# Mt Gilead Planning Proposal

January 2015

**Campbelltown City Council** 

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### 1.0 Introduction

# 1.1 Background

A planning proposal was submitted to Campbelltown City Council (CCC) by Mt Gilead Pty Ltd and S & A Dzwonnik (the landowners) requesting that the land described as Part Lot 1 and Part Lot 2 in DP 807555, and Lots 59 and 61 in DP 752042 at Appin Road, Mt Gilead (the site) be rezoned to predominantly residential land. The proposal accords with NSW government strategic objectives for the release of greenfield land in the Sydney Metropolitan Region for residential development. By logically extending the urban footprint of Campbelltown for future residential development the proposal seeks to enhance and expand housing choice and supply close to the Campbelltown-Macarthur Regional Centre.

This proposal follows CCC's endorsement on 3 July 2012 of a preliminary planning proposal for the site and the subsequent Gateway Determination made by the Director-General of the then Department of Planning and Infrastructure on 7 September 2012 to proceed with a planning proposal subject to conditions (see Gateway Determination at **Appendix A** which includes the Alteration of Gateway Determination to extend the date for completion of the planning proposal until 7 September 2015).

Please note that at the time that the original planning proposal was submitted to Council it was anticipated that the proposed rezoning of the subject land would be effected through an amendment to *Campbelltown* (*Urban Area*) *Local Environmental Plan 2002* (CLEP 2002). However, as Council is now in the process of replacing CLEP 2002 with *Campbelltown Local Environmental Plan 2014* (CLEP 2014), this planning proposal has been prepared as an amendment to CLEP 2014.

In his determination, the then Director-General required detailed investigation of a range of issues in support of the rezoning process as well as consultation with various public authorities. In response to the Gateway Determination and CCC's requirements for additional technical studies, the landowners, in consultation with CCC, commissioned a team of expert consultants to prepare detailed assessments of the following planning issues:

- flora and fauna;
- conservation of ecological and riparian corridors
- Aboriginal heritage;
- non-indigenous heritage;
- bushfire risk;
- traffic, transport and access;
- noise;
- air quality;
- contamination;
- geotechnical conditions and mine subsidence;
- infrastructure, stormwater and sewer services;
- visual impact;
- agricultural land impacts;
- economic impacts; and
- social impacts.

This final planning proposal addresses these issues and also establishes the key development standards and planning controls for the Mt Gilead land to inform the proposed local environmental plan amendment.

In addition, an indicative structure plan and site-specific development controls have been prepared for the land to supplement controls in *Campbelltown (Sustainable City) Development Control Plan 2014.* Draft voluntary planning agreements for the delivery of local and regional infrastructure (respectively) will be publicly exhibited in due course.

This planning proposal has been prepared in accordance with section 55 of the *Environmental Planning* and Assessment Act 1979 (EP&A Act) and the guidelines prepared by the Department of Planning and Infrastructure titled "A guide to preparing planning proposals", dated October 2012.

# 1.2 The Need for the Planning Proposal

The land the subject of this planning proposal has been identified for some time on the former Metropolitan Development Program (MDP) as future greenfield release land. By providing new land use zoning and key development standards for the site, the planning proposal facilitates the strategic outcomes of the MDP and, more currently, the draft *Metropolitan Strategy for Sydney 2031, a Plan for Growing Sydney* and State government policies in relation to housing supply. Furthermore, the planning proposal is consistent with regional, sub-regional and local strategic planning objectives and outcomes (as discussed in **Section 2.0**).

The MDP had set the minimum development yield of the Mt Gilead site at 1500 lots. However, the studies detailed in this planning proposal show that the land and the surrounding road network are capable of accommodating and supporting up to 1700 dwellings. This development yield will incorporate a range of lot sizes (375 square metres to 1000 square metres) with an average area of 600 square metres so providing a variety of housing types to facilitate choice in the Campbelltown local government area (LGA).

By extending the established urban footprint of Campbelltown, the site will not sit as an unconnected, stand-alone residential development. Rather, it expands the existing residential land to the immediate north and will utilise any excess capacity in existing community infrastructure and services such as schools, recreation facilities, shops and the like.

The planning proposal is required to facilitate the above outcomes as the land is currently not zoned for the proposed residential development. The planning proposal seeks to zone the majority of the site to Residential R2 (approximately 149ha), along with smaller areas for open space (approximately 31ha) (including riparian corridors and provision of a sports field), and roads, in accordance with the Standard Instrument – Principal Local Environmental Plan and consistent with draft CLEP 2014. In addition, a small area is intended to be zoned as a neighbourhood centre in order to facilitate the future delivery of a community centre, and approximately 29ha will remain as rural land.

### 1.3 Council and Stakeholder Involvement

A joint Landowner-Council Working Group was established to advance and oversight the preparation of the planning proposal.

The public will have an opportunity to comment on the proposal during the public notification period.

In accordance with the Gateway Determination, consultation with public authorities under section 56(2)(d) of the EP&A Act will be undertaken by CCC during the exhibition of the planning proposal. Notwithstanding this, the landowners and/or CCC have consulted with the following entities to inform the preparation of the planning proposal:

- Roads and Maritime Services in relation to traffic and road infrastructure;
- Transport for NSW in relation to traffic, roads and public transport;
- NSW Office of Water in relation to drainage and riparian corridors;
- Heritage Office in relation to non-indigenous heritage (Mt Gilead Homestead and surrounds);
- Aboriginal Groups including Cubbitch Barta and Tharawal Local Aboriginal Land Council in relation to Aboriginal heritage;
- Rural Fire Service in relation to bushfire risk management;
- Sydney Water in relation to water and sewer infrastructure;
- Endeavour Energy in relation to electricity supply and infrastructure;
- Jemena in relation to gas supply.

The outcomes of the above consultation are reflected, where relevant, in the appended specialist assessments and in **Section 5.0**.

# 2.0 Strategic Planning Context

The Mt Gilead site is included broadly and specifically in relevant State, regional and local strategic planning documents, and has been identified as contributing to the Government housing targets for the Sydney metropolitan area. The relevant strategic planning framework is discussed below.

# 2.1 New South Wales 2021: A Plan to Make NSW Number One

NSW 2021: A Plan to Make NSW Number One is a long-term plan to deliver services in NSW, which sets clear priorities to guide government decision-making and resource allocation.

NSW 2021 is based around five strategies to rebuild the economy, provide quality services, renovate infrastructure, restore government accountability, and strengthen our local environment and communities. The rezoning of the site for residential uses would be consistent with the strategy in that it could contribute to the aim of improving housing affordability and availability, and assist in facilitating the goal of delivering 25,000 new dwellings per year.

# 2.2 Metropolitan Strategy

### 2.2.1 Metropolitan Plan for Sydney 2036

The *Metropolitan Plan for Sydney 2036* aims to provide an integrated planning framework to manage Sydney's growth to 2036. Since its release in December 2010, the strategy has been reviewed and a draft *Metropolitan Strategy for Sydney to 2031* has been released. This draft strategy establishes the most upto-date strategic framework for Sydney, and is addressed further below.

### 2.2.2 Draft Metropolitan Strategy for Sydney to 2031

The draft *Metropolitan Strategy for Sydney 2031* was publicly exhibited until 31 May 2013 and was the new strategic plan to guide Sydney's growth, superseding the 2036 Plan. The draft strategy sets the framework for Sydney's growth and prosperity to 2031 and beyond. It has a strong focus on boosting housing and jobs growth, and includes targets and actions to facilitate investment and growth in NSW.

The draft 2031 strategy anticipates that Sydney's population will grow by 1.3 million people by 2031 taking the population to 5.6 million. Notably the number of people over 65 will be double that at present, and there will be more than one million people under 15 years of age. Relevantly, Greater Western Sydney will be home to more than half of Sydney's population.

To drive sustainable growth, the draft strategy is built around five key outcomes for Sydney including balanced growth; a liveable city; productivity and prosperity; a healthy and resilient environment; and accessibility and connectivity. The draft strategy sets employment and housing targets across six subregions and new housing is encouraged in areas close to existing and planned infrastructure in both infill and greenfield sites.

The Campbelltown LGA, in which Mt Gilead is situated, is classified as part of the South West Subregion and Campbelltown–Macarthur is a major centre under this plan servicing the South West Subregion.

**Table 1** lists a number of targets contained in the Draft Strategy and relevant to this proposal.

Table 1 - Draft Metropolitan Strategy South West Sydney targets

Area	Current	Target to 2021	Target to 2031	
Population	829,000	1,048,000 (218,000)	1,298,000 (469,000)	
Housing	286,000 346,000 60,000)		427,000 (141,000)	
Employment	298,000	362,000 (64,000)	432,000 (134,000)	

<sup>\*</sup>Brackets denote the increase from existing numbers

More specifically, the Campbelltown-Macarthur Major Centre will continue as the regional focus for office, retail, entertainment, cultural, public administration and services developments, and is projected to provide capacity for at least an additional 10,000 jobs until 2031.

The planning proposal is consistent with, and directly supports, the strategic objectives of the draft Metropolitan Strategy in relation to boosting housing supply, and indirectly in facilitating jobs growth in the South West Subregion.

### 2.2.3 Draft South West Subregional Strategy

The draft *South West Subregional Strategy* (SWSS) is applicable to the Campbelltown LGA and sets actions for the subregion to ensure local delivery of the objectives set out within the *Metropolitan Plan for Sydney to 2036*. The proposal is consistent with several of the key directions in the draft SWSS in that:

- it will unlock land for the development of residential dwellings, directly contributing to the growth of housing in the South West subregion;
- it will support the provision of dwellings in the vicinity of new centres identified in the South West subregion such as the Campbelltown centre; and
- it recognises and respects the rural character of the subregion through limiting the extent of the proposed residential zoning.

### 2.2.4 A Plan for Growing Sydney

The draft *Metropolitan Strategy for Sydney to 2031* has been finalised in the strategy document *A Plan for Growing Sydney* which was released in December 2014. Campbelltown-Macarthur is now recognised in this strategy as one of three Regional City Centres outside of the Sydney and Parramatta Central Business Districts.

To achieve the vision for Sydney to be a strong global city A Plan for Growing Sydney has set the following goals:

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

It is considered that the proposal is consistent with these goals particularly with regard to assisting in the delivery of new housing to meet the needs of Sydney's growing population. It is noted that the subject site at Mt Gilead is included in the land defined as the Macarthur South Investigation Area. However, it is assumed that as a Gateway determination has been given for the subject site, it is only included in this investigation area as a component to be considered in the overall assessment proposed to be undertaken for the Macarthur South Area.

# 2.3 Campbelltown Council Strategic Policies

### 2.3.1 Campbelltown 2025 – Looking Forward

Campbelltown City Council has adopted *Campbelltown 2025 – Looking Forward*, an overarching planning strategy that sets social, environmental and economic foundations for the growth of the LGA. The document articulates a vision to provide a sustainable city by 2025, and sets out six strategic directions which include desired outcomes and focus areas that will need to be considered in future development within Campbelltown. The proposal's consistency with these strategic directions is explored below.

#### **Growing the Regional City**

This focus area sets out a vision to ensure a sustainable future for Campbelltown city as a strong regional centre with regional facilities and employment opportunities. By supplying a range of residential lots, on average 600 square metres in area, development of the Mt Gilead site can make Campbelltown more attractive for people seeking employment in the area, so encouraging growth and investment in new enterprises and infrastructure.

#### **Building a Distinctive Campbelltown Sense of Place**

Campbelltown is to grow into a place that is distinctive in terms of natural and built environment, offering residents a relaxed, safe and scenic environment. The proposal at Mt Gilead will facilitate a community that will have high civic pride with a built form that responds and capitalises on the site's natural landscape features. The future community should contain an ambience of growth, prosperity and contemporary style.

#### **Getting Around the City**

The development of the city is to be planned and integrated around transport needs. Future planning is to increase opportunities for accessibility and reduce the need for private cars with increased use of existing public transportation within the city. Mt Gilead will be linked by bus to Campbelltown City Centre, ensuring that accessibility is created to an existing activity node.

#### **Building and Maintaining Quality Infrastructure**

New development is to satisfy its own infrastructure requirements by means of direct provision on site or contributing proportionately to the broader infrastructure upgrades by Council. The site is capable of being serviced to support the incoming community.

#### Creating Education, Employment and Entrepreneurial Opportunities

The city's vision is to retain and create jobs to grow the supply of skilled and adaptable workers within the city. By catering for the mid to upper end of the housing market, Mt Gilead can facilitate the city's growth in professional and business jobs.

### 2.3.2 Campbelltown Local Planning Strategy

The Campbelltown Local Planning Strategy (CLPS) is a background document which informed the preparation of the draft Campbelltown Local Environmental Plan 2014. The aim of the CLPS is to provide a strategic land use planning direction to deliver the strategic vision documented in Campbelltown 2025 - Looking Forward. It also acknowledges the growth targets within the draft South West Subregional Strategy (SWSS) and establishes a basis for achieving those targets.

Specifically it refers to the potential of the Mt Gilead site as an area that could be developed to assist in meeting the 4,700 'greenfield' dwelling target nominated in the draft SWSS for the Campbelltown LGA.

### 2.3.3 Campbelltown Residential Development Strategy

The Campbelltown Residential Development Strategy (CRDS) seeks to identify dwelling opportunities to address the projected population growth of the Campbelltown LGA, and has thus provided valuable input into the preparation of the CLPS. The CRDS seeks to manage the anticipated future residential growth required for the Campbelltown LGA through the forms of both 'infill' and 'greenfield' development. It further notes that the Mt Gilead site could provide a potential yield of 1,500 dwellings.

# 2.4 Residential Land Supply

### Metropolitan Development Program

The *Metropolitan Development Program* (MDP) was a key NSW Government program to maintain housing supply in the Sydney metropolitan region, and its main function was to manage land supply to meet new housing needs from urban renewal and greenfield sites in Sydney. The program rolled forward annually and included assessing future land supply to meet housing needs, and maintaining housing and land supply databases. The MDP identified the Mt Gilead site as greenfield release land that was yet to be zoned.

Currently, monitoring of supply of new home sites to accommodate Sydney's growing population is reported via MDP reports which provide up to date information on greenfield land and dwelling supply.

The land at Mt Gilead the subject of this planning proposal is the same as that originally identified for release under the then MDP.

#### Supply of housing in Campbelltown

The Department of Planning and Environment released updated population projections in June 2014. These projections identified that Greater Sydney requires one million more homes by 2031 to house Sydney's growing population. The Campbelltown LGA is expected to grow at a rate of 1.8% per annum,

with an increase in population of 64,600 (42.7%) between 2011 and 2031. An additional 24,846 homes will be needed in Campbelltown by 2031 to accommodate the expected population increase<sup>1</sup> (2014 NSW Population Projections data, Department of Planning and Environment).

As discussed above, Campbelltown-Macarthur is now a Regional City Centre. It is understood that, accordingly, CCC wishes to stimulate and broaden the area's economic base and range of business opportunities. A limitation in housing choice could limit the attractiveness of the Campbelltown area as a place to live for professional and business people. The proposed range in lot sizes at Mt Gilead could help redress this issue, so contributing to the growth of Campbelltown-Macarthur as a Regional City Centre.

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<sup>&</sup>lt;sup>1</sup> Expected population increase divided by the average Sydney household size.

# 3.0 Site Description and Context

### 3.1 Land to be Rezoned

The site subject to this planning proposal is essentially a triangle extending south of Campbelltown's urban footprint. The western boundary of the site diagonally bisects Lot 1 in DP 807985 ending at the south eastern boundary of Lot 2 in DP 807555. The eastern boundary is Appin Road. The total land area of the site is 210ha.

# 3.2 Legal Description and Ownership

The site consists of four lots owned by two land owners as shown in Figure 1.

- Part Lots 1 and 2 in DP 807555 and Lot 59 DP 752042, owned by Mt Gilead Pty Ltd, a company of the MacArthur Onslow family that has held property around the area since the 1940s.
- Lot 61 DP 752042, owned by S & A Dzwonnik who have held the land since the 1980s.

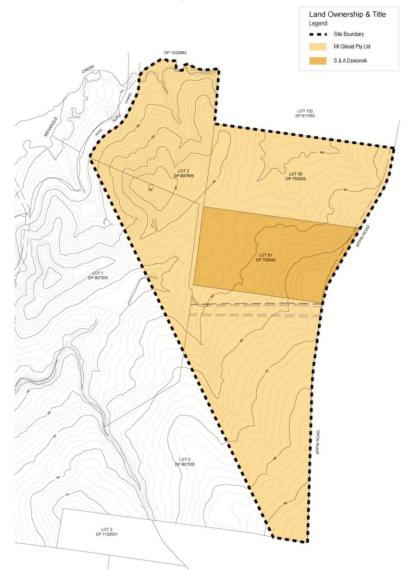


Figure 1 - Land Title and Ownership

Source: Cox Richardson

# 3.3 Current Zoning

The site is currently zoned No 1 (Non Urban) under the *City of Campbelltown Interim Development Order No 15* (IDO 15) (see **Figure 2**). Under IDO 15, the proposed residential development of the Mt Gilead site is not permissible.

IDO 15 does not permit subdivision in Zone 1 unless a minimum area of 100 hectares can be achieved. It includes several provisions relating to agricultural and rural land uses and seeks to retain large lots for these purposes.

CCC is currently finalising the preparation of draft *Campbelltown Local Environmental Plan (LEP)* 2014 (CLEP 2014). While the draft CLEP 2014 covers the majority of the Campbelltown LGA, some areas of land within IDO 15, including the Mt Gilead land release site, are identified as deferred matters within the draft LEP.

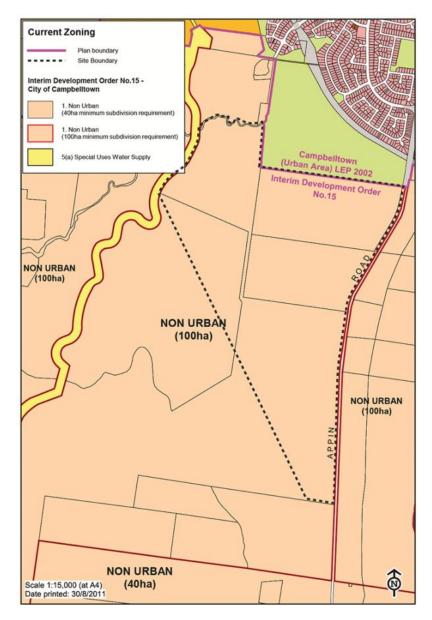


Figure 2 - Map indicating the current zoning of the subject site

# 3.4 Location and Context

The Mt Gilead site, as defined by the MDP, is located in the Campbelltown LGA approximately 7 kilometres south of the Campbelltown city centre. Mt Gilead covers a total area of approximately 210 hectares, part of which is the long-established Mt Gilead rural property (see **Figure 3**).

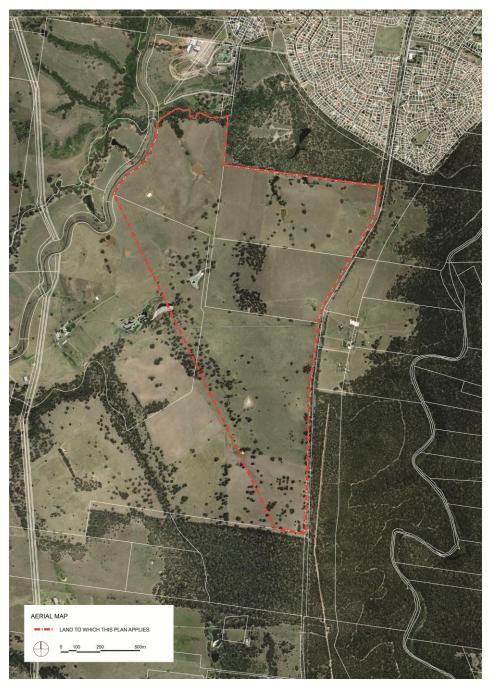


Figure 3 – Aerial photograph of the site

Source: Cox Richardson

The site is immediately bounded by:

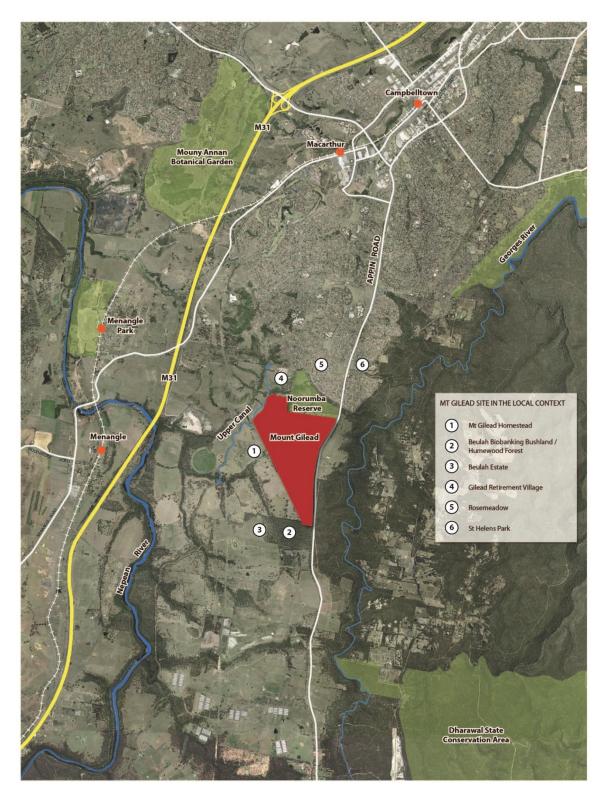
- Appin Road to the east;
- Noorumba Reserve and Non-Urban land to the north;
- the Sydney Water Supply Canal (the Upper Canal) in the north west;
- rural land to the west and the associated Mt Gilead Homestead, Old Mill and the Artificial Lake all of which date back to the early construction and use of the Mt Gilead estate; and
- part of the Beulah Biobanking Reserve/ Humewood Forest to the south.

Access to the respective landholdings is from Appin Road.

More broadly, the surrounding locality includes (see Figure 4 to Figure 7):

- the low density residential suburbs of Rosemeadow and St Helens Park (including the Gilead Retirement Village) located around one kilometre to the north;
- the M31 motorway (previously known as the M5) beyond the Mt Gilead Homestead and farm to the west:
- the Nepean River about 2 kilometres to the west of the Mt Gilead Homestead;
- a number of rural land parcels along the eastern side of Appin Road adjoining the Dharawal State Conservation Area located south east of the site;
- the Georges River approximately one kilometre to the east of Appin Road; and
- the Beulah Estate and rural residential land further to the south.

Figures 5 to 7 illustrate the surrounding locality.



**Figure 4 –** Site context

Source: Cox Richardson



Figure 5 – Beulah Bio-banking Reserve/Humewood Forest to the south of the site



Figure 6 – The Old Mill with Mt Gilead farm manager's house in the foreground



Figure 7 - Mt Gilead outbuildings (former coach house)

## 3.4.1 Relationship to Surrounding Development

The urban areas to the north of the site are predominately residential, forming the southern extent of residential development in Campbelltown. This land is generally categorised by low density, single dwelling development, while the non-urban zoned land to the immediate north and north-west of the site has been developed for seniors living. As the Mt Gilead site is located less than 1km to the south of the above development, the proposed rezoning will provide a logical addition to the residential area.

The Noorumba Reserve which part forms the northern boundary of the site is a significant local natural resource in that it contains Cumberland Plain Woodland including 39 plant species of regional significance.

### 3.5 Site Characteristics

Located within a semi-urban area, the site has historically been used for agricultural purposes and thus contains cleared paddocks with improved pastures. Pockets of residual vegetation are located along drainage lines and steeper slopes. The site comprises remnant and degraded native vegetation and exotic pastures.

There are no buildings or other improvements on the land, other than a number of farm dams, fencing and a track to the Mt Gilead homestead. The land is currently approximately 95% cleared for grazing and is currently used for cattle production (see **Figures 8 to11**).



Figure 8 - Pasture land



Figure 9 – Access to the Mt Gilead property from Appin Road



Figure 10 - Looking west at constructed dam towards the middle of the site



Figure 11 - North-west boundary and the highest point of the site looking north-west

# 3.5.1 Topography and Drainage Corridors

Topographically, the majority of the site is generally undulating and consists of gentle rises, rounded crests and ridges with slopes generally less than 5 degrees (see **Figure 12**). The land generally slopes north-west into a shallow valley at the foot of the ridge line in the north-west. The ridge line has a hill with steeper gradients up to 25 degrees.

There are several surface water features on the site consisting of small farm dams and drainage channels. The major drainage channels are:

- a steep gully to the north-west trending north and a shallow gully to the north-east trending north which form part of the Menangle Creek Catchment; and
- a shallow gully to the south-west trending north-west that forms part of the Woodhouse catchment and eventually flows out to the Nepean River.

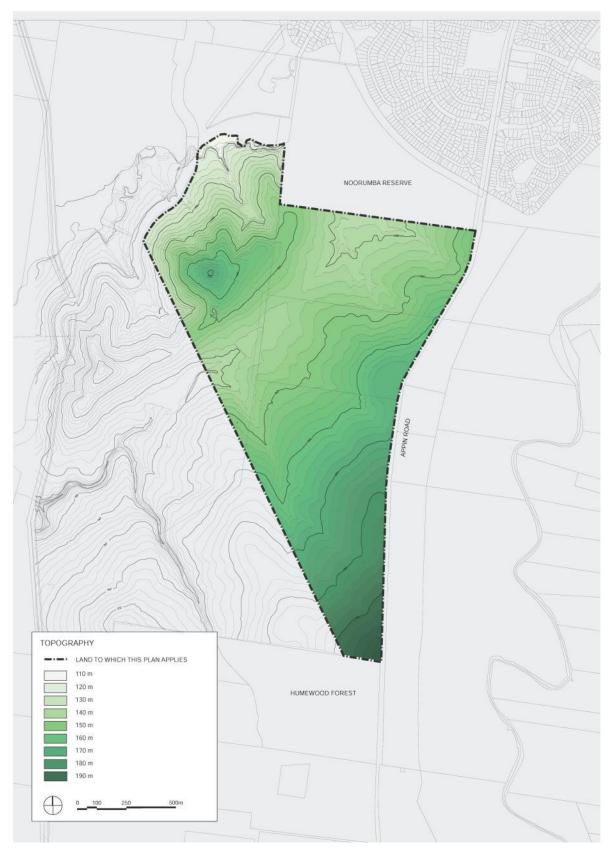


Figure 12 - Topography of the site

Source: Cox Richardson

#### 3.5.2 Flora and Fauna

Essentially agricultural land, the site has a long history of grazing, pasture improvement and weed invasion. Eco Logical Australia has surveyed and described the existing flora and fauna on the site (see Ecological Assessment Report at **Appendix F**).

A total of 154 flora species were identified on the site, comprising 67 native and 87 introduced species; and no threatened flora was recorded during field surveys. The site contains three native vegetation communities:

- Cumberland Plain Woodland a Critically Endangered Ecological Community under both Commonwealth and NSW legislation, with three localised clumps located along the northern and western borders of the site.
- Shale Sandstone Transition Forest a Critically Endangered Ecological Community (EEC) under both Commonwealth and NSW legislation, and represented by two pockets in the middle of the site.
- River-flat Eucalypt Forest listed as an EEC under NSW legislation, and represented by a small patch in the north western corner of the site.

In relation to avifauna, a total of 58 bird species were recorded on the site, including one vulnerable and one migratory species. Few native mammals were identified during field surveys - 13 native bat species including six vulnerable species and a lone wallaby. Domestic livestock graze throughout the site.

These matters are discussed further in Section 5.1 of this report.

### 3.5.3 Geology and Soils

The site is underlain by the Triassic Ashfield Shale of the Wianamatta Group deposited over the Hawkesbury Sandstone. In general there are only limited bedrock outcrops across this area, with shale underlying the northern portion of the site and sandstone the southern portion of the site (refer to URS report at **Appendix G**).

The area is covered by Blacktown group soils derived from Wianamatta Shale, ranging from shallow to moderately deep Red Podzolic Soils and Brown Podzolic Soils on crests, upper slopes and well drained areas, to deep Yellow Podzolic Soils and Soloths on the lower slope and in the drainage depressions and areas of poor drainage. Soils derived from Wianamatta Shale will generally exhibit a subsoil profile of moderately reactive high plasticity clay.

The site is considered to present a very low risk of Potential Acid Sulphate Soils (PASS).

In terms of salinity, the local soil types are expected to yield negligible salinity.

### 3.5.4 Geotechnical Observations

In general, the site was found by URS to have no significant observable geohazards. Although, several areas of potential hazard were identified, in general the overall stability of the site was considered good with only surficial soils instabilities on the steeper northern area and minor rock fall potential localised to the former quarry (URS, **Appendix G**).

### 3.5.5 Heritage

### Non-indigenous Heritage

A number of non-indigenous heritage items are located in close proximity to, or abutting, the site. These are:

- The Sydney Water Supply Upper Canal System, also known as the Upper Canal, forms the northwestern boundary of the site. It is listed on the NSW State Heritage Register.
- The Mt Gilead Homestead and surrounding buildings and structures, including the Old Mill are outside of, but in close proximity to, the site to the west. The Homestead group is a local heritage item listed in Campbelltown IDO No 15 and on the Register of the National Trust of Australia (NSW). A small part of the Artificial Lake (dam), which is part of the group, is located on the site.

- The Beulah Estate lies approximately 0.5 to one kilometre to the south of the site. Beulah, a cultural
  landscape containing early colonial structures and an important garden layout, is listed on the State
  Heritage Register. It is shielded from the site by bushland in the Beulah Biobanking area.
- The Humewood Forest lies to the immediate south of the site and is part of the Beulah Biobanking area. Humewood, a stand of trees associated with the former home of the Hume family (see Meadowvale below), is a local heritage item listed in IDO 15 and is significant because of the landscape value of its vegetation.
- Meadowvale (formerly known as Humewood) is situated south of the Beulah Biobanking bushland.
   Meadowvale, a house with colonial characteristics and a local heritage item listed in IDO 15, stands on the original land grant made to Andrew Hume, the colonial explorer of NSW.

In addition to the above, the archaeological remnants of the early Hillsborough homestead, located within the site, is considered to have local significance but is not listed in any statutory instrument.

#### Indigenous Heritage

There are twelve items of indigenous significance located on the site, comprising three artefact scatters; two isolated finds; one modified tree; and six Potential Archaeological Deposits.

# 3.6 Site Opportunities and Constraints

In summary, from the foregoing examination the site presents a number of opportunities and constraints for future residential development - as follows and as illustrated in **Figure 13**.

- Opportunities:
  - Close to physical, social and employment infrastructure in the Campbelltown City Centre;
  - Identified as a greenfield land release area within the Metropolitan Development Program;
  - Has sufficient area for provision of open space and community facilities;
  - Provides potential for views and vistas in a rural setting;
  - Largely cleared of vegetation;
  - Retained existing vegetation creates opportunities for biodiversity corridors;
  - Land generally level or gently undulating;
  - No geotechnical or geological issues.
- Constraints;
  - Steep slope in the north west corner of the site;
  - Drainage lines traverse the site;
  - Proximity to heritage items.

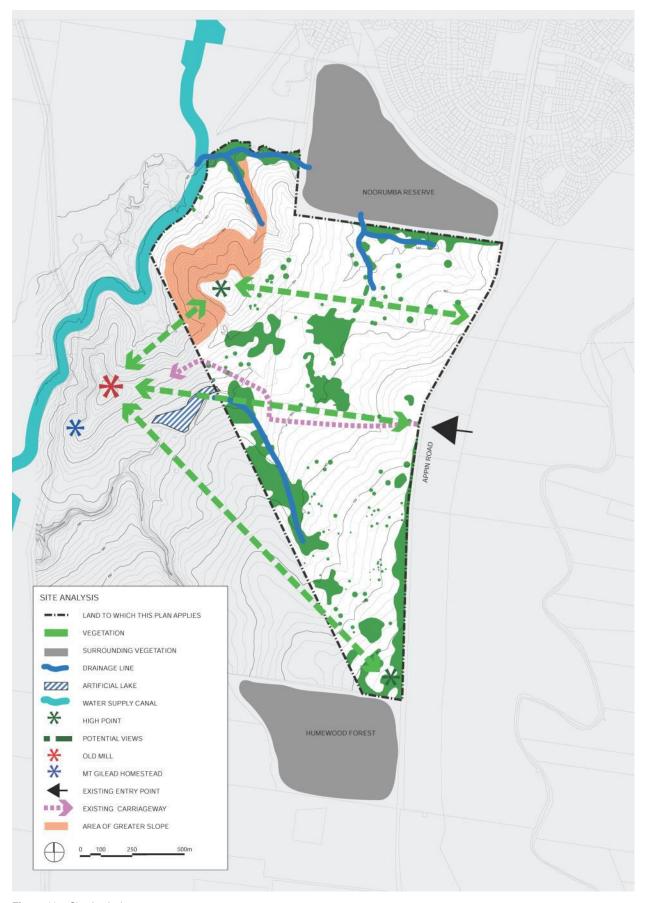


Figure 13 – Site Analysis

Source: Cox Richardson

# 4.0 Planning Proposal

This planning proposal has been prepared in accordance with the *A guide to preparing planning proposals* (Department of Planning & Infrastructure, October 2012) and in accordance with Section 55(2) of the EP&A Act.

# 4.1 Objectives and Intended Outcomes

The primary outcome of the planning proposal is residential development of the 210 ha Mt Gilead site in close proximity to the social and community assets within the Campbelltown LGA that respects the heritage and ecological significance of adjoining land.

The objectives of the planning proposal are to:

- Permit low density residential development supported by public open space and community facilities, including a small retail centre.
- Protect environmentally sensitive land and provide an environmental bushland corridor that links the Noorumba Reserve with the Beulah biobanking site and the Nepean River corridor.
- Respect the heritage significance of the Mount Gilead homestead site including the outbuildings, mill and dam and their setting.
- Respect the environmental significance of the Beulah biobanking site.
- Reserve land for acquisition by Roads and Maritime Services for future road infrastructure (widening of Appin Road).
- Increase the supply of housing within the Campbelltown LGA with the addition of up to 1700 new dwellings.

# 4.2 Explanation of Provisions

The proposed outcome will be achieved by:

- Amending draft Campbelltown Local Environmental Plan 2014 (CLEP 2014) prior to it being made, or if
  it is made before this planning proposal is finalised, by amending the new CLEP 2014.
- Adopting the provisions within draft CLEP 2014.
- Including a number of local provisions in relation to minimum lot size and protection of terrestrial biodiversity as explained below.

### 4.2.1 Land to which the Plan will Apply

The planning proposal applies to the land at Appin Road, Gilead, in the Campbelltown LGA, known as Part Lot 1 DP 807555, Part Lot 2 DP 807555, Lot 59 DP 752042 and Lot 61 DP 752042 (see **Figure 14**).

### 4.2.2 Relationship to Existing Local Planning Instruments

The land to which this planning proposal applies falls within the provisions of the *City of Campbelltown Interim Development Order No. 15* (IDO 15), which has been identified as a deferred matter within draft CLEP 2014. The planning proposal will be either a post exhibition amendment of draft CLEP 2014, or the first amendment to the new CLEP 2014.

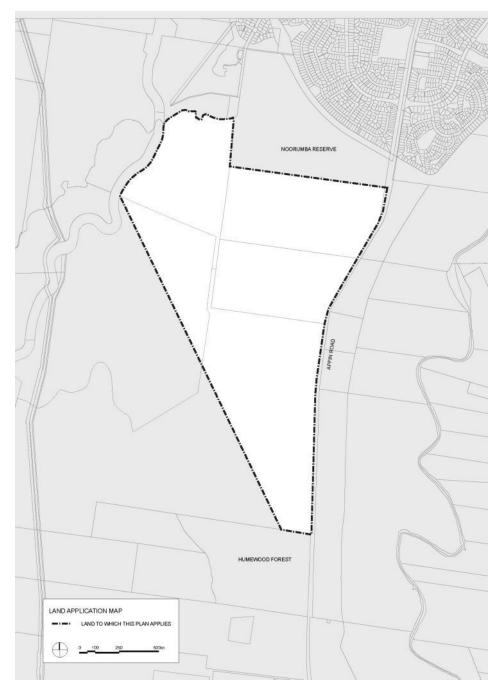


Figure 14 – Land to which the planning proposal applies

### 4.2.3 Land Use Zones

The Mt Gilead site is proposed to be zoned (in accordance with the Standard Template) as follows:

- R2 Low Density Residential;
- RU2 Rural Landscape;
- B1 Neighbourhood Centre;
- RE1 Public Recreation;
- SP2 Infrastructure.

The proposed zoning is shown on the Land Zoning Map appended at **Appendix B** and illustrated in **Figure 15**.

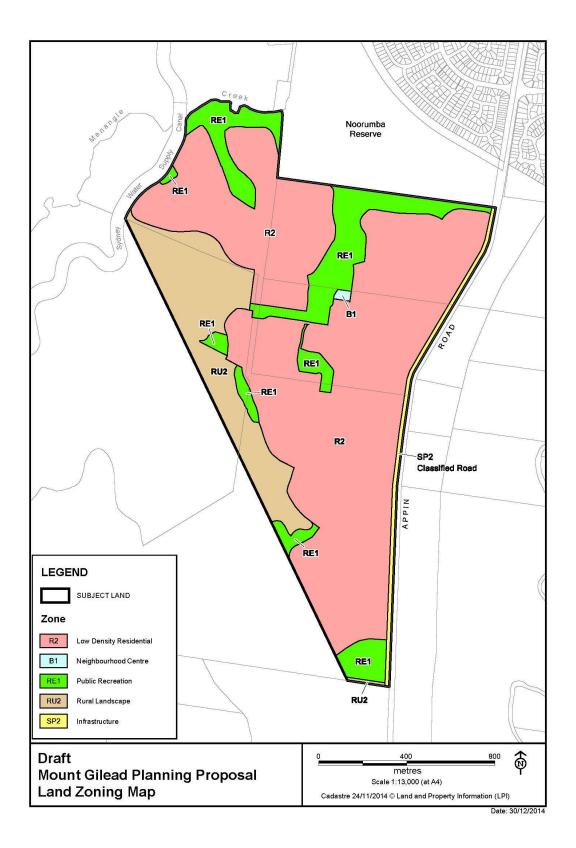


Figure 15 – Proposed zoning

### 4.2.4 Proposed Provisions

It is proposed that all the provisions within draft CLEP 2014, including proposed land uses, will apply to the land the subject of this planning proposal. It is further proposed that additional provisions be inserted into the CLEP 2014 in order to:

- enable an exception to the minimum lot size; and
- maximise the retention and enhancement of native biodiversity.

#### Minimum subdivision lot size

It is proposed to include an additional clause to permit lot sizes smaller than the minimum in recognition of the need for greater housing choice within the Sydney Metropolitan Region.

In order to provide a range of dwelling sizes and types to suit the diverse needs of the incoming population, it is intended that in specific circumstances subdivision to allow lots less than 450 square metres in area, but with a minimum area of 375 square metres. This provision applies to a small area of land in the centre of the site (shown as Area 13 on the Lot Size Map appended at **Appendix B**) and is subject to the resultant lot(s) satisfying all of the following conditions:

- the lot(s) being for the purpose of a single dwelling; and
- there being no more than three lots less than 450 square metres in area contiguous with each other on a street; and
- the lot(s) not being located on a bus route; and
- the lots(s) being within 200 metres of a bus route, the community hub or open space area.

In addition, the maximum number of lots less than 450 square metres able to be created is capped at 65. The proposed provision, to be inserted into clause 4.1A of the draft CLEP 2014, is appended at **Appendix C**.

#### **Terrestrial Biodiversity**

In order to protect and encourage the recovery of significant flora and fauna and their habitats, and retain and enhance native biodiversity, it is intended that some ecologically sensitive land proposed to be zoned RE1 and RU2 receives special protection. A clause to this effect, titled Terrestrial Biodiversity, is to be incorporated in 'Part 7 - Additional Local Provisions' of the draft CLEP 2014, and is appended at **Appendix C.** The relevant land is identified on the Terrestrial Biodiversity Map and is appended at **Appendix B.** 

### 4.2.5 Key Development Standards

The proposed development standards that will apply to the Mt Gilead land are generally consistent with those applying across the rest of the Campbelltown LGA as set out in draft CLEP 2014 and shown on the maps in **Appendix B** and are as follows:

- R2 Low Density Residential
  - Minimum lot sizes 450 square metres; 500 square metres; and 700 square metres.
  - Maximum building height 8.5 metres. Note a small area is restricted to 6 metres to protect views from the Mt Gilead Homestead site.
  - Maximum floor space ratio 0.55:1
- RU2 Rural Landscape
  - Minimum lot size 100ha
  - Maximum building height 9 metres
- B1 Neighbourhood Centre
  - Maximum building height 9 metres

### 4.3 Justification

The matters justifying this planning proposal, as required by *A guide to preparing planning proposals*, are covered in Section 6 of this report.

# 4.4 Mapping

The land to which this planning proposal applies is illustrated in **Figure 14** above and on the maps located at **Appendix B**.

#### LEP maps

The following draft LEP maps are included with this planning proposal and are attached at Appendix B:

- Land Zoning Map
- Lot Size Map;
- Height of Buildings Map;
- Floor Space Ratio Map;
- Land Acquisition Reservation Map;
- Terrestrial Biodiversity Map; and
- Heritage Map.

# 4.5 Additional Development Controls

### 4.5.1 Campbelltown (Sustainable City) Development Control Plan 2014

To support the planning proposal and to reflect the special characteristics of the Mt Gilead site, an amendment to *Campbelltown (Sustainable City) Development Control Plan 2014* (DCP) is proposed. The amendment (see **Appendix D)**, to be incorporated as Part 4 in Volume 2 of the DCP, sets the vision and key development objectives for Mt Gilead, and provides additional site specific development principles and controls in relation to:

- heritage protection;
- protection of key views;
- the street network and public transport;
- open space and landscaping;
- residential subdivision; and
- residential development.

### 4.5.2 Indicative Site Structure Plan

The DCP amendment incorporates an Indicative Site Structure Plan as well as a section covering the proposed landscape palette for Mt Gilead, including street trees.

The Indicative Site Structure Plan, shown in **Figure 16** and appended at **Appendix D** has been developed to support the planning proposal and provide a framework for the future subdivision and development of the Mt Gilead site. The plan shows:

- the indicative layout of roads, including the proposed main bus route through the site;
- transport access points off Appin Road;
- the distribution of public open space and the indicative location of detention basins;
- the location of riparian corridors; and
- the general location for a future sports field and neighbourhood centre.

# 4.6 Community Consultation

It is proposed that the community will be consulted regarding the planning proposal during the formal statutory notification and exhibition period.

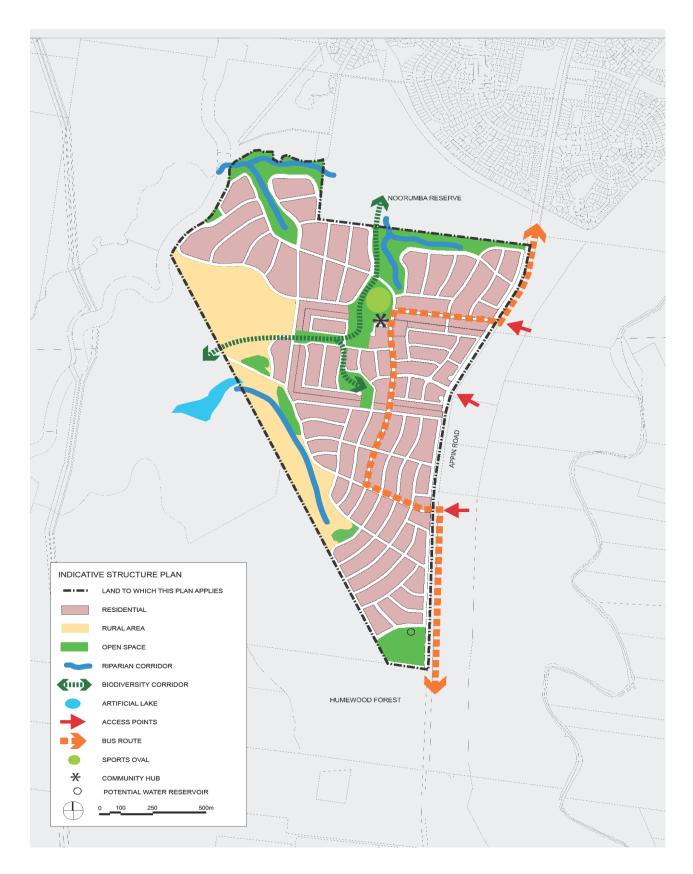


Figure 16 - Indicative Site Structure Plan

Source: Cox Richardson

# 5.0 Key Planning Issues

This section of the report addresses the planning issues listed for assessment in the Gateway Determination (see **Appendix A**) and further augmented by CCC's requirements for additional technical studies. The detailed technical reports are appended to this report.

# 5.1 Ecology

The site and its surrounds currently contains areas of native vegetation and exotic pastures. As such, Eco Logical Australia has prepared a detailed Ecological Assessment Report for the planning proposal (refer **Appendix F**). This report identifies the existing site conditions and provides an assessment of the acceptability of rezoning the land for residential purposes. The following is a summary of the key issues.

#### 5.1.1 Fauna

#### Context

A total of 58 bird species (including three introduced species) were recorded on the site during bird census and opportunistic observations, including one vulnerable species, *Glossopsitta pusilla*, and one migratory species, *Ardea ibis*. No evidence of nocturnal bird activity was found.

During site surveys 13 microbat species were identified. A single Swamp wallaby - *Wallabia bicolor* - was observed along the eastern boundary adjacent to native vegetation. Domestic livestock, (cows and ponies) were grazing on the site and one feral mammal, the European fox, was recorded.

No koalas were identified on the site.

#### Issues and Assessment

Seven threatened fauna species and one migratory species were identified on site. Potential habitat for hollow dependant bat species was also identified in the form of hollow bearing trees. Eco Logical Australia has recommended that these trees should be retained where possible. No other potential habitat areas were identified as substantial.

While no koalas were identified on the site, some scattered koala habitat trees - *Corymbia maculata* and *Eucalyptus crebra* - are present. Importantly, the coverage of potential koala habitat trees does not exceed the 15% threshold under *State Environmental Planning Policy No 44—Koala Habitat Protection* (SEPP 44) and therefore the site is not classified as potential koala habitat. Despite this, Eco Logical recommends that these trees should be retained where possible, and management plans should be developed to reduce the impact of domestic pets on koalas in the surrounding area.

Eco Logical has confirmed that the rezoning of the site will not have any adverse impact on existing fauna species. There is limited fauna habitat, but where scattered hollow trees do occur, they should be retained if possible.

#### Planning Proposal Response

It is considered that the proposed rezoning of the subject site will not have any adverse impacts on threatened or endangered fauna species. The future design of residential development on the site – as shown in the Indicative Site Structure Plan incorporates the retention of potential fauna habitat trees.

### 5.1.2 Flora

### Context

The site comprises both remnant and degraded native vegetation and exotic pastures, and three native vegetation communities are located within the boundaries of the site:

- Cumberland Plain Woodland (CPW) 9 hectares;
- Shale Sandstone Transition Forest (SSTF) 24.5 hectares; and
- River-flat Eucalypt Forest (RFEF) one (1) hectare.

CPW is listed as a critically endangered ecological community (CEEC) under both the Commonwealth Environment Protection & Biodiversity Conservation Act 1999 (EPBC Act) and the NSW Threatened Species Conservation Act 1995 (TSC Act). SSTF is also listed as a critically endangered ecological community (EEC) under both these Acts, and RFEF is listed as endangered under the TSC Act. A detailed description of the existing flora within, and surrounding the site, is provided in the Ecological Assessment Report at **Appendix F**.

#### Issues and Assessment

A total of 154 flora species were identified within the site including 67 native and 87 introduced species. Nine weed species listed as noxious in the Campbelltown LGA and four Weeds of National Significance were identified on the site. No threatened flora was recorded.

The proposed rezoning of land does not trigger any particular mechanisms of the TSC Act. Matters relating to threatened species, endangered populations and endangered ecological communities are typically considered in the plan-making stage to ensure subsequent development can be undertaken without having a significant impact on these matters. If a development is likely to have a significant impact on these matters, a Species Impact Statement (SIS) must be prepared and submitted with the development application.

An alternative approach is Biodiversity Certification which removes the need to undertake a SIS with a development application. To provide the option of Biodiversity Certification, an assessment consistent with the Biodiversity Certification Assessment Methodology (BCAM) was undertaken by Eco Logical Australia to determine if the 'improve or maintain' test is met by the proposed rezoning. Biodiversity Certification of the site is currently under consideration.

The site has been divided into three categories for the purposes of the BCAM:

- land for biodiversity certification (extent of the development) 152 hectares;
- land for conservation/riparian/open space 41 hectares; and
- land maintaining its current land use (rural) 17 hectares.

Under the BCAM the development footprint will impact 1.8 hectares of the SSTF CEEC which is 'red flagged'. The 'improve or maintain' outcome will not be met unless a variation is obtained from the NSW Office of Environment and Heritage (OEH) prior to any future development occurring. Overall, the envisaged future development will involve the retention of 83% of CPW, 49.6% of SSTF and 100% of RFEF. The rezoning will remove 1.5 hectares of CPW and 12.5 hectares of SSTF, both largely comprising scattered trees.

In light of the small area of SSTF likely to be removed, and the area of CEEC proposed to be protected, it is considered by Eco Logical Australia that a red flag variation request could be considered favourably by OEH.

The BCAM compares the impact of a proposal to the conservation benefits. This comparison is measured using Biobanking credits which are attributed for the extent of the existing vegetation, or for factors such as how land will be managed or protected. Based on the existing site conditions, a total of 192 credits are required. A total of 366 credits are expected to be generated, resulting in a surplus of 174 credits.

Future applications for development on the site which impact any EECs or CEECswill be required to be referred to the Commonwealth Government under the *Environment Protection and Biodiversity Conservation Act 1999.* 

Overall, the ecological assessment concluded that the balance between development and conservation is achievable and that the planning proposal adequately addresses ecological issues.

#### Planning Proposal Response

The planning proposal proposes to retain significant areas of vegetation within public open space areas. The site's ecological values are proposed to be addressed by either Biodiversity Certification or via a Species Impact Statement submitted with future development applications.

Moreover, the proposed LEP amendment protects the ecological values of the site in the following ways:

- Ecologically sensitive land proposed to be zoned RE1 and RU2 will receive special protection via a
  clause to this effect, titled Terrestrial Biodiversity (as shown in **Appendix C**), which is proposed to be
  incorporated in 'Part 7 of draft CLEP 2014. The relevant land is identified on the Terrestrial Biodiversity
  Map.
- The land proposed to be zoned RE1 in the north of the site connects with Noorumba Reserve and there are generally connections between all the areas of RE1 zoned land so facilitating the passage of native fauna.

### 5.2 Bushfire Risk

The site is identified as bushfire prone on the Campbelltown Bush Fire Prone Land Map and therefore a Bushfire Assessment has been undertaken by Eco Logical Australia (**Appendix H**). This assessment investigates the capability and suitability of the site for future residential development with regard to the relevant bushfire planning legislation and policies.

#### Context

Eco Logical Australia has undertaken site specific and surrounding vegetation mapping, identifying vegetation formations including Sclerophyll (Dry) and Grassy Woodland. To the east and south of the site are areas of forest, whilst smaller pockets of forest, woodland and grassland are contained within the site. The majority of the site has a gentle slope with areas of steeper slopes in the northern western portion of the site.

While the majority of the site is proposed for residential development, portions of existing bushland will be retained as open space.

### Issues and Assessment

The existing vegetation on the site has been classified as 'forest' or 'grassland' which presents a hazardous risk of bushfire. To ensure protection from bushfire risk, Eco Logical has established indicative Asset Protection Zones (APZ) to provide a buffer to future residential development with calculations based on the vegetation of the site and slope of the land.

Eco Logical has identified other bushfire protection measures including the provision of adequate access, water supply for fire fighting, the safe installation of utilities, and building construction standards for future dwellings. These measures would be implemented as part of future applications for residential development.

### Planning Proposal Response

The Bushfire Assessment has demonstrated that the site is capable of accommodating future subdivision and land development subject to appropriate bushfire protection measures. The recommendations provided in Section 5 of the Bushfire Assessment would be implemented in the future planning of the site and in the detailed design of the new residential development.

The NSW Rural Fire Service has advised that it has no objection to the planning proposal in principle but notes that any future development will need to comply with the requirements of *Planning for Bush Fire Protection 2006* (see correspondence at **Appendix E**). Accordingly, the site is considered suitable for rezoning for future residential use.

# 5.3 Ecological and Riparian Corridors

The current vegetation on the site provides opportunities for creating effective biodiversity corridors thereby linking vegetation to the north, south and east. This, along with the preservation of riparian corridors, was assessed as part of the aforementioned Ecological Assessment Report prepared by Eco Logical Australia (see Section 5.1 above and **Appendix F**).

### 5.3.1 Ecological Corridors

#### Issues and Assessment

The nature of current vegetation on the site and its proposed retention/removal is discussed in Section 5.1.2 above.

There is currently connectivity within the site to areas of vegetation to the north and south via a fragmented series of islands or stepping stones of vegetation. The ecological assessment concluded that while the planning proposal would remove some areas of scattered trees, it would at least maintain the interrupted connectivity with surrounding vegetation to the north (Noorumba Reserve) and south (the Beulah Biobanking area).

The report further notes that as an outcome of the planning proposal the fragmented patches of vegetation would be consolidated through improved management and revegetation. At a broader landscape scale, connectivity between Noorumba Reserve and Beulah is via the vegetation to the east of Appin Road which, with the exception of Appin Road, provides a contiguous linkage of vegetation in a very good condition with low disturbance.

### Planning Proposal Response

Together, the planning proposal, the Indicative Structure Plan and proposed conservation measures are intended to enhance the condition of retained patches of woodland so reducing the degree of fragmentation. As discussed earlier, it is intended that significant areas of vegetation be retained on the site within areas of public open space. In addition, the proposed LEP amendment fosters the retention and creation of ecological corridors in the following ways:

- The land proposed to be zoned RE1 in the north of the site connects with Noorumba Reserve, and all the areas of RE1 zoned land are generally connected (as shown indicatively in **Figure 17**).
- Ecologically sensitive land proposed to be zoned RE1 and RU2 will receive further protection via a
  Terrestrial Biodiversity clause (as shown in **Appendix C**) which is to be incorporated in 'Part 7 of the
  draft Campbelltown LEP 2014. The relevant land is identified on the Terrestrial Biodiversity Map.

### **Riparian Corridors**

#### Issues and Assessment

There are several streams and drainage lines across the site, particularly in the north and towards the western boundary.

All streams and drainage lines were categorised and mapped by Eco Logical Australia following the 'Guidelines for controlled activities' set out by the NSW Office of Water (NOW) (see **Appendix F**). This methodology utilises the Strahler Stream Order classification which identifies riparian corridor widths as measured from the top of bank and minimum vegetated riparian zone widths.

Drainage lines that were not classified in the assessment were deemed to be of limited riparian value or did not meet the definition of a river. In some situations the watercourses have been significantly disturbed and in some areas display no true bed and bank characteristics.

The mapping of top of bank and stream order is presented in **Figure 18**. The majority of the watercourses are considered to range from slightly to substantially modified, with clearing of vegetation within the catchment and along the tops of banks. Aquatic habitat is limited due to the modification of the watercourses, and even in unmodified watercourses the aquatic vegetation is generally of marginal quality. Eco Logical Australia concluded that the overall rating of riparian and aquatic conditions varies from degraded to moderate.

#### Planning Proposal Response

Riparian zones have been defined to the top of bank and appropriate vegetated riparian zones mapped (see **Figure 18**), noting that the NSW Office of Water has agreed that since some previously mapped first order Strahler streams/channels do not meet the definition of 'waterfront land' they can be removed.

Wherever possible, development and subsequent asset protection zones will not occur in areas mapped as riparian corridor or vegetated riparian zone. As shown in **Figure 17**, the majority of mapped watercourses on the site will be contained within areas of proposed open space or on retained rural land, which are to be zoned RE1 and RU2 respectively. Moreover, as explained above, further protection is provided via the terrestrial biodiversity clause and attendant biodiversity overlay map to be incorporated in the draft Campbelltown LEP 2014.

Eco Logical Australia has made a series of recommendations in relation to the future management of riparian corridors. These cover matters such as:

- the determination of stream ordering downstream;
- the determination of riparian corridor widths;
- future maintenance, rehabilitation and vegetation of riparian corridors;
- measurement of the top of bank of any proposed new constructed channels;
- the permissibility of cycleways and paths within the outer vegetated riparian zone;
- the permissibility of detention basins within the outer vegetated riparian zone, and associated equivalent offset areas.

These requirements will be taken into account in the planning proposal or will be implemented as part of subsequent development applications.

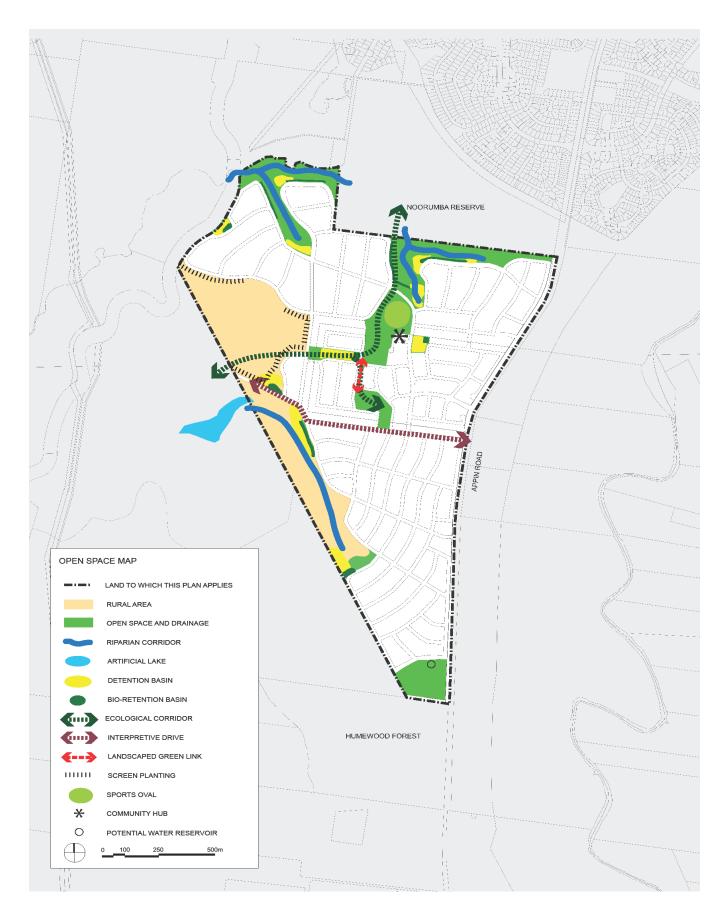


Figure 17 – Indicative open space strategy illustrating riparian and ecological corridors

Source: Cox Richardson

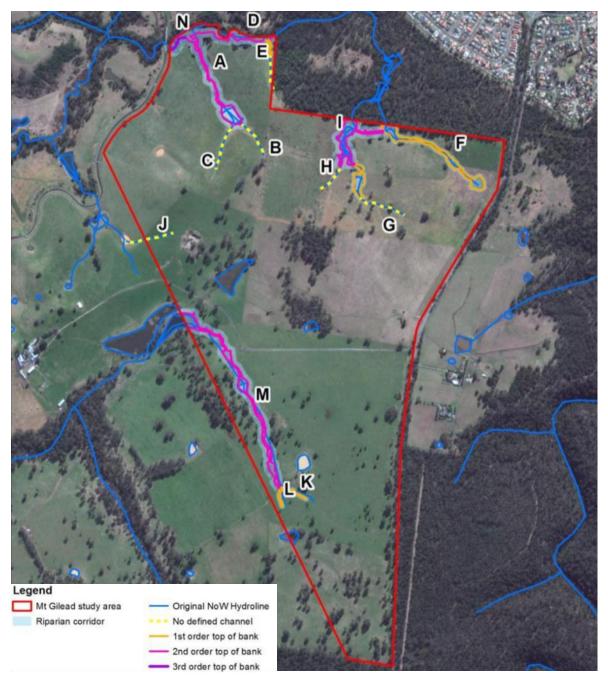


Figure 18 - Classification of riparian corridors

Source: Eco Logical Australia

# 5.4 Soils and Geotechnical Conditions

The proposed rezoning of the site for future residential uses requires an assessment of the existing soil and geotechnical considerations to identify any potential risks. As such, URS has prepared a Phase 1 Environmental and Geotechnical Site Assessment (**Appendix G**).

#### Context

The site generally slopes north-west into a shallow valley at the foot of a ridge line in the north-west. The ridge line comprises a hill with steeper gradients. The site contains a number of small farm dams with three major drainage channels.

The northern portion of the site is underlain by Ashfield Shale, while Hawkesbury Sandstone underlies the southern portion of the site. Soils on the site are shallow to moderately deep (<1.5 m) and are expected to be moderately reactive high plasticity clay.

#### Issues and Assessment

Geotechnical observations by URS identified five areas of potential hazard, including hilly areas of the site, gullies and a quarry. The overall stability of the site has been confirmed by URS as 'good' with only surficial soil instabilities on the steeper northern area and minor rock fall potential localised to the quarry. URS has noted that areas proposed for residential zoning are not located in these areas.

The existing soils on the site are cohesive and potentially have low bearing strength when wet. URS has suggested compaction of soil will enhance the bearing strength of the founding soil. It has been recommended that the site should be graded and site drains should be designed to prevent ponding or channelling of water across the soil horizons.

An investigation by URS of surface soils (0-300mm depth) across the site identified that all surface soil samples were non-saline. A review of the available Acid Sulphate Soil Risk Map and an assessment of the topography and lithology of the site also confirmed there is a very low risk of potential acid sulphate soils (PASS).

Given the topography and lithology of the site, URS considers no further assessment is required to provide an appropriate characterisation of acid sulphate soil risk and that consideration of PASS is not necessary in relation to future development.

## Planning Proposal Response

URS has confirmed that the site is acceptable for residential land uses as there are no significant geohazards. It has been recommended that targeted geotechnical testing occur with future applications for development to support the detailed design of the residential development.

## 5.5 Mine Subsidence

Subsidence as a result of future coal mining is a potential issue for the site. Accordingly, a Mine Subsidence Report has been prepared by Mine Subsidence Engineering Consultants (MSEC) and is provided at **Appendix I**. The report predicts subsidence parameters and the potential impacts on the future development.

### Context

The site is located within the Coal Exploration Authorisation Area A248, associated with the Bulli and Balgownie Coal Seams. The Bulli Seam, containing coking coal, lies approximately 500-590 metres below the surface, whilst the Balgownie Seam, containing thermal coal, is approximately 610 metres below the surface.

BHP Billiton plans to operate a mine in the Bulli Seam south of the site, and whilst not currently planned, there is potential for mining to continue north below the Mt Gilead site. Despite this potential, MSEC is of the opinion that part of the coal seams below the site are unlikely to be mined due to the presence of faults in the seams. Based on current technology, the Balgownie Seam is unlikely to be mined in the near future due to extraction constraints.

As well as containing coal resources, the site lies within the Petroleum Exploration Licence Area PEL2 and contains significant gas reserves which could potentially be extracted through gas wells. The owner of the exploration licence, AGL, has recently suspended expansion of nearby gas extraction projects due to community concern and legislation prohibiting wells being established within two kilometres of residential dwellings. As such, the extraction of gas is not considered an issue for the site.

### Issues and Assessment

Potential impacts from future mining activities are predicted to include subsidence, tilts, strains and curvatures. As no specific mining activities are currently proposed, MSEC has assumed a scenario of longwall mining with a width of 320 metres and chain pillars between longwalls of 45 metres width. This scenario involves the mining of the Bulli Seam only, due to the unlikely capability of mining the Balgownie Seam.

In consultation with BHP Billiton and based on the above scenario, MSEC has identified the potential for subsidence and maximum tilt, curvature and strain. The potential impacts comprise:

maximum predicted subsidence varies from 1120mm to 1440mm;

- maximum predicted tilt is 7mm/m at the perimeter of the subsidence trough and 2 to 3mm/m within the bottom of the trough;
- maximum predicted strains are 1.1mm/m, tensile, and 2.3mm/m, compressive; and
- maximum predicted curvature is 6.4 kilometres radius.

Although the above figures represent the maximum potential impact, the presence of faults within the coal seams will restrict the layout of any future longwall mining activities. As such, the Mt Gilead site will be outside, or on the edge of, any subsidence trough. The level of subsidence on the site is therefore expected to be lower than these maximums.

Likewise unlikely, if advancements in technology allow the Balgownie Seam to be mined, the maximum subsidence is expected to be approximately 750mm to 850mm. Cumulatively, this would result in a vertical subsidence of approximately two metres. This level of subsidence is unlikely to cause damage to buildings, with maximum tilt, curvature and strain being the most relevant impacts.

The Mine Subsidence Board has established building guidelines to be followed when constructing moderately sized housing. These guidelines embody provisions of the Building Code of Australia (BCA), Australian Standards and good building practices. Based on these guidelines, MSEC has established a range of subsidence parameters which should be implemented in the future construction of residential development on the site.

## Planning Proposal Response

Based on the above assessment, the site is capable of being developed for residential purposes if the relevant guidelines and standards for residential buildings are followed and the level of construction is commensurate with the established subsidence parameters. These matters will be further addressed in future applications for development on the site.

## 5.6 Contamination

Past and current agricultural uses on the site can result in a risk of soil or groundwater contamination via the release of chemicals through leaks and spills. URS has prepared a Phase 1 Environmental and Geotechnical Site Assessment to assess these risks and confirm the suitability of the site for future residential development (**Appendix G**).

### Context

The ownership of the site has changed on several occasions since 1890, and the land has been used for farming and grazing prior to 1954 and to the present.

## Issues and Assessment

Low levels of contamination associated with previous and current uses are expected on the site based on the preliminary environmental and historical review undertaken by URS. This contamination could be attributed to various chemicals such as arsenic and organochlorine pesticides (OCPs) associated with sheep and cattle grazing activities.

A single instance of an asbestos cement pipe was identified on the site by URS in 2006. No asbestos was observed during the most recent site inspection.

URS has suggested that the migration of onsite contaminants to adjacent receptors should be able to be adequately controlled by the use of surface drainage. A Phase 2 investigation should also be undertaken to reduce the risk of unexpected findings during the future development. This is capable of being undertaken as part of future applications for development.

## Planning Proposal Response

URS has confirmed there is minimal likelihood of significant chemical contamination of the site that would compromise development for residential purposes. Any further investigations and mitigation measures can be undertaken during the preparation of detailed applications for the future residential development.

# 5.7 Non-indigenous Heritage

The presence of several historical sites within and adjacent to the site necessitates an assessment of non-indigenous heritage. Navin Officer and Tropman & Tropman Architects (the heritage consultants) have jointly prepared a European Heritage Assessment in relation to the historical significance of the site and to confirm the appropriateness of future residential development (refer to **Appendix J**).

#### Context

There are no items of state heritage significance within the site. However, the Upper Canal System located adjacent to the site and part forming the north western boundary is listed on the State Heritage Register.

The following items on the site are listed as, or considered to be of, local heritage significance:

- Part of the Artificial Lake (dam) listed as a heritage item in the Campbelltown IDO 15 as part of the 'Mt Gilead Group'.
- The archaeological remnants of the early 'Hillsborough' homestead is considered (by the attached heritage assessment) to be of local heritage significance, as are significant and endangered ecological features on the surrounding land.

The history of these items and their significance are detailed in the joint report at **Appendix J**.

In addition, as identified in **Section 3.5.5**, the following heritage items are located outside, but in the immediate vicinity, of the site:

- the Mt Gilead Homestead and surrounding buildings and structures (listed in Campbelltown IDO No 15 and on the Register of the National Trust of Australia (NSW));
- the Beulah Estate (listed on the State Heritage Register);
- Humewood Forest (listed in IDO 15); and
- Meadowvale (listed in IDO 15).

## Issues and Assessment

The heritage consultants have undertaken an assessment of the impacts of the planning proposal on the heritage significance of the local and state listed items on and within the vicinity of the site as summarised below.

#### **Upper Canal System**

The Upper Canal – is a system of tunnels, aqueducts and open canals which transport water from the Appin area to the Prospect Reservoir, has historic and architectural significance and is listed on four heritage registers: NSW State Heritage Register; IDO 15; the Sydney Catchment Authority's Heritage and Conservation Register; and the Register of the National Trust of Australia (NSW).

The proposal will indirectly impact the aesthetic qualities of the Upper Canal System by partially removing the bushland setting.

#### **Artificial Lake (Dam)**

The Mt Gilead Group – the group of stone buildings, homestead, stables, granary and windmill without sails (referred to as the Old Mill) is listed in IDO 15 and on the Register of the National Trust of Australia (NSW - Classified). Neither listing defines the area of the item, but the description from both demonstrates that they focus on the Homestead Complex and Old Mill, with the IDO 15 also including a dam which is assumed to be the Artificial Lake. Other than a small area of the lake, none are within the site.

The proposal has the potential to impact the heritage significance of the Artificial Lake as it is partially located within the site.

#### Site of early Hillsborough homestead

The site of the early homestead known as Hillsborough has been identified as a site of local archaeological significance.

#### **Remnant tracks**

An assessment of remnant access tracks and a carriageway to the Mt Gilead Homestead was undertaken to identify if these contained any heritage significance. It was determined that these tracks and the

carriageway do not satisfy any state or local level criteria for significance. Despite this, any possible interpretation of the extent of the carriageway has been encouraged to reflect the historic quality of the site.

#### **Mt Gilead Homestead Complex**

The heritage assessment concluded that historically, the Mt Gilead Homestead Complex and Windmill (the Old Mill), together with the Artificial Lake to the east, had been considered to be part of a single picturesque vista. The views to and from these items are considered important in the context of their heritage significance and as such, where practicable and feasible, it is considered desirable that the current rural landscape setting for these two items be retained.

The consultants note that the overall heritage significance of these two items is not considered to be affected by the proposal. Views to the Mt Gilead Homestead Complex and the Old Mill from the proposed residential development are not considered to have a significant, or otherwise unacceptable, impact on the heritage values of these items.

#### **Neighbouring items**

The heritage items listed above in the vicinity of the site are not identified as being affected by the planning proposal.

## Planning Proposal Response

The heritage conservation provisions in clause 5.10 of draft Campbelltown LEP 2014 will apply to the site and protect the heritage values of the site and its surrounds. In addition, further measures are proposed as described below.

#### **Upper Canal**

The proposal will indirectly impact the aesthetic qualities of the Upper Canal System, a State heritage item, by replacing part of the bushland setting with residential development. As the Canal has its own corridor of 'bushland setting' which will not be impacted by the proposal, the overall heritage significance of the item will not be detrimentally impacted.

Notwithstanding this, to address any potential impacts, it is proposed that a statement of heritage impact (SOHI) be prepared prior to any development application for works adjacent to the Upper Canal. The SOHI should clearly document the extent of visual or aesthetic impacts and all necessary controls to minimise or avoid heritage impacts.

Approval from the NSW Heritage Council should be sought for any development impacts within, or directly adjacent to, the bushland corridor of the Upper Canal.

### **Views and Vistas**

The residential use of the site is considered acceptable by the heritage consultants subject to the incorporation of the heritage assessment recommendations and subdivision guidelines provided in the European Heritage Assessment (see **Appendix J**). These recommendations and guidelines will generally be applied in relation to the preparation of future applications for residential development on the site.

More specifically, the planning proposal has responded to the issues in relation to significant vistas from, and views to, the Mt Gilead Homestead complex in the following ways:

- The land to the north east of the Mt Gilead Homestead is to retain a rural zone and is proposed to be zoned RU2, so protecting and retaining the landscape setting of the Mt Gilead group.
- Views to the north-east from the Homestead to the hill (within the RU2 zone), known as 'One Tree Hill' would generally be protected as the parklike backdrop and surrounds are not proposed to be disturbed with residential development. It is proposed that future residential development to the east will be screened with the planting of trees. 'One Tree Hill' will be retained as a grassed knoll with a single tree.
- The rural, parklike setting of the Old Mill will be retained within the proposed RU2 zone of draft CLEP 2014.

These measures are further supplemented with a series of provisions in the site specific DCP in relation to retaining and interpreting heritage and views. Moreover, the Indicative Structure Plan interprets the significance of the historic alignment of the Mt Gilead carriageway off Appin Road by generally setting it on the axis of the Old Mill. Particular elements of the alignment, such as the gateway off Appin Road and the curve of the road around the Artificial Lake are retained where possible, as are views of the Old Mill.

#### **Artificial Lake (Dam)**

The integrity of that part of the Artificial Lake within the site is generally not compromised as it will continue to be surrounded by rural land by virtue of the proposed RU2 zone along the western boundary of the site, and the whole lake is to remain in one ownership.

In addition, a heritage curtilage is to be provided around the Artificial Lake to mitigate any potential impacts and only the construction of a stormwater detention basin within the curtilage would be acceptable. Construction outside of the curtilage area would have no impact on the item.

If the Artificial Lake was to be visually or functionally impacted or if impacts were to occur adjacent to it, a SOHI and a conservation management plan (CMP) would be developed for the lake prior to any development application. The CMP would establish whether any impact(s) may or may not occur to the item during and post construction, and serve to manage them.

The heritage assessment further recommends that the Artificial Lake should be considered for State heritage listing, as well as for inclusion in Campbelltown's LEP rather than it being part of the general Mt Gilead listing as is currently the case.

### Hillsborough Homestead

The site of the Hillsborough cottage will be recorded and interpreted in the subdivision design of the site, as shown in the Indicative Structure Plan, and existing archaeological evidence of the cottage will be recorded and interpreted.

### **Beulah Biobanking Site**

The southern boundary of the site adjoins land at Beulah which has been established as a biobanking site. In recognition of the environmental significance of this biobanking site, an area of 3.5 hectares of public recreation land has been included on the draft zoning map (refer to **Appendix B**) in order to provide a buffer between the Beulah site and proposed future residential development.

## 5.8 Aboriginal Heritage

The generally undisturbed nature of the subject site results in potential for Aboriginal cultural heritage sites and areas of archaeological sensitivity. As such, Navin Officer has prepared an Archaeological Assessment and Aboriginal Consultation Report (refer to **Appendix K**) which examines the significance of existing Aboriginal Archaeological Sites on the site and provides an assessment on the potential impact of permitting residential development.

#### Context

Three artefact scatter sites (MGA13, MGA26 and MGA27) have been identified as possessing moderate scientific significance. Two isolated finds (MGA12 and MGIF3) are of low scientific significance at a local level. One culturally modified tree (MGMT1) has been assessed to have high scientific and cultural significance at a local level. Further information on six potential archaeological deposits (PADs) (MG PAD42, MG PAD43, Mt Gilead Property PAD, MG PAD44, MG PAD45 and MG PAD46) was not identifiable at this time, but it is acknowledged by Navin Officer that an Aboriginal Heritage Impact Permit (AHIP) would be required in the future if any disturbance was proposed to the PADs.

A copy of the assessment report was forwarded to the Office of Environment and Heritage in September 2013. The Office indicated that it will defer comment until the formal notification period.

## Issues and Assessment

A comprehensive consultation process was undertaken by Navin Officer in accordance with the OEH document 'Aboriginal cultural heritage consultation requirements for proponents 2010'. This involved correspondence with Local Aboriginal Land Councils, government agencies and various Indigenous relations groups. A field assessment of the site and various desktop searches were also undertaken by Navin Officer to inform the assessment.

On the assumption that all of the identified items, Aboriginal sites and PADs will be directly affected by future development, Navin Officer has determined that the future development of the site for residential purposes will have an impact on items of Aboriginal significance, and that future construction on the site would have a high degree of harm and result in the removal of all items of significance.

Navin Officer has not precluded the proposed rezoning of the site but has recommended that the following mitigation measures, detailed in the report at **Appendix K**, should be implemented in the future development of the site:

- implementation of conservation areas;
- subsurface testing of archaeological deposits;
- surface salvage of Aboriginal objects;
- care and management of recovered artefacts; and
- ongoing consultation with Aboriginal stakeholders.

## Planning Proposal Response

The heritage conservation provisions in clause 5.10 of draft Campbelltown LEP 2014 will apply to the site and are considered adequate to protect the Aboriginal significance of the site.

The culturally modified tree will continue to be protected by virtue of its location on land proposed to be zoned RU2.

The mitigation measures outlined above should be implemented by CCC in relation to future applications for development.

# 5.9 Landscape Character and Visual Impact

As detailed above in Section 5.7 there are existing features of the site and surrounding landscape elements that have been identified as having heritage significance. The proposed rezoning of the land for residential purposes has the potential to materially affect the rural agricultural nature of the site and its associated heritage features – in particular the Mt Gilead Homestead Complex and surrounding land. Accordingly, Clouston Associates were commissioned to undertake a Landscape Character and Visual Impact Assessment (see **Appendix L)** to assess the extent of the impacts of the planning proposal and establish whether and how such impacts can be mitigated.

## Context

A number of elements associated with 19<sup>th</sup> Century English landscapes are present both within and surrounding the site. Of particular relevance are:

- the Homestead Complex and the Old Mill and associated landscape including the Artificial Lake (dam) and One Tree Hill;
- historic references which indicate that the landscape character of the property in the 19th century was 'park-like' and resembled an 'English country seat'; and
- landscape elements such as individual tree specimens within a grazing landscape, ironbark fencing, a backdrop of native timber and extensive views.

While some of these elements are missing from today's property, the core elements commonly associated with the 19th Century romantic English landscapes remain – that is, a parkland style landscape of individual and groups of trees in a rolling pasture and extensive district views, providing the context and curtilage for the heritage listed structures and buildings.

The combination of these elements creates the landscape character significance and establishes a wider landscape context for the identified heritage items.

The Upper Nepean/Sydney Water Supply Canal is also identified as an important heritage element of the landscape but has limited visual presence from the site.

#### Issues and Assessment

Clouston Associates originally identified numerous visual receptors grouped into public domain views, private domain views, views to and from the site, and views within the site. Of these, six locations were identified which best demonstrate any effect of future residential development.

An assessment of these viewpoints has identified impacts ranging from moderate/high to moderate and negligible. In essence, the future residential development on the site may have impacts on significant landscape and visual elements if not appropriately mitigated.

The Visual Impact Assessment (VIA) identifies two broad areas of landscape character and visual significance that require specific mitigation measures:

- The core visual catchment from the Old Mill looking north and from the access road to the Mt Gilead Homestead looking north east (both with a moderate/high visual impact rating).
- The approaches to the site on Appin Road along the eastern boundary of the site which would change
  as a result of the removal of existing vegetation along the eastern side of Appin Road to facilitate road
  widening so revealing the physical features of new urban development (moderate visual impact rating).

Other identified receptor locations were considered to be of such distance from the core heritage elements, or the view cones of any part of the site so narrow, that any change was expected to be barely visible and thus mitigation measures were not deemed to be warranted.

The view from the Gilead Aged Care Facility (located to the north of the site) would also potentially be significantly impacted by the proposed rezoning, but the approved development of the Gilead retirement village currently in construction on the adjoining site will entirely obscure this view; thus impacts from this receptor were discounted.

## Planning Proposal Response

Clouston Associates has identified a range of mitigation measures to be considered in the future residential development of the site framed around the key principles of avoidance, reduction, alleviation, compensation and management. The VIA sets out specific mitigation principles and measures to manage the impacts of the residential development that would flow from the planning proposal, and indicates that if these are implemented in relation to the above two areas of impact, the visual impact rating would reduce to moderate/low.

#### More specifically:

- In relation to the visual catchment from the Old Mill looking north and from the access road to the Mt Gilead Homestead looking north east, the core mitigation principles for these receptors would be to:
  - retain the 'bald' character of One Tree Hill as a grassed knoll with a single landmark tree;
  - maintain the skyline of the tree and grassed crest uninterrupted by planting or built form;
  - ensure that only native vegetation and no built form is visible on the lower flanks of One Tree
     Hill: and
  - maintain views to the Artificial Lake (dam) with a vegetated backdrop and no visible built form.
- In relation to the loss of vegetation along Appin Road and views of new urban development, the core mitigation principles would be to:
  - establish a sense of the former character of, and arrival experience at, the Mt Gilead property driveway entrance through simple landmark tree planting and landscape design; and
  - re-establish, through new roadside native planting and landscape design, a roadside character evocative of the former rural approach to the Mt Gilead property along Appin Road from both north and south.

The recommended landscape and design measures will be implemented via the proposed site specific provisions in the site specific DCP. In addition, the proposed land use zones listed in Section 5.7 above, the proposed larger lots in the north west corner of the site (as shown on the Lot Size Map) and the proposed limit to building height on the northern side of One Tree Hill (as shown on the Height of Buildings Map) will further mitigate any impacts on the views from the Homestead and the Old Mill.

The rezoning of the site to permit residential development is thus considered acceptable as there are sufficient mitigation measures available to appropriately reduce landscape character and visual impacts.

# 5.10 Transport, Traffic and Access

The appended Traffic, Transport & Access Study prepared by Parsons Brinckerhoff (see **Appendix M**) was designed to assess the effects on traffic of the proposed rezoning for a range of dwelling numbers (1500-1700). The traffic study was undertaken in accordance with the requirements of CCC, Transport for New South Wales(TfNSW) and Roads and Maritime Services (RMS) and the road and intersections included in the traffic study were accepted by TfNSW and RMS. The consultation with these authorities is detailed in the report at **Appendix M**.

### Context

The site is located adjacent to Appin Road which is a State Road. Other important surrounding roads include Narellan Road, Oxley Street and the Hume Motorway. Appin Road carries approximately 21,500 vehicles daily south of Woodland Road, Bradbury. No formal pedestrian paths are located on Appin Road along its boundary with the subject site. A review of crash data on Appin Road in close proximity to the site indicates a total of 17 reported crashes in the five year period (2007-2012).

Two bus services (Route 887 and 888) operate within close proximity of the site with Route 887 travelling past the site on Appin Road.

#### Issues and Assessment

The road and intersections assessed in the traffic study included Appin Road from Appin to Narellan Road, Narellan Road from Appin Road to Gilchrist Drive and the major intersections along these routes. The study area included 13 existing intersections and three proposed intersections along Appin Road directly accessing the site. Annual increases in background traffic in addition to the potential increased traffic that would be generated as a result of the planning proposal traffic growth were factored into the traffic assessment, ensuring a conservative and true assessment of the future situation.

Various development scenarios were modelled: 1,500 and 1,700 dwellings by 2026, and an interim scenario of 50% of these dwellings being constructed by 2021.

The traffic, transport and access study confirmed that the proposed rezoning for residential development will further contribute traffic to intersections along Appin Road into the future. Several of the intersections were operating at or near capacity in 2013 and will further deteriorate on the basis of background traffic growth into 2021 and 2026. Likewise, several intersections are expected to operate near, at or over capacity due to the addition of traffic from the Mt Gilead site. As such, additional capacity would be required at the following intersections in order to improve intersection performance to acceptable levels of service:

- Appin Road, Kellerman Drive and Copperfield Drive;
- Appin Road and St Johns Road; and
- Appin Road, Oxley Street, Narellan Road and The Parkway.

In addition, the mid-block capacity assessment of the capacity of Appin Road to handle the expected traffic increases determined that Appin Road would need to be upgraded – including adding turning lanes, slip lanes and augmenting the carriageway to two lanes.

A range of mitigation measures are set out in the Traffic, Transport & Access Study (**Appendix M**) to address the impacts of the planning proposal on the road network. These include:

- providing a bus service to the site;
- accommodating a walking and cycle network in the site;
- investigating car share schemes;
- developing a residential travel plan; and
- upgrades to specific intersections and Appin Road (see below).

TfNSW and RMS have reviewed the Traffic, Transport and Access Study and have confirmed that the mitigation measures are acceptable to mitigate the impacts of the Mt Gilead rezoning (refer to letter dated 21 May 2014 at **Appendix E**). TfNSW and RMS have also advised that they have no objection to the Mt

Gilead Planning Proposal being publicly exhibited provided the following conditions have been met (refer to letter dated 13 January 2015 at **Appendix E**):

- Development is set back 20 metres from the existing Appin Road western boundary providing for a future road corridor of 40 metres.
- The land required for road widening is dedicated at no cost to Government through an appropriate agreement.
- The land required for road widening is shown as SP2 Infrastructure 'Classified Road' on the Mount Gilead Planning Proposal Land Zoning and Land Reservation Acquisition Maps.

## Planning Proposal Response

It is considered that the site is capable of being developed for residential purposes with the implementation of the mitigation measures identified in the Parson Brinkerhoff study and confirmed by TfNSW and RMS. Specifically, the road infrastructure upgrades identified in the recommendations in the report aim to overcome the congestion anticipated to be caused by both background growth and the Mt Gilead development and thus enable the development of the site for up to 1700 dwellings. The planning proposal maps reflect the conditions required by the traffic authorities.

The funding and staging of road infrastructure works will be the subject of a regional voluntary planning agreement (VPA) between the landowners and the State government, which will also address land dedications matters as referred to by TfNSW and RMS in their correspondence dated 13 January 2015 (refer **Appendix E**).

With regard to public transport, the Indicative Structure Plan shows a bus route through the site and the intersections with Appin Road will be designed to accommodate buses. The decision to run a private bus service to and from the site will ultimately lie with TfNSW.

## **5.11** Noise

The site is potentially susceptible to noise impacts as it adjoins Appin Road and is located in close proximity to a number of industrial uses. As such, a Noise Assessment has been prepared by Wilkinson Murray to assess the potential noise impact from surrounding industrial uses and traffic on the Mt Gilead site (see **Appendix N**). The predicted noise impact from traffic generated by the development of Mt Gilead on surrounding residential areas has also been addressed.

## Context

Wilkinson Murray conducted noise monitoring at the site to determine existing background levels and traffic noise levels from Appin Road. The existing background noise levels of the site are similar to those of a rural context. Noise levels of surrounding uses, such as the Rosalind Park Gas Plant and Menangle Quarry, were also identified for consideration in the noise assessment. It should be noted that subsequent to the completion of the acoustic assessment advice was given that the proposed Leaf's Gully power station would not be proceeding. Accordingly the noise impacts of the power station are no longer relevant to this planning proposal.

### Issues and Assessment

The surrounding industrial activities are potential catalysts for noise intrusions on the future residential development at Mt Gilead. However, as a result of on-site noise monitoring, it was determined that the surrounding industrial uses are barely audible on the site. This is due to both the considerable distance of the uses from the site and the topographical shielding between the uses and the site.

Based on the identified traffic noise levels from Appin Road, Wilkinson Murray assessed the suitability of the site for residential development. Noise level criteria were established for future residential development based on the Department of Planning's document *Development Near Rail Corridors and Busy Roads – Interim Guideline* and the requirements of *State Environmental Planning Policy (Infrastructure) 2007.* If new residential development was to be constructed without any mitigation measures but set back approximately 30 metres from Appin Road, it would not comply with the relevant noise criteria. As such, Wilkinson Murray has suggested measures such as glazing specifications and acoustic door seals to achieve the relevant noise levels.

Traffic noise generated by the proposal was determined using criteria set in the NSW Road Noise Policy (March 2011) and the expected traffic generation from the future residential development. The expected traffic generation on Appin Road will result in an increase of 2.4dBA for the peak hour, and between 2.0 –

2.2dBA over a fifteen hour period. The NSW Road Noise Policy specifies that an increase of 2dBA is barely discernible, therefore the proposal is not expected to have any impact on surrounding residential areas.

## Planning Proposal Response

The noise impacts both on the proposal and resulting from the proposal will not be significant and are capable of being appropriately addressed in future design and development stages. Noise impacts do not preclude the rezoning of the site for residential purposes.

Moreover, it is noted that the Indicative Structure Plan for the site proposes a substantial buffer between residential development and Appin Road.

# 5.12 Air Quality

The proximity of the site to several industrial uses increases the potential for adverse air quality impacts on any future development. Wilkinson Murray has performed a qualitative air quality impact review to determine the viability of the proposed planning proposal (see **Appendix O**). The review addressed the potential impact on air quality from surrounding industrial facilities and road traffic on the future residential development that would eventuate as a result of the planning proposal.

## Context

The existing air quality environment at the Mt Gilead site is expected to be good due to its location away from significant urban development; however the following surrounding uses could influence air quality at the site:

- Appin Road;
- the M31 motorway approximately 1.8 kilometres to the west;
- Menangle Quarry approximately 1.2 kilometres to the west;
- Rosalind Park Gas Plant approximately 1 kilometre to the west; and
- poultry farms (Ingham's Broiler Complex) approximately 4 kilometres to the south.

It should be noted that subsequent to the completion of the air quality assessment, advice was given that the proposed Leaf's Gully power station would not be proceeding. Accordingly, any potential air quality impacts of the power station are no longer relevant to this planning proposal.

Current data from nearby quality monitoring stations indicates that the regional air quality is below the target levels established for New South Wales. As such, there is capacity within the region for additional development.

#### Issues and Assessment

Wilkinson Murray have identified that potential impacts on the air quality of the Mt Gilead site could arise from elevated levels of particulate matter, carbon monoxide, nitrogen dioxide, sulphur dioxide and ozone. An assessment concentrating on the impact of the surrounding uses listed was undertaken with each of the surrounding uses expected to operate within the relevant air quality levels established by the NSW Environment Protection Authority (EPA). Two of these uses, the Rosalind Park Gas Plant and Ingham Broiler Complex, operate under environmental protection licenses, which ensure that they are continually monitored by the EPA for compliance with air quality targets.

The substantial distance of all of these uses from the Mt Gilead site further diminishes the likelihood of any air quality impacts on the future residential development. Prevailing winds within the region will contribute to disbursing any air quality impacts, such as dust or odour, away from the site.

Likewise, the separation distance of the site from Appin Road is sufficient to ensure that no air quality impacts are experienced on the site. Wilkinson Murray have noted that even with widening of Appin Road, a minimum of 30 metres will be achieved between the roadway and the nearest dwelling, appropriately mitigating any air quality impacts.

## Planning Proposal Response

In light of the above assessment, Wilkinson Murray have identified that there will not be any significant impact on air quality at the Mt Gilead site from surrounding industrial uses and traffic. The site will be suitable for residential development from an air quality perspective and thus capable of being rezoned for this purpose.

# 5.13 Stormwater and Flooding

Worley Parsons has prepared a Stormwater Management and Flooding Assessment of the site (see **Appendix P**) covering the future management of the stormwater quality and quantity and flood risk post rezoning (and as a result of development).

#### Context

The site consists predominantly of open pasture land currently used for grazing livestock. The existing land surface grades generally towards the north-west with some steep areas, particularly in the north-western corner of the site. A number of low order ephemeral watercourses drain the site and discharge to four identifiable points along the site boundary.

#### Issues and Assessment

#### Stormwater quality

The objectives of the strategy for the management of stormwater quality agreed with CCC are to preserve the state of existing watercourses and to ensure that post-development pollutant loads are consistent with Council's stormwater pollutant load reduction targets. The pollutant reduction targets that were adopted for Mt Gilead are stricter than the baseline targets in Council's draft parameters for MUSIC modelling, but are considered appropriate given the proximity of the site to the Upper Canal and the Nepean River.

Separate MUSIC models were prepared to reflect the existing catchment and site conditions and the post development scenario as shown in the Indicative Site Master Plan. The modelled treatment train consisted primarily of end-of-line stormwater treatment devices such as gross pollutant traps (GPTs) and bioretention systems located in areas of public open space. The results of detailed water quality modelling indicate that the proposed treatment train achieves Council's requirements in relation to stormwater quality.

#### Stormwater quantity

The focus of the strategy to manage the quantity of stormwater was to demonstrate that stormwater runoff under post-development conditions can be managed so that post-development peak flow rates do not exceed pre-development peak flow rates at each of the site's discharge points, and to ensure that flows up to the 100 year ARI event can be accommodated; safe passage of the probable maximum flood (PMF) is provided; and, development does not result in water runoff causing flooding or erosion on adjacent properties.

XP-RAFTS software was used to develop a hydrologic model of the catchments that drain through the site which was then used to simulate a range of design storms and predict peak flow rates under existing and post-development scenarios. Required stormwater detention storage volumes were calculated to ensure that post-development peak flow rates would be less than, or equal to, pre-development peak flow rates at each of the proposed bio-retention systems for events up to the 1% Annual Exceedance Probability (AEP) event.

The results established the volume of stormwater detention that would be required at each bio-retention system to limit discharges so that post-development peak discharge rates do not exceed pre-development peak discharge rates for storm events up to the 1% AEP event.

## **Flooding**

The objective of the flood assessment was to provide information regarding potential flood constraints that could affect development of the site and to identify potential flood management measures. The assessment was informed by various Australian and NSW flood plain management guidelines and policies.

One-dimensional flood modelling of the major creek lines within the Mt Gilead site was undertaken to define flood characteristics, with the HEC-RAS software used to develop flood models of each tributary.

These were then used to simulate the 1% AEP and PMF events, and to determine preliminary flood extents and potential constraints that flooding may pose on future development.

The results indicated that the 1% AEP flood and PMF flood extents would generally be contained within riparian corridors and outside of proposed development areas. Where future residential development could be affected by the PMF, the indicative road layout shown on the Indicative Site Structure Plan was considered to provide sufficient capacity for flood free evacuation.

## Planning Proposal Response

The strategy for the management of stormwater quality has been developed so that the land parcels under different ownership are able to achieve the agreed stormwater quality objectives independently of each other, so enabling them to be developed at different times.

The overall stormwater management strategy involves the implementation of a treatment train to satisfy the agreed pre-determined stormwater quality objectives and includes rainwater tanks, GPTs and bioretention systems. The bio-retention basins and/or swales will collect surface runoff from roads and general urban areas and, as shown in the Indicative Site Structure Plan, are to be located in open space areas adjacent to, and generally outside of, riparian corridors.

Stormwater detention structures with multi-staged outlets will be provided adjacent to the proposed bioretention systems to ensure that post-development peak discharges are equal to or less than predevelopment peak discharges.

Flooding up to the PMF is not predicted to impact on most areas proposed for residential development. Where residential development is proposed within flood affected areas, minimum habitable floor levels and flood free evacuation routes will need to be considered at development application stages in accordance with Council and State policies. A more detailed assessment of flood behaviour and flood impacts will be necessary at DA stage based on proposed lot layouts and site grading.

In summary, the results of detailed water quality modelling documented in the Worley Parsons report indicates that the proposed treatment train achieves CCC's requirements in relation to the management of both stormwater quantity and quality. The risk of flooding is low and is not a constraint to the proposed rezoning of the site for residential uses.

# 5.14 Utility Services

Worley Parson has investigated and documented the future utility servicing requirements for the site. This is summarised below and documented in detail in the Infrastructure and Services Report at **Appendix Q** and the Water and Wastewater Servicing Strategy at **Appendix R**.

#### Existing services and future requirements

### Potable water

There is currently no potable water reticulation infrastructure in the vicinity of the site. However, the site is located adjacent to Sydney Water's Rosemeadow reservoir zone.

The preferred potable water servicing involves connection to the Rosemeadow elevated system and construction of a new reservoir zone to service high level lots within Mt Gilead, including construction of a water main connecting to the Rosemeadow system, a main parallel to Appin Road, a water pumping station at the north-eastern corner of the site and an elevated security reservoir at the south-eastern corner of the site.

### Waste water

There is currently no wastewater reticulation system in the vicinity of the site with the nearest wastewater infrastructure being Sydney Water's reticulation system that services the suburb of Rosemeadow to the north of Mt Gilead.

Worley Parsons investigated various wastewater servicing options for the site and have proposed that the site be connected to the Glenfield-Liverpool gravity wastewater system. This would require a new 310 kW wastewater pumping station; two rising mains; and, a gravity sewer which would ultimately convey wastewater from Rosemeadow to the Glenfield wastewater system.

#### **Electricity**

The site is located within Endeavour Energy's area of operation. There is currently no existing electricity infrastructure within the vicinity of the site.

Initial discussions with Endeavour Energy suggest that future development can be supplied from the Ambarvale Zone Substation. It is expected that a new substation will be required and two new 11 kV feeders would need to be installed. The existing power poles running along Appin Road cannot accommodate the new 11kV feeders.

#### Gas

There is no reticulated gas service in the immediate vicinity of the site. Initial discussions with Jemena have established that there is sufficient capacity within existing infrastructure to service the proposed development, and it is likely that the gas connection would be made within Rosemeadow and run down Appin Road and into the site.

The nearest gas main to the site is the 'Eastern Gas Pipeline', a 457mm diameter high pressure main that is the major gas supply line between Sydney and the Gippsland Basin in Victoria. This main is located approximately 600 metres from the western site boundary. A direct connection from the Eastern Gas Pipeline is unlikely to be a feasible option for servicing the development.

#### **Telecommunications**

Existing copper and fibre optic cabling is located in existing residential areas to the north of Mt Gilead. Telstra telephone exchanges are located at St Helens Park and Menangle. A high intensity copper main line runs north-south through the Mt Gilead site and an optic fibre line is located along the eastern side of Appin Road.

Telecommunications services would be provided by Telstra under the Universal Service Obligation arrangement referenced under the *Telecommunications Act (1997*). Existing Telstra infrastructure would need to be extended from the north via Appin Road to reach the site. Initial discussions with NBN Co indicate that the proposed development may be eligible for the National Broadband Network

#### Planning Proposal Response

As indicated above, the site is capable of being serviced through the extension/augmentation of existing utility infrastructure or the provision of new infrastructure. The provision of appropriate lead in works will be addressed as part of future development applications and in consultation with the relevant service providers. Sydney Water has advised that whilst all work with regard to water and wastewater services is not yet complete it supports the public exhibition of the planning proposal. Please see copy of letter from Sydney Water in **Appendix E**.

# 5.15 Economic and Social Impacts

## 5.15.1 Social and Economic needs

The scale of the future envisaged residential development on the site will result in potential social and economic impacts. As such, MacroPlan Dimasi has prepared a Social and Economic Needs/ Impact Assessment (**Appendix S**).

### Context

An expected yield of 1,400 to 1,700 dwellings by 2026 was used in predicting the future population on the site. Based on an occupancy rate of three people per household, the population at Mt Gilead is expected to lie between 4,188 and 5,088 persons by 2026 - an increase equivalent to 0.3% of the overall Campbelltown LGA population per annum, reflecting the minor nature of the increase in the LGA context.

### Issues and Assessment

The projected population is expected to have a negligible impact on demand for employment land. Based on existing labour force rates in outer south western Sydney, between 2,115 and 2,568 working residents are expected to reside within the site. MacroPlan Dimasi suggests there is no causal relationship between employment land increase and population growth, rather employment land is linked to broader market forces.

The only need for employment land is expected to be for minor services such as retail facilities for local residents. Furthermore, there is an abundance of existing employment land to satisfy demand in South West Sydney.

The existing retail opportunities in the context of the site have informed an assessment of the retail needs. Based on the expected population and surrounding context, no large supermarket facility is required to service the site. A small convenience store is expected to be suitable to service the future population in addition to the existing facilities in the surrounding locality.

The scale of envisaged development on the site does not produce a substantial demand for social and community infrastructure and open space, and the expected additional population will have a nominal impact on local and regional services which are expected to be able to cater to the demands of the new population. The future residential population could not support a new government funded school or hospital and would not generate a significant demand for district or regional open space for organised sporting and recreational activities. It is thus anticipated that the existing wider provision of services will cater for the incoming Mt Gilead population elsewhere in the catchment.

The size and type of neighbourhood services and social infrastructure required to support the Mt Gilead release area has been measured against relevant benchmarks for the Sydney Growth Centres and other national standards. MacroPlan Dimasi recommends that the following provision be accommodated at Mt Gilead to meet the needs of the new population:

- a small convenience store:
- a Neighbourhood Community Centre (on approximately 1500 square metres of land)
- 2.5ha Neighbourhood Park
- 14.39ha of open space generally.

## Planning Proposal Response

The aforementioned study confirms that the population likely to result from the planning proposal is able to be serviced by existing social and economic infrastructure within the Campbelltown LGA and there are no social or economic obstacles to the proposed rezoning.

Moreover, in accordance with the above recommendations, the planning proposal makes specific further provision with the following:

- The zoning of a small area of land adjacent to proposed open space as B1 Neighbourhood Centre.
   The land uses within this zone permit a community centre and neighbourhood shop.
- The zoning of almost 31ha of land as RE1 Public Recreation. Both active and passive recreation uses are permissible in this zone.

In addition, the Indicative Structure Plan for the site shows the location of a 2.9ha sports field as well as a 'community hub' that would accommodate a community centre and convenience store/ kiosk (approximately 0.21ha). The provision of open space and a community centre are the subject of a VPA between the landowners and CCC.

## 5.15.2 Impacts on Agricultural Land

The site is classified as Agricultural Land Class 3 and has been, and currently is, used for agricultural purposes. Accordingly, an Agricultural Investigation has been prepared by AgEconPlus Consulting to determine the strategic importance of land for agricultural production (see **Appendix T**).

### Context

The site is mostly cleared and gently sloping with three creeks. The soil is predominately shallow and composed of a clay base and shale rock beneath. The average rainfall is 767.4mm with an even monthly distribution. Previously, the site was used for beef cattle grazing and dairy cattle milk production. It is now used for cattle grazing purposes.

#### Issues and Assessment

Feasible forms of food production based on the agricultural land classification include horticulture not dependent on irrigation water, such as olive or wine crops, or livestock grazing. Producing crops such as olives or wines is not feasible as these crops are currently oversupplied and prices are depressed. The

grazing of livestock on the site is also undesirable as more intense forms of grazing and animal production are currently carried out in areas west of the Great Dividing Range, with significantly more suitable sites than Mt Gilead for such activities.

In regard to the availability of land for food production in the Sydney Basin and NSW, the site represents 0.2% and 0.01% of Class 3 agricultural land respectively. As such, the site is not critical to the vitality of the agricultural industry of Sydney or NSW. If the site was not used for beef cattle grazing, there would be a lost opportunity of 125 additional beef cattle grazed in NSW. The beef cattle industry in NSW currently comprises over six million cattle; therefore the minor reduction of 125 cattle from the site would be negligible.

## Planning Proposal Response

The site does not play a critical role in the agricultural industry of Sydney or NSW, with limited value for a select range of agricultural activities. The rezoning of the site for residential purposes will not adversely affect food production in Sydney or NSW.

# 6.0 Summary and Conclusion

# 6.1 Need for Planning Proposal

Is the planning proposal a result of any strategic study or report?

The planning proposal seeks to rezone land in accordance with the intent of, and land identified within, the Metropolitan Development Program (MDP). The MDP had earmarked the site for the expansion of the existing residential land situated to the north of the site.

The MDP had set the development yield of the Mt Gilead site at 1500 lots. Subsequently the assessments undertaken for the planning proposal have demonstrably indicated that the land and relevant infrastructure have the capacity to accommodate more dwellings. This planning proposal has established that the site has the capacity to accommodate up to 1700 dwellings.

The planning proposal responds directly to the MDP and also contributes to the target of 60,000 new homes by 2021 in the South West Subregion.

Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

The planning proposal to rezone the Mt Gilead site from Rural to Residential land is the most efficient means of achieving the State and regional planning objectives and strategic outcomes.

# 6.2 Relationship to Strategic Planning Framework

Is the planning proposal consistent with the objectives and actions of the applicable regional or sub-regional strategy (including the Sydney Metropolitan Strategy and exhibited draft strategies)?

As set out in **Section 2**, the proposal is consistent with applicable regional and subregional strategic documents, including all draft strategies, prepared by the NSW Government and Campbelltown City Council as summarised below.

#### Metropolitan Plan for Sydney 2036

As described in **Section 2**, the *Metropolitan Plan for Sydney 2036* aims to provide an integrated planning framework to manage Sydney's growth to 2036. Since its release in December 2010, the strategy has been reviewed and a *Draft Metropolitan Strategy for Sydney to 2031* has been released. As this new draft strategy represents the most up-to-date strategic planning policy in Sydney, the proposal has been assessed against this new strategy.

### Draft Metropolitan Strategy for Sydney to 2031

As set out in **Section 2**, the *Draft Metropolitan Strategy for Sydney 2031* establishes the latest strategic directions for the Sydney Metropolitan Region. The proposal is consistent with the draft Metropolitan Plan in that it will provide additional dwellings to contribute to the delivery of the targeted 427,000 dwellings in South West Sydney by 2031. By unlocking the Mt Gilead land for residential development, the proposal will indirectly stimulate and support employment growth and jobs closer to home.

#### Draft South West Subregional Strategy

The proposal is consistent with the *Draft South West Subregional Strategy* as it will unlock land for the development of residential dwellings, contributing to the supply of housing in the South West subregion, and supporting the Campbelltown-Macarthur Major Centre.

#### A Plan for Growing Sydney

It is considered that the proposal is consistent with the goals of *A Plan for Growing Sydney* particularly with regard to assisting in the delivery of new housing to meet the needs of Sydney's growing population.

Is the planning proposal consistent with the council's strategy or other local strategic plan? As mentioned in **Section 2**, the planning proposal is consistent with Council's strategic documents Campbelltown 2025 – Looking Forward, Campbelltown Local Planning Strategy and Campbelltown Residential Development Strategy. The proposal will enhance Campbelltown as a growing Regional

Centre by addressing the need to provide for future residential development, maintaining protection of sensitive environments, utilising existing transport and traffic infrastructure into Campbelltown City, and improving the diversity and choice of housing.

Is the planning proposal consistent with applicable State Environmental Planning Policies? The consistency of the proposal with the relevant State Environmental Planning Policies (SEPPs) is outlined in **Table 2**.

Table 2 - Consistency of the proposal with the relevant SEPPs

SEPP	Requirement	Proposal	Complies
SEPP 19 – Bushland in Urban Areas	SEPP 19 aims to protect bushland in urban areas identified in Schedule 1 of the SEPP. Campbelltown is listed in Schedule 1 and therefore a Plan of Management is to be developed where bushland is zoned or reserved for public open space purposes.	The urban bushland within the site is to be dedicated to CCC. Plans of Management for future bushland within the site will be prepared at the time of relevant development as required by CCC.	Yes
SEPP 44 – Koala Habitat Protection	Campbelltown is identified as a local government area with the potential for providing koala habitat.  This Policy aims to encourage the proper conservation and management of areas that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline.	The number of Koala habitat trees does not exceed the 15% threshold under the SEPP and therefore the site is not considered potential Koala habitat.	Yes
SEPP 55 – Remediation of Land	SEPP 55 requires a planning authority to consider whether land is contaminated, and if so whether it is, or can be made suitable for proposed residential use.	This planning proposal indicates that the land is not contaminated and is suitable for future residential development	Yes
SEPP (Infrastructure) 2007	The aim of this Policy is to facilitate the effective delivery of infrastructure across the State.	Future development of the site will need to be consistent with the relevant provisions of this SEPP, with future development applications referred to the RMS where necessary.	Yes
SEPP (BASIX) 2004	The overall aim of this Policy is to encourage sustainable residential development through establishing targets for thermal comfort, energy and water use.	DAs for all future residential development will need to comply with the targets established under BASIX.	Yes
SEPP (Housing for Seniors or People with a Disability) 2004	The aim of this policy is to encourage the provision of housing which increases the supply and diversity of residencies that meets the needs of seniors or people with a disability.	The planning proposal does not preclude the provision of housing for seniors and people with a disability.	Yes
SEPP Mining, Petroleum production and extractive industries 2007	The aims of this Policy are to support petroleum production and extractive industries to provide and manage development of mineral, petroleum and extractive material resources for promoting the social and economic welfare of the State.	The planning proposal does not impede potential mining of coal resources.	Yes
SEPP Affordable Rental Housing 2009	The aims of this Policy are to provide an overall consistent planning regime for the provision of affordable rental housing.	The planning proposal does not preclude the provision of affordable rental housing	Yes
SEPP Exempt and Comply	The aims of this Policy are to provide exempt and complying development codes that have State-wide application.	The planning proposal is not inconsistent with this SEPP which would apply to future development	Yes
SREP 20 Hawkesbury Nepean River	The aims of this plan is to protect the environment of the Hawkesbury-Nepean River system by ensuring that the impacts of future land uses are considered in a regional context.	The assessments undertaken for this planning proposal have addressed the environment of the Hawkesbury Nepean system. The inclusion of proposed LEP provisions in relation to the Terrestrial Biodiversity (see Section 4), and the delivery of water quality and quantity infrastructure ensure the protection of the Hawkesbury Nepean system	Yes

Is the planning proposal consistent with applicable Ministerial Directions (s.117 directions)? The consistency of the proposal with the relevant Section 117 Directions is outlined in **Table 3**.

Table 3 - Consistency of the proposal with the relevant Section 117 Directions

Section 117 Direction	Summary / Implications	Proposal	Complies
1.1 Business and Industrial Zones	This direction applies when a relevant planning authority prepares a planning proposal that will affect land within an existing or proposed business or industrial zone. A planning proposal must ensure that proposed new employment areas are in accordance with a strategy that is approved by the Director-General of the Department of Planning	The area proposed to be rezoned to Zone B1 Neighbourhood Centre is approximately 3,200m² and is proposed to accommodate a community centre and small convenience store/kiosk. This planning proposal is thus considered to be justifiably inconsistent with this direction as it is of minor significance due the small area proposed for business purposes.	Yes
1.2 Rural Zones	This direction applies when a council prepares a draft LEP that creates, removes or alters a Rural Zone or provision. Any rezoning of Rural land needs to be justified by an environmental study or is in accordance with the relevant Regional Strategy prepared by the Department of Planning and Infrastructure.	As noted previously, the site was identified for rezoning on the Metropolitan Development Program. The planning proposal reflects the outcomes of extensive environmental studies and accords with relevant regional strategies as set out in this report.	Yes
1.3 Mining, Petroleum Production	Any future extraction of State or regionally significant reserves of coal, other mineral, petroleum and extractive materials are not compromised by inappropriate development.	Faults within the coal seam below the site will restrict any future mining activities, whilst the remainder of the seam will still be capable of being extracted.	Yes
2.1 Environment Protection Zones	This direction seeks to ensure the protection and conservation of environmentally sensitive areas.	Environmentally sensitive land is protected and conserved by way of provisions in a proposed Terrestrial Biodiversity clause in the draft LEP for the site (see <b>Section 4</b> )	Yes
2.3 Heritage Conservation	This direction applies to the conservation of heritage items, areas, objects and places of environmental heritage significance and indigenous heritage.	The heritage report has recommended appropriate mitigation measures to ensure that existing heritage is protected.	Yes
3.1 Residential Zones	This direction applies when Council prepares a draft LEP that creates, removes or alters a Residential Zone or provision. Any draft LEP will need to ensure that residential development is adequately serviced with water and sewerage.	The options for the provision of water and sewer infrastructure have been investigated and will be delivered as part of future applications for subdivision	Yes
3.3 Home Occupations	This direction encourages the carrying out of low-impact small businesses in dwelling houses.	The provisions in the draft LEP are consistent with CCC LGA-wide practice and do not preclude the carrying out of low-impact small businesses in dwelling houses	Yes
3.4 Integrated Land Use and Transport	This direction aims to ensure that urban structure, building forms, land use locations, development design, subdivision and street layouts achieve improved access to housing, jobs and support viable public transport.	The proposal seeks to deliver new housing in close proximity to existing residential urban land with access to public transport.	Yes
4.1 Acid Sulphate Soils	This direction aims to avoid significant adverse environmental impacts from the use of land that has a probability of containing acid sulphate soils	Previous studies on site indicated that Acid Sulphate Soils were considered to present low risk. No further assessment is required	Yes
4.2 Mine Subsidence and Unstable Land	This direction aims to prevent damage to life, property and the environment on land that may be unstable or subject to mine subsidence.	The Mine Subsidence Report has confirmed that any subsidence related issues can be managed.	Yes
4.3 Flood Prone Land	This direction aims to ensure that development is consistent with flooding policies and includes consideration of potential floor impacts.	The site subject to this proposal is not identified as flood prone land.	Yes

Section 117 Direction	Summary / Implications	Proposal	Complies
4.4 Planning for Bushfire Protection	This direction aims to protect life, property and the environment from bush fire hazards, and to encourage sound management of bush fire prone areas. The direction requires that a Council shall consult with the Commissioner of the NSW Rural Fire Service prior to undertaking community consultation on a draft LEP, and take into account any comments made. It also requires that the draft local environmental plan shall have regard to <i>Planning for Bushfire Protection 2006</i> , and introduce controls that avoid placing inappropriate developments in hazardous areas.	Any future development on site will have regard to <i>Planning for Bushfire Protection 2001</i> .  Council has consulted with the NSW RFS who advise that it has no objection to the planning proposal in principle. See copy of letter at <b>Appendix E</b> .	Yes
6.1 Approval and Referral Requirements	This direction aims to ensure that LEP provisions encourage the efficient and appropriate assessment of development.	No new unnecessary referral or concurrence conditions are proposed as part of the planning proposal.	Yes
6.2 Reserving Land for Public Purposes	This direction aims to facilitate the provision of public services and facilities by reserving land for public purposes.	The planning proposal includes the reserving of land to enable the widening of Appin Road which is classified as a State Road. Road and Maritime Services has advised that it will be the responsible public authority for the acquisition of the land dedicated for the road widening. See copy of letter at <b>Appendix E</b> .	Yes
7.1 Implementation of the Metropolitan Plan for Sydney 2036	Planning proposals shall be consistent with the NSW Government's Metropolitan Plan for Sydney 2036 published in December 2010.	The planning proposal achieves the overall intent of the Plan and does not undermine the achievement of its vision, land use strategy, policies, outcomes or actions.	Yes

# 6.3 Environmental, Social and Economic Impact

Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

There is no critical habitat on the site.

Seven threatened bat species were identified on the site. The ecological assessment carried out for the planning proposal concludes that these species will not be affected by the proposal.

The following ecological communities are located within the boundaries of the site: Cumberland Plain Woodland (CPW) – a critically endangered ecological community; Shale Sandstone Transition Forest (SSTF) – a critically endangered ecological community; and River-flat Eucalypt Forest (RFEF) - an endangered ecological community.

The proposal involves the retention of 83% of CPW, 49.6% of SSTF and 100% of RFEF, with 1.5 hectares of CPW and 12.5 hectares of SSTF to be removed - both largely comprising scattered trees.

Any adverse effects as a result of the removal of CPW and SSTF will be addressed either via a Species Impact Statement submitted with future development applications, or offset with Biodiversity Certification as detailed in the Ecological Assessment at **Appendix F.** The proposal is capable of achieving the test of 'improving or maintaining' the current vegetation on the site, subject to a red-flag variation being granted by OEH. The landowners have committed to achieving bio-banking offsets and substantial land has been set aside for this purpose.

Also as noted in clause 5.1.2, the proposed LEP amendment protects the ecological values of the site in the following ways:

Ecologically sensitive land proposed to be zoned RE1 and RU2 will receive special protection via a
clause to this effect, titled Terrestrial Biodiversity (as shown in Appendix C), which is proposed to be
incorporated in 'Part 7 of the draft Campbelltown LEP 2014. The relevant land is identified on the
Terrestrial Biodiversity Map.

 The land proposed to be zoned RE1 in the north of the site connects with Noorumba Reserve and there are generally connections between all the areas of RE1 zoned land so facilitating the passage of native fauna.

Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

The environmental effects as a result of the planning proposal are detailed in Section 5 of this report and the appended specialist reports, and involve impacts on:

- non-indigenous heritage views and vistas;
- Aboriginal heritage;
- native vegetation; and
- traffic.

None of the impacts are considered of sufficient magnitude to preclude the land uses the subject of the planning proposal. All will be managed by:

- proposed LEP provisions;
- proposed development controls in Campbelltown (Sustainable City) DCP 2014;
- the provision of State road infrastructure to be delivered via a regional voluntary planning agreement between the landowners and the State government;
- the retention of significant stands of trees within open space areas; and
- provision of Biobanking offsets and/or other measures to protect the biodiversity of the site as determined by SIS assessments at development application stage.

Has the planning proposal adequately addressed any social and economic effects?

The planning proposal has considered the potential social and economic effects of the rezoning for future residential development. While local community and recreation facilities will be provided within the site, as noted in **Section 5.15**, the incoming population will be able to access all other social services in neighbouring suburbs where there is excess capacity (eg schools, health services, retail, entertainment, etc).

The site will accommodate a range of lot sizes, so providing choice in housing form and size which would respond to a variety of living situations and lifestyle choices. This has the potential to attract new residents who could, in turn, stimulate employment growth within the Campbelltown LGA.

## 6.4 State and Commonwealth Interests

Is there adequate public infrastructure for the planning proposal?

#### **Utility Services Infrastructure**

The full range of utility services needed to support the site has been investigated, covering electricity, telecommunication, gas, water, waste water and stormwater drainage. The site is able to be serviced with all of the above utility infrastructure as set out in **Section 5.14**.

### Transport Infrastructure

The site is capable of absorbing and supporting public transport and provision has been made for a bus route within the site. The street layout within the site, as proposed in the Indicative Structure Plan, facilitates local traffic movements as well as walking and cycling. Local roads will be constructed as part of future development applications.

The need for road and intersection upgrades has been set out in the Traffic, Transport & Access Study (see **Appendix M**) and discussed in **Section 5.10**. Various intersection and road upgrades will be required to address capacity deficits which are forecast to occur as a result of the planning proposal and background growth. These will be the subject of a regional voluntary planning agreement between the landowners and the State government.

What are the views of State and Commonwealth public authorities consulted in accordance with the Gateway determination?

All the authorities listed in the Gateway Determination will be consulted by CCC in accordance with section 56(2)(d) of the EP&A Act. The inputs and views of the following entities were sought either by the landowners and/or their consultants or CCC during preparation of the planning proposal.

- Sydney Water supports the exhibition of the planning proposal and has indicated that it will support
  the finalisation of the planning proposal once its requirements for determining the servicing strategy
  have been met (see letter at Appendix E).
- Transport for NSW and Roads and Maritime Services have confirmed that the measures proposed
  to mitigate the traffic impacts of the planning proposal are acceptable. They also do not object to the
  public exhibition of the planning proposal (see letters at Appendix E).
- The Office of Environment and Heritage has indicated that it will consider and respond to the Indigenous Heritage Assessment during the formal notification period.
- The NSW Office of Water responded to questions about the classification of the streams on the site and agreed to the removal of a number of 1<sup>st</sup> order streams mapped on the site (see correspondence at Appendix E).
- The **NSW Rural Fire Service** has no objection to the planning proposal in principle but advises that any future development will need to comply with the requirements of *Planning for Bush Fire Protection* 2006 (see correspondence at **Appendix E**).

## 6.5 Conclusion

The studies undertaken in support of this planning proposal have confirmed that the Mt Gilead site is suitable for residential development. The proposal will enable the 210 ha site to be rezoned for low density residential development on land that is generally unconstrained by biophysical and ecological features.

The planning proposal will facilitate development that would have demonstrable social and economic benefits for the region. With up to 1700 new dwellings in a low density environment, the proposal will deliver positive outcomes for housing supply to the South West Region and the Campbelltown-Macarthur Regional City Centre, and with a range of lot sizes, 600 square metres on average, it will expand the type and choice of dwellings available in the Campbelltown LGA. This outcome is consistent with local and regional strategies and objectives to promote housing diversity.

The land is proposed to be rezoned (in accordance with the Standard Instrument – Principal Local Environmental Plan and consistent with draft CLEP 2014) to a predominantly R2 residential zone along with smaller areas for public open space and roads. In addition, a small area is intended to be zoned as a neighbourhood centre in order to facilitate the future delivery of a community centre. 29ha is to be retained as rural land. Ecologically sensitive vegetation will be protected.

In accordance with the Gateway Determination a range of planning and environmental issues were considered in preparing the planning proposal. They demonstrate that the proposed rezoning can proceed with few, if any, adverse effects. Impacts in relation to sensitive vegetation; heritage; and traffic and transport infrastructure are able to be managed and mitigated by a combination of additional LEP provisions, site-specific development controls, the provision of road infrastructure through a VPA, and the offsetting of the loss of vegetation.

The proposed rezoning makes provision on site for local passive and active open space, community facilities and a small area of retail development. For those social and economic services and facilities that will not be provided on site, it is considered that there is sufficient capacity in the neighbouring areas to accommodate the needs of the incoming community.

The site is able to be serviced with necessary water, waste water and other utility services.

It is considered that there is sufficient information available to give Council the confidence to publically exhibit and formally notify this planning proposal and associated LEP amendment in accordance with the *Environmental Planning and Assessment Act 1979.* 

However, it is noted that Council will require assurance that the State Government will provide the necessary resources needed for the widening of Appin Road. The proposed voluntary planning

agreement between the traffic authorities and the proponents will include an apportionment of funds payable by the proponents for the road works considered attributable to the need that will be generated by the Mt Gilead URA. This is anticipated to be approximately 50% of a total cost of approximately \$20M. However, Council has not received any advice from the State authorities confirming that they will fund the remaining 50%. Without this contribution from the State Government there is no capacity for the development to remain economically feasible should the development itself be made responsible for funding what is essentially the regional co-contribution to facilitate road and traffic infrastructure.