in Penrith and Jamisontown within the catchment area. All centres are located across Mulgoa Road from the site with the nearest centre approximately 900 m away. These centres include long day care, pre-school, and other programs such as Gymbaroo.

Public and community buildings

Community buildings include community centres and halls which provide programs or services, or can be hired for events and activities. None of the public and community buildings are within easy walking distance from the proposed development. Those closest to the proposed development include:

- Penrith Senior Citizens Centre (1.2 km)
- Penrith Civic Centre (1.2 km)
- Douglas Hall (1.4 km)
- The 1st and 2nd Penrith Scout Halls (2.5 and 3 km respectively)

The Penrith Senior Citizens Centre is run by volunteers and hosts a range of different activities aimed at people aged over 55.

Library, arts and culture

Arts and cultural buildings and facilities near to the proposed development include the Joan Sutherland Performing Arts Centre (known as 'The Joan'), the Penrith Showground, the Penrith Museum of Printing, and the Penrith City Library.

The Penrith Showground and the Penrith Museum of Printing are the proposed developments closest cultural facilities. These facilities are adjacent to each other across, approximately 450 m from the proposed development across Mulgoa Road. Weekly markets, harness racing, raffles and other events are held at the Showgrounds. Function rooms for hire, a bistro, TAB and Keno are also present (Club Paceway, n.d.).

The Joan and the library are both located outside of the precinct. However they are within reasonable walking distance in the Penrith town centre approximately one kilometre away.

The Penrith Regional Gallery is located to the west of the Nepean River along the Great River Walk, which provides pedestrian and cycling access from the Panthers Precinct. The Great River Walk is discussed in more detail below.

Community services and aged care

The Mountainview and SummitCare aged care residential homes are the closest aged care services to the proposed development. Mountainview (Figure 19) is located adjacent to the proposed development and SummitCare is approximately 700 m south. The majority of community services are located more than 800 m away in and around the Penrith town centre. These services include an employment agency (Max Solutions), family planning centre, Headspace, Anglicare, and youth organisations such as the YMCA. A full list of facilities can be found in Appendix B.

Government organisations including the Penrith City Council offices, Penrith Service Centre and Centrelink are also located within the town centre.

Figure 19 Mountainview Retirement and Aged Care



Places of worship

Ten Churches of different Christian denominations are located in the study area. These churches are primarily located in and around the Penrith town centre.

Sports, leisure, recreation and open space

The development site is located close to many recreation opportunities. The Nepean River is within short walking distance to the west of the site. The River is considered a key cultural and recreational asset in the region attracting local residents and visitors. A holiday park is located in Emu Plains to the north of the development site and west of the River. It provides cabins, caravan sites and camp sites close to the River.

On and off water activities are allowed on the Nepean River, including boating and fishing. Commercial tours also operate along the River, such as the Nepean Belle Paddlewheeler (Figure 20). . Two local rowing clubs are located close to the development site, which use the River for club and competitive rowing. These clubs are also open to the public.

Figure 20 Nepean Belle Paddlewheeler on the Nepean River



The Great River Walk is a popular route for pedestrians and cyclists to the west of the development site. It loops around the Nepean River from Victoria Bridge (Great Western Highway) to Penrith Valley Bridge (M4 Western Motorway) continuing further north. The Walk passes through the major public park of Tench Reserve (Figure 21) and the heavily patronised Nepean River Coffee Club. In the future, the Walk will be extended towards Penrith Lakes, Windsor, Wisemans Ferry and Berowra.

Tench Reserve stretches along the western edge of the Panthers Precinct. It includes a public boat ramp, walkway/cycleway, park benches, picnic facilities, toilets and a playground.

Figure 21 Playground at Tench Reserve



In total, there are ten parks/reserves and fourteen sport and recreation facilities within the local study area.

This includes ovals and facilities for sports such as netball, tennis, skating and swimming. Currently, the lake at the proposed development site is used for Aqua Golf (Figure 22). The development may result in the closure of the facility.

Figure 22 Aqua Golf



Panthers Penrith World of Entertainment Complex is located next to the proposed development. The Complex includes a number of bars and restaurants, an event centre, sports and activities, theatre, and a TAB. The Complex also includes accommodation, with the Mercure Hotel.

Health and emergency services

The Nepean Hospital is a tertiary centre servicing patients as far west as the Upper Blue Mountains. The area is also serviced by the Nepean Private Hospital and associated family and cancer care centres, all located at Derby Street in Kingswood, approximately 3 km away. A cluster of specialist consulting rooms associated with the hospital are located in the study area.

A new paramedic response centre is being built at 141 High Street, just over 3 km from the ESQ 1818 site (NSW Ambulance, 2015). This centre will be a home base for 30 ambulances and is due to be operational in 2017 (NSW Ambulance, 2016).

Other nearby health services include Pathology, Physiotherapy, general medical practitioners (GPs), dentistry, sports medicine and imaging.

Stations for all three emergency services (Fire, Police and Ambulance) are located in and around the Penrith town centre.

Public Transport and Accessibility

Penrith Station on the Western and Blue Mountains lines, is 1.6 km away from the proposed development and is its closest train station. Five key bus routes currently service the proposed development area stopping outside the Panthers Penrith Entertainment Complex. These routes are:

688 Penrith to Emu Heights via Panthers and Emu Plains.

- 689 Penrith to Leonay via Panthers and Emu Plains.
- 690P Springwood to Penrith via Glenbrook, Blaxland, Warrimoo and Valley Heights.
- 691 Penrith to Mount Riverview via Blaxland.
- 1688 Penrith to Leonay & Emu Heights Combined Routes 688 & 689 service via Panthers.

There is also a sixth bus route, S13, which stops at the Mountainview retirement village. This is a limited 'shopper hopper' route that circles through Penrith Interchange, Station Street near Reserve Street, the retirement village and Centro Nepean. It operates Monday to Friday, making four journeys a day.

The 789 and 770 bus routes are existing routes that would connect students living at the proposed development to the Kingswood High School. The nearest stop for these routes is at the Penrith Interchange, approximately 1.8 km away in the town centre.





5.4 Key Implications

In summary, two different subsets of people live within the Riverlink precinct. The first is the old age and retirement community of Riverlink East. Almost 80% of the people living in this area are aged over 60 years, with 67.9% aged 70 years or over and a median age of 79. These people tend to live in single person households or as a couple without any children. Incomes are low, tending to be within the range of the age pension of \$300-399 per week (37.9%), with most people earning less than \$800 per week.

In Riverlink West, the median age decreases to 40, which is slightly above the median ages of Penrith (34) and the LGA (37). This community tends to be more wealthy than Riverlink East, Penrith, and the LGA, with a high median weekly income of \$1,625 reflecting a greater number of people working in professional and managerial roles. Home ownership is comparatively high in Riverlink West and almost all households own at least one motor vehicle. Family are common within Riverlink West, with over half of all families including children (56.7%), 45.7% of which are couple families with children.

In Riverlink as a whole there are low levels of cultural diversity and mobility. More than half the people living in Riverlink in 2011, lived in Riverlink five years previously. This is reflective of the broader region, with similar cultural diversity and mobility in both Penrith and the LGA.

Most people who live in the LGA also work within the LGA and driving is the most common form of transport. Health care, retail, manufacturing and education are the most common industries of employment.

There is a variety of social infrastructure within a few kilometres of the proposed site. However most is located further than 800 metres or a ten minute walk from the site. Social infrastructure within 400 metres of ESQ 1818 includes the Panthers complex, Mountainview nursing home and Penrith Park.

Infrastructure within 800m includes the SummitCare aged care facility, Great River Walk, Cables Wake Park, Penrith Showground, Penrith Paceway and Penrith Museum of Printing.

6. Future Community Profile

6.1 Indicative future residents

In order to understand the potential future resident population of the proposed ESQ 1818 development, GHD has prepared indicative population projections based on a similar recent development in Western Sydney. The ESQ 1818 development is a new development type for Penrith, with medium density developments traditionally made up of three storey walk-up flats.

Given many of the recent and similar developments in Penrith and other outer Western Sydney LGAs were not complete at the time of the 2011 ABS Census, a development site at Wentworth Point in the Auburn LGA was considered¹. This development, also located on water-front land, is a high density development with a range of building heights and bedroom sizes (primarily one and two bedroom with some three bedroom apartments), and a similar resident profile to what is anticipated for the ESQ 1818 development. The average household size for the Wentworth Point development is 2 persons per dwelling.

The profile for Rouse Hill Town Centre was also suggested by Penrith City Council as potentially having a similar resident profile as the proposed ESQ 1818 development. At the time of the 2011 Census the majority of dwellings were separate houses (59% or 123 dwellings), with only 39% of apartments (81 dwellings), as the town centre would have been developed post 2011. However the 2011 resident profile for the Rouse Hill town centre has been considered to inform the future population profile where relevant. Detailed demographic summaries for both Wentworth Point and Rouse Hill are provided at Appendix A.

The indicative population projections for the ESQ 1818 development have been prepared based on an average of 2 people per dwelling across the proposed 859 apartments. Based on this, the indicative future population would be 1,718 persons. This is presented in Table 8 below.

Based on the proposed age profile and the existing profile for Penrith suburb and Penrith LGA, new residents are likely to include significant numbers of young couples with and without children, single households, older people looking to downsize, and potentially many first home buyers.

There may be emerging cultural groups in Penrith LGA in the future, as the proportion of people born in a non-English speaking country increased by 0.8% between 2006 and 2011 (12.5% to 13.3%). The largest increases were people born in India (0.4%) and Philippines (0.2%). This trend is also reflected at the Rouse Hill Town Centre, which also has experienced an increase in people born in non-English speaking countries including India (6.9%), Philippines (6.9%) and China (3%). Based on this, new residents may include people from these and other culturally diverse groups.

GHD's analysis of high and medium density communities across Western Sydney demonstrates a high degree of cultural diversity in well-located developments. These include Harrris Park, Auburn, Carter Street, Liverpool CBD and others. Communities typically include a slightly younger age profile compared with the broader LGA which is often made up of detached housing stock. Couples, singles and couple families with pre-school children feature in multi-unit dwellings located close to public transport and town centres.

¹ The indicative future population was based on the 2011 Census Basic Community Profile for Wentworth Point State Suburb (SSC 12458) by the Australian Bureau of Statistics.

	ESQ 1818 Dev	velopment	Penrith	Penrith LGA
0 to 4	107	6.2%	6.7%	7.6%
5 to 11	69	4.0%	7.3%	9.8%
12 to 17	46	2.7%	6.1%	8.7%
18 to 24	131	7.6%	10.0%	10.4%
25 to 34	646	37.6%	16.7%	14.7%
35 to 49	407	23.7%	19.6%	20.9%
50 to 59	167	9.7%	10.9%	12.9%
60 to 69	100	5.8%	9.4%	8.8%
70 to 84	36	2.1%	9.5%	5.1%
85 and over	10	0.6%	3.8%	1.1%
Total population	1,718	100%	100%	100%

Table 8 Indicative age profile for ESQ 1818 residents compared to Penrith suburb and Penrith LGA

6.2 Indicative future workers

The ESQ 1818 development would include 3,300 m² of retail space with cafes, restaurants and potentially a small fresh food market/deli (e.g. an IGA). Jobs are likely to include casual, part time and full time opportunities in hospitality, retail and services. Based on Penrith's current employment profile, local residents are likely to make up the majority of future workers at the ESQ 1818 development.

GHD considered a range of employment generation models to assess the likely future worker and visitor population. These included:

- Research by Hill PDA.
- City of Sydney employment survey.
- Advice from Penrith City Council.
- The UK employment densities guide.

GHD generated the forecasts based on the UK model as this was the most nuanced and most detailed source. The fact that it is based on UK research was moderated by consideration of local conditions and advice from Council.

To estimate the number of future workers at the development and a DFO, the *Employment Densities Guide: 2nd edition* by Drivers Jonas Deloitte UK (2010) was used. The guide is widely used by local authorities, developers and surveyors in the UK to estimate the number of jobs for different property types. It provides ratios for restaurants and cafes (18 square metres per employee), and other superstores/retail warehouses (90 square metres per employee).

GHD also considered the City of Sydney's average work-space ratios (WSR) from the 2012 floor space and employment survey (FES). However, the FES did not provide a WSR for retail

warehouses, so the ratios prepared by Drivers Jonas Deloitte UK (2010) were considered more suitable for this assessment.

Based on the ratios from Drivers Jonas Deloitte UK (2010), the ESQ 1818 development has the potential to create around 180 full-time retail jobs from restaurants and cafes alone. The forecast rates are shown in shown in Table 9.

Usage type	Square metres per full-time employee	ESQ 1818 development	Direct Factory Outlet (DFO)
Restaurants and cafes (between 10- 30m ²)	18	3,000 m ² retail 183 employees	-
Other superstores/retail warehouses	90	-	30,000 m ² retail 333 employees
Residential component		96 to 136	-
Total		279 lower end Moderate 319	333

Table 9 Potential number of jobs for the ESQ 1818 development

These figures are indicative only. The guide states that there are a wide range of factors affecting the employment density of restaurants, including:

- Number of transactions (e.g. turnover rate of covers/customers).
- Opening times (e.g. lunchtime only or all day opening).
- Seasonal variation (e.g. summer trade greater than remainder of year).
- Brand and business model (e.g. upmarket operation will have higher ratio of staff to covers/customers).

The ESQ 1818 development has the potential to provide upmarket cafes and restaurants fronting the lake. Based on the research outlined above, GHD has assessed that the development may generate a minimum of around 180 jobs during operation.

It is also relevant to consider the number of jobs that would be provided as a consequence of the development in service, cleaning, repairs and grounds maintenance as these are indirect jobs. Depending on the socio-economic status of residents of the development, conservatively, if 10% of unit holders engaged cleaners, health service providers or other services at any one time around 80 people could be on site providing these services throughout a week. At 15 % 120 would be employed. This has assumed a modest socio-economic status of residents.

A higher socio economic status and related higher disposable income of some residents would increase the rate of employment of people in service industries including health. The development would not generate these jobs but the visitation of the area by service industry workers is a relevant consideration in planning for appropriate social infrastructure.

Additional jobs would be generated during construction. The construction, fit out and landscaping of the ESQ 1818 proposal would be more complex than a DFO which would typically be a shell building formed with tilt up panels and commercial shop fitting. The fit out of multiple dwellings and the renovation of interiors over time would create construction and maintenance phase jobs.

While there are few reliable mechanisms for estimating construction phase jobs, UrbanGrowth NSW uses a ratio of around 1 job per dwelling unit when estimating construction phase employment. On this basis GHD forecasts that around the equivalent of 800 workers would be employed full time during construction. Additional people would be employed during the renovation phase with some lag between occupation and the beginning of modification, repainting, refurbishing and kitchen and bathroom renovation. If 2% of units were undergoing modification at any one time 16 people would be employed on site in this capacity on any week day.

The employment generated by the ESQ 1818 development during construction and subsequent maintenance would be significantly more than that for a DFO and ancillary food outlets. In conclusion, ESQ 1818 would have at best a beneficial impact on local employment or at worst a positive impact during construction and a relatively neutral impact during operation. A DFO could still be located elsewhere in the LGA, within existing bulky goods retail precincts (e.g. south of the site on Mulgoa Road).

6.3 Indicative future visitors

Recreational facilities are proposed as part of the development, including a nature walk, pedestrian and cycle pathway and passive recreation areas around the lake. These features could improve the amenity and accessibility of the public domain within the Panthers Precinct. Depending on what is provided, the number of visitors to the Panthers Precinct may increase. Visitors are likely to include:

- Family and friends of existing and new residents.
- People visiting nearby attractions and facilities, such as the Great River Walk, Nepean River Coffee Club and the Penrith Education and Health Precinct.
- Tourists.
- Workers.
- Students.

6.4 Key implications

- 1,700 new residents would live in the area as result of the development.
- Between around 280 and 320 people would be employed directly in the development during the operational phase and others indirectly.
- Increased visitors would lead to a significant increase in the population of the local area. This would in turn lead to more people using local facilities and services and potential changes to the character and amenity of the neighbourhood.
- Compared to the existing community of Riverlink, the majority of new residents are expected to be young adults, many with young children. This would change the demographic profile of the local area, and may have implications for community interaction and cohesion as well as demand for specific community facilities.

7. Consultation

GHD consulted stakeholders during February and March 2016. Stakeholders consulted for this project included Penrith City Council, Emergency Services, the NSW Department of Education and the Nepean Blue Mountains Local Health District.

GHD prepared project briefs for each of the stakeholders containing information on the project background and indicative population projections and resident profiles, which were provided to each stakeholder to guide the discussions.

The sections below describes the consultation methods used and consultation outcomes with each of the stakeholders.

7.1 Penrith City Council

A meeting at Council offices was conducted with Penrith City Council's Investment Coordinator, Social Planning Coordinator and Social Planner. This meeting discussed the project vision, likely future population characteristics and needs and issues to consider in the impact assessment. Council also confirmed the outcomes of the discussion in a subsequent email.

Council raised the following concerns/considerations for this socio-economic study:

- Consider the site's connectivity to Penrith Station and Penrith CBD.
- Clearly define the boundaries between public and private spaces.
- Clearly acknowledge that the Panthers Leagues Club is a gambling and drinking venue. Address the potential conflicts of use (e.g. licensed venue and gaming facility, noise from activities and special events).
- Refine and confirm the indicative future demographic profile. Consider using the Rouse Hill and Thornton developments to inform the future profile.
- Address both new residents and visitors to the site.
- Consult with existing residents (e.g. letter).
- Consider any cumulative impacts (e.g. buyer profile, additional licensed venues) with nearby developments (e.g. Panthers Leagues Club, Parkview site, seniors housing).
- Consider the provision of community facilities within/outside the site. The community identified the need for and benefit of a "men's shed", particularly near the proposed Seniors Living development, due to a lack of workshop spaces in the local area. Other suggestions were a creative industries hub and Regional City Community Services facility.
- The design needs to address CPTED principles, including the need for lighting.
- Consider the use of existing and planned Penrith CBD community facilities by new residents.
- Address how the proposed development will contribute to housing affordability through increased housing supply and diversity; jobs generation especially for local residents; and competition with businesses in Penrith CBD including Nepean Square.
- Suggested references:
 - Penrith Night Time Economy Study and Strategy.
 - Penrith City Centre Vision.
 - Riverlink Precinct Plan.

- Penrith Progression.
- 'Our River' Project.
- Cultural Facilities, District & Local Open Space development contribution plan.
- VPA Planning Agreement Outlet Centre.

GHD has addressed comments raised by Council in this report. In relation to consultation, GHD understands that the planning proposal would be placed on public exhibition and feedback on the proposal will be facilitated by consideration of supporting studies including this one.

7.2 Emergency Services

7.2.1 NSW Police – Penrith Local Area Command

GHD interviewed the Crime Prevention Officer of the Penrith Local Area Command (LAC) via telephone. GHD provided the indicative resident profile (i.e. young families, first home-buyers, home down-sizers). The Officer considered the incoming demographic as 'low-risk'. As a result, the development is unlikely to create any significant or unusual crime and safety issues.

7.2.2 NSW Fire and Rescue

GHD spoke with NSW Fire and Rescue's Senior Planning Officer to understand the capacity of local stations to service the ESQ 1818 development. NSW Fire and Rescue stated that the site is well-located with good servicing capacity, with two stations close by. These are:

- High Street, Penrith across Mulgoa Rd approximately 2.5 km east of the site
- Jeannette Street, Regentville 3 km south along Mulgoa Road on the M4 Highway interchange.

Both stations are staffed 24/7 and the Jeanette Street station has a specialised rescue team.

Being a new development, ESQ 1818 buildings would be compliant with the Building Code of Australia which would reduce risks and facilitate emergency response and management.

With some new residents likely to be from culturally and linguistically diverse backgrounds, NSW Fire and Rescue's Community Safety Directorate has a Culturally and Linguistically Diverse (CALD) coordinator would work with peak bodies and community groups to ensure CALD communities are engaged and information is provided in a culturally appropriate way.

7.2.3 NSW Ambulance

GHD has requested information from NSW Ambulance. GHD has not received any advice however based on previous consultations with NSW Ambulance, we have an understanding that it uses an advanced fluid deployment model to provide services across Sydney. Therefore, an ambulance station is located at Penrith but vehicles are also deployed from other stations to meet demands within the region.

NSW Ambulance is currently implementing the Sydney Ambulance Metropolitan Infrastructure Strategy (SAMIS). Under the previous model an ambulance station was allocated to a response area. Under the SAMIS model this will be replaced with a network of "hub" stations that will accommodate up to 40 ambulance vehicles. Vehicles will depart these hub stations to smaller satellite 'standby' facilities as well as traditional stations. A single hub station will be grouped with these smaller standby stations to make a "cluster". Each cluster (of a hub and standby points) will provide coverage to a particular response area.

7.3 State government agencies

7.3.1 Nepean Blue Mountains Local Health District

GHD interviewed a representative of the Nepean Blue Mountains Local Health District to understand the capacity of health services within the Nepean – Blue Mountains area. Key observations from the discussion, included:

- The Local Health District (LHD) is focussing on increasing services and capacity across the district.
- Around 400 GPs work in the district however there is a State and Commonwealth Government declared a GP shortage in Penrith. It is difficult to secure medical students and doctors, as most live outside the area. As a result, outside of hours GP services are difficult to provide.
- Doctors who are trained in the district tend to continue working in the area. Doctors are usually placed where there are shortages. However, a new provider will instead place registrars based on their preferences, which may negatively impact on the district's services and capacity.
- Nepean Hospital will continue to be a major tertiary hospital. The Hospital has 70,000 patients and 3,300 births each year. The Hospital campus has services, including mental health, drug and alcohol support and oral health. It employs between 2,500 and 3,300 employees.
- There are five community health centres servicing the district. These are in Penrith, Cranebrook, St Clair and St Marys. The Penrith and Lemongrove centres are closest to the ESQ 1818 development site. Telehealth services will be set up in the future to connect the community centres.
- All centres have access to interpreter services. Culturally and Linguistically Diverse (CALD) groups make up a small proportion of Penrith's population, compared to other LGAs. Residents represent a range of cultures and languages so it is hard to provide CALD targeted services within the centres.
- There is a relatively large Aboriginal population in Penrith. The LHD is currently working with the Ministry of Health to deliver an Aboriginal health service.
- The Penrith Community Health Centre on Soper Place generally provides services to children and families. It also has mental health and drug and alcohol support services.
- The Lemongrove Community Health Centre on Glebe Place provides services to people of all ages with chronic and complex health conditions. It also provides support to people experience domestic violence.
- The Ministry for Health will fund four new Primary Integrated Care Centres in the district. These will bring together a range of health services that focus on prevention and early intervention programs, as well as treatment. The proposed locations are Orchard Hills, Penrith, Katoomba and the existing St Clair centre. The exact location of these centres within the Penrith area are yet to be determined.
- The socio-economic study should consider the access of new residents to health services.
- The NSW Health benchmarks (e.g. one GP per 1,300 persons) are considered inadequate to address the GP shortage in Penrith. The LHD is currently developing benchmarks specific to the district. These will be available in nine to twelve months.

- The LHD does not provide gambling support services. There are opportunities for more recreational activities within the Panthers Precinct to counteract the licensed and gambling activities at the Panthers Club or any anti-social behaviour. Opportunities and considerations for the Precinct include:
 - Building on the Great River Walk, public domain and outdoor activities.
 - Connect residents living in high-rise apartments with open spaces.
 - Provide a safe swimming environment in the Nepean River.
 - Provide active transport.
 - Ensure access to public transport.

7.3.2 NSW Department of Education

GHD consulted the Department's Senior Asset Planner to understand the capacity of local schools to service the new ESQ 1818 residents. Department of Education (DoE) identified that local public primary and high schools have capacity for new students from the proposed development

The closest public high school is Penrith High School which is a selective school. Selective schools place their students based on academic merit, and parents must complete and submit a successful application form for their children to be enrolled.

The closest non-selective school is Kingswood High School, which is over four kilometres from the site.

7.4 Key implications

- There are opportunities to provide new community facilities within/outside the site, such as a men's shed, creative industries hub or a regional city community services facility.
- The area is well-serviced by district health facilities, including the Nepean Hospital Campus, and Penrith and Lemongrove Community Health Centres. Planned facilities (e.g. Primary Integrated Care Centres) would also meet the future demands of the district. However, there is a recognised shortage of GPs in Penrith. Suitably appointed facilities in the development with access to parking and localised amenity may attract a GP or medical centre to be located on site. The development may provide attractive accommodation close to services that is likely to appeal to health workers
- Emergency services are likely to have capacity to service future residents and workers of the development.
- Local primary and secondary schools have existing capacity to service the future residents of the development.
- While there were no significant or unusual crime and safety issues identified for the development, it is important to incorporate CPTED principles in the design.
- The proposed development is located close to many recreational opportunities (e.g. Great River Walk, Nepean River). The development could build on these strengths by:
 - Enhancing the public domain.
 - Providing more recreational activities.
 - Connecting new residents to open spaces.
 - Promoting access to active transport and public transport.
 - Providing continuous paths linking elements of the development and external pedestrian routes and surrounding recreational areas.

- Funding benches and shade planting to enhance the connection of the site to Penrith CBD.
- The development has the potential to create jobs opportunities for local residents. However, there may be potential competition with businesses in Penrith CBD, including Nepean Square.
- The development has the potential to lead to greater housing affordability in Penrith through increasing housing supply and diversity.
- It is important to consider any cumulative impacts on local social infrastructure from the ESQ 1818 development as well other major proposed developments in the area.
- The Panthers Leagues Club is a gambling and drinking venue, which has the potential to cause conflicts of use with the proposed development. The visual and physical proximity of this venue to the development could pose challenges for resident individuals or families managing alcoholism or gambling addiction but GHD has no evidence that it would be likely to lead to the development of addictive behaviours in the general population of residents.
- Access from the site to Penrith Station and Penrith CBD is an important consideration and the enhancement of this connection will be important to connect residents and workers to services and regional transport.

8. Social sustainability objectives for ESQ 1818

GHD has developed a set of social sustainability principles for ESQ 1818. These have been based on the social policy context including feedback from Penrith LGA residents about aspirations for the locality generally, profile of existing and future communities, objectives for the ESQ 1818 development, and leading practice in the provision of socially sustainable developments. The objectives will guide the social sustainability strategies and recommendations forESQ 1818, to help create a vibrant, healthy, connected place to live, work and visit.

Figure 24 Social sustainability objectives for ESQ 1818



Table 10 below identifies the characteristics of socially sustainable developments associated with each principle.

Principle	Characteristics
Healthy and active lifestyles	Local provision of high quality open space and recreation facilities will be provided to encourage active and healthy lifestyles and facilitate social interaction. Fresh food will be available at local shops and dining options, and there will be opportunities to grow fresh food and raise chickens. Access to public transport options, as well as active transport through cycling and walking, should be provided to encourage healthy lifestyles.
	Open space and associated facilities within the development including BBQs, outdoor kitchen gardens, kick about, tennis wall or basketball hoops and party spaces will be attractive and provide a variety of experiences. Shared play on a "common" will be a focal point for leisure and relaxation. Connected and low cost locally based recreation will be more socially rewarding, and desirable alternative to paid entertainment and gambling nearby.
	ESQ 1818 will be set in private open space that is open to the local community. With the exception of balconies and ground level service or courtyard structures the landscaped areas will be activated and accessible. A caveat or easement can be arranged to facilitate access and way finding signage can encourage connectivity.
Connected community	ESQ 1818 will be well connected to surrounding centres and jobs by high quality and safe pedestrian and cycle ways, allowing people to walk and cycle to shops, services, facilities and their workplace. Residents and workers will enjoy good access to public transport, including regular buses that connect to the Penrith CBD, as well as pedestrian and cycle routes to Penrith Station. The development will provide opportunities for residents to meet and make connections between generations and cultural backgrounds. Seating and landscaping will create intimate spaces for quiet conversation and tranquillity as well as inter-generational interaction.
	Pets will be accommodated further connecting apartment dwellers leading to reduced social isolation, especially for older people.
Safe and vibrant	Vibrant places are activated both during the day and at night, on weekdays and weekends. ESQ 1818 will provide a safe, interesting place to spend time, with a variety of things to do for all community members. All community members, from children to seniors, will feel safe to walk throughout and beyond the development at all times of the day.
Diverse and integrated community	As a mixed community, residents, workers and visitors will interact daily, sharing the identity of ESQ 1818 as a friendly, integrated and vibrant community. A diversity of household types will be supported by a range of apartment sizes. As a child-friendly and seniors-friendly community, public spaces and streets will be safe and accessible and

Table 10 Social sustainability principles and characteristics

Principle	Characteristics
	provide spaces for conversations and connections.
Connected to nature	The community will have access to high quality green spaces and Penrith's natural assets including the Nepean River. Recreational facilities and well-designed shared spaces in and between buildings will provide places for interaction and play. Features such as the lake boulevard and nature walk will provide a direct connection to the natural environment on a daily basis. Consideration will be given to planting of species of significance to local Aboriginal people including a bush tucker garden. Landscaping will encourage native birds to complement the remnant bushland and River corridor.

9. Socio-economic impact assessment

This section presents the outcomes of the assessment of potential socio-economic opportunities and impacts resulting from the proposed ESQ 1818 development. GHD has also assessed the economic impacts associated with the proposed change of use from a DFO to the mixed use development.

This assessment is based on the categories outlined in the guidelines for social and economic assessments included in the Penrith DCP 2014. Where relevant, some of these categories have been grouped together. The sections below present the discussion about potential impacts and opportunities, including recommended enhancement or mitigation measures. Section 10 summarises the assessment, the stakeholders impacted, the management measures, and the resultant outcomes from implementing the recommendations.

9.1 Demographic and population change

Penrith LGA is experiencing significant growth and development, with a number of new developments proposed, such as the recent Thornton development and the recently approved Parkview development (Panasonic site). These and other developments would see the overall population of Penrith LGA increase from around 202,342 persons in 2016 to 256,051 persons in 2036, which is an increase of 26.5% over the thirty year period (forecast.id, 2015).

The proposed ESQ 1818 development would provide 859 new apartments in Penrith, leading to an increase of around 1,700 new residents when complete. The population of Penrith suburb is expected to increase significantly due to other developments close to the city centre, so that by 2036, the population is expected to increase by 68% from 12,232 in 2011 to 20,541 people. With the ESQ 1818 development, this would be a total increase of 10,000 people or 81%. This is significant growth and change for Penrith suburb and the LGA, which would lead to more people using local infrastructure, such as roads, public transport, shops and community facilities.

The new developments in the inner areas of Penrith would also primarily include multi-storey apartment buildings, which are likely to have a different resident profile to the existing community, particularly the residents of the Mountainview retirement village and aged care facility. Compared to the existing residents of Penrith suburb and Mountainview, the ESQ 1818 development would have more adults between 25 and 49 years. There would also be less primary and high school aged children, and less older people. New residents may also include more people from different culturally and linguistically diverse backgrounds than existing residents. Based on the most recent census GHD predicts that emerging cultural groups would include people from India, the Philippines and China.

In addition to new residents, around 183 retail workers and increased visitors to the site would lead to more people using surrounding facilities and services. This has the potential to change the local character, community interaction and demand for specific community facilities in the area. These potential impacts are discussed in more detail in the sections below.

9.2 Accommodation and housing

Residential accommodation in the LGA is primarily made up of separate houses. The ESQ 1818 development would increase supply of apartments in the suburb of Penrith and the LGA., The development would contribute to increased supply and diversity of housing in Penrith, providing more options for different household types, such as single households, young families, couples without children, and older people looking to downsize. Increasing or contributing to housing diversity supports a diverse community, which is a key component of social sustainability.

Housing affordability has also been identified in the *A Plan for Growing Sydney* and the Penrith City Strategy as a significant issue for Penrith. In 2006, 15.2% or households were in housing stress, which was higher than the average for Sydney at 13.6%. Affordability issues will continue to increase demand for smaller, less expensive homes (Penrith City Council, 2013). Increasing the supply of smaller dwelling types (i.e. one, two, three and some four bedroom apartments) may therefore contribute to housing affordability in Penrith.

The ageing of the population and meeting people's housing needs (as they age) to allow them to remain independent is a key concern for many communities. As required under the Seniors Housing SEPP, 10% of the dwellings or 85 apartments will be designed to comply with the *Australian Standard 4299 – 1955 Adaptable Housing*. Adaptable housing is designed to become an 'accessible' house if required, which is designed to meet the needs of people requiring higher level access from the outset, and usually designed and built with a specific person's needs in mind (Palmer and Ward, 2013).

GHD recommends that consideration be given to designing additional apartments according to universal design principles in line with the *Livable Housing Design Guidelines*. This means the dwelling can be more easily modified at a later stage than a dwelling without these design considerations. This can be more cost-effective than retrofitting a dwelling and ensures residents can remain living in their home for longer as their needs change.

GHD also recommends that, subject to further marketing testing, additional 3 bedroom dwellings be included in the apartment mix. This would enable singles and couples to transition to large dwellings, retaining local connections with neighbours, health providers and education as families grow and change.

9.3 Mobility, access and universal design

Connectivity and mobility are key requirements to ensure all community members can access facilities and services. In particular, for young people, older people, people with a disability, parents with prams, and disadvantaged groups (e.g. people on low incomes), the ability to move around and get to places independently is critical to ensuring equitable access and participation.

The Panthers Penrith Precinct is located on Mulgoa Rd, a major road in Penrith which provides a direct connection to the Penrith CBD. The Penrith train station is located 1.8 km or a 23 minute walk from the ESQ 1818 site. While for many residents and workers this distance may be considered achievable, for many of the groups identified above, this distance would be considered too far to walk on a regular basis. In addition, for residents who commute to work by train, many may prefer to drive to the station, particularly if they already face a long train journey.

It is possible for residents to walk to Mulgoa Rd or across the road past the stadium to catch a bus which then connects to the train. While this may not result in a time saving, for people who cannot drive and for those who wish to leave their car at home, this would be a viable option.

It is recommended that new residents be provided with information, such as is contained within a green travel plan, at the time of purchase (for buyers) or when they move in (for renters) about public transport services including connections to get to key destinations such as the train station. It is also recommended that consideration be given to providing new residents with free travel (e.g. a pre-loaded Opal card) which would encourage residents to establish public transport as a primary mode of travel. This would reduce reliance on private vehicles, which is a key concern raised during consultation with Penrith City Council.

Providing pedestrian and cycle connections throughout the development and connecting to external pathways is also a key requirement. The ESQ 1818 concept plan shows pathways from east to west and north to south through the development between blocks of buildings, ensuring

that people can walk throughout to access the retail and dining options which front the lake. Design measures should also ensure the development connects via pedestrian and cycle pathways to existing pathways along Mulgoa Rd.

Future public buildings, open space, public domain areas and walking/cycling facilities will need to meet the *Australian Standard 1428 Design for access and mobility*. This would ensure that all community members, particularly people with a disability and older people, can access public spaces and move relatively independently throughout the community.

GHD recommends that accessible design be considered for connections throughout the development including to residential buildings, private and public open spaces, and the recreation facilities, and to existing pedestrian pathways along Mulgoa Rd.

GHD recommends that shade and rest areas be provided along shared paths. These would enhance the public domain and connections throughout the development. These would provide a better walking environment, particularly during hotter weather. These areas may also encourage less mobile groups to use these paths (e.g. older people, people with a disability, parents with prams).

The ESQ 1818development would also result in changes to traffic conditions in the local area. GHD prepared the *Panthers Precinct Masterplan Transport Strategy* in 2014 which assessed the impact of the overall Precinct masterplan (including the proposed DFO) on local roads and intersections, including Mulgoa Road. The traffic modelling confirmed that all roads and intersections in the core would operate satisfactorily under the critical evening peak hour flows when the masterplan is complete. The assessment found that the signalised intersections at key access points along Mulgoa and Jamison Roads are adequate and would operate at acceptable levels of service with the improvements recommended in the previously approved Planning Agreement Road Works.

GHD is currently preparing a traffic assessment of the ESQ 1818 development. The draft assessment compares the traffic generation from the DFO with the ESQ 1818 development. The assessment has found that the ESQ 1818 development would generate less traffic compared to the DFO, with an average of 553 trips in the PM peak hour compared to 689 trips for the DFO. While this would be an improved outcome by comparison, the increase in traffic would be a noticeable impact in the local area, particularly for Mountainview residents which share the entry from Mulgoa Rd with the ESQ 1818 development.

The ESQ 1818 development would generate around the same amount of parking demand (1,209) as the DFO development (1,169). The ESQ 1818 development would include 93 accessible spaces spread throughout the development. This amount exceeds the parking requirement for the site based on the Penrith City Council DCP.

To reduce potential traffic and parking impacts for existing and future residents, workers and visitors in the local area, the ESQ 1818 development would encourage active modes of transport, including cycling, by providing 312 bicycle parking spaces. The measures discussed above regarding public transport use and walking would also assist with reducing car trips and traffic and parking generation.

End of trip bicycle facilities, such as parking, lockers and showers, are recommended at key locations within the development (e.g. shops, open space). These would further encourage residents and workers to cycle. Four car share spaces are proposed within the development to encourage the use of car share schemes and reduce the need for residents to have a privately owned vehicle.

9.4 Community and recreation facilities and services

When complete, the proposed ESQ 1818 development would lead to an increase of around 1,700 new residents in the suburb of Penrith. These residents would access community and recreation services and facilities in Penrith. This section discusses the needs of new residents and potential impacts on existing service provision.

Multipurpose community spaces

Community facilities and spaces facilitate social interactions, learning, enterprise development, healthy lifestyles and community participation. Located within one kilometre of the Penrith CBD, the ESQ 1818 development is well-located to Penrith City Council's Civic Centre, Library and soon to be completed Joan Sutherland Performing Arts Centre. As district-level facilities and located on public transport routes, these centres would be accessible to and meet the needs of most new residents requiring access to these larger facilities.

Beyond these district facilities, the closest community spaces include the 1st and 2nd Penrith Scout Halls, Douglas Hall, and Penrith Senior Citizens Centre. These facilities are all more than a kilometre from the site. A ten minute walk or 800 m is considered to be the maximum distance most people will walk to reach a local destination such as a park or shops.

Leading practice for social infrastructure provision in urban infill developments recommends that existing local multipurpose facilities should be upgraded. However, given there are no local facilities located within walking distance of the ESQ 1818 development, a new multipurpose space could be provided as part of the development. This would be available to ESQ 1818 residents as well as the broader community and community groups.

The space could be a strata-managed affordable space, located on the ground floor of a building in a location easily accessible by non-residents. This space would be between 60m² for a meeting room with some storage and kitchenette, or up to 100m² for a larger space for a range of purposes with sufficient storage, kitchenette and toilets. The space could be used for resident meetings, social functions, and with an affordable access policy, could also accommodate use by community groups. The space could also adjoin open space, which would increase its accessibility and functionality, and could be useful for new resident activities provided through the Welcome Program (see Section 9.6) and playgroups (see below).

Child care

Child care includes long day care, preschool, Outside of School Hours (OOSH) care, and vacation care. The provision of child care services is a key requirement to support productivity and ensure working families are supported.

The indicative population projections show that an additional 106 children aged 0 to 4 years would live in the ESQ 1818 development and potentially require access to child care. Although provision of child care facilities with new developments is common and attractive to many home buyers, child care is prohibited within the zoning for the site under the Local Environment Plan. Therefore new residents would access existing child care facilities within the Penrith LGA.

As discussed in Section 5.3, there are fifteen child care services located in Penrith and Jamisontown suburbs, including long day care, preschool and OOSH services.

Table 11 below shows the child care places required to meet the additional population resulting from the ESQ 1818 development based on leading practice rates of provision.

Table 11	Child	care	requirements
----------	-------	------	--------------

Service type	Leading practice rate of provision	Requirement
Long day care	1 place for every 5 children aged 0-4 years 1 child care place for every 75 workers	21 places
Pre-school	1 place for every child aged 4-5 years	26 places
Out of school hours care	1 place for every 5 children aged 5-11 years	13 places

Based on a desktop review of the <u>www.mychild.gov.au</u> website, many existing child care facilities in Penrith suburb have some vacancies. However, with the cumulative impact of the ESQ 1818 development with other major proposed developments in the area (e.g. Parkview on the eastern side of Mulgoa Rd), it is likely that there would be increased demand for existing child care services over time.

It is recommended that the developer consider the provision of a suitable space for a child care centre within the development. The centre design would need to comply with relevant state and local regulations and guidelines, including access to suitable open space.. GHD notes that there is uncertainty about whether a facility would be permissible in the zone. As this would be an ancillary use, subservient to the primary use of the site for a mixed residential and commercial development GHD believes that Council would have the discretion to consent to the inclusion of a child care facility within the site. There is potential for such a centre to be patronised by workers at Panthers and other local employers including Mountainview and health facilities in the locality. Consideration could be given to an extended hours provider to meet the needs of shift workers residing in the development or working locally.

It is recommended that new residents are provided with information about local child care services at the time of purchase. This could be provided as part of a Welcome Program (see Section 9.6). A multipurpose space provided on site as discussed above could also assist to meet the needs of children and parents, as a playgroup could be offered for new residents.

Education

The ESQ 1818 development would have good access to existing local primary schools. These are located between two and three kilometres away. High school students however would need to travel further. The closest public high school is Penrith High School which is a selective school (around 2.4 km away). The closest non-selective school is Kingswood High School, which is over four kilometres from the site. These are accessible by bus from the closest bus stop on Derby Street (around 1 km walk from the site). Local primary and secondary schools have existing capacity to service the future residents of ESQ 1818.

New residents would have good access to several tertiary education providers, including colleges and training centres within the Penrith City Centre. The Penrith Campus of the Western Sydney University is around 5 km away (15 minute drive by car or bus from the closest bus stop on Derby Street).

Services for young people

The ESQ 1818 development is expected to have a considerable population of young people, with approximately 46 high school students (12 to 17 years) and 130 young adults (18 to 24 years). The new retail and dining options may be attractive to young people, and the recreation facilities proposed around the lake may contribute to health and wellbeing outcomes through encouraging healthy outdoor activities.

Accessing facilities and services beyond the development will also be important. Public and active transport connections are particularly important for young people who are yet to drive. Five key bus routes stop outside the Panthers Penrith Precinct along Mulgoa Road, and which connect to the Penrith City Centre, where a range of services and facilities, including entertainment and leisure options (e.g. Westfield) are located.

Services for older people

Providing high quality access to appropriate facilities and services is essential to ensure older people remain independent as their needs increase with age. This includes an efficient and accessible public transport service and walking/cycling network to ensure the ongoing independence of older people, as well as health and support services.

The ESQ 1818 development is expected to increase the population of older people over 70 years by around 46 people. While this is not a large number, this would increase over time, and with the existing Mountainview retirement village directly adjacent to the proposal, the needs of older people will be an important consideration.

Future public buildings, open space, public domain areas and walking/cycling facilities will need to meet the *Australian Standard 1428 Design for access and mobility* to ensure older people can access community spaces and move relatively independently throughout the community.

Connections through the development and to Mountainview will also be important to ensure Mountainview residents can access the facilities withinESQ 1818, including the retail and dining options, and recreational areas and walking trails around the lake and Creek. It is recommended these recreational facilities consider the needs of older people, including seating at regular intervals around the lake for people to rest, sheltered areas with tables and chairs and limiting the needs for stairs. Seating and shelters should also be provided on the edges of the development i.e. not just near buildings, so that non-residents feel comfortable to use the facilities and feel welcomed into the spaces.

Reciprocal arrangements with Mountainview could see older residents of ESQ 1818 access recreational programs at Mountainview and residents of Mountainview attend activities in any multi-purpose space or outdoor common inESQ 1818. Building local connections would increase the desirability of the development and the reputation of the developer and club.

Open space, sport and recreation facilities

As discussed in Section 5.3, the proposed ESQ 1818 site is well-located, with access to ten parks and reserves and fourteen sport and recreation facilities (including ovals and facilities for sports such as netball, rowing, tennis, skating and swimming).

Public open space provides important opportunities for physical activity, social interaction and overall health and wellbeing. With an increase of around 1,700 new residents, the provision of open space and facilities for recreation and leisure will be an important consideration for the ESQ 1818 development.

Leading practice rates of provision for urban infill developments recommends that one local or multipurpose park should be provided for up to 5,000 residents. Penrith City Council collects developer contributions for local and district open space under the Penrith City Local Open Space and District Open Space Development Contributions Plans. These plans both set rates for the amount of contributions that would be collected. The plans currently do not anticipate and identify facilities as a direct result of ESQ 1818. These plans would need to be updated to ascertain the nexus between facilities to be provided by Council and the development. Alternatively the proposed recreational facilities and spaces around the lake could be provided in tandem with the ESQ 1818 development. This would be in lieu of contributions that would otherwise be collected by Council for local and district open space and facilities.

The provision of the recreational facilities and spaces around the lake and development would assist with meeting future resident and worker needs for open space and recreation, as well as the needs of existing communities, particularly residents of Mountainview. The pathways, kick around area, and outdoor gym facilities would encourage active recreation, contributing to improved health and wellbeing outcomes.

There are opportunities for the developer to encourage community cohesion and inclusion, as new residents start to move into the development. As part of the recommended Welcome Program (detailed in Section 9.6), community events and activities, such as markets, are recommended. It is recommended that the proposed public spaces within the development (e.g. kick around area) accommodate these activities.

GHD understands that the masterplan provides that all open space in which the buildings are set will be private open space but accessible to communities adjoining the development. CABE will make suitable arrangements with Penrith City Council to include a caveat or easement on the property title to facilitate access. Balconies, courtyards and service facilities that are part of the private open space and utility of the building will be private. The spaces will be inviting, promote community connections and link seamlessly with the external open space in the precinct.

The pathways would also be designed to enable future connections to to the Great River Walk. The developer is recommended to investigate the provision of future connections. Future connections would provide broad health and wellbeing benefits, as well as potentially attracting more visitors into the Panthers Penrith Precinct.

The ESQ 1818 development may result in the closure of the Aqua Golf facility to accommodate the planned development. While part of the Penrith Entertainment Complex which provides a unique leisure and recreation experience for users, the facility reduces public access to the lake. The potential removal of the facility and the inclusion of recreation facilities around the lake would ensure that all community members have access to and can enjoy the amenity of the lake, which would have broader community benefits.

Emergency services

Stations for all three emergency services (Fire, Police and Ambulance) are around 2-3km from the development site. The current capacity of these services is sufficient to service the new residents of the development. A new paramedic response centre is being built just over 3km from the site. The centre will be operational in 2017 and provide additional capacity to service the cumulative growth in Penrith.

It is important to ensure that the development is designed to provide good access for emergency services. GHD recommends that emergency services are consulted as the project progresses to best inform the safe design and management of the site.

Health services

New residents of the ESQ 1818 development are likely to access Penrith's existing health services. As discussed in Section 5.3, the development site is well-located to health services within the Penrith City Centre (around 1km). These include GPs and specialists. These would be accessible by bus from the ESQ 1818 development.

The development is within 4 km of district health facilities, Nepean Hospital, Nepean Private Hospital, the Penrith and Lemongrove Community Health Centres and specialist consulting rooms associated with the hospital. New residents could easily access these by car. However, those residents reliant on public transport would need to walk around 1 km from the ESQ 1818 development to the closest bus stop (Derby Street) for a direct bus to Nepean Hospital. For some vulnerable groups (e.g. older people, people with a disability, parents with prams), the walk to the bus stop may be considered difficult. Additional shading and seating on linking pathways could facilitate pedestrian access. A cooperative arrangement between the Panthers bus to include health facilities on the circuit could enhance connectivity. More direct arrangements may need to be made with community transport providers if a large proportion of dwellings are occupied by elderly residents, people with a disability or people with an illness.

The ESQ 1818 development is expected to house around 1,700 residents once completed. The increase of residents is unlikely to place pressure on existing district health facilities, as residents are expected to gradually move into the development over the course of the five-stage construction. The Nepean Blue Mountains Local Health District (LHD) is also focussing on increasing district-level services (e.g. new Primary Integrated Care Centre in Penrith, providing telehealth between existing Community Health Centres) to respond to the district's overall growing population. This would service the cumulative population of ESQ 1818 and other major proposed developments in the area.

The cumulative population may exacerbate the current shortage of GPs in Penrith. There is an opportunity for retail space within the development to be leased by GPs. This would provide convenient access to new and existing community members, including Mountainview residents.

9.5 Cultural values and beliefs

Australia has a deep history of human occupation, with Aboriginal people settling the continent more than 40,000 years ago. Landscape features such as rivers, creeks and hilltops are often associated with the archaeological traces of the life and culture of past Aboriginal people. These places represent the continuing cultural connections Aboriginal people have to place and land. Recognition of this ongoing connection is important and can be incorporated into building and landscape design.

Public art, landscaping and interpretive works can assist to create a sense of identity for new communities while recognising cultural heritage. The pathways around the lake and creekline present opportunities for interpretive works and signage which could focus on Aboriginal

heritage and/or the natural environment. There are also opportunities to provide public art works throughout the development. These design measures can assist with placemaking by creating links between the development and the broader 'place' its situated, therefore linking community members to the character and identity of the development, and therefore each other. This can also assist with building connections between new and existing communities.

It is recommended that a public art and landscaping strategy be prepared which would identify the locations for each piece of public art or interpretive works, the intent for each piece, timing and approach for delivery. The strategy would ensure the pieces contribute to the overall story of the development and enhance a sense of identity and connection.

It is recommended that the local Aboriginal stakeholders be involved in any interpretation of local Aboriginal heritage.

9.6 Community identity and cohesion

As discussed in Section 9.1, the ESQ 1818 development would have a different resident profile to the existing profile for Penrith, particularly the adjacent Mountainview facility. It will be important to encourage connections and social integration between the existing older residents in neighbouring Mountainview and the new ESQ 1818 community.

The provision of connections through the development to the retail, dining and recreational opportunities would encourage existing community members to use these new facilities. The design of pathways and connections should ensure that it is clear that non-residents are welcome to walk through the development and use the publicly available facilities.

It is also recommended that a Welcome Program be provided for ESQ 1818 to create connections between new and existing community members. Welcome programs are consistent with leading practice frameworks including Green Star Communities and EcoDistricts (Section 3.1) with many developers such as Lend Lease funding these programs.

The Welcome Program would focus on providing information to new residents about local services, facilities and activities, as well as provide programs targeted to the needs of diverse age groups in Penrith and the development. The program would be delivered by a local community organisation, with activities provided from the recommended multipurpose space within the development, or other local community facilities.

The inclusion of dining and retails options would be an asset to ESQ 1818 residents and residents of Mountainview. A café and small fresh food market/deli offering could enhance the social use of the areas fronting the lake and create opportunities for incidental interaction between new and existing residents. Seating and landscaping are recommended to create intimate spaces for quiet conversation and tranquillity. These would provide opportunities for residents to meet and make connections between generations and cultural backgrounds.

9.7 Cohesion of the development and its surrounds

The ESQ 1818 development is a significantly different from the existing Mountainview development and Riverview west area adjacent to the Panthers Precinct. Both of these areas are characterised by single and double storey dwellings, while the ESQ 1818 development would include 11 buildings ranging in height from four to 14 storeys. This would be a higher density development than the existing built form, and represent a significant change to the existing character and density of the area.

However, the inner areas of Penrith are all undergoing significant development, with many higher density developments underway or proposed for the suburb of Penrith, including across Mulgoa Rd. The ESQ 1818 development would therefore be consistent with other developments
soon to be constructed, which may offset the potential impact of the development on the broader Penrith suburb.

Higher density developments have been generally well received by the community and industry within the area. The recent Thornton mixed use development by Landcom in North Penrith was recognised by the Urban Development Institute of Australia (UDIA) NSW Awards for Government Leadership in Urban Development. The ESQ 1818 development would be in line with the upcoming high density developments in the area.

9.8 Health

As discussed in Section 9.4, the proposed recreational facilities as part of the ESQ 1818 development provide opportunities to deliver improved health and wellbeing for new residents, workers and visitors, as well as existing community members.

Connections to pathways along Mulgoa Rd, as discussed in Section 9.3, would also encourage walking and cycling. It is also recommended that facilities for bicycles, such as bicycle parking and storage lockers should be provided at the development to encourage residents and workers to cycle.

The construction of the development could temporarily affect the amenity and community members through increased noise, dust and vibration. A construction management plan would be required by construction contractors to implement measures to mitigate these impacts.

The development would occur over five stages, which may lead to a lengthy construction timeframe when each building is considered together. This could lead to stress and anxiety for vulnerable community members such as older residents of Mountainview. It is recommended that particular attention be given to the potential construction impacts and mitigation measures for these residents. It is recommended that Mountainview service providers are consulted to understand their operating times and any potential sensitive activities. This would ensure that the loudest construction activities can be undertaken outside of those times and avoid disrupting Mountainview staff and residents.

It is strongly recommended that the development's recreation and retail components are delivered early in the development to provide opportunities for both new and existing residents.

Access to fresh food is a key consideration for community health and wellbeing. The closest supermarket is the Coles at Nepean Village, approximately 900 meters or a 10 minute walk from the ESQ 1818 development. While this is considered to be a reasonable and walkable distance, existing and future residents, workers and visitors, particularly people with limited mobility such as residents of Mountainview, would benefit from a more immediate source of fresh food. The potential inclusion of a small fresh food market/deli would provide this convenient access while contributing to the amenity of the development and improved health outcomes.

Residents are likely to visit the adjacent Panthers Leagues Club for entertainment. It is a licensed venue and gaming facility, which raises the risk of people developing an alcohol or gambling addiction. Young people are considered more at risk of these.

People who suffer from addiction may experience mental and physical health problems. These may affect other aspects of life such as work and social wellbeing, as problem drinkers or gamblers may spend less time engaging with family and social networks. Support services are available at different district health facilities (i.e. Nepean Hospital, Penrith and Lemongrove Community Health Centres) which provide help for people suffering from mental or physical health problems, or drug and alcohol addiction. The closest specific gambling counselling service is in Kingswood. The Welcome Program could provide information to new residents about support services.

Open space and associated facilities within the development including BBQs, outdoor kitchen gardens, kick about, tennis wall or basketball hoops and party spaces would provide a focal point for leisure and relaxation for residents. Connected and low cost locally based recreation would be more socially rewarding, and desirable alternative to paid entertainment and gambling nearby. It is strongly recommended that the development's recreation and retail components are delivered early in the development to provide opportunities for both new and existing residents.

9.9 Risk perception in the community and crime and public safety

The Panthers Leagues Club is a significant entertainment and licensed venue in Penrith, and as such has led to increased rates of alcohol-related violence in the area (Section 5.1.8). Hotspot maps, which show the highest density of recorded crimes per square metre, show that the ESQ 1818 development is located close to two hotspots for theft, domestic assault and malicious damage. These hotspots are centred on the Penrith City Centre and the residential area of Jamistown, adjacent to the Penrith Panthers Precinct in the south-east. In terms of non-domestic assault, there were hotspots near the Penrith Panthers Club and Penrith City Centre.

The risk of theft, assault and malicious damage may be of concern for ESQ 1818 residents, workers and visitors in their new environment. Ensuring all residential buildings are securityenabled would help to address this concern. The retail and dining options and recreational facilities would help to activate the development and increase opportunities for passive surveillance.

The design for the development should consider Crime Prevention Through Environmental Design (CPTED) principles which are outlined in the Penrith DCP. The safety and surveillance objectives in the DCP are:

- To promote public safety and security through passive surveillance of public spaces.
- To ensure that, through casual surveillance, the siting and design of buildings and spaces reduces the opportunity for crime.
- To ensure that development encourages people to use streets, parks, cycleways, footpaths, the hilltop avenue and other public places without fear of personal risk.

The DCP also sets out design controls which should be implemented in the design of buildings, public spaces, recreation and community facilities within the ESQ 1818 development. To ensure these are applied, it is recommended that a CPTED assessment is prepared in consultation with Penrith LAC.

9.10 Social amenity

The proposed ESQ 1818 development would be a significant physical change to the existing site, which currently includes carparking for the Panthers Club and an event marquee. As discussed in Section 9.7, the development would also be significantly different to the existing built form in the area. Future residents would also have a different profile to existing residents in the suburb of Penrith, particularly compared to the older Mountainview residents (Section 9.1).

Together, the different physical and social composition of the ESQ 1818 development would alter the existing character of the area. However, as discussed in Section 9.1, the character of inner Penrith is changing, with many higher density developments being built, which is changing the social profile of residents living in Penrith's inner suburbs. There is evidence that people value well located housing with reduced commuting time and good access to services, open space and retail facilities.

The recreational facilities and dining and retail options provided with the ESQ 1818 development would benefit existing community members and improve the social amenity of the site, particularly opening up the lake for public access. It is recommended that these facilities and the retail/dining options be delivered early in the development, in stage two or three, to provide community access to these facilities which would encourage social interaction and create vibrancy through the development.

There may be some visual impact due to the proposed heights of buildings, which may impede views for some community members towards the Blue Mountains in the west and to the southwest. Residents of Mountainview are most likely to experience this impact. However, the existing treeline which runs along the western boundary of the property is likely to block existing views. To reduce potential visual impacts, the concept plan proposes that buildings closest to the Mountainview development would be four storeys, with heights increasing as the development moves closer to the lake.

9.11 Local economy and employment

As discussed in Section 6.2, the ESQ 1818 development has the potential to create around 183 local jobs from restaurants and cafes only. This is around half the number of jobs that could be potentially created by a DFO. Despite this, the development is considered to deliver overall positive economic impacts in the area. A DFO could still be delivered elsewhere in the LGA, within existing bulky goods retail precincts (e.g. south of the site on Mulgoa Road).

In line with State and local government policies, the development would provide high density housing, close to jobs within the development and in nearby established employment areas (e.g. Penrith CBD). New residents would be able to access existing public transport to commute to other employment areas (e.g. Blacktown, Parramatta). Residents are also likely to spend in the local area, including Penrith CBD and Nepean Village shopping centre.

Restaurants and cafes within the development may attract more visitors to the Panthers Precinct and surrounding attractions, such as the Panthers Leagues Club and Nepean River. These uses could help activate the lakefront and surrounding area particularly at night and contribute to growing the night time economy around the Club.

The development would increase the number of restaurants and cafes within the area, which may compete to an extent with existing restaurants particularly in Penrith CBD and Nepean Village shopping centre. This is considered a minor negative economic impact, as people are likely to continue to spend in Penrith CBD and Nepean Village. These places provide a range of other services, not available within the ESQ 1818 development. These include banking, shopping, major supermarkets, liquor stores and health services. People are likely to spend at existing restaurants while accessing other services in Penrith CBD and Nepean Village.

10. Social Sustainability Plan

This Social Sustainability Plan has been developed for the ESQ 1818 development, based on the social sustainability objectives (Section 8) and the assessment of potential socio-economic issues arising from the development (Section 9). The recommended strategies within this plan seek to create a connected, integrated, functional, healthy place for residents and workers within the proposed development and surrounding area.

Table 12 below set out the social sustainability objectives, the recommended strategies, and the potential socio-economic issues/risks that will be mitigated through their implementation.

Table 12 Social sustainability plan

Recommended strategies	Socio-economic issue/risk addressed
Connected community ESQ 1818 will be well connected to surrounding centres and jobs by high quality as people to walk and cycle to shops, services, facilities and their workplace. Residents and workers will enjoy go regular buses that connect to the Penrith CBD, as well as pedestrian and cycle routes to Penrith Station.	
Provide a Welcome Program targeted to new residents. The Program would be delivered by a local community	Poor access to social infrastructure
organisation. The Program would include information about local services, facilities and activities, as well as provide community activities from the recommended multipurpose space within the development or other local community facilities.	Lack of integration between existing and new communities
Provide information about local public transport services to new residents, including a green travel plan. This could be	Poor access to public transport
delivered as part of the recommended Welcome Program.	Poor access to active transport
	Reliance on private vehicles
Provide new residents with a pre-loaded Opal travel card to encourage public transport use.	Poor access to public transport
	Reliance on private vehicles
Provide information about local health and support services to new residents. This could be delivered as part of the recommended Welcome Program.	Poor access to health and support services
Provide information about local child care services to new residents. This could be delivered as part of the recommended Welcome Program.	Poor access to child care services

Recommended strategies

Socio-economic issue/risk addressed

Healthy and active lifestyles Local provision of high quality open space and recreation facilities will be provided to encourage active and healthy lifestyles and facilitate social interaction. Fresh food will be available at local shops and dining options, and there will be opportunities to grow fresh food. Access to public transport options, as well as active transport through cycling and walking, should be provided to encourage healthy lifestyles.

Provide local social infrastructure, such as a GP, within the development to meet the needs of the community.	Poor access to GPs
Provide a fresh food market/deli within the development to promote access to fresh food for new residents.	Poor access to fresh food
Connect the development with pedestrian and cycle paths to existing pathways along Mulgoa Road. These paths	Poor connectivity to the surrounding area
should have high amenity and be easily identified through planting, signage and pedestrian/bicycle priority while protecting them from increased traffic.	Poor access to active transport
	Increased traffic within the site
	Poor connectivity to the surrounding area
Require all pathways, private and public open space, community facilities and public domain areas meet universal access guidelines. Incorporate accessible design principles throughout the development, including seating, shelters	Lack of universal design
and connections between residential buildings, and to existing pathways along Mulgoa Road.	Poor access to active transport
	Poor quality public domain

Recommended strategies	Socio-economic issue/risk addressed
Safe and vibrant Vibrant places are activated both during the day and at night, on weekdays and weekends. ESQ 1 spend time, with a variety of things to do for all community members. All community members, from children to seniors, the development at all times of the day.	
Provide a multipurpose space within the development to promote social interaction and community use.	Poor access to social infrastructure
	Lack of integration between existing and new communities
Deliver the development's recreation and retail components early in the development to provide opportunities	Poor access to recreational opportunities
for new residents and visitors.	Lack of integration between existing and new communities
Consult emergency services (fire, police and ambulance) as the project progresses to best inform the safe design and management of the site.	Poor access for emergency services
Incorporate Crime Prevention Through Environmental Design (CPTED) principles throughout the	Risk of crime
development.	Poor quality public domain
Prepare a Crime Prevention Through Environmental Design (CPTED) assessment for the development in	Risk of crime
consultation with the Penrith Local Area Command (LAC).	Poor quality public domain
Ensure that all residential buildings are security-enabled.	Risk of crime

Recommended strategies	Socio-economic issue/risk addressed									
Diverse and integrated community As a mixed community, residents, workers and visitors will interact daily, sharing the identity of ESQ 1818 as a friendly, integrated and vibrant community. A diversity of household types will be supported by a range of apartment sizes. As a child-friendly and senior friendly community, public spaces and streets will be safe and accessible										
Investigate provision of creative industries hub within the recommended multipurpose space. This could include offices, equipment and workshop spaces for hire by small businesses and creative industries.	Lack of job diversity									
Design additional apartments according to the universal design principles, in line with the <i>Liveable Housing Design Guidelines</i> . Liveable dwellings are suitable to a range of occupants, including older people and people with a disability. Liveable dwellings are easier to enter, safer to move around in, more capable of cost-effective adaptation, and designed to better anticipate the changing needs and abilities of occupants.	Housing for older people Housing for people with a disability People are forced to move homes and/or out of their local area as they age and their									
Develop urban design principles and physical features which ensure the development integrates with neighbouring areas and site boundaries do not create physical barriers to neighbouring areas.	mobility decreases Physical separation with neighbouring areas Lack of integration between existing and new communities									
Ensure that neighbouring land uses are consulted as the project progresses (e.g. Mountainview service providers) to understand the project, proposed construction activities and hours, and potential amenity-related impacts.	Potential conflicts with neighbouring land uses									

Recommended strategies	Socio-economic issue/risk addressed
Connected to nature The community will have access to high quality green spaces and Penrith's natural assets in facilities and well-designed shared spaces in and between buildings will provide places for interaction and play. Features will provide a direct connection to the natural environment on a daily basis.	
Prepare and implement a public art strategy to create a sense of identity for new communities while recognising cultural heritage. The pathways around the lake and creekline present opportunities for interpretive works and signage	Lack of cultural identity Poor quality public domain
which could focus on Aboriginal heritage and/or the natural environment. Local Aboriginal stakeholders should be involved in any interpretation of local Aboriginal heritage.	Lack of integration between existing and new communities

11. Conclusion

The study has identified the likely positive and negative socio-economic impacts of the ESQ 1818 development for the existing and future community, and recommended strategies to mitigate these impacts.

Overall, the development is considered to provide positive socio-economic impacts for both current and future residents. In particular the proposed recreational facilities and dining and retail options would improve the social amenity of the site. These would contribute to improved health and wellbeing outcomes for both new residents, workers and visitors, as well as existing community members (e.g. Mountainview retirement village residents). These new uses could also help activate the lakefront and surrounding area particularly at night through passive surveillance. This could contribute to growing the night time economy and safety around the Panthers Leagues Club.

Penrith is set to become one of Sydney's Strategic Centres and Regional City Centres, which will be the focus for additional housing, jobs and services. Penrith is expected to service surrounding communities, including the growing North West Growth Centre. The ESQ 1818 development would contribute to increased supply and diversity of housing in Penrith, providing more options for different household types. It would increase the supply of smaller dwelling types (i.e. one, two, three and some four bedroom apartments), which may contribute to housing affordability in Penrith.

The development would provide high density housing, close to jobs within the development (around 183 jobs) and in nearby established employment areas (e.g. Penrith CBD). New residents would be able to access existing public transport to commute to other employment areas (e.g. Blacktown, Parramatta). Residents are also likely to spend in the local area, including Penrith CBD and Nepean Village shopping centre.

The inner areas of Penrith are all undergoing significant development, with many higher density developments underway or proposed for the suburb of Penrith. The ESQ 1818 development will therefore be consistent with other developments soon to be constructed, which may offset the potential impact of the development on the broader Penrith suburb.

The development would encourage active modes of transport through the provision of pathways, bicycle parking spaces and car share spaces within the development. These facilities would assist with reducing car trips, traffic and parking generation.

While the development is within a few kilometres to most social infrastructure, local community spaces are not within short walking distance. This may reduce the access of children and young children who are yet to drive.

The cumulative impact of the ESQ 1818 development with other major proposed developments in the area is likely to increase demand for existing child care services over time and may exacerbate the current shortage of GPs in Penrith.

Health and safety concerns due to the site's proximity to the Panthers Leagues Club (licensed venue and gaming facility) include the potential risk of people developing an alcohol or gambling addiction and risk of theft, assault and malicious damage.

A number of recommendations to mitigate the potential socio-economic issues and risks arising from the ESQ 1818 development include:

• Providing information and programs for new residents through a Welcome Program to be delivered by a local community organisation. The Program would include information about local services, facilities and activities.

- Provide a multipurpose space within the development to promote social interaction and community use. A multipurpose space could include a creative industries hub, with offices, equipment and workshop spaces for hire. Activities under the recommended Welcome Program could be run in this multipurpose space.
- Connect the development with pedestrian and cycle paths to existing pathways along Mulgoa Road. These paths should have high amenity and be easily identified through planting, signage and pedestrian/bicycle priority while protecting them from increased traffic.
- Deliver the development's recreation and retail components early in the development to provide opportunities for new residents and visitors.
- Design additional apartments according to the universal design principles, in line with the *Liveable Housing Design Guidelines*. Liveable dwellings are suitable to a range of occupants, including older people and people with a disability. Liveable dwellings are easier to enter, safer to move around in, more capable of cost-effective adaptation, and designed to better anticipate the changing needs and abilities of occupants.
- Require all pathways, private and public open space, community facilities and public domain areas meet universal access guidelines.
- Incorporate Crime Prevention Through Environmental Design (CPTED) principles throughout the development.
- Prepare and implement a public art strategy to create a sense of identity for new communities while recognising the cultural heritage of the area.

12. Glossary and Abbreviations

ABS	Australian Bureau of Statistics
ACARA	Australian Curriculum, Assessment and Reporting Authority
CALD	Culturally and Linguistically Diverse
DCP	Development Control Plan
EIA	Environmental Impact Assessment
GP	General Practitioner
IAIA	International Association for Impact Assessment
LAC	Local Area Command
LEP	Local Environmental Plan
LGA	Local Government
NSW	New South Wales
n.d.	no date
SIA	Social Impact Assessment

13. References

ACARA (Australian Curriculum Assessment and Reporting Authority). 2015. *My School.* Available at https://www.myschool.edu.au/, Accessed 1 March 2016.

Australian Government. 2016. '5.2.2.10 Maximum Basic Rates of Pension – July 1909 to Present Date'. *Guide to Social Security Law*. Department of Social Security. Available at http://guides.dss.gov.au/guide-social-security-law/5/2/2/10 Accessed: 19 February 2016.

Berkeley Group. 2016. *Creating Successful Places*. Available at: http://www.berkeleygroup.co.uk/sustainability/social-sustainability, Accessed February 2016.

Clouston Associates. 2013. 'Our river' Nepean River Master Plan. Penrith City Council.

Club Paceway. n.d. *Club Paceway.* Available at <http://www.clubpacewaypenrith.com/>, Accessed: 1 March 2016.

EcoDistricts. 2016. Available at http://ecodistricts.org/, Accessed February 2016.

Economy id. n.d. *Penrith City Council Economic Profile*. Available at http://economy.id.com.au/penrith, Accessed 19 February 2016.

EnviroDevelopment. 2011. Available at: http://www.envirodevelopment.com.au/, Accessed February 2016.

Green Building Council Australia. 2015. *Green Star.* Available at: http://www.gbca.org.au/green-star/green-star-communities/ Accessed February 2016.

NSW Ambulance, 2015. *Sydney Paramedic Response Centre Program: Project Newsletter*. Issue 1. January 2015. Available at

http://www.ambulancesuperstations.health.nsw.gov.au/WWW_SAMIS/media/Media/Publications/Newsletter/3014-Newsletter-SAMIS-Ambulance-Issue-1-190115.pdf>. Accessed 26 February 2016.

NSW Ambulance. 2016. *Paramedic Response Network: Penrith*. Available at http://www.ambulancesuperstations.health.nsw.gov.au/Projects/Refurbishment>. Accessed 26 February 2016.

Penrith City Council. n.d. 'What's on for Seniors: Penrith Seniors Centre', *Penrith City Council*. Available at https://www.penrithcity.nsw.gov.au/Community-and-Library/Seniors/Whats-on-for-seniors/. Accessed 24 February 2016.

Penrith City Council. 2014. Development Control Plan: Volumes 1&2. Penrith, NSW.

Planning Institute of Australia (PIA). 2010. Social Impact Assessment Position Statement. Available at <http://www.planning.org.au/policy/social-impact-assessment-1010>. Accessed: 11 February 2016.

Vanclay, F., Esteves, A.M., Aucamp, I. & Franks, D. 2015. *Social Impact Assessment: Guidance for assessing and managing the social impacts of projects.* Fargo ND. International Association for Impact Assessment.

Appendices

Appendix A – Demographic Summary

2011 Census	Riverl	ink East	River	link West	River preci		Penri	th Suburb	Penrith LGA	
Population:										
Total Persons	355	100.0%	485	100.0%	840	100.0%	11813	100.0%	178467	100.0%
Age groups:										
0 to 4 years	0	0.0%	44	9.1%	44	5.2%	797	6.7%	13558	7.6%
5 to 11 years	0	0.0%	38	7.8%	38	4.5%	864	7.3%	17513	9.8%
12 to 17 years	0	0.0%	34	7.0%	34	4.0%	716	6.1%	15510	8.7%
18 to 24 years	12	3.4%	46	9.5%	58	6.9%	1181	10.0%	18509	10.4%
25 to 34 years	9	2.5%	48	9.9%	57	6.8%	1970	16.7%	26315	14.7%
35 to 49 years	24	6.8%	104	21.4%	128	15.2%	2318	19.6%	37294	20.9%
50 to 59 years	27	7.6%	72	14.8%	99	11.8%	1291	10.9%	23009	12.9%
60 to 69 years	39	11.0%	60	12.4%	99	11.8%	1109	9.4%	15766	8.8%
70 to 84 years	127	35.8%	34	7.0%	161	19.2%	1121	9.5%	9095	5.1%
85 and over years	114	32.1%	4	0.8%	118	14.0%	446	3.8%	1896	1.1%
Under 18 years	0	0.0%	116	23.9%	116	13.8%	2377	20.1%	46581	26.1%
15 years and over	352	99.2%	386	79.6%	738	87.9%	9790	82.9%	139757	78.3%
Median Age (years)	79		40		56		37		34	
Cultural Diversity:										
Indigenous persons	0	0.0%	3	0.6%	3	0.4%	472	4.0%	5388	3.0%
Persons born in Non Main English Speaking countries	0	0.0%	29	6.0%	71	8.5%	1611	13.6%	23810	13.3%
Language spoken at home other than English	30	8.5%	26	5.4%	56	6.7%	1607	13.6%	25981	14.6%
Speaks English Only	313	88.2%	425	87.6%	738	87.9%	9410	79.7%	144384	80.9%

Speaks other language and speaks English very well or well	21	5.9%	13	2.7%	34	4.0%	1041	8.8%	15862	8.9%
Household Characteristics:										
Family households	39	22.3%	117	70.5%	156	45.7%	2,820	57.2%	46,494	78.3%
Lone person household	132	75.4%	43	25.9%	175	51.3%	1,905	38.6%	11,418	19.2%
Group household	4	2.3%	6	3.6%	10	2.9%	208	4.2%	1479	2.5%
Average household size (number of persons)	1.3		2.6		2.1		2.2		2.9	
Family Characteristics:										
Total families	38		127		165		2,889		48,360	
Couple family with children	0	0.0%	58	45.7%	58	35.2%	1,021	35.3%	24,038	49.7%
Couple with children under 15 years	0	0.0%	35	27.6%	35	21.2%	714	24.7%	15,689	32.4%
Couple with children over 15 years	0	0.0%	23	18.1%	23	13.9%	307	10.6%	8,349	17.3%
Couple family without children	27	71.1%	50	39.4%	77	46.7%	1,027	35.5%	14,293	29.6%
One parent family	11	28.9%	14	11.0%	25	15.2%	756	26.2%	9,296	19.2%
One parent with children under 15 years	3	27.3%	6	42.9%	9	36.0%	410	54.2%	4,978	53.5%
One parent with children over 15 years	8	72.7%	8	57.1%	16	64.0%	346	45.8%	4,318	46.5%
Other family	0	0.0%	5	3.9%	5	3.0%	85	2.9%	733	1.5%
Other characteristics:										
Need for assistance	140	39.4%	18	3.7%	158	18.8%	904	7.7%	7,671	4.3%

Dwellings:										
Separate House	13	6.3%	148	84.1%	161	42.1%	2,335	43.5%	48,409	77.3%
Semi-detached, terrace house, townhouse	158	76.7%	9	5.1%	167	43.7%	1249	23.3%	6430	10.3%
Flat, unit or apartment	4	1.9%	7	4.0%	11	2.9%	1284	23.9%	4242	6.8%
Other dwellings	0	0.0%	0	0.0%	-	0.0%	7	0.1%	228	0.4%
Not stated	0	0.0%	0	0.0%	-	0.0%	59	1.1%	83	0.1%
Total occupied private dwellings	175	85.0%	164	93.2%	339	88.7%	4934	91.9%	59392	94.8%
Unoccupied private dwellings	31	15.0%	12	6.8%	43	11.3%	433	8.1%	3240	5.2%
Tenure Type:										
Fully owned	139	86.3%	74	45.7%	213	65.9%	1,065	22.7%	15,906	27.5%
Owned with a mortgage	6	3.7%	58	35.8%	64	19.8%	1,198	25.5%	25,998	45.0%
Rented (Total):	16	9.9%	30	18.5%	46	14.2%	2,437	51.9%	15,868	27.5%
Real estate agent	8	50.0%	22	73.3%	30	65.2%	1,438	59.0%	9,334	58.8%
State or territory housing authority	0	0.0%	0	0.0%	-	0.0%	562	23.1%	2,628	16.6%
Person not in same household	5	31.3%	8	26.7%	13	28.3%	309	12.7%	2,987	18.8%
Housing co- operative/community/church group	0	0.0%	0	0.0%	-	0.0%	72	3.0%	294	1.9%
Other landlord type	0	0.0%	0	0.0%	-	0.0%	29	1.2%	367	2.3%
Landlord type not stated	3	18.8%	0	0.0%	3	6.5%	27	1.1%	258	1.6%
Other Tenure Type	3	18.8%	0	0.0%	3	6.5%	72	3.0%	284	1.8%
Not stated	10	62.5%	3	10.0%	13	28.3%	161	6.6%	1335	8.4%

Individual Income:										
Median Individual Income (\$/weekly)	361		745		583		545		623	
Negative/Nil Income	0	0.0%	23	5.9%	23	3.1%	587	6.0%	11,596	8.3%
\$1-\$199	9	2.6%	17	4.4%	26	3.5%	598	6.1%	10,230	7.3%
\$200-\$299	79	22.7%	37	9.6%	116	15.8%	1,151	11.8%	12,970	9.3%
\$300-\$399	120	34.5%	30	7.8%	150	20.4%	1,214	12.4%	12,542	9.0%
\$400-\$599	68	19.5%	44	11.4%	112	15.2%	1,160	11.8%	15,411	11.0%
\$600-\$799	17	4.9%	41	10.6%	58	7.9%	1,090	11.1%	16,150	11.6%
\$800-\$999	6	1.7%	34	8.8%	40	5.4%	894	9.1%	14,112	10.1%
\$1,000-\$1,249	12	3.4%	32	8.3%	44	6.0%	803	8.2%	13,396	9.6%
\$1,250-\$1,499	10	2.9%	23	5.9%	33	4.5%	523	5.3%	8,696	6.2%
\$1,500-\$1,999	6	1.7%	34	8.8%	40	5.4%	516	5.3%	9,174	6.6%
\$2,000 or more	9	2.6%	40	10.3%	49	6.7%	243	2.5%	4,923	3.5%
Individual income not stated	12	3.4%	32	8.3%	44	6.0%	1,011	10.3%	10,557	7.6%
Household Income:										
Median Household income (\$/weekly)	418		1,625		1,115		949		1,398	
Negative/Nil Income	0	0.0%	3	2.0%	3	0.9%	61	1.3%	547	1.0%
\$1-\$199	0	0.0%	4	2.6%	4	1.2%	95	2.0%	699	1.3%
\$200-\$299	13	7.7%	0	0.0%	13	4.0%	240	5.1%	1,337	2.4%
\$300-\$399	64	37.9%	9	5.9%	73	22.7%	542	11.6%	3,021	5.5%
\$400-\$599	38	22.5%	12	7.9%	50	15.6%	515	11.0%	4,460	8.1%
\$600-\$799	21	12.4%	14	9.2%	35	10.9%	500	10.7%	4,449	8.1%
\$800-\$999	8	4.7%	6	3.9%	14	4.4%	409	8.8%	4,288	7.8%
\$1,000-\$1,249	10	5.9%	3	2.0%	13	4.0%	444	9.5%	5,093	9.3%
\$1,250-\$1,499	3	1.8%	18	11.8%	21	6.5%	372	8.0%	4,676	8.5%
\$1,500-\$1,999	3	1.8%	13	8.6%	16	5.0%	550	11.8%	8,124	14.8%
\$2,000-\$2,499	0	0.0%	16	10.5%	16	5.0%	353	7.6%	6,487	11.8%

\$2,500-\$2,999	3	1.8%	20	13.2%	23	7.2%	214	4.6%	4,442	8.1%
\$3,000-\$3,499	0	0.0%	12	7.9%	12	3.7%	122	2.6%	2,817	5.1%
\$3,500-\$3,999	0	0.0%	6	3.9%	6	1.9%	44	0.9%	1,222	2.2%
\$4,000 or more	0	0.0%	10	6.6%	10	3.1%	52	1.1%	1,681	3.1%
All incomes not stated	6	3.6%	6	3.9%	12	3.7%	161	3.4%	1,571	2.9%
Labour Force:										
Labour force participation	55	15.6%	248	64.2%	303	41.1%	5,559	56.8%	92,282	66.0%
Total employed	52	94.5%	238	96.0%	290	95.7%	5,137	92.4%	87,225	94.5%
Employed full-time	34	65.4%	162	68.1%	196	67.6%	3,521	68.5%	58,956	67.6%
Employed part-time	12	23.1%	69	29.0%	81	27.9%	1,273	24.8%	22,780	26.1%
Unemployed persons	3	5.5%	10	4.0%	13	4.3%	422	7.6%	5,057	5.5%
Not in labour force	284	80.7%	113	29.3%	397	53.8%	3,449	35.2%	40,881	29.3%
Occupation:										
Managers	13	24.5%	36	14.8%	49	16.5%	493	9.6%	8,771	10.1%
Professionals	12	22.6%	58	23.8%	70	23.6%	887	17.3%	12,132	13.9%
Technicians and trades	6	11.3%	27	11.1%	33	11.1%	682	13.3%	13,298	15.2%
Community and personal service	6	11.3%	23	9.4%	29	9.8%	545	10.6%	8,428	9.7%
Clerical and administrative	13	24.5%	49	20.1%	62	20.9%	914	17.8%	16,648	19.1%
Sales	3	5.7%	24	9.8%	27	9.1%	483	9.4%	8,627	9.9%
Machinery operators and drivers	0	0.0%	9	3.7%	9	3.0%	548	10.7%	9,319	10.7%
Labourers	0	0.0%	15	6.1%	15	5.1%	497	9.7%	8,360	9.6%
Not Stated	0	0.0%	3	1.2%	3	1.0%	89	1.7%	1,643	1.9%

Key Industry:										
Agriculture, forestry & fishing	0	0.0%	3	1.2%	3	1.0%	27	0.5%	562	0.6%
Mining	0	0.0%	0	0.0%	-	0.0%	5	0.1%	169	0.2%
Manufacturing	3	5.7%	15	6.1%	18	6.1%	523	10.2%	10,261	11.8%
Electricity, gas, water & waste services	3	5.7%	4	1.6%	7	2.4%	54	1.1%	1,320	1.5%
Construction	0	0.0%	33	13.5%	33	11.1%	364	7.1%	8,161	9.4%
Wholesale trade	3	5.7%	12	4.9%	15	5.1%	248	4.8%	4,772	5.5%
Retail trade	10	18.9%	17	7.0%	27	9.1%	581	11.3%	9,902	11.4%
Accommodation & food services	0	0.0%	14	5.7%	14	4.7%	346	6.7%	4,834	5.5%
Transport, postal & warehousing	0	0.0%	6	2.5%	6	2.0%	369	7.2%	6,422	7.4%
Information media & telecommunications	0	0.0%	6	2.5%	6	2.0%	82	1.6%	1,245	1.4%
Financial & insurance services	3	5.7%	10	4.1%	13	4.4%	226	4.4%	3,804	4.4%
Rental, hiring & real estate services	3	5.7%	11	4.5%	14	4.7%	96	1.9%	1,300	1.5%
Professional, scientific & technical services	6	11.3%	28	11.5%	34	11.4%	244	4.7%	3,575	4.1%
Administrative & support services	0	0.0%	9	3.7%	9	3.0%	180	3.5%	2,649	3.0%
Public administration & safety	10	18.9%	15	6.1%	25	8.4%	422	8.2%	6,475	7.4%
Education & training	3	5.7%	14	5.7%	17	5.7%	357	6.9%	5,802	6.7%
Health care & social assistance	6	11.3%	34	13.9%	40	13.5%	609	11.9%	8,866	10.2%
Arts & recreation services	3	5.7%	3	1.2%	6	2.0%	74	1.4%	1,113	1.3%
Other services	0	0.0%	7	2.9%	7	2.4%	196	3.8%	3,639	4.2%
Not Stated	0	0.0%	3	1.2%	3	1.0%	135	2.6%	2355	2.7%

Educational attainment:										
Completion of Year 12 (or equivalent)	61	17.3%	175	45.3%	236	32.0%	3,548	36.2%	52,696	37.7%
Without post-school qualifications	243	69.0%	153	39.6%	396	53.7%	4685	47.9%	69452	49.7%
Educational institution attending:										
Total	39	100.0%	138	100.0%	177	100.0%	3,371	100.0%	55,312	100.0%
Pre-school attending:										
Pre-school	0	0.0%	8	5.8%	8	4.5%	192	5.7%	3,664	6.6%
Infants/Primary education attending:										
Government	0	0.0%	11	8.0%	11	6.2%	535	15.9%	10,679	19.3%
Catholic	3	7.7%	16	11.6%	19	10.7%	145	4.3%	3,545	6.4%
Other Non Government	0	0.0%	10	7.2%	10	5.6%	67	2.0%	1,668	3.0%
Total	3	7.7%	37	26.8%	40	22.6%	747	22.2%	15,892	28.7%
Secondary education attending:										
Government	0	0.0%	13	9.4%	13	7.3%	370	11.0%	7,216	13.0%
Catholic	0	0.0%	11	8.0%	11	6.2%	146	4.3%	4,061	7.3%
Other Non Government	0	0.0%	0	0.0%	-	0.0%	48	1.4%	1,515	2.7%
Total	0	0.0%	24	17.4%	24	13.6%	564	16.7%	12,792	23.1%
Technical or Further Educational Institution(a):										
Full-time student:					-					
Aged 15-24 years	0	0.0%	0	0.0%	-	0.0%	46	1.4%	802	1.4%
Aged 25 years and over	0	0.0%	0	0.0%	-	0.0%	71	2.1%	547	1.0%
Part-time student:					-					

Aged 15-24 years	0	0.0%	3	2.2%	3	1.7%	82	2.4%	1,656	3.0%
Aged 25 years and over	3	7.7%	3	2.2%	6	3.4%	155	4.6%	1,727	3.1%
Full/Part-time student status not stated	0	0.0%	0	0.0%	-	0.0%	6	0.2%	63	0.1%
Total	3	7.7%	6	4.3%	9	5.1%	360	10.7%	4,795	8.7%
University or other Tertiary Institution attending:										
Full-time student:					-					
Aged 15-24 years	0	0.0%	12	8.7%	12	6.8%	127	3.8%	2,726	4.9%
Aged 25 years and over	0	0.0%	3	2.2%	3	1.7%	74	2.2%	798	1.4%
Part-time student:					-					
Aged 15-24 years	0	0.0%	6	4.3%	6	3.4%	30	0.9%	509	0.9%
Aged 25 years and over	0	0.0%	3	2.2%	3	1.7%	103	3.1%	1,373	2.5%
Full/Part-time student status not stated	0	0.0%	0	0.0%	-	0.0%	0	0.0%	26	0.0%
Total	0	0.0%	24	17.4%	24	13.6%	334	9.9%	5,432	9.8%
Other type of educational institution attending:										
Full-time student	0	0.0%	0	0.0%	-	0.0%	31	0.9%	261	0.5%
Part-time student	0	0.0%	0	0.0%	-	0.0%	61	1.8%	783	1.4%
Full/Part-time student status not stated	0	0.0%	6	4.3%	6	3.4%	4	0.1%	11	0.0%
Total	0	0.0%	6	4.3%	6	3.4%	96	2.8%	1,055	1.9%
Type of educational institution not stated	33	84.6%	33	23.9%	66	37.3%	1,078	32.0%	11,682	21.1%

Mobility:										
Lived at same address 1 year ago	284	80.0%	393	81.0%	677	80.6%	9,138	77.4%	147,873	82.9%
Lived at same address 5 years ago	189	53.2%	254	52.4%	443	52.7%	5,509	46.6%	103,221	57.8%
Transport:										
Households without a motor vehicle	84	51.9%	8	5.0%	92	28.7%	1,001	21.2%	4,451	7.7%
One motor vehicle	68	42.0%	49	30.8%	117	36.4%	2,229	47.3%	19,274	33.4%
Two motor vehicles	4	2.5%	69	43.4%	73	22.7%	1,097	23.3%	22,017	38.2%
Three motor vehicles	6	3.7%	18	11.3%	24	7.5%	285	6.0%	7,626	13.2%
Four or more motor vehicles	0	0.0%	15	9.4%	15	4.7%	104	2.2%	4,291	7.4%
Journey to work (by one method only):										
Train	0	0.0%	18	8.2%	18	6.8%	740	16.2%	8,441	10.6%
Bus	4	9.1%	0	0.0%	4	1.5%	49	1.1%	822	1.0%
Ferry	0	0.0%	0	0.0%	-	0.0%	3	0.1%	8	0.0%
Tram (includes light rail)	0	0.0%	0	0.0%	-	0.0%	3	0.1%	26	0.0%
Taxi	0	0.0%	0	0.0%	-	0.0%	17	0.4%	98	0.1%
Car, as driver	26	59.1%	167	76.3%	193	73.4%	2,949	64.6%	58,044	73.1%
Car, as passenger	7	15.9%	11	5.0%	18	6.8%	290	6.4%	5,340	6.7%
Truck	0	0.0%	3	1.4%	3	1.1%	47	1.0%	1,770	2.2%
Motorbike/scooter	0	0.0%	3	1.4%	3	1.1%	26	0.6%	416	0.5%
Bicycle	0	0.0%	0	0.0%	-	0.0%	31	0.7%	264	0.3%
Other	4	9.1%	0	0.0%	4	1.5%	20	0.4%	311	0.4%
Walked only	3	6.8%	5	2.3%	8	3.0%	285	6.2%	1,394	1.8%
Worked at home	0	0.0%	12	5.5%	12	4.6%	102	2.2%	2,432	3.1%

Appendix B - Penrith Social Infrastructure

No.	Name	Туре
1	SummitCare Penrith	Aged care facility
2	Mountain View Nursing Home	Aged care facility
3	Ivy League Family Daycare	Child care
4	Jamisontown Children Centre	Child care
5	Kindy4Kids Child Care Penrith	Child care
6	Little Cottage Preschool	Child care
7	Nepean Tiny Tots	Child care
8	Penrith Community Aid Child Care Services	Child care
9	Penrith Early Learning Centre	Child care
10	Spunky Monkeys Early Learning Centre	Child care
11	Explore & Develop	Child care
12	Penrith Montessori Academy	Child care
13	Pasadera Pre-School	Child care
14	Bright Stars Kindergarten	Child care
15	Gymbaroo Sydney West	Child care
16	Little Learners Early Learning Centre	Child care
17	Kidz Biz Pre-School and Long Day Care	Child care
18	1st Penrith Scout Hall	Community building
19	2nd Penrith Scout Hall	Community building
20	Douglas Hall	Community building
21	Penrith Civic Centre	Community building
22	Penrith Senior Citizens Centre	Community building
23	South Penrith Scout Hall	Community building
24	headspace Penrith	Community services
25	Anglican Retirement Villages Home Care	Community services
26	Anglicare	Community services
27	Baptist Community Services	Community services
28	Centrelink	Community services
29	Docs Penrith Community Services Centre	Community services
30	Family Planning NSW Penrith	Community services
31	Mission Australia	Community services
32	PCYC Penrith	Community services
33	Penrith City Council	Community services
34	Penrith Service Centre	Community services

No.	Name	Туре
35	UnitingCare	Community services
36	YMCA Penrith	Community services
37	The Benevolent Society	Community services
38	Joan Sutherland Performing Arts Centre	Cultural facility
39	Ambulance Service NSW	Emergency service
40	Penrith Fire Station	Emergency service
41	Penrith Police Station	Emergency service
42	Barratt & Smith Pathology	Health
43	Douglass Hanly Moir Pathology	Health
44	Everybody Physiotherapy Penrith	Health
45	Hall Family Denture Clinic	Health
46	High Street Family Doctors	Health
47	Medeco Medical Centre Penrith	Health
48	Ozemed	Health
49	Penrith Doctors	Health
50	Penrith Imaging	Health
51	Tindale Dental Centre	Health
52	Tindale Family Practice	Health
53	Western Sydney Sports Medicine Centre	Health
54	St John (NSW) - Penrith Training Centre	Health
55	NSW Civil and Administrative Tribunal	Justice services
56	Penrith Court House	Justice services
57	Penrith Legal Aid Office	Justice services
58	Penrith City Library	Library
59	Penrith Showground	Multi-purpose facility
60	Penrith Museum of Printing	Cultural facility
61	Howell Oval	Open space
62	Jamison Park	Open space
63	Judges Park	Open space
64	Memory Park	Open space
65	Penrith Park	Open space
66	Penrith Picnic Park	Open space
67	Tench Reserve	Open space
68	Triangle Park	Open space
69	Willoring Crescent & Harris Street Reserve	Open space
70	Woodriff Gardens	Open space

No.	Name	Туре
71	C3 Church Penrith Campus	Place of worship
72	Empower Church	Place of worship
73	Extended Hand Church	Place of worship
74	Penrith Anglican Church, St Stephen's	Place of worship
75	Penrith Uniting Church	Place of worship
76	Riverlands Christian Church	Place of worship
77	Sacred Gardens Church of the Holy Spirit	Place of worship
78	Sacred Gardens	Place of worship
79	St Nicholas of Myra Catholic Parish	Place of worship
80	St. Andrews Presbyterian Church	Place of worship
81	The TransEdge Church	Place of worship
82	St Nicholas of Myra Primary School	Primary school
83	Jamisontown Public School	Primary school
84	Penrith Public School	Primary school
85	Penrith South Public School	Primary school
86	Penrith High School	Secondary school
87	Aqua Golf	Sport and recreation
88	Cables Wake Park	Sport and recreation
89	Great River Walk - Penrith	Sport and recreation
90	Nepean District Tennis Association	Sport and recreation
91	Nepean Rowing Club	Sport and recreation
92	Penrith Bowling & Recreation Club	Sport and recreation
93	Jamison Park Netball Complex	Sport and recreation
94	Penrith Ice Palace	Sport and recreation
95	Penrith Paceway	Sport and recreation
96	Penrith Rowing Club	Sport and recreation
97	Penrith Skate Park	Sport and recreation
98	Penrith Swimming Centre	Sport and recreation
99	Pepper Stadium	Sport and recreation
100	Astute Training	Tertiary education
101	Benchmark College	Tertiary education
102	Evocca College Penrith	Tertiary education
103	Nepean College - Penrith Campus	Tertiary education
104	Nepean Community College	Tertiary education
105	NOVA Employment & Training - Penrith	Tertiary education
106	Dive In Swimming Academy	Sport and recreation

No.		Туре
107	Penrith Regional Gallery	Cultural facility
108	Museum of Fire	Cultural facility
109	Nepean Hospital	Health
110	Nepean Private Hospital	Health
111	Penrith Community Health Centre	Health
112	Penrith Medical Centre	Health
113	Lemongrove Community Health Centre	Health

Appendix C – Bureau of Crime Statistics and Research (BOCSAR) Crime Maps



Figure 25 Hotspot for incidents of breaking and entering a dwelling



Figure 26 Hotspot for incidents of malicious damage to property



Figure 27 Hotspot for incidents of domestic assault



Figure 28 Hotspot for incidents of non-domestic assault



Figure 29 Hotspot for incidents of stealing from a motor vehicle

GHD

133 Castlereagh St Sydney NSW 2000

T: +61 2 9239 7100 F: +61 2 9239 7199 E: sydmail@ghd.com.au

© GHD 2016

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited. n:\au\sydney\projects\21\25061\WP\213832.docx

Document Status

Rev	Author	Reviewer		Approved for Issue			
No.	Name Signature		Signature	Name	Signature	Date	
A	M.Gigacz L.Harding	G.Newling	Fithy	G.McCabe		01.03.16	
В	M.Gigacz L.Harding	G.Newling	Fithy	G.McCabe		15.03.16	

www.ghd.com

