Contents

FIGURES

Document Control

Document ID: Wollongong DCP 2009 – D16 West Dapto Release Area

Rev No	Adoption Date	In Force Date	Revision Details
1	14/12/2010	17/12/2012	Adopted
2	27/7/2011	3/8/2011	Incorporate Shone Ave Neighbourhood Plan
3	26/11/2012	8/12/2012	Update Wongawilli North Neighbourhood Plan
4	27/5/2013	1/6/2013	Incorporate Sheaffes Rd Neighbourhood Plan
5	9/12/2013	14/12/2013	Incorporate Reddalls Rd Industrial Neighbourhood Plan
6	24/3/2014	2/4/2014	Incorporate Darkes Rd South West Neighbourhood Plan and updated road network diagrams
7	3/8/2015	12/8/2015	Incorporate Avondale Road North, Huntley Neighbourhood Plan
8	24/8/2015	9/9/2015	Incorporate Shone Avenue / West Dapto Road Neighbourhood Plan
9	19/10/2015	24/10/2015	Incorporate West Dapto Rd / Sheaffes Rd (south) Neighbourhood Plan
10			Draft May 2018
11	19/11/2018	20/12/2018	Incorporate Bong Bong South Neighbourhood Plan
12	10/12/2018	20/12/2018	Incorporate the West Dapto Vision, Structure Plan 2018 and planning principles
13	9/12/2019	20/12/2019	Whole document review and restructure
14	6/4/2020	27/4/2020	Incorporate Hayes Lane and Iredell Road Neighbourhood Plan
15	2/8/2021	30/8/2021	Incorporate additional area into Hayes Land and Iredell Road Neighbourhood Plan.
16	18/10/2021	12/11/2021	Neighbourhood Planning Review

1 INTRODUCTION

This chapter of the Wollongong Development Control Plan 2009 (DCP) is intended to provide structure and guidance for the future development of the West Dapto Urban Release Area. It is aimed at achieving the vision for West Dapto which is:

> *West Dapto will grow and develop as a series of integrated and connected communities. Set against the spectacular Illawarra Escarpment and a landscape of riparian valleys, these communities will integrate the natural and cultural heritage of the area with the new urban form.*
>
> *The communities will be healthy, sustainable and resilient with active and passive open space accessible by walkways, cycleways and public transport. To support these new communities, local centres will provide shopping services, community services and jobs while employment lands will facilitate further opportunities for the region.*
>
> *West Dapto will be supported by a long-term strategy to oversee the timely implementation of infrastructure to deliver sustainable and high-quality suburbs with diverse housing choices.*

Other parts of this DCP continue to apply to the West Dapto Release Area in conjunction with this chapter. Part A of the DCP contains the Introduction and Part B provides Land Use Based Planning Controls. Part C provides Specific Land Use Controls and Part E provides the General (City Wide) Controls.

This document is set out around groups of planning principles. The principles are designed to outline expectations around elements for consideration while planning for development of the West Dapto Urban Release Area. The principles, objectives and applicable controls will guide the growth of new suburbs and neighbourhoods, protect the environment and integrate with existing communities.

2 LAND TO WHICH CHAPTER APPLIES

This chapter applies to all land within the West Dapto Release Area (**Figure 1**).

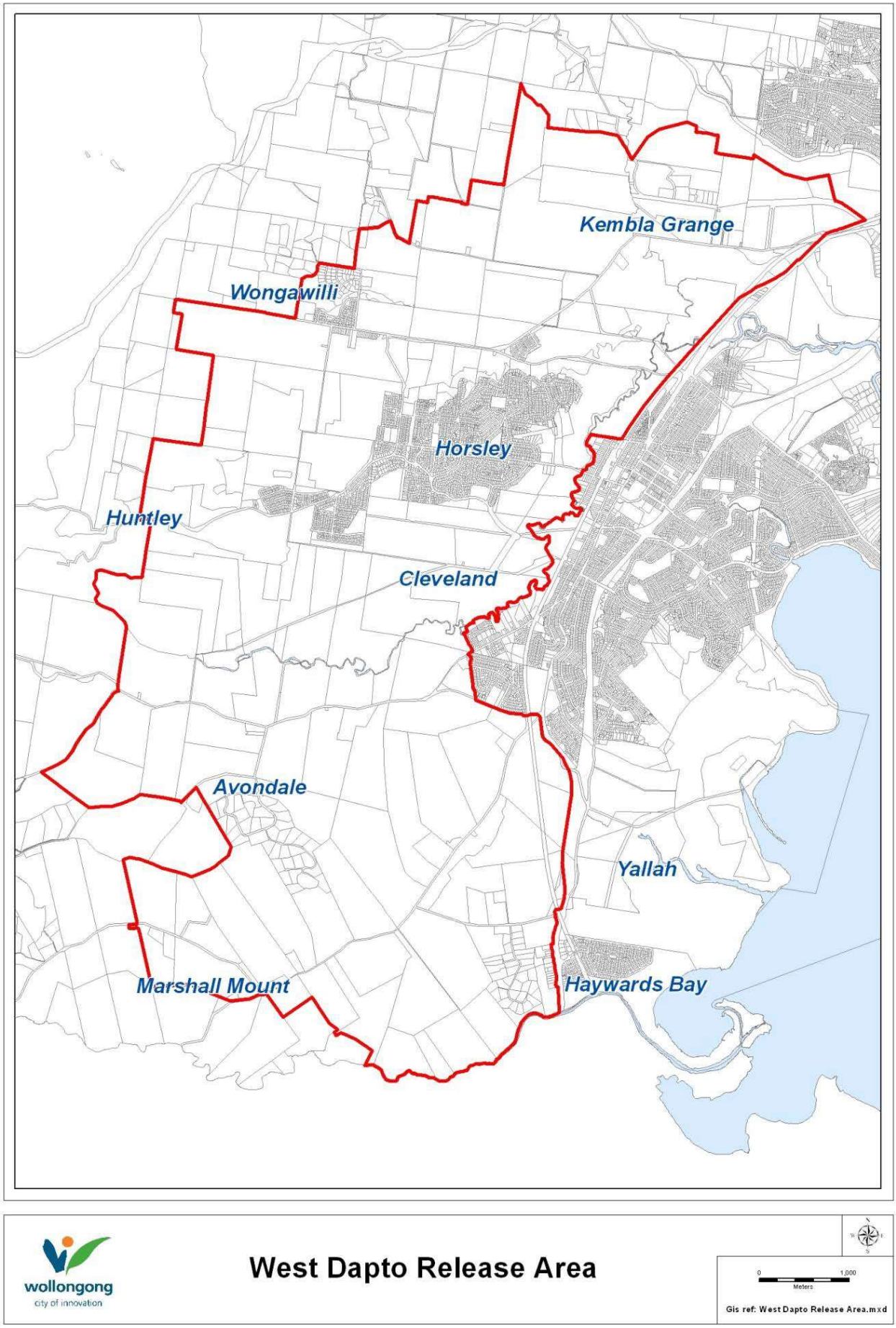

Figure 1. West Dapto Release Area

3 OBJECTIVES

The objectives of this chapter are to:

(a) enable the development of the West Dapto Urban Release Area for residential, employment, industrial and environmental conservation areas in a manner consistent with the Wollongong LEP 2009 the West Dapto Vision 2018 and the West Dapto Structure Plan (**Figure 2**).

(b) ensure development incorporates the principles of Ecologically Sustainable Development, promoting the retention and enhancement of the area's unique environmental features, to shape the desired future urban setting.

(c) support the provision of safe and efficient road networks that promotes long term sustainability and active transport, with public transport services linking surrounding areas.

(d) implement Water Sensitive Urban Design (WSUD) for effective water management and protect development in the area from flooding.

(e) recognise the existing environmental and landscape qualities of the release area and establish future urban characteristics to shape ongoing development.

(f) protect, conserve and enhance riparian and environmentally sensitive areas and only allow for development compatible with the conservation values of these areas.

(g) protect areas of high scenic value, notably the Illawarra Escarpment and Lake Illawarra with developments that contribute and promote the areas visual and aesthetic values.

(h) conserve and enhance the environmental, cultural and built heritage of West Dapto.

(i) guide the development of open space to meet future community needs and facilitate a network of open space connected by off road cycleways and shared paths throughout the release area.

(j) ensure that development in the Darkes Road, Bong Bong and Marshall Mount town centres contributes to the creation of retail, business, commercial and community hubs and provides significant local employment and community service opportunities.

(k) provide village centres with localised businesses and higher density residential opportunities at key places or intersections where bus stops, community facilities and open space come together as local urban focal points.

(l) ensure the community's social and cultural needs are met through the provision of a range of community facilities across the release area (co-located with other facilities in 'hubs', creating urban focal points).

(m) guide planning and development of well-located schools, childcare centres, and adult education facilities to support the community's educational needs.

(n) stimulate diversity in development types and styles to provide a range of different dwellings to increase housing choice and design quality in the Illawarra.

(o) ensure safe, secure, liveable, and resilient urban environments are established considering future climate and other potential environmental vulnerabilities.

(p) improve employment opportunities and economic growth in the Illawarra region whilst ensuring that commercial and industrial development is ecologically sustainable, energy efficient and of a high design standard.

4 STRUCTURE PLAN

The West Dapto Structure Plan (**Figure 2**) shows the land use setting which will house the future urban structure and guide the development of the release area.

It is characterised by a series of residential precincts estimated to generate around 19,500 dwellings. The precincts come together to form five distinct stages, separated by riparian corridors connecting through the release area from the Illawarra Escarpment framing the western extent to Lake Illawarra in the east. The release area will also integrate and protect heritage landscapes and items into the urban structure.

The West Dapto Structure Plan identifies:

- Town and village centres
- Conservation land
- Heritage items and potential curtilages
- Transition land (environmental constraints exist but may be appropriate for sympathetic developments)
- Development land
- Employment land
- Large open space facilities (neighbourhood parks 2-5 ha, and district parks 5-8 ha)
- Structural road network
- Creek lines and flood extents (1% AEP)

In the Wollongong LEP 2009, Stage 1–2, some of Stages 3 and 4, and all of Stage 5 of the release area are zoned for residential development (**Figure 3**). There is also 175 hectares of employment land zoned at Kembla Grange (**Figure 3**).

Stages 1 and 2

Stages 1 and 2 are located in the northern extent of the release area (**Figure 3**) and have a number of unique features, including:

- Potential development of around 6,700 dwellings.
- Employment land (industrial zones) located within close proximity to Unanderra light industrial area and well connected to Dapto Regional Centre along the Princes Highway, the Port of Port Kembla and the M1 Motorway.
- South of the employment lands will be home to Darkes Town Centre with approximately 7,500m2 of commercial/retail floor space providing for a range of shops and services as well as community facilities and active open space for community recreation.
- Protection and rehabilitation of riparian corridors and conservation areas (vegetation and heritage conservation depending on site features and opportunities) to improve water quality, recreational opportunities and connectivity of remnant vegetation along these structural spurs through the release area.
- Structural road network that will connect from outside the release area, through Stages 1 and 2 and into the southern reaches of the release area.
- Active transport facilities (cycleways and shared paths) connecting residential areas with open space provisions via riparian corridors and along the structural road network.
- Two village centres (Wongawilli and Jersey Farm) providing local convenience shops and urban focal points within the residential areas of Stage 2.
- Two primary schools, one located close to the Darkes Town Centre and one located in the Wongawilli and Jersey Farm Roads area to service the future residential families.
- Bong Bong Town Centre, at the southern extent of Stage 2 on the south side of Bong Bong Road will provide retail needs, local services and community facilities with employment opportunities in the local context. It will be the urban focal point supporting opportunity for denser housing products located convenient to public and active transport links.

Stage 5 or Yallah-Marshall Mount Precinct

The vision for the Yallah-Marshall Mount Precinct is to create a vibrant, compact, environmentally sustainable village atmosphere. The precinct will be centred around a compact, walkable village centre reflecting low carbon footprint principles. The Yallah-Marshall Mount precinct will utilise traditional urban design principles, with relatively high densities around the town centre and concentrated along the main access roads. The precinct will have a diverse range of housing types and densities.

The bulk of higher density development will be focussed around the proposed village centre, with opportunities for small lot housing along the main transport links through the precinct. The fringe areas will contain rural and rural-residential development. The aim is to have the new community focussed on transport links, rather than a 'blanket' of suburbia. The desire is to have a variety of housing types and styles to provide for a wide diversity in population, allow for increased "ageing in place" opportunities and make an interesting urban environment. The biodiversity corridors and Duck Creek will be significant attributes of the new community, with the escarpment as a visual backdrop.

Yallah-Marshall Mount precinct is characterised by:

- Potential development of around 4,000 new dwellings.
- Marshall Mount Town Centre comprising approximately 3,500m2 floor space in a traditional main street format providing retail shops, local convenience needs, local services, community facilities and the like.
- Connection of the precinct into Avondale and Cleveland, with access via an extension of Yallah Road (Road No. 8) as part of the overall West Dapto road network.
- Protection of significant vegetation and unique landscape features of the area.
- Utilisation of Duck Creek as a focal feature of the community.
- A primary school located near Marshall Mount Town Centre to meet the educational needs of the future residential families.

Stages 3 and 4

Stages 3 and 4 are located in the existing rural suburbs of Cleveland and Avondale, in the middle of the release area south of Horsley. They are well connected to the Dapto Regional Centre to the east via Fowlers Road into Cleveland Road. Part of Stage 3, and a small part of Stage 4 have been rezoned. Stages 3 and 4 will ultimately include:

- Potential development of approximately 8,800 new dwellings.
- Community facilities including a district level recreational centre and youth services facility.
- Two primary schools to meet the educational needs of future residential families.
- Three well connected village centres (Fowlers, Huntley and Avondale) that will provide local convenience shops and urban focal points within the residential areas.
- Unique Mullet Creek Catchment environmental features providing the riparian corridor spur supporting and defining the surrounding urban form.
- Structural road network that will connect from the southern extent of Stage 2 at Bong Bong Town Centre down to the southern extent of Stage 4 and into Stage 5 of the release area. There will also be road connections spanning from Dapto Regional Centre into the release area along the east, branching into the village centres supporting surrounding residential development.
- Active transport facilities (cycleways and shared paths) connecting residential areas with open space provisions via riparian corridors and along the structural road network.
- High school and primary school facilities for the future population of the stages. Ideally the school will be located near the Bong Bong Town Centre (in Stage 2 or 3) to create a relationship with the town centre and provide education services for the future children and youth population residing between Stages 1, 2 and 3 of the release area.

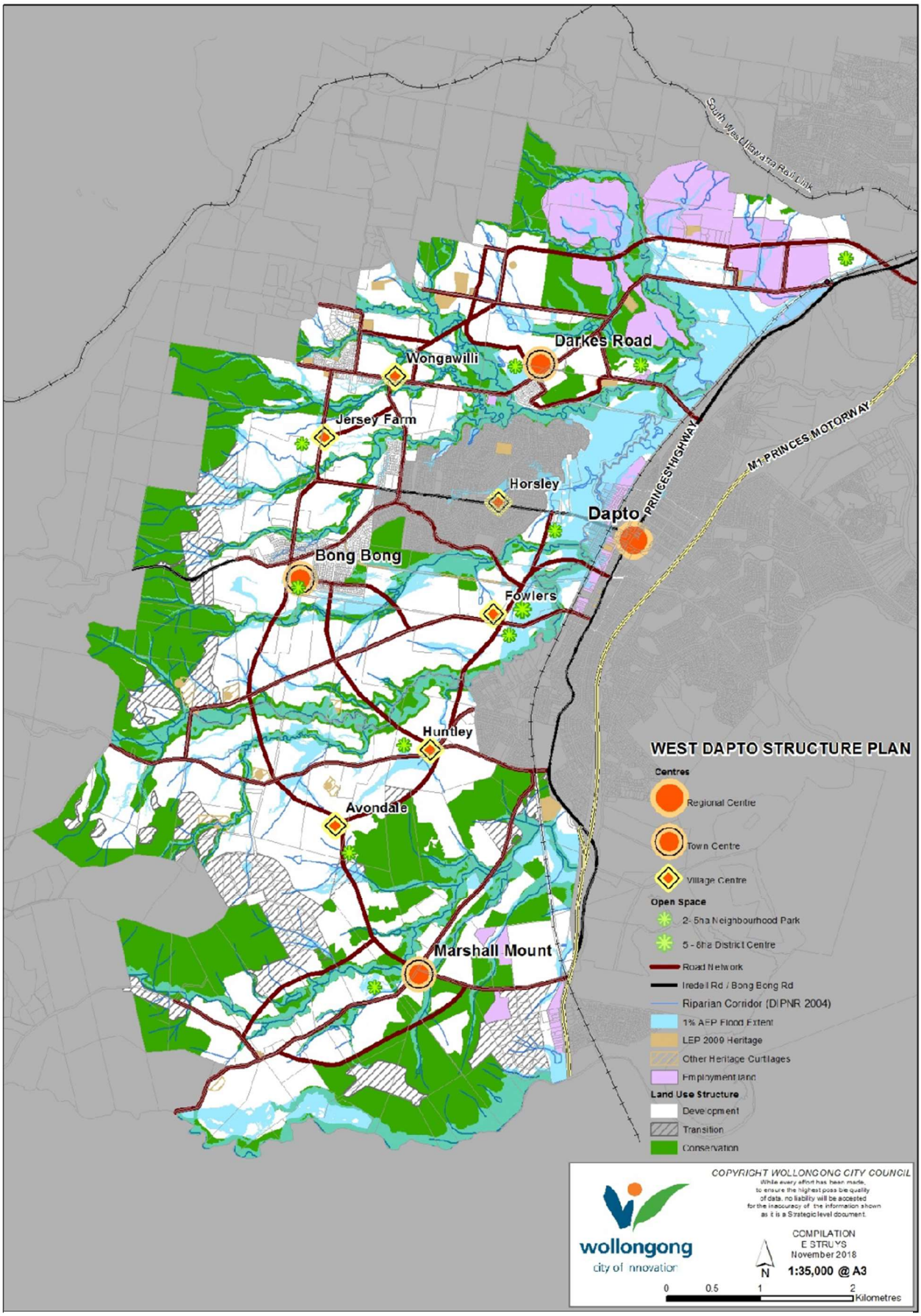

Figure 2. West Dapto Structure Plan 2018

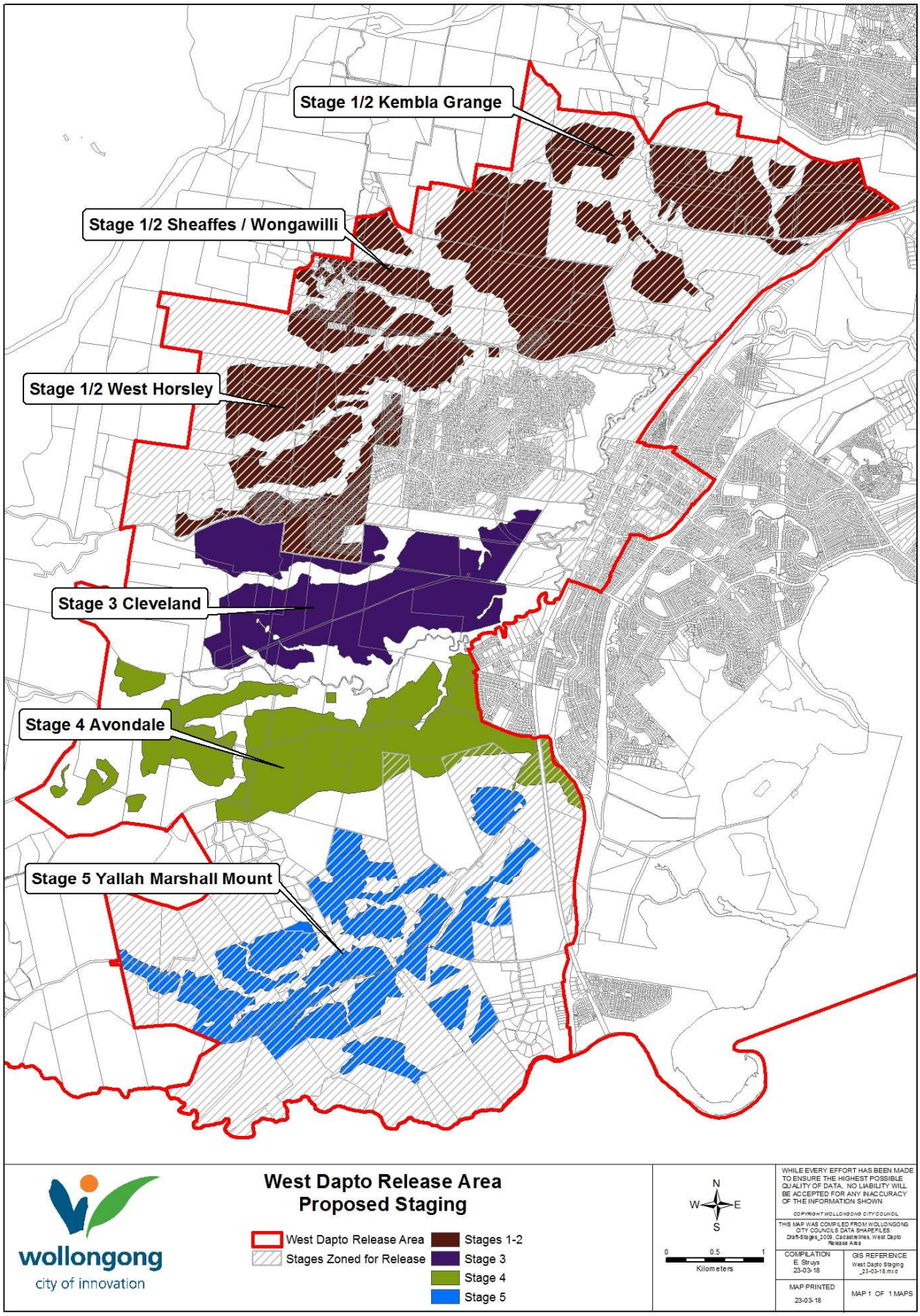

Figure 3. Stages of West Dapto Release Area

5 PLANNING PRINCIPLES

The West Dapto Planning Principles are intended to guide land use planning decision associated with the release area. They provide a statement of a desirable outcome for the development of the release areas and provide a basis of reasoning to support making planning decisions. Principles are important considerations when there may be more than one interpretation or contradictions between any qualitative requirements or development controls defined in other chapters of the DCP.

There are eight groups of principles originally outlined in the West Dapto Vision 2018. This chapter is structured in a similar way, building on principles with additional details. **Figure 4** outlines the key components and how they relate to Council's planning policies.

The groups of principles include:

- Transport
- Water management
- Conservation
- Open space
- Community facilities (and Education)
- Town centres
- Employment
- Housing

Figure 4. Principles and planning tools relationship

6 TRANSPORT

6.1 The Road Network

The future road network for West Dapto will be the backbone of the community, providing for all types of access and movement through the release area. The road network form and provision contribute significantly to achieving the vision of long-term sustainability.

An integrated transport system is proposed that caters for private cars, freight, public transport, pedestrians and cyclists. Road types have been developed based on a functional hierarchy, where the road designs support the transport modes in various ways. The road network has been developed to cater for future urban land uses and to deliver a safe, connected and legible transport framework that complements the natural environment and facilitates sustainable transport outcomes.

The Structure Plan (**Figure 2**) outlines the structural road network through the release area. The road network structure was modelled in TRACKS to understand the demand and supply requirements to service the release area. The modelling informed road typology requirements for the structural road network as shown in **Figure 5** and **Figure 6**. The road typology for the release area is informed by road hierarchy and cross sections which detail how the roads are configured for designs. Road hierarchy and cross sections are covered in DCP Chapter B2 Residential Subdivision.

In accordance with the following road network principles (specifically 2 and 3), the release area needs to be accessible in emergency situations. Flooding events present a specific challenge to urban development in a flood plain area and specific design response is needed provide safe and connected residential areas. **Figure** illustrates which structural roads or sections of road will be designed and constructed to provide 1% Annual Exceedance Probability (1% AEP) flood immunity.

Principle 1 - Supportive land use patterns

1.1 Plan higher residential densities and mixed land use in and adjacent to town and village centres and major public transport nodes, to reduce reliance on the private car and reduce overall road network requirements and costs.

1.2 Plan the co-location of compatible land uses to reduce private car reliance and reduce overall road network requirements and costs.

Principle 2 - A safe, connected and legible road network for all users

2.1 Provide a road network based on the modified grid layout to maximise accessibility and efficiency.

2.2 Implement a clear hierarchy of road types (see **DCP Chapter B2 Residential Subdivision**) that responds to relevant transport requirements and road function, creating a highly legible road network for all users (**Figure 5** Road typology and **Figure** Flood reliable roads).

2.3 Implement intersection designs appropriate to the road types (**Figure**), surrounding land uses and environments.

2.4 Ensure the West Dapto structural road network supports the town and village centres hierarchy.

2.5 Ensure the integrated road system, caters for all road users including private cars, freight, public transport (buses), pedestrians and cyclists.

2.6 Implement driveway access restrictions and manage on-road parking on the higher-order roads (access-denied roads) to improve traffic efficiency and pedestrian/cyclist safety and amenity.

2.7 Ensure built form controls on adjacent properties to roads deliver active frontages to maximise passive surveillance and personal safety in the road environment. For example, road layouts that include lanes, service roads and so on to ensure houses front the primary road.

2.8 Ensure roads and intersections are designed to meet requirements of the DCP Chapter B2: Residential Subdivision, AustRoads and Australian Standards.

Principle 3 - Design roads to complement the environment

3.1 Ensure roads fit with the landform (topography), complement local character and land use, and minimise visual, ecological and noise impacts.

3.2 Ensure road alignments take advantage of views and visual stimuli for the motorist to enhance legibility, sense of place and create a positive experience in movement.

3.3 Consider the role of road networks in structuring precincts, including both transport and community needs to maximise liveability and quality urban outcomes.

3.4 Incorporate Water Sensitive Urban Design (WSUD) into transport infrastructure design and consider options to increase permeability of hard surfaces.

Principle 4 - Quality infrastructure

4.1 Use robust and durable materials, quality finishes and ancillary infrastructure, with neat, uncomplicated designs that minimise maintenance requirements and discourage vandalism.

4.2 Consider innovative technologies in road and transport infrastructure design, construction, and operation.

Principle 5 - Road network to support sustainable transport outcomes

5.1 Staging of additional car based infrastructure to encourage public and active transport and maximise the use of existing infrastructure.

5.2 Use an established 15% transport mode shift target when planning for road network requirements within West Dapto, to encourage a shift towards reduced car dependence.

5.3 Ensure that roads are designed to provide a high level of safety, access and amenity for pedestrians, cyclists and public transport (bus services).

6.2 Bridge and culvert design

Bridges and culverts form important structural components supporting the road network as it traverses the flood plain landscape. While there are design limits and prefabrication conditions the infrastructure are built to, it is also important that design decisions on materials, placements, modification to standards and any other specifics take into account desired outcomes for the areas they are in and who they will cater to.

Principle 1 – Good design is context sensitive design

Design that is sensitive to context is valued by communities. Bridges and culverts that are functional and fit the landscape are good for community pride and local identity.

1.1 Consider the influence of locational context and functional requirements in the design process. For example, if the crossing is traversing land that is zoned E2 or E3 and there are known ecological communities or fauna groups recorded there, fauna crossings should be a design component and construction must be sensitive to these outcomes.

1.2 Bridge and culvert alignment should integrate with environmental features.

1.3 Construction over or within waterways should have regard to the Fish Passage Guidelines developed by NSW Fisheries.

1.4 Ensure storm immunity standards are met, and design and construction provides longevity and minimises maintenance requirements.

1.5 Design finishes and overall appearance should respond to and incorporate character of the area.

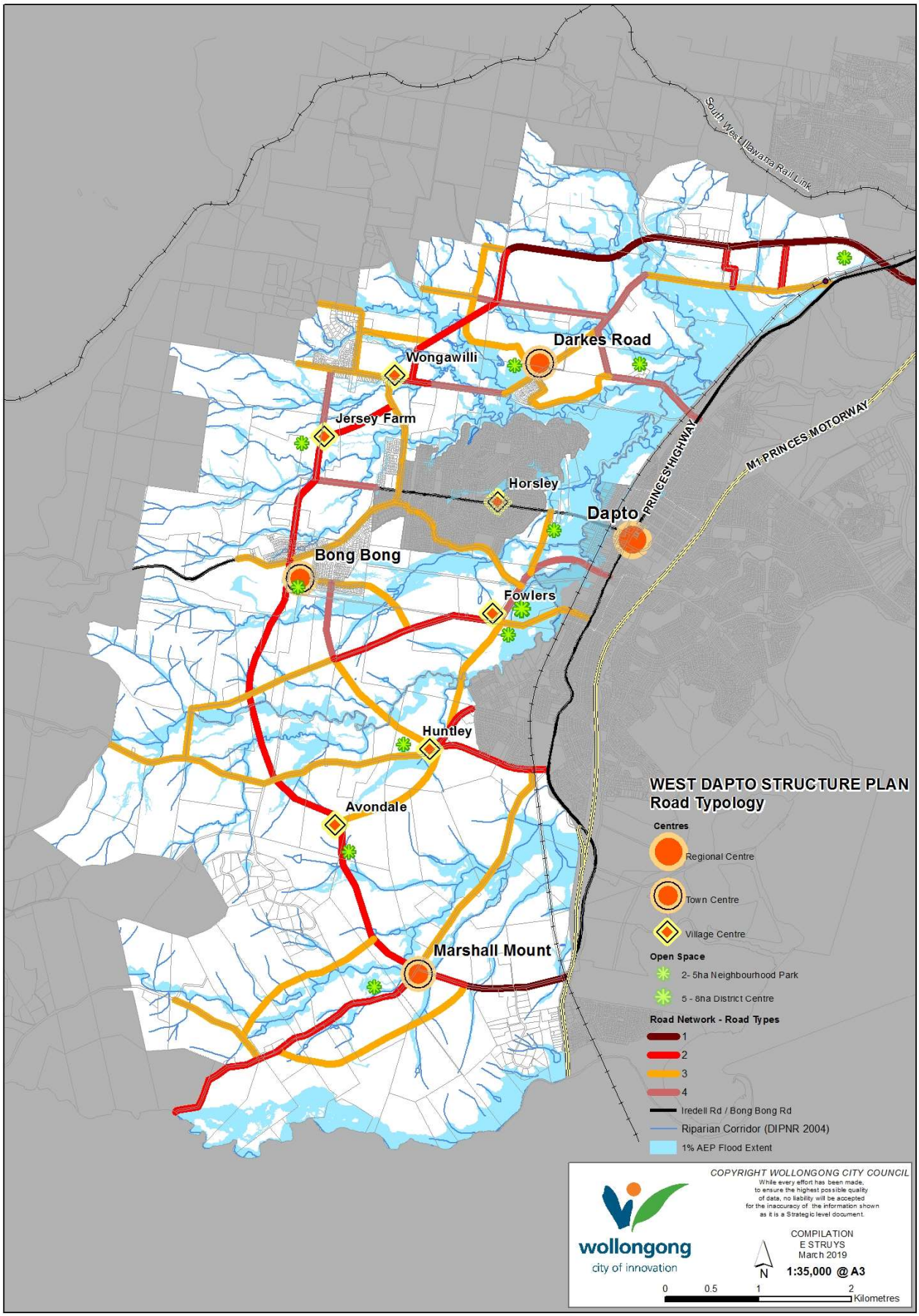

Figure 5. Road typology

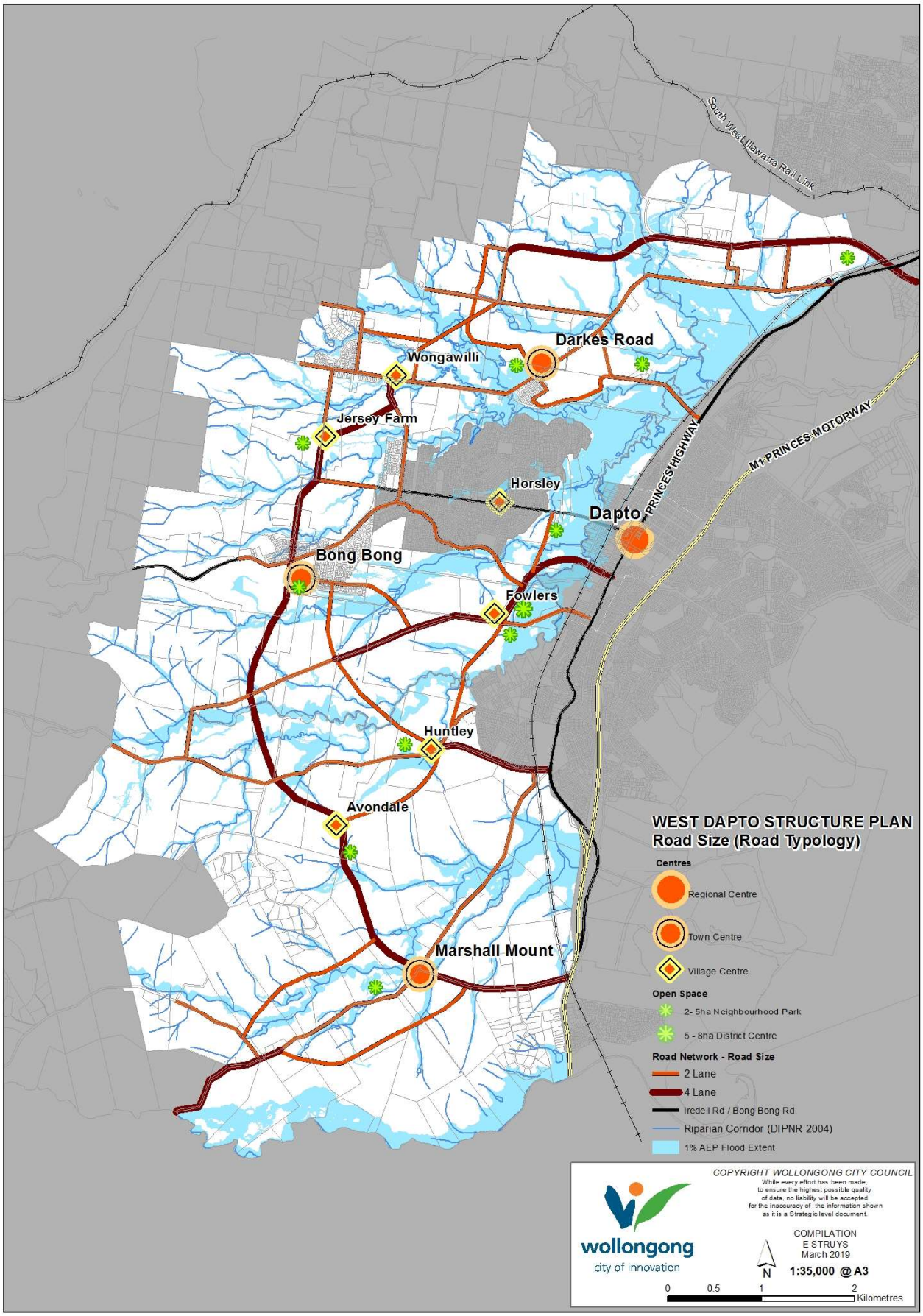

Figure 6. Road sizes

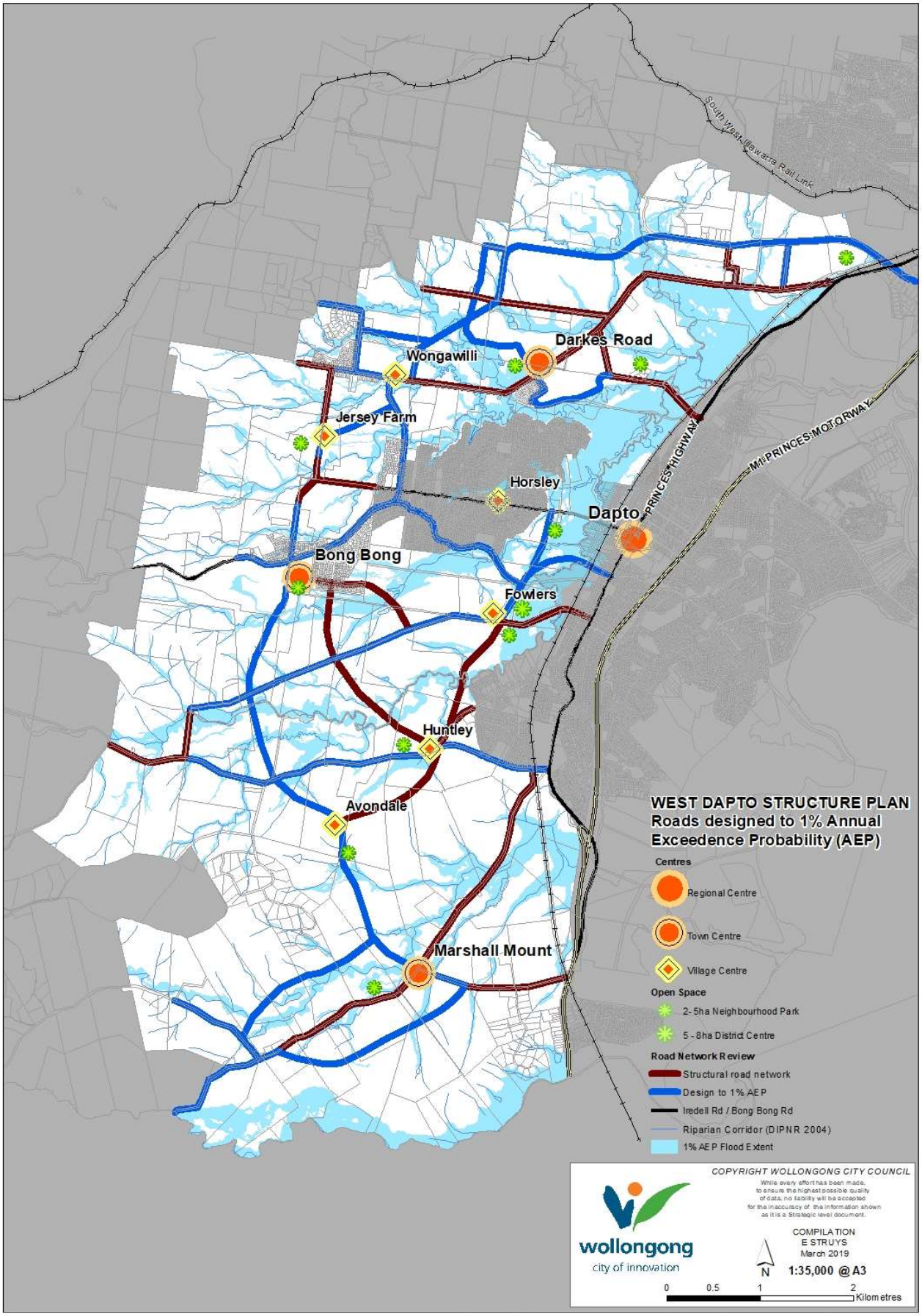

Figure 7. Flood reliable roads

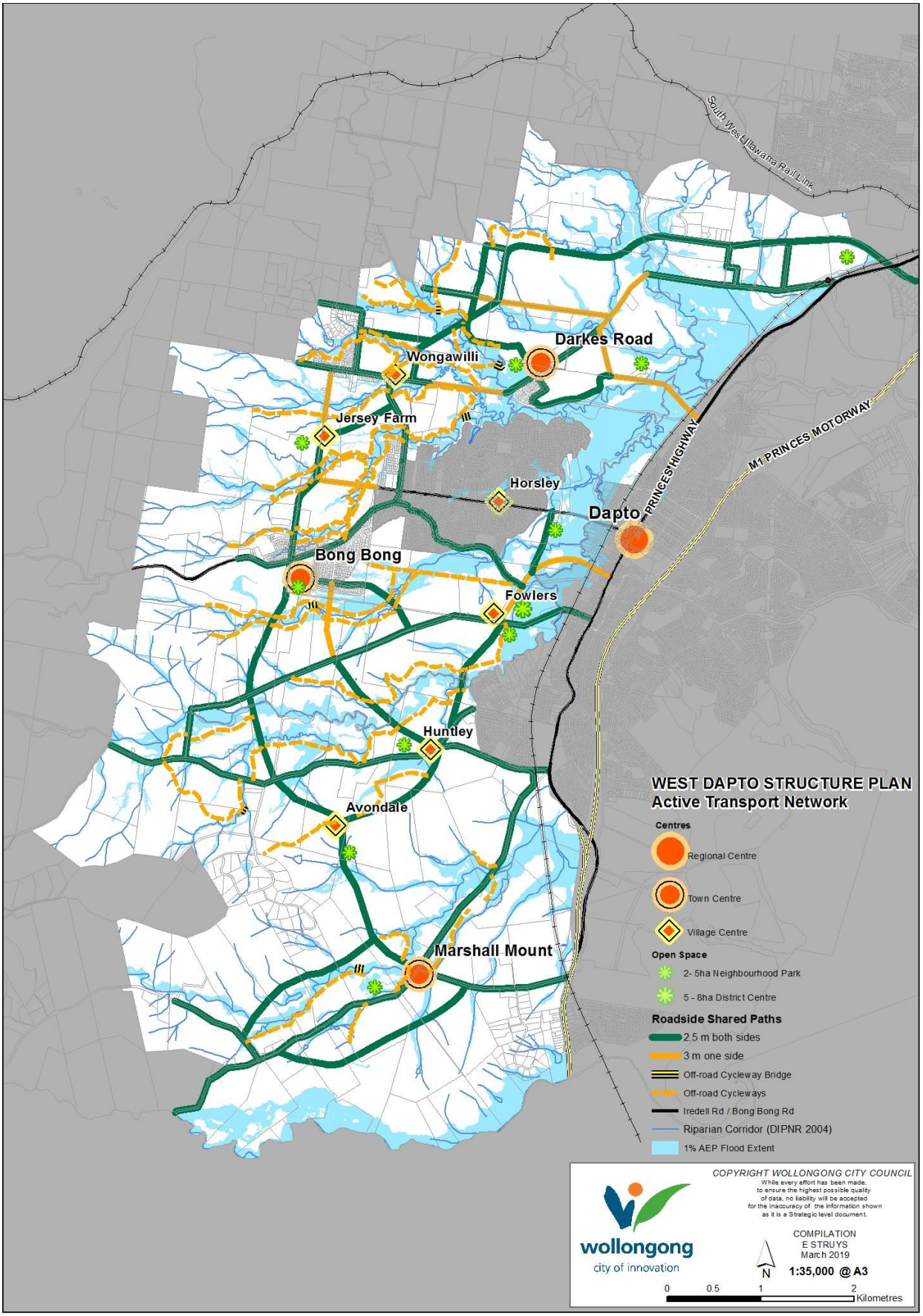

Figure 8. Active transport network

6.3 Active transport

Walking and cycling (referred to as Active Transport) will be an important component of the future West Dapto transport system, contributing significantly to achieving the vision of a sustainable community. The planning and design for West Dapto emphasises walkable communities which enables sustainable living. Walking is also an important factor in the success of public transport.

Active transport at the local level will deliver convenient and attractive travel options especially for short trips, which will not only assist in reducing the reliance on and impacts of private car use but will contribute to the health and resilience of the community.

The riparian corridors will be structural open space areas, to convey water and connect ecology, to promote walking and cycling with a series of pathway systems clearly linking key destinations such as schools from residential areas to promote walkability.

The Active Transport Network (**Figure 8**) identifies off-road cycleways, and active travel links on shared paths as part of the road network, connecting neighbourhoods and residential areas to parks and town centres (road cross sections include roads with shared paths as outlined in DCP Chapter B2 Residential Subdivision). Shared paths and cycleways should be located outside of core riparian areas, with selected cycleway bridges spanning riparian core land connecting key destinations through an open space network.

Principle 1 – Supportive land use patterns

1.1 Plan residential land uses close to town and village centres and major public transport nodes with higher residential densities adjacent to these locations to maximise walking and cycling catchments

1.2 Promote shared parking across uses in town and village centres to encourage walking when undertaking multiple activities in these centres. Avoiding fragmented parking will also improve utilisation of spaces and improve walkability through more compact town centre layouts and fewer driveway crossings.

Principle 2 – Connected, functional pedestrian and cycle network

2.1 Provide a convenient and legible movement network for pedestrians (including people living with disabilities) and cyclists, ensuring excellent connectivity and directness between residences and attractors such as schools, shops, public transport nodes, sports ovals, and employment centres.

2.2 Include footpaths or shared paths on all roads in the road types hierarchy except laneways and minor access streets (refer to Road Network Principles and DCP Chapter B2: Residential Subdivision).

2.3 Take advantage of easements, riparian areas and open space areas to create convenient pedestrian and cycle links (or “short-cuts”) that maximise accessibility between different precincts and land uses.

2.4 Implement a wayfinding strategy to provide clear and coordinated information for access to facilities and services within the West Dapto Release Area and surrounding areas.

2.5 Provide safe and secure bicycle parking or storage facilities at key destinations in town and village centres, sports ovals, community facilities, transport interchanges and key open space areas.

2.6 Include bicycle parking and end-of-trip facilities as part of the development of employment, business and commercial sites, particularly in town and village centres.

2.7 Ensure that the West Dapto cycleway network integrates with the wider surrounding regional cycle routes.

Principle 3 – Attractive and safe environment

3.1 Design streets to provide a high level of pedestrian and cyclist amenity and safety, creating public space where people want to be.

3.2 Provide convenient and safe road crossing points, traffic calming (where appropriate) and tree planting to enhance the pedestrian and cycle environment.

3.3 In high pedestrian demand areas such as town and village centres, further increase pedestrian amenity and safety through path widening, driveway access controls and other site-specific actions to improve pedestrian priority.

3.4 Incorporate Crime Prevention Through Environmental Design (CPTED) principles in the planning of walking and cycling facilities.

3.5 Consider innovative technologies for lighting key off-road paths, including solar lighting and luminescent pathway materials, etc.

3.6 Construct pedestrian and cycle infrastructure according to AustRoads and Australian Standards, with attractive and durable materials and well-designed landscaping treatments.

3.7 Incorporate supporting infrastructure such as seats, bike rails, shade structures, bubblers and viewing or rest areas into the active transport network where appropriate.

As part of Council's commitment to the transport principles and active transport outcomes, additional initiatives will be explored that will help promote and encourage the take up of active transport in our community.

6.4 Public transport

The establishment of efficient and attractive public transport options for West Dapto is imperative to achieve sustainable growth outcomes. West Dapto Urban Release Area presents an opportunity to promote 'best practice' in public transport and non-motorised modes, reducing reliance on the private car, contributing to a mode shift target and creating a more resilient, interesting and liveable community.

These high level principles inform and guide public transport planning for the new growth area, to ultimately ensure that the vision for sustainable transport in West Dapto is achieved. This will also require partnerships beyond council, with public transport providers and Transport for NSW.

Neighbourhood Plans and development applications must demonstrate they have planned to facilitate public transport by responding to these principles at each level of development planning.

Principle 1 – Accessible public transport

1.1 Major public transport nodes located in town and village centres where the greater residential densities and employment opportunities are centred.

1.2 Ensure that major generators of travel are well serviced by public transport.

1.3 Promote co-location of different destination assets around public transport nodes and in centres, to enable multiple trip purposes.

Principle 2 – Effective bus network, service provision and integration

2.1 Provide coordinated, frequent and reliable bus services to destinations within and surrounding West Dapto.

2.2 Create an efficient, seamless travel experience through integrated ticketing, minimising transfer times, and intuitive and easily accessible service information.

2.3 Ensure street networks are interconnected and allow permeability for buses.

2.4 Ensure the bus network is highly accessible and services the majority of residences (with bus stops every 400m, see DCP B2 Residential Subdivision), town and village centres, employment areas, sporting facilities and Dapto Station.

2.5 Incorporate bus priority measures as necessary to ensure highly efficient, prioritised bus transport.

Principle 3 – Quality infrastructure

3.1 Provide comfortable, attractive, safe, and secure buses and bus related infrastructure with clear timetable and service information which cater for all users including people living with a disability and the elderly.

3.2 Ensure pedestrian and cycle links to bus stops are of a high standard (refer also to Active Transport Principles).

3.3 Encourage the use of innovative and efficient public transport technology.

7 WATER MANAGEMENT

This section outlines the guiding principles, objectives, outcomes and development controls relating to Water Management across the West Dapto Release Area.

The approach behind 'water management' is to consider both floodplain and stormwater principles in an integrated way to achieve a better overall 'water management' strategy for the West Dapto Urban Release Area.

West Dapto is bisected by a series of watercourses that form part of the Mullet Creek and Duck Creek catchments. During heavy rain they can experience intense floods of short duration (rapid rise and fall of the creek levels). The residential areas of West Dapto will be designed to be above the 1% Annual Exceedance Probability (1% AEP) flood level and include provisions to protect future residents against flood risk.

Principle 1 - Integrate floodplain and stormwater management into the urban development process.

Objectives

- Adopt a water management approach by integrating floodplain and stormwater management, which meets the needs for hydraulic capacity, managing floods and maintaining water quality.
- Develop an overall 'water management' strategy for the urban release area by integrating both stormwater and floodplain management strategies, to guide progressive development within West Dapto without causing adverse impacts to downstream areas by way of flooding or reduction in water quality.
- Manage stormwater runoff such that flood damage and adverse effects on both development and the natural environment is minimised.

Outcomes

- The creation of a water management strategy for West Dapto with consideration of but not limited to existing and new urban development, flooding, stormwater runoff, minimising impact of flooding and stormwater, water sensitive urban design, the environment, and water quality in receiving waters including Lake Illawarra.
- The successful implementation of a water management strategy for West Dapto.

Principle 2 - Improve the management of water quantity relating to urban development inclusive of stormwater, wastewater, water supply and recycled water.

Objectives

- Maintain or minimise changes to natural hydrology of catchments which drain to waterways or neighbouring catchments.
- Manage stormwater runoff using a combination of at-source and regional systems rather than a single scale system where possible.
- Minimise stormwater runoff volumes.
- Incorporate Water Sensitive Urban Design principles in managing stormwater quantity.
- Mitigate potential stormwater impacts from future urban development.
- Reduce the probability and impact of downstream flooding to a level acceptable to the community.
- Manage stormwater discharge in a manner that minimises impacts on downstream receiving waters.
- Ensure that stormwater runoff is treated as a valuable resource and that its use for non-potable purposes is encouraged.
- Encourage stormwater reuse and harvesting.
- Reduce potable water consumption.

Outcomes

- Any retention/detention basins, if required, are strategically located within the neighbourhood, precinct and/or regional scale to attenuate flows to pre-development conditions for events between the 1 year and 100-year storm events.

- Developments which use re-use water, infiltration, retention and/or detention strategies to limit the increase in runoff volume.
- Limiting the increase in stormwater runoff volume from urban development through the use of water sensitive urban design measures.
- Minimised impervious areas to 60% on individual lots to promote infiltration and reduce peak flows downstream.
- Grassed swales incorporated at the subdivision scale to promote infiltration and reduce peak flows downstream.
- Rainwater tanks utilised on a large scale on individual lots for house and garden reuse to reduce runoff volume and reliance on potable water supplies.
- The use of buffers such as landscaping, detention and retention structures between impervious surfaces and receiving waters.
- The use of landscaped features to direct runoff from impervious areas into vegetated areas.

Principle 3 – Develop the floodplain and surrounding areas in a sustainable way.

Objectives

- Develop strategies that will cater for progressive urban development within West Dapto without causing adverse impacts to downstream areas by way of flooding, increase in flow rates or reduction in water quality.
- Identify the extent of the floodplain based on post development flooding scenarios to enable key planning for sustainable urban development.
- Prevent the intensification of the use of floodways, watercourses and overland flow paths for residential/commercial/industrial development use.
- Design development layouts with consideration to the existing floodplain and natural landform.
- Promote multifunctional and appropriate land use of the floodplain.
- Address the potential impacts of climate change.
- Increase the public awareness of flooding within the West Dapto Urban Release Area and the existing urban catchment of Dapto.
- Ensure that flood fringe areas are sustainably managed.

Outcomes

- Urban developments in the release area are resilient to flooding in both the short and long term.
- Residential developable areas that are located outside of the 1% AEP flood extents and elevated using a freeboard of 500mm plus a predetermined climate change factor, based on a detailed catchment wide flood investigation for the post development (ultimate) flooding scenario.
- Urban developments are designed with minimal disturbance to the natural land form.
- Recreational open space areas which are located adjacent to riparian areas and/or within the natural floodplain storage areas.
- Development which has been controlled by specific guidelines to ensure sustainable development in the floodplain.
- Increased public awareness of the hazard and extent of land affected by all potential floods, including floods greater than the 1% AEP event and to ensure essential services and land uses are planned appropriately in recognition of all potential floods.
- No adverse impacts to downstream areas from either flooding or reduction in water quality.

Principle 4 - Preserve the natural function of the floodplain, natural waterways and riparian corridors.

Objectives

- Ensure that the natural function of the floodplain to convey and store floodwaters during flood events is preserved and enhanced where possible along with any associated flood dependant ecosystem.
- Prevent any filling and/or development within high flood risk areas.

- Ensure no net increase in fill within the floodplain.
- Protect key creeks and riparian corridors from degradation and improve their environmental function where possible.
- Ensure that rehabilitation of key riparian corridors is consistent with the adopted 'water management' strategy for West Dapto and the DCP Chapter E23 Riparian Land Management.

Outcomes

- All residential, commercial and industrial development is located outside of the identified flood conveyance and flood storage areas.
- The revegetation of riparian corridors does not increase flood risk to the existing surrounding urban areas.
- Natural drainage paths and infiltration basins utilised as much as possible.
- Revegetation of key riparian areas is undertaken in accordance with the Riparian land management chapter in the Wollongong DCP.
- Waterways are protected by providing a vegetation buffer to urban development.
- Potential increase in developable land within the shallow floodplain (< 0.5m depth in a 1% AEP event and of low hydraulic hazard) by way of implementing a local cut/fill strategy only where compliance with all relevant floodplain management controls can be demonstrated.
- The natural functions of flood dependant ecosystems are preserved where possible.

Principle 5 - Protect people and property from flooding in a strategic way.

Objectives

- Minimise the risk to human life and property damage caused by flooding through appropriately locating urban development.
- Ensure flood risk and flood impacts to both existing and future development within West Dapto and surrounding catchment areas are minimised.
- Minimise the risk to human life by ensuring the provision of safe vehicular access and egress for residents and emergency services in times of flood.
- Develop practical floodplain and stormwater management solutions for future urban development and associated infrastructure within West Dapto.
- Locate residential urban development areas outside of the 1% AEP flood extents and elevate using a freeboard of 500mm plus a predetermined climate change factor, based on the post development (ultimate) flooding scenario.
- Design specific roads within the urban release area to achieve a 1% AEP flood event immunity including a pre-determined climate change factor or greater flood event.
- Ensure new development does not increase the flood risk to existing development areas.

Outcomes

- Specific guidelines which have been created to locate development within West Dapto without putting people and property at flood risk.
- Residential developable areas that are located outside of the 1% AEP flood extents and elevated using a freeboard of 500mm plus a predetermined climate change factor, based on a detailed catchment wide flood investigation for the post development (ultimate) flooding scenario.
- Floor levels for all residential habitable buildings are set at or above the post development flood planning level corresponding to the 1% AEP flood level plus 0.5m freeboard plus a pre-determined climate change factor.
- Specific roads (shown in **Figure**) are designed to connect urban development and provide safe vehicular flood access to higher ground in times of flood up to and including the 1% AEP event plus a pre-determined climate change factor, or where feasible the Probable Maximum Flood (PMF) event.
- Identification of potential flood risks to people and property in West Dapto through the undertaking of a detailed Floodplain Risk Management Study.

- Sheltered refuge areas are incorporated into building designs, with the floor level of the refuge set above the PMF where applicable to protect occupants from extreme floods.

Principle 6 - Protect water quality of surface and groundwater from urban development and avoid any adverse effects on water quality to downstream watercourses and Lake Illawarra.

Objectives

- Enhance the long-term environmental protection of the receiving waters and Lake Illawarra.
- Manage stormwater quality using a combination of at-source and regional systems, rather than single scale systems where possible.
- Incorporate best practice Water Sensitive Urban Design (WSUD) and proven innovative solutions to ensure there is no adverse impact on water quality discharging from the site or to natural streams.
- Utilise higher stormwater quality targets through best practice stormwater treatment systems, as proposed by the stormwater risk management framework being developed for the Lake Illawarra catchment.
- Prioritise stormwater quality management strategies to meet load reduction targets for nitrogen, the limiting nutrient for water quality issues in the receiving waters.
- Manage stormwater in accordance with the Lake Illawarra Coastal Management Program.

Outcomes

- The use of appropriate WSUD measures both at the source of subdivision runoff and at a regional scale to minimise the water quality impacts downstream.
- The use of a treatment train approach including systems such as bio-retention, swales, wetlands and raingardens which exceed current stormwater quality targets.
- No reduction in water quality in Lake Illawarra related to stormwater arriving from the release area.
- A water quality monitoring system that monitors the effectiveness of stormwater treatment systems within the urban release area, the quality of water entering receiving waters and agreed systems and processes for addressing any inadequate water quality issues.
- Stormwater quality reduction targets are verified through focussed monitoring, evaluation, and reporting activities.
- The flood risk to existing development is not increased.

Principle 7 - Integrate stormwater management into the natural and urban land form in an unobtrusive way.

Objectives

- Manage the flow of stormwater from the urban release area using both natural and artificial drainage networks to a formal point of discharge.
- Integrate Water Sensitive Urban Design (WSUD) into roads, landscape, and open space only where practical to collect and treat runoff prior to discharge into receiving waters and Lake Illawarra.
- Identify, manage and enhance the function of existing watercourses and natural trunk drainage paths where possible.
- Make provision in the Neighbourhood Planning phase of the urban release area for adequate proportion of land that serves stormwater management functions.
- Minimise the use of ‘hard engineered’ stormwater infrastructure. If this type of infrastructure is necessary, avoid locating ‘hard engineering’ stormwater infrastructure within existing vegetation or riparian corridors where possible.
- Ensure stormwater systems are safely integrated with parks, conservation areas and riparian buffers in a visually appealing way to achieve quality environmental and social outcomes.
- Promote the community acceptance of places which integrate stormwater systems with the environment.

Outcomes

- A network of interconnected multi-functional drainage corridors within West Dapto which act as watercourses, floodways, flora and fauna habitat and water quality treatment areas.

- Stormwater treatment systems which are integrated within public open spaces and streetscapes to enhance visual and public amenity.
- Online stormwater basins only where environmental impacts are minimised, and development benefits maximised.
- Artificial drainage infrastructure which has been designed and landscaped to mimic natural ponds and waterways, and also provides public amenity.
- Places which are safe, visually appealing and encourage active and passive uses by the community.
- Places that provide access to and awareness of the total stormwater system for the community.
- Native vegetation used within stormwater management infrastructure.
- Road corridors located above the 1% Annual Exceedance Probability (AEP) which have incorporated WSUD measures.

Principle 8 - Provide efficient and sustainable stormwater infrastructure for the urban release area.

Objectives

- Develop regional stormwater management solutions in combination with at-source based systems where possible.
- Ensure that the stormwater infrastructure is practical, cost effective and maintainable, with preference given to options achieving the maximum benefit-cost ratio over their lifecycle.
- Ensure stormwater infrastructure is designed to remain viable for the long term and under the widest range of probable climate futures.
- Ensure that lifetime maintenance costs are factored into decision making processes and strategies are in place to ensure adequate maintenance over the life of the system.
- Incorporate best practice stormwater management principles and strategies in developments, including monitoring regimes that can demonstrate the effectiveness of the system.
- Discourage interim stormwater management solutions unless it can be replaced with an ultimate strategic solution.
- Ensure that stormwater management systems applied within West Dapto achieve aesthetic, recreational, environmental and economic benefits and avoid introducing social risks;
- Achieve a uniform standard of stormwater drainage design for all urban developments.
- Increase public convenience and public safety as well as protection of property.
- Ensure stormwater infrastructure is designed with consideration to blockage and maintenance access.

Outcomes

- The overall number of stormwater systems is tailored for the neighbourhood and regional zones to detain or retain as much of the catchment runoff as possible.
- Infrastructure such as swales, basins, wetlands and gross pollutant traps which have been designed with consideration to maximum functionality and longevity, minimal construction and ongoing maintenance costs, infrequent maintenance periods and low potential for attracting mosquitos and algal blooms.
- Stormwater infrastructure such as trunk drainage and basins that are designed to fit within the existing topography, with minimal impact upon the environment.
- Reduced capital costs due to implementation of soft engineering treatments.
- Installation of stormwater infrastructure which has been designed with consideration to climate change in a practical, sustainable and cost-effective manner.
- Stormwater infrastructure designed and constructed with consideration to the ultimate strategic stormwater plan for West Dapto.

Principle 9 - Preserve the natural environment and enhance where possible in keeping with stormwater quantity and quality management objectives and targets.

Objectives

- Protect and enhance the habitat value of the surrounding environment and downstream waterways, by controlling water quality and water quantity.
- Improve key riparian corridors and ensure the ecological values of the creek systems are enhanced without flooding impact on existing development.
- Protect and enhance where possible natural watercourses, riparian corridors and wetlands.
- Minimise the disturbance to the natural landform and existing vegetation.
- Reduce the impacts typically associated with urbanisation on receiving waterways and wetlands, including a reduction in streamflow erosion potential.
- Adopt the treatment of all watercourse corridors including widths according to the Riparian land management chapter in the Wollongong DCP.
- Maintain riparian connectivity of key category 1 watercourses by using piered deck structures where road crossings are proposed.
- Minimise the number of road crossings across category 2 watercourses to preserve riparian connectivity.
- Minimise the edge effects at the riparian corridor/urban interface by providing a suitable riparian corridor width and integrated transition at the urban and riparian interface (for example, perimeter roads with houses fronting, gentle batters if needed, otherwise avoid batters and retaining walls).
- Protect and rehabilitate existing waterways into 'living' waterways.
- Enhance urban areas by applying Councils 'Urban Greening Strategy'.
- Enhance the appeal of the natural environment to the community by introducing adjacent open spaces.

Outcomes

- Key watercourses within development neighbourhoods which have been enhanced with natural bed stability and sympathetic re-vegetation to minimise erosion and promote habitat without causing adverse impacts to surrounding urban development in times of flood.
- Watercourses protected by providing a buffer of natural vegetation to urban development.
- Urban development which has minimal disturbance to soils and vegetation by maintaining the natural landform.
- Waterways that are rehabilitated and provide fish habitat, pools and riffles and adequate riparian buffers in line with best practice.
- Appropriate monitoring systems in place to demonstrate the habitat value of downstream waterways is being protected including agreed systems and processes to manage stormwater quality and/or quantity if the habitat values are shown not to be protected.
- Community open space areas located adjacent to riparian buffers that provide a natural visual backdrop.
- Clear connectivity between riparian corridors, residential areas and roads by avoiding steep batters and retaining walls or opaque fences.
- Community access to selected waterways.

Principle 10 - Promote liveability and amenity for the community by using water in all environments.

Objectives

- Promote the community acceptance of places which integrate stormwater systems with the environment.
- Protect and rehabilitate existing waterways into 'living' waterways.
- Locate communal open space adjacent to natural and artificial waterways.

Outcomes

- Places which are safe, visually appealing and encourage active passive use by the community.
- Places that provide access to and awareness of the total stormwater system for the community.
- Waterways that are rehabilitated and provide fish habitat, pools and riffles and adequate riparian buffers. in line with best practice.
- Safe community access to selected waterways.

Other General requirements

1. A water cycle management report is to be submitted with development applications for subdivision in accordance with the currently adopted Water Cycle Management Study and Floodplain Risk Management Study and Plan for the urban release area. The report must address water cycle management, water quality management, watercourse and corridor management, conservation and rehabilitation of aquatic habitat, and floodplain management.
2. Land that remains below the 1% AEP flood level for the post development flooding scenario as approved by the consent authority is not suitable for residential development. The post development flooding scenario refers to the ultimate development scenario inclusive of a fully developed catchment across the urban release area, riparian corridor enhancement and floodplain management works (e.g. basins).
3. Subdivision of land is not to create any additional flood affected residential allotments. A flood affected allotment is defined as being wholly or partly below the Flood Planning Level (FPL) (i.e. the 1% AEP flood level plus a freeboard of 500mm) or the Probable Maximum Flood (PMF) – whichever is the greater.
4. There is to be no net increase in fill within the floodplain.
5. There is to be no filling or development located within the high flood risk areas.
6. Compensatory excavation may be used to offset fill; however, the compensatory excavation must be taken from an adjacent area of similar flood function that is lower in the floodplain (i.e. at a lower AEP inundation extent) than the proposed fill areas. Cut and fill drawings and volume calculations must be supplied to Council.
7. Filling of individual sites within the floodplain in isolation without consideration of the cumulative effects is not permitted unless the floodplain risk management plan (FRMP) for the catchment has been adopted which allows filling to occur. Where no FRMP is applicable, any proposal to fill a site must be accompanied by an analysis of the effect on flood levels of similar filling of developable sites in the area.
8. Any development and/or filling proposed within the floodplain shall be commensurate with the land use, flood risk, flood hazard and hydraulic category.
9. Enhanced riparian corridors cannot be used to offset any floodplain storage in the flood modelling.
10. The minimum habitable floor level of buildings to be set at the post development flood planning level (FPL) - (i.e. the 1% AEP flood level based on the post development flooding scenario plus a freeboard of 500mm plus a predetermined climate change factor). *Note: the allowance for climate change is determined from the current and relevant Flood Risk Management Study and Plan.*
11. Subdivisions are to be designed according to Water Sensitive Urban Design principles. Development applications are to include a detailed statement indicating how the proposed design complies with these principles. Refer to Chapter E15: Water Sensitive Urban Design.

12. Detention basins created offline to watercourses are required as necessary where peak flows are predicted to increase. Consideration will be given to proposals for larger basins that serve multiple precincts and sub-catchments or other innovative design. The location of basins needs to be agreed to by adjoining land owners as part the Neighbourhood Plan. Where a basin is on an adjoining property, owner's consent and the creation of an easement is required.

13. Developments shall be demonstrated to have reliable access in a 1% AEP event to Council's designated flood reliable roads within the West Dapto Release Area.

14. Development Proposals shall consider flood events larger than the 1% AEP event.

15. The Lake Illawarra Risk Based Framework water quality targets shall be used as a minimum for all water quality modelling. Note: This general requirement is subject to the outcome of the Office of Environment and Heritage (now Department of Planning, Industry and Environment) Project: *Applying the OEH / EPA Risk Based Framework in the Lake Illawarra Catchment.*

16. Refer to Chapter E13: Floodplain Management and Chapter E14: Stormwater Management and Chapter E15: Water Sensitive Urban Design for additional controls relating to floodplain and stormwater management.

8 CONSERVATION PRINCIPLES

8.1 Environment conservation

In adopting the concept of ecologically sustainable development (ESD, see DCP Chapter A2), regionally significant releases, such as the West Dapto Urban Release Area, present opportunities to preserve remanent vegetation and enhance its ecological connectivity (structural and functional). This section identifies the strategic environmental priorities to guide planning and development of the West Dapto Release Area integrating conservation priorities with opportunity for a future West Dapto Biodiversity Conservation Strategy (BCS) and Biodiversity Conservation Strategy Structure Plan (BCSSP).

A BCS provides opportunity for Council to achieve biodiversity certification (bio certification) in a coordinated approach for the whole release area, improving the overall conservation outcomes beyond what would be achievable developing site by site. Council will continue to work closely with the NSW Department of Planning, Industry and Environment and the Environment, Energy and Science Group to achieve this strategic outcome. The principles should also be used to guide site by site considerations.

Principle 1: Prioritise areas that offer high environmental value for conservation

Consider information that identifies areas of threatened ecological communities or stands of habitat greater than 4ha (considered to present high environmental value in terms of habitat size and area) and avoid impacts as a result of land use changes to these areas.

Principle 2: Connectivity of habitat areas

Connecting patches of habitat that have high biodiversity value will provide opportunity for ecological migration over time as well as opportunity for improvement to habitat quality and values. These are more commonly known as biodiversity corridors providing strategic connection of larger and better condition patches of vegetation either by re-establishing continuous native vegetation cover in one or more stratums over an alignment or designing stepping stones of habitat that traverse local corridors recognised in planning instruments and studies.

Principle 3: Protect Environmental Values

Community values of environmental function in a landscape are aided by planning and providing complementary land uses alongside conservation sites to assist in improving and protecting the ecological function of the site and enhancing its resilience.

Secure areas that present high environmental value as areas for conservation and long term management (ideally through a bio certification process).

Main development interfaces with the escarpment on the western edge of the release area are considered environmentally sensitive and zones reflect E2 Environmental Conservation. Environmental Conservation land will form a transitional development edge with lower densities of development adjacent to these areas. Increased opportunity for planting will be accommodated to complement the wooded slopes and riparian corridors.

Development interfaces with the predominantly west-east running riparian corridors which are where revegetation and ongoing management is required, or will be, zoned E3 Environmental Management.

Environmentally sensitive design and siting will be required for development in the E4 Environmental Living zone.

Refer to Chapter E17: Preservation and Management of Trees and Vegetation, Chapter E18: Threatened Species, Chapter E23: Riparian Land Management.

8.2 Heritage conservation

Understanding and conserving the heritage values of the West Dapto presents an opportunity to enrich the social values of the release area and to promote cultural understanding of our shared heritage.

The Australian Heritage Commission (2000) states the aim of both natural and cultural heritage conservation is to retain the significance of place and in the case of West Dapto the natural and cultural heritage values are deeply entwined and cannot be separated. (Australian Government, Department of Environment and Energy, 2017). Impacts to heritage significance are a key consideration for development of the release area at each planning stage. Land use changes should retain, integrate and enhance heritage values. The principles for West Dapto aim to promote heritage conservation and meaningful consideration of the significance of place to ensure future development enhances the heritage values of West Dapto.

Principle 1: Prioritise the Conservation of Heritage Items and sites of Aboriginal Heritage Significance

Local Heritage items listed in Schedule 5 of the Wollongong LEP 2009, sites of Aboriginal Cultural Heritage significance as well as areas of potential archaeological significance should be retained and conserved within new development areas and appropriate curtilages and visual settings established. Development planning should account for the significance of sites and places and their visual relationships to each other or key landforms and key sites that contribute to the historic setting or cultural significance of newly developing neighbourhoods should be retained.

Principle 2: Respect the Cultural Landscape

The West Dapto Urban Release Area has a rich and diverse history of Aboriginal and non-Aboriginal occupation. The area retains a range of key landscape elements, landforms, natural features such as creeks and ridgelines, important views and visual connections, and historic road and transport corridors that are important and unique aspects of the local area. The elements contribute to the character and significance of West Dapto through connection to Dreaming stories and by telling the stories of the area. Proposed development should be guided by an understanding of, and respect for significant features of the natural landform and historic setting. This will assist new communities in understanding and appreciating the unique visual and physical connections between places and features, within and outside of their development areas.

Views and Vistas

Generally, land in the release area around and above the 50-60m contours is considered of High Scenic Quality. Development within these areas must be sympathetic to that visual quality as the ability of the area to absorb change is low.

Principle 3: Embed Local History and Character in New Communities

Developments should strive to feature historic sites and places of significance within development areas to provide a unique sense of identity and character for developing neighbourhoods. The adaptation and re-use of historic buildings in an appropriate manner, conserving and integrating them into new developments, is encouraged. The retention and integration of significant Aboriginal sites as well as significant trees and landforms into natural area reserves, parks and as conservation areas is also encouraged. The use of historically relevant street names, integration of interpretation and the celebration of aspects of a site's Indigenous and post settlement history, are encouraged to ensure that the rich history of the area is celebrated and recognisable in the identity of developing communities.

Other Requirements

Developers must complete various **heritage studies** to understand the significance of Indigenous and European heritage sites and the potential impacts of the proposed development. These studies determine further conservation management requirements and approval needs.

Neighbourhoods will include visual character and cultural landscapes and ensure:

1. Design of subdivision patterns and road layouts are to have regard to the retention of view corridors and vistas through, and to, areas of high scenic quality.
2. Primary street planting is to be undertaken and established prior to the commencement of individual lot development or housing construction to minimise the visual impacts of proposed development.
3. A **visual impact assessment** is to be prepared by the applicant and submitted with any development application in areas of high scenic quality (at or above 50-60m contours). The visual impact assessment is to assess any potential impact to the visual quality and how the design will respond to this. The assessment will include recommendations for the development design. The development application will demonstrate how the visual quality of the visual catchment will be protected and incorporated through design responses.
4. An **Aboriginal Cultural Heritage Assessment Report** (ACHAR) is to be prepared for any proposed development where, or if:
    - the site has been identified having moderate to high archaeological potential or cultural significance.
    - an Aboriginal site or object has been recorded in the vicinity.
    - an area of potential archaeological deposit (PAD) has been identified through a Due Diligence Assessment or other study undertaken on the site.

    The recommendations of the ACHAR should inform the development outcomes.

Wollongong LEP 2009 identifies a number of heritage items within the West Dapto Release Area. In addition to the statutory controls contained under the LEP the Wollongong DCP 2009 contains requirements in relation to these items.

1. Refer to Chapter E10: Aboriginal Heritage and Clause 5.10 of the Wollongong LEP 2009 for specific controls relating to Aboriginal Heritage.
2. Refer to Chapter E11: Heritage Conservation, Clause 5.10 of the Wollongong LEP 2009, The NSW Heritage Act 1977 and The Burra Charter.

8.3 Riparian Corridors

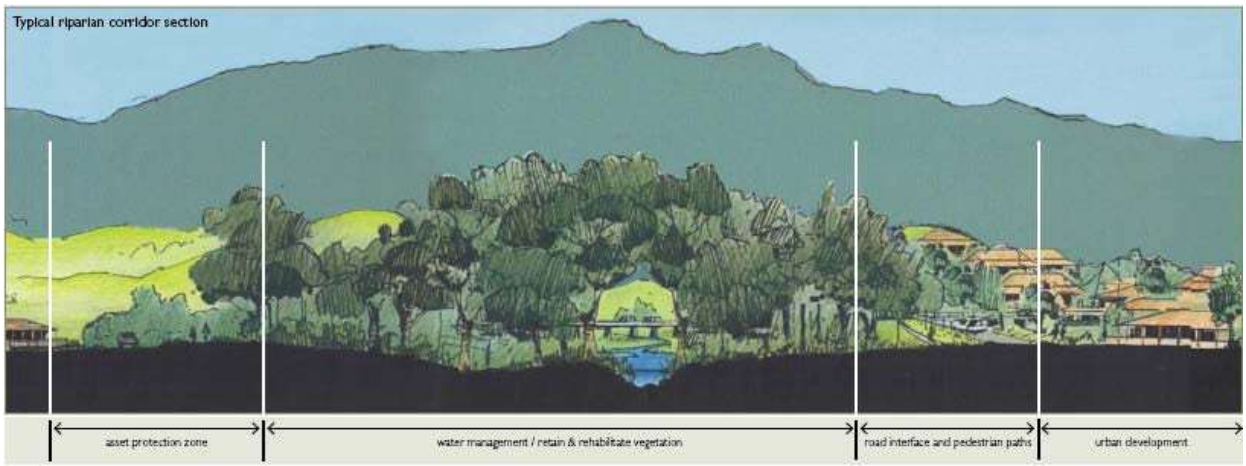

Figure 9. Typical riparian corridor cross section

West Dapto is dissected by fast flowing creeks and extensive areas of flood prone land, and riparian corridors. These areas offer an opportunity for recreation, visual separation and conservation. The corridors will result in significant amounts of open space creating wider landscapes within easy reach of all parts of the new development areas, meaning walking, cycling, recreation and nature will form a part of daily life. These riparian corridors have been, or will be, zoned for environmental protection. Limited development is allowed in these areas.

The riparian corridors will link the escarpment to Lake Illawarra through the release area. They will be vegetated with avenues of intensive planting and water management running through the urban street pattern to create a connected web of open space. This will encourage walking and create a sense of nature interacting with urbanity (see cross section in **Figure 9**).

Land between the watercourse and the 1% Annual Exceedance Probability flood extent can either be:

1. retained in private ownership and used for grazing, recreational activities or other permissible uses, or
2. dedicated at no cost to Council, for use as bushland, agricultural or recreational purposes. There are no development contributions off-set for the dedication or transfer of this land.

Controls:

1. Neighbourhood Plans will identify proposed land uses and ownership of the riparian land.
2. Riparian corridors are to be revegetated to instate a healthy ecological structure and function and to enhance resilience to flooding and improving water quality.
3. Refer to Chapter E23: Riparian Land Management for controls relating to riparian lands.

9 OPEN SPACE PRINCIPLES

This section establishes the open space principles for the West Dapto Urban Release Area. This section should also be read in conjunction with Community and Education Facilities principles and at a landscape structure level, will contribute to delivering against the Urban Greening Strategy. An overarching framework with four inter-related principles is designed to achieve the open space objectives for the West Dapto Urban Release Area. Open spaces need to be considered places that are designed responding to principles to ensure they provide for a resilient community.

There are more details regarding Council's specific requirements for each open space facility and subdivision requirements provided in the **West Dapto Open Space Design Manual and the West Dapto Open Space Technical Manual.**

Principle 1: Functionality

- Open space needs to be of an appropriate size and flexible footprint for multiple functions and uses (Hierarchy of facilities).
- Open space and recreation outcomes are not compromised by other competing functional elements. For example, flooding and water management, traffic and road infrastructure, cultural heritage and biodiversity.

Principle 2: Accessibility

- Walkable distances from residential areas, universal design principles used for facilities with a focus on 'play' and diverse experience (resident catchments).
- There is a well-distributed network of accessible (in both location and design), attractive and useable public open spaces and natural areas within the existing and future neighbourhoods of West Dapto.

Principle 3: Connectivity, movement and flow

- Open space must be connected spaces with shared paths and trails linking to other facilities or places of interest, including centres, heritage sites (if not sensitive), riparian areas, natural areas, employment centres, transport nodes, community facilities and the like.
- The open space areas are highly connected to create a network of open spaces with a range of functions to complement the existing landscape features and provide opportunities for ecological connectivity.

Principle 4: Value and amenity

- Future uses complement and add to existing values – for example, open space may present opportunities to preserve remanent vegetation or support the regrowth of bushland vegetation. Land uses must not have conflicting outcomes – for example, an active play facility may jeopardise a threatened ecological community, water management may restrict active use, etc.).
- That public open space and natural areas will provide opportunity for interaction filling a variety of recreational, sporting, play, and meeting the physical and social needs of the community.

9.1 Hierarchy and catchments

Based on the principles of functionality, accessibility, connectivity and values, there are some guides to the level of open space based on size and characteristics of projected population and its recreational needs categorises relevant population catchment distances for each level of open space provision (hierarchy) and how it generally relates to size requirements in the future urban and residential areas based on NSW Recreation and Open Space Planning Guidelines for Local Government (2010).

It is important to emphasise that any benchmark standards cannot be used as a 'one size fits all' assessment tool. Through analysis of local context and community needs, these standards can and should be varied if based on sound evidence.

Table 1. Open space provision standards (based on NSW Recreation and Open Space Planning Guidelines for Local Government (2010) and the Elton Report (2007) recommendations).

Function and service	Size	Catchment radius (distance)
Local Passive	0.5-2 ha	400-600m
Local Active	1-2 ha	400-600m
Neighbourhood Passive	2-4 ha	2km
Neighbourhood Active	3-5 ha	2km
District Active	5-8 ha	Southern ward of LGA
City wide Active	8 + ha	Facility to serve the whole LGA

Note: If stormwater infrastructure is proposed to be co-located with open space the general size requirements in **Table 1** should be considered with reference to Council's **West Dapto Open Space Design Manual.**

The relationship can also be understood in catchments for community populations. **Figure 10** shows proposed open space catchments of West Dapto (based on methods established in NSW Recreation and Open Space Planning Guidelines for Local Government, 2010). These catchments are indicative and are shown for illustration purposes only to guide how location of facilities will be planned to be located within a walkable catchment. In the release areas open space network, open space will need to be provided at all hierarchy and catchment levels.

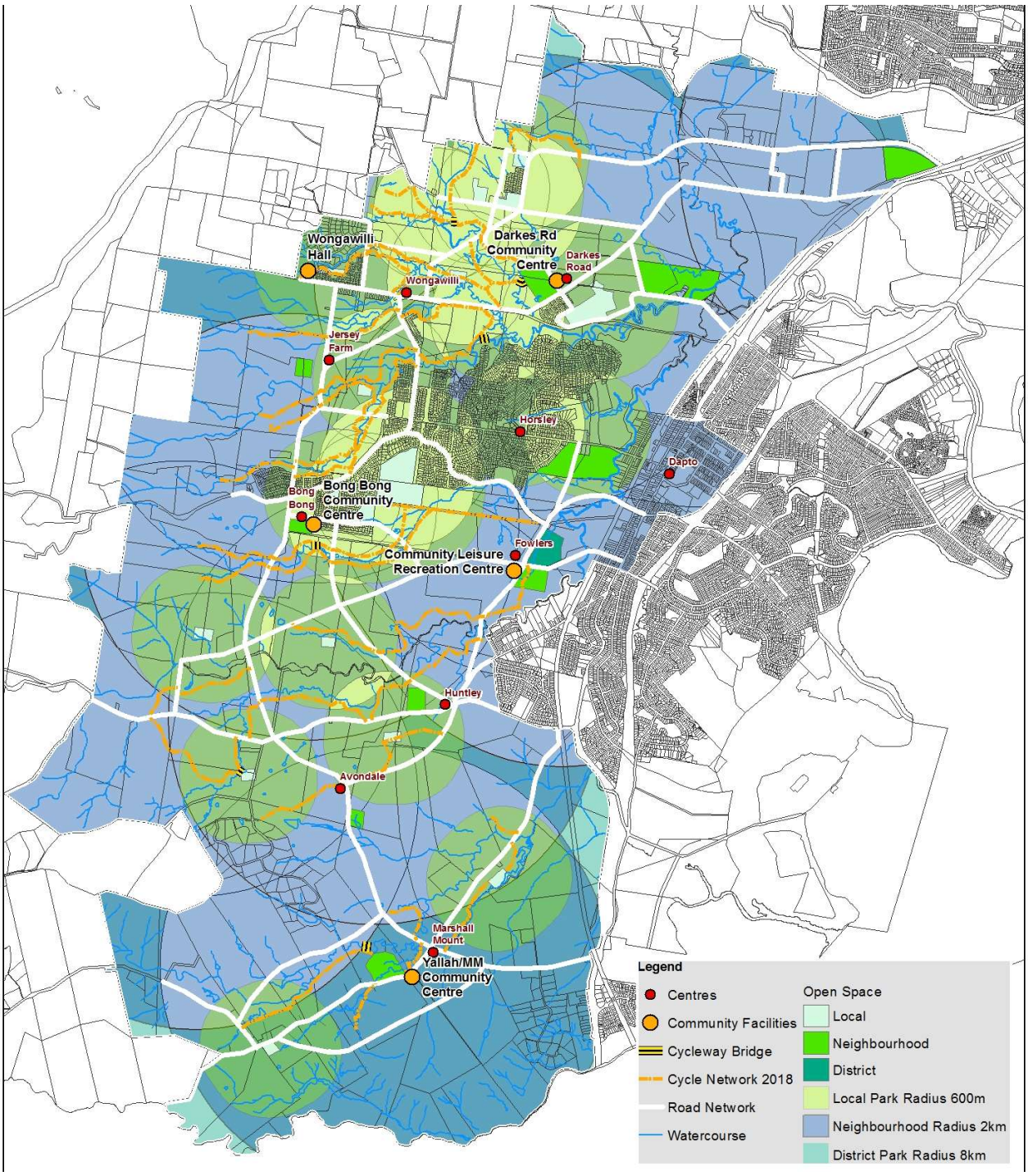

Figure 10. Planning for open space in West Dapto Urban Release Area

10 COMMUNITY AND EDUCATION PRINCIPLES

Community facilities are an increasingly important component of local service provision across a range of areas in the public and private sector. For example, there is a clear trend in public health and alternative education to use local community facilities for regular and specialist community services rather than develop individual facilities. Council understands this increases the importance of flexible design, location and efficiencies to be achieved by these facilities for them to make the best contribution to community outcomes.

Figure 11. Community hub concept – co-location, joint use and multi-purpose centres

Principle 1: Healthy, diverse and resilient

Community facilities contribute to quality of life to support healthy, diverse and resilient community.

Principle 2: Efficient

Making efficient use of resources through shared or co-located facilities and multiple use agreements (multi-purpose community hubs) with flexible design that can respond, expand and adapt as needs change.

Principle 3: Safety, security and adding to civic identity and sense of place

Promote safety, security and provide focal points adding to civic identity and sense of place through clustering community facilities.

Principle 4: Self-sufficient and resilient community

Community facilities provide opportunity for self-sufficiency to build capacity and social capital and to actively contribute to community resilience.

Principle 5: Vibrant and accessible

Placing facilities in convenient, central locations, adjacent to open space promotes access and contributes to the vibrancy of the development and allows for overflow activities such as children's play.

Principle 6: Equitable

Provide equitable access for all sections of the population, through the distribution, design and policies of facilities.

Principle 7: Diversity

Community facilities promote diversity and encourage people from culturally and linguistically diverse backgrounds to participate in the social and economic life of the community.

Principle 8: Viable and sustainable

Developing sustainable funding, ownership, governance, management and maintenance arrangements, including private partnership arrangements where community benefit is achieved.

Principle 9: Coordination

Council will work with the State Government and non-government schools sector to promote best-practice education outcomes for the community of West Dapto. This will include sharing data and integrating asset solutions, such as opportunity for shared and joint-use facilities.

Planning for the provision of education is important for West Dapto's growing community. In NSW, the Department of Education provides funds and regulates education services for NSW students from early childhood to secondary school. The Department of Education provided previous support for the six primary schools and two high schools based on the projected housing provision and related future population estimates.

Figure 12 shows some indicative school locations within the release area.

The distribution of schools in the release area ideally would be spread across the residential areas of the five stages. There would be two new primary schools in the vicinities of Darkes Road/West Dapto Road and Wongawilli Village.

In Stage 3 of the release area, a new secondary school close to Bong Bong Town Centre will be supported by three primary schools; potentially Jersey Farm - Robins Creek (Bong Bong Primary School on **Figure 12,** Bong Bong/Cleveland (Stage 3 Primary School on **Figure 12**) and Avondale/Mooreland (Stage 4 Primary School in **Figure 12**).

A third secondary school potentially located in Calderwood Urban Release Area has been approved and will service a primary school in Marshall Mount area (shown in **Figure 12** as Yallah Primary School) as well as the required primary schools in Calderwood.

A special needs school should be either co-located with or separate to a mainstream school in the release area.

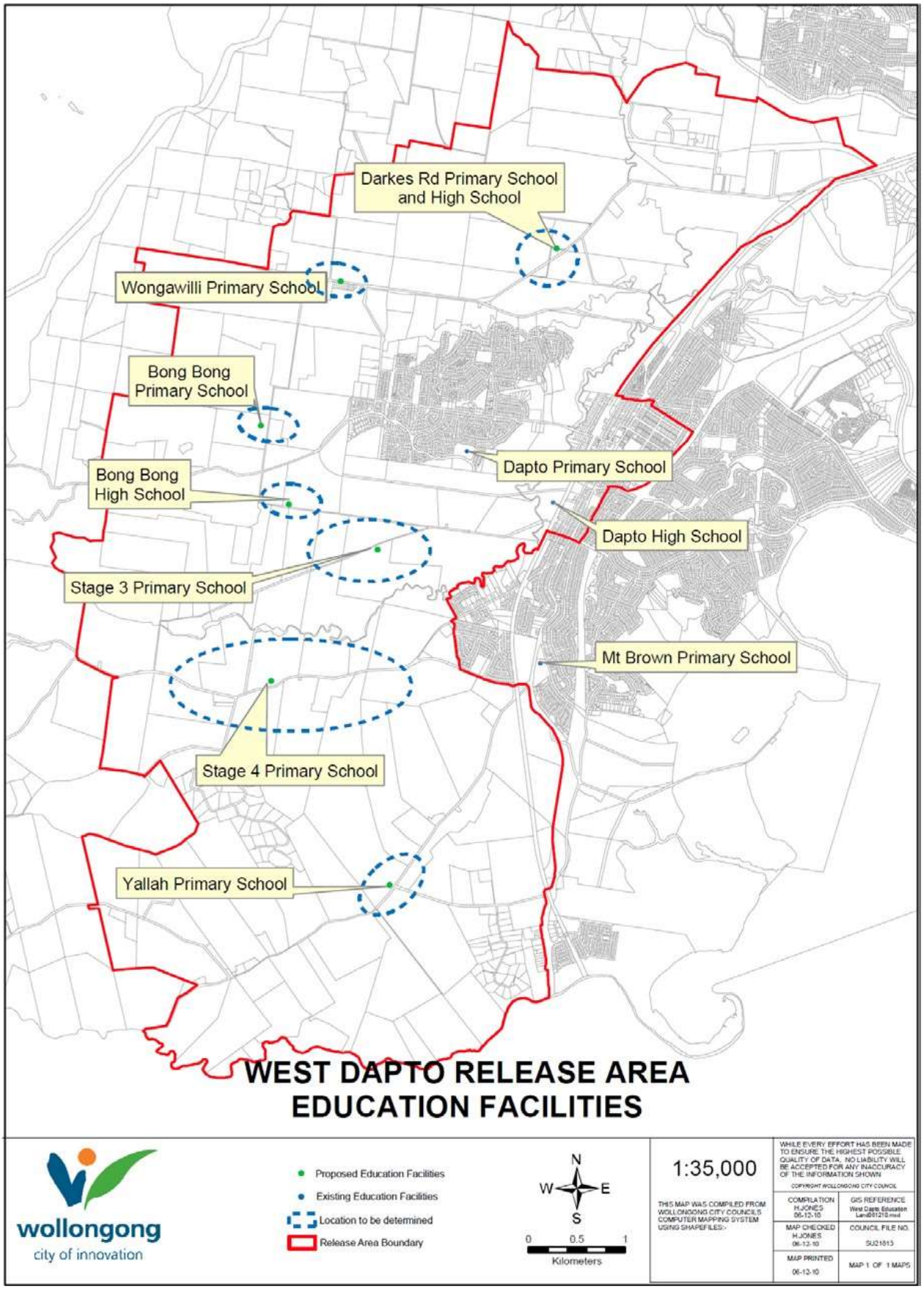

Figure 12. Potential school locations (Council to work with NSW Department of Education)

11 TOWN CENTRE PRINCIPLES

As a new release area, there is an opportunity to ensure that the ideal treatments are made to establish sustainable, appealing and functional residential living as well as commercial and light industrial areas providing employment, social and cultural opportunities with sufficient flexibility to cater for the future populations needs. As with other previous principles the town centre principles should not be considered in isolation.

The town centres of West Dapto will fill diverse roles, functions and mixed uses. The key objective of town centre principles is to help identify centre locations, function and existence. Configurations will reflect the town centre hierarchy with a focus on pedestrian priority. Supported with a decision process (zoning, neighbourhood planning, etc.), appropriate locations will promote the social and economic functions and outcomes sympathetic to character and 'place'.

There are three principles, Hierarchy (**Figure 13**), Movement sensitive and Identity and diversity, each to be considered in planning of town centres to meet the objectives for West Dapto Release Area.

Council also expects the town and village centres of West Dapto to be:

1. Master planned with the plan responding to the release areas planning principles.
2. Subdivision design modelled for walkability with plans that demonstrate public and employment base have easy access to active and public transport.

Principle 1: Hierarchy

Hierarchy provides a basis for which to establish functions, order, and visions as well as allowing the protection of these. Hierarchy is not the only way to understand or to set direction in planning for centres, we understand that the centres are also a connected network, which can support each other in an interlocking way.

Each level of the hierarchy represents the size and general characteristics of the centres commercial, retail and business roles (see **Figure 13**). The Hierarchy reinforces role and function, supports the Wollongong City Centre and higher order centres and provides certainty for investment decisions. Hierarchy reinforces character and identity as well as provides direction around appropriate residential density sympathetic to community facilities and service locations.

Requirements for development in Business zones must comply with contents of the DCP Chapter B4: development in Business Zones. B4 outlines the Hierarchy for the LGA as well as other studies or assessments needed to support development applications.

<u>Regional Centres</u>

Wollongong Local Government Area has two major regional centres Warrawong and Dapto. It forms and important commercial and business centre role in Wollongong LGA.

A series of new centres will be located close to Dapto's existing urban landscape. Supporting Dapto's development as a regional centre will be an important consideration in the planning of new town and village centres. These lower order centres must be sensitive to the levels of hierarchy to maintain existing functions and minimising any negative impact on the hierarchy.

<u>Town Centres</u>

There are three town centres planned for the urban release area. The objective of the town centres is to ensure that development in the Darkes Road (1), Bong Bong (2) and Marshall Mount (3) town centres contribute to the creation of retail, business, commercial, and community hubs that act as public transport nodes and provide significant local employment opportunities.

Major town centres (~15,000m2) are planned within the central western (Bong Bong Road) and the southern (Marshall Mount) parts of the release area. A local town centre is planned in the northern (Darkes Road) area. These are intended to create local retail, business, commercial and community hubs providing significant local employment opportunities. They will need to complement rather than compete with the higher order major regional centre of Dapto.

Council expects the town centres of West Dapto to be master planned demonstrating how the plan responds to these planning principles.

Village Centres

The West Dapto further review of release area centres and controls (Urbacity, 2014) noted the role of Villages, as a lower order centre, is to *"provide convenient alternative to the supermarket based town centres for daily goods and services with a focus on amenity for housing density and improved public transport use".*

Village and local centres will develop localised business opportunities at key places and intersections where bus stops, community facilities and local open space come together to create an urban focal point for the local community. Small villages are proposed ~2,500 m2 of floor space and accommodate a 1,000-1,500m2 supermarket and variety shops.

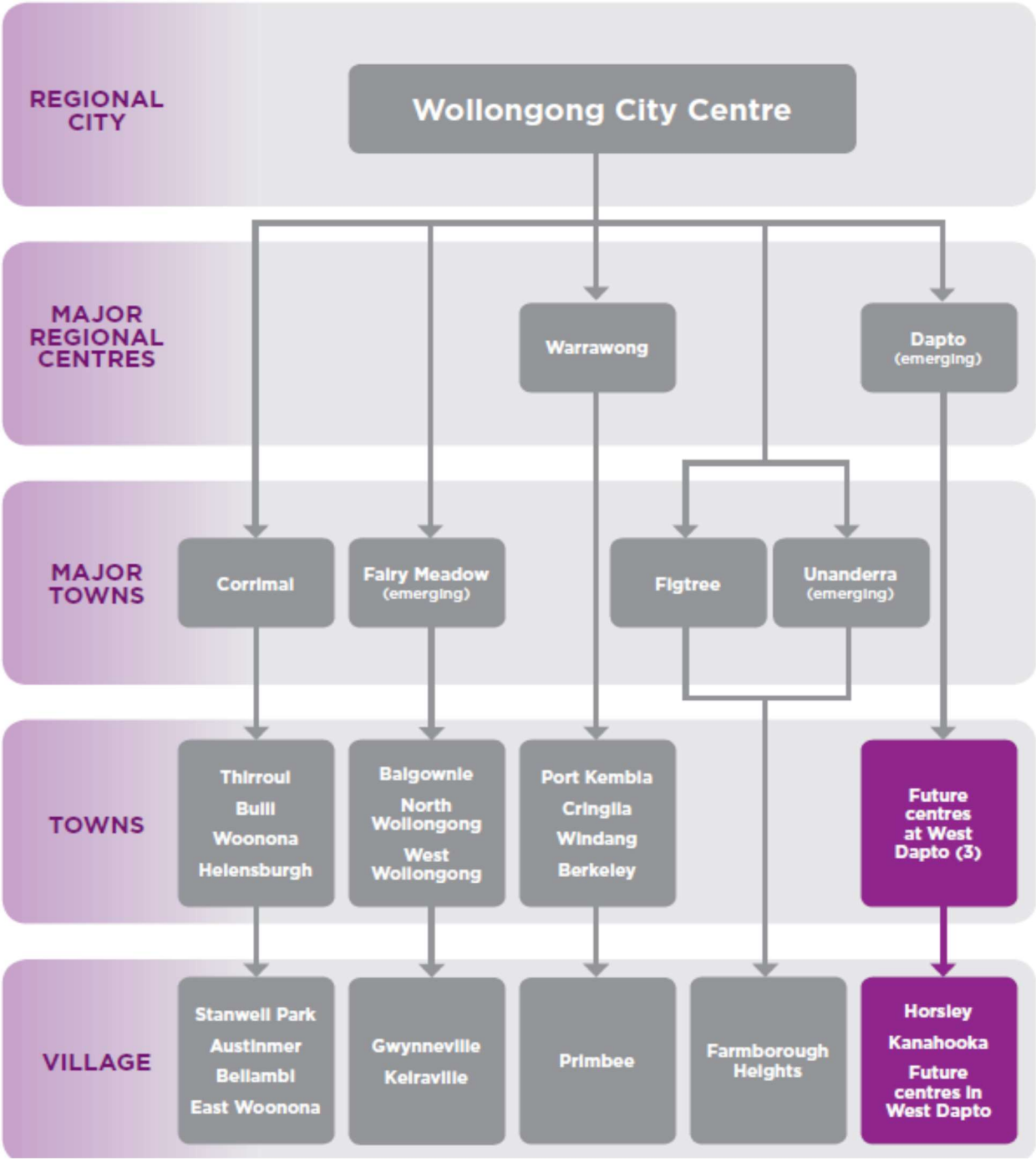

Figure 13. Wollongong Town Centres Hierarchy

Principle 2: Movement sensitive

The town centres of West Dapto are expected to facilitate social contact, employment, and living needs in a sustainable manner. That is, the town centres will be located to promote active transport, public transport and healthy lifestyles. Living within 400-800m of a mix of destinations is consistently associated with higher levels of active transport in adults and older adults (Heart Foundation, 2017).

Movement sensitive means movement (accessibility, location, etc.) will be a key consideration for co-location of a mix of destinations (or land uses) within a centre. Centres will provide a location for activity, attraction, service for people to walk or cycle to. A focal point and community hub and transport node within the neighbourhood that allows for multiple activities to be undertaken and different daily needs (i.e. live, work, play) to be met in the one location.

Centres must also be supported and surrounded by a network of connected streets, paths and cycle ways, providing and promoting opportunities for active transport, and convenient access to public transport rather than private vehicles. The network will link open space works with Open Space and Recreation principles.

Neighbourhood Plans must consider their interface with adjoining areas and their ability to develop. The Plans must consider how different land use parcels such as centres are linked by the road network and pedestrian / cycle paths within and between different residential neighbourhoods.

Principle 3: Diversity and identity

Centres are vital to the social fabric of a neighbourhood and will facilitate a diverse range of activities by prioritising places and spaces where people of all ages can gather, meet friends and family and engage in social activities.

A vision that encourages diversity and shapes and reflects a centre's character is especially important for new centres. Centres will be diverse from each other (through hierarchy, features and visions). The vision can be understood as capitalising on existing features of heritage, environment (vegetation, topography, etc.) contributing to a new theme expressing the centre's role in the new urban residential landscape. In other words, a vision and purpose for people to create from, understanding that activity, physical setting and meaning come together to create a 'sense of place' framed by the built forms that provide a variety of building types.

The town centres will have a variety of building typologies with urban characteristics such as increased height, minimal or zero street setbacks and street level awnings and verandahs. The public domain is intended to reflect an urban character, with high quality hard and soft landscaping and paved footpaths with advanced planting of shade trees. Parking will be at the rear of blocks and underground as well as good on street provision of kerbside parking – building setbacks to accommodate front parking lots will not be permissible, as these detract from the street qualities sought in these centres.

Other Chapters of Wollongong DCP 2009 containing development controls relating to the developments within the town and village centres include:

1. Chapter B3 – Mixed Use Development for specific controls relating mixed use developments.
2. Chapter B4 – Development in Business Zones for specific controls relating to business and town centre developments.

11.1 Town centre development controls

Development in the West Dapto Town Centres is to comply with the following development controls:

1. Establish a strong urban form that clearly distinguishes the centre or local node from surrounding areas.
2. Taller buildings of 4-6 storeys are encouraged in the town centre core. Lower scale buildings up to 3 storeys in height should surround and support the core.
3. The street wall height should have a 2-3 storey building form.
4. Zero building setbacks on main streets. Other streets are generally to have a setback of between 0 – 2.5m.

5. Side and rear building setbacks are as follows:

Setback	Distance
Side	Zero
Rear	Zero where lot adjoins allotment zoned B2 Local Centre or 5-6m where lot adjoins allotment with any residential zone.

6. Civic public spaces designed to encourage social interaction with paved areas, outdoor seating and urban green spaces are encouraged to balance the indoor building provisions.
7. Shared parking facilities are encouraged, accessed from laneways of minor streets. Parking lots and parking areas should not be visible from the streets, allowing the built form to define the urban function.

11.2 Village centre development controls

Development in the West Dapto Village Centres is to comply with the following development controls:

1. Building setbacks can be either street aligned (zero) or setback up to 5m to create commercial forecourts or residential courts to the street.
2. Varied building setbacks are encouraged to create an informal organic character.
3. Building heights of up to 2 storeys are encouraged to create an urban village character with upper floor uses including small scale commercial and residential developments.
4. Parking to be provided at the rear of buildings in the form of rear laneways and parking areas accessed from the rear laneways / car courts.
5. All shops should address and be entered from the major street where possible, or the secondary street.
6. Community congregation areas to be north facing and take advantage of escarpment views where possible.
7. Street parking to be maximised around villages.
8. Parking lots and parking areas are generally not to be visible from the main collector roads, allowing the built form to define the urban function.

12 EMPLOYMENT PRINCIPLES

Five of the Seven Employment Principles in the West Dapto Vision 2018 intend to guide the development and creation of sustainable employment outcomes for the West Dapto Urban Release Area.

The creation of employment opportunities within and near West Dapto allows people to work close to where they live and can reduce the overall traffic generated by the development.

The Structure Plan **(Figure 2)** shows the main employment area, in the northern end of the release area at Kembla Grange, in purple. The land is mostly zoned for light and heavy industrial land uses. There are some limited areas of light industrial land arranged in an enterprise corridor north and south of the Dapto Regional Centre, and some west of the M1 and along Yallah Road, Yallah to provide additional local employment opportunities.

Other Considerations

1. Wollongong Economic Development Strategy and Implementation Plans, and Advantage Wollongong, Invest Wollongong.
2. Chapter B5 Industrial Development for controls relating to development on industrial lands.

Principle 1: Support local sustainable and <u>accessible</u> employment

1.1 Support a variety of employment opportunities accessible to the whole community.

1.2 Employment containment to reduce commuting out of the release area and region.

1.3 Local access to higher order (career generating) employment opportunities.

1.4 Encourage high density employment opportunities within walking distance of existing or proposed public transport services.

1.5 Encourage employment area developments adjoining the structural road network to take advantage of accessibility and exposure.

Principle 2: Attract, facilitate and support industries, enterprises and business to locate in West Dapto (this principle is supported by Council, Business Chambers and other organisations as required).

Principle 3: Ensure Town and Village centre employment outcomes are prioritised

3.1 Town and village centres are to ensure planning decisions (such as master plans and spatial arrangements) support and prioritise employment outcomes.

3.2 Encourage professional service type jobs and roles that are beyond the normal retail type jobs normally expected in new urban release areas.

Principle 4: Protect existing employment land

4.1 Maintain existing zoned employment land within the release area to ensure a supply is maintained over time and is available for employment generating opportunities.

4.2 Create a strategy to enable appropriate interim uses of employment areas that also allows for gradual intensification over time.

4.3 Support the preservation of large lots and clusters of light and heavy industrial land and ensure business parks are not located within light industrial zones.

Principle 5: Take advantage of and encourage employment innovations

5.1 Planning decisions to anticipate, be responsive to and cater for innovative employment solutions.

Principle 6: Improve employment opportunities and ensure a high standard

6.1 Ensure developments are considerate of their context and are compatible with residential and sensitive land uses as well as conservation outcomes of the urban release area.

6.2 Apply a merit-based approach when assessing employment generating activities.

6.3 Encourage development for employment which provides a range of goods and services without adversely affecting the amenity, health or safety of any adjoining area.

13 HOUSING PRINCIPLES

Any specific controls for Neighbourhood Plans must consider the ability to develop adjoining areas including linkages to those areas.

The Housing Principles should be read in conjunction with Council's LGA-wide Housing Policy setting, which is updated from time to time to ensure we are addressing the challenges of a changing housing environment.

These principles should be considered in conjunction with all other planning principles as they all contribute to achieving the vision for the West Dapto Release Area and ultimately sustainable housing outcomes.

"*The communities will be healthy, sustainable and resilient and will have access to diverse housing choice and active or passive open space accessible by walkways, cycle ways and public transport.*"

Urban Residential Density Distribution

The intention for West Dapto's urban structure is to provide varying housing densities with increased densities located around town and village centres, and community hubs. Targeting the delivery of medium residential densities in the release area encourages population diversity, makes public transport more viable and supports the sustainability of the town and village centres. A range of housing types are to be provided to ensure that the housing needs of all household types are met. A diverse demographic profile will help ensure a sustainable and vibrant community in the long term.

The areas of lower residential density (R2 Low Density Residential zone) should provide an average of 13 dwellings per hectare and then in later stages 15 dwellings per hectare. In the more sensitive areas, such as the "transition" areas shown on the structure plan (**Figure 2**). Council proposes densities around 5 to 10 dwellings per hectare to enable the protection of environmental values and minimise visual impacts. The areas of medium residential density (R3 Medium Density Residential zone) should provide an average of 20 to 25 dwellings per hectare. Density measures such as Gross Density help inform and set targets at a precinct level (based on Landcom, 2011, Residential Density guide and supporting charts, (**Figure 15**). Net density (**Figure 14**) will show if the desired mix and ultimate (finished development) housing is being achieved. These are not site by site or zone controls as the aim is for diversity. They help to inform infrastructure planning, and to understand the intensity of built forms and population.

Principle 1: Encourage housing diversity

Diversity can be delivered through different products at different stages of planning by promoting and providing a range of density and lot size and shapes to offer a range of choice to better meet changing community needs.

Mixture of density low to high, single dwellings, dual occupancy, town houses and apartments in appropriate locations should all be considered in neighbourhood planning and subdivision design stages.

Promote increased densities and innovative design types close to town and village centres and transport infrastructure where possible.

A variety of lot sizes and dimensions must be provided to achieve diversity in products to suit a range of household structures and to meet the density targets relating to the residential zones (Refer to **Figure 14**).

Figure 14. Net Residential Density Chart (Landcom, 2011).

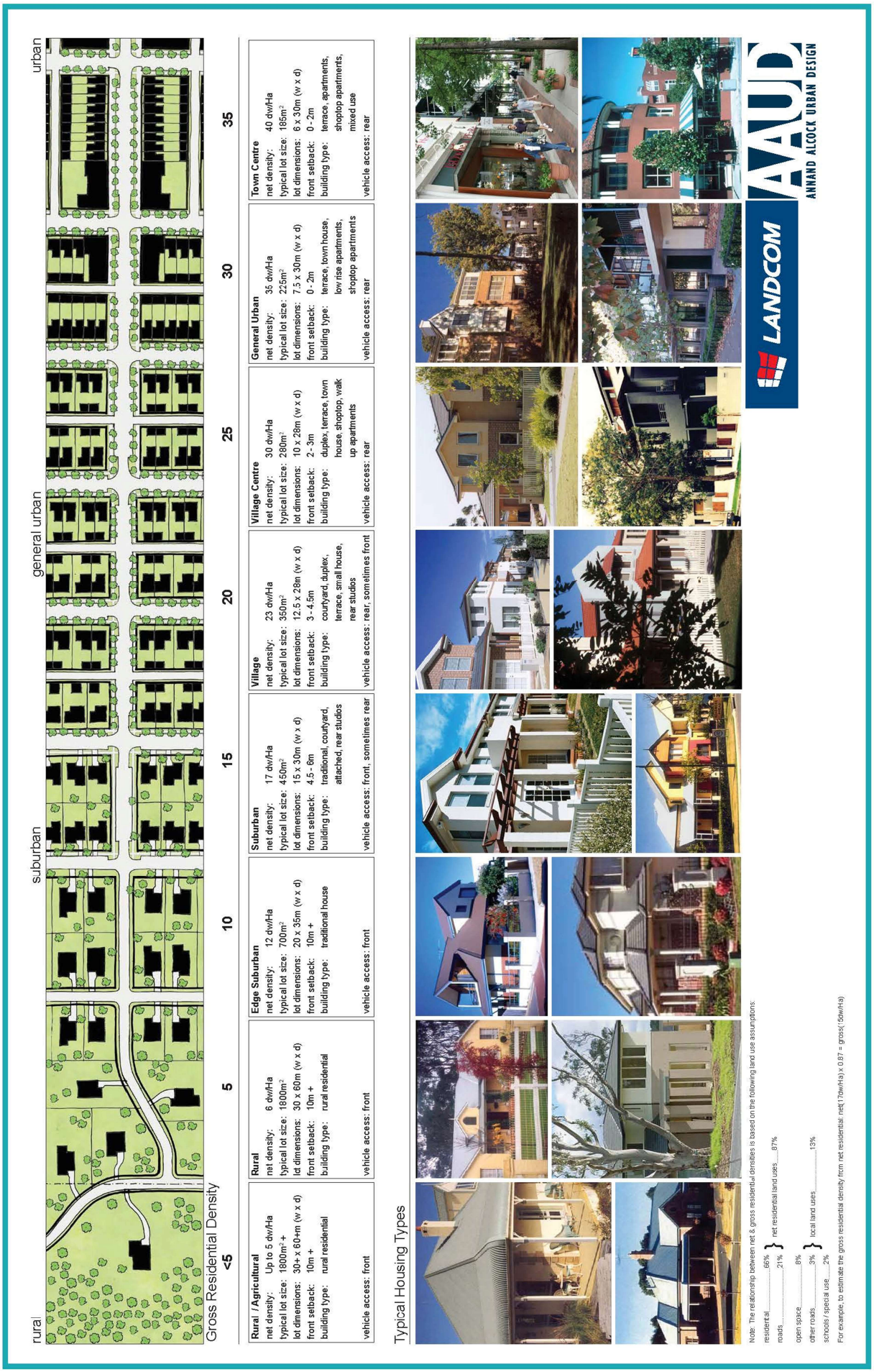

Figure 15. Gross Residential Density (Landcom, 2011)

Principle 2: Promote housing affordability

Residential neighbourhoods cater for a variety of demographic and socio-economic characteristics. Promoting housing mixture is one tool that provides opportunity for more affordable housing options and reduces housing stress.

Principle 3: Establish sustainable, energy efficient, appealing and functional residential living

1 Seek to promote design excellence in housing provision and neighbourhood planning.

2 Target an increased use and uptake of renewable energy through housing and neighbourhood design.

3 Target smart design solutions for housing with passive heating/cooling (housing placement in lots, responsive floor plans), light coloured roofing and light paving or ground covering materials (both reduces ambient air temperatures in the neighbourhoods and roof cavity temperatures).

4 Lots must have the appropriate area and dimensions for the siting of dwellings, canopy trees and other vegetation, private outdoor open space, rainwater tank, and vehicular access and on-site parking.

Principle 4: Creating local amenity and a sense of place

Design safe, healthy and active neighbourhoods with interactive interfaces between residences, the streets and surrounds. It is about ensuring there is visual connection between housing and the streets, parks and activity areas they are adjoining or interfacing with.

Encouraging and supporting housing design that responds to place. Creating site responsive built form and lot layouts that consider existing features and landscape context, natural land form and surrounding land uses.

Manage housing growth to protect and promote the conservation values that contribute to concepts of 'place' in West Dapto.

1. Lot size and layout must respond to the physical characteristics of the land, such as slope and existing significant vegetation, and site constraints including bush fire risk.

2. Lot design is to facilitate housing fronting onto creek line corridors and other areas of public open space, to incorporate these spaces into the living environment, facilitate surveillance, and prevent isolation and degradation of these spaces.

Principle 5: Housing transition to the Illawarra Escarpment

Reduce housing density on the fringe of the urban release area to provide delineation to the housed urban areas and a buffer to the escarpment and important environmental features.

14 NEIGHBOURHOOD PLANS

Neighbourhood Planning is a progressive step between the West Dapto Structure Plan, the urban zoning process, and a development application for subdivision. It allows issues to be considered on a neighbourhood or catchment scale. A Neighbourhood Plan must be adopted into this Development Control Plan before Council determines a development application for land within the West Dapto Urban Release Area (WDURA). Neighbourhood Planning is the preferred approach of Council to meet the requirements of Clauses 6.1(2) and 6.2(2) of the WLEP 2009. Council acknowledges that a concept development application can also satisfy this obligation when proposed at a Neighbourhood scale (**Figure 17**).

Neighbourhood Planning is intended to:

- ensure adjoining land owners jointly (or on behalf of another) consider common constraints and design issues.
- provide a means to work through issues such as transport access and the staging of development.
- allow Council and other agencies to better align infrastructure planning and delivery to where development is occurring or is ready to occur.
- achieve efficiencies of shared infrastructure requirements delivered at a Neighbourhood scale to allow for shared servicing, shared cost/contribution and efficient ongoing maintenance (for example water management).
- set urban density targets at an appropriate scale that supports town and village centre development.
- align neighbourhood boundaries with ownership/cadastre and water sub-catchments reflecting the existing environmental setting.
- identify and protect environmental and heritage conservation areas.
- manage the interface between urban development and adjoining land uses.
- provide guidance for the preparation of a development application for land contained within the Neighbourhood Plan.

Draft Neighbourhood Plans will be exhibited as proposed amendments to this chapter. After exhibition of a draft and adoption of a final Neighbourhood Plan into this chapter, development applications for lots within the defined area of the Neighbourhood Plan can be lodged. A development application within a defined Neighbourhood (**Figure 17**) will not be accepted unless there is an adopted Neighbourhood Plan.

Development applications must align with any relevant Neighbourhood Plan, identified Sequencing or Staging Plans. A development application can be lodged on behalf of many land owners, if the owner's consent is provided for each affected lot. Any proposed variation to an agreed Neighbourhood Plan will require justification and will be considered on merit. Council may require the agreement of adjoining owners for variations to an adopted Neighbourhood Plan on or near property boundaries particularly where variations to an adopted Neighbourhood Plan arise as a result of a development application. The variation needs to be adopted before the development application is determined, or at the next opportunity.

14.1 Neighbourhood Plan Requirements

Neighbourhood Plans are required to:

- support and reflect the West Dapto Vision 2018 Planning Principles and Structure Plan.
- confirm the developable areas within the defined Neighbourhoods outlined in **Figure 17**. Council will also consider proposals to consolidate neighbourhoods.
- supplement the previous information prepared to support rezoning of West Dapto. For example, information prepared by Council in 2007 did not have sufficient resources or site access to allow detailed consideration of every property in the WDURA.

  You can request copies of the studies from Council's Urban Release or Customer Service teams (The West Dapto Aboriginal Heritage Study is not a public document).
- consider all potential constraints holistically, mitigate impacts, or propose solutions to managing constraints on a neighbourhood or catchment scale, rather than property by property.
- define the desired future character for the neighbourhood.
- plan the development sequence for all lots within a neighbourhood to ensure adjoining land owners consider each other's proposals, concepts and development timeframes (planning through any access issues, etc).

- encourage the integration of development sites, development sequencing and economies of scale (eg opportunities for efficiencies through shared infrastructure, integrated outcomes with well-considered interfaces between land uses). Avoid exclusion of adjoining lots that may result in development isolation or disjointed development outcomes.
- provide more detailed neighbourhood specific information such as future residential density, proposed landform, open space functions, conservation areas, water management structures and neighbourhood transport network. The specific information shall be guided by the West Dapto Structure Plan, the West Dapto Development Contributions Plan and other relevant sections of this DCP chapter (for example 6.1 The Road Network).
- ensure that the impact of earthworks on the natural topography, landform and vegetation is minimised.
- ensure sufficient space is provided in a neighbourhood plan for water management, open space and any other land uses, or infrastructure required (considering the Principles in the West Dapto Vision 2018) to support safe and sustainable communities.
- ensure interfaces between land uses and delivery of large infrastructure is well coordinated within and with adjacent neighbourhoods.
- identify additional specific information that is required to be addressed at a future development application stage.

14.2 Pathways to Neighbourhood Planning

There are two options for neighbourhood planning in the West Dapto Urban Release Area:

- Preparing a Neighbourhood Plan (lodged with or without a Planning Proposal), or
- Lodging a Concept Development Application (CDA).

In West Dapto, the preparation of a Neighbourhood Plan has traditionally been pursued and is Council's preferred option, however the *Environmental Planning and Assessment Act, 1979* also identifies CDAs as an option.

14.2.1 Pre-lodgement and Lodgement Pathway

The following steps apply to all draft Neighbourhood Plans and Concept Development Applications:

a. **Optional Pre-meeting** Discuss the site with Council staff to gauge the general acceptability of the overall proposal. Council will consider the current Sequencing Plan, Staging Plan and planned infrastructure delivery. This discussion is offered to support a holistic approach to planning and to streamline the process.

b. **Mandatory Pre-lodgement meeting** held with the applicant and representatives from relevant Council Divisions to discuss the preliminary neighbourhood plan proposal. Detailed notes from the meeting will generally be given to the applicant within 10 business days. All pre-lodgement advice will include as a minimum reference to the matters to be addressed in a Neighbourhood Plan or CDA (Section 14.2.3 below). A fee may be payable to Council subject to Council's Fees and Charges.

c. Applicant refines their proposal, guided by the pre-lodgement notes.

d. **Lodgement:** The draft neighbourhood plan or concept development proposal is lodged with Council, accompanied by the applicable assessment fee. The application must also include the completed lodgement checklist, confirming that the necessary information accompanies the application.

e. Council will process the application within 14 days. If an application is incomplete or inadequate it will be rejected. If this occurs, Council will return the rejected application to the applicant, with a letter outlining the reasons for rejection.

14.2.2 Neighbourhood Planning Assessment Pathway

The following steps apply only to Neighbourhood Plans:

a. **Assessment period**: If an application is accepted, the draft neighbourhood plan's assessment period will begin. A Council officer will seek expert advice from various internal staff. Together, they will review the proposal to decide if it is supportable or if more information is required. Council staff are generally given 21 days to provide referral comments.

If more information is needed, a request for information (RFI) will be sent to the applicant. The applicant's response must be made, in full to Council, within 21 days. When the new information is received, it will be reviewed to determine its completeness. The new information will be re-referred to Council staff for review and comments. The assessment period should include only one RFI.

A report to Council will be prepared, at the end of the assessment period, recommending that the proposal be:

I. Exhibited. This will occur if the draft plan is considered generally supportable to progress. Any outstanding RFI issues that can be resolved post exhibition would also be detailed in the Council report.

II. Rejected. If significant outstanding issues remain unresolved after the RFI process, a recommendation to reject the draft plan will be made. If it is rejected, it cannot progress further, and the applicant will be notified.

An alternate resolution may also be made by the Council.

Where a Neighbourhood Plan is lodged with a concurrent Planning Proposal the Planning Proposal will be subject to Local Planning Panel review before the report to Council for exhibition is prepared.

b. **Exhibition**: If the proposal is supported by Council for exhibition, the draft Neighbourhood Plan will be exhibited for a minimum 28 days. External referral agencies will be directly notified of the proposal and given copies of the draft plan with the relevant supporting documents.

c. **Post-exhibition period**: Council will review all submissions received at the end of the exhibition period. An RFI will be forwarded to the applicant, if required, to allow the resolution of any issues raised.

A report to Council will be prepared at the end of the post exhibition period, outlining any issues raised in submissions. The report will recommend adoption of the proposal, or rejection. An alternate resolution may also be recommended by the Council. If the proposal is rejected, it will not progress any further, and the applicant will be notified. Council staff will be available to discuss the reasons for an application's rejection, where necessary.

14.2.3 Concept Development Applications Assessment (CDA) Pathway

Division 4.4 of the *Environmental Planning and Assessment Act (*EP&A Act*) 1979* sets out the statutory requirements for making concept development applications. Section 4.23 of the EP&A Act 1979 provides that a concept development application can satisfy the requirement that a DCP must be prepared before land can be developed, as required by Part 6 of WLEP 2009. Therefore, Council can consider a CDA as an alternative to a Neighbourhood Plan.

A CDA sets out concept proposals for the development of a site, similar to a Neighbourhood Plan. Detailed proposals for the site or for separate parts of the site are to be the subject of a subsequent development application, or applications. These subsequent applications must be consistent with the original consent.

A concept development application must also:

- demonstrate consistency with the West Dapto Vision 2018 and all relevant chapters of Wollongong DCP 2009.
- be proposed at a Neighbourhood scale consistent with the defined Neighbourhood applying to the land, or larger, as shown in **Figure 17** Defined Neighbourhoods.
- be compliant with the relevant planning controls, or where there are non-compliances these are either minor or satisfactorily justified.

The following steps apply only to CDAs:

a. **Exhibition**: If the proposal is supported for exhibition, the CDA will be exhibited for a minimum 28 days in accordance with Council's Community Participation Plan.

External referral agencies will be directly notified of the proposal.

b. **Assessment period**: Council will collaborate with internal specialist staff to review the proposal to decide if the proposal is supportable, or if more information is required.

If more information is needed, a request for additional information will be sent to the applicant. An applicant's response must be made, in full to Council, within 21 days. When the information is received, it will be reviewed to determine its completeness.

c. **Post-exhibition period**: Council will review all submissions received, including agency submissions, at the end of the exhibition period. An RFI will be forwarded to the applicant, if required, to allow the resolution of any issues raised.

   A report to Council will be prepared, at the end of the post-exhibition period, recommending adoption of the proposal into this chapter of the DCP, or rejection. An alternate resolution may also be recommended by the Council. If the proposal is rejected, it will not progress any further, and the applicant will be notified.

d. **Determination:** Following the end of the assessment period, Council staff, where possible under delegations, will determine the CDA.

e. **Post determination:** In the event that a CDA has been approved in accordance with Section 4.23 of the EP&A Act 1979 and is deemed to have satisfied the requirements of Part 6 of WLEP 2009, Council can consider that approval as an alternative to a Neighbourhood Plan. The Concept Approval shall be adopted into this chapter of the DCP as soon as practical.

See **Figure 16** below:

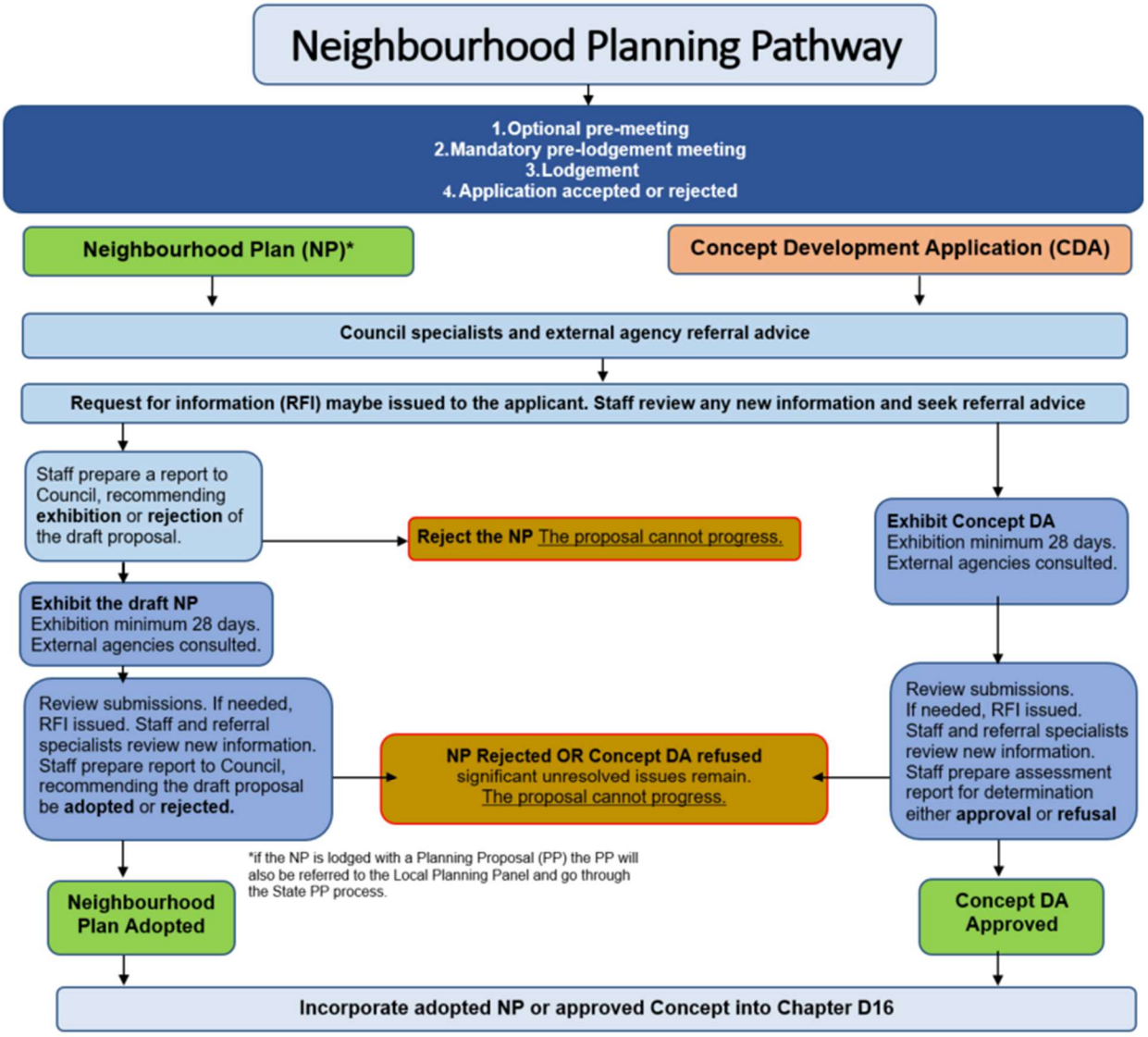

Figure 16. Neighbourhood Planning Pathways flowchart

14.3 Matters to be Addressed in Neighbourhood Planning Applications

An application for a Neighbourhood Plan must include:

1. Site location and description, and general land capability assessment, addressing existing issues such as:

   - Wollongong LEP 2009 provisions (including Zoning, Minimum Lot Size, FSR, Building Height, Flooding, Heritage, Acid Sulfate Soils, riparian corridors, etc)
   - other relevant legislation

- the setting within West Dapto, for example the proximity to commercial centres, main roads, community services
- flooding and bush fire constraints
- topography, known geotechnical constraints, known contamination constraints
- biodiversity (EECs, bushland, significant trees, habitat)
- heritage - historical land use, heritage sites, including Indigenous Heritage cultural issues and visual character
- existing road network
- available utilities, services and existing easements
- need for community and recreation facilities
- noise impacts (e.g. from main roads, industrial areas, or public and private railways).

2. A concept Neighbourhood Plan and supporting documentation, showing the proposed:

- land use areas including, but not limited to, residential, retail, employment, recreation and conservation areas
- road layout and hierarchy
- indicative dwelling density (**Figure 15**) and yield
- public transport, bicycle and pedestrian routes demonstrating walkability
- drainage management concept plan based on modelling (water quantity, quality, and flood behaviour) inclusive of indicative locations and sizing of infrastructure

  Note – where a drainage/water quality solution is developed at a catchment or neighbourhood level, Council will consider acquisition where the agreed detention basin site is consistent with the West Dapto Development Contributions Plan
- buffers to heritage items or other proposed heritage conservation management measures
- riparian corridors, buffers and proposed future uses
- location of schools, community facilities, recreation facilities and parks, including any proposed public land
- conceptual Bulk Earthworks Plan is required. The Bulk Earthworks Plan shall also demonstrate the feasibility of the drainage (stormwater) infrastructure and road layout plans. Justification will be required where there are changes to the existing landform.

3. In collaboration with Council advice, a staging or sequencing plan supporting the concept Neighbourhood Plan showing:

- all existing site boundaries within the neighbourhood, and
- proposed development staging within the planned area, taking into consideration delivery of essential infrastructure, access and logical progression as a development front.

4. Submission in electronic and PDF form.

- All the above data layers are required to be presented in electronic form. The electronic Neighbourhood Plan package will include either a set of Shapefiles, a Geodatabase or set of CAD files or be provided in another form as required by Council. The applicant shall also seek advice regarding Council's specific naming conventions, coordinate system and metadata requirements prior to lodgement of the Neighbourhood Plan.
- Council also requires the Neighbourhood Plan and supporting plans (staging, infrastructure plan, etc) to be provided in PDF form.

Defined Neighbourhoods in West Dapto Urban Release Area

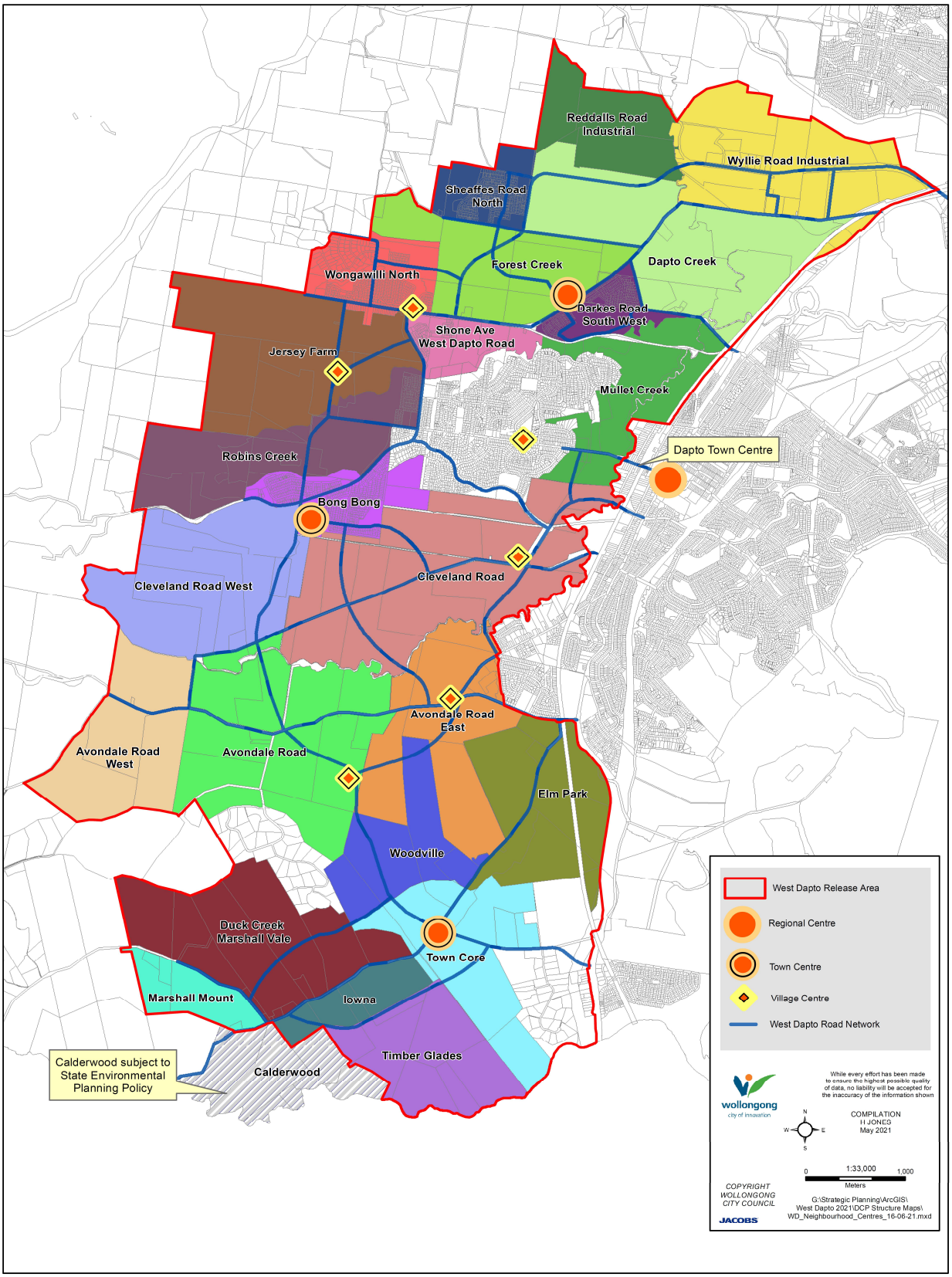

Figure 17. Defined Neighbourhoods in West Dapto Urban Release Area.

*The transport network displayed in **Figure 17** is correct as at the time of adoption and represents the overall transport structure depicted through the West Dapto Development Contributions Plan. The West Dapto Development Contributions Plan provides additional information relating to infrastructure requirements and should be read in conjunction with the Wollongong DCP 2009 Chapter - for example, apportionment, infrastructure costed in the plan, and infrastructure not included in the plan. The West Dapto Development Contributions Plan is available on Council's website.*

14.4 Transitional Arrangements

Council recognises that the WDURA is an active release area where much development has already occurred, and new neighbourhoods are forming. Council also recognises that new Neighbourhoods, as shown in **Figure 17** Defined Neighbourhoods in West Dapto Urban Release Area, will be developed over time.

All existing adopted Neighbourhood Plans in Section 14 remain the guiding step between the West Dapto Structure Plan and Development Applications. A Neighbourhood Plan is repealed by an amendment to this chapter (Chapter D16: West Dapto Urban Release Area) where the guiding function of that Neighbourhood Plan is replaced by a subsequent adopted Neighbourhood Plan. Where a Neighbourhood Plan is under assessment or pre-lodgement meetings have been held, those applications can continue (these are listed within the Council Business Paper of 18 October 2021.

In the event that a Concept Development Application has been approved in accordance with Section 4.23 of the EP&A Act and is deemed to have satisfied the requirements of Part 6 of WLEP 2009, Council can consider that approval as an alternative to a Neighbourhood Plan. The Concept Approval shall be adopted into this chapter of the DCP as soon as practical.

All Neighbourhood Planning applications lodged after 31 December 2021 must reflect **Figure 17** Defined Neighbourhoods unless they are subject to the transitional arrangements outlined in this Section.

14.5 Adopted Neighbourhood Plans

Section 14.5 outlines all neighbourhood plans that have been adopted into the DCP for the purposes of this Part.

All adopted Neighbourhood Plans remain in force until such time as they are superseded by a subsequent Neighbourhood Plan. In some circumstances, adopted Neighbourhood Plans represent part of the larger defined neighbourhood shown in **Figure 17.**

The table below lists adopted Neighbourhood Plans and identifies how these relate to Defined Neighbourhoods depicted in **Figure 17.**

Defined Neighbourhood (Figure 17)	**Neighbourhood Plans adopted before 1 October 2021** These form part of the Defined Neighbourhood area.	**Submitted by**	**Adoption Date**
Bong Bong	14.3.1. Bong Bong East and North	Stockland	14 Dec 2010
Bong Bong	14.3.2. Bong Bong Town Centre	Vinta Group / Bong Bong Town Centre	14 Dec 2010
Wongawilli north	14.3.3. Wongawilli north	Cardno Forbes Rigby and Jones Flint and Pike.	26 Nov 2012
Jersey Farm	14.3.5 Shone Avenue south	KF Williams	26 Jul 2011
Reddalls Road Industrial and Solar Radio Station	14.3.6 Reddalls Road Industrial	Beadnell	9 Dec 2013
Sheaffes Road North	14.3.7 Sheaffes Road North	SMEC Urban	8 Apr 2013
Darkes Road South West	14.3.8 Darkes Road South West	Don Fox Planning	24 Mar 2014
Avondale Road West	14.3.9 Avondale Road North, Huntley	Urbis	3 Aug 2015
Shone Avenue West Dapto Road	14.3.10 Shone Avenue / West Dapto Road	KF Williams	24 Aug 2015
Stream Hill	14.3.11 West Dapto Road / Sheaffes Road (south)	Watts Consulting for Wollongong City Council	19 Oct 2015
Cleveland Road West	14.3.12 Bong Bong South	Stockland	19 Nov 2018
Robins Creek	14.3.13 Hayes Lane and Iredell Road	Cardno	6 Apr 2020 & 2 Aug 2021
Woodville, Elm Park, Duck Creek Marshall Vale, Town Core, Iowna, Timber Glades	14.3.14 Stage 5 Yallah, Marshall Mount future neighbourhood precincts	Neighbourhoods yet to be planned.	9 Dec 2019

14.5.1 Bong Bong East and North

Figure 18. Neighbourhood Plan 1 - Bong Bong East and North

The following variations to development controls have been accepted:

Chapter B1 Residential Development - Section 4.5 Front setbacks – controls 1 and 2 are replaced with:

1. The following setback requirements apply from the primary street frontage to the front façade of the building:
   - (a) Front building line: 4.5m minimum setback, except for garages which must be setback at least 5.5m from the property boundary on the primary road.
   - (b) Articulation zone: An articulation zone up to a maximum of 1.5m measured from the foremost edge of the building line may be incorporated within the front setback zone. The following building elements are permitted in the articulation zone:
     - i) an entry feature or portico
     - ii) a balcony, deck, patio, pergola, terrace or verandah
     - iii) a window box treatment
     - iv) a bay window or similar feature
     - v) an awning or other feature over a window
     - vi) a sun shading feature.
   - (c) A building element must not extend above the eave gutter line, other than a pitched roof to an entry feature or portico that has the same pitch as the roof on the dwelling house.
   - (d) The maximum area of all building elements within the articulation zone, other than a building element listed in (v) or (vi) above, must not be more than twenty five percent of the area of the articulation zone, measured through the horizontal plane of the elements.
2. For corner allotments a 2m minimum setback requirement applies from the secondary street frontage to the façade of the building.

Chapter B1 Residential Development - Section 4.6 Side and rear setbacks – controls 1 to 3 are replaced with:

1. A dwelling house and any carport, garage, balcony, deck, patio, pergola, terrace or verandah that is attached to the dwelling house with a building height at any point up to 3.8m on an allotment with an area greater than or equal to 450m2 must have a setback from a side boundary of at least 900mm. This control does not apply to a secondary street frontage.
2. Any part of a dwelling house that has a building height in excess of 3.8m and any carport, garage, balcony, deck, patio, pergola, terrace or verandah that is attached to a dwelling house on an allotment with an area greater than or equal to 450m2 must have a setback from a side boundary of at least the sum of 900mm and an amount that is equal to one quarter of the additional building height above 3.8m. This control does not apply to a secondary street frontage.

   Note - A two storey dwelling house may have its ground floor component (up to 3.8m in height) setback 900mm from the side boundary with the second storey setback further as required by the formula in (2).

   A dwelling house that is part two storey and part single storey may have the single storey portion of the dwelling house (up to 3.8m) setback 900mm from the side boundary and the two storey portion of the dwelling house setback further as required by the formula in (2).
3. On an allotment with an area less than 450m2 and a lot width 10m or less, where an easement for access and maintenance as well as driveway crossing locations (which are located so as not to adversely impact on-street parking capacity) are provided on title, a zero side setback may be applied to one side for the single storey component of the dwelling. The two storey component of the dwelling is to be setback further as required by the formula in (2). This control does not apply to a secondary street frontage.

The following additional controls to apply:

1. A dwelling house and any carport, garage, balcony, deck, patio, pergola, terrace or verandah that is attached to the dwelling house with a building height at any point up to 3.8m must have a setback from the rear boundary of at least 3m.
2. A dwelling house with a building height of more than 3.8m and any carport, garage, balcony, deck, patio, pergola, terrace or verandah that is attached to the dwelling house must have a setback from the rear boundary of at least 3m, plus an amount that is equal to three times the additional building height above 3.8m up to a maximum setback of 8m.
3. Despite (6) and (7), an allotment that has a rear boundary with a laneway may have a building line that abuts that boundary for up to 50 per cent of the length of that boundary.

Chapter B2 Residential Subdivision – Section 13 Cut and Fill land reshaping works – does not apply to master planning of land and precinct subdivision applications.

14.5.2 Bong Bong Town Centre

In the area where Bong Bong Road adjoins the north-south arterial route a new district town centre is to be established, based on a north-south orientated main street (see **Figure 18** Bong Bong East and North Neighbourhood Plan). The Bong Bong Town Centre is to be the primary town centre in the release area. The Bong Bong Town Centre is to be a supermarket based centre with a range of shops and would accommodate around 15,000m2 of retail floor space.

14.5.3 Wongawilli – North

Wongawilli North will provide a mix of housing densities from large lot housing towards the escarpment and becoming denser towards the east and surrounding the village centre. The riparian corridor will create some structural form for passive recreation and active transport links along shared paths between the residential pockets.

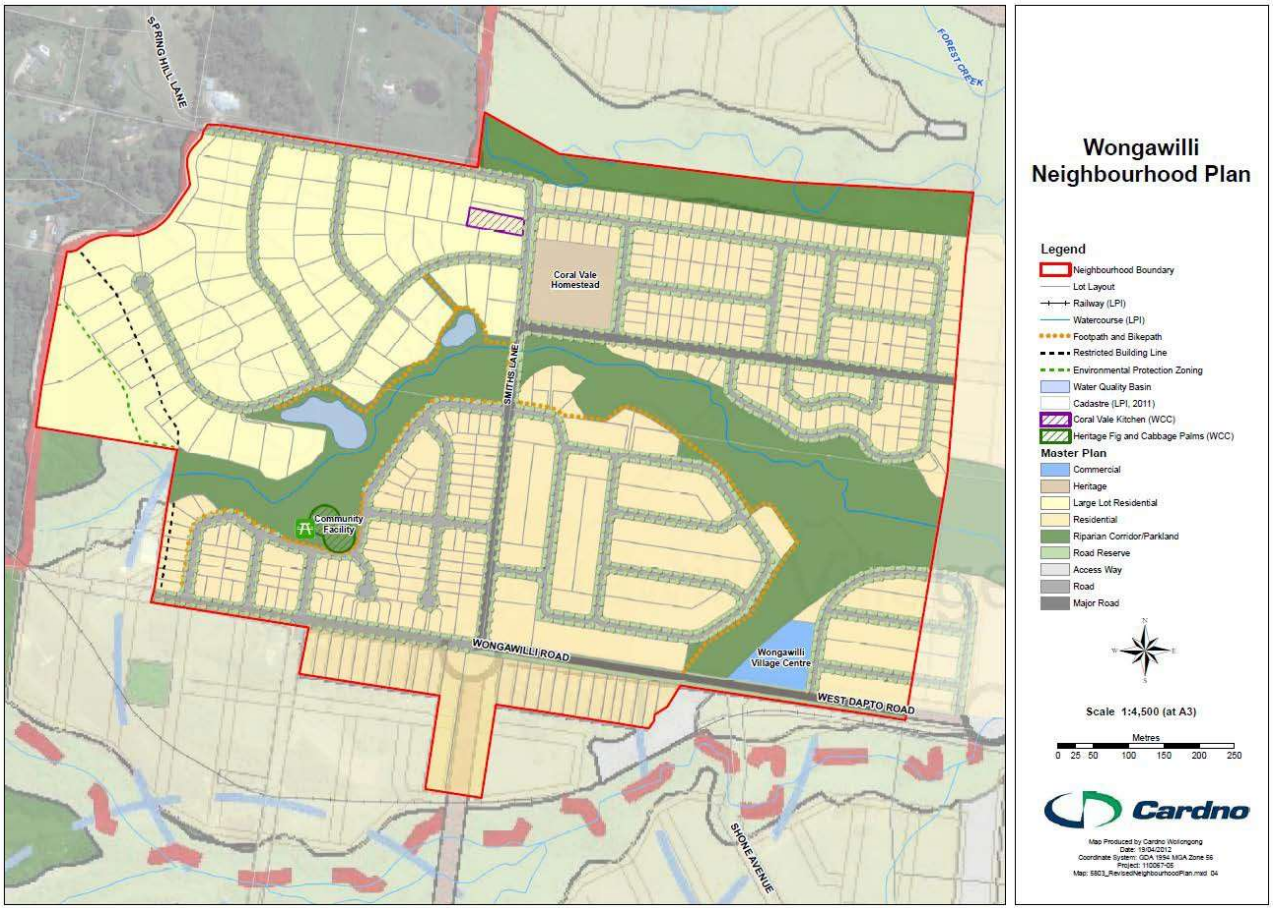

Figure 19. Wongawilli North Neighbourhood Plan

The following modified and additional controls to apply:

1. Minimum lot width fronting Wongawilli Road and Smiths Lane of 15m;
2. Minimum front building line setback of 4.5m for all lots fronting Wongawilli Road and Smiths Lane;
3. The maximum length of cul-de-sacs that provide access to lots fronting Wongawilli Road Should not exceed 130m;
4. For lots with a dual road frontage:
   (a) Wongawilli Road and Smiths Lane is considered to be the primary road frontage and the internal unnamed road is considered to be the secondary road frontage and the rear of the lots;
   (b) All dwellings must face, address and activate the primary road frontage of Wongawilli Road and Smiths Lane;
   (c) Carports or garages must be located and accessed from the secondary road frontage rear of the lots;
   (d) Minimum rear setbacks are to remain in accordance with Chapter B1, garages and carports are to have a minimum rear setback of 5.5m in accordance with the principles shown in **Figure 20**;
   (e) Fencing and landscaping treatment of the secondary road frontage is in accordance with the principles shown in **Figure 20**. Examples of Articulated fencing include, but are not limited to:
      i) Masonry to 1.2m high with open type lattice or slats above with masonry elements no wider than 150mm;
      ii) Timber Lap and Cap;
      iii) Colorbond solid to 1.2m with Colorbond lattice style top sections.

5. For lots backing onto or adjoining the Rural Fire Service (RFS) property:

   (a) Dwelling house, secondary dwelling and any habitable areas must be setback at least 10m from the rear or common property boundary that adjoins the RFS property.

   (b) Outbuildings and garages must be setback at least 5m from the rear of common boundary that adjoins the RFS property.

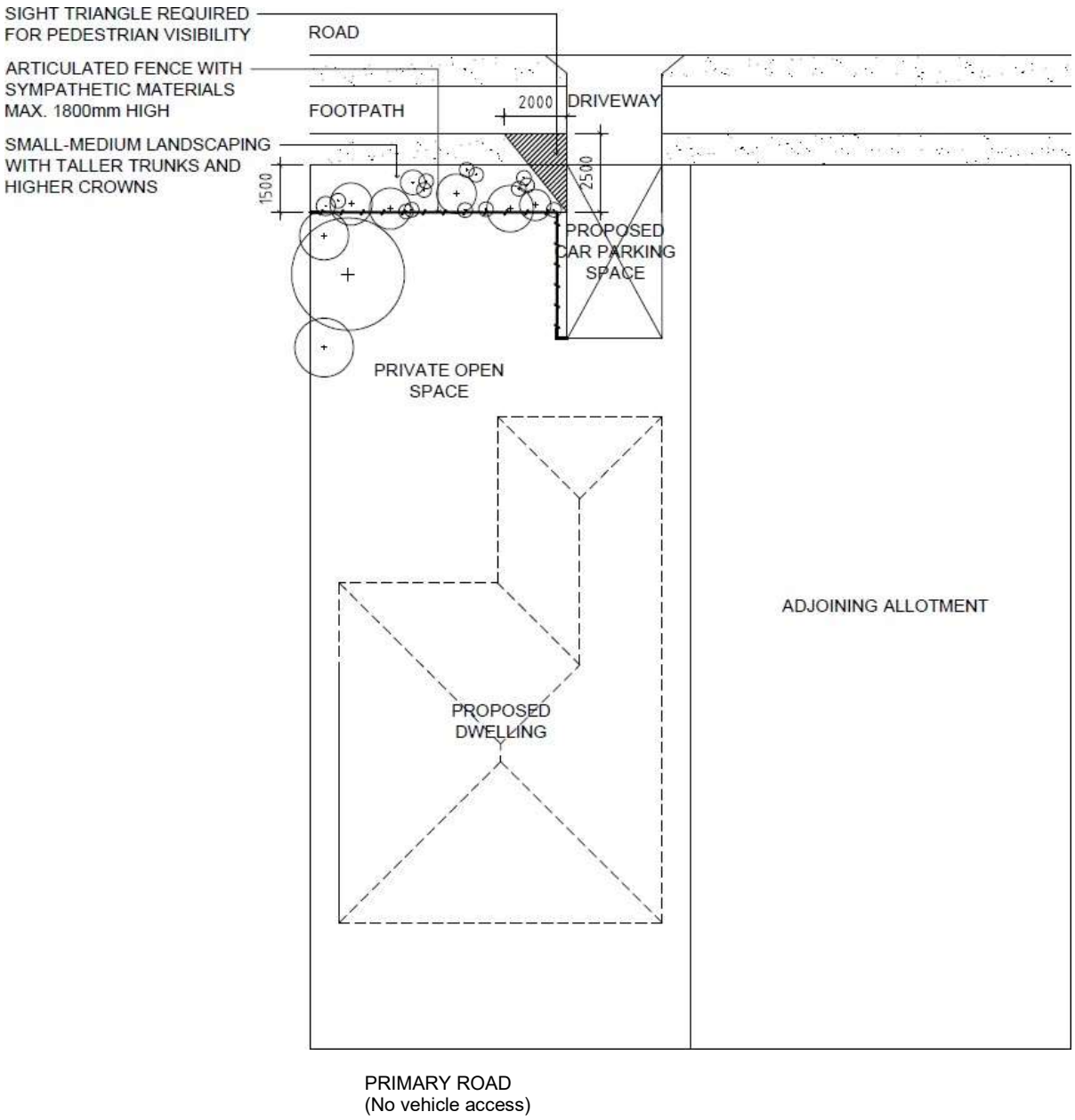

Figure 20. Dual frontage property secondary frontage treatment

Wongawilli Village centre will provide a small convenience centre with a small grocer and some mixed retail shops. The centre will be designed focusing on activating the interface with the riparian boundary and its West Dapto Road frontage. Parking will be included in the village design with street parking along the secondary street and a parking lot area provided along the north, generally not visible from West Dapto Road, allowing built form to perform a clear street defining urban function. The village form will be guided by the concept design presented in **Figure 21**.

Figure 21. Wongawilli Village Centre – Conceptual design

14.5.4 Wongawilli Mine Spur Rail line

It is anticipated that the Wongawilli Mine will continue to operate for the next 30 years, or longer. Coal is transported from the mine to Port Kembla via the rail network. Future urban development should be designed to recognise the continued use of the rail spur line and include measure to mitigate noise and other potential impacts. Division 15 of SEPP Infrastructure 2007 applies to development near the spur line.

Objectives:

(a) To facilitate the transport of coal from Wongawilli Mine to Port Kembla by rail transport.

(b) To minimise rail noise, vibration and other impacts on dwellings near the rail spur line.

Controls:

1. Development Applications for subdivision and dwelling houses within the rail buffer area (Refer to **Figure 22**), must satisfy the requirements of SEPP Infrastructure Division 15, and are to include:
   a. sound attenuation measures that achieve a maximum of 35dBA within the dwelling.
   b. consideration of vibration impacts and include mitigation measures.

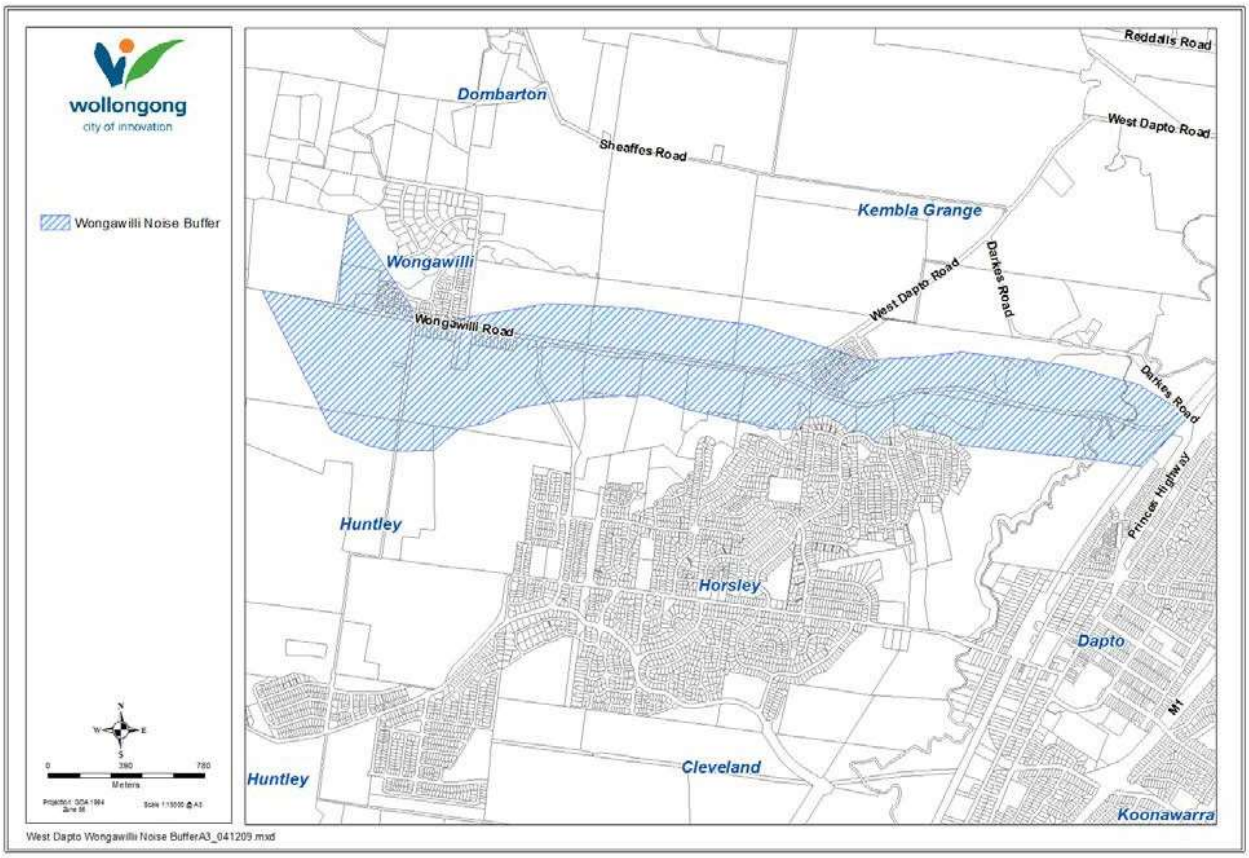

Figure 22. Wongawilli rail noise area

14.5.5 Shone Avenue - South

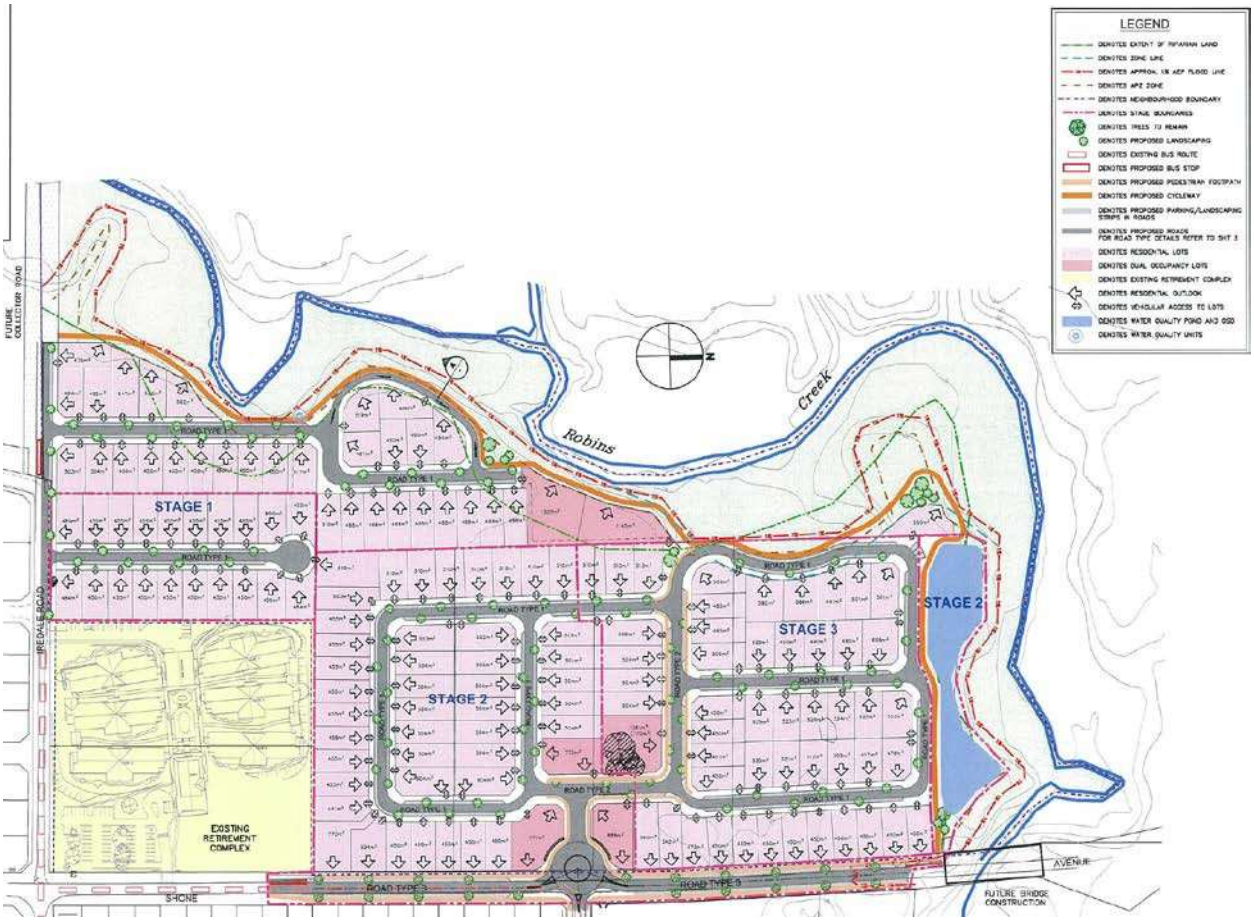

Figure 23. Shone Avenue South Neighbourhood Plan

The following modified and additional controls to apply:

1. For lots with a dual road frontage:
   - (a) Shone Avenue and Iredell Road are considered to be the primary road frontage and the internal unnamed road is considered to be the secondary road frontage and the rear of the lots;
   - (b) all dwellings must face, address and activate the primary road frontage of Shone Avenue and Iredell Road;
   - (c) carports or garages must be located and accessed from the secondary road frontage rear of the lots;
   - (d) minimum rear setbacks are to remain in accordance with Chapter B1, garages and carports are to have a minimum rear setback of 5.5m in accordance with the principles shown in **Figure 24**;
   - (e) fencing and landscaping treatment of the secondary road frontage is in accordance with the principles shown in **Figure 24**. Examples of Articulated fencing include, but are not limited to:
     - i) Masonry to 1.2m high with open type lattice or slats above with masonry elements no wider than 150mm;
     - ii) Timber Lap and Cap;
     - iii) Colorbond solid to 1.2m with Colorbond lattice style top sections.

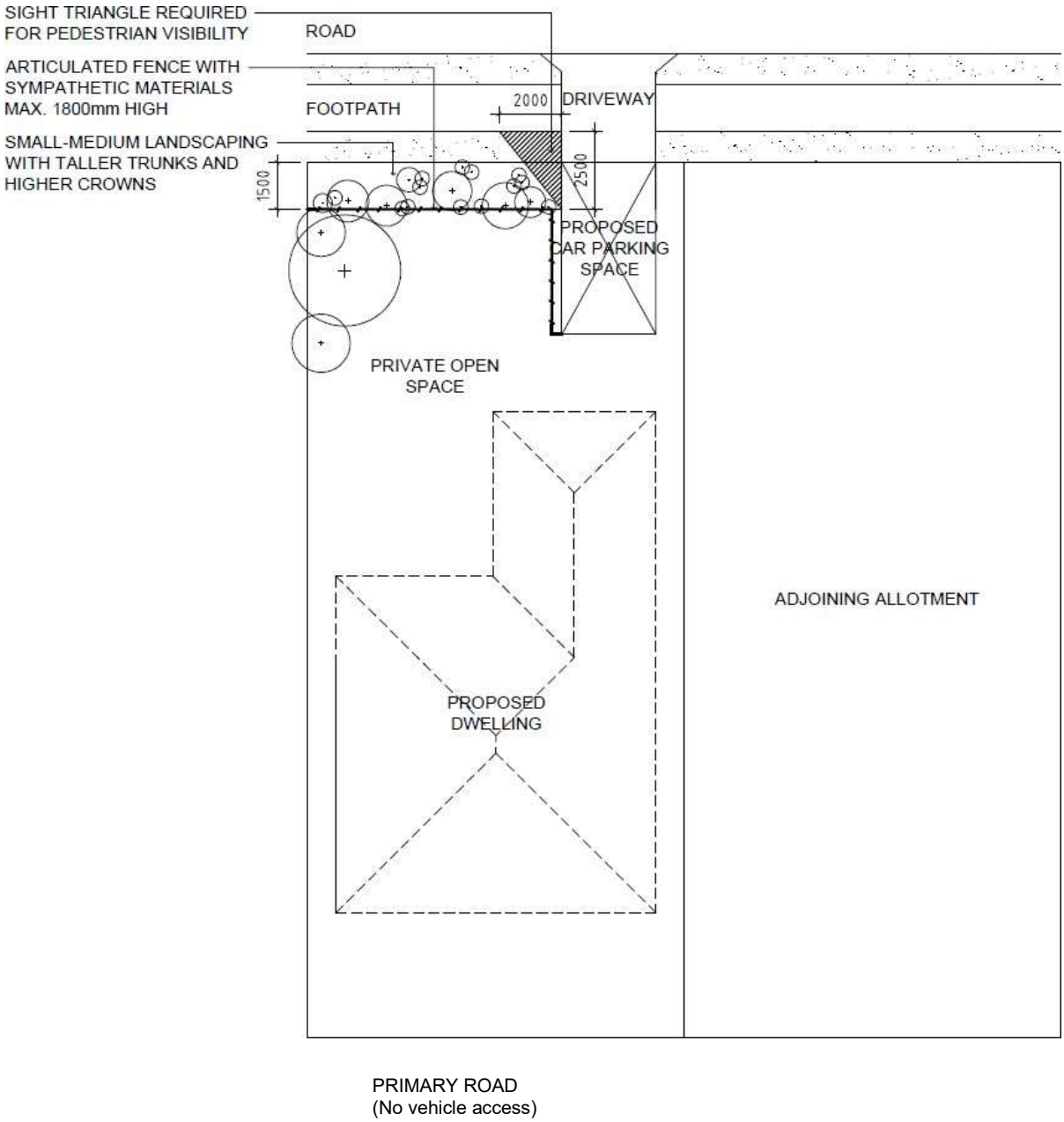

Figure 24. Dual frontage property secondary frontage treatment

14.5.6 Reddalls Road Industrial

Figure 25. Reddalls Road Industrial Neighbourhood Plan

The following additional controls to apply:

1. The proposed cycleway must have adequate passive surveillance to ensure safety by design.
2. Indicative future bus stop locations should be identified and shown on road types capable of handling bus routes. A minimum number of stops should be located in a manner to ensure that the majority of lots are within 400m of a bus stop.
3. Any proposed development of the neighbourhood will require the applicant upgrading the relevant section of Reddalls Road to a standard that is suitable for the normal range of Heavy vehicles at no cost to Council. These upgrade works would also include any required intersection treatment to Reddalls Road and the new proposed Access Road as well as any necessary road safety works.

14.5.7 Sheaffes Road North

Figure 26. Sheaffes Road North Neighbourhood Plan

The following modified and additional controls to apply:

1. For lots with a dual road frontage:

   (a) Sheaffes Road and Paynes Road are considered to be the primary road frontage and the internal unnamed road is considered to be the secondary road frontage and the rear of the lots;

   (b) All dwellings must face, address and activate the primary road frontage of Sheaffes Road and Paynes Road;

   (c) Carports or garages must be located and accessed from the secondary road frontage rear of the lots;

   (d) Minimum rear setbacks are to remain in accordance with Chapter B1, garages and carports are to have a minimum rear setback of 5.5m in accordance with the principles shown in **Figure 27**;

   (e) Fencing and landscaping treatment of the secondary road frontage is in accordance with the principles shown in **Figure 27**. Examples of articulated fencing include, but are not limited to:

      i) Masonry to 1.2m high with open type lattice or slats above with masonry elements no wider than 150mm.

      ii) Timber Lap and Cap;

      iii) Colorbond solid to 1.2m with Colorbond lattice style top sections.

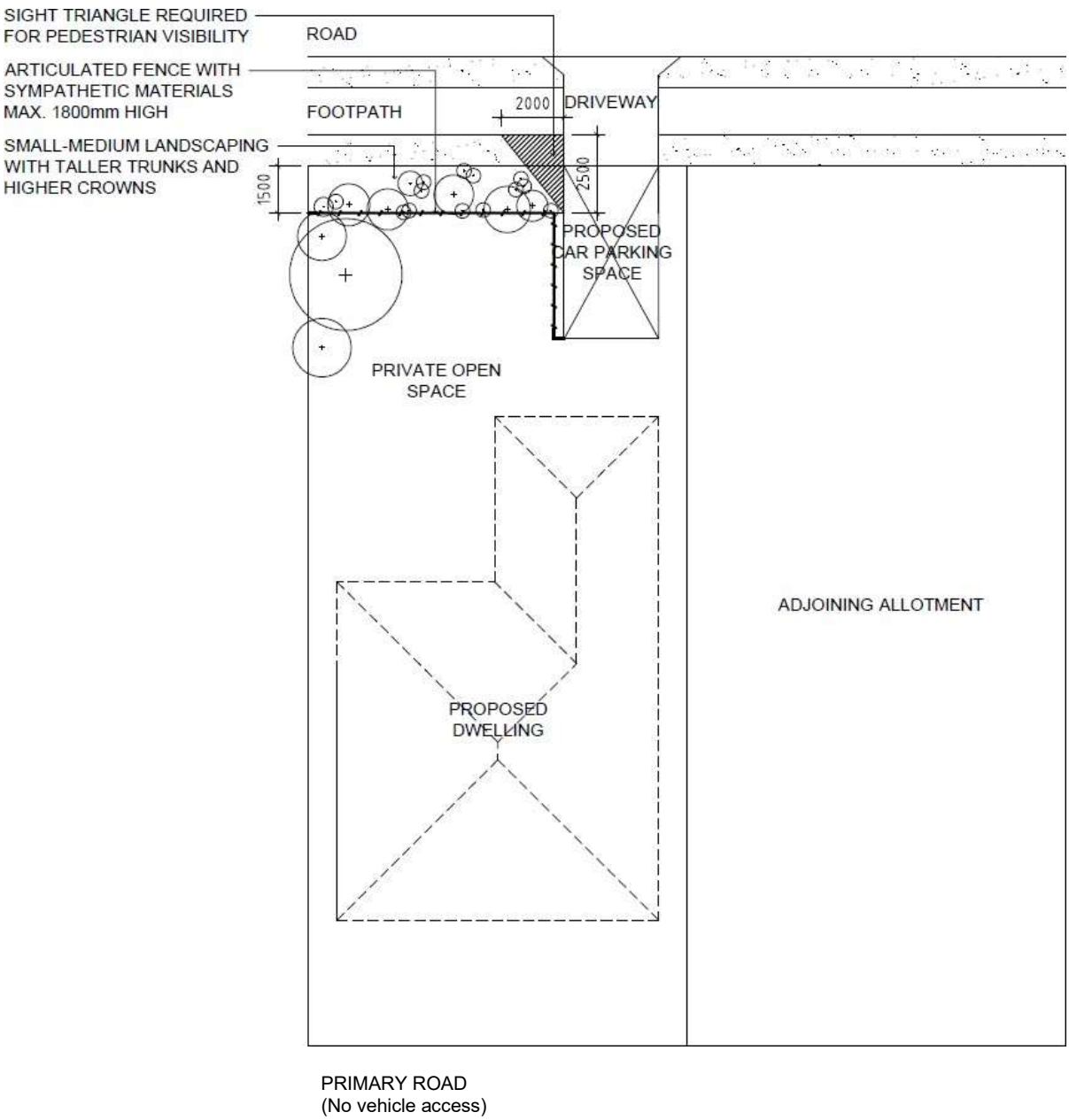

Figure 27. Dual frontage property secondary frontage treatment

14.5.8 Darkes Road South West

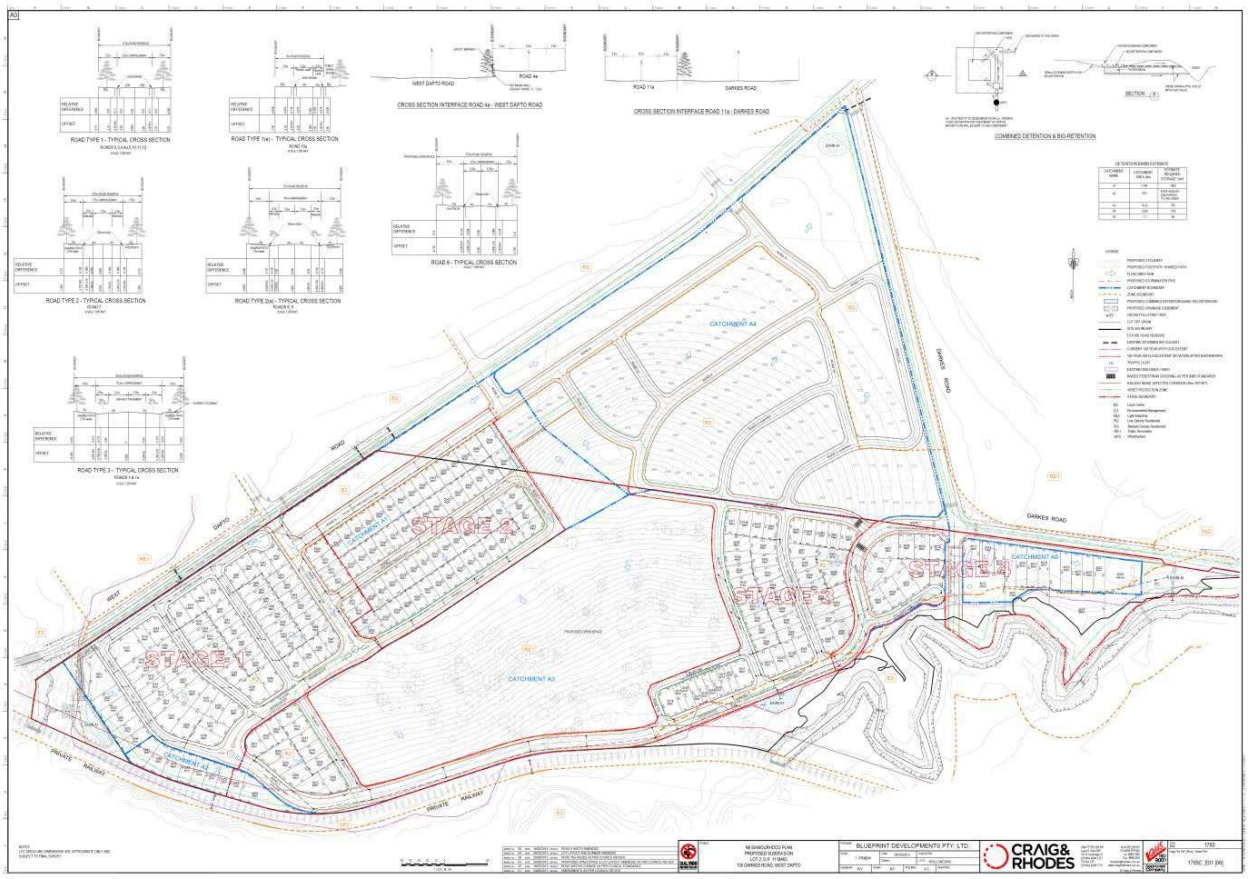

Figure 28. Darkes Road South West Neighbourhood Plan

The following modified and additional controls to apply:

1. Lot width, depth and aspect are to be in accordance with **Figure** above and are not required to comply with Chapter B2 Section 6 Subdivision Lot Layout – Aspect & Solar Access Orientation as well as Section 8 Lot Width & Depth Requirements. The relevant issues have been considered and the lot layout and details shown are considered acceptable. Should the lot layout depart substantially from that shown then compliance with Chapter B2 is required unless variation is sought in accordance with Chapter A1.

2. On an allotment with an area less than 450m2 and a lot width 10m or less, where an easement for access and maintenance as well as driveway crossing locations (which are located so as not to adversely impact on-street parking capacity) are provided on title, a zero side setback may be applied to one side for the single storey component of the dwelling. The two storey component of the dwelling is to be setback further as required by the formula in (2). This control does not apply to a secondary street frontage.

3. For lots with a dual road frontage:

   (a) West Dapto Road and Darkes Road is considered to be the primary road frontage and the internal unnamed road is considered to be the secondary road frontage and the rear of the lots;

   (b) All dwellings must face, address and activate the primary road frontage of West Dapto Road and Darkes Road;

   (c) Carports or garages must be located and accessed from the secondary road frontage rear of the lots;

   (d) Minimum rear setbacks are to remain in accordance with Chapter B1, garages and carports are to have a minimum rear setback of 5.5m in accordance with the principles shown in **Figure** below;

(e) Fencing and landscaping treatment of the secondary road frontage is in accordance with the principles shown in **Figure** . Examples of articulated fencing include, but are not limited to:

i. Masonry to 1.2m high with open type lattice or slats above with masonry elements no wider than 150mm;

ii. Timber Lap and Cap;

iii. Colorbond solid to 1.2m with Colorbond lattice style top sections.

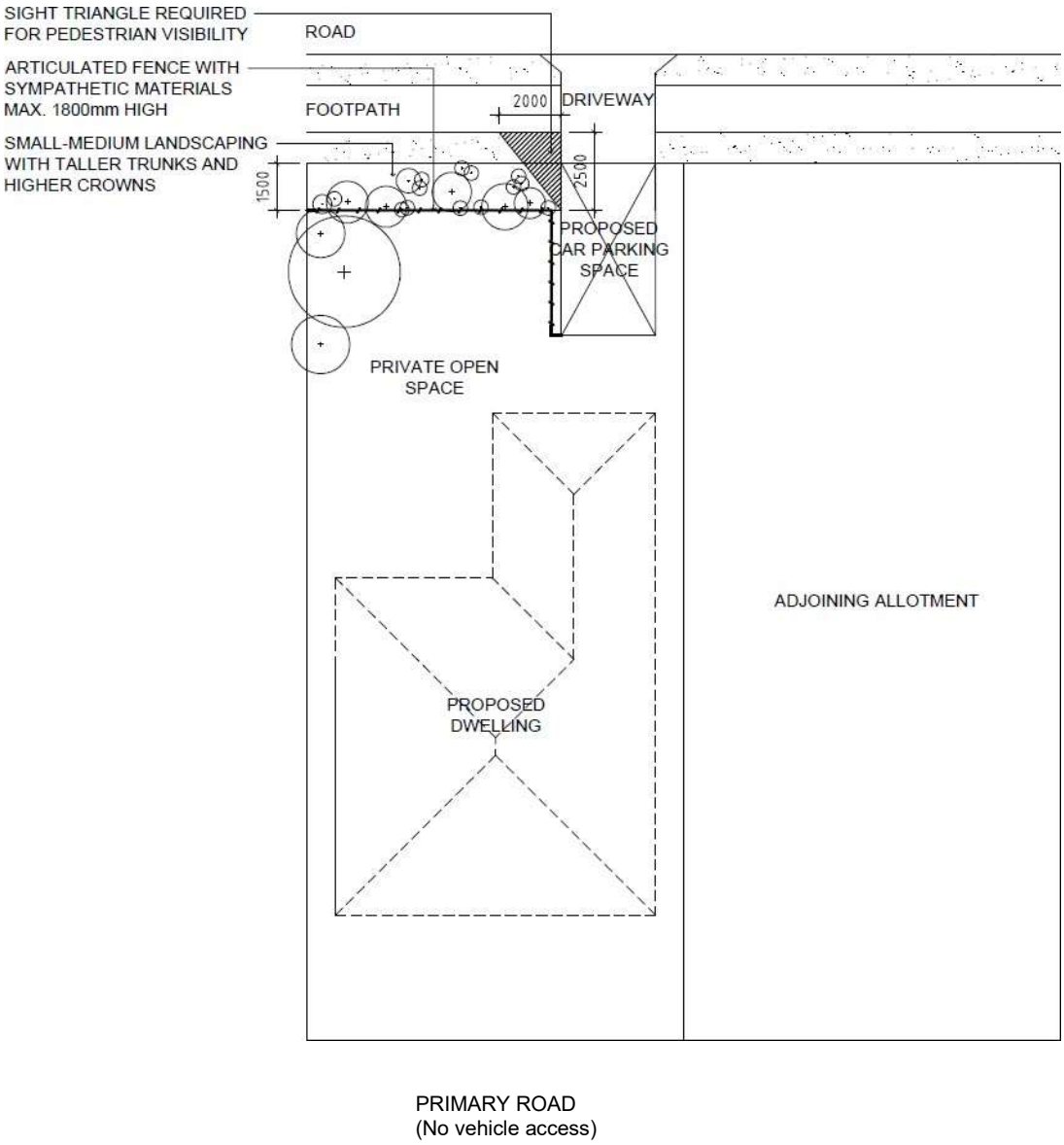

Figure 29. Dual frontage property secondary frontage treatment

1. For all development applications outside of the area denoted as Stage 1:

(a) An Aboriginal Heritage Assessment is to be undertaken in accordance with the Wollongong Development Control Plan 2009 Chapter E10.

(b) Additional archaeological investigations are required to be undertaken to the previously recorded archaeological sites and three (3) potential archaeological deposits (PADs) identified. This work is required in order to better determine the significance and extents of these areas.

(c) In-principle support for the intended mitigation or Aboriginal Heritage Impact Permit (AHIP) proposals is to be gained from the NSW Office of Environment and Heritage (OEH) prior to the determination of the associated development application.

(d) Further consultation with Local Aboriginal Groups is to be undertaken within the assessment of any future Development Applications.

(e) Consideration of the impacts of the proposal on identified Non-Indigenous Archaeological Deposits located on the site during the preparation of the Heritage reports and which are subject to Section 140 of the NSW Heritage Act 1977.

(f) Conservation planning related to any retained structures or features on the site (e.g. The Silo and gardens).

(g) Interpretation planning relating to the history and heritage significance of the development area.

2. Bush Fire Matters

(a) Certain construction standards apply for development on Bush Fire Prone Land. The applicable Construction Standards for proposed development are to reflect the Bushfire Attack Level (BAL) as identified at **Figure 30** below.

(b) Given that the site is identified as Bush Fire Prone Land, when a development application for subdivision is made, the development will require a Bush Fire Safety Authority to be issued by the NSW RFS under Section 100B of the Rural Fires Act 1997. The RFS has indicated that it is likely that by condition of the Bush Fire Safety Authority, restriction on the titles of the lots requiring the provision and maintenance of the necessary APZ's will be required.

APPENDIX 1 (Map 2): AS 3959 – 2009 (Table 2.4.2) BAL Construction Standards relevant to the Neighbourhood Plan

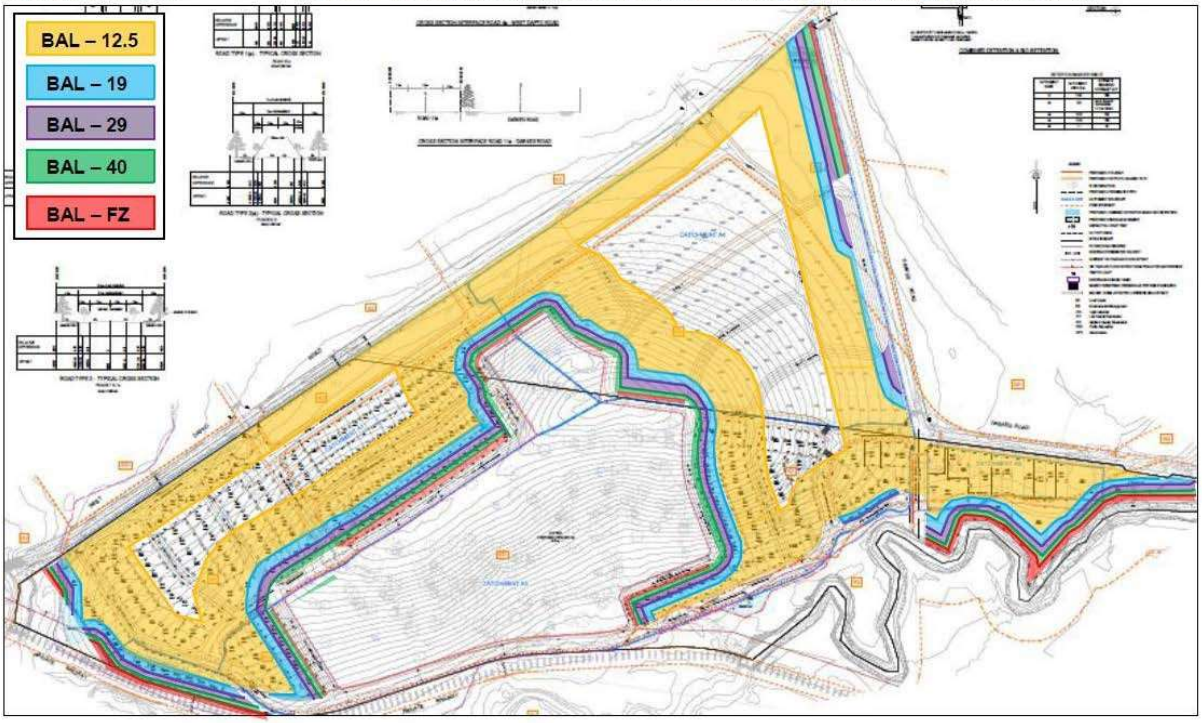

Figure 30. BAL Construction Standards relevant to the Neighbourhood Plan

1. Access

(a) An appropriate access track is to be provided to the Detention Basin A1 to facilitate sufficient maintenance access for Council.

(b) Appropriate access is also to be provided to the Wongawilli Rail Spur Line from the Detention Basin A1 and from Road 01.

(c) The final form of the access track is to be determined in conjunction with Council Engineering Officers within the assessment of future Development Applications. Hardstand access will be required.

2. There may be scope to amend the current Council Drainage Acquisition Maps to reflect more up to date flood mapping of the area. This is to be further investigated within future Voluntary Planning Agreements (VPAs) and assessment of development applications.

14.5.9 Avondale Road North, Huntley

Figure 31. Avondale Road North, Huntley Neighbourhood Plan

14.5.10 Shone Avenue / West Dapto Road

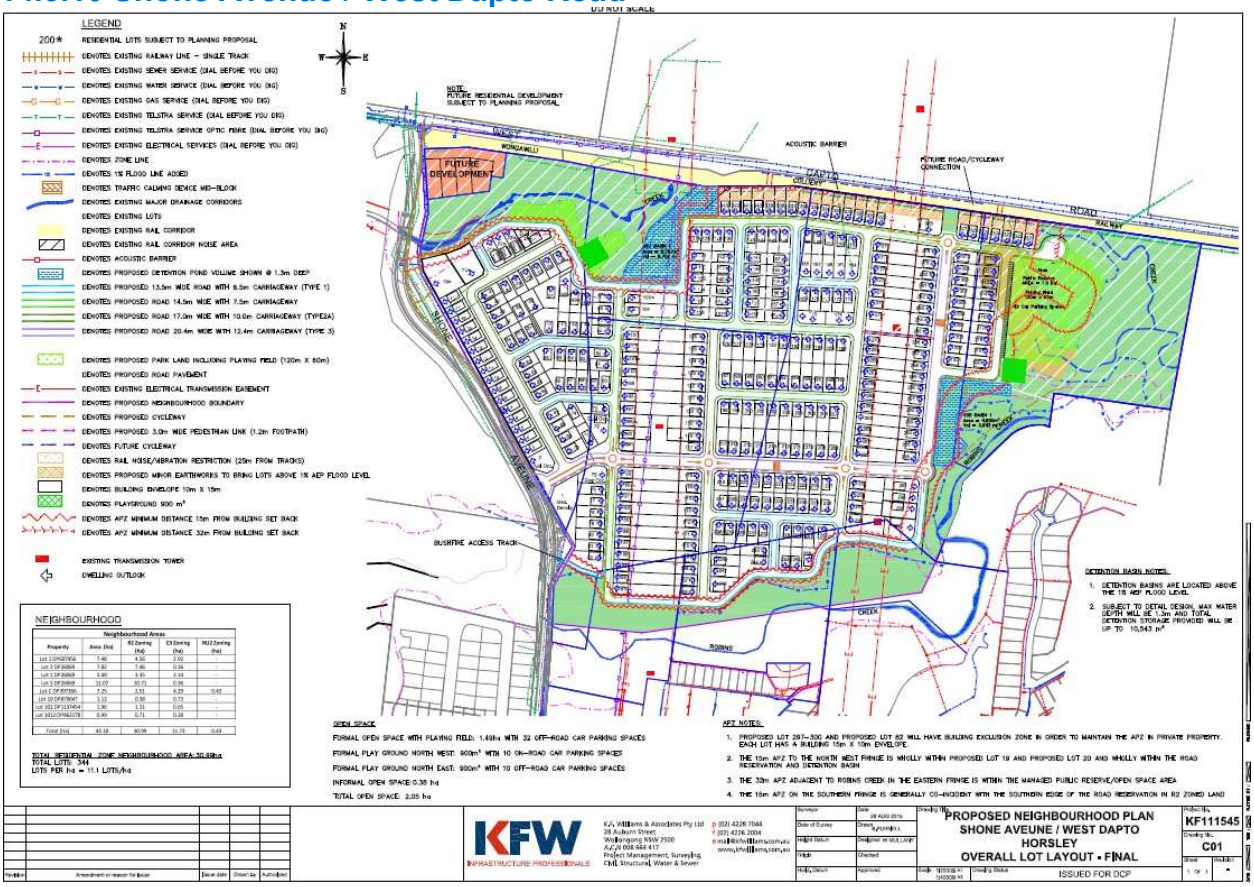

Figure 32. Shone Avenue and West Dapto Road Neighbourhood Plan

The following modified and additional controls apply:

1. For lots with a dual road frontage:

   (a) Shone Avenue is considered to be the primary road frontage and the internal unnamed road is considered to be the secondary road frontage and the rear of the lots.

   (b) All dwellings must face, address and activate the primary street frontage of Shone Avenue – this is the main address of the dwelling.

   (c) The minimum front setback on Shone Avenue is 4m (being a greenfield site) and the minimum setback from the secondary road is 4m.

   (d) No car access to residential lots is permitted from Shone Avenue (i.e. lots are access denied). Carports or garages must be located and accessed from the secondary road frontage rear of the lots.

   (e) Garages and carports must be setback a minimum of 5.5m from the property boundary on the secondary road to enable a vehicle to park or stand in front of the garage or carport (i.e. allow off street parking that does not impede the footpath) and in order to be a non-dominant component of the streetscape.

   (f) Fencing controls for the primary street frontage of Shone Avenue are outlined in Chapter B1: Residential Development and are designed to complement the objectives of passive surveillance.

   (g) Fencing and landscaping treatment of the secondary road frontage must ensure that clear lines of sight are maintained for motorists and pedestrians to and from the lot, and ensure the design complements the objectives of passive surveillance. To help soften the visual impact and improve the streetscape appearance of the fence and allow visual connection between the dwelling and the street, any fence will be required to be well articulated and landscaped with appropriate planting. Articulated fencing should be provided to a maximum height of 1.8m.

Examples of articulated fencing include, but are not limited to:

i) Masonry to 1.2m high with open type lattice or slats above with masonry elements no wider than 150mm;

ii) Timber Lap and Cap

iii) Colorbond solid to 1.2m with Colorbond lattice style top sections.

NB. Fences in bush fire prone areas shall be of a metal or masonry construction only.

(h) Any gates associated with the secondary street fence should open inwards and not obstruct the road reserve.

(i) Where garage door openings face the secondary road, they shall be a maximum of 50% of the width of the dwelling. Refer to Chapter B1: Residential Development for other car parking and access controls.

2. For lots backing onto West Dapto Road:

(a) An acoustic building exclusion zone of 25m applies along the length of the rail corridor to reflect Noise Report recommendations.

(b) A sound wall is to be erected by the developer along the length of the rail corridor, as indicated in the Neighbourhood Plan.

14.5.11 West Dapto Road / Sheaffes Road (south)

Along West Dapto Road a town centre (large local town centre) is to be established to the west. The town centre will interface with large neighbourhood open space provisions that will cater for active organised sporting needs. The town centre will perform an important role in the provision of public transport, as a node with active transport facilities will meet with the public transport network. The core part will contain the primary retail and commercial functions and be surrounded by some business and medium density housing. It is envisaged that this centre would accommodate around 7,500m2 of retail floor space to support the employment land.

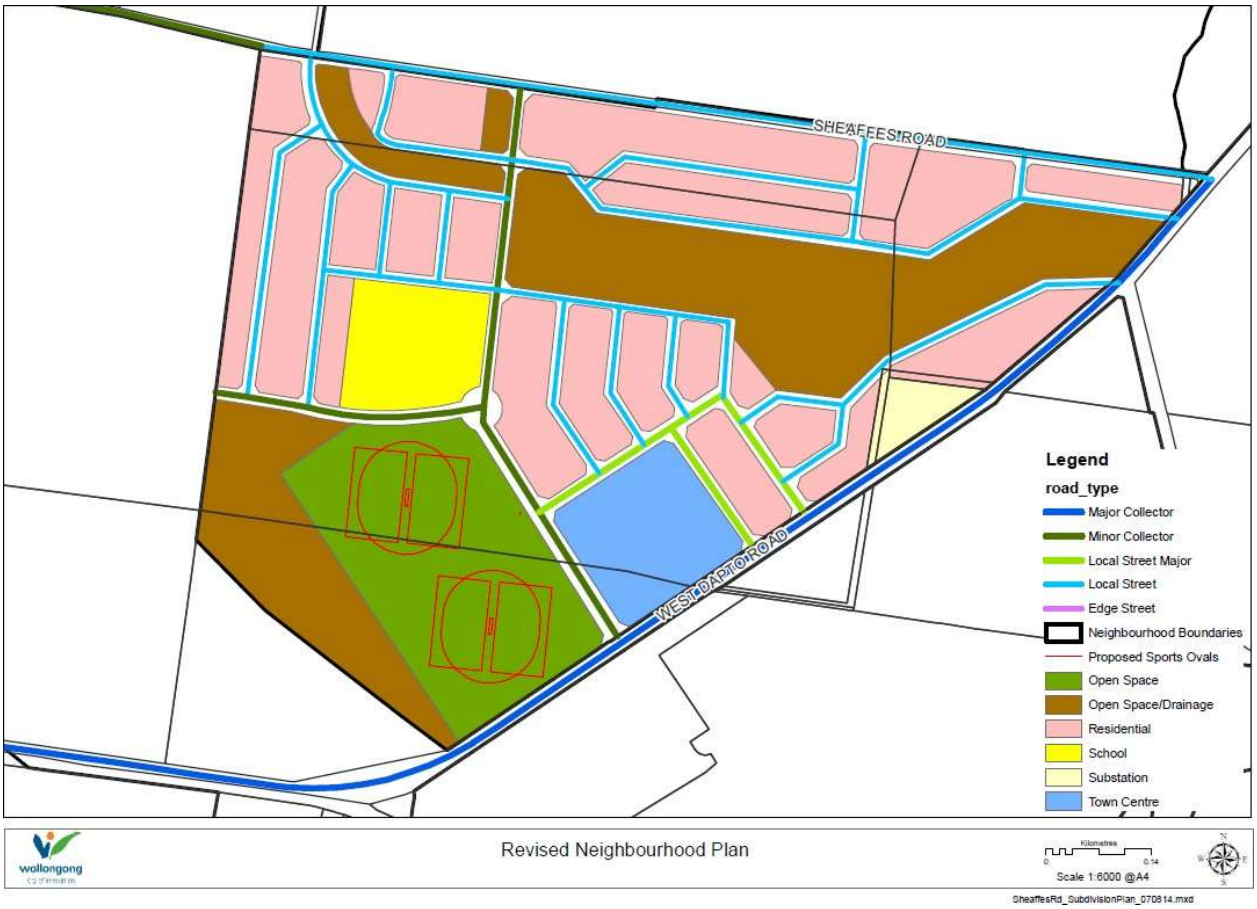

Figure 33. West Dapto Road / Sheaffes Road (south) Neighbourhood Plan

14.5.12 Bong Bong South

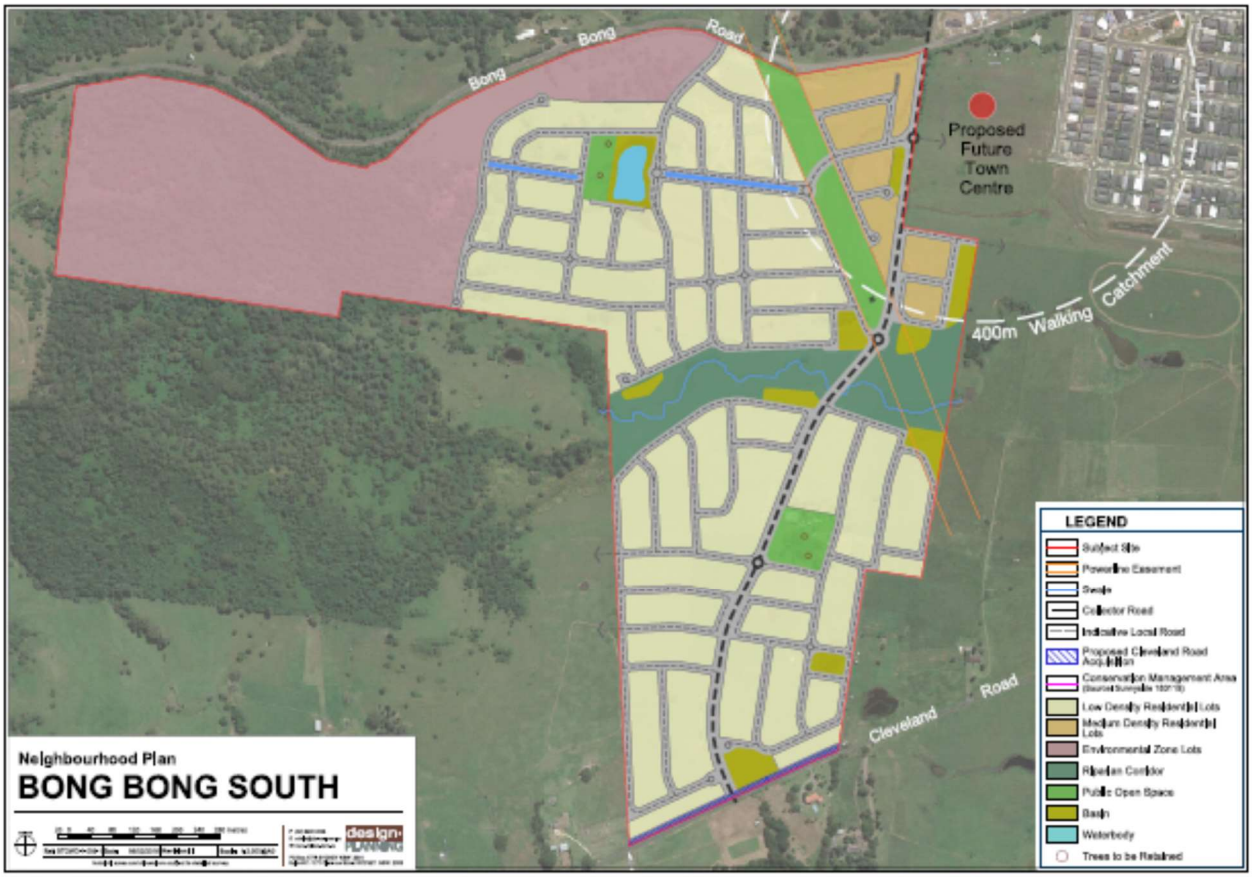

Figure 34. Bong Bong South Neighbourhood Plan

14.5.13 Hayes Lane and Iredell Road

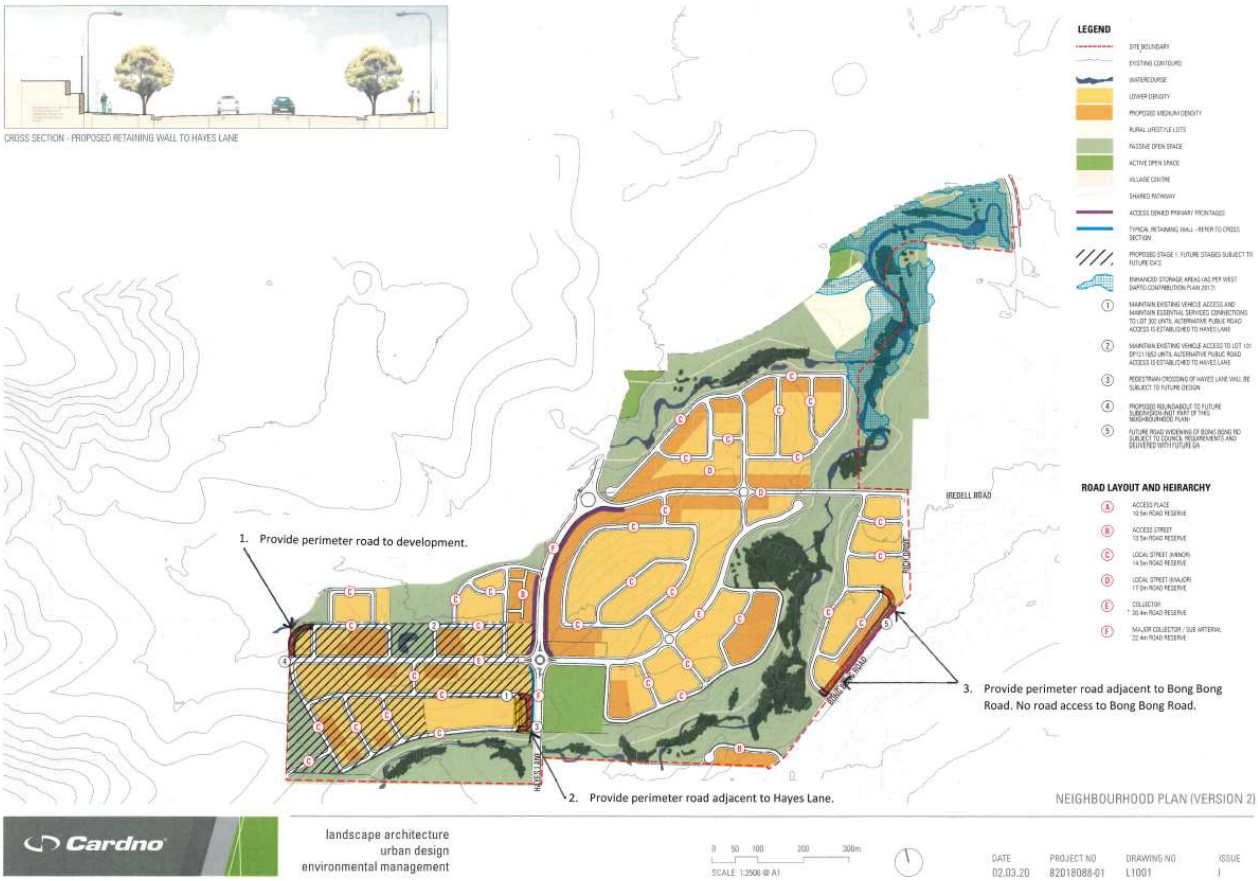

Figure 35a. Hayes Lane and Iredell Road Neighbourhood Plan

1. The future subdivision of the land should be generally in accordance with Figures 35a and 35b.
2. Future residential development on the land shall be in accordance with Chapter B1, except where variations or additional controls are identified below.
3. A development application for subdivision shall demonstrate the manner in which it is compatible with the current and likely future orderly and economic development of adjoining lands including:
    - Connectivity to pedestrian, cycling and public road networks
    - Earthworks, retaining walls and future cut/fill requirements
    - Stormwater management including any necessary works on adjoining land
    - A construction management plan maintaining connections to all essential services and public road network during and post-construction
    - Management of Asset Protection Zones and connectivity to public roads for bushfire emergency and evacuation
4. Minimum setback of four metres from primary road frontage, except for garages which must be setback at least five metres from the property boundary on the primary road.
5. Minimum setback of two metres from a secondary road on a corner lot.
6. For lots with more than one road frontage, the primary frontage is that which is adjacent to the road with the widest reserve width [internal roads/laneway are considered to be the secondary road frontage and the rear of the lots].
    - All dwellings must face, address and activate the primary road frontage
    - Car ports, garages and on-site parking must not be located within the setback to the primary frontage and not be accessed from the primary frontage.

- Fencing and retaining walls fronting controlled access roads are to present a consistent streetscape and should be constructed prior to the issue of a Subdivision Certificate to ensure consistency of materials, construction and delivery.

7. Residential development on lots less than 300sqm must be developed as Integrated Housing.
8. If developed in an integrated manner, a zero side setback will be considered for attached dwellings.
9. Fencing and landscaping treatment of a road frontage that is not the primary road frontage must ensure that clear lines of sight are maintained for motorists and pedestrians and ensure the design achieves passive surveillance. Any fence will be required to be well designed and landscaped. The maximum fence height is 1.8 metres of which a maximum 1.5m from the ground is solid form and elements above 1.5m are open form. Any gates should open so as not to obstruct the road reserve.

   These fencing requirements are to be included as a Restriction-as-to-user on the title of affected lots.
10. Fencing to 'Access Denied' primary frontages (as shown in the Neighbourhood Plan) shall be constructed prior to the issue of a Subdivision Certificate. Where retaining walls are required they are to be constructed in stepped design of masonry blocks or Council-approved equivalent and fencing as indicated in the Neighbourhood Plan and DCP controls.

    These fencing requirements are to be included as a Restriction-as-to-user on the title of affected lots.
11. Where rear or side boundary fences adjoin land to be dedicated as open space, fences are to be of a design and materials which allow for passive surveillance between the private lot and the open space.

    These fencing requirements are to be included as a Restriction-as-to-user on the title of affected lots.
12. Where garage door openings face the secondary road they shall be a maximum of 50% of the width of the dwelling façade.
13. Western lots inclusive of transmission easement should have rural, timber style fences fronting the new road.
14. Parts of the site are identified as bushfire prone land. Certain construction standards apply for development on Bushfire Prone Land. The applicable Construction Standards for proposed development are to reflect the applicable Bushfire Attack Level (BAL). The BAL will be finalised at DA stage.
15. The north and south edges of the Neighbourhood Plan interface with existing vegetation. This requires the provision of an Asset Protection Zone (APZ) in accordance with Rural Fire Service (RFS) requirements. There is sufficient space within each development site fronting the riparian and woodland areas to ensure the provision of an APZ. The final location of any required APZ will be identified at the DA design stage.
16. Design of local parks must integrate with the proposed OSD. The design and relationship will be finalised as a part of the subdivision DA.

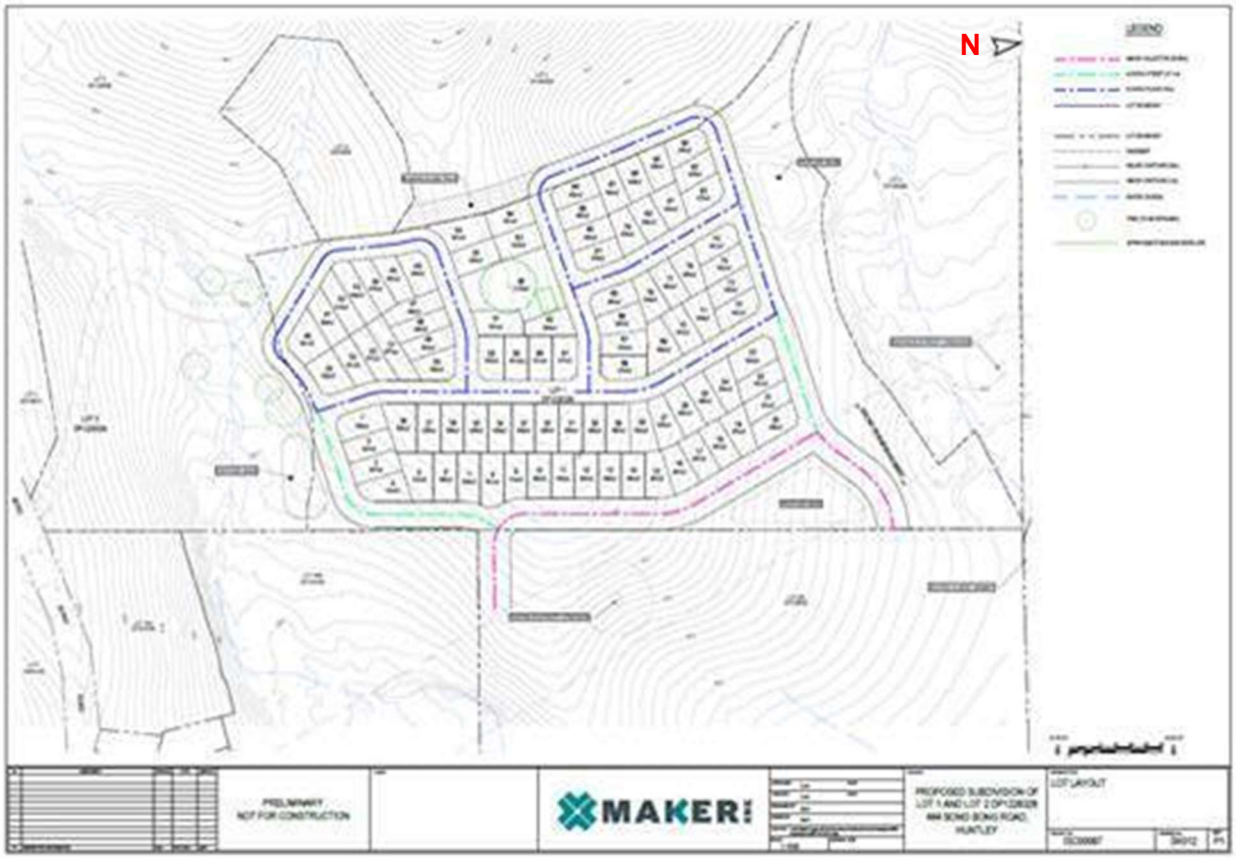

Figure 35b. Hayes Lane and Iredell Road Neighbourhood Plan – western area

17.1. The future subdivision of the land should be generally in accordance with Figures 35a and 35b.

17.2. Future residential development on the land shall be in accordance with Chapter B1.

14.5.14 Stage 5 – Yallah / Marshall Mount

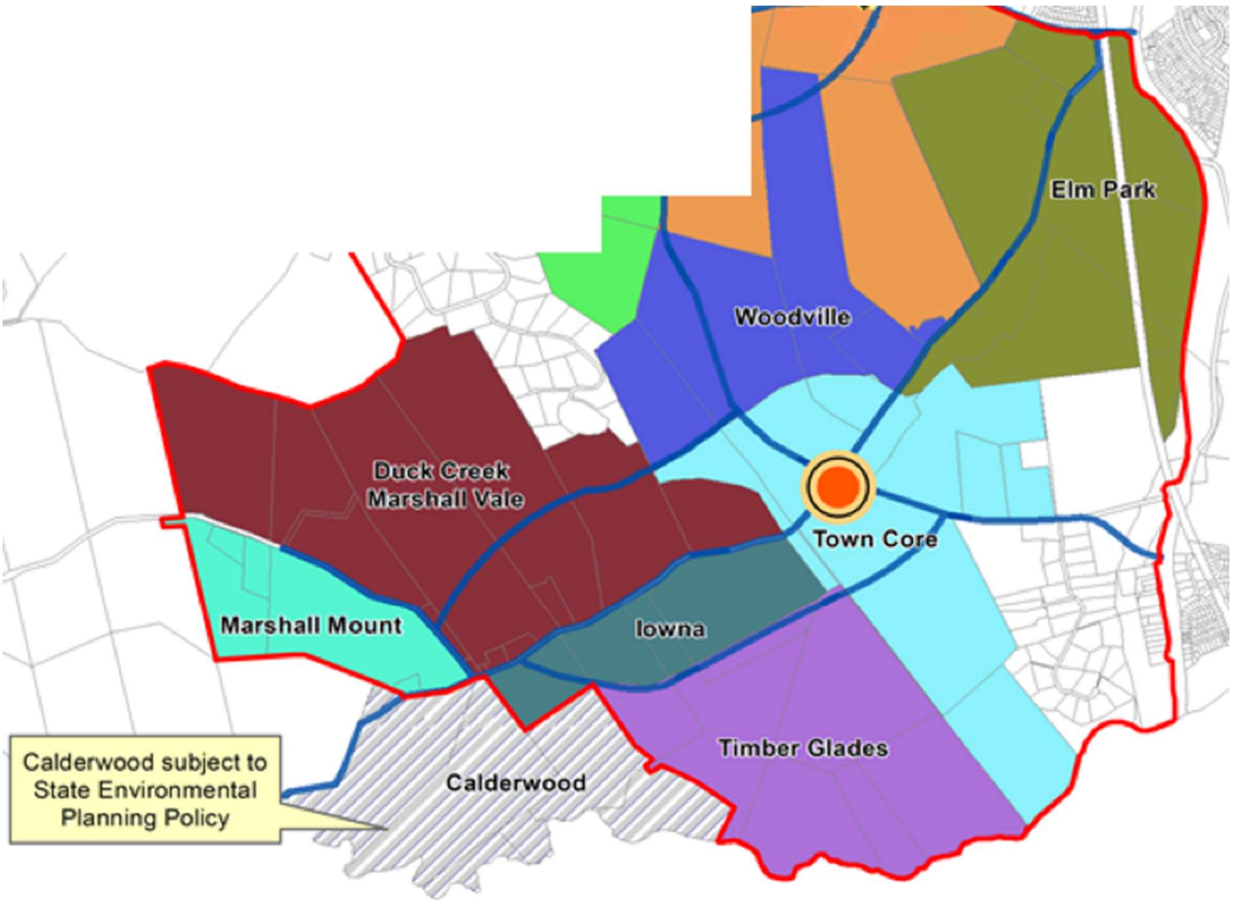

Figure 36. Boundaries of future Neighbourhoods in Stage 5 to be planned.

There are a number of defined neighbourhoods that make up Stage 5 Yallah/Marshall Mount. During the rezoning process, visions and strategic decisions were made to provide strategic level structure to future development in the area (see Page 8 summary of structure). The Neighbourhood plans will all be required to deliver against the strategic intents established during these processes. Applicants planning in Stage 5 can contact Council to obtain a copy of the Yallah-Marshall Mount Vision Statement (Council reference: Z14/418278).

Marshall Mount Town Centre

The new village centre will be focussed around the intersection of Yallah Road and Marshall Mount Road on lower lying land adjacent to Duck Creek. The vision proposes that the focal point of the new community will be in this neighbourhood. Other developable land near this central intersection will be available for development for a mixture of housing types, with densities ranging from 50-75 dwellings per hectare near the village centre, with 20-30 dwellings per hectare further away. The vision needs to achieve these higher densities to create a critical mass of population within a walkable catchment of the proposed village centre to assist in economic viability of the centre and reduced car dependence.

There are opportunities for smaller lot housing and terraces to take advantage of future public transport routes along Marshall Mount Road. Duck Creek provides opportunities for passive open space and walking and cycling tracks, but also includes land with significant flood hazard and is not suitable for development. The corner of Marshall Mount Road and North Marshall Mount Road contains heritage items, including a community hall, which provides opportunities for a community focus around this point. There is flat land, which may have potential for a school and playing fields adjacent to the proposed Village Centre. Land further from the main public transport routes will be for low density residential and rural-residential development.

The steeper slopes and more timbered areas provide a scenic green backdrop to the Duck Creek valley and provide a bushland link along the ridgelines from the escarpment to Lake Illawarra.

15 Matters to be addressed in Development Applications

This chapter applies to development applications in the West Dapto Urban Release Area.

Documentation accompanying a development application for subdivision will also have to provide more detailed site specific information and specialist reports, addressing issues such as:

- Detailed site survey prepared by a registered surveyor.
- Development plans – lot layout, earthworks, detailed road designs, landscape plans, subdivision stages (if any) (Chapters B1, B2, B3, B4, D16 and E19).
- Flora and fauna assessment and future management (Chapter E18).
- Riparian land management (Chapter E23).
- Drainage/flooding/water quality modelling, WSUD (Chapters E13, E14, and E15).
- Soil erosion and sediment control (Chapter E22).
- Land contamination assessment (Chapter E20).
- Bushfire management (Chapter E16).
- Traffic assessment (Chapter E3).
- Aboriginal Heritage assessment (Chapters E10 and E11).
- Noise assessment (where relevant) (Infrastructure SEPP).
- Pedestrian and bicycle routes, including accessibility for persons living with a disability (Chapter E1).
- Crime Prevention through Environmental Design (Chapter E2), etc.

The documentation accompanying a development application for a dwelling house on a newly subdivided lot should address Parts A and B1 (dwelling houses) of this DCP and any variations to the generic controls under this chapter (e.g. the standard setbacks in individual neighbourhoods may have been varied).

An application for a dwelling house can also be undertaken in accordance with the requirements of SEPP Exempt and Complying Development, which can be assessed by Council or a Private Certifier.