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Mirvac Homes (NSW) Pty Ltd
and Vianello Holdings Pty Ltd

Social impact and infrastructure assessment

Glenmore Park Extension

wsp

April 2022

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Social impact and infrastructure assessment Glenmore Park Extension

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WSP acknowledges that every project we work on takes place on First Peoples lands.

We recognise Aboriginal and Torres Strait Islander Peoples as the first scientists and engineers and pay our respects to Elders past and present.

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Addendum

In 2020, Elton Consulting (now WSP) prepared a Social Impact and Infrastructure Assessment for the Glenmore Park Extension.

In 2022, WSP prepared this Addendum to acknowledge a small reduction in the proposed yield and revise findings accordingly. The proposed yield was reduced from 2,600 dwellings to 2,400 dwellings. This Addendum provides:

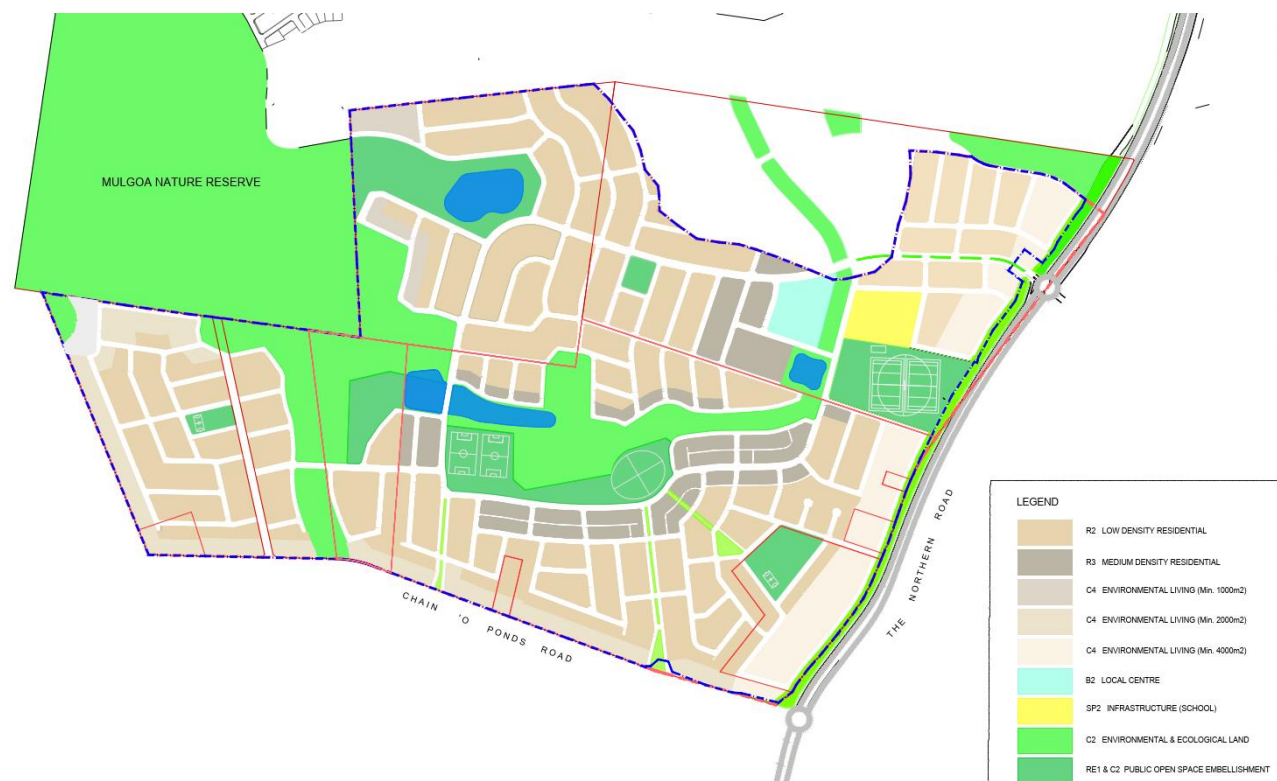
1. A revised project description (refer to Section 1 in the original report)
2. An update to the policy context (refer to Section 2 in the original report)
3. An update of the future community profile (refer to Section 3 in the original report)
4. A review of social impacts and their significance, also acknowledging the new *Social Impact Guideline* (Department of Planning, Industry and Environment, 2021) (refer to Section 4 in the original report)
5. A review of the social infrastructure assessment (refer to Section 5 in the original report)
6. A review of the open space assessment (refer to Section 5 in the original report).

The 2020 Report was not modified. No additional consultation was undertaken to inform this Addendum.

1. Revised project description

It is understood that the revised master plan does not propose other changes in addition to the reduced yield, apart from some differences in open space sizes (refer Section 6 below).

Figure 1: Revised master plan



As shown in Figure 1, the master plan continues to include:

- A proposed school site, adjacent active open space (double sportsfield)

- A central open space supporting both passive and active uses, including a double sportsfield
- Two local parks linking to the Mulgoa Nature Reserve
- A total of five sportsfields including two double fields and one smaller oval
- Linear park connecting the school to central open space, local parks and water bodies, as well as to the Glenmore Park development north of the site.

It is also understood that a multipurpose community facility is proposed in the centre of the site, co-located with active open space and an amenities building.

2. Updated policy context

Local policies

The Penrith *Local Strategic Planning Statement* (LSPS) was adopted by Penrith City Council (Council) in March 2020. The LSPS supports:

- Walkable, active, inclusive and connected neighbourhoods, with walking and cycling paths and connections to jobs, recreation, shops, services
- Social infrastructure and public places as a key pillar for social connections, health and wellbeing
- Diverse and affordable housing that meets community needs
- Cultural and natural assets as defining elements to protect
- Design that considers natural risks and supports healthy built environments.

The LSPS identifies the need to ensure that communities have adequate access to education/child care facilities, local health services (general practices and medical centres) and local social support services (e.g. community centres and organisations). Identifying opportunities for joint use of school facilities is another action of the LSPS.

Council's *Sport, Recreation, Play and Open Space Strategy* was finalised since the 2020 report. In addition to Table 1 in the original report, further performance measures for play and recreation spaces have been summarised below:

- **Playgrounds:** within 5 minutes safe walk, with one space within 400m for 80% of homes and within 500m for 100% of homes
- **Youth space (10-20 years):** within 10 minutes safe walking and cycling, with at least one youth space within 800m for 80% of houses and within 1500m for 100% ideally within 500m of public transport stop
- **Passive outdoor recreation:** within 5 minutes safe walk, with one space within 400m for 80% of homes and within 500m for 100% of homes
- **Active recreation (group based):** within 15-minutes safe walking, or 10 minutes cycling – or less than 1500m walking distance
- **Organised sport and recreation:** access to at least two of the following within 20-minutes safe walking or 15-minutes safe cycling or public transport: field sports, outdoor sports courts, indoor sports, aquatic sports.
- **Trail and path-based recreation:** within 10-minutes safe walking or within 800m of 100% of houses.

New sportsgrounds within new release areas should connect to active transport networks and public transport stops. Workplaces and schools should be within 500m of open space.

Greener Places (Draft) 2020

The revised Draft continues to encourage 400m walking distance (5 minutes walk) to a local park from homes, schools and workplaces.

Local parks should be between 0.5-2ha in medium/low density areas, with expansive road frontages.

A range of design solutions are provided for various recreation spaces, which should be considered in detailed design.

3. Updated future community profile

Based on a revised yield of 2,400 dwellings, the estimated future population for the site is 7,200.

4. Review of social impacts and their significance

Section 1.4 of the 2020 Report referred to the NSW Department of Planning, Industry and Environment's (DPIE) *Social Impact Assessment (SIA) Guideline* (2017). The new *SIA Guideline* for State Significant Projects was released by DPIE in 2021. The new Guideline has made changes to the social impact categories with no major change to be made to the 2020 Report. The 2020 Report followed the necessary steps of SIA (e.g. scoping, consultation, impact identification and assessment, and development of measures). The following changes and additions are made to the 2020 Report.

Way of life

Identified social impact: social impact associated with increased traffic and congestion include possible delays, increased length of trips for drivers, increased safety risks associated with congestion, amenity impacts for future residents of the area.

Measures: in addition to measures in the 2020 Report, design solutions to minimise driving and support walkable, connected and active neighbourhoods should be considered during detailed design. This will help to address the impacts of traffic and congestion, and will further support healthy lifestyles.

Community

Identified social impact: Increased opportunity for social cohesion, local character and sense of place through a well-designed Master Plan.

Measures: in addition to measures in the 2020 Report, the provision of a community space to support community activities could be considered, co-located with open space and recreation and other community focused uses (e.g. café). This is further explored in Section 5. Beyond the provision of community-focused spaces, activating these spaces will ensure that these are well used. Detailed design of indoor/outdoor community spaces should seek to understand the needs of future residents. These spaces should also be provided early in the development to support the first residents moving in.

Accessibility (formerly Access to services and infrastructure)

Identified social impact: Access to education through the provision of a new school. The more recent master planning and design guidelines prepared by DoE should be considered¹, noting that further engagement has occurred with DoE/School Infrastructure NSW in selecting the school site.

Measures: in addition to measures in the 2020 Report, the concept plan should maximise active connections to the school site from the site and Glenmore Park Stage 2. Shared uses with the local community outside of school hours should be investigated in collaboration with DoE and the future school.

Culture

No information was available to identify social impacts associated with culture. It is recommended that future detailed design incorporates cultural values, via culturally appropriate engagement, to connect the future development with Country.

¹ DoE, Draft Guidelines for School Site Selection (2020) and Draft Master Planning Guidelines for Schools (2020)

Decision-making systems

Identified social impact: there will be ongoing construction that will affect some future residents.

Measures: appropriate mechanisms should be put in place during the construction period to ensure residents who move in during early stages of the development, are able to provide feedback or express concerns. It is also recommended that appropriate engagement is conducted to inform detailed design, particularly of community spaces.

5. Review of social infrastructure assessment

Community facilities

As identified in the 2020 Report, the site is within easy driving distance of existing community facilities, including the Glenmore Park Youth and Community Centre and Surveyors Creek Community Centre.

To understand the likely demand for community facility space created by the proposal, we can use the generally accepted indicative standard of 80sqm per 1,000 people. Using this benchmark, the projected population of Glenmore Park creates demand for approximately 575sqm of community facility floorspace. This is not a large community facility, however it is a feasible and viable size, able to support multipurpose and flexible uses.

We understand from previous consultation that Council has discussed with Mirvac their desire for off-site contributions to a district level community facility. This is likely based on the common local government preference for fewer, but larger and better appointed community facilities that are located in accessible locations. Larger facilities provide the opportunity for the provision of fewer but better appointed facilities that are less costly to manage and maintain.

However, we do understand Mirvac's intention for a community facility space to be provided on site. We further note that existing facilities in the area, albeit easily accessible by car, will unlikely support active movements for the future community. Based on best practice as well as the recommendations of the LSPS noted above, a community space would likely contribute to social cohesion and local character, and strengthen sense of place in the future development. This may be provided in various forms, not necessarily a standalone 'community centre'. An option put forward by Mirvac is to provide a community meeting/activity space in conjunction with the amenity building recommended to be provided adjacent one or more of the proposed sportfields (refer Section 6 below). There are a number of examples where community space is provided with amenity (e.g. toilets, kiosk, changerooms) to effectively provide community meeting and activity space in local communities (e.g. Catherine Park in Camden, Fletcher in Newcastle, Glenunga Hub in Adelaide).

In addition, this space is proposed to be available to the community from the start of the development. This is consistent with previous recommendations to activate the site early and ensure there are social cohesion opportunities for those residents that will move in first. It is recommended that this space be adequately designed and programmed in conjunction with adjacent open spaces to ensure high useability for a range of experiences and an inclusive offer.

Education

No additional consultation has been conducted to inform this Addendum. A future population of 7,200 people is likely to result in a primary-school aged population of 864 children.

It remains adequate to propose a primary school site on-site. Most recent guidelines noted above. Based on the NSW Department of Education's (DoE)'s most recent guidelines², new primary schools are typically provided for 1,000 children on a site of at least 1.5ha. It is noted that since 2020, the location of the future school has been negotiated with DoE/SINSW.

² Department of Education NSW, Draft Guidelines for School Site Selection, 2020

Health care

No additional consultation has been conducted. No change to previous findings.

Child care

No additional consultation has been conducted. No change to previous findings. Future child care facilities, if required, are likely to be driven by the private market.

6. Review of open space assessment

Pinnacle Park and Jacaranda Park continue to be the closest parks to the site, also noting linear opportunities along Surveyors Creek. Mulgoa Rise Fields remain the closest sporting facility to the site. A new linear park is planned to connect the western edge of Mulgoa Rise to Mulgoa Reserve.

The below table applies Council's open space performance criteria to the proposed development and summarises requirements for the site. This is assessed against the proposed master plan.

Including linear parks, a total of 25.92ha of open space is required. A total of 48.07ha is provided. This includes just over 50% of linear parks, which includes non-useable areas. Excluding linear parks, 18.72ha of open space is required, and 22.65ha is proposed. The proposed supply of open space is therefore adequate in size. Additional comments and recommendations are provided in the below table.

Type	Benchmark	Required	Proposed	Comments
Local park	0.2ha/1,000 pop Within 5 minutes safe walk, with one space within 400m for 80% of homes and within 500m for 100% of homes	1.44ha	2.80ha	Proposed provision exceeds requirements. As per Figure 4 in the 2020 Report, all future residents will have access to local and district parks with the exception of a small portion in the north-east of the site.
District park	1ha/1,000 pop Local park locational criteria above apply to district parks	7.2ha	9.43ha	
Sporting space	1.4ha/1,000 pop Within 15-20 minutes safe walking	10.08ha	10.42ha	Proposed provision slightly exceeds requirements. Previous advice in the 2020 Report applies. Amenities building should be provided to service proposed sportsfields.
Linear park	1ha/1,000 pop Within 10-minutes safe walking or within 800m of 100% of houses	7.2ha	25.4ha	Not all of this area will be useable as it incorporates riparian areas and detention basins. However this will support a range of recreational opportunities within the site, as well as active and green connections within and out of the site. Embellishments and low level amenity (e.g. seating, potentially fitness equipment, nature play) should be considered as part of detailed design. Proposed connections into Glenmore Park to the north of the site, and into Mulgoa Reserve to the west, are supported. Multiple entry points to be provided.

Playground	Within 5 minutes safe walk, with one space within 400m for 80% of homes and within 500m for 100% of homes	Not shown	<p>Proposed open spaces have the capacity to accommodate playgrounds. At least one district playspace is recommended and has been provided on the proposed masterplan.</p> <p>Future detailed design should ensure inclusive principles. As a whole the site should address the needs of a range of age groups and provide a range of experiences within walkable distance from dwellings.</p>
Youth space (10-20 years)	Within 10 minutes safe walk, with one space within 400m for 80% of homes and within 500m for 100% of homes	Not shown	<p>Proposed open spaces have the capacity to accommodate youth spaces particularly district open spaces. Details of this space should be further discussed with Council to ascertain needs and most appropriate uses.</p>

Social impact and infrastructure assessment

Glenmore Park Extension

Client:

Mirvac Homes (NSW) Pty Ltd and Vianello Holdings Pty Ltd

Date:

24 March 2020

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1 Introduction

Elton Consulting has been engaged by Mirvac (Homes) NSW Pty Ltd and Vianello Holdings Pty Ltd to undertake a social impact assessment that incorporates the social infrastructure needs of the future community at Glenmore Park Extension limited to schools, community facilities, health care facilities and open space. This report was originally drafted in May 2018 and has been updated in March 2020 following a revision to the Master Plan.

1.1 Background

The Glenmore Park Extension is part of Penrith City Council's Accelerated Housing Delivery Program. The site is situated at the southern border of the current Glenmore Park suburb. The proposal includes the development of around 2,600 dwellings with a mix of low and medium densities, as well as open space, a mixed-use centre and a primary school. Currently the site is inhabited by local landowners in a rural setting.

The site is approximately 15 kilometres from the future Western Sydney Airport; an area of significant growth and infrastructure delivery over the next 10 to 15 years. The site is part of the Greater Penrith to Eastern Creek Growth Area.

The purpose of this report is to provide a high-level assessment for the Planning Proposal and flag possible social infrastructure to be considered in a future Section 7.11 plan or Voluntary Planning Agreement.

1.2 Site location

The Site proposed for residential development is a southward extension of Glenmore Park and is bound by Chain-O-Ponds Road to the south. It forms part of the suburb of Mulgoa in the Penrith Local Government Area (LGA). The northern border of the site adjoins Glenmore Park Stage 2, where residential development is nearing completion (see **Figure 1**). There are rural properties on the southern side of Chain-O-Ponds Road.

The northern portion of the site is currently zoned RU2 Rural Landscape and is owned by Vianello Holdings Pty Ltd. The southern portion of the site includes landowners that have negotiated option agreements with Mirvac Homes (NSW) Pty Ltd. The total site is proposed to be rezoned as R2 Low Density Residential, R3 Medium Density Residential and E4 Environmental Living along with the appropriate zonings for open space, mixed use and education.

Figure 1. Site boundary

Site Boundary



Source: Elton Consulting, 2020

As seen in **Figure 2** below, the existing landscape of the site is rural. **Figure 3** shows the southern-most section of Glenmore Park (Stage 2) which is currently under construction. The residential development will continue south to Chain-O-Ponds Road.

Figure 2. View of existing landscape from southern side of Glenmore Park Stage 2



Source: Elton Consulting

Figure 3. Southern-most street in Glenmore Park Stage 2



Source: Elton Consulting

1.3 Master plan description

The Planning Proposal details a development of approximately 2,600 dwellings. At this stage of the planning process, the breakdown of dwellings includes the following:

- » Around 2,000 dwellings in low density residential areas, including some on very large lots (2,000m² – 4,000m²)
- » Approximately 600 dwellings counted as medium density development.

The Proposal incorporates a centrally located mixed-use retail centre and a 2.0 hectare school site located adjacent to the open space near The Northern Road. Further information regarding capacity, demand and schools planning priorities in the Penrith LGA can be found in Section 5.2.

There are naturally occurring open space riparian corridors throughout the site as well as planned connections with open space, cycle ways and roads into the existing suburb of Glenmore Park. The Master Plan also has provision for active open space uses.

1.4 What is social impact assessment?

Social impact assessment (SIA) is the process through which efforts are made to estimate in advance the likely social consequences of a decision or action by a public or private entity. The aim of SIA is to achieve better outcomes and avoid adverse outcomes.

Social impact assessment

is achieved by effectively assessing the social consequences of a proposed decision or action (such as development proposals, plans, policies and projects), on affected groups of people and on their way of life, life chances, health, culture and their capacity to sustain these.

The New South Wales Department of Planning, Industry and Environment (DPIE) released a Social Impact Assessment (SIA) Guideline in September 2017. Although this Guideline was written specifically for 'state significant mining, petroleum production and extractive industry development', it is understood from discussions with DPIE that the Guideline may be used for other types of State Significant projects in terms of providing general guidance regarding principles, approach and methodology.

This SIA report applies the principles of the DPIE Guideline with the methodology adapted to suit the circumstances and context of the Glenmore Park Extension project. The SIA has been undertaken as a high-level scoping of issues appropriate for this stage of the planning process, noting that the NSW DPIE Gateway process may recommend further investigations for later approval stages. In this context, the report flags social infrastructure that may be required for inclusion in a Section 7.11 Plan or Voluntary Planning Agreement.

1.5 Social impact matters to consider

Negative social impacts can be tangible or intangible, direct or indirect, quantifiable or qualitative, and sometimes the same social impact can be experienced differently by different people. Conversely others experience positive impacts and feel hopeful the relocation will better suit their individual circumstances.

The purpose of a SIA is not to produce a quantifiable net cost or benefit answer, but rather to provide an appraisal of the likely consequences to the groups of people affected by the development and understand the different ways in which they may be affected.

This SIA has been prepared by reflecting the guidance provided in Appendix F5 of the Penrith Development Control Plan 2014 as well as consideration of the following social impact matters outlined in the DPIE Guideline (p.5):

- » **Way of life**, including:
 - > how people live, how they get around, how they access adequate housing
 - > how people work, access adequate employment, their working conditions and/or practices
 - > how people play and access recreation activities
 - > how people interact with one another on a daily basis.
- » **Community**, including its composition, cohesion, character, how it functions and sense of place

- » **Access to and use of infrastructure, services and facilities**, whether provided by local, state, or Federal governments, or by for-profit or not-for-profit organisations or volunteer groups
- » **Culture**, including shared beliefs, customs, values and stories, and connections to land, places, and buildings (including Aboriginal culture and connection to country)
- » **Health and wellbeing**, including physical and mental health
- » **Surroundings**, including access to and use of ecosystem services, public safety and security, access to and use of the natural and built environment, and its aesthetic value and/or amenity
- » **Personal and property rights**, including whether their economic livelihoods are affected, and whether they experience personal disadvantage or have their civil liberties affected
- » **Decision-making systems**, particularly the extent to which they can have a say in decisions that affect their lives, and have access to complaint, remedy and grievance mechanisms
- » **Fears and aspirations** related to one or a combination of the above, or about the future of their community.

Importantly, this SIA will consider physical and non-physical social impacts, both positive and negative. These physical and non-physical dimensions are important to both the identification and mitigation of social impacts. A robust and community responsive physical master plan and land use mix is fundamental to the achievement of positive social outcomes. Physical factors include safe, affordable housing, quality public domain, access to education and employment opportunities, and availability of public transport. Non-physical factors include social networks and connections, social inclusion and sense of belonging, health and wellbeing, and feelings of safety.

1.6 SIA methodology

The methodology for this SIA involved three key activities: scoping, assessment and mitigation or enhancement.

Scoping

Using community profile information, this SIA seeks to understand the demographic characteristics of the new community by examining existing adjoining communities and hence the provision of social infrastructure for the future community without impacting on existing provision. This stage aims to gather baseline data to measure change against.

It is outside the scope of this report to conduct extensive community consultation however, representatives from the Penrith City Council, the NSW Department of Education and Training and the NSW Department of Health were consulted during the scoping stage in 2018. We have not consulted with these agencies again in updating our report, given the modifications in the revised Master Plan:

- » do not change the range of matters likely to be impacted by the project
- » are unlikely to change its potential impacts, with the exception of the repositioning of the school which is likely to ameliorate a potential negative impact of the project.

Impact identification

This stage of assessment involves predicting the social changes that may result from the development of the Glenmore Park Extension. Using specialist, professional knowledge and judgement, a significance level is established for each predicted change. The SIA Guideline (DPIE, 2017) also provides guidance and a framework for the assessment of significance. This includes consideration of characteristics of the impacts such as their extent, duration, severity and sensitivity.

Mitigation or enhancement measures

The SIA makes practical suggestions about ways to mitigate potential negative impacts and maximise positive potential impacts of the Glenmore Park Extension.

The DPIE Guidelines provide the following guidance on the development of mitigation strategies:

- » Ensuring a clear connection between the potential impact and the proposed mitigation strategy
- » Identifying any applicable standards which may apply including to address population demands for community facilities space or open space
- » Clarifying whether the project is the sole or primary cause of an impact and determining the scale of its relative contribution. Citing p.44 of the DPIE Guideline: 'There may be cases where it will not be appropriate or possible for an individual applicant to bear full responsibility for mitigation and management and collaborative multi-stakeholder mitigation measures may be more suitable'
- » Confirming if the mitigation requires action by another party to implement
- » Determining the cost effectiveness of the mitigation strategy
- » Establishing the extent to which the mitigation measure is acceptable by those that are expected to be affected.

1.7 Social infrastructure planning approach

The proposed approach to planning social infrastructure for the proposed development includes the following key principles:

- » **Quality over quantity** – Penrith City Council takes a performance based approach to open space planning, which requires residents to have access to a range of open space categories, including local and district parks, sporting spaces, and linear parks and other multi-use open spaces. While quantity is still required to address the population growth, Penrith City Council has placed a strong emphasis on fit for purpose and quality of spaces. Quality is determined by design (guided by sound principles), quality of materials used, limited land constraints and programming and management which allow more benefit to be gained from relatively efficient use of spaces. Well-planned social infrastructure should maximise Council's value for money rather than increase maintenance costs by duplicating facilities.
- » **Understanding the likely future population** – The estimated occupancy rate for the site is 3.0 which has been rounded up from the forecast average occupancy rate of Glenmore Park, which is 2.98. As this site is the extension to the current Glenmore Park (Stage 2), this is the most reliable representation of the future household size in the new development. Communities living in urban transformation areas need access to a full range of social infrastructure and services including community meeting and activity spaces, childcare, schools and education facilities, health and medical facilities, support services, sport and recreation facilities and open space.

Implications for Glenmore Park Extension

Key trends and principles support social infrastructure that is well located, clustered, multipurpose and flexible. Community facilities are best located in a central town or local centre location where they can then contribute to the sense of place and identity of the future community. While standards provide an important starting and reference point, the identification of social infrastructure requirements for Glenmore Park Extension should not be purely a mathematical exercise. It should consider the context of the site and the varying and evolving needs of the incoming population.

2 Policy and planning context

This section focuses on the local government policy context relevant to the Glenmore Park Extension project.

Accelerated Housing Delivery Program 2017

The Glenmore Park Extension site is one of two sites adopted by Council as part of the Accelerated Housing Delivery Program. The site was listed as 'Suitable for Short Term Development' along with the Orchard Hills North project.

The goal of the Program is to provide affordable and diverse housing. This will be achieved through two mechanisms:

- » Fast tracking greenfield developments in order to deliver housing within 3 to 5 years
- » Repurposing land capable of producing 1,000 or more residential lots.

The Program identifies the Western Sydney Airport, the North-South Rail Link, the Western Sydney City Deal, and various transport corridor works as 'game changers' or catalysts for accelerated growth in the area. In response, the Program provides a framework, submission requirements, and assessment criteria in order to streamline the development approvals process. A central aspect of the framework is existing infrastructure and the ability to access and expand these services. The Plan considers the following as important requirements:

- » Roads, sewerage, power, and water
- » Education facilities
- » Public open spaces and recreational facilities
- » Emergency services
- » Health and social services.

The Program ideally wishes to utilise acreage strategically located to urban centres which are well serviced and supported.

Penrith Urban Strategy

Penrith's Urban Strategy contributes to Penrith's overall strategic plan which identifies the long-term aspirations of the community. The urban strategy has a vision of a sustainable city which is diverse, creative, accessible, healthy and embraces its regional and cultural identity.

The Urban Strategy looks to manage growth within the city up to 2031 and also transform Penrith into a city that is diverse, healthy, vibrant, accessible, cultural, regional, safe, is attractive for all ages and has a unique identity.

As part of the Urban Strategy Council have developed 8 key sustainability elements that must be considered when there is additional urban development in the area. This document and the sustainability elements within, will help inform the private and development sector on current requirements surrounding the location and density of new urban development. This sustainability checklist includes:

- » Residential capacity and diversity
- » Retail and Commercial
- » Community Services and Infrastructure
- » Public Transport
- » Active Transport
- » Environment

- » Open Space and Recreation
- » Affordable Housing.

Glenmore Park, and the proposed development site is a key growth area.

Penrith has been identified as able to accommodate an additional 25,000 dwellings by 2031, with 50% in existing urban areas and the remaining 50% in new release areas. Central to this Urban Strategy is the sustainability checklist which will help guide those engaging in development within the Penrith LGA.

Community Plan (2017)

The Penrith City Council Community plan is a ten-year plan on how Council can effectively work with its stakeholders to improve the wellbeing of the community. Penrith City Council aspires to offer the cosmopolitan and cultural lifestyles of an established city whilst still retaining its rural character.

The Community Plan developed several key outcomes for the area which include:

- » Helping the community find jobs that are close to home and suit them
- » Planning for future growth by understanding the services and infrastructure needed to support a growing city
- » Improving public transportation, roads, and cycle ways
- » Creating public spaces that are safe, vibrant and pleasant
- » Protecting air/water quality and natural areas
- » Supporting the physical and mental health of the community
- » Putting Councils' values of accountability, respect and innovation into action.

Penrith City Council has developed specific strategies that describe how Council will achieve its outcomes over the next 10 years. The Community Plan is an important strategy for those engaging in development within the Penrith LGA.

Penrith Sport and Recreation Strategy (Draft) 2019

The Penrith Sport and Recreation Strategy (the Strategy), outlines provisions, best practice design and management options to guide the delivery of open space across the LGA over the next 15 years. Within the context of significant forecasted population growth, the Strategy identifies the need to deliver spaces which are inclusive, environmentally sustainable and targeted for growing demographic groups – such as older residents and young children.

The Strategy is divided into core objectives for the provision of open space, play spaces, and sport and recreation.

Open space

Vision: An accessible and connected network providing a range of active, passive, structured and unstructured needs. Open space in Penrith will offer a range of opportunities and will be managed in a sustainable manner for current and future generations"

Current challenges Council experience with delivering open space across the LGA include:

- » The disproportionate representation of small parks and open spaces
- » Increasing population growth paired with limited delivery of new open space in new land release areas
- » Issues associated with maintenance and quality
- » Isolation of facilities and general disconnection between green corridors and open spaces.

Council uses a performance based approach to open space planning with particular focus on access and minimum size requirements, connectivity of open space and civic spaces, and using open space to support climate adaptation and resilience. Council has developed the following benchmarks as guidelines to assist

the planning and delivery of open space for future communities (**Table 1**). Importantly, Council notes “these are not exclusive outcomes and will not be the only approach used” (p.25).

Table 1 Open space performance indicators for greenfield development

Open space Type	Minimum Rate	Access from Homes	Land Size
Local Park	0.2ha/1,000 pop General rate of provision 1:2,500 pop	80% within 400m 100% within 500m	Min 0.5ha
District Park	1ha/1,000 pop General rate of provision 1:5,000 pop	80% within 800m 100% within 1.5km	Min 2ha, average >5-10ha
Sporting Space	1.4ha/1,000 pop General rate of provision 1:12,500 pop	80% access to 2 spaces within 2km	Min 10ha, average >10ha
Linear Park	1ha/1,000 pop	100% within 800m	Min 20m wide
Citywide Park	1ha/1,000 pop General rate of provision 1:20,000 pop	100% within public transport	Min 20ha
Total	4.6ha/1,000 pop		

Council defines the different types of open space as:

- » Local open space – emphasis on convenient access to passive and limited active recreation within walking distance of residents. Uses could include passive recreation, play equipment targeted at 0-6 years of age, seating, playspace, isolated sporting facilities, low-key picnic and BBQ facilities including shading and tables, and kick about spaces.
- » District open space – emphasis on more structured gatherings and activities with a catchment ranging two or more suburbs. Uses could include large group activities, organised sport, playspace for all ages, environmental education, cultural expression, hard courts, multiple sports, lighting, parking, walking loops and amenity buildings.
- » Sporting spaces – emphasis on primary role for organised sport. This includes sportsgrounds, athletics tracks, courts and other sport surfaces, and may include building where there is recreation such as sport halls and aquatic centres.
- » Linear open space – emphasis on ‘movement orientated recreation’ such as walking, running and cycling. These spaces are often associated with natural spaces such creeks, storm water channels and native vegetation corridors.

Play

Vision: A wide range of play opportunities which promote the social, physical and cognitive development of children; playspaces in Penrith will be recognised as unique, safe and innovative providing a diversity of opportunities across the network.

Council’s planning approach to playspace across the LGA is guided by the NSW Government Everyone Can Play Guideline which focuses on three main questions centred around accessibility, wayfinding, quality and appropriateness of equipment for different ages and needs, comfort and facilities which support length of stay. Currently many playspaces across the LGA lack shade, supporting infrastructure and good access. Council’s high-level guidance materials have been included at **Table 2**.

Table 2 Playspace hierarchy

Playspace Type	Estimated value (\$)	Comment
Local Playspace	\$120,000-\$250,000	Services homes within close walking distance. Local playspace, should ideally be located within 500m for all residents, offer a range of opportunity for 4-12years but also include equipment for toddlers, include 5 pieces plus of equipment, and offer a level of imaginative and non-structured play areas.
District Playspace	\$250,000-\$1,000,000	Larger parks, more prominent then local play, variety, located alongside other infrastructure e.g. sportsgrounds and serve a wider catchment than local parks. Promotes longer stays than local play and should include play equipment for all age groups, imaginative/creative play, non-structured play area, adult/carer area.
Citywide Playspace	\$1,000,000-\$5m+	Larger parks, more prominent then District play, variety, located alongside other infrastructure e.g. sportsgrounds, and with additional components including those of bespoke design. Promotes longer stays than District play and will attract local and citywide visitors. This may be in the form of an adventure playground, water park or unique aspect such as additional space for larger community events such as concerts.

Sport and Recreation

Vision: Penrith will be acknowledged for its diverse range of affordable, accessible and inclusive sport and recreation opportunities, provided in quality environments by well managed clubs and associations. Quality experiences, events and opportunities will also support regional tourism as a key contributor to the City's economy.

Council currently has a wide range of 'traditional' and less common sport facilities across the LGA. As the local population continues to increase, Council notes the difficulty of finding suitable land with minimal land constraints – such as flooding, topography, drainage and easement. Within the Strategy, Council recognises the growing trend of social recreation which has given rise to a range of unstructured individual activities such as rock climbing, dog walking, fitness, walking/running, cycling and skate and scooter sports. Changing recreation trends have challenged traditional sport and recreation planning with evident gaps for mixed recreation across the LGA. Future sport and recreation planning will need to consider the wide range of formal and informal activities enjoyed by many residents.

Key provisions and benchmarks include:

- » A minimum of 1.4ha/1,000 people of active open space in new release areas
- » New sport and recreation facilities are not located within existing flood ways and drainage channels
- » New facilities must be fit for purpose.

Implementing the Strategy

Throughout the Strategy, Council identifies key strategic directions and actions for new release areas and for the South West, which is the region where the Glenmore Park Extension is located.

Council considers the South West and South East regions are at risk of a cumulative short fall of open space due to increasing residential population. Planning approaches within the Strategy relevant to the site include:

- » Planning for new land release areas needs to provide appropriate quality and quantity of open space, including delivering a minimum of 1.4ha/1,000 people of sport and recreation open space
- » Considering the quantity, connections and distribution of open space early during the planning process
- » Delivering bespoke spaces, but making sure provision is not centralised and Council has the ability to maintain and manage bespoke spaces after assets are transferred to Council ownership

Council identifies the following key priorities for the South West:

- » A designated dog park in the proposed new land release areas
- » Mixed use recreation space in either Mulgoa or Wallacia
- » Upgrades to walking loops, fitness equipment and shading.

Greener Places (Draft) 2017

The Government Architects Office is currently developing a draft Green Infrastructure policy called Greener Places. Once finalised, Greener Places will influence and guide renewal and development projects ranging from state to local government. The policy will provide an overarching document which will outline and define the NSW Government's position on Green Infrastructure. Included in the Greener Places supporting documents will be three manuals/toolkits which will focus on open space and recreation, bushland and waterways, and urban tree canopy.

Central to the Greener Places Draft are four primary principles:

- » Integration of Green Infrastructure with urban development and design in order to create spaces which are multi-purpose providing ecosystem services, promote healthy life styles and active living
- » Connectivity through the creation of networks of open space which link green areas (creeks, rivers, open spaces, designed green spaces) together but also to major urban features, such as transport hubs, residential and commercial buildings, town centres
- » Multi-functionality through the ability of green spaces to deliver multiple ecosystem, environmental and other services simultaneously
- » Participation of stakeholders and incorporation of stakeholder feedback, knowledge and experience in development and implementation of neighbourhood, local, district and regional Green Infrastructure policies and actions.

The principles and tool kits will formulate an overarching document which will influence state policy, regional plans and district level implementation.

Western Sydney Infrastructure Plan 2017

The Western Sydney Infrastructure Plan is a \$3.6 billion investment program to improve transport corridors in western Sydney. The Plan spans 10 years and primarily focuses on road maintenance and improvement. The two main goals of the plan are to capitalise on the economic benefits of developing the Western Sydney Airport and provide integrated transport solutions for the region.

The Plan anticipates an increase in road infrastructure demand as residential and employment development within the Western Sydney Priority Land Release Areas and Western Sydney Priority Growth Areas become accessible. In response to this, The Plan aims to initiate/complete the following:

- » The Northern Road Upgrade
- » Werrington Arterial Road
- » Bringelly Road Upgrade
- » Proposed M12 Motorway
- » The Local Road Package.

The Western Sydney Infrastructure Plan addresses goals 1 and 3 partially while facilitating goal 1 from the Plan for Growing Sydney document. Considering the locality of the Glenmore Park Extension site to the Western Sydney Airport and its position with the Western City District, The Plan provides important insights into the future management of this area.

A Metropolis of Three Cities – Greater Sydney Regional Plan (March 2018)

This site falls within the Greater Penrith to Eastern Creek Growth Area. This Growth Area connects the Penrith CBD and St Marys through to the M7 Motorway/Eastern Creek with new mass transit lines. This provides the opportunity to integrate land use and transport planning at a suitable scale. New land release

areas will be considered for suitable sites in the Penrith LGA, including around Orchard Hills. The work will also consider the potential to renew older residential areas on new transit hubs, including those with high proportions of social housing.

The Western Parkland City (also covering this site) will see the Western Sydney Airport as the economic catalyst for the next 40 years. It will attract globally significant defence and aerospace activities and have significant freight and logistics strengths. The development of a new Western Economic Corridor with north-south access for the Western Parkland City and the Western Sydney Airport and Badgerys Creek Aerotropolis at its heart, will agglomerate the economic activities of the city. The established centres of Liverpool, Greater Penrith and Campbelltown-Macarthur will be critical locations for commercial and retail businesses and health, education and other services as the city grows.

Western City District Plan (2018)

The Western City District Plan covers the Blue Mountains, Camden, Campbelltown, Fairfield, Hawkesbury, Liverpool, Penrith and Wollondilly LGAs. The Plan is a district level guide for the implementation of Greater Sydney Regional Plan, providing a link between regional and local planning for the next 20 years. The Western Sydney Airport is central to the establishment of the Western City District, providing opportunities for economic growth which will support a new economic and residential hub of Greater Sydney.

The Western Sydney District Plan emphasises the value placed on the region's natural heritage and landscapes. The Plan stresses the importance of protecting, enhancing and expanding the use of existing open space, including sports facilities. Key considerations for planning open space are quality, quantity and distribution, with the emphasis being on the latter two considerations.

Western Sydney Airport Plan and Draft Environmental Impact Statement

The impact statement developed by Penrith City Council recognises that the new Western Sydney Airport (WSA) at Badgerys Creek offers great potential as a catalyst for increased infrastructure, jobs and investment in the Penrith LGA and Western Sydney Region. Penrith City Council is of the position that a large amount of work needs to be done to make sure the WSA maximises the benefits it has for Penrith.

Specifically, Council wants to see a more equitable distribution of the noise impacts of aircraft movements, meaning alternative flight paths, a noise sharing limit and changes to the Sydney Airports Curfew Act. None of this would impact on the site.

Transport connections and supporting infrastructure needs to be established before the opening of the WSA, specifically rail from the airport to the recently announced Main Western line.

A key focus of Penrith City Council is ensuring mitigation strategies are in place for any adverse effect of the WSA on the social, economic and environmental wellbeing of Penrith.

Penrith City District Open Space Section 94 Development Contributions Plan 2007

In March 2018, Section 94 of the EP&A Act was renamed as Section 7.11.

The Penrith City Local Open Space Section 94 Development Contribution Plan outlines the development contribution plan for the Penrith LGA and is applicable to all residential developments permitted within the City of Penrith Council, including new release areas.

Regarding district open space provision, previous studies conducted by Penrith City Council indicate that in 2007 the existing district open space was at times insufficient in meeting the demand of the population at the time and that it would not be sufficient to meet any future demand.

Any offsite contributions for active open space to accommodate the demand generated from the rezoning will be calculated using the methodology set out in this Plan. When this document was published the contribution rate per person for district open space embellishment was calculated by taking C/P plus any additional indexed increases where:

C = Contribution rate (\$/person) and including 15% design and supervision, and

P = Estimated additional population within the City to 2022.

The contribution rate per person was \$1,495.

Under the *Penrith City Local Open Space Section 94 Development Contributions Plan 2007* the contribution rate per person was \$532 however, this does not apply to new release areas.

Planning for an Ageing Community Strategy 2010

Penrith City Council's Planning for an Ageing Community Strategy (2010) was developed to assist Council with the challenges that arise with an ageing population. The strategy aids local Council's in understanding the diverse needs of older people, create more diverse housing options for older people, ensure that older people are part of the decision-making process and create more suitable infrastructure for older people.

The five key themes for the strategy with over 100 actions include:

- » Encouraging participation in social, leisure and cultural activities.
- » Encouraging healthy lifestyles and access to health care and support services.
- » Support Older People to age in place.
- » Creating local communities that support active ageing.
- » Encourage participation in and contribution to community life.

Penrith's elderly population is below NSW and national averages, the population of Penrith is projected to age dramatically, with residents aged 65 and over, doubling by 2021. Penrith City Council has a long-term outlook for its aging population, requiring effective long-term planning to help create greater opportunities for older people to actively participate in the community.

Penrith Disability Inclusion Plan (2017 -2021)

Penrith City Council's Disability Inclusion Plan was developed as part of the NSW Disability Inclusion Act 2014. The Disability Inclusion Strategy's aim is to create a more inclusive and supportive community for those living with a disability in the Penrith Local Government Area (LGA). Community consultations identified four key focus areas for Penrith City Council, which include:

- » Developing positive community attitudes and behaviours
- » Creating liveable communities
- » Improving access to services through better systems and processes
- » Supporting access to meaningful employment

Approximately 36,000 people within the Penrith LGA live with a disability, including over 11,000 with a severe disability who need assistance with daily activities. The elderly population within Penrith is also growing which creates challenges around increased frailty, mobility loss, hearing loss and vision impairment. The disability inclusion strategy coupled with the Council's Development Plan Control provides detailed planning and design guidelines for stakeholders engaging in development within the Penrith LGA. Ensuring that accessibility guidelines and recommendations reflect current best practice to enable fair access for all.

3 Demographic context

In order to establish a social baseline, we have collated information on the profile of the existing community or residents and workers in the proposed development's area of social and cultural influence.

We have compared Jordan Springs and Glenmore Park which are both in the Penrith LGA. Jordan Springs is considered to be comparable to the incoming population characteristics of the Glenmore Park Extension. Being the extension to the existing suburb of Glenmore Park it was important to understand the existing community and how they live. Finally, the Penrith LGA data provides a broader context for how similar or different the new community at Glenmore Park will be to the LGA.

3.1 Existing community profile

When compared with Penrith LGA (**Table 3**), the existing populations of Glenmore Park and Jordan Springs are characterised by:

- » A slightly larger population aged 35 – 49 which suggests a higher proportion of parents and homebuilders with babies and young children.
- » A considerably high proportion (25%) of individuals born overseas in Jordan Springs
- » A high number of couples with families in both areas which suggests that there will be a strong demand for facilities and services that can support families with babies and young children.
- » A higher portion of residents in the medium highest and highest group for income in Jordan Springs with both Glenmore Park and Jordan Springs, well below Penrith LGA in the lowest quartile income bracket.
- » A predominance of separate detached housing with a higher proportion of renting and mortgages in Jordan Springs.
- » A large number of low density houses which are predominantly 3 or more bedrooms

Further demographic information can be found in **Appendix A**.

Table 3 Current population profiles

	Jordan Springs	Glenmore Park	Penrith LGA
Population Number (2011)	N/A	19,887	184,589
Population Number (2016)	5,111	23,658	201,400
Population Difference (Number)	N/A	+3,771	+16,811
Population change (%)	N/A	+19.0%	+9.1%
Service age groups	%	%	%
Babies and pre-schoolers (0 – 4)	12.9	7.9	7.4
Primary Schoolers (5 - 11)	10.3	11.7	9.8
Secondary Schoolers (12 – 17)	6.5	9.6	7.8
Tertiary education & independence (18-24)	9.3	9.7	9.9
Young workforce (25 to 34)	26.9	14.8	15.5

	Jordan Springs	Glenmore Park	Penrith LGA
Parents and homebuilders (35 to 49)	21.5	22.9	20.5
Old workers and pre-retirees (50 to 59)	6.2	12.0	12.3
Empty nesters and retirees (60 to 69)	4.3	7.5	9.7
Seniors (70 to 84)	1.8	3.6	6.0
Elderly aged (85 and over)	0.2	0.3	1.2

*Percentages may not total 100 due to rounding

3.2 Future community profile

The following information provides an understanding of the nature of the incoming population based on projected population figures obtained through the Australian Bureau of Statistics.

We have used a dwelling occupancy rate of 3.0, based on the existing occupancy rate for at Glenmore Park (ABS 2016 Census), to estimate the future population for the site. This results in a total population for the site of **7,800 people**.

Based on population forecasts (**Table 4**), the future demographic profile of the community in the Glenmore Park Extension will likely be characterised by the following:

- » A high proportion of parents and homebuilders aged between 35 to 49
- » A higher proportion of primary schoolers and secondary schoolers than compared to Penrith LGA
- » A significantly higher proportion of couples with children than for Penrith LGA
- » A relatively low proportion of seniors.

Table 4 Population forecast for 2036 (as at May 2018)

	St Marys - Jordan Springs	Glenmore Park*	Penrith LGA
Population Forecast			
2016	5,111	23,658	201,400
2036	9,519	24,273	256,051
Population Difference	+4,408	+615	+54,651
Service Age Group	%	%	%
Babies and pre-schoolers (0-4)	9.6	7.9	7.3
Primary Schoolers (5 to 11)	12.0	11.1	9.5
Secondary Schoolers (12 to 17)	9.2	8.5	7.6
Tertiary education and independence (18 to 24)	10.0	8.8	9.6
Young workforce (25 to 34)	14.0	13.3	14.8
Parents and homebuilders (35 to 49)	20.2	21.6	19.7

	St Marys - Jordan Springs	Glenmore Park*	Penrith LGA
Older workers and pre-retirees (50 to 59)	11.7	11.4	11.1
Empty nesters and retirees (60 -69)	7.6	8.4	8.9
Seniors (70 to 84)	5.2	7.9	9.4
Elderly aged (85 and over)	0.6	1.1	2.1
Household Type	St Marys - Jordan Springs	Glenmore Park	Penrith LGA
Households	3,089	8,152	92,591
Average household size	3.08	2.98	2.73
Dwellings	3,450	8,279	96,665
Family Type	%	%	%
Couple families with children	41.4	46.6	33.9
Couple families without children	24.0	24.6	25.8
Group households	1.8	1.2	2.5
Lone persons	16.9	16.3	21.8
Single parent family	12.4	8.5	12.8
Other families	3.5	2.7	3.3

*The Glenmore Park forecasted figures do not include the expected population increase as a result of the Glenmore Park Extension.

The Nepean Blue Mountains Local Health District (NBMLHD) Health Care Services Plan proposes a population increase of 28% for the NBMLHD with Penrith as the second largest growth area within the NBMLHD. It is expected the future population of the NBMLHD will have high proportions of older people and children and young people. Population projections from DPIE (**Table 5**) also estimate significant growth in the Penrith LGA to 2036 and similar trends with higher growth in people aged over 65 years.

This ageing trend may only be partially present in Glenmore Park as preliminary projects indicate a high proportion of children and young people compared to 2016 proportions while there is an overall decline in older service age groups for the area.

Table 5 Population projections 2016-2036

LGA	Total Growth	Proportional age group change					
		0-4	5-9	10-19	20-64	65-84	85+
Blue Mountains	1,471	-935 (-1.3%)	-913 (-1.3%)	-872 (-1.3%)	-4,227 (-6.3%)	+5,916 (+7.1%)	+5,916 (+3.1%)
Hawkesbury	10,702	+119 (-0.8%)	-44 (-1.0%)	+451 (-1.3%)	+2,277 (-5.2%)	+5,856 (+5.9%)	+2,045 (+2.4%)
Penrith	149,309	+8,116 (-0.9%)	+8,926 (-0.6%)	+19,922 (+0.1%)	+80,964 (-2.8%)	+24,406 (+2.7%)	+9,193 (+1.5%)

LGA	Total Growth	Proportional age group change					
		0-4	5-9	10-19	20-64	65-84	85+
Western City District	624,724	+31,160 (-0.8%)	+37,419 (-0.5%)	+78,490 (-0.4%)	+318,469 (-3.2%)	+126,048 (+3.5%)	+33,141 (+1.5%)
Greater Sydney Region	1,973,465	+105,989 (-0.4%)	+114,310 (-0.2%)	+245,741 (+0.2%)	+991,124 (-3.5%)	+404,284 (+2.7%)	+112,017 (+1.1%)

Source: Department of Planning, Industry and Environment, 2019

Based on the preliminary projection for Glenmore Park and the NBMLD Health Services Plan, the future population of Glenmore Park Extension will likely be characterised by:

- » A generally younger population with a higher proportion of young children
- » High proportions of young families with working parents and young married professionals without children
- » An ageing population with a high proportion of people over the age of 65.

As social infrastructure demand is often life cycle driven (i.e. families with young children require child care) this projected age profile by service age group gives a broad indication of the range of future social infrastructure required to support the projected Glenmore Park Extension population.

4 Social impact assessment

It is considered best practice to conduct community consultation during the Social Impact Assessment (SIA) process. This is outside the scope of this assessment given the preliminary nature of the Planning Proposal process. Nonetheless consultation was conducted with external stakeholders in order to provide context for our assessment of the social, health and educational needs of the community and what perceived impacts are likely to be felt as a result of the Glenmore Park Extension project.

Elton Consulting met with social, health and education planners from the following entities in 2018:

- » Penrith City Council
- » Nepean Blue Mountains Local Health District
- » NSW Department of Education and Training.

This report has been informed by our findings from these conversations and as a result the following sections identify the potential social impacts expected to be experienced by the community as a result of the Glenmore Park Extension project.

Penrith City Council identified a range of considerations in relation to the development. Traffic and congestion has been a long-lasting concern for the area. Social impacts resulting from diversity of affordable housing as well as the promotion of social inclusion through smart design principles were also raised for consideration.

The key issues identified during this consultation included the health impacts of higher density living coupled with an increase in traffic and congestion in the development. Other issues included access to healthy living and good air quality given the location of the site being known for poor air quality and a high prevalence of asthma.

The Department of Education and Training noted the impacts relating predominantly to the location of the potential school site. It is the strong preference for the school site to be co-located with community facilities and/or the proposed mixed-use hub. The Planning New Schools Guidelines indicates the need for 2.0 hectares for greenfield developments. Issues relating to safety and health included proximity to the main road in terms of noise and air pollution, proximity to large bodies of water in the riparian corridors, proximity to sporting fields, and the proximity to any bush fire prone zones.

The Guideline recommends consideration of the land use and noise/vibration impacts if the school is to be located in close proximity to high noise and vibration generating development such as heavy industry, airport flight paths or heavily used motorways, such as The Northern Road.

Further consultation with the following stakeholders is recommended:

- » Existing surrounding residents with a tailored engagement approach to immediately adjacent residents
- » National Parks and Wildlife Service regarding future use of the nearby Mulgoa Nature Reserve once the future population arrives in Glenmore Park Extension
- » The Golf and Recreation Club on The Northern Road
- » Local businesses and industry
- » Cultural and environmental organisations
- » Community service providers.

We have identified the potential social impacts associated with the development of the Glenmore Park Extension. A social impact is classified as a positive or negative change to the social impact matter. See Section 1.5 for details of each matter.

4.1 Way of life

Identified social impact: Increased traffic and congestion

Stakeholder(s) affected: Glenmore Park Stage 2 residents from cars travelling north from the Extension site

Likely cumulative impacts:

Air quality throughout the development will be affected due to the number of cars sitting stationary and travelling throughout the site between either the school, the retail centre and the major intersection at the entrance to the site.

Noise will be a cumulative impact caused by the increased traffic travelling throughout the site as well as the trucks freighting along The Northern Road.

The trucks and forthcoming freight corridor heading toward the airport will be a spatial cumulative impact on residents living in dwellings along The Northern Road border of the site.

Analysis: This impact is caused by a range of factors that will contribute to more cars coming into and leaving the development. The location of the school will dictate where a significant amount of traffic is directed during pick up and drop off times. The scheduled upgrades to The Northern Road will positively mitigate some of the traffic expected from this development and the introduction of large and deep lots along The Northern Road will help buffer noise impacts. However, as the commencement of construction and operation of the Western Sydney Airport approaches, The Northern Road is expected to be used as a freight route and will require effective signalling. This remains a key consideration for Council.

Mitigation or enhancement measures:

Measures for reducing the need for car use include co-locating the school with the mixed-use hub and sharing parking facilities and locating the biggest use of traffic closer to the arterial road (The Northern Road).

Mitigating poor air quality will involve offsetting carbon emissions with trees and monitoring air quality regularly. Noise pollution can be abated through the use of a noise barrier and/or siting and treatment of dwellings, though, design principles will need to be considered including personal safety and the visual amenity through incorporation of public art.

Identified social impact: Greater housing choice and potential to improve affordability

Stakeholder(s) affected: Local residents (existing and future), community housing providers

Likely cumulative impacts: A more diverse supply of housing and potentially an increased supply of affordable housing in the Penrith LGA

Analysis: This impact relates to the range of housing available both in terms of size and price points. The greater the diversity of housing provided in the development, which may include medium density townhouses, apartment-style dwellings and detached houses, the greater the housing choices for people moving into the area and for those growing up in the area. Providing a range of housing types will support families with children, older people ageing in place, and younger people wanting to move out of home.

There is also the opportunity to improve affordability for low and moderate income households. Council is supportive of achieving affordable housing through cash contributions or pilot projects with community housing providers which deliver housing on site for affordable purchase or affordable rental.

Mitigation or enhancement measures:

Mirvac and Vianello can negotiate with Council, through a VPA, to either provide a monetary contribution to affordable housing off-site or an in-kind contribution to provide affordable housing on-site. The developers have advised they are working with Council and NSW Department of Communities and Justice on working through a diverse solution which offers both purchase and rental affordable housing opportunities for low and moderate income households.

4.2 Community

Identified social impact: Increased opportunity for social cohesion, local character and sense of place through a well-designed Master Plan

Stakeholder(s) affected: Glenmore Park Stage 2 residents, future community

Likely cumulative impacts:

An increasing level of social cohesion and a sense of place are resultant cumulative impacts of the considered nature of the layout plan. In other words, how the location of the dwellings, school, retail centre, active and passive open space benefit each other in creating a cohesive community. Maintaining the local character of the site in the changing context of rural to suburban can be important for long-time residents in the area.

Analysis: This impact relates to the potential for enhanced community cohesion and sense of place as a result of the incoming population and most importantly, well-planned and designed open space and community facilities. The site should largely be self-contained so that the daily needs of residents, including employment opportunities, are catered for within the development. This relates to the design of streets and open spaces to facilitate social interaction, the promotion of gathering spaces and participation in community activities. The school will be a focus of activity as will the local centre and playing fields.

Mitigation or enhancement measures:

Mirvac and Vianello have the responsibility to facilitate a sense of community in the proposed development. Enhancing community cohesion can be achieved through two key activities: firstly, considered street and open space design to promote social interaction, and secondly, the engagement of a Cultural or Community Development Officer to arrange community activities for the first 5 to 10 years of occupation of the development. The clear focus would be connecting the residents in Glenmore Park Stage 2 and the new residents of Glenmore Park Extension. This can be done through allowing existing sports clubs in Glenmore Park to use sporting fields and facilities in the Extension.

Identified social impact: Changing nature of the area from rural to suburban

Stakeholder(s) affected: Local landholders

Cumulative impact: As more land in proximity to the Glenmore Park Extension is designated for residential development, the need to adapt to change will increase for local residents.

Analysis: This impact relates to the changing nature of the designated development site from a rural landscape vista to a highly urban residential nature. This impact is not considered to be severe given the land is not expected to be productive agricultural land and therefore the rezoning for residential purposes is not a likely severe negative social change. Nonetheless, stress can be caused by the change associated with the development and must be respectfully acknowledged.

Mitigation or enhancement measures:

The key mitigation is working with residents through an open and inclusive community engagement program that includes regular events and activities for existing nearby and new residents. This program would respectfully acknowledge the potential stress for some residents associated with the changing nature of the area.

Mirvac and Vianello could also consider the use of public art to maintain some of the historical features of the land.

4.3 Health and wellbeing

Identified social impact: Poor air quality due to proximity to major road

Stakeholder(s) affected: All future residents of dwellings situated along The Northern Road

Likely cumulative impacts: Increased prevalence of illness including asthma, lung and disease and premature death

Analysis: The planned upgrade to The Northern Road is required due to the substantial amount of development planned for the surrounding area over the next 30 years. Major land use changes together with natural growth in the area will drive a dramatic increase in traffic demand. The upgrade to The Northern Road is expected to cater for construction traffic and minimise the impacts of large construction projects on commuter and freight travel along The Northern Road.

Regarding the likelihood of poor air quality, a study published in the European Respiratory Journal found Australians aged 45-50 who lived less than 200 metres from a major road had a 50 per cent higher risk of asthma, wheeze and lower lung function over a five-year period than those who lived more than 200 metres from a major road.¹ Research in the United States has demonstrated that exposure to pollutants emitted from motor vehicles can also cause lung and heart problems and premature death.²

The Penrith LGA has a large population of people who suffer from asthma. The location at the base of the Blue Mountains contributes to this with especially poor air quality during bushfire season. This means that the impact of poor air quality as a result of increased traffic within the development as well as by virtue of being in close proximity to The Northern Road is considered significant.

The Government's approach to mitigation of this issue is to assess the level of emission from vehicles. The Department of Environment, Climate Change and Water's *Action for Air* project aims to improve air quality in the greater metropolitan region. *Action for Air* identifies ozone and particulates as the biggest air quality challenges for the region, and nominates actions and objectives specifically targeted to reduce motor vehicles emissions. The project would help to meet this goal by reducing travel times and congestion and improving road conditions for heavy vehicles. These benefits would, in turn, reduce vehicle emissions.³

¹ <https://pursuit.unimelb.edu.au/articles/are-australia-s-roads-giving-you-asthma>

² <https://www.epa.gov/air-research/research-near-roadway-and-other-near-source-air-pollution>

³ The Northern Road Upgrade Mersey Road, Bringelly to Glenmore Parkway, Glenmore Park: NSW Government Environmental Impact Statement/Commonwealth Draft Environmental Impact Statement. Volume 1: Main Report, June 2017.

https://majorprojects.accelo.com/public/b11732cec911f9581e51c74b9e314eae/Volume%201_The%20Northern%20Road%20Upgrade_Environmental%20Impact%20Statement_1.pdf

Mitigation or enhancement measures:

The EPA found that roadside vegetation has been shown to reduce a population's exposure to air pollution through the interception of airborne particles or through the uptake of gaseous air pollution via leaf stomata on the plant surface in addition to affecting pollutant transport and dispersion.

The preservation and planting of roadside vegetation and the construction of roadside structures such as noise barriers, are some of the few near-term mitigation strategies available for urban developers and facilities already subjected to high pollution levels near roads. These mitigation methods, if successful, can complement existing pollution control programs and regulations, as well as provide measures to reduce impacts from sources that are difficult to control such as brake and tyre wear and re-entrained road dust.

Identified social impact: Access to a healthy active lifestyle

Stakeholder(s) affected: Future residents, health care providers

Likely cumulative impacts: Decrease in levels of obesity and type 2 diabetes

Analysis: Having access to natural open space is vital for physical and mental wellbeing. Research shows that having access to natural open space can improve short-term memory, restore mental energy, relieve stress, improve vision, boost immune system, reduced risk of early death and early research indicates the possibility of spending time in a forest environment can stimulate the production of anti-cancer proteins.⁴

The Victorian Department of Education cites research that shows outdoor play is important for children in developing capacities for creativity, symbolic play, problem solving and intellectual development. Natural open space includes parks and paths, sandpits, garden beds or trees providing shade. Children having trouble concentrating benefit from playing outdoors and experience better concentration as a result.⁵

The lack of public transport in Glenmore Park means that driving is the dominant mode of transport for most residents. The promotion of active transport and easy connections to walking and cycling paths will contribute to this outcome.

Mitigation or enhancement measures:

Enhancing access to a healthy lifestyle can be achieved by promoting active transport where possible and the intelligent design of open space and shared recreational facilities. Mental health should be considered equally and open space design principles must involve the inclusion of areas for quiet rest and contemplation. Giving the community access to BBQ areas, for example, acts to enhance social cohesion.

4.1 Surroundings

Identified social impact: Potential exposure to illegal dumping due to proximity to landfill depot

Stakeholder(s) affected: Future community, nearby residents

Likely cumulative impacts: Ground subsidence, soil contamination, potential exposure to hazardous waste and asbestos as well as diminishing the amenity of surrounding public spaces.

Analysis: The Penrith Landfill Depot is located approximately four kilometres from the centre of the Glenmore Park Extension site. The landfill is a 'dry' landfill site (Class 2) indicating that there are no issues around odour to be expected. Discussions with the owners have confirmed that approximately 95% of the

⁴ <http://www.businessinsider.com/scientific-benefits-of-nature-outdoors-2016-4?IR=T/#3-stress-relief-3>

⁵ <http://www.education.vic.gov.au/Documents/childhood/providers/regulation/pracnotesnaturalenv.pdf>

site for the approved waste disposal activities has been capped following the completion of land fill activities, further limiting the impact of the site. The primary social impact concern centres around illegal dumping where people who don't want to pay the tip fee leave their rubbish around tip sites or in the bush. This is a low likelihood impact that would predominantly affect the residents in the western portion of the development.

Mitigation or enhancement measures:

The impacts caused by illegal dumping near the Penrith Landfill Depot can be mitigated through working with Council and Environmental Groups to address the motivations for illegal dumping as well as developing abatement initiatives.

Identified social impact: Potential for soil contamination from adjacent Defence Establishment Orchard Hills (DEOH)

Stakeholder(s) affected: Future community, nearby residents

Analysis: The DEOH is located directly opposite the Glenmore Park Extension site on eastern side of The Northern Road. The DEOH is a tri-service munitions storage and distribution base used by the Royal Australian Air Force. Activities includes munitions storage, the use of weapon ranges, firing ranges, firefighting training areas, fuel storage and distribution from above ground and underground storage tanks. The property also contains a sewage treatment plant. Two historical landfills exist, containing non-putrescible refuse, including building rubble and asbestos containing materials. Potential risks from known contamination have been identified on the property. These risks are actively managed by Defence to ensure that impacts to human health and the environment are minimised.⁶ This impact has a low likelihood of occurring nevertheless it may result in stress caused by the perception of contaminated land and must therefore be acknowledged here.

Mitigation or enhancement measures:

Monitor the Department of Defence's continued investigations into the known contaminations of the area.

4.2 Access to services and infrastructure

Identified social impact: Access to education through the provision of a new school

Stakeholder(s) affected: Existing and future community

Likely cumulative impacts: Delivery of a school in the Glenmore Park Extension would contribute to the increased provision of educational services in the Penrith LGA

Analysis: Providing access to education for children is a priority for any developed nation. There is potential for a primary school in the Glenmore Park Extension however, this is to be determined in subsequent stages of the planning process.

The location of the school site is an important factor in the level of accessibility and benefit provided by the school. The NSW Department of Education strongly supports the co-location of schools with community services, thinking of schools themselves as a community facility.

The Planning Schools Guideline⁷ identifies a checklist of issues relating to planning a new school site. Implications for the potential school within Glenmore Park Extension include:

⁶ <http://www.defence.gov.au/id/Master/docs/NCRP/NSW/0899DefenceEstablishmentOrchardHillsNSW.pdf>

⁷ Department of Education, September 2016. Planning New Schools: School Safety and Urban Planning Advisory Guidelines (currently under review).

- » The size and shape of the site – whether it is generally rectangular
- » Whether the school is situated centrally within the catchment area
- » Whether the drop off and pick-up area is safely accessible for a high volume of cars
- » The noise generated from The Northern Road and Chain-O-Ponds Road
- » The school should be no more than 10-15 minutes' walk for a primary school child
- » Ensuring the roads surrounding the school are safe and encourage active transport such as cycling
- » Adequate precautions are taken in relation to bushfire prone areas south of Chain-O-Ponds Road

Mitigation or enhancement measures:

Enhance access to education through negotiation of the school site with the Department of Education. Design the school to maximise the benefits to the community through co-location of the school with the mixed-use hub and associated community facilities such as childcare and sporting fields.

Early activation of social infrastructure including the school can be achieved through engaging with the Department of Education as early as possible.

4.3 Personal and property rights

Identified social impact: Employment opportunities resulting from new Western Sydney Airport

Stakeholder(s) affected: Future community, local retailers

Likely cumulative impacts: The cumulative impacts as a result of the Western Sydney Airport include increased employment opportunities and an increase in economic livelihood of local retailers located on the Northern Road as more customers will pass by the retail centre.

Analysis: The site is located approximately 9 minutes' drive from the Airport and future residents will have direct access to employment opportunities through the Airport as it becomes operational. Also, the upgrading of The Northern Road and expected increase in traffic, while presenting impacts on other aspects of the site, will likely improve the economic livelihoods of local retailers due to the potential for increased customer traffic for the retail centre as people travel to and/or from the airport.

Mitigation or enhancement measures:

Design that allows for safe access to the retail centre for motorists turning off the Northern Road. This would be addressed through the Traffic Impact Assessment.

4.4 Likely impact if the proposal does not proceed

Current planning for the Greater Penrith to Eastern Creek growth area around the site indicates there will be significant urban change in the area regardless of whether the Planning Proposal is approved. When the Western Sydney Airport becomes active, there will likely be continued residential and commercial development along The Northern Road. In the long term this will likely increase local land prices.

5 Social infrastructure assessment

5.1 Community facilities

The existing community facilities in proximity to the site include the Floribunda Community Centre, the Glenmore Park Youth and Community Centre, the Surveyors Creek Community Centre, Regentville Hall, Mulgoa Hall, Joan Sutherland Performing Arts Centre and the Penrith City Library. These facilities are between 5 and 10 kilometres to the site and are accessible by car.

Details of community facilities in the area can be found in **Appendix B-1**.

Implications for the proposal

Community facilities in the surrounding areas are currently servicing the current population adequately. Council does not require a regional or district level facility that would serve to attract traffic into the development. Issues relating to youth activity and the current level of use of youth facilities were raised during Council consultation and could be addressed through well-designed Master Plan.

5.2 Education

Consultation with the Department of Education in May 2018 highlighted the following:

- » There is available capacity across the surrounding high schools in proximity to the Glenmore Park Extension however, the surrounding primary schools are currently at capacity. Hence, the Department recommends an additional primary school be provided in the Glenmore Park area.
- » Regarding access and amenity, it is reasonable that a primary school child may walk or ride for no more than 10 to 15 minutes to get to school. This means that the school should ideally be located at a manageable distance to the dwellings likely to house school aged children.
- » Ideally, a school should be located central to the drawing catchment.

Details of existing educational institutions in the area can be found in **Appendix B-2**.

Implications for the proposal

The Master Plan indicates the location of the school as being adjacent to the retail centre and open space on the eastern edge of the site near The Northern Road. This is consistent with the Department of Education's preference for co-location so as to immerse schools in the community. The approximate distance from east to west across the site is 2.2 kilometres. It may take a primary school child approximately 20 minutes to walk this distance to get to school given the topography.

Due to a substantial amount of the site being outside an easily walkable distance to the school, access for some students will be through walkways, cycle ways and a bus route across the site. The bus route could use minor local access and connector roads from the western side of the site across to the school near the eastern border on The Northern Road. If cycling is going to be the most likely way that students will travel to the primary school, other than by car or bus, an adequate number of secure bike racks must be provided at the school.

5.3 Healthcare

Consultation with the Blue Mountains Nepean Health District in May 2018 highlighted the following considerations:

- » The Glenmore Park Medical Centre located within Glenmore Park houses multiple GPs and is privately run. Most of the GPs in the area are either operating as single or two-doctor practices.
- » The upcoming Stage 1 redevelopment at Nepean Hospital will be operational by 2022. The Nepean Hospital is the main tertiary hospital that offers neonatal intensive care and a regional trauma centre. It is also the closest medical centre to the future airport.
- » The Healthscope-owned Nepean Private Hospital is located next to the public Nepean Hospital. There are plans for a small surgical day surgery and overnight hospital in Somerset Street.
- » A Health One site has been announced but not yet fully funded for Orchard Hills. This medical centre will cost approximately \$30 million with \$18 million already announced. The purpose of this facility is to have GPs and private medical professionals located together.
- » It is expected that public/private partnerships will be more common around the Glenmore Park area in the future. The recently launched Quarter Penrith (formerly the Penrith Health Precinct) is an example of partnerships between the University of Sydney, Western Sydney University and TAFE Kingswood. There is significant investor interest in making Quarter Penrith a technology and research hub.
- » The south-eastern side of The Northern Road will potentially be serviced by Celestino's Sydney Science Park though it is unclear if health services will be provided on site.

Details of healthcare services in the area can be found in **Appendix B-4**.

Implications for the proposal

Healthcare services in the vicinity of the Glenmore Park Extension will likely be adequate to service the incoming population. New residents will travel north toward existing GPs in Glenmore Park as well as along The Northern Road toward Penrith City Centre to access medical services. The potential mixed-use hub in the Glenmore Park Extension may provide a health clinic to ease the need for residents to travel outside the immediate area.

5.4 Childcare centres

The strong presence of privately operated child care centres as well as Council-run centres in the Penrith LGA indicates the demand generated for childcare by new families in the Glenmore Park Extension is likely to be met through existing capacity and vacancies available in these centres and therefore a standalone childcare centre is not recommended for the Glenmore Park Extension. Many of the childcare facilities in Glenmore Park have vacancies.

Details of healthcare services in the area can be found in **Appendix B-3**.

6 Open space assessment

Access to open space for both active and passive leisure and recreation pursuits is regarded as critical to physical and mental wellbeing and is seen as a key component of a healthy and sustainable community. Open space is important for many reasons and is used by different people and different population groups for a wide range of leisure and recreation activities.

Penrith City Council has identified a need for more good quality active open space in Glenmore Park.

Existing

There are currently no existing public open space facilities located on the site. A selection of nearby open spaces is provided below (**Table 6**), with a more extensive list in **Appendix B-5**.

Table 6 Existing open space near the site

Name	Facilities	Distance from site
Mulgoa Rise Field	4 grass playing fields	0.6km
Pinnacle Park	Open space for passive recreation	0.8km
Jacaranda Park	Open space for passive recreation	1.1km
Windmill Park	Dog walking	2.8km
Surveyors Creek Softball Facility	6 softball diamonds	5.9km
Jamison Park	City wide open space with multi-sport opportunities, passive recreation, and community and cultural capacity	8.4km

The select list above highlights the variety of open space close to the site. While these spaces have been designed and delivered to service the existing population of Glenmore Park, it is not unreasonable to assume residents of the Glenmore Park Extension will also access these facilities. Similarly, it is not unreasonable to assume existing residents of Glenmore Park will access facilities delivered on site at the Glenmore Park Extension.

Consequently, it is important to understand the type, role and function of open space currently in Glenmore Park in order to ensure new spaces within the Glenmore Park Extension are complementary. The project should not aim to replicate specialised open spaces needs which are be met elsewhere nearby but rather deliver spaces which contribute to cumulative open opportunities for residents on site and of the greater area. This will help ensure Penrith City Council continues to support a range of passive and active recreation activities, a priority noted in its Sport and Recreation Strategy.

Performance criteria

As noted above, Council uses a performance based approach to open space planning, which is informed but not determined by key performance criteria. These include those related to:

- » Access to open space – outlined in Table 1 above
- » Quantum of open space – outlined in Table 1 above
- » Connectivity – open space must be connected via a network to civic spaces and other open spaces.

We have reviewed the Planning Proposal to determine how it responds to these criteria.

Access to open space

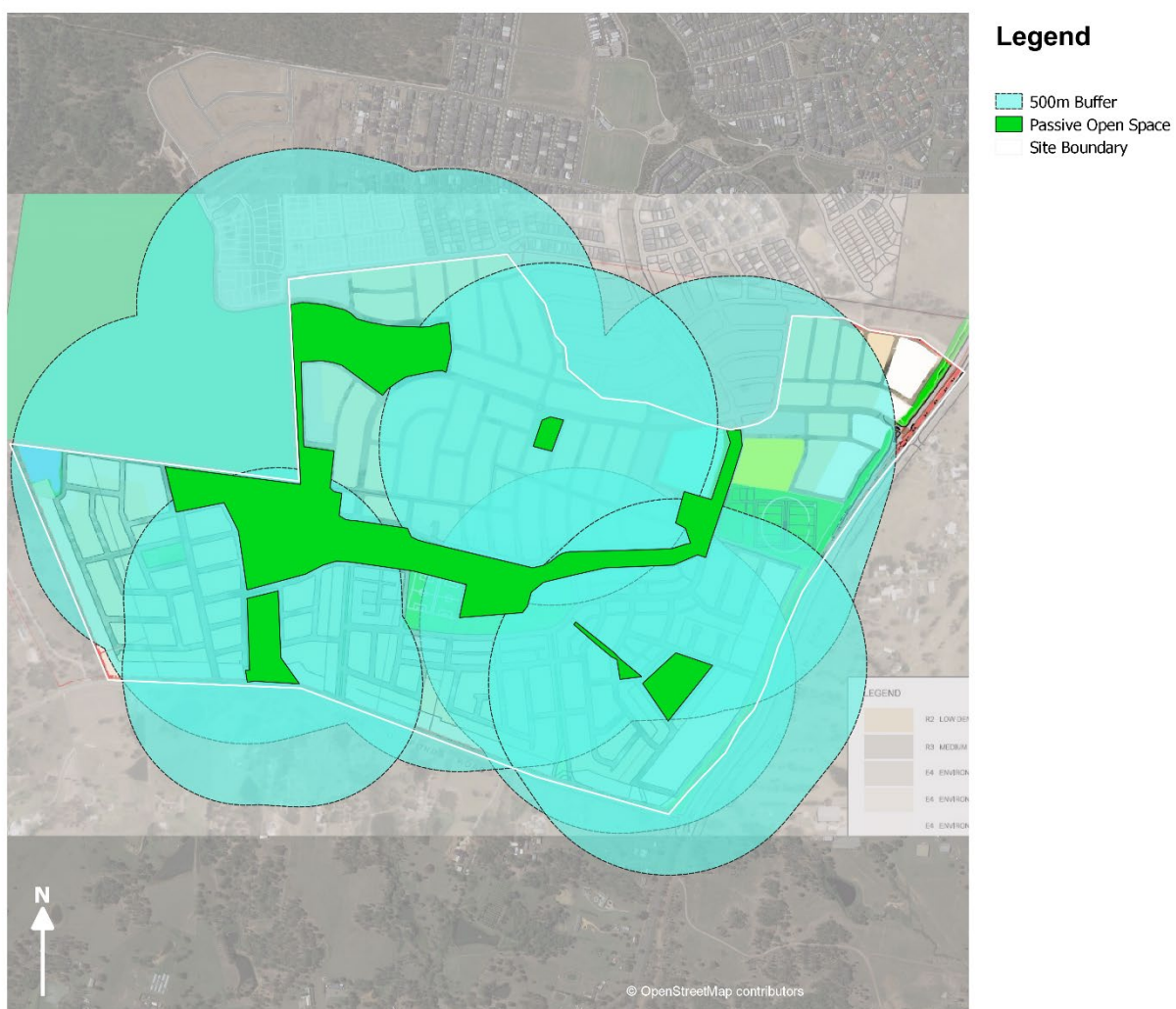
The performance criteria for open space access particularly relevant to this site are:

- » Local park (minimum 0.5 hectares) – 80% within 400m, 100% within 500m
- » District park (minimum 2 hectares) – 80% within 800m, 100% within 1.5km
- » Sporting space (minimum 10 hectares) – 80% access to 2 spaces within 2km.

Figure 4 demonstrates almost all residents in the Glenmore Park Extension will have access to local and district parks (minimum 0.5 hectares and 2 hectares respectively) provided on-site within at least 500 metres. The only exception is a small number of lots to the north east of the site, which will have direct access to open space in Glenmore Park.

Figure 4. Passive open space access – Glenmore Park Extension

Passive Open Space Access



Source: Elton Consulting, 2020

Importantly, these spaces will be large enough to cater for a range of different uses and recreational opportunities. The proposed locations of the open spaces are well distributed across the development, accessible by a short walk for most residents. The provision of exercise equipment at outdoor gyms along the riparian corridors adjacent to child play spaces or interactive public art would promote the accessibility of an active and healthy lifestyle.

Figure 5 below shows the majority of residents will have access to a sporting space within 500 metres and all will have access to two sporting spaces within 2 kilometres. We note these spaces are around 5 hectares

in size, which is lower than the suggested 10 hectare minimum, but they are large enough to accommodate two sporting fields on each with accompanying sporting courts.

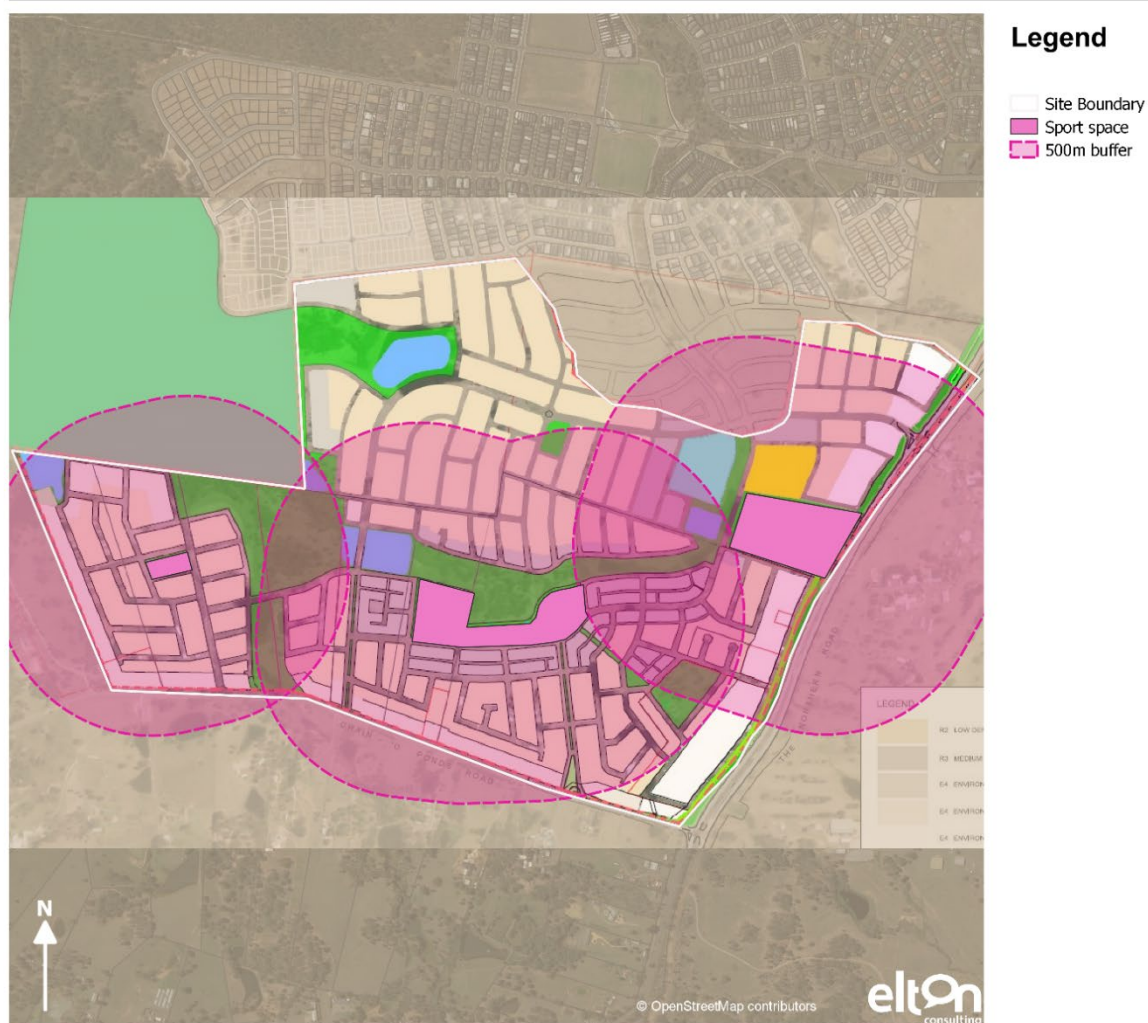
The master plan proposes a sporting space on the eastern side of the site along The Northern Road which is co-located with the school and retail centre. The space can be configured as two rectangular playing fields or one oval playing field. An additional two rectangular and one oval playing fields are proposed in the centre of the site. This is a total of five playing fields.

Additionally, the master plan incorporates a 1.75 hectare local park in the south eastern portion of the site which could be utilised as another sporting space. This park is large enough to host a tennis court complex of four courts and is distinct enough from the other active recreation purposes that it would attract a different demographic group.

We understand Council's preference is for a singular multi-purpose sporting hub with sufficient parking and a singular amenity building. If this were to be provided on this site, a significant amount of traffic would be forced to travel inward to the site and require parking in one location, which may spill over into streets designated for residential parking. Therefore, we do not recommend this approach for this site. Further to this, the active recreation purposes are distinct enough to justify the separation of the complexes. It is reasonable that the central location will cater for AFL and cricket, and the eastern location could accommodate soccer and rugby on the rectangular pitches. There is also potential for the south-eastern park to function as a tennis complex.

Figure 5. Active open space access – Glenmore Park Extension

Sport and Recreation Access



Source: Elton Consulting, 2020

Quantum of open space

Council's Sport and Recreation Strategy, establishes separate performance indicators for the required amount of open space for different types of open space. Our understanding is these performance indicators should not be aggregated as one open space can perform multiple functions. For example, a 2 hectare park could be both a local park and a district park. **Table 7** calculates demand for different open spaces at the Glenmore Park Extension.

Table 7 Demand for open space – Glenmore Park Extension

Open space type	Performance indicator	Provision rate (for 7,800 residents)	
		Required	Demand generated
Local Park	0.2ha/1,000 pop General rate of provision 1:2,500 pop	1.6ha	3.1 facilities
District Park	1ha/1,000 pop General rate of provision 1:5,000 pop	7.8ha	1.6 facilities
Sporting Space	1.4ha/1,000 pop General rate of provision 1:12,500 pop*	10.9ha	1.1 facilities
Linear Park	1ha/1,000 pop	7.8ha	-
Citywide Park	1ha/1,000 pop General rate of provision 1:20,000 pop	7.8ha	0.4 facilities

*minimum two formal sporting spaces

The site provides a total of 41.7 hectares of green space which meets the relevant performance indicator requirements as follows:

- » Local park – the master plan incorporates 5.9 hectares of local parks distributed across the site
- » District park – three district size parks totalling 10.6 hectares are proposed in the centre, west and north west of the site
- » Sporting space – the master plan proposes 9.7 hectares of sporting space within the Glenmore Park Extension in two locations in the east and centre of the site with the potential to increase this to 11.5 hectares by including the large space to the south east of the site
- » Linear park – 8.7 hectares of riparian corridor link with local and district parks as well as sporting spaces to create green links across the site from the north east, through the centre and to the north west and the south west
- » Citywide park – the future population of the site does not warrant the development of a citywide park.

Connectivity

Open space and civic spaces are connected by linear open space running through the middle of the site from the north east linking it to Glenmore Park, through to the local centre, sporting spaces, and on to the south west of the site.

The way spaces are connected will be important. Ideally the walkways and cycle ways would be linked by a continuous loop connecting the open spaces. At present this is achieved by viewing the central loop of collector roads that passes by each of the major areas of open space, as well as the school and retail centre, as a singular connected loop. The street design of this loop will include adequate lighting, tree cover, way finding, natural surveillance, safe pedestrian crossing for differing levels of mobility.

Open space design considerations

The design and provision of local park space should not only consider the four defining Greener Places Principles that relate to the design and planning of green infrastructure but also the more specific needs of an ageing population. The key Greener Places Principles include:

- » Integration – combine green space with urban development and grey infrastructure to create more multi-purpose infrastructure that promotes healthy active living
- » Connectivity – create a network of high quality open spaces that connect town centres, public transport hubs, creeks, employment and residential areas
- » Multi-functionality – the ability of green spaces to deliver multiple ecosystem, environmental and other services simultaneously
- » Participation – an open and inclusive planning process that incorporates the knowledge and needs of diverse parties.

Specific design features to consider include accessible off leash dog areas and opportunities for innovative design of outdoor exercise areas that provide exercise equipment with moveable parts so that older people and people with lower fitness levels can use them for cardiovascular exercise. It is also beneficial to co-locate community exercise areas with child playspaces so parents can work out while having full visibility of their children using the playground.

Penrith City Council identified the need to address the issue of 'youth boredom' and prevalence for screen-time in the area. The provision of 'youth-related destinations' is cited in research conducted by the University of Western Australia as contributing to a reduction in young people's reliance on screens⁸ and encouraging social connections outside the home. It is recommended that a youth-oriented space such as a skate park or basketball court be provided adjacent to the playing fields, school and retail centre.

⁸ Christian, H. et al. (2015) Nowhere to go and nothing to do but sit? Youth screen time and the association with access to neighbourhood destinations. *Environment and Behavior*.
<http://journals.sagepub.com/doi/pdf/10.1177/0013916515606189>

7 Conclusion

This assessment has considered the potential social impacts that may be expected as a result of the Glenmore Park Extension development.

The residential development is expected to yield approximately 2,600 low and medium density dwellings with a resultant population of around 7,800 people. This population is expected to have similar characteristics to those of the adjoining suburb of Glenmore Park.

Overall, the noteworthy social impacts identified in this assessment relate to the delivery of a primary school that will give children in the area access to education. Likewise, the development will provide access to green space and to a healthy lifestyle through the inclusion of formal active open space as well as informal recreation spaces such as outdoor gyms and walking and cycle ways.

There were a small number of low level potential negative impacts such as noise and air pollution as a result of increased traffic along The Northern Road to affect residents along the eastern border of the site, however these can largely be mitigated through the implementation of proven, industry wide measures and emerging technologies. Others included the proximity and potential exposure to illegal dumping at the former landfill site and proximity and potential exposure to soil contamination of the DOEH site at the eastern border on the eastern side of The Northern Road. While these impacts are unlikely, there are acknowledged in this assessment.

Regarding the provision of social infrastructure and open space, the development will lead to the delivery of a K-6 primary school. It was determined through consultation that there is no current requirement for additional community facilities, childcare centres or healthcare facilities as demand for these services can be accommodated by existing nearby facilities.

The provision of total open space is adequate to meet the needs of the future community in Glenmore Park Extension. Where possible the principles of connectivity and accessibility have been addressed.

A Additional demographic information

A-1 Current community profile

	Jordan Springs	Glenmore Park	Penrith LGA
	%	%	%
Indigenous	3.2	9.5	3.9
Overseas arrivals 2011-2016	25.1	10.7	12.2
Speaks another language, and English not well or not at all	4.1	1.2	1.9
Country of Birth (Top 3)	Jordan Springs	Glenmore Park	Penrith LGA
	India (7.5%)	United Kingdom (4.4%)	United Kingdom (3.9%)
	Philippines (4.1%)	India (2.6%)	New Zealand (2.0%)
	United Kingdom (2.5%)	Philippines (1.9%)	Philippines/India (1.9%)
Family Types	Jordan Springs	Glenmore Park	Penrith LGA
	%	%	%
Couples with children	48.7	51.9	37.2
Couples without children	25.7	22.4	21.7
One parent families	9.8	11.7	14.1
Other families	0.4	0.5	4.6
Group Household	3.0	0.9	2.5
Lone person	8.7	9.7	18.2
Average household size (Persons per dwelling)	N/A	3.22	2.85
Tenure	Jordan Springs	Glenmore Park	Penrith LGA
	%	%	%
Fully own	6.4	20.9	24.8
Mortgage	52.6	38.8	38.8

	Jordan Springs	Glenmore Park	Penrith LGA
Renting	36.7	20.9	28.8
Change between 2011-2016	N/A	Fully owned (+282)	Renting (+3,344)
Households in mortgage stress	10.6	6.1	9.3
Households in rental stress	18.2	17.4	29.6
Dwelling type	Jordan Springs	Glenmore Park	Penrith LGA
	%	%	%
Separate house	94.0	90.8	80.0
Medium density	0.8	7.8	15.2
High Density	5.0	1.4	3.9
Largest change between 2011-2016	N/A	Separate house (+970)	Separate house (+4 717)
Unoccupied private dwellings	10.0	4.2	5.6
No. of bedrooms per dwelling	%	%	%
0 or 1 bedrooms	0.0	0.7	2.3
2 bedrooms	4.4	0.7	9.7
3 or bedrooms	91.2	94.3	81.2
Change in number of bedrooms per dwelling 2011-2016	N/A	4 Bedrooms (+403)	4 Bedrooms (+2,630)

B Community and social infrastructure tables

B-1 Community Facilities

Facility name	Location (Address)	Capacity	Distance from site (km)
Community centres, halls and hubs			
Surveyors Creek Community Centre	Ballybunnion Terrace	120 people max (Hall) 3 x Meeting rooms Hall – 13.9m x 9.4m Kitchen facilities/Outdoor area	5.0km (8-minute drive)
Glenmore Park Youth and Community Centre	Little Street, Glenmore Park	220 people max (Hall) 35 people max (Meeting room) Hall – 18.7m x 13.8m 2 x Meeting rooms Youth lounge and youth meeting room Kitchen facilities	5.1km (11 min drive)
South Penrith Neighbourhood Centre	Corner Trent St & Birmingham Rd, South Penrith NSW 2750	70 people max (hall) 30 people max (meeting room)	6.5km (11-minute drive)
Regentville Hall	16 Jeanette Street, Regentville	120 people max Hall – 16m x 11.6m Kitchen facilities	7.3km (8 min drive)
Floribunda Community Centre	3-4 Floribunda Ave, Glenmore Park NSW 2745	70 people max (Hall) 30 people max (Meeting room) 40 people max (Activity room) Hall – 12m x 6.6m Kitchen facilities/Shade area	8.3 km (9-minute drive)

Mulgoa Hall	349 Littlefield's Road, Mulgoa	110 people max Hall – 13.9m x 10.6 Ramped access, small stage, air con. Kitchen facilities	9.1km (11 min drive)
Penrith City Library	601 High St, Penrith NSW 2750		9.8km (14-minute drive)
Joan Sutherland Performing Arts Centre	597 High St, Penrith NSW 2750	Regional facility	9.8km (14-minute drive)
Scout halls			
1st South Penrith Scout Hall	70 Glenbrook St, Jamisontown NSW 2750		6.9km (9 min drive)
1st Penrith Scout Hall	Taloma St, South Penrith NSW 2750		6.8km (9 min drive)
2nd Penrith Scout Hall	Lethbridge Street, Penrith		7.2km (10min drive)

Source: www.penrithcity.nsw.gov.au and www.google.com

B-2 Existing Schools and Universities

Facility Name	Location	Sector Year Range	LBOE ICSA	Enrolment Data			Distance from site
				2016	2017	2018	
Secondary School							
Glenmore Park High School	Glenmore Pkwy, Glenmore Park NSW 2745	Gov. U, 7-12	17% 970	844	837	840	4.8km
Caroline Chisholm College	90-98 The Lakes Dr, Glenmore Park NSW 2745	Non-Gov. 7-12	13% 1046	954	971	973	5.3km
Jamison High School	222 Evan St, South Penrith NSW 2750	Gov. U, 7-12	17% 964	999	1003	990	5.3km
Penrith High School	158-240 High St, Penrith NSW 2750	Gov. 7-12	88% 1164	951	926	922	6.8km

Facility Name	Location	Sector Year Range	LBOE ICSA	Enrolment Data			Distance from site
				2016	2017	2018	
Kingswood High School	131 Bringelly Rd, Kingswood NSW 2747	Gov. U, 7-12	22% 939	710	717	735	4.9km
Primary School							
Glenmore Park Public School	33-41 The Lakes Dr, Glenmore Park NSW 2745	Gov.	28% 998	661	672	659	4.9km
Holy Family Primary School	Lot 32 Willowdene Ave, Luddenham NSW 2745	Non-Gov. K-6	8% 1017	251	244	227	9.5km
Bethany Catholic School	34-38 William Howell Dr, Glenmore Park NSW 2745	Non-Gov. K-6	10% 1052	600	611	610	5.2km
St Mary Mackillop Primary School	150 Fragar Rd, South Penrith NSW 2750	Non-Gov. K-6	15% 1047	408	417	414	4.0km
St Nicholas of Myra Primary School	Higgins St, Penrith NSW 2750	Non-Gov. K-6	20% 1050	196	207	219	7.3km
Penrith Public School	Cnr High St & Doonmore St, Penrith NSW 2750	Gov. U, K-6	41% 980	391	418	418	6.9km
Surveyors Creek Public School	St Andrews Dr, Glenmore Park NSW 2745	Gov. U, K-6	18% 1018	534	556	562	3.5km
Special							
Fernhill School	Ridgetop Dr, Glenmore Park NSW 2745	Gov. U	40% 1000	-	51	82	2.1km
Tertiary (vocational and universities)							
TAFE NSW Nepean	12/44 O'Connell St, Kingswood NSW 2747	-	-	-	-	-	15.1km (20 min drive)
Nepean Arts and Design Centre	Located at Nepean TAFE	-	-	-	-	-	15.1km (20 min drive)

Facility Name	Location	Sector Year Range	LBOE ICSA	Enrolment Data			Distance from site
				2016	2017	2018	
Australian Business Academy	81 Henry St, Penrith NSW 2750	-	-	-	-	-	14.3km (19 min drive)
Nepean College TAFE	Henry St, Penrith NSW 2750	-	-	-	-	-	14.0km (19-minute drive)
Western Sydney University, Penrith Campus	Second Ave, Kingswood NSW 2747	-	-	-	-	-	14.3km (19 min drive)

Source: www.myschool.edu.au/

B-3 Childcare Centres

Facility name	Service type	Vacancies – (Permanent)			Number of approved places
		0-24	25-35	36 +	
Glenmore Park Child and Family Centre	Centre based care Mon- Fri long day care	Yes 5 x days	Yes 3 x days	No	60
Kids Academy Preschool Glenmore Park	Centre based care Mon- Fri long day care	Yes 5 x days	Yes 5 x days	Yes 5 x days	80
Kids Academy Glenmore Park	Centre based care Mon- Fri long day care	Yes 4 x days	Yes 5 x days	Yes 5 x days	80
Exploring Hub Early Learning Centre Glenmore Park	Centre based care Mon- Fri long day care	Yes 5 x days	Yes 5 x days	Yes 5 x days	36
Explore & Develop Glenmore Park	Centre based care Mon- Fri long day care	Yes 5 x days	Yes 5 x days	Yes 5 x days	82
Jamisontown Children's Centre	Centre based care Mon- Fri long day care	Yes 4 x days	Yes 5 x days	No	49
Kids Academy Regentville	Centre based care	Yes 4 x days	Yes 2 x days	Yes 5 x days	145

	Mon- Fri long day care				
The Little Kids School Glenmore Park	Centre based care Mon- Fri long day care	No	No	No	25
Kids World Kindy	Centre based care Mon- Fri long day care	Yes 5 x days	Yes 3 x days	Yes 5 x days	49
Little People Child Care	Centre based care Mon- Fri long day care	Yes 5 x days			23

Source: www.childcarefinder.gov.au/ and www.acecqa.gov.au/

B-4 Healthcare facilities

Facility name	Location (address)	Distance from site (km)
Glenmore Park Child and Family Centre	31 Blue Hills Dr, Glenmore Park NSW 2745	2.3km
Womra Crescent Surgery	49 Womra Cres, Glenmore Park NSW 2745	3.0km
Jenna Gulli – Naturopath	8 Birkdale Cct, Glenmore Park NSW 2745	3.4km
Advantage Psychology	Child and Family Centre, Cnr Glenmore Parkway and Blue Hills Drive, Glenmore Park NSW 2745	3.6km
Glenmore Park Dental Services	19 Town Terrace, Glenmore Park NSW 2745	3.6km
Glenmore Park Chiropractic Centre	42 The Lakes Dr, Glenmore Park NSW 2745	3.8km
Medical and Fitness Centre	142 Bringelly Rd, Kingswood NSW 2747	4.6km
Glenmore Park Medical Centre	1-11 Town Terrace, Glenmore Park NSW 2745	4.8km
Brad Parkinson – Naturopath Penrith	26 Honeysuckle Ave, Glenmore Park NSW 2745	5.1km
Glenwest Medical Centre	6 Bija Dr, Glenmore Park NSW 2745	5.2km
Lakes Drive Family Practice	112 The Lakes Dr, Glenmore Park NSW 2745	5.7km
Southlands Family Doctors	2 Birmingham Rd, South Penrith NSW 2750	5.8km
Smith Street Family Medical Practice	169 Smith St, South Penrith NSW 2750	6.2km
Derby Street Family Medical Centre	68 Derby St, Kingswood NSW 2747	6.5km

Facility name	Location (address)	Distance from site (km)
Harbour City Orthopaedics	104 Derby St, Kingswood NSW 2750	6.5km
High Street Family Doctors	243 High St, Penrith NSW 2750	7.4km
Southlands Medical Clinic	218 Derby St, Penrith NSW 2750	7.7km
Penrith Medical Centre	61-79 Henry St, Penrith NSW 2750	7.9km
Nepean Hospital	Derby St, Kingswood NSW 2747	7.9km
Penrith Mall Medical Centre	453 High St, Penrith NSW 2750	8.4km
Medeceo Medical Centre Penrith	518 High St, Penrith NSW 2750	8.4km
Healthsmart Medical Centre	51/122-144 Station St, Penrith NSW 2750	8.8km

Source: www.google.com

B-5 Open space

Name	Location	Type		Distance
Mulgoa Rise Field	5 Parkway Ave, Glenmore Park NSW 2745	4 x grass playing fields	Active	0.6km
Pinnacle Park	6 Pinnacle Park, Glenmore Park NSW 2745	Open space	Passive	0.8km
Jacaranda Park	12 Branksome Way, Glenmore Park NSW 2745	Open space	Passive	1.1km
Moocow Playground	19 Deerubbin Drive, Glenmore Park NSW 2745	Playground Linkage open space	Passive/Active	1.6km
Torquay Park	3 Torquay Terrace Glenmore Park NSW 2745	Linkage open space	Passive/Active	2.1km
Blue Hill Reserve	8400 Blue Hills Drive, Glenmore Park NSW 2745	Playing field	Active	2.4km
Windmill Park	19 Saddler Way, Glenmore Park NSW 2745	Open field Dog walking	Passive	2.8km
Apple Gum Reserve	8 Lady Jamison Drive, Glenmore Park NSW 2745	Open space	Passive/Active	4.9km
Glenmore Park Youth & Community Centre (Ched Towns Reserve)	Town Terrace, Glenmore Park NSW 2745	4 x Grass sporting fields Skate park Playground	Active	5.1km
Glenmore Park	50 Tall Trees Dr, Glenmore Park NSW 2745	Open field	Passive	5.2km

Name	Location	Type		Distance
Pioneer Park	Robyn Ave, South Penrith NSW 2750	Open field	Passive	5.8km
Surveyors Creek Softball Facility	40 Ballybunnion Terrace, Glenmore Park NSW 2745	6 x softball diamonds	Active	5.9km
Spence Park	Derby Street, Penrith NSW 2750	Playground	Passive	6.5km
South Penrith Half Court	138 Maxwell Street, South Penrith NSW 2750	Basketball	Active	6.6km
Eileen Cammack Reserve	368 Evan Street, South Penrith NSW 2750	2 x playing fields Playground	Active	6.7km
Mulgoa Nature Reserve	Mulgoa NSW 2745	National Park	Passive	6.7km
Rotary Park	Glenmore Pkwy, Glenmore Park NSW 2745	Work out equipment	Passive	6.7km
Gow Park	Littlefields Rd, Mulgoa NSW 2745	Open field	Passive	7.2km
Jamison Park	South Penrith NSW 2750	Off leash dog Park 34 x Netball courts 5 x Cricket field Skate Park Multicourt Playground 9 x playing fields Athletics oval	Active	8.4km
Glenmore Heritage Valley	690 Mulgoa Rd, Mulgoa NSW 2745	Golf Course	Active	9.4km

Source: www.google.com and www.penrithcity.nsw.gov.au

C Guiding principles to social impact assessment

Elton Consulting uses the following guidelines to inform all social impact assessments. These guidelines align with those adopted by the NSW Government in September 2017.

Principle	Description
Action-oriented	Delivers outcomes that are practical, achievable and effective.
Adaptive	Establishes systems to actively respond to new or different circumstances and information and support continuous improvement.
Distributive equity	Considers how social impacts are distributed within the current generation (particularly across vulnerable and under-represented groups) and between current and future generations.
Impartial	Is undertaken in a fair, unbiased manner and follows relevant ethical standards.
Inclusive	Seeks to hear, understand and respect the perspectives of the full diversity of potentially affected groups of people. It is also informed by respectful, meaningful and effective engagement that is tailored to suit the needs of those being engaged (for example, culturally sensitive, accessible).
Integrated	Uses and references relevant information and analysis from other assessments to avoid duplication and double counting of impacts in the future assessments. It also supports effective integration of social, economic and environmental considerations in decision-making.
Life cycle focus	Seeks to understand potential impacts (including cumulative impacts) at all project stages.
Material	Identifies which potential social impacts matter the most, and/or pose the greatest risk to those expected to be affected.
Precautionary	If there is a threat of serious or irreversible damage to the environment, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental (including social) degradation.
Proportionate	Scope and scale should correspond to the potential social impacts.
Rigorous	Uses appropriate, accepted social science methods and robust evidence from authoritative sources.
Transparent	Information, methods and assumptions are explained, justified and accessible; and people can see how their input has been considered.

NSW Department of Planning and Environment (2017) Social Impact Assessment Guideline for State significant mining, petroleum production and extractive industry development, adapted from Vanclay, F (2003) Social impact assessment: Guidance for assessing and managing the social impacts of projects. International Association for Impact Assessment.



www.elton.com.au