

CHAPTER 6.17 WARNERVALE EAST / WADALBA NORTH WEST

1.0 INTRODUCTION

The purpose of this Chapter is to provide specific development guidelines for the former Warnervale/Wadalba Urban Release Areas.

The majority of land suitable for development within the Warnervale East/Wadalba North West area has either been developed or approved for development. The area now comprises the suburbs of Woongarra, Hamlyn Terrace and Wadalba. The area has evolved over the past decade with market forces and changes in development standards resulting in some variation from the original plans detailed in Wyong Shire Council Development Control Plan No. 49 (now superseded).

This chapter has been prepared to provide guidance for the development of the remaining lands, consistent with current development standards and the desired and likely future character of the area.

1.1 Objectives of this Chapter

- To provide a high quality and varied residential environment with accessible open space, retail and community facilities
- To provide attractive streetscapes which reinforce the function of a street and enhance the amenity of dwellings
- To provide opportunity for a variety of housing types
- To provide a safe and efficient system of roads and pathways for vehicular, pedestrian and cycle movements
- To provide for the protection and enhancement of the environment

1.2 Land to which this Chapter Applies

This Chapter applies to land as shown edged heavy black on Figure 1. Figures 2 and 3 on the following pages show in greater detail the land described as Warnervale East (Figure 2) and the land described as Wadalba North West (Figure 3).

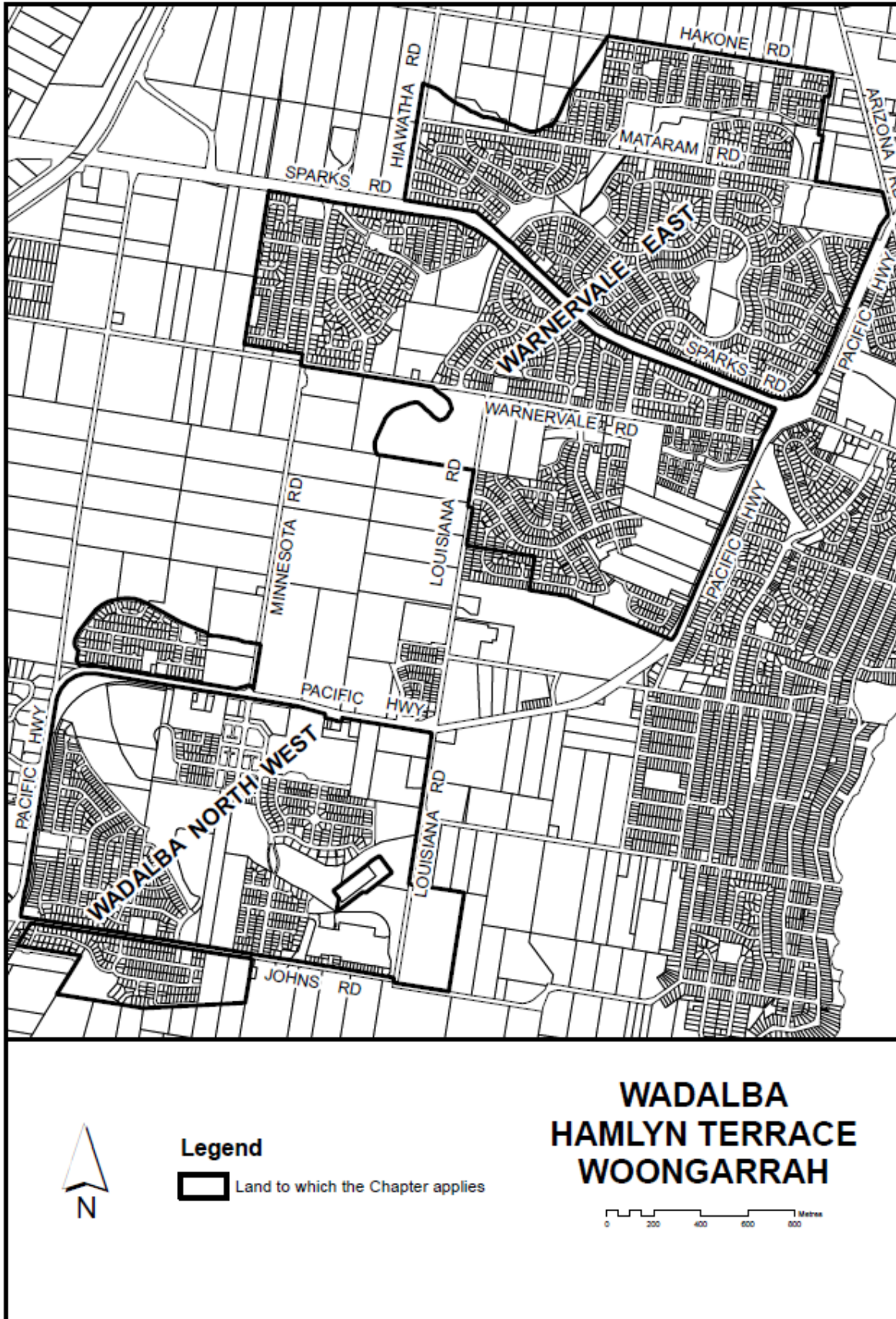


Figure 1 Land to which Chapter 6.17 applies

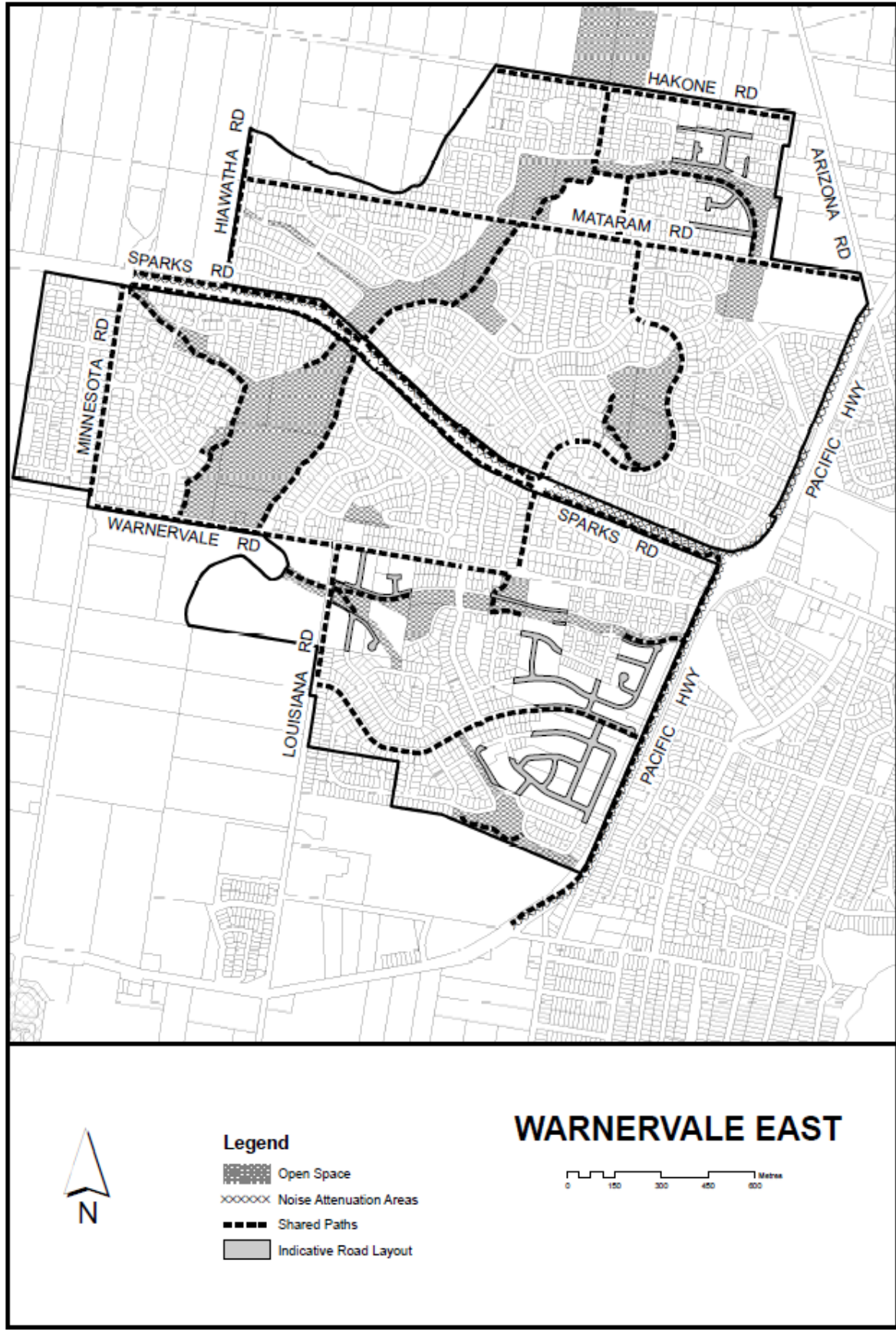


Figure 2 Warnervale East

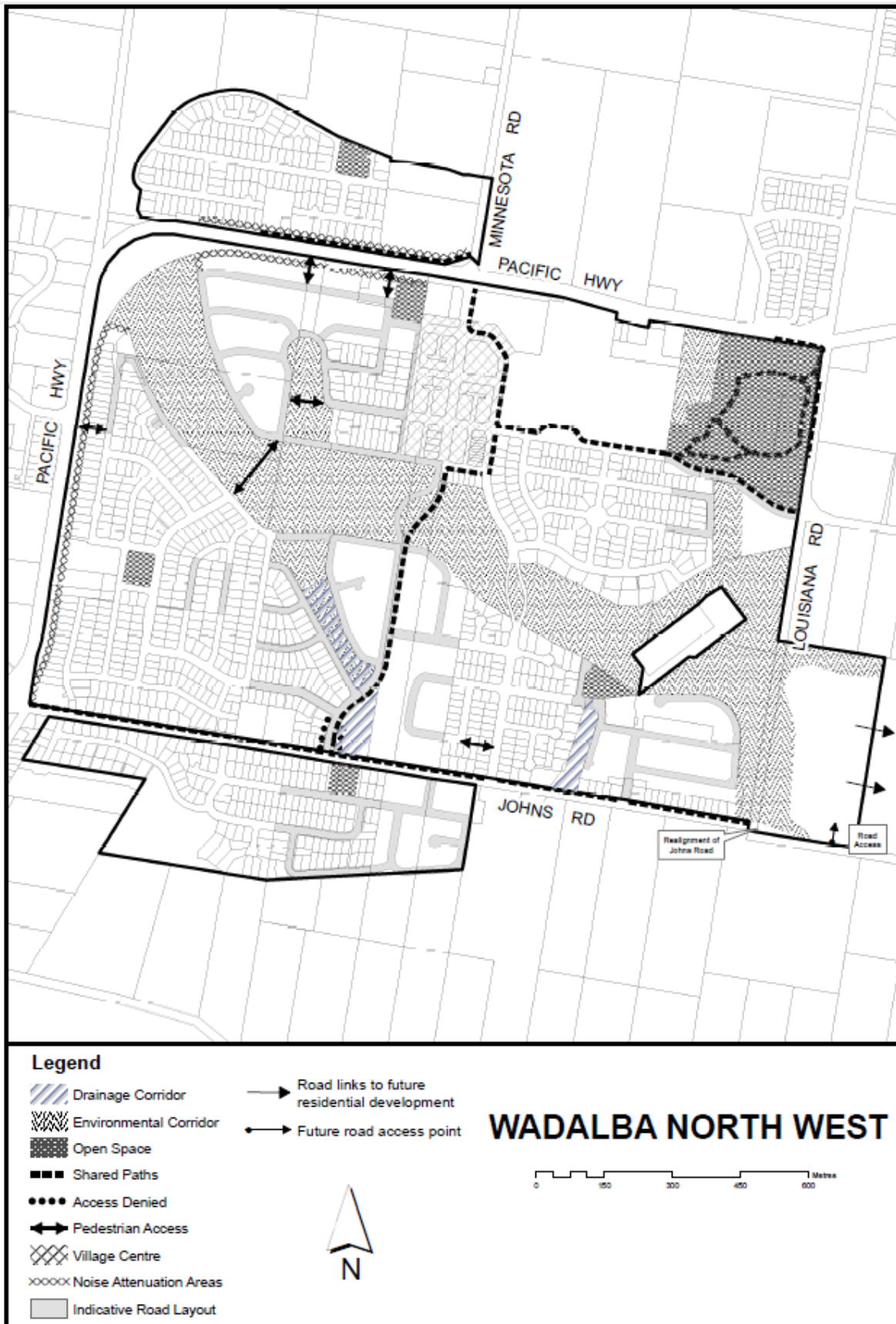


Figure 3 Wadalba North West

1.3 Relationship to other Chapters and Policies

This Chapter should be read in conjunction with other relevant Chapters of this Development Control Plan and other Policy Documents of Council, including but not limited to:

- Chapter 2.1 – Dwellings and Ancillary Structures
- Chapter 2.6 - Signage
- Chapter 2.11 – Parking and Access
- Chapter 3.6 – Tree and Vegetation Management
- Section 4 – Subdivision
- Chapter 6.2 – Hamlyn Terrace – Louisiana Road Infill Precinct (LRIP)
- Council’s Civil Works Design Guideline and Construction Specification

2.0 SUBDIVISION DESIGN

Any application for subdivision of land in the Warnervale/Wadalba area, must consider the requirements of WLEP 2013 and DCP 2013 Section 4 – Subdivision, in addition to any requirements of this Chapter. Where any inconsistencies arise with the provisions contained in this Chapter, this Chapter shall prevail.

2.1 Streetscape

OBJECTIVES

- To ensure a consistent and pleasant streetscape blending into the surrounding natural environment
- To maintain pedestrian and road safety
- To, as far as possible, preserve the natural features of the area

REQUIREMENTS

- a A streetscape plan, prepared and submitted as part of a Category 3 Landscape Design Report in accordance with Council’s Landscape Guidelines is to be provided with each subdivision application. The streetscape plan shall show:
 - i the street reserve together with typical cross sections;
 - ii location and detailing of carriageway pavement, parking bays, bus stops, kerbs, footpath, cycle paths and speed control devices;
 - iii location and species of proposed trees or other vegetation;
 - iv location of existing vegetation to be retained and proposed treatments to ensure its health;
 - v typical dwelling front alignments including any proposed setback variations together with any building detailing proposed to promote special character or identity;

- vi any relevant details for front garden treatment, e.g. fences, driveways and landscape themes;
 - vii any relevant details for the design and location of street furniture - lighting, seats, bus stops, street signs, etc.
- b Applicants are required to consult with Council to ascertain preferred design standards for street furniture prior to the lodgement of a subdivision application.

Note: Wider verges are often necessary to provide space for larger trees, varied service requirements or varied parking requirements particularly where densities are 15 dwellings per hectare or greater.

- c Street landscaping schemes shall:
- i emphasise street tree planting particularly species that attain a minimum height of 8 metres at maturity;
 - ii select species that are drought resistant;
 - iii select species that are locally occurring where possible;
 - iv select species that have a growth habit and propagation that would inhibit weed growth;
 - v select species that would not obscure street lighting, vehicle sight lines at intersections or overhang the carriageway so as to interfere with service vehicles or buses;
 - vi require minimal maintenance once established.

2.1.1 Crossing of Environmental Corridors / Warnervale Floodplain

Those areas identified as "sensitive crossings" will be constructed having regard to the following:

- a tree canopy to continue across the road corridor to facilitate the movement of arboreal fauna;
- b roads to be split to reduce the width of the crossing;
- c pavement to be designed to reduce the concentration of runoff within the corridor;
- d landscaping is to be provided within the road reserve to facilitate the regeneration of the canopy overhanging the road;
- e road crossings are to be designed with features to assist with fauna movement and to reduce mortality (e.g. underpasses, landscaping, lighting issues, speed suppression, glide poles – as appropriate).

2.2 Traffic Noise Amelioration

OBJECTIVE

- To ensure that neighbourhood amenity is maintained through suitable reduction in traffic noise and visual intrusion

REQUIREMENTS

- a Areas labelled on the plan as "Noise Attenuation Areas" along the Pacific Highway and Sparks Road shall be required to be dedicated to Council to a width of 10m.
- b A noise study prepared by an appropriately qualified acoustic consultant shall accompany any development or subdivision application for properties with frontage to either the Pacific Highway or Sparks Road. The noise study shall identify appropriate noise amelioration measures including but not limited to dwelling design and acoustic barrier design to achieve noise goals set out in Clause 2.2 c. The design noise level shall be based upon 10 year projected estimated traffic flows, speeds and percentage of heavy goods vehicles in accordance with the NSW Road Noise Policy (or superseding document). Council is to be consulted prior to the preparation of the noise study as to the appropriate noise amelioration measures for the site.
- c A relaxation of the external noise goal may occur providing it is based on sound economic and technical considerations and only on the basis of submission of proof that the internal noise standard specified in Australian Standard 2107-2000 (or superseding document) can reasonably be achieved for each affected new residence.
- d Acoustic barrier design shall be in accordance with the Noise Study and as determined by Council and will be shown in the Landscape Assessment and Design Report and submitted to Council for approval in accordance with Part 4: Subdivision.

2.2.1 Noise Amelioration Mounding – Landscape Treatment

- a Noise amelioration mounds should be treated with stepped construction of sub-grade to enable better keying of top soil to the subgrade mounds. Top soil should be a minimum of 200mm deep and no slope should have a greater than 1:3 batter. Mounds should be constructed with tree planting within batter grass treatments, grasses should only be planted as a temporary measure so that tree establishment is not hindered by competition with grassing.
- b Tree species preferred should be based on a major structural planting *Casuarina glauca* or other *Casuarina* species such as *dystila* or *toralosa* with intermittent planting of alternative species. *Casuarina*'s are preferred because of their drought resistance and ability to survive on low nutrient levels and their self mulching growth habit. In all cases, all beds should be mulched and wherever possible drought tolerant ground covers used underneath the tree planting, native grasses are preferred wherever possible. All planting beds where they are adjacent to established turf or grassed areas should have a mowing edge treatment to them. Any structures such as fences which may atop the noise amelioration mound should be durable in both materials and design and not create the need for maintenance on a frequency more than once every two years nor should they be composed of materials that will not survive a period of at least 20 years from construction. In all cases, consideration should be given to the aesthetic affect of fences and walls and an attempt made to ensure the highest standard of visual presentation while giving priority to the visual appeal of the tree plantings on the noise amelioration mound.

2.2.2 Noise Amelioration – Acoustic Wall

- a Where both Council and the Noise Report recommend the incorporation on an acoustic wall within the 10m wide Noise Attenuation Area, a fence may be provided in accordance with the Noise Study
- b Notwithstanding the above, acoustic barriers shall:
 - i require minimal maintenance once established. As a general rule structures shall have a design life in excess of 20 years and avoid finishes that require painting; and
 - ii be landscaped with species that:
 - are drought resistant;
 - have a growth habit and propagation that would inhibit weed growth; and
 - would not obscure street lighting, vehicle sight lines at intersections or overhang the carriageway so as to interfere with vehicles.

2.3 Road Hierarchy and Layout/Major Intersections and Car Parking – Warnervale and Wadalba North West

OBJECTIVES

- To create a legible road hierarchy
- To best ensure the safety of road user, pedestrians and residents

REQUIREMENT

The majority of the development in the Warnervale and Wadalba North-West areas have been either completed or approved for development. With regard to roadworks, those areas yet to be approved for subdivision or development are to have consideration of the existing subdivision pattern and the requirements of Part 4 – Subdivision. Additional specific requirements for certain locations are shown in Appendix A.

2.4 Bus Routes

OBJECTIVE

- To provide for efficient and convenient public transport links and stops

REQUIREMENTS

An overall scheme for permanent bus routes was developed prior to the development of the Warnervale/Wadalba area, however changes to bus routes and the road network has seen this scheme altered.

- a Applicants for subdivision of land should consult with both Council and the relevant bus company with regard to bus routes and the provision of bus shelters. Bus shelters will be located in consultation with Council and the relevant bus company.
- b Applicants are required to consult with the relevant bus company to identify:

- i suitable bus stop locations; and
 - ii the need for alternate bus routes.
- c The subdivision design shall facilitate pedestrian movements to bus stop locations.
- d Copies of correspondence between the applicant and the bus company shall be provided to support any subdivision application.
- e Low frequency bus routes (less than a total of six bus movements per day) will be allowed on a 9 metre road pavement within an 18 metre road reservation.

2.5 Cycleway and Footpath System

OBJECTIVE

- To provide safe and convenient pedestrian and cycleway networks with clear internal links and connections to external regional networks

REQUIREMENTS

- a Cycleway systems shall be provided generally in the locations shown in Figure 2 and 3, and shall consist of a rigid pavement of 2.5 metres within a minimum 5.0 metre reservation.
- b The design of the shared pedestrian/cycleways shall be in accordance with Austrroads.
- c Public pedestrian accessways should be provided to connect the major areas of residential use with recreational areas, and other community facilities and services such as schools, shops, child care and neighbourhood centres. Pedestrian Road crossings should coincide with slow points designed to limit the travel speed of vehicles.
- d Concrete footpaths shall be provided in accordance with Part 4 Subdivision.
- e The pedestrian and cycleway links shall utilise the proposed traffic signals at the Pacific Highway and Louisiana Road intersection.

2.6 Open Space and Landscaping

OBJECTIVE

- To ensure that adequate and appropriate open space land is provided for the development of the area

REQUIREMENTS

- a Local open space shall be provided in the locations identified in Figures 2 and 3, subject to the specific notations on the Plan and the requirements of Table 1. Minor variations in the location and configuration of open space, as a result of subdivision design are acceptable.
- b Open space types and the areas they are to be provided are shown in Table 1.
- c No trees shall be removed from areas designated on the plan as open space, drainage corridor or environmental corridor unless approved by Council.

- d Where appropriate, small parks should be landscaped prior to each land release and designed to create attractive usable focal points.
- e Noise amelioration areas, trunk drainage, and areas below the 1:100 year flood line (other than those identified on the plan as open space) shall not be accepted as contributing to open space requirements of a subdivision.
- f Small parks shall generally be located adjacent to low speed streets (less than 40km/h) and designed to:
- i deter impulsive moves onto the street through the judicious use of planting and/or fencing;
 - ii maximise visibility to passing drivers;
 - iii be accessed via road crossings located at slow points designed to limit the travel speed of vehicles.
- g Additional open space may be provided by the applicant providing it can be clearly demonstrated that it is likely to require minimal maintenance or be maintained by adjoining residents. Any additional open space will not be credited against any S.94 charges.
- h As a general rule these additional open space areas will not be grassed. They are more likely to be landscaped with shrubs, trees and ground covers that are drought resistant and have a growth and propagation that would inhibit weed growth.

Open Space Type	Number	Requirements
Small Parks	19 – 20	Minimum area of 0.5 hectare and not less than 30 metres wide. Locate within 500 metres of all residential areas.
Large Parks	1	Minimum area of 6 hectares protecting small knoll north of Sparks Road, above 40 metre contour. <i>N.B. Large park requirement for Wadalba included in land proposed to be acquired as part of the Environmental Corridor.</i>
Playing Fields	4	Minimum dimensions of 200 metres x 200 metres. Locate within 1km of all residential areas and school sites.
Courts	3	Minimum dimensions of 100 metres x 100 metres. Locate within 1km of all residential areas and school sites.
Semi-Natural Parks (including Wadalba North West Environmental Corridor)		See notes on the Plan. To be fenced to limit disturbance. Fencing to allow movement of ground dwelling mammals.
Cycleways		Minimum of 2.5 metres wide within a 5 metre reservation.

Table 1 Open space and landscaping requirements

Note: This table includes parks required within the Louisiana Road Infill Precinct (LRIP). The specific park requirements for the LRIP are dealt with in Chapter 6.2.

2.7 Utility Services

OBJECTIVES

- To maintain satisfactory visual amenity by limiting the number of services visible in the area
- To ensure that the environmental impact of development is minimised through the use of appropriate physical controls

REQUIREMENTS

- a With the exception of existing or proposed 33kV or greater electricity services in Warnervale, Mataram, Sparks and Hiawatha Roads, undergrounding of all services (existing and proposed) shall be required in all developments or subdivisions.
- b Gross pollutant traps required as part of the Warnervale East Trunk Drainage Scheme shall be constructed prior to subdivision of land within each of the defined drainage sub-catchments generally in accordance with the parameters identified in Table 3.1 of the Report entitled "Trunk Drainage Investigation: Warnervale East 7B - Stage 2 - Flood Management Plan", prepared by Willing and Partners, unless applicants for development can satisfactorily demonstrate that temporary measures can be implemented in the context of staged development.

3.0 DEVELOPMENT PRINCIPLES

3.1 Wadalba - Residential Neighbourhoods/Precincts

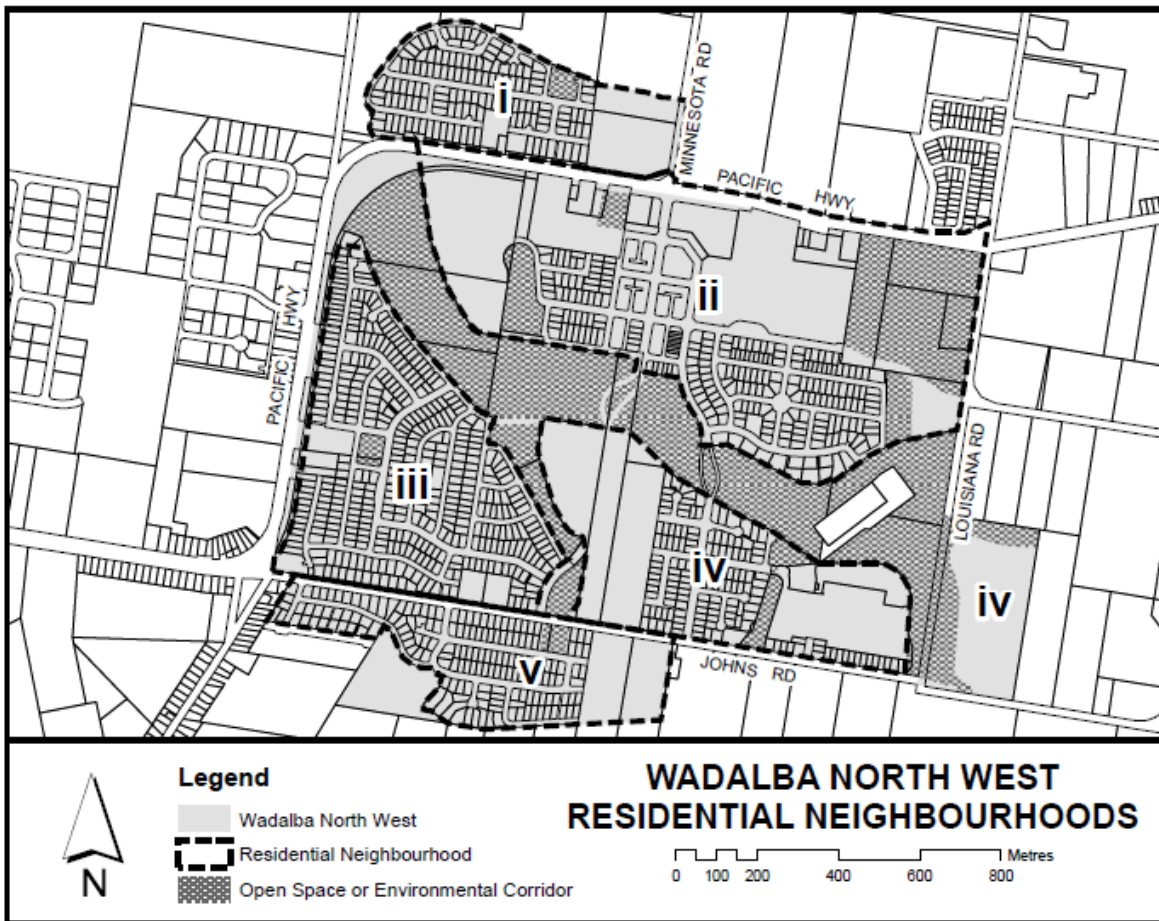


Figure 4 Wadalba Residential Neighbourhoods

Note: Indicative plans – refer to LEP 2013 for land zoning

OBJECTIVE

- To provide for a range of suitable housing opportunities taking advantage of the surrounding natural environment and the proximity to services

REQUIREMENTS

- a As shown in Figure 4, five distinct neighbourhoods are to be created within the Wadalba North West area. These neighbourhoods are physically separated by the Pacific Highway, the drainage or environmental corridor or Johns Road. These neighbourhoods should be distinguished by variety in the architectural character and building materials used while being related to the whole Wadalba Village through the use of a consistent palette of street landscaping. The five neighbourhoods include:
 - i land north of the Pacific Highway. Small scale neighbourhood of two sub-precincts on either side of Minnesota Road (for east side refer to Chapter 6.2 - LRIP);

- ii neighbourhood surrounding the local centre and school. Maximum residential densities permitted under the provisions of the WLEP 2013 are encouraged within this neighbourhood (with the exception of steeply sloping and elevated sites adjoining the Environmental Corridor);
 - iii neighbourhood bounded by the Pacific Highway, Johns Road and the drainage corridor. This neighbourhood is to be developed to maximise surveillance of and views to the drainage corridor. Higher density development is encouraged in those areas in close proximity to the proposed bus route;
 - iv neighbourhood on the southern side of the Environmental Corridor, east of the drainage corridor and bounded by Johns Road to the south. Development is to maximise views to the environmental corridor and views out of the site to the south;
 - v land south of Johns Road Development is to maximise views to the proposed environmental corridor within Wadalba. Larger allotments are to be created as the elevation increases and slope increases at the southern boundary of this neighbourhood.
- b Residential development within the Wadalba North West area will achieve a high standard of urban form through:
- i a variety of lots sizes and opportunities to increase housing choice;
 - ii balconies, planters, verandas, steps in the roofline and other architectural features to provide visual relief and individual identity;
 - iii a variety of finishes used on external materials;
 - iv building designs which encourage neighbourly communication and surveillance of streets and public spaces;
 - v garages and parking structures are to be sited and designed to reduce their impact on the street.

3.1.1 Lot 27 DP 663622 (137 Johns Road, Wadalba)

OBJECTIVES

- To provide site specific requirements to facilitate a high quality residential subdivision design of Lot 27 DP 663622.
- To ensure that any subdivision design and associated civil works meets Council's requirements.
- To ensure that the subdivision design of Lot 27 DP 663622 responds to the topography of the land and provides for the management of bushfire risk, road safety for all users, environmental values, potential contamination and drainage features of the site.

REQUIREMENTS

- a Any application for subdivision of Lot 27 DP 663622 must comply with all requirements and provide any necessary documentation as set out in any Voluntary Planning Agreement in relation to the land.

- b Any application for subdivision must include the following information and satisfy the following requirements:
- i. Provide a road layout which considers the topography and drainage flow pathways which traverse the site.
 - ii. The road layout facilitates eastward expansion of the collector road network. Such a road layout must have regard to potential constraints of the adjoining land (e.g. topography, road grades and drainage) to ensure that road connection points are sensibly located to service future residential development and ensure that a rational collector street network can be established.
 - iii. Development of the land shall be facilitated by a single road access intersection from Johns Road. No residential allotments shall be permitted to have direct access onto Johns Road, Wadalba. A Safe Systems approach shall be applied to the road network and associated areas.
 - iv. A Traffic Assessment shall be required with the subdivision application which shall:
 - Provide a design for appropriate road geometry and treatment of Johns Road (including the road widening)
 - Identify and justify the intersection design for the development
 - Examine sight distances and overall road safety for all users by way of a road safety audit. Note no recommendations are to be made within the audit and all deficiencies are to be resolved through consultation with Council.
 - Demonstrate appropriate access and manoeuvring for all vehicles.
 - Provide a suitable road hierarchy including collector and local roads
 - v. Provide an Ecological Assessment report which includes a threatened species conservation assessment and addresses flora and fauna
 - vi. A Vegetation Management Plan (VMP) will be required as per the requirements of Chapter 3.6 – Tree and Vegetation Management, recommending trees suitable for retention and replacement. The VMP is to include design details to establish a single line of canopy trees along the residential zoned frontage of Johns Road, Wadalba. The subdivision design and any construction works are to accommodate the retention and restoration of the wildlife corridor area zoned E2 Environmental Conservation
 - vii. A temporary sewage pump station and associated infrastructure shall be constructed by the land owner to meet Council specifications and transferred to Council at no cost.
 - viii. A detailed stormwater management plan shall be required. This will include MUSIC modelling for compliance with water quality objectives which complies with Australian Runoff Quality. Any stormwater detention or treatment basins and/or associated infrastructure shall be placed in suitable locations in an environmentally sensitive manner. Stormwater management facilities (or part thereof) may be located within the wildlife corridor if they can be designed to enhance the functionality of the Wadalba Wildlife Corridor within land zoned E2 Environmental Conservation (otherwise they shall be located outside the E2 zoned land).
 - ix. Satisfy any approval requirements that the NSW Office of Water may have for streamlines (blue lines) which traverse the site.

- x. Site contamination issues shall be addressed by a Hazardous Building Material Survey and Management Plan, prepared in accordance with AS 2601:2001 (The demolition of structures), and by a suitably qualified consultant. Following the removal of any existing structures on site, Stage 2, 3 and 4 Investigations of the site must be undertaken in accordance with requirements of the Office of Environment and Heritage *Guidelines for Consultants Reporting on Contaminated Lands*.
- xi. A Bushfire Assessment Report will be required in accordance with the provisions of Planning for Bushfire Protection. Retention of existing vegetation and the potential for maintaining asset protection zones are to be considered in this report. No Asset Protection Zones shall be permitted in land zoned E2 Environmental Conservation.
- xii. If the subdivision application seeks to include a perimeter fire trail, it shall not be provided on any E2 Environmental Conservation zoned land which is proposed to be transferred to Council. All fire trails must be constructed to Council's specifications.
- xiii. Any application for development that proposes works within the undisturbed areas of the site, being the E2 Environmental Conservation zoned environmental corridor, must be accompanied by a report from a suitably qualified archaeologist containing a qualified assessment of sub-surface archaeological potential.

3.2 Wadalba Local Centre

The Wadalba Local Centre is proposed to have an integrated mix of retail, commercial, community and residential uses. In order to maximise the utilisation of local services and to provide a high degree of surveillance, a minimum gross density of 25 dwellings per hectare is to be achieved within the Local Centre,

OBJECTIVES

- To provide for appropriate residential development in the proximity of the Wadalba Local Centre
- To provide for other appropriate commercial and community based development in the locality

REQUIREMENTS

- a The development of land for residential purposes in the Wadalba Local Centre is to be for Small Lot Residential Development as described in Part 4 Subdivision.
- b The development of non-residential uses at the entrance to the Wadalba North West Estate should meet the following criteria:
 - i development is to be at a similar scale and bulk to the local centre. In this regard development shall be a maximum of two storeys;
 - ii no access/egress provided to the Pacific Highway.
- c Movement of pedestrians through sites with frontage to the Pacific Highway is to ensure that all pedestrian movements across the Pacific Highway are channelled to the signalised intersection with Minnesota Road.
- d Landscaping plans for sites fronting the Pacific Highway are to include the continuation of the landscaping treatment along the Pacific Highway frontage.

3.2.1 Lot 195 DP 1006789

OBJECTIVES

- To provide specific design requirements for any non-residential uses of Lot 195 DP 1006789

REQUIREMENTS

- a Any proposed access or egress to/from the site to/from Figtree Boulevard is to be designed to the satisfaction of both Council and the Roads and Maritime Service (RMS) and are to retain the integrity of the visually important tree lined entrance to the Wadalba Village. The location of proposed intersections are required to have due consideration for the efficiency of the existing roundabout and signalised Pacific Highway / Figtree Boulevard / Minnesota Road intersection.
- b Any proposed development will be required to undertake a revised Traffic Impact Study to identify the likely traffic impacts and subsequent road upgrade requirements. The study is to be prepared in accordance with the Roads and Maritime *Guide to Traffic Generating Developments 2002* and is to include, but not be limited to the following:
 - i Current traffic counts for the Pacific Highway/Figtree Boulevard/Minnesota Road and Figtree Boulevard/Orchid Way intersections, inclusive of all proposed and approved developments.
 - ii The anticipated additional vehicular traffic generated from the proposed development.
 - iii The distribution on the road network of the trips generated by the proposed development. Predicted traffic flows are to be shown diagrammatically.
 - iv Consideration of the traffic impacts on existing and proposed intersections and the capacity of the local and classified road network to safely and efficiently cater for the additional vehicular traffic generated by the proposed development. The study is to also give consideration to the cumulative traffic impacts of other proposed and approved developments in the area.
 - v Identifying the necessary road network infrastructure upgrades that are required to maintain existing levels of service and road safety on both the local and classified road network. This is to be demonstrated by preliminary concept drawings. Any upgrades are required to be to the satisfaction of Roads and Maritime Services and Council.
 - vi Traffic analysis of any major/relevant intersections using SIDRA or similar traffic model, including:
 - Current traffic counts and 10 year traffic growth projections (inclusive of proposed and approved developments in the area)
 - With and without development scenarios considered
 - 95th percentile back of queue lengths
 - Submission of electronic input/output data files.
- c Appropriate access arrangements to the site over Council's drainage reserve (Lot 198 DP 1006789) are to be resolved prior to the lodgement of a development application for the site.
- d Any access arrangement which proposes a permanent 'bridge' structure over Council's drainage reserve is to be designed so that the structure is at least 600mm above the 1% AEP flood level.

Structures are to be designed and constructed in accordance with Council's Civil Works Design Guidelines and Construction Specifications. No further encroachment onto Lot 198 DP 1006789 will be accepted.

- e Due to increased flooding potential resulting from development of the site, upgrade works will be required to be undertaken on the adjoining drainage reserve, including but not limited to channel deepening and vegetative plantings, in accordance with any requirements of Council.
- f Documentation in the form of an acoustic assessment is required to be submitted with any development application for the site which identifies the compliance of the noise impacts from building operation (including but not limited to loading vehicles, plant or other machinery) with relevant noise standards for the nearby school and residential areas.
- g As part of any development application for the site, a design feature for the intersection of the Figtree Boulevard and Pacific Highway is to be provided. This feature is to act as an entry treatment for the Wadalba village and not contain corporate or commercial designs or logos. This may be located on the road reserve of Figtree Boulevard, provided it does not restrict pedestrian/vehicular visibility.
- h Setbacks from Figtree Boulevard are to be consistent with other setbacks for existing development which have frontages to Figtree Boulevard.
- i The internal site layout is to be designed so as to avoid conflict between service vehicles, customer vehicle parking and movement areas and pedestrian movement paths. Pedestrian access and egress routes are to be clearly defined. A site operational management plan is to be submitted which documents how this will be achieved.
- j Public areas (including car parking, footpaths/thoroughfares, site accesses, building entries etc) are to have focused lighting for safety and surveillance.
- k Suitable architectural features (including surface relief or surface patterns) are to be incorporated in the building design to provide visual relief and minimise the bulk and scale of the development.
- l Awnings are to be provided on all building frontages.
- m A variety of architectural forms and roof shapes are to be used to create visual interest. A flat monotonous roof profile will not be accepted.
- n Items of plant or equipment located on roofs are to be suitably screened.
- o Buildings adjacent to the Pacific Highway are to be constructed of high quality materials and are to incorporate significant architectural features such as those identified in 'k' to break up the building bulk.
- p Developments are to be designed, constructed and operated having regard for available energy efficient materials, lighting, heating and cooling.
- q All outdoor storage areas, including areas for waste and bulk bins, are to be located in areas which not visible from public areas and screened by fencing and landscaping.
- r Any hazardous material on site is to be stored in compliance with relevant health and safety requirements and construction specifications.
- s Landscaping is to be provided within setbacks and adjoining pedestrian movement paths where located on/adjoining the site. Strategic localities within the car parking area are to be planted with species which will provide shading.

- t Landscaping is to be used in preference to fencing to delineate public/private area and site boundaries; however any fencing required for protection of property or plant from vandalism is to be minimalistic.
- u Signage is to be a unifying part of the local centre as well as overall building design. It is to incorporate similar elements as utilised elsewhere in the centre. Building signage is to be consistent, utilising standard formats and colours.

3.3 Wadalba Environmental Corridor

The former Department of Environment and Conservation (now OEH) has issued Council with a deemed concurrence to deal with subdivision proposals which have "significant" impacts on a number of threatened species listed on the *Threatened Species Conservation Act, 1995* within the Wadalba area. In effect this switches off concurrence provisions of the *Threatened Species Conservation Act, 1995* within the area to which it applies. A copy of this information is available within Appendix 1 of the Wadalba Wildlife Corridor Management Plan 2006 (D00641790, or download the document using the following link: <http://www.wyong.nsw.gov.au/DownloadDocument.ashx?DocumentID=95>).

This letter outlines the conditions under which the deemed concurrence can be used. Individual Species Impact Statements (SISs) are not required for developments which involve removal of threatened species habitat as covered by the Deemed Concurrence. The conditions outlined by DEC need to be satisfied in order for DEC's concurrence to be assumed under Section 64 of the *Environmental Planning and Assessment Regulations, 2000*. Applicants should discuss the requirements with Council's staff, prior to the development of subdivision designs.

Areas identified as part of the Wadalba Environmental Corridor are shown in Figure 3.

3.3.1 Restriction on Works and Occupation

OBJECTIVE

- To ensure that development and future interaction within and in the vicinity of the Wadalba Wildlife Corridor does not interfere with the integrity of the Corridor

REQUIREMENTS

- a Any facilities within the environmental corridor including, but not limited to roads, drainage works, small parks should:
 - i not result in the clearing or significant fragmentation of the area;
 - ii services such as water, power and telecommunications that are unavoidably required to be within the wildlife corridor are to be sensitively placed so as to avoid, protect or retain known habitat features (e.g. hollow bearing trees, dams, drainage lines, etc);
 - iii retain corridors of woodland around, and where possible over, the proposed facilities;
 - iv not impact on the necessary glide angles and widths in relation to the squirrel glider; and
 - v not compromise the value and connectivity of the environmental corridor.
- b No fencing which would prevent movement of ground dwelling mammals, including ground dwelling medium sized mammals, should be erected within the identified environmental corridor.

- c There is to be minimal use of overhead lighting within the environmental corridor (to ensure nocturnal movements of native species along fauna corridors are maintained and native species are not disturbed by lighting).
- d All necessary fire protection measures (asset protection zones, fuel free and fuel reduced zones) are not to impact on the wildlife corridor area.
- e Placement and construction of any detention/water treatment structures required within the wildlife corridor are located sensitively and designed and landscaped to enhance habitat values for threatened amphibians and mitigate Identified Key Threatening Processes (e.g. *Gambusia* and frog chytrid).
- f Properties adjoining, abutting or adjacent to the wildlife corridor (including those separated by only a roadway) are to be provided with a restriction as to user covenant to restrict and control cat ownership.

3.3.2 Reservoirs and Communication Tower

- a Vehicle access to the reservoirs and the adjoining communication tower(s) must be maintained at all times.
- b The street drainage of that land south of the reservoirs must be designed and constructed to accommodate overflow from the reservoirs. The applicant must liaise with Council's Water and Sewerage section in this regard.
- c The water mains from reservoirs are to be located on land that is dedicated to Council as part of the road reserve. The mains must not be located on privately owned land requiring the formalisation of easements.

3.4 Warnervale/Wadalba - Community and Local Centres

OBJECTIVE

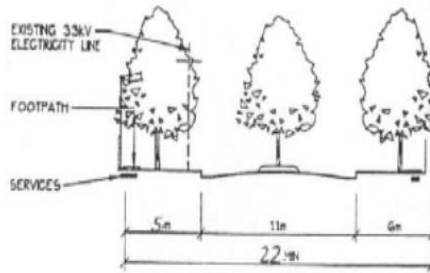
- To provide adequate land and facilities to support the development of local communities and appropriate services

REQUIREMENTS

- a A total of 3.7 hectares of land shall be provided for the establishment of community centres.
- b The sites shall be generally located in the areas shown by the plan and shall accommodate community facilities such as a child care centre and neighbourhood centre, plus associated carparking and public toilets; and:
 - i be located on a pedestrian route;
 - ii be near a school;
 - iii be easily accessible by both bus and car;
 - iv be adjacent to an area of open space.

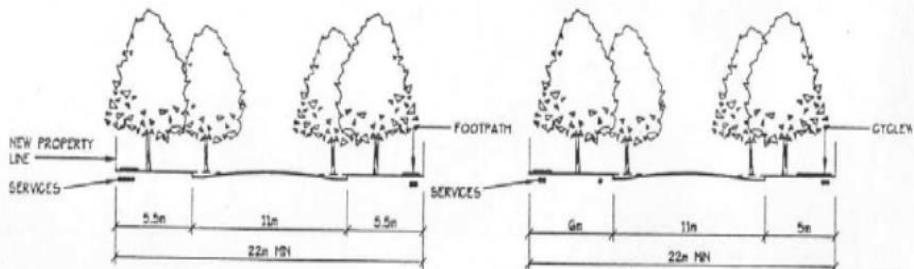
APPENDIX A

TYPICAL CROSS-SECTIONS FOR VARIOUS ROADS IN WARNERVALE/WADALBA URBAN RELEASE AREA



NOTE: WIDEN TWO(2) METRES ON SOUTHERN SIDE OF EXISTING ROAD RESERVATION LANDSCAPED MEDIANS AT SELECTED LOCATIONS

WARNERVALE ROAD DEVIATION

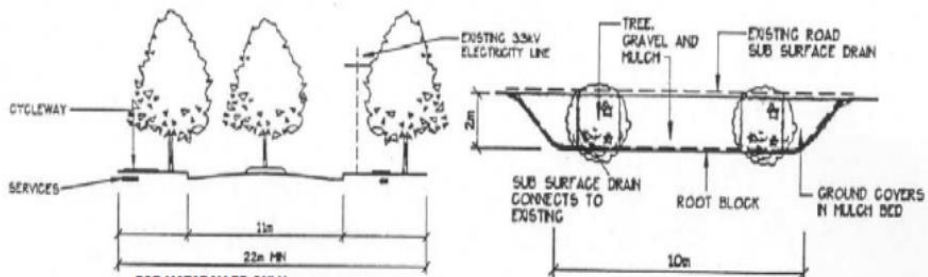


NOTE: WIDEN ONE(1) METRE EITHER SIDE OF EXISTING ROAD RESERVATION AND UNDERGROUNDING OF EXISTING ELECTRICITY LINES

NOTE: WIDEN EXISTING ROAD RESERVATION TWO (2) METRES (VARIABLE SIDES) AND UNDERGROUNDING OF EXISTING ELECTRICITY LINES

MINNESOTA (INCLUDING EXTENSION TO HIAWATHA), LOUISIANA (INCLUDE. MOUNTAIN VIEW DRIVE)

JOHNS ROAD



FOR MATARAM RD ONLY
NOTE: WIDEN 1.5 METRES ON NORTHERN SIDE AND 0.5 METRES ON SOUTHERN SIDE OF EXISTING ROAD RESERVATION. LANDSCAPED MEDIANS AT SELECTED LOCATIONS

MATARAM ROAD AND HAKONE ROAD

TYPICAL PLAN OF PROTRUDENCES INTO PAVEMENT WARNERVALE ONLY