

Vineyard Precinct Stage 1

Finalisation Report



Planning &
Environment

November 2017

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Executive Summary

This report along with supporting documents support the rezoning of Stage 1 of the Vineyard Precinct (the precinct). Rezoning of the precinct is responding to the demands of Sydney's future population growth by delivering an additional 2,300 homes within the North West Growth Area. The estimated resident population of 7,000 will be serviced by parks, environmental conservation areas, a village centre, a proposed primary school and a new and improved road network.

The rezoning of the precinct facilitates the government's housing objectives identified in the Draft *Greater Sydney Region Plan* and the draft *Western City District Plan* and will contribute to the supply of land in Sydney that is development-ready for housing. It is also consistent with the North West Land Use and Infrastructure Implementation Plan by contributing to housing supply and open space networks.

The North West Growth Area is benefiting from a huge investment in infrastructure with the construction of the Sydney Metro Northwest, the upgrading of Schofields Road from two lanes to four and the planned extension and upgrade of Bandon Road to link Windsor and Richmond Roads.

The precinct is able to be rezoned now as there is the availability of services: sewer and water are available to the entire Stage 1 area and electricity is available for up to 500 lots immediately with full capacity to be delivered within 5 years.

The Precinct Plan including an indicative layout plan (ILP) for Vineyard Stage 1 was exhibited from 12 December 2016 to 28 February 2017. A total of 51 submissions were received, including 40 from the public and 11 from government agencies.

The key issues raised in the public submissions include:

- the proposed location of open space, existing native vegetation (ENV) and drainage land;
- the proposed residential zoning of land;
- lot sizes;
- the 1:100 year flood event line and associated E4 Environmental Living zone;
- the new and amended road layout in and around the precinct; and
- land acquisition.

The key issues raised in government agency submissions include:

- the proposed location of the school and playing fields;
- potential land use conflict (including impacts from existing odour generating land uses);
- flooding and drainage;
- the amount of ENV to be retained within Stage 1, and the protection of ENV on private land;
- infrastructure delivery;
- roads and traffic;
- asset protection zones (APZs); and
- Aboriginal heritage.

A discussion of the major issues can be found in **Section 4** and a summary of all submissions and the response of the Department of Planning and Environment (the Department) can be found at **Appendix B**.

The main changes to the ILP post-exhibition include:

- Increasing the retention of ENV. This has involved increasing the amount of open space and relocating the playing fields. See **Section 4.2.1**.
- Relocating pocket parks in the north-east and the south of the precinct to equitably distribute them and minimise impacts to individual landholdings. This has not diminished the amount of open space. See **Section 4.2.2**.
- Zoning ENV on private land as E2 Environmental Conservation. See **Section 4.3**.
- Relocating a proposed collector road. See **Section 4.6.1**.
- Refining the new intersection at Windsor Road and Otago Street. See **Section 4.6.3**.

Trunk sewer and water services are available to the precinct, although sewer lead-ins are yet to be delivered and are scheduled for delivery by the end of 2019. They may, however, be constructed ahead of this timeframe by private entities.

There presently exists electricity capacity for 500 lots from existing 11kV feeders to the precinct which originate from the existing Riverstone zone substation. Further capacity for up to 1,000 lots will be available in around two years time when Endeavour Energy carries out augmentation works on the upstream 11kV network.

Electricity capacity for the entire Stage 1 area will be available once the Box Hill and Riverstone East zone substations in neighbouring release areas are delivered. These are planned to be established in approximately 5 years.

1 Introduction

1.1 Overview

The rezoning of the Vineyard (Stage 1) Precinct (the precinct) facilitates the government's housing objectives identified in *A Plan for Growing Sydney* and the draft *Western City District Plan* and will contribute to the supply of land in Sydney that is development-ready for housing. It is also consistent with the North West Land Use and Infrastructure Implementation Plan by contributing to housing supply and open space networks. The precinct is able to be rezoned now as there is the availability of services: sewer and water are available to the entire Stage 1 area and electricity is available for up to 500 lots immediately with full capacity to be delivered within 5 years.

The draft precinct planning package for Stage 1 was exhibited between 12 December 2016 and 28 February 2017. If approved by the Minister and the Governor, the precinct plan will rezone land for urban development under *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* (Growth Centres SEPP).

The new planning controls for the precinct have the potential to provide 2,300 new homes, local parks and playing fields, environmental conservation areas, a village centre, a proposed primary school and a new and improved road network.

The rezoning will:

- permit development for a range of urban purposes, including housing, shops, a primary school, community facilities, open space, and road and drainage infrastructure;
- establish controls to define minimum and maximum residential density targets and ensure appropriate standards for subdivision and urban development;
- identify and plan for delivery of infrastructure that is required to support development; and
- protect significant vegetation and a portion of the Killarney Chain of Ponds.

Following public exhibition, the Department, in collaboration with Hawkesbury City Council (Council), undertook an extensive review to address issues raised in submissions and finalise the documents.

This report documents the public consultation process, summarises the issues raised in submissions and reports on how those issues have been addressed to finalise the precinct plan.

1.2 Summary of the Precinct Plan

The precinct planning package consists of a number of documents and plans, including:

- amendments to the Growth Centres SEPP which when published, will mean the creation of Appendix 13 Hawkesbury Growth Centres Precinct Plan (referred to in this document as the 'precinct plan') to apply to Vineyard (Stage 1);
- amendments to the various maps under the Growth Centres SEPP, to show how controls apply to land within Vineyard (Stage 1);
- an Indicative Layout Plan (ILP) to display the location of roads, residential areas, open space, infrastructure, a proposed primary school and community facilities;
- the Hawkesbury City Council Growth Centres Precinct Development Control Plan (Hawkesbury City Growth Centres DCP) which provides more detailed design controls for development in the precinct; and
- amendments to Hawkesbury Local Environmental Plan 2012.

The Department is currently preparing a Section 94 Contributions Plan in consultation with Council to establish funding mechanisms for local infrastructure, which includes local roads, drainage

infrastructure, and open space. It is anticipated the draft Section 94 Contributions Plan will be exhibited in early 2018.

The final ILP for Vineyard (Stage 1) is shown at **Figure 1** and **Appendix A. Table 1** summarises the development outcomes for the precinct.

Table 1: Planning outcomes for Stage 1

Land use	Area (ha)	Dwellings*	Population* (based on average 3 people/ dwelling)
Min. lot size 1,500m ²	5.9	23	69
Min. lot size 2,500m ²	15.1	17	51
Min. lot size 10,000m ²	5.6	3	9
Min. lot size 20,000m ²	21.3	9	27
Environmental Living (subtotal) (includes 3.7ha land zoned E2 Environmental Conservation)	47.9	52	156
Low density residential (max. 18 dw/ha)	94.2	1,696	5,088
Medium density residential (max.30 dw/ha)	18.5	555	1665
Total residential (including Environmental Living) (subtotal)	160.6	2,303	6,909
Primary school	2.8	-	-
Village centre	0.8	-	-
Mixed use (includes social infrastructure facility)	0.6	18	54
Total Village centre (subtotal)	1.4	-	--
Active open space	6.4	-	-
Passive open space	21.0	-	-
Total open space	27.4	-	-
Water Management	16.0	-	-
Roads – main roads and existing	22.0	-	-
Total infrastructure (subtotal)	38.0	-	-
TOTAL AREA (all bolded figures)	230.2	-	-
TOTAL DWELLINGS AND POPULATION	-	2,321	6,963

*Figures have been rounded

1.3 Staged Rezoning of Vineyard Precinct

The Vineyard precinct is proposed to be rezoned in two stages.

Vineyard (Stage 1) has ultimate capacity for approximately 2,300 homes for a projected 7,000 residents and is the subject of this Precinct Plan. The rezoning of Vineyard (Stage 2) has been deferred until confirmation of essential services, and the preferred alignment of the corridor for the Outer Sydney Orbital (OSO) is confirmed. The North West Land Use and Infrastructure Implementation Plan has identified Vineyard (Stage 2) as a possible urban employment area. Further investigations into suitable land uses will be undertaken following confirmation of the corridor alignment.

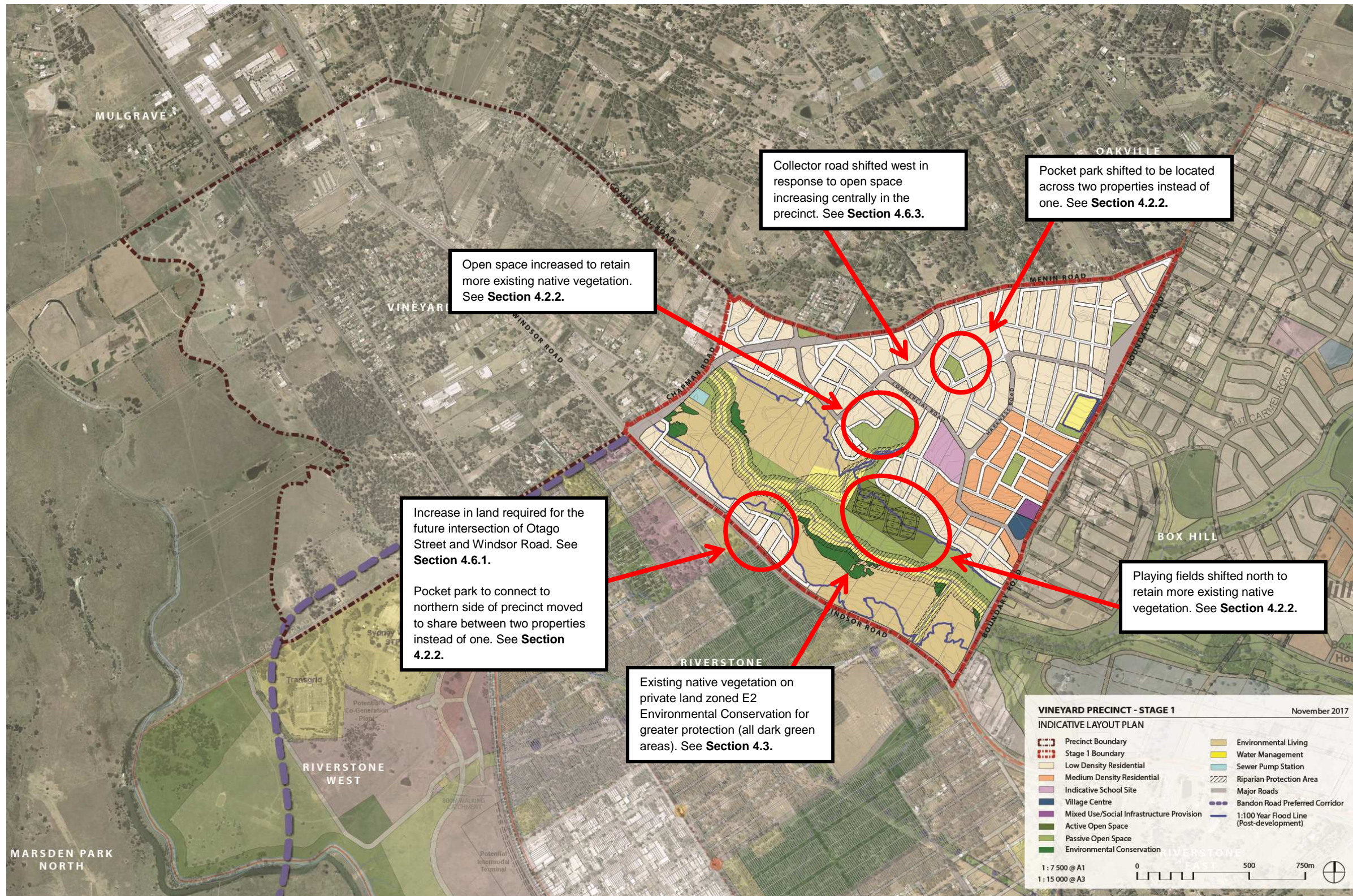
1.4 Strategic and Statutory Framework

A number of strategic and statutory documents provide the broad direction and fundamental principles to be considered when undertaking the planning of greenfield areas, and in particular, the Vineyard Precinct. These are listed below and further detailed in **Section 6** of this report:

- Draft Greater Sydney Region Plan
- Draft *Western City District Plan*
- North West Land Use and Infrastructure Implementation Plan

- *State Environmental Planning Policy (Sydney Region Growth Centres) 2006*
- Draft Future Transport Strategy 2056

Figure 1: Final Indicative Layout Plan – major amendments following exhibition



2 Exhibition Details

2.1 Exhibition and Submissions Period

The draft Precinct Planning Package was exhibited from 12 December 2016 to 28 February 2017. All submissions received by the Department have been considered in the summary of submissions report at **Appendix B**. A total of 51 submissions were received.

2.2 Exhibited Materials

The following documentation was publicly exhibited as part of the draft Precinct Planning Package:

- Precinct Planning Report;
- draft ILP;
- Explanation of Intended Effect (EIE), a 'plain English' version of the planning controls for the Vineyard precinct (Stage 1) proposed to be inserted into *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* (Growth Centres SEPP);
- draft Growth Centres SEPP maps;
- draft DCP; and
- supporting technical studies.

2.3 Exhibition Venues

The draft Precinct Planning Package was available to the public at the following locations:

- Hawkesbury City Council, 366 George Street, Windsor;
- Department of Planning and Environment, 320 Pitt Street, Sydney; and
- Department of Planning and Environment website www.planning.nsw.gov.au.

2.4 Public Notice

A media release announcing the start of exhibition was issued on Sunday 11 December 2016.

Notices were placed in the following newspapers advising of the details of the public exhibition:

- Hawkesbury Courier – 21 December 2016; and
- Hawkesbury Gazette – 22 December 2016.

2.5 Notification of Land Owners

The Department notified all landowners within the Vineyard Precinct of the draft Precinct Planning Package in writing at the start of the exhibition period. The letter provided details of the exhibition period and information sessions, and invited submissions on the draft Precinct Plan.

2.6 Notification of Key Stakeholders

The Department advised stakeholders of the exhibition, including the local councils, Stage Government agencies, and environmental, community and development interest groups, as listed at **Appendix C**.

2.7 Information Sessions

Engagement with landowners within the Vineyard Precinct has occurred since the release of the Precinct in 2013. The Department issued letters and flyers and hosted information sessions in late 2013 providing an overview of the planning process and outlining ways the community would be involved in the precinct planning process. In mid-2014, the Department hosted two workshops with approximately 200 participants from the precinct.

The Department hosted two drop-in information sessions at the Vineyard Church, 357 Windsor Road, Vineyard during the exhibition period. The sessions were held on:

- Thursday 2 February 2017 5:00pm-8:00pm
- Thursday 9 February 2017 5:00pm-8:00pm

The sessions were an opportunity for members of the public to meet with the project team and discuss the draft Precinct Plan. Sydney Water, Roads and Maritime Services and Council were also represented at the sessions.

A total of 165 landowners and community members were in attendance across both sessions.

2.8 Post-exhibition Targeted Landowner Consultation

In October 2017, the Department, supported by Council staff, invited and met with the majority of landowners within Stage 1 that were affected by the following major post-exhibition changes to the ILP:

- relocation of pocket parks in the north-east and south;
- shifting the playing fields to accommodate more ENV;
- relocation of a collector road;
- increasing passive open space to accommodate more ENV;
- refinement of the intersection of Windsor Road and Otago Street; and
- relocation of a raingarden (drainage infrastructure).

The post-exhibition targeted landowner consultation sessions were held on:

- Tuesday 10 October 2017
- Wednesday 11 October 2017
- Friday 13 October 2017

3 Submissions Summary

3.1 Number of Submissions

A total of 51 submissions were received during exhibition. All submissions received are listed and summarised at **Appendix B** along with the Department's response. A summary of submissions grouped into major stakeholder groups is provided at **Table 2**.

Table 2: Summary of submissions

Submission author	Number of submissions
State Government Agencies (inc. Council)	11
Landowners within precinct	33
Landowners (external) and community/interest groups	7
Total	51

3.2 Issues Raised in Submissions

All submissions received were reviewed by Departmental staff. Detailed responses to key issues are provided in **Section 4** of this report.

The prominent issues raised in submissions include:

- the proposed location of open space, ENV and drainage land;
- the proposed location of the school and playing fields;
- the proposed residential zoning of land;
- the zoning of land above and below the 1:100 year flood event line;
- lot sizes and density cap;
- flooding and drainage;
- the amount of ENV to be retained and protection of ENV on private land;
- infrastructure delivery;
- the new and amended road layout in and around the precinct; and
- land acquisition.

4 Consideration of Issues

This section discusses the issues raised in submissions and those raised in ongoing discussions with state agencies and key stakeholders. Post exhibition changes have been made to the ILP as a result of the Department's review of submissions. The changes made to the ILP since exhibition are summarised in **Section 5** and discussed below.

The key issues raised in submissions have been considered in detail in this section, while **Appendix B** provides responses to individual submissions. Reference should be made to the final ILP at **Figure 1** (and **Appendix A**).

4.1 Zoning and Densities

The submissions raised concerns in relation to the proposed landuse zones. Objections mainly related to zoning for open space or drainage. Requests were also made for land to be zoned a "higher" residential use than exhibited.

A range of issues must be balanced in precinct planning to determine which areas of land will be developed for residential purposes, commercial purposes, open space, drainage, environmental conservation, schools etc. Final decisions are dependent on the best outcome for the future community. As such, residential zones and densities are planned to correspond with the precinct's local character, topography, other constraints such as flooding and to ensure the provision of infrastructure will match the needs of the future population.

The Vineyard Precinct was exhibited proposing a density cap to ensure that the provision of infrastructure and services will match the needs of the future population. For R2 Low Density Residential it is recommended to be a range 15-18 dwellings per hectare, while for R3 Medium Density Residential it is recommended to be 20-30 dwellings per hectare. .

4.2 Zoning for Open Space

The submissions raised concern in relation to the following matters:

- the location of open space; and
- the adequacy of the amount of open space across the precinct to serve the population.

Open space is located to ensure equitable access for residents within the precinct and to provide access for residents in surrounding precincts, e.g. to sports fields. This is essential to provide for the wellbeing of future residents and fosters community interaction. Projected demographic data for specific catchment areas is also considered as part of the placement process to ensure future community demands are met. Refer to **Section 4.2.1** for further discussion on open space.

4.2.1 Placement of Open Space

Open space in any precinct is designed and located to serve the future residents of an area. This takes into consideration a number of factors such as:

- safe and easy access for vehicles, pedestrians and cyclists;
- the population catchment near open space;
- expanding or integrating existing areas of open space or native vegetation;
- creating pedestrian and cyclist linkages through the precinct and to adjoining precincts; and
- environmental constraints such as flooding, slope, and, indigenous and non-indigenous heritage.

The areas of open space proposed within Stage 1 (27.4 hectares) include (see **Figure 1**):

- a pocket park near the intersection of Commercial Road and Menin Road;
- a pocket park adjacent to the Boundary Road road reserve;
- a pocket park to the west of Harkness Road;
- a pocket park in the centre of the medium density area, near the village centre;
- a pocket park at the edge of the medium density area, adjacent to a stormwater detention basin along Boundary Road;
- a pocket park north of the future intersection of Otago Street and Windsor Road;
- playing fields and extensive parklands taking in the Killarney Chain of Ponds corridor; and
- an area west of the proposed school site to retain an area of ENV and forming an extension the riparian corridor open space.

Pedestrian and cyclist linkages within the precinct have been planned to connect to passive open space located along the riparian corridor. These linkages are detailed in the DCP. The playing fields will be located on partially constrained land near the riparian corridor that is subject to flooding and not suitable for residential development.

The other pocket parks are centrally placed for the residential area they serve, providing safe and easy access for residents, and reducing the need to cross major roads.

4.2.2 Changes to Open Space

Increases in open space areas to accommodate existing native vegetation

The Biodiversity Certification Order applicable to the North West and South West Growth Areas requires 2,000ha of ENV to be retained as precincts are rezoned.

ENV to be protected is generally located on land that has limited development potential due to other constraints (particularly flooding) or that has been integrated with land that is required for other public purposes such as open space. The target of ENV to be protected in Stage 1 of the Vineyard Precinct is 18.2ha. The exhibited Precinct Plan proposed to protect 12.5ha of ENV following detailed ground-truthing to confirm the presence of ENV, land use decisions to incorporate high priority areas of ENV into public open spaces and the exclusion of areas needed for essential infrastructure (road widening and drainage purposes).

Since exhibition, the draft ILP was reviewed to identify areas of open space that could be increased to allow for the protection of additional ENV. Following a thorough investigation, two areas are recommended to be adjusted to protect additional ENV (see **Figures 2 and 3**): an area central to the precinct, and another necessitating the adjustment of the playing fields north. These additional areas of ENV met the definition of ENV in the Biodiversity Certification Order, are located within or near existing areas of ENV and could readily be incorporated into exhibited areas of open space. Consideration was also given to other areas of ENV elsewhere in the precinct, however, due to their disconnect to areas of open space and riparian corridors, did not offer an equal or similar ecological value to the identified areas.

Figure 4 shows areas of vegetation including ENV and additional high conservation value vegetation (AHCVV) that were considered for inclusion. The vegetation was given a rating based on its quality (with a rating of (1) being the highest), whether it met the definition of ENV and its location. The extra areas retained (below the playing fields and central to the precinct) were given a high rating due to their connectivity and meeting the definition of ENV. Other areas of vegetation did not have a high rating or were isolated were discounted from being retained.

Inclusion of the identified additional areas of ENV has resulted in a further 3.72ha of ENV being protected, bringing the total quantum of protected ENV across Stage 1 to 16.1ha. While there remains a deficit of 2.1ha of ENV within Stage 1 of the precinct to meet the ENV target of 18.2ha, it has been

agreed with the Office of Environment and Heritage (OEH) that this deficit can be made up elsewhere in the North West Growth Area through ongoing precinct planning.

The open space area in the middle of the precinct has been increased to accommodate the retention of an additional 1.27ha of ENV as shown in **Figure 2**.

Figure 2: 4 O'Dell Street - Exhibited and proposed layout



Exhibited



Proposed

The playing fields have been shifted to the north to retain an additional 2.45ha of ENV. See **Figure 3**. Several design options were considered and the preferred option was selected to achieve a balance between retaining ENV, minimising impacts on developable urban land and ensuring the playing fields are located on relatively flat land adjacent to other open space areas.

Figure 3: 284B, 284, 284D, 316 & 324 Commercial Road-Exhibited and proposed layout

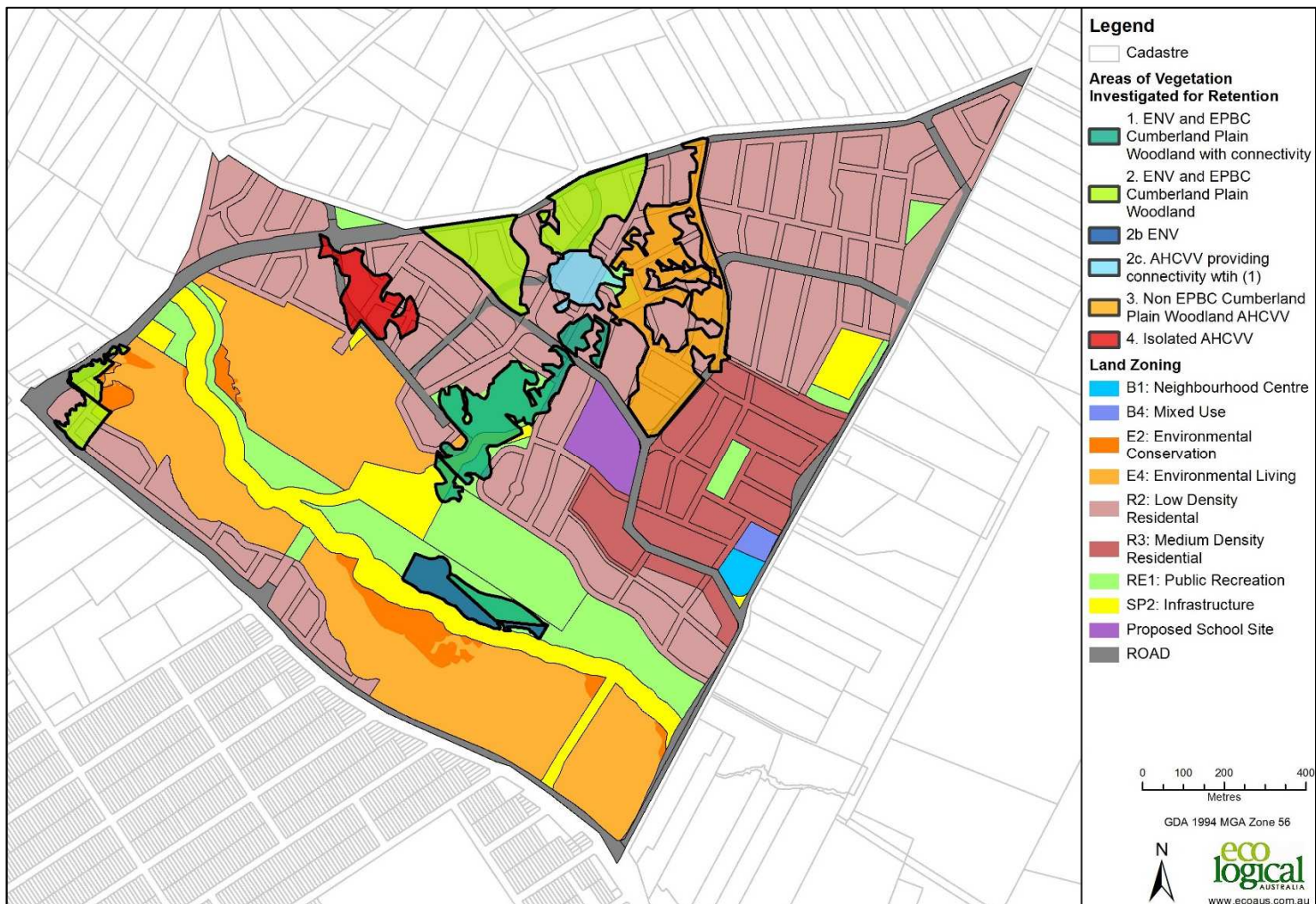


Exhibited



Proposed

Figure 4: Areas of vegetation investigated for retention



Adjustment of pocket park west of Harkness Road

The pocket park to the west of Harkness Road has been slightly shifted to the north-west to respond to the realignment of a collector road (see **Section 4.6.3 and Figure 5**). The pocket park remains centrally located within this section of the precinct.

Figure 5: 49 Harkness Road & 283 Commercial Road - Exhibited and proposed



Exhibited



Proposed

Open space Link – Otago Street / Windsor Road intersection

Following the detailed design of the future intersection of Otago Street and Windsor Road (see Section 4.6.1), the location of the open space linking areas north and south of the Killarney Chain of Ponds was also reviewed. The open space has been shifted west to maintain its alignment with the proposed local road and is consequently partially located on 621 and 627 Windsor Road rather than wholly on 627 Windsor Road, as exhibited. See **Figure 6**.

Figure 6: 621 & 627 Windsor Road - Exhibited and proposed layout



Exhibited



Proposed

4.3 Private Land containing existing native vegetation zoned E2 Environmental Conservation

The submission from OEH raised concerns regarding the effectiveness of protecting ENV on private land under an E4 Environmental Living zone due to potential impacts from activities such as land filling, significant dumping, canopy tree loss and under-scrubbing. These practices have historically resulted in loss of ENV. The E4 zone had been used in those areas under private ownership affected by flooding to the 1:100 chance ARI.

Such activities are not strictly a result of the land use zone, however it is acknowledged that better long-term protection of ENV could be afforded under the E2 Environmental Conservation zone where the range of permissible land uses is more restrictive and more appropriate for land containing ENV.

In response to OEH's concerns, the patches of ENV to remain in private ownership will be zoned E2 Environmental Conservation rather than E4 Environmental Living. See **Figure 7**.

The E2 Environmental Conservation zone is intended to protect areas of high ecological value and prevent development that could have an adverse impact on that value. The E2 Environmental Conservation zoning will provide better protection of the ENV on private land than what would be afforded under the E4 Environmental Living zone which is intended to provide for low-impact residential development in areas that are constrained due to flooding and areas with aesthetic values.

Post-exhibition changes will also be made to the Hawkesbury City Growth Centres Precinct DCP to amend the exhibited controls and incorporate additional development controls that provide better protection and enhancement of native vegetation, consistent with the Biodiversity Certification Order. The post-exhibition controls to be added include:

- Part 2.2.4, Control 1 which requires all future development applications (DA) for subdivision to provide a map showing the location, extent and area of any ENV within non-certified land.
- Part 2.2.4, Control 3 which requires that during subdivision works or earthworks, native plants, seeds and top soil are to be retained and/or collected for reuse in the rehabilitation of any riparian area and natural areas or landscaping of any public open space areas located within the development site.
- Part 2.2.4, Control 4 which requires consideration of the need to minimise weed dispersion and promote weed eradication during subdivision design and bulk earthworks. A Weed Eradication and Management Plan, outlining weed control measures during and after construction, is to be submitted with any subdivision DA.

Figure 7: Areas of ENV on private land zoned as E2 Environmental Conservation



4.4 Essential Infrastructure

4.4.1 Water, Sewer and Electricity

Utility agencies have committed to the funding and delivery of essential infrastructure for Vineyard (Stage 1). Development of land is dependent on essential infrastructure, i.e. water, sewer and electricity being available. Infrastructure will be delivered progressively as detailed in **Table 3**.

Table 3: Provision of essential infrastructure

Type	Availability/Capacity
Potable water (trunk)	Yes
Potable water (lead-ins)	No – to be privately delivered
Sewer (trunk mains)	Yes
Sewer (lead-ins)	Yes – to be delivered by 2019 by Sydney Water if not privately delivered sooner
Electricity	Available capacity to serve around 500 lots from the existing Riverstone zone substation. Ultimate capacity will be generated from the future Box Hill and Riverstone East zone substations in approximately five years' time.

Water trunk mains are in place and ready to service Stage 1, subject to lead-ins being privately delivered by developers. There is also available capacity in the wastewater system to service the protected number of dwellings in Stage 1. To allow for development to connect to this sewerage

infrastructure, Sydney Water intends to construct four lead-ins, due to be completed by mid-2019 (if not delivered earlier privately).

There is electricity capacity for 500 lots from existing 11kV feeders in the precinct which originate from the existing Riverstone zone substation. This area is described in **Section 4.4.2**. Further capacity for up to 1,000 lots will be available in around two years' time when Endeavour Energy carries out augmentation works to the upstream 11kV network.

Electricity capacity for the entire Stage 1 area will be available once the Box Hill and Riverstone East zone substations in neighbouring release areas are delivered. These are planned to be established in approximately 5 years. Endeavour Energy will monitor the rate of housing development on a regular basis to ensure that capacity upgrades will be available in a timely manner for the precinct.

Developers will need to make arrangements via Accredited Service Providers for their 11kV reticulation and extension of the 11kV network to their subdivision. Endeavour Energy has changed funding arrangements such that 11kV reticulation works and extensions for new subdivisions will be reimbursed to developers based on standard rates. This addresses "first mover" disadvantage for the provision of electrical infrastructure in fragmented ownership areas such as the precinct.

4.4.2 Early Activation Sub-Precinct

The early activation sub-precinct (EAP) is located towards the east of Stage 1. It is bound by Menin Road to the north, Boundary Road to the east, and Harkness and Commercial Roads to the west. The EAP provides an area available for development immediately upon rezoning due to, with the exception of sewer lead-in mains, available utility infrastructure. Therefore, development may occur in the EAP first, based on capacity and physical infrastructure.

4.4.3 Drainage Infrastructure

Urban development within the precinct will rely on detention basins and raingardens to moderate storm flows and maintain water quality of in-flows to the creek system. Precinct planning has resolved to locate and configure the basins to detain as much of the catchment runoff as possible, thereby minimising the overall number of basins required and minimising the impact on developable area. The Department, in consultation with Council, is preparing a Section 94 Contributions Plan that will fund the acquisition of land required for drainage detention and water quality infrastructure, and their construction. Drainage infrastructure will be constructed at the time it is required to support urban development.

4.5 Flooding

4.5.1 General Discussion – determination of 1:100 year flood event line

Around one third of the precinct is affected by the 1:100 year flood level. For precinct planning, detailed hydrologic and hydraulic modelling of the precinct was undertaken to map a range of local and regional flood events, including the pre- and post-development 1:100 year flood event. The result of this flood modelling has meant more accurate information relating to flood extents and heights within the precinct is now available. The new flooding information has been incorporated into the ILP and SEPP maps.

The flood planning level adopted for the precinct is the post-development 1:100 year flood event. Any land below the flood planning level is considered to be of high hazard posing significant development/evacuation challenges. To avoid risks to people and properties, no new residential development will be permissible below the flood planning level.

4.5.2 Probable Maximum Flood Line and Flood Evacuation Study

As part of finalising the Vineyard precinct plan, the Department commissioned a Flood Evacuation Study that focused on the Vineyard, West Schofields and Marsden Park North precincts. The study was required to ensure the future residents of the precinct located above the 1:100 year event and below the Probable Maximum Flood line (PMF) could safely be evacuated during a major flood event. The study was done in consultation with Infrastructure NSW and the Hawkesbury-Nepean Flood Risk Management Directorate (which includes the State Emergency Service (SES) and Roads and Maritime Services (RMS)) and further expanded on the work being done by the Directorate. The results of the study have indicated that the proposed density of residential development below the PMF can be safely evacuated in a major flood event.

To manage the number of dwellings in this location, it is recommended to set a dwelling density range of 15-18 dwellings per hectare. This is shown on the Residential Density Map and is consistent with the draft amendment to the Growth Centres SEPP that seeks to establish maximum residential densities across the North West Growth Area.

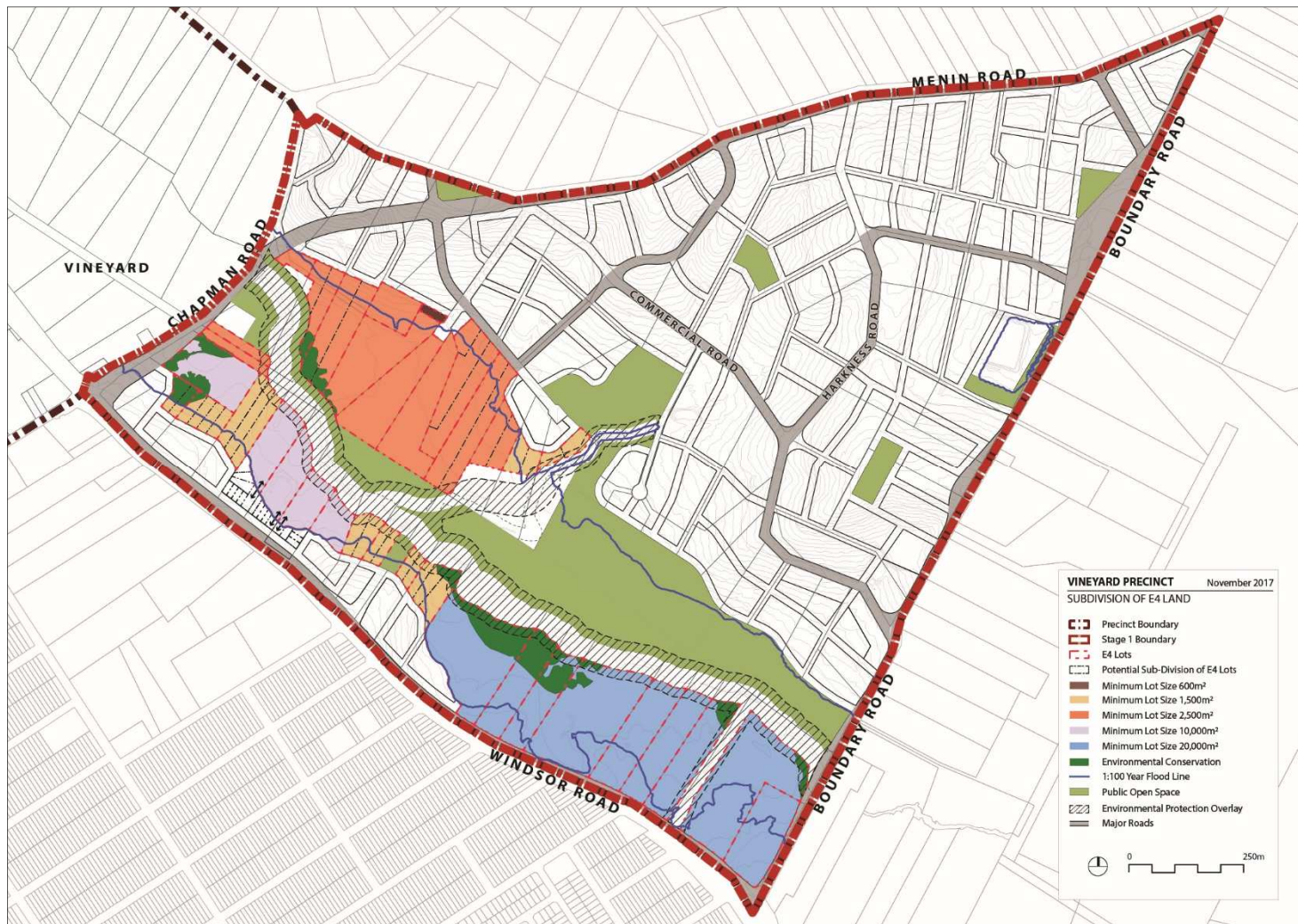
4.5.3 E4 Environmental Living zoning above and below 1:100 flood line

Land below and just above the boundary of the 1:100 flood line has mainly been zoned E4 Environmental Living. This is to recognise the constrained nature of the land due to potential flooding. **Figure 8** shows a possible subdivision pattern for the E4 Environmental Living zone. While there would be other possible subdivision outcomes, one such outcome is shown below to demonstrate the pattern of subdivision for lots that fall above and below the 1:100 flood line.

Local roads must be located above the 1:100 flood line. To ensure land below the local road is not isolated through a subdivision, an area of E4 Environmental Living is proposed. This may then result in a subdivision pattern where lots have land above the flood line for a housing development pad and land below the flood line can be used for back gardens.

The most heavily flood constrained area (shown blue) has a minimum lot size of 20,000m². This land does not have subdivision potential.

Figure 8: E4 Environmental Living zone subdivision study



4.6 Ultimate Road Network

There are a number of roads that require upgrading to support the future population. Chapman Road, Commercial Road, and Menin Road have been identified as part of the regional road network for the North West Growth Area. These roads will be upgraded to a sub-arterial status and form part of the Bandon Road corridor. When complete the route will function as a regional traffic connection between Boundary, Windsor and Richmond Roads. The portion within the Vineyard precinct will require upgrading from a 20 metre road reserve, to a 35 metre road reserve which will be extended wholly to the south within the Vineyard Precinct. RMS will be undertaking the land acquisition and widening / upgrade.

The upgrade of the western portion of Boundary Road, that lies within the Hawkesbury local government area, is to be funded via the Vineyard Section 94 Contributions Plan.

A connecting road from Menin Road through to Boundary Road will also be funded via Section 94 contributions. The construction of this local road will close off the existing corner where Menin and Boundary Roads currently intersect. This intersection cannot be maintained once the Menin Road is upgraded to a sub-arterial status as the angle and proximity of the Menin/Boundary intersection would be unsafe.

Areas of land acquisition for road purposes are identified on the Land Zoning Map and Land Reservation Acquisition Map. If a proposed road does not appear on these maps, it is to be delivered by developers. Note that local and collector roads that are not mapped on the Land Reservation Acquisition Map can be varied from their indicative location at development stage, provided it can be demonstrated to Council that appropriate vehicular access within and through the precinct can be achieved.

4.6.1 Proposed design of Windsor Road/Otago Street Intersection

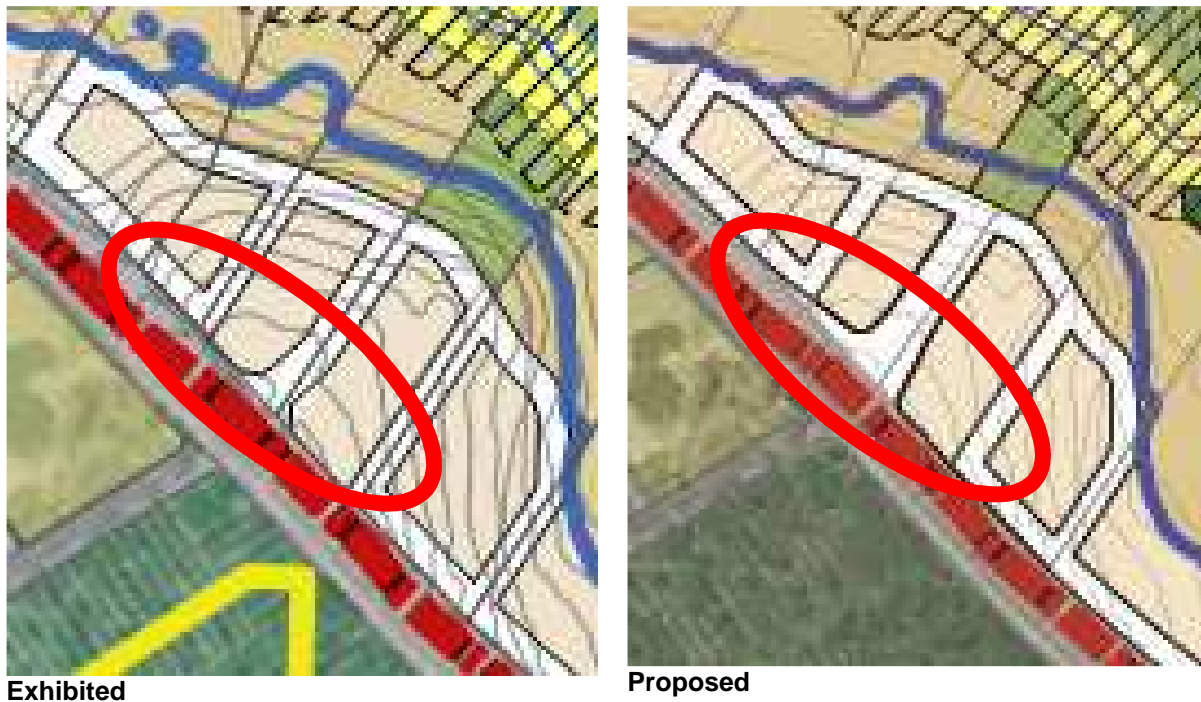
As Windsor Road is an arterial road, multiple direct vehicular access points to properties fronting Windsor Road are unsafe and will not be permitted by the RMS. Therefore, it is proposed that all new properties in the area between the Killarney Chain of Ponds and Windsor Road will be accessed via a new four-way intersection aligned with Otago Street.

Ultimate access into the southern part of the Vineyard precinct will only be available via this new intersection. However, until that intersection is constructed and to facilitate development of this area, a left-in, left-out access will be available via Chapman Road approximately 130m from the Windsor Road intersection. Presently, Otago Street links into the Riverstone precinct which will have a school and playing fields accessible via this intersection. The proposed four-way Windsor Road/Otago Street intersection will facilitate local traffic movements and form a pedestrian and cyclist link between the Riverstone and Vineyard precincts.

Existing properties along Windsor Road will be able to maintain existing vehicular access arrangements until such time that land is developed.

At exhibition, land that would need to be acquired to accommodate the intersection was shown on the ILP and SEPP maps, see **Figure 9**. Since exhibition the Department has worked with RMS and designed the intersection and it has been determined further land is required. The greater land-take affects the two properties originally affected by the intersection, 621 and 627 Windsor Road, as well as an additional property, 615 Windsor Road. A minor part of the frontage of 615 Windsor Road is required to support a deceleration lane required for safety and access.

Figure 9: 615, 621 & 627 Windsor Road - Exhibited and proposed layout

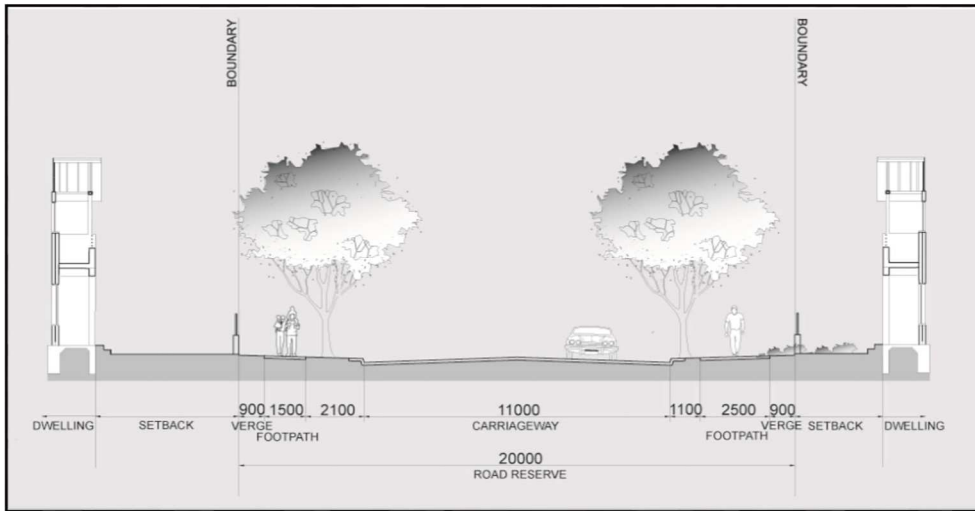


4.6.2 Widening of Collector Road Routes to 20.8m and intersection land take

Collector road reserve widths are typically set at 20m. As exhibited this consisted of the following breakdown and is shown in **Figure 10**:

- 0.9m verge either side (1.8m total)
- 1.5m footpath one side
- 2.5m footpath one side
- 2.1m landscaping one side
- 1.1m landscaping one side
- 11m carriageway (inc. parking)

Figure 10: Exhibited collector road section

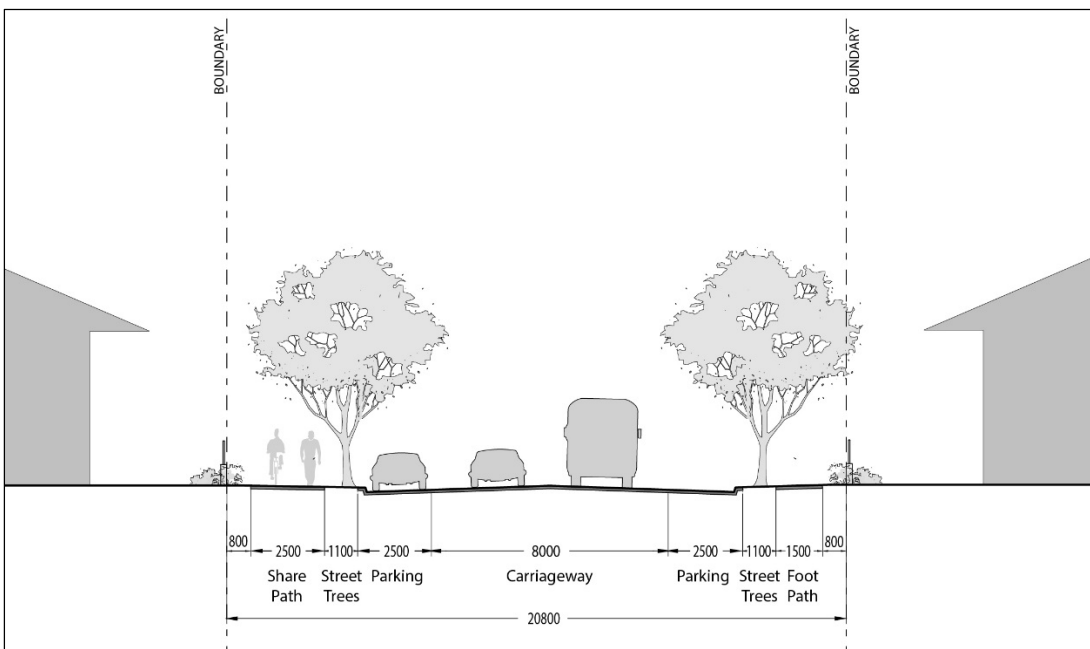


Transport for NSW has requested that a 13m wide carriageway be provided to allow for bus movements, therefore widening the total road reservation to 20.8m. The amended section is shown in **Figure 11** and consists of the following:

- 13m carriageway (consisting of traffic lanes and parking)
- 1.5m footpath one side
- 2.5m share path one side
- 1.1m landscaping strip either side (total 2.2m)
- 0.8m verge either side (total 1.6m)

An extra 0.8m of road reserve is required to accommodate the land use types within the reserve to achieve the widened carriageway of 13m. This will require minor land acquisition for some properties that front Commercial Road (internally within the Precinct) and Harkness Road. This land will be acquired by Council.

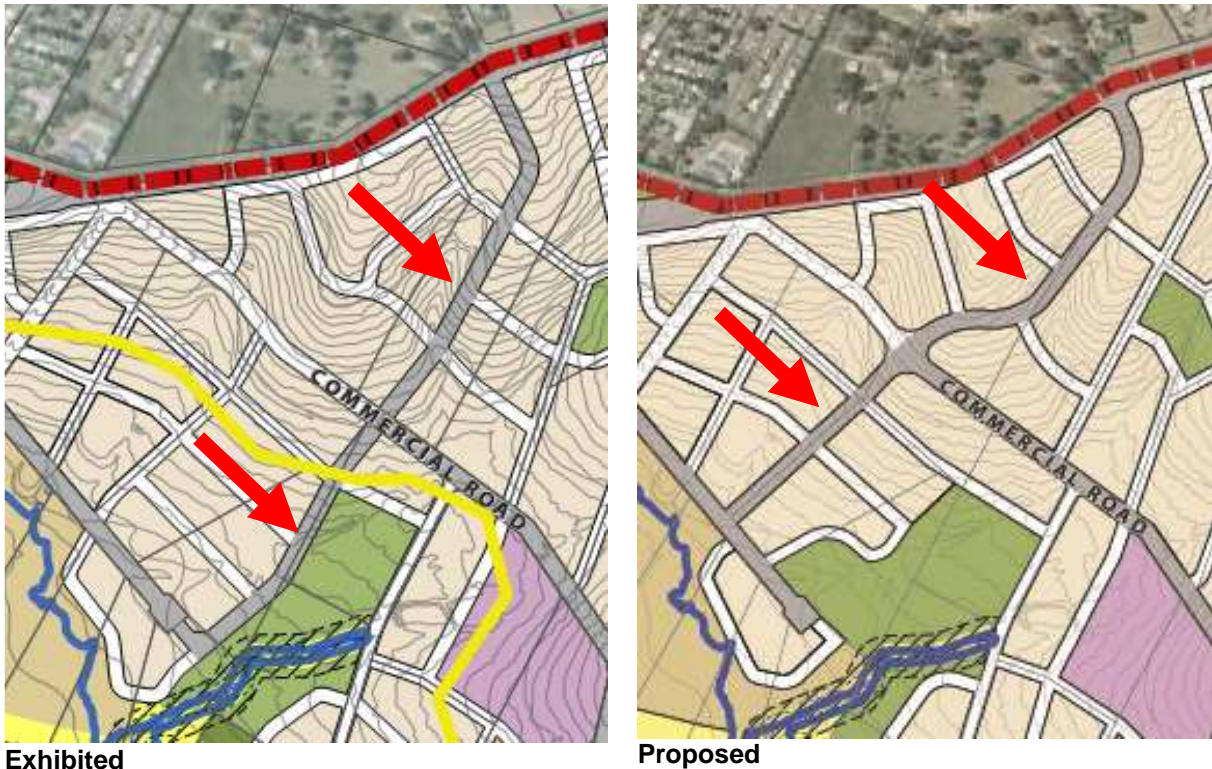
Figure 11: Amended collector road section



4.6.3 Re-location of a Proposed Collector Road

A proposed collector road was shifted west following public exhibition to accommodate the retention of more ENV central to the precinct - see **Figure 12**. The collector road is restricted as to where it will access the precinct as the intersection with Menin Road has been set through the high-level design of the sub-arterial corridor, in discussions with the RMS. The location of the collector road as it heads south within the precinct is flexible and has been moved since exhibition but could be refined further as the precinct is developed. The retention of ENV west of the creekline, central to the precinct, has meant the open space area has been increased and accordingly, the route of the collector road had to be altered.

Figure 12: Collector location as exhibited and proposed



4.7 Land Acquisition and the Section 94 Contributions Plan

Land identified for acquisition will be acquired by a government agency. Council or the RMS will acquire land in the precinct when it is needed under the *Land Acquisition (Just Terms Compensation) Act 1991*. The responsible agency and the land to be acquired is shown in the Growth Centres SEPP.

Council will acquire land for drainage purposes, local road infrastructure, open space and community facilities. Land required for major road infrastructure will be acquired by the RMS and acquired in a timeframe based on the need for road upgrade. The upgrade will be influenced by the increasing traffic volumes in the area. Any roads not identified on the Land Reservation Acquisition Map will be funded by developers.

Acquisition will depend on the rate of development and subject to receipt of development contributions. Therefore, it is expected that the rate of land acquisition will be subsequently driven by developers' response to demand for housing.

5 Post-Exhibition Amendments to Precinct Planning Package

5.1 Indicative Layout Plan and SEPP Map Amendments

The following table summarises the changes made to the ILP after exhibition as shown in **Figure 1** and details the corresponding changes to the relevant SEPP maps.

Table 4: Description of changes made to the ILP since exhibition

Description/location of change	SEPP map amended	Comments	See Section
Open Space			
Pocket park west of Harkness Road	Height of Buildings Acquisition Zoning Residential Density	Due to realignment of a collector road, the location and shape of the pocket park to the west of Harkness Road has been located across two properties as opposed to one property (49 Harkness Road and 283 Commercial Road).	4.2.2
Playing fields	Height of Buildings Acquisition Zoning Native Vegetation Protection Residential Density	The playing field location has been shifted to the north to retain an additional 2.45ha of ENV.	4.2.2
Park to the west of the creekline	Height of Buildings Acquisition Zoning Native Vegetation Protection Residential Density	Land west of the creekline was exhibited with a R2 Low Density Residential zoning. The majority of the lot is to be zoned RE1 Public Recreation to retain an additional 1.27ha of ENV.	4.2.2
Pocket park north of intersection of Otago Street and Windsor Road	Height of Buildings Acquisition Lot Size Zoning Native Vegetation Protection Residential Density	With the design of the future intersection at Otago Street and Windsor Road being refined (see below), the connecting open space has been shared between 621 and 627 Windsor Road for it to line up with the intersection and local road. Pedestrian and cycle links will occur in the future between the Vineyard and Riverstone precincts.	4.2.2
Native Vegetation Protection			
Increased amount of open space	Height of Buildings Acquisition Lot Size Zoning Native Vegetation Protection Residential Density	The open space areas in the precinct were adjusted and increased to accommodate the retention of an additional 3.72ha of ENV across the precinct resulting in an overall retention of 16.1ha of ENV within the precinct.	4.2.2

Description/location of change	SEPP map amended	Comments	See Section
ENV on private land zoned as E2 Environmental Conservation	Zoning Height of Building	The areas of ENV on private land will be zoned E2 Environmental Conservation rather than E4 Environmental Living to give greater protection to the ENV.	4.3
Traffic and Transport			
Windsor Road and Otago Street intersection	Height of Buildings Acquisition Zoning Residential Density	The Department worked with the RMS post-exhibition to design this future intersection to ensure the required amount of land would be shown on the Land Reservation Acquisition map.	4.6.1
Widening of collector roads to 20.8m and intersection land take	Floor Space Ratio Height of Buildings Acquisition Zoning Residential Density	To ensure bus capable collector roads, the existing road reserve forming collector routes will be widened from 20m to 20.8m. Intersections will also be widened to allow bus turning movements.	4.6.2
Collector Road	N/A	A collector road was moved to the west to enable adjustments elsewhere in the precinct to accommodate the retention of more ENV.	4.6.3
Water Cycle Management			
Raingarden relocation	Height of Buildings Acquisition Lot Size Zoning	The exhibited location of the raingarden at 3 Putland Place would have required the demolition of an existing dwelling. The raingarden has been relocated to a lot in the vicinity (9 O'Dell Street) that will not require the demolition of any existing dwellings.	See Summary of Submissions
Drainage corridor running from creek to Windsor Road in far south east of precinct	Height of Buildings Acquisition Lot Size Zoning Native Vegetation Protection	After review this drainage corridor has been reduced in width from 46m to 25m.	See Summary of Submissions
Zoning and minimum lot size			
The zoning on Lot 3 DP 248509 (5 O'Dell Street) above the 1:100 year flood line changed from R2 Low Density Residential to E4 Environmental Living	Height of Buildings Buildings Acquisition Lot Size Zoning	To retain an existing dwelling.	See Summary of Submissions
The minimum lot size of residential land on Lot 3 DP 248509 (5 O'Dell Street) and Lot 4 DP 248509 (6 O'Dell Street) changed from 2500m ² to 1500m ² .	Lot size	To ensure subdivision potential.	N/A
The far southern portion of Lot 3 DP	Lot size	To ensure subdivision potential for an area of the lot isolated by a local road.	N/A

Description/location of change	SEPP map amended	Comments	See Section
244901 changed from 2,500m ² to 600m ² .			
The minimum lot size of the E4 zoned land changed from 1,500m ² to 10,000m ² .	Lot size	To match the minimum lot size with the land that is located above the 1:100 flood line.	N/A
The resulting battleaxe portions of lots 5 & 6 DP 224860 (onto Chapman Road) changed from 10,000m ² to 2,500m ² .	Lot size	The isolated battleaxe portions could not have met the minimum lot size control if 10,000m ² had been retained.	N/A

5.2 Hawkesbury City Council Growth Centre Precinct DCP Amendments

The proposed post-exhibition amendments of the Hawkesbury City Growth Centre DCP are summarised below, and detailed in **Appendix D**:

- Section 2.2.1 Flooding controls expanded and updated
- 2.2.4 Native vegetation and ecology – controls expanded and updated
- 2.2.7 New odour section added
- 4.1 – Controls updated to reflect density ranges
- All relevant figures updated

6 Consistency with other Instruments, Acts and Policies

6.1 Draft Greater Sydney Region Growth Plan

The Draft Greater Sydney Region Plan, released on 22 October 2017, identifies a metropolis of three cities within Greater Sydney, the Western Parkland City, the Central River City and the Eastern Harbour City. The Vineyard Precinct lies within the Western Parkland City while the balance of the North West Growth Area lie within the Central River City.

The Western Parkland City recognises the strategic role and function of the Western Sydney Airport and Badgerys Creek Aerotropolis in the region, drawing a range of trade, logistics, education and science facilities to the region. A focus on liveability for residents is central to the Western Parkland City, promoting the importance of a tree canopy and walkable neighbourhoods to access shops and services.

The Vineyard Precinct Plan promotes walkability to key destinations such as the village centre, school and local parks, highlighted by the central green spine along the Killarney Chain of Ponds which will be established for active and passive recreational uses.

6.2 Draft Western City District Plan

The Draft *Western City District Plan*, released on 26 October 2017, identifies planning priorities and actions for growth and development in the Western City District. The Land Release Area of the Vineyard Precinct is identified within the draft District Plan, and is located on the fringe of the Metropolitan Rural Area. The location of the Vineyard Precinct within the Western City District Structure Plan 2036 signals the extent of the urban area, and its proximity to the Strategic Centres of Windsor, Richmond, Marsden Park and Rouse Hill, as well as public transport infrastructure such as the T1 Richmond Rail Line and the Sydney Metro Northwest, which is due to be opened in 2019.

6.3 North West Land Use and Infrastructure Implementation Plan

The North West Land Use and Infrastructure Implementation Plan provides the detailed strategic framework for the North West Growth Area, and has identified the following key actions:

- to plan for an increased population in Sydney's north west in vibrant and liveable neighbourhoods;
- improve transport accessibility and connectivity throughout the area; and
- identify and enhance key biodiversity areas, open spaces, riparian corridors and culturally sensitive areas.

The Vineyard Precinct plan is consistent with these actions by encouraging higher densities in a walkable range to the village centre, proposed school, and the regional bus network, and supported by the promotion of a bus-capable road network to support local bus services.

It is also consistent in:

- meeting the anticipated dwellings of 2,300; and
- responding to the potential flood impacts in the area between the 1:100 flood event and the PMF by applying appropriate dwelling density controls to the Stage 1 area.

6.4 State Environmental Planning Policy (Sydney Region Growth Centres) 2006

The aims of the Growth Centres SEPP include the following:

- to co-ordinate the release of land for residential, employment and other urban development in the Growth Areas,
- to enable the establishment of vibrant, sustainable and liveable neighbourhoods that provide for community well-being and high quality local amenity,
- to provide controls for the sustainability of land in growth centres that has conservation value,
- to provide for the orderly and economic provision of infrastructure in and to growth centres,
- to provide development controls in order to protect the health of the waterways in growth centres,
- to protect and enhance land with natural and cultural heritage value,
- to provide land use and development controls that will contribute to the conservation of biodiversity.

These principles have informed the precinct planning process, from the preparation of the detailed technical studies to the masterplanning of land use options within the precinct.

6.5 Draft Future Transport Strategy 2056

The Draft Future Transport Strategy 2056, released on 22 October 2017, was prepared in recognition of the importance that transport infrastructure provides to Sydney's residents, and the need to direct the delivery of transport infrastructure in ways that serve the economic, social and environmental goals of the city. It sets a 40 year vision, directions and outcomes framework for customer mobility across the State. Together with the draft Services and Infrastructure Plans and draft Supporting Plans, it explores the required network for Sydney's future and the framework needed to address issues and place-based decision-making.

The Strategy is focused on specific customer outcomes for Greater Sydney including:

- efficient, reliable and easy-to-understand journeys for customers;
- efficient and reliable freight journeys;
- a safe transport system;
- 30 minute access to centres;
- fast and convenient interchanging;
- integrated walking and cycling facilities;
- vibrant centres supported by streets that balance convenient access with enhancing the attractiveness of places;
- fully accessible transport;
- use of new technology;
- integration of future forms of mobility with other modes of transport;
- affordable delivery, operation and maintenance; and
- a resilient transport system that contributes to net-zero emissions by 2050.

The recommended placement of land uses in the Vineyard Precinct Plan is supported by a local road network that supports the abovementioned objectives. The future community will be well placed with strategic centres well within a 30-minute travel time to the Strategic Centres of Windsor, Richmond, Marsden Park and Rouse Hill. Specific accessibility and streetscape controls within the DCP provide further parameters for a place-based approach to be adopted as the land is developed for urban purposes.

Vineyard will also benefit from the future Outer Sydney Orbital, an 80km north-south motorway and freight rail corridor that is being investigated to link Box Hill in the north to the Hume Motorway at Menangle in the south.

6.6 Growth Centres Development Code

The Growth Centres Development Code provides a guide to the preparation of the Precinct Plan. The Development Code provides for consistent standards of development across the Growth Centres. The Vineyard Precinct Plan for Stage 1 has also been prepared with reference to other development controls including those of Hawkesbury City Council, to enable controls to be consistent with surrounding areas. In certain instances, variation of the design controls in the Development Code has been necessary to address particular site characteristics.

The Precinct Plan is consistent with the Development Code with the exception of matters where site specific controls are required, or where it has been determined that consistency with the Council's current controls takes precedence.

6.7 Section 117(2) Ministerial Directions for Plan Making

The proposed SEPP amendment is not strictly required to comply with the Minister's directions, as they apply only to the preparation of Local Environmental Plans. However, the Precinct Plan may at some point be incorporated into the relevant Council Local Environmental Plan and it is therefore appropriate that the Precinct Plan be consistent with the Section 117 directions to the maximum possible extent.

An assessment of consistency with Directions issued by the Minister under Section 117 of the EP&A Act was prepared as part of the Precinct Planning Report, prior to exhibition. That assessment has been reviewed against the changes made following exhibition and the Precinct Plan is generally consistent with the same Directions.

6.8 Biodiversity Certification for the Sydney Growth Centres

Biodiversity Certification under the *Biodiversity Conservation Act 2016* (formerly the *Threatened Species Conservation Act 1995* (TSC Act)) was conferred upon the Growth Centres SEPP in December 2007 and confirmed in July 2008 via an amendment to the TSC Act. The Certification effectively switches off the need to undertake assessment and obtain approvals required under the TSC Act for development on land that is certified.

The Biodiversity Certification includes a number of requirements (or Relevant Biodiversity Measures – RBMs) that must be satisfied in order to maintain the Certification. RBM 35 requires that a report be prepared assessing the consistency of the Precinct Plan with the Biodiversity Certification. This report has been prepared for the final Precinct Plan and is included at **Appendix E**.

ENV to be protected is generally located on land that has limited development potential due to other constraints (particularly flooding) or has been integrated with land that is required for other public purposes such as open space. The target for Stage 1 of Vineyard is the protection of 18.2ha of ENV. The exhibited Precinct Plan proposed to protect 12.5ha of ENV and the final Precinct Plan will protect 16.1ha. There is still a deficit of 2.1ha for the precinct however, it has been agreed with OEH that this deficit can be made up elsewhere in the North West Growth Area.

The increase in the amount of ENV to be protected within Vineyard (Stage 1) has occurred in consultation with OEH in reviewing the size and location of ENV and it was determined additional areas of ENV could be accommodated by increasing the amount of open space within the precinct. The full deficit of ENV could not be made up in Stage 1 due the quality and location of what ENV exists. ENV needs to be of a certain size and the new areas met the definition of ENV and were located within or near existing areas of ENV and could readily be incorporated in to exhibited areas of open space.

6.9 Growth Centres Strategic Assessment Program

In December 2011, the Federal Government endorsed the Sydney Growth Centres Strategic Assessment Program Report and in February 2012 approved the classes of actions in the Growth Centres that, if undertaken in accordance with the approved program, do not require separate approval under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act).

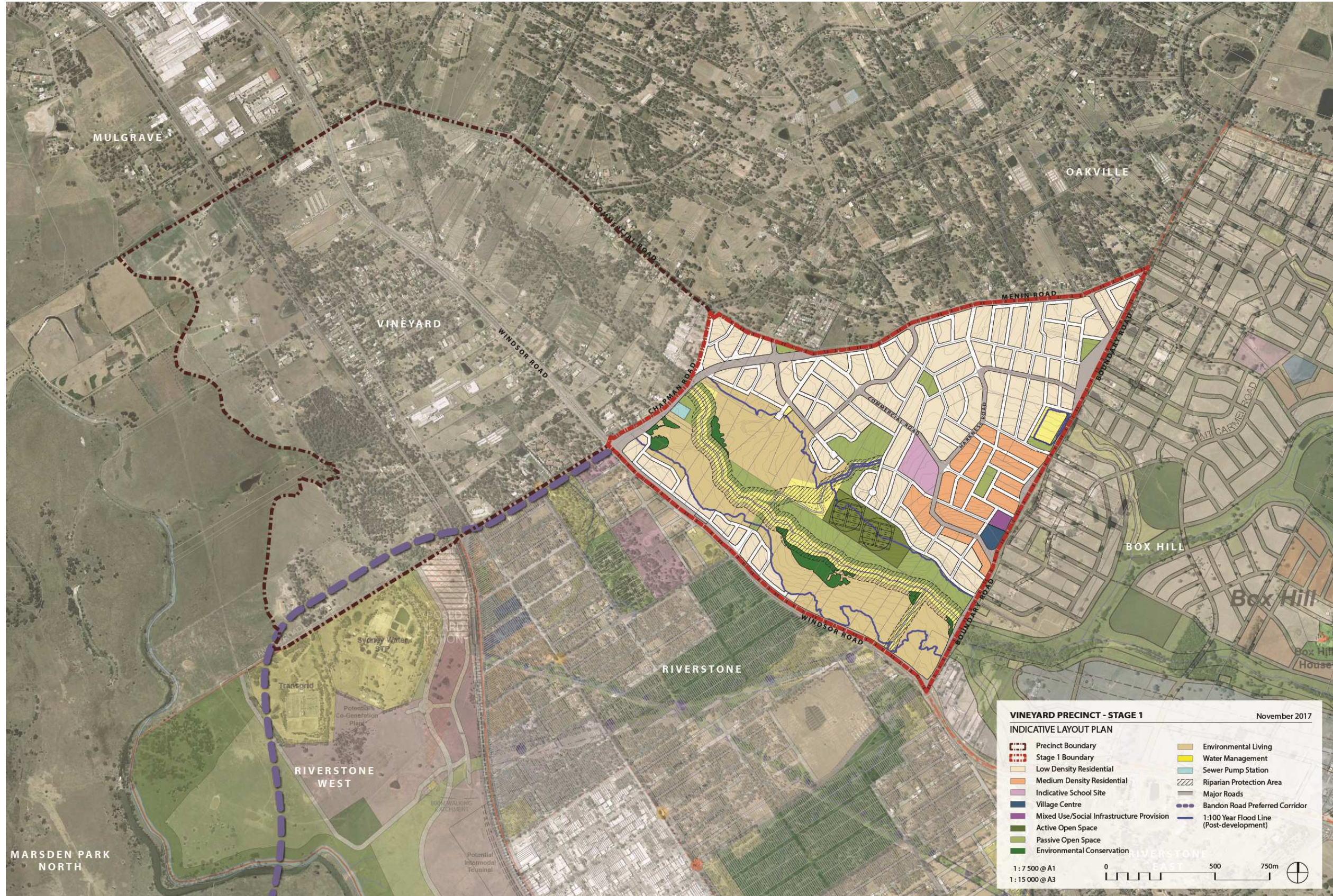
The Program includes a range of commitments for matters of national environmental significance protected under the EPBC Act. The commitments are drawn from the analysis in the Supplementary Assessment Report and Draft Strategic Assessment Report (Part B), and build upon the Relevant Biodiversity Measures for the Growth Centres Biodiversity Certification.

Generally, if a development proposal complies with the Biodiversity Certification under the *Biodiversity Conservation Act 2016* (formerly the TSC Act) (refer above), the requirements of the Strategic Assessment Program will have also been met. This means that:

- on land that is certified under the TSC Act, there is no need for further assessment of impacts under the EPBC Act;
- any proposal to clear vegetation on land that is non-certified must be in accordance with the Relevant Biodiversity Measures (RBMs) of the Growth Centres Biodiversity Certification; and
- any proposed development on non-certified land that is not in accordance with the RBMs would require full assessment and approvals under both the TSC Act and the EPBC Act.

An assessment of consistency of the final Precinct Plan with the Strategic Assessment Program has been prepared and is included at **Appendix F**. The assessment concluded that 5.3ha of CPW will be protected within non-certified and certified lands. This is consistent with the targets of the draft Conservation Plan and will count towards the target of 138ha required on flood prone lands. There will be a loss of 1.5ha of CPW in non-certified lands due to essential infrastructure but it has been offset within the retained 5.3ha.

Appendix A: Final Indicative Layout Plan



Appendix B: Summary of Submissions and Responses

Appendix C: Key stakeholders notified of the public exhibition

<i>Key stakeholders</i>	
Ambulance Service of NSW	Housing Industry Association
Hawkesbury Council	NSW Farmers Association
Cemeteries and Crematoria NSW	Planning Institute of Australia
Council of Social Service of NSW	Property Council of Australia
Department of Family & Community Services	Real Estate Institute of NSW
Department of Premier and Cabinet	Royal Australian Institute of Architects
Department of the Environment	Urban Development Institute of Australia NSW
Department of Primary Industries - Water	Urban Taskforce of Australia
Endeavour Energy	NSW Federation of Housing Associations
Environmental Protection Agency (Metropolitan Branch)	Business Council of Australia
FACS Housing Services	Large Format Retail Association
Fire and Rescue NSW	NSW Business Chamber (Sydney South West)
Greater Western Sydney Regional Coordination Branch, Department of Premier and Cabinet	Regional Development Australia - Sydney Committee
Jemena	Retail Council
Local Government NSW	Sydney Business Chamber
Mine Subsidence Board	Western Sydney Business Connection
NBN Co.	Australian Conservation Foundation
NSW Department of Education	Australian Sustainable Built Environment Council
NSW Department of Finance, Services and	Environmental Defender's Office (NSW)
NSW Department of Health	Greening Australia
NSW Department of Industry	National Parks Association of NSW
NSW Department of Justice	Nature Conservation Council of NSW
NSW Department of Primary Industries	Total Environment Centre
NSW Office of Sport	Action for Public Transport
NSW Police Force	Bicycle NSW
NSW Rural Fire Service	Clubs NSW
NSW State Emergency Service	National Trust of Australia (NSW)
Office of Local Government	Shelter NSW
Office of Strategic Lands	The Committee For Sydney
Premier's Council for Active Living	NSW Council on the Ageing
Roads and Maritime Services	Physical Disability Council of NSW
Nepean Blue mountains Local Health District	Western Sydney Community Forum
Sydney Water	Aboriginal Affairs
Transgrid	Corporation
Transport for NSW	Cubbitch Barta Native Title Claimants Aboriginal
Urban Growth NSW	New South Wales Aboriginal Land Council
Water NSW (Sydney Catchment Authority)	Office of Communities
NSW Land and Water	Metropolitan Local Aboriginal Land Council
NSW Department of Industry	Tomcomwall Cultural Heritage Consultants

Appendix D: Hawkesbury Growth Centres DCP amendments post exhibition

DCP Section	Text/Table/Figure amended	Comment
Throughout main body of DCP and Appendices	<ul style="list-style-type: none"> Updating of various references such as references to DCP parts, Australian Standards, Council planning and development documents, government authorities Updating of figures and diagrams Provisions reworded to improve readability Correction of descriptions Removal of duplicate controls Rewording of unclear controls Rationalisation of competing controls Typographical, spelling, grammatical, formatting, cross referencing, numbering corrections 	
Section 1 Introduction	Table 1-2 Guide to DCP controls	References to various DCP parts updated
	Figure 1-2 Vineyard Precinct in the context of the North West Growth Area	Precinct status updated
Section 2 Environmental and design considerations for development	Figure 2-1 Flood Planning Area	Flood extent and description of flood planning area updated
	2.2.1 Flooding	Definitions added, objectives and controls reworded and made clearer. Land use specific controls added.
	2.2.2 Salinity and soil management	Control 2 wording updated to provide greater clarity
	2.2.3 Aboriginal and European heritage	Note to this section updated as it is addressed in Control 3
	Figure 2-3 Aboriginal cultural heritage map updated	Updated due to a site being removed from north-eastern end of the precinct
	Figure 2-4 European cultural heritage map updated	Updated due to typographical error
	2.2.4 Native vegetation and ecology	Modification of exhibited controls and new controls added. See Section 4.3 for further details.
	Figure 2-5 Riparian protection area map	Map title updated
	2.2.5 Bushfire hazard management	Controls 2 and 3 combined due to being related to one another
	Figure 2-6 Bushfire Asset Protection Zones	Deleted as written controls in the DCP will suffice
	2.2.6 Site contamination	Controls 2 and 3 reworded to provide greater clarity
	2.2.7 Odour assessment and control	New section added addressing potential odour impacts
	2.3.1 Cut and fill	Wording of objective 4 amended to provide greater clarity of intent
	2.4.1 Stormwater management	<ul style="list-style-type: none"> Objectives b and c deleted due to not being relevant Controls 3 and 6 added regarding rainwater tanks and wetland plant species
Figure 2-7 (was Figure 2.8) Water Cycle Management	Updated to respond to final ILP	

DCP Section	Text/Table/Figure amended	Comment
Section 3 Precinct Planning Outcomes	Figure 3-1 Vineyard Precinct Indicative Layout Plan	Updated to respond to final ILP
Section 4 Neighbourhood and subdivision design	4.1 Residential density and subdivision	Definition of net residential density corrected
	Figure 4-3 Residential structure	Figure updated to respond to final ILP
	Table 4-1 Typical characteristics of residential net densities	Table updated to reflect density bands within the precinct
	Table 4-2 Minimum lot size by density bands	Table updated to reflect density bands within the precinct
	Table 4-3 Minimum lot frontages by density bands	Table updated to reflect density bands within the precinct
	4.1.2 Block and lot layout	Control 21 deleted as matter adequately dealt with by the SEPP
	4.1.3 Battle-axe lots	Control 3 deleted because it is inconsistent with SEPP Land Use Table. Control 4 deleted because it is dealt with by control 5.
	Table 4-4 Subdivision Approval process	<ul style="list-style-type: none"> • Table amended to reflect Council's practice regarding timing of subdivision certificates. • Housing Code applicable row deleted due to potential for Housing Code to be amended over time and Table 4-4 being inconsistent with the Housing Code.
	4.3 Construction environmental management	Control 4 deleted as not required
	4.4.1 Street layout and design	<ul style="list-style-type: none"> • Objectives b and c deleted as not required. Controls 5 and 6 combined. • Controls 7 and 15 deleted at request of Council. • Control 8 relocated to 4.1.4 Corner Lots. • Additional controls for roundabout, intersections, shared pedestrian and bicycle pathways.
	Table 4-5 Street Types	Access street type description amended to permit on-street parking on one side of the road only
	Figure 4-11 Precinct Road Hierarchy	Map updated to change Boundary Road to a collector road and intersection types amended
	Figure 4-12 Typical collector road	Diagram updated to include 20.8m wide cross section: <ul style="list-style-type: none"> – 13m carriageway – 1.5m footpath one side – 2.5m share path one side – 1.1m landscaping strip either side – 0.8m verge either side
	Figure 4-14 Typical access street	Figure updated on Council's request: <ul style="list-style-type: none"> – 6m carriageway – 3.1m verge + footpath (developable side) – 1m landscaping (developable side) – 3m landscaping (non-developable side)
Additional Figures [4-15 to 4-17]	Indicative intersection designs shown: <ul style="list-style-type: none"> – Harkness Rd/ Commercial Rd – Harkness Rd/ new collector – Commercial Rd/ new collector 	

DCP Section	Text/Table/Figure amended	Comment
	Additional Figure [4-18]	Pedestrian and cycle routes
	4.4.2 Laneways	Control 1 updated to include requirement for laneways to meet RMS technical standards
	4.4.3 Shared driveways	Control 5 simplified
	Figure 4-18 Indicative examples of shared driveways	Resolution of text improved and “form” changed to “from”
	4.4.4 Access to arterial and sub-arterial roads	Control 8 updated to ensure no new access off Windsor Road is permitted
Section 5 Development in the residential and environmental protection zones	Section 5	The application of this section was extended to include development in environmental protection zones
	5.1 Dwelling design controls	Explanation updated to delete reference to abutting dwellings (abutting dwellings are not defined in the SEPP)
	Table 5-2 Summary of key controls for lots with frontage width $\geq 4.5\text{m}$ for rear accessed dwellings	Updated to reflect revised density bands and include additional side setback and parking space controls
	Table 5-3 Summary of key controls for lots with frontage width $\geq 7\text{m}$ and $< 9\text{m}$ for front accessed dwellings	Updated to reflect revised density bands and include additional side setback and modify garage and parking controls
	Table 5-4 Summary of key controls for lots with frontage width $\geq 9\text{m}$ and $\leq 15\text{m}$ for front accessed dwellings	Updated to reflect revised density bands and include additional side setback and modify garage and parking controls
	Table 5-5 Summary of key controls for lots with frontage width $> 15\text{m}$ for front accessed dwellings	Additional side setback and modify garage and parking controls
	Table 5-6 Summary of key controls for lots in the Environmental Living Zone	Updated to include additional side setback control and modify garage and parking controls
	5.1.2 Streetscape and architectural design	Light colour roof control added at the request of Council
	5.1.4 Side and rear setbacks	Side setback control moved into Tables 5-2 to 5-6
	5.1.5 Dwelling height, massing and siting	Site coverage definition moved to Appendix A
	5.1.9 Visual and acoustic privacy	Control requiring an acoustic report modified and expanded. Visual privacy controls updated.
	Table 5-7 Noise levels permitted within habitable rooms for residential premises impacted by traffic and rail noise	Maximum noise levels controls updated
	5.2.1 – Residential development adjacent to transmission easements	Control 4 unclear and has been deleted
	5.2.2 Attached dwellings	Updated to delete reference to abutting dwellings (abutting dwellings are not defined in the SEPP)
	5.2.3 Secondary dwellings, studio dwellings and dual occupancies	Wording of control 4 updated. In control 5 maximum GFA for a studio dwelling reduced from 75m^2 to 60m^2 to be consistent with Hawkesbury Local Environmental Plan 2012
5.2.5 Residential flat buildings, manor homes and shop-top housing	Reference to densities in control 1 deleted	
5.3 Other development in residential areas	Section updated to include the environmental protection zone	

DCP Section	Text/Table/Figure amended	Comment
	5.3.1 General requirements	Control 5 deleted because of inconsistency with the SEPP Land Use Table
	5.3.2 Educational establishments and places of worship	Control 8 deleted as the matter is dealt with by control 9 Note deleted as it is not needed
	5.3.3 Neighbourhood shops	Controls 1 and 2 updated to apply to all residential zones, rather than only the R2 Low Density Residential zone
	5.3.5 Farm buildings and outbuildings	New objective (a) added
Section 6 Centres controls	Figure 6-1 Centres Hierarchy	Base road layout updated
	6.2.1 Streetscape and architectural design	Control 6 updated to only require blank walls on primary and secondary walls to be avoided Controls 16 and 37 updated to apply to all building facades, not just active frontages Controls 17 deleted because too restrictive and dealt with by 6.2.3 Controls 34, 35 and 36 not relevant to small scale centre Control 39 added addressing awnings and sightlines to traffic signals and signage
	6.2.3 Signs	Control 2 updated to allow signage on 25% of glazed surfaces Control 10 deleted as it does not address situations of more than 3 tenants Control 12 deleted as it is dealt with by condition 4 and Figure 6-3 Control 14 deleted as it prevents spot lighting of signage. The matter is adequately addressed elsewhere in DCP
	6.2.5 Safety, surveillance and maintenance	Control 4 deleted as it is Council responsibility separate to DA process Control 9 wording updated for better clarification
	6.2.6 Site servicing	Controls 7 and 8 amended to provide greater clarity
	Table 6-1 – Parking requirements in centres	Bicycle control added
	6.2.8 Residential flat buildings, manor homes and shop top housing	A new section was added
	Appendix A Glossary	Amendments to definitions

DCP Section	Text/Table/Figure amended	Comment
		Definitions of <i>Flood Planning Levels</i> , <i>Habitable room</i> and <i>Non habitable room</i> deleted as they are included in main body of DCP
Appendix C	1.1.1 Proposed Development	Section deleted as not needed
Appendix D Preferred Plant Species	Table 2 Undesirable Plant Species	Genus Salix Willow listing deleted and it is dealt with by All Willow species listing

Appendix E: Consistency with the Growth Centres Biodiversity Certification

Appendix F: Consistency with the Growth Centres Strategic Assessment Program