

STATEMENT OF ENVIRONMENTAL EFFECTS

Housing Development

at
LOT 1, DP 349727
27-61 NIKKO ROAD
WARNERVALE, NSW 2259

for
KINGSTON PROPERTY FUND No.2 PTY LTD

REVISION 5
PROJECT 1028
SEPTEMBER 2019

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1.0 CONTENTS

2.0	<i>INTRODUCTION</i>
3.0	<i>SITE ANALYSIS</i>
4.0	<i>PROPOSED DEVELOPMENT</i>
5.0	<i>PLANNING CONTROLS – WYONG LEP 2013</i>
6.0	<i>PLANNING CONTROLS – WYONG SHIRE DCP 2013</i>
7.0	<i>CONCLUSION</i>
8.0	<i>MAPS</i>
9.0	<i>EXISTING STREETScape</i>
10.0	<i>MATERIAL & COLOUR SCHEDULES</i>

2.0 INTRODUCTION

This Statement of Environmental Effects has been prepared by Shaddock Architects, in support of a Development Application to Central Coast Council for the construction of 60 Dwelling Houses in a mixed subdivision of dual occupancy lot and small lot subdivisions, on the sites identified as 27-61 Nikko Road, Warnervale. A residue lot and environmental corridor make up the remainder of the site.

The development consists of 48 x 4 Bed Single Storey Dwellings (freestanding), 4 x 3 Bed Single Storey Dwellings (freestanding), and 8 x 4 Bed Two Storey Dwellings (semi-detached).

This Statement should be read in conjunction with the following documentation:

- *Architectural Drawings prepared by SHADDOCK ARCHITECTS - A01 to A28 Revision 28, dated 12.09.2019*
- *Solar Access Report prepared by SHADDOCK ARCHITECTS Revision 4, dated September 2019*
- *Equinox Shadow Diagrams by SHADDOCK ARCHITECTS Revision 1, dated September 2019*
- *Detail Survey prepared by DALY SMITH*
- *Civil Drawings prepared by DALY SMITH - C01 to C09 Revision E, dated 13.09.2019*
- *Subdivision Plans prepared by DALY SMITH – 33334 01 to 33334 02 Revision G, dated 13.09.2019*
- *Landscape Documentation prepared by MOIR LANDSCAPE ARCHITECTS*
- *Traffic & Parking Assessment prepared by INTERSECT TRAFFIC*
- *BASIX Certificate prepared by BUILDING SUSTAINABILITY ASSESSMENTS*
- *Acoustic Assessment prepared by GLOBAL ACOUSTICS*
- *Preliminary Contamination Assessment prepared by QUALTEST LABORATORY*
- *Flora & Fauna Assessment prepared by ENVIRO ECOLOGY*
- *Bushfire Hazard Assessment Report prepared by BUILDING CODE & BUSHFIRE HAZARD SOLUTIONS*

3.0 SITE ANALYSIS

COUNCIL	The subject site is located within the Central Coast Council LGA
PLANNING CONTROLS	<ul style="list-style-type: none">- Wyong Local Environmental Plan 2013- Wyong Shire Development Control Plan 2013- State Environmental Planning Policy Building Sustainability Index (BASIX) 2004
ZONING	<p>ZONE R2 – Low Density Residential - Majority of site except for the Environmental Corridor (25m wide) crossing the northern portion of the site.</p> <p>ZONE E3 – Environmental Management - (The Environmental Corridor passing across the northern corner of the site) (Reference: LEP Land Zoning Map - sheet LZN_007A)</p>
FRONTAGE	<p>382m to Nikko Road</p> <p>271m to Kanowna Road</p>
SITE AREA	The total area of the subject site is 35,947sqm nom.
SITE LOCATION	The subject site is a triangular block of land on the intersection of Nikko and Kanowna Roads. Warnervale Train Station is located approximately 500m to the southwest, Warnervale Oval is 30m to the south, and Warnervale Public School and Hamlyn Terrace Community Centre approximately 2.2km to the West. The proposed “Neighbourhood Centre” as shown on the Warnervale South Structure Plan – Precinct 7A, is located 500m to the west of this site.
SITE OPPORTUNITIES	With the rapidly growing demand for housing on the Central Coast, and the allocation of this area as part of the Warnervale South Land Release, this site is perfectly suited for a Housing development of this type. The site is well supported with convenient access to the local bus service, train station linking to Sydney and Newcastle, sporting facilities, schools and other community activities.
ADJACENT DEVELOPMENT	Adjoining the site to the east are 4 large semi-rural properties, each containing a single dwelling house, addressing Virginia Road, further west. To the south of the site, across Kanowna Road, are 12 large residential lots, containing newer style dwelling houses. The eastern boundary of the site is formed by Nikko Road. Further east is the Central Coast and Newcastle Rail line with Railway Road on the other side. Sparks Road, being the major interchange road onto the M1 Motorway is to the North of the site.
EXISTING USES	The subject site is currently undeveloped, containing some remnant vegetation.
MINE SUBSIDENCE	The subject site is not located within a Mine Subsidence District (Reference: LEP Mine Subsidence Districts Map)
BUSH FIRE PRONE LAND	The northern section of the site has been identified as containing Bush Fire Zoned Vegetation Category 1, while the southern side addressing Kanowna Road has being classified as Buffer Zone. (Reference: LEP Bush Fire Prone Land Map)
ACID SULPHATE SOIL	The subject site has been identified as not containing Acid Sulphate Soil (Reference: Wyong Shire LGA Acid Sulphate Soils Map)
DRINKING WATER CATCHMENT	The subject site has been identified as not containing land that has been identified as Drinking Water Catchment. (Reference: LEP Drinking Water Catchment Map)

FLOOD PRONE LAND	The subject site has been identified as having land (within the environmental corridor) that requires 1% Flood & Freeboard, and also land that is allocated as Flood Storage Area. (Reference: LEP Flood Mapping Precincts)
FLOOR SPACE RATIO	The subject site is not subject to any Floor Space Ratio Controls. (Reference: LEP Floor Space Ratio Maps)
FORESHORE BUILDING LINE	The subject site is not subject to any Foreshore Building Line Controls. (Reference: LEP Foreshore Building Line Maps)
HEIGHT OF BUILDING	The subject site is not subject to any Height of Building Controls. (Reference: LEP Height of Building Maps)
HERITAGE	The subject site does not contain an Item of Heritage Significance nor is it within a Heritage Conservation Area (Reference: LEP Heritage Maps)
KEY SITES	The subject site has not been identified as being a Key Site. (Reference: LEP Key Sites Maps)
LAND RESERVATION ACQUISITION	The subject site has not been identified for the purpose of Land Acquisition. (Reference: LEP Land Acquisition Maps)
LOT AMALGAMATION	The subject site has not been identified as being required to form part of any lot amalgamation. (Reference: LEP Lot Amalgamation Maps)
MINIMUM LOT SIZE	The portion of the site in the R2 Zone is subject to Minimum Lot Sizes of 450sqm. The portion of land in the E3 Zone is subject to Minimum Lot Size of 40 ha. (Reference: LEP Minimum Lot Size Maps)
URBAN LAND RELEASE	The subject site has been identified as being part of the Warnervale South Land Release. (Reference: LEP Urban Land Release Map)

4.0 PROPOSED DEVELOPMENT

The proposed development consists of the subdivision of the site into a mix of lot types (dual occupancy and small lots), and integrated construction of 60 new dwelling houses inclusive of roads, landscape, drainage and all other associated infrastructure as documented.

This development has been designed by a team of professional Architects and other specialised consultants to achieve a high level of aesthetic standards. The building forms have been carefully articulated in size and materials to provide variation and rhythm to the independent units. The utilisation of 17 alternate floor plans, each with varying façade treatments in combination with 3 colour schemes for each type, provides variation and interest to the emerging streetscape within the development.

Refer to Architectural drawing A02 & A03 for the Schedules containing; lot numbering, lot type, lot size, house type, façade design and colour scheme.

The following table contains a summary of the development, including lot and dwelling types;

Table 1 – General Summary

Current Total Site Area	35,947 sqm
Total number of Residential Units	60
Number of 4 Bed Dwellings (freestanding)	48
Number of 3 Bed Dwellings (freestanding)	4
Number of 4 Bed Dwellings (semi-detached)	8
Number of dwellings with Double Garages	46 (92 spaces)
Number of dwellings with Tandem Garages	8 (16 spaces)
Number of dwellings with Single Garages	6 (6 spaces)
Visitor parking spaces in driveway	57
Carparking Spaces total provided	171

Table 2 - Subdivision Types Summary

Number of Battle-axe Lots suitable for Dual Occupancy Development (combined lot area 800sqm or greater exclusive of access handle)	2
Number of Battle Axe Lots (lot area 750sqm or greater)	1
Number of Small Lots (lot area 250sqm or greater)	55

Refer to Schedule and Summaries contained on Architectural Drawing A02 & A03 for location and allocation of Subdivision and Dwelling types within the development. These summaries should also be read in association with the Plan of Subdivision prepared by Daly Smith, registered Surveyors, form part of this submission.

5.0 PLANNING CONTROLS – WYONG LEP 2013

DEFINITIONS

(Reference LEP Dictionary)

dwelling house means a building containing only one dwelling.

Note. Dwelling houses are a type of residential accommodation.

semi-detached dwelling means a dwelling that is on its own lot of land and is attached to only one other dwelling.

Note. Semi-detached dwellings are a type of residential accommodation.

Dual occupancy (attached) means 2 dwellings on one lot of land that are attached to each other, but does not include a secondary dwelling.

ZONE R2 - LOW DENSITY RESIDENTIAL

(Reference LEP Land Zone Map)

1 Objectives of zone

- To provide for the housing needs of the community within a low density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To maintain and enhance the residential amenity and character of the surrounding area.
- To provide a residential character commensurate with a low density residential environment.

2 Permitted without consent

Home-based child care; Home occupations

3 Permitted with consent

Bed and breakfast accommodation; Boarding houses; Boat launching ramps; Boat sheds; Building identification signs; Business identification signs; Car parks; Child care centres; Community facilities; Dual occupancies; Dwelling houses; Emergency services facilities; Environmental facilities; Environmental protection works; Exhibition homes; Exhibition villages; Flood mitigation works; Group homes; Health consulting rooms; Home businesses; Home industries; Information and education facilities; Jetties; Neighbourhood shops; Places of public worship; Recreation areas; Respite day care centres; Roads; Secondary dwellings; Semi-detached dwellings; Shop top housing; Water recycling facilities; Water reticulation systems; Water storage facilities

4 Prohibited

Any development not specified in item 2 or 3

COMPLIANCE:

This zone applies to the portions of the site allocated for the 60 dwellings. The proposed development consists of “dwelling houses”, “semi-detached dwellings”, and “dual occupancies” which are all residential types Permitted with Consent in the R2 Zone.

ZONE E3 – ENVIRONMENTAL MANAGEMENT

(Reference LEP Land Zone Map)

1 Objectives of zone

- To protect, manage and restore areas with special ecological, scientific or aesthetic values.
- To provide for a limited range of development that does not have an adverse effect on those values.

2 Permitted without consent

Home occupations

3 Permitted with consent

Bed and breakfast accommodation; Building identification signs; Business identification signs; Community facilities; Dual occupancies; Dwelling houses; Eco-tourist facilities; Emergency services

facilities; Environmental facilities; Environmental facilities; Environmental facilities; Extensive agriculture; Farm buildings; Farm stays accommodation; Flood mitigation works; Home-based child care; Home businesses; Home industries; Horticulture; Information and education facilities; Recreation areas; Research stations; Road; Roadside stalls; Secondary dwellings; Sewerage treatment plants; Water recreation structures; Water recycling facilities; Water supply systems.

4 Prohibited

Industries; Multi dwelling housing; Residential flat buildings; Retail premises; Seniors housing; Service stations; Warehouse or distribution centres; Any other development not specified in item 2 or 3.

COMPLIANCE:

This zone has been applied to the area surrounding the natural water course that crosses the northern portion of the site. As this area will be left undeveloped, with existing vegetation conserved and restored, this proposed usage is Permitted with consent in the E3 Zone.

MINIMUM SUBDIVISION LOT SIZE

Part 4.3

- 1) *The objectives of this clause are as follows:*
 - a) *to ensure that minimum lot sizes reflect the outcomes of any adopted settlement strategy for Wyong,*
 - b) *to ensure that the creation of parcels of land for development occurs in a manner that protects the physical characteristics of the land, does not create potential physical hazard or amenity issues for neighbours, can be satisfactorily serviced and will not, through its potential cumulative effects, create capacity problems for existing infrastructure,*
 - c) *to ensure that lot sizes are able to accommodate development that is suitable for its purpose and consistent with relevant development controls.*
- 2) *This clause applies to a subdivision of any land shown on the Lot Size Map that requires development consent and that is carried out after the commencement of this Plan.*
- 3) *The size of any lot resulting from a subdivision of land to which this clause applies is not to be less than the minimum size shown on the Lot Size Map in relation to that land.*
- 4) *This clause does not apply in relation to the subdivision of individual lots in a strata plan or community title scheme.*

COMPLIANCE:

The LEP Lot Size Maps requires that sites within the R2 Zone have minimum lot sizes of 450sqm. This development seeks an exemption to this minimum lot size requirements utilising Clause 4.1B (3).

EXEMPTIONS TO MINIMUM LOT SIZES FOR CERTAIN RESIDENTIAL DEVELOPMENTS

Clause 4.1B

- 1) *The objectives of this clause are as follows:*
 - a) *to provide opportunities for affordable housing in appropriate locations,*
 - b) *to encourage housing diversity without adversely impacting on residential amenity.*
- 2) *This clause applies to land in Zone R2 Low Density Residential.*
- 3) *Development consent may be granted to a single development application for development on land to which this clause applies that is both of the following:*
 - a) *the subdivision of land into 5 or more lots of a size that is less than the minimum size shown on the Lot Size Map in relation to that land,*
 - b) *the erection of a dwelling house on each lot resulting from the subdivision.*
- 4) *Development consent may be granted to a single development application for development that is both of the following:*
 - a) *the erection of a dual occupancy on land to which this clause applies,*
 - b) *the subdivision of that land into 2 lots of a size that is less than the minimum size shown on the Lot Size Map in relation to that land.*

- 5) *In determining whether to grant development consent for development under subclause (3) or (4), the consent authority must consider the following:*
- a) *the likely impact of the height of the development on development located on adjoining land in relation to visual impacts and overshadowing,*
 - b) *whether the development provides adequate pedestrian, vehicular and service access and car parking,*
 - c) *whether the development incorporates the principles of ecologically sustainable development,*
 - d) *the relationship between each of the dwellings comprising the development in relation to location and siting.*

COMPLIANCE:

For the creation of the small lot subdivision component of this development this application seeks an exemption to the minimum lot size requirements within the R2 Zone utilising Clause 4.1B (3). As this application proposes to subdivide the land into more than 5 lots and erect dwelling houses on each of the resulting lots, in compliance with this requirement for exemption.

HEIGHT OF BUILDINGS

Clause 4.3

- 1) *The objectives of this clause are as follows:*
- a) *to establish the maximum height limit for buildings to enable the achievement of appropriate development density,*
 - b) *to ensure that buildings are compatible with the height, bulk and scale of the existing and desired future character of the locality,*
 - c) *to ensure that the height of buildings protects the amenity of neighbouring properties in terms of visual bulk, access to sunlight, privacy and views.*
- 2) *The height of a building on any land is not to exceed the maximum height shown for the land on the Height of Buildings Map.*

COMPLIANCE:

The Height of Building Maps shows no nominated maximum height for buildings on this site. Wyong DCP2013 Chapter 2.1 Houses and Ancillary Structures establishes the maximum building height for dwellings on sites not mapped to be 10 metres and only 2 storeys. All residential dwellings in this development are in full compliance with these requirements.

FLOOR SPACE RATIO

Part 4.4

- 1) *The objectives of this clause are as follows:*
- a) *to ensure that the density, bulk and scale of development is appropriate for a site,*
 - b) *to ensure that the density, bulk and scale of development integrates with the streetscape and character of the area in which the development is located,*
 - c) *to facilitate development in certain areas that contributes to economic growth.*
- 2) *The maximum floor space ratio for a building on any land is not to exceed the floor space ratio shown for the land on the Floor Space Ratio Map.*

COMPLIANCE:

The Floor Space Ratio Maps show no nominated maximum FSR applicable to this site.

DEVELOPMENT NEAR ZONE BOUNDARIES

Part 5.3

- 1) *The objective of this clause is to provide flexibility where the investigation of a site and its surroundings reveals that a use allowed on the other side of a zone boundary would enable a more logical and appropriate development of the site and be compatible with the planning objectives and land uses for the adjoining zone.*

- 2) *This clause applies to so much of any land that is within the relevant distance of a boundary between any 2 zones. The relevant distance is 20 metres.*
- 3) *This clause does not apply to:*
 - a) *land in Zone RE1 Public Recreation, Zone E1 National Parks and Nature Reserves, Zone E2 Environmental Conservation, Zone E3 Environmental Management or Zone W1 Natural Waterways, or*
 - b) *land within the coastal zone, or*
 - c) *land proposed to be developed for the purpose of sex services or restricted premises.*
- 4) *Despite the provisions of this Plan relating to the purposes for which development may be carried out, development consent may be granted to development of land to which this clause applies for any purpose that may be carried out in the adjoining zone, but only if the consent authority is satisfied that:*
 - a) *the development is not inconsistent with the objectives for development in both zones, and*
 - b) *the carrying out of the development is desirable due to compatible land use planning, infrastructure capacity and other planning principles relating to the efficient and timely development of land.*
- 5) *This clause does not prescribe a development standard that may be varied under this Plan.*

COMPLIANCE:

As the only zone change crossing this site is for the E3 Environmental Management Corridor, this Part does not apply to this development, in accordance with Part 5.3 3) a).

PRESERVATION OF TREES OR VEGETATION

Part 5.9

- 1) *The objective of this clause is to preserve the amenity of the area, including biodiversity values, through the preservation of trees and other vegetation.*
- 2) *This clause applies to species or kinds of trees or other vegetation that are prescribed for the purposes of this clause by a development control plan made by the Council.*
Note. A development control plan may prescribe the trees or other vegetation to which this clause applies by reference to species, size, location or other manner.
- 3) *A person must not ringbark, cut down, top, lop, remove, injure or wilfully destroy any tree or other vegetation to which any such development control plan applies without the authority conferred by:*
 - a) *development consent, or*
 - b) *a permit granted by the Council.*
- 4) *The refusal by the Council to grant a permit to a person who has duly applied for the grant of the permit is taken for the purposes of the Act to be a refusal by the Council to grant consent for the carrying out of the activity for which a permit was sought.*
- 5) *This clause does not apply to a tree or other vegetation that the Council is satisfied is dying or dead and is not required as the habitat of native fauna.*
- 6) *This clause does not apply to a tree or other vegetation that the Council is satisfied is a risk to human life or property.*
- 7) *A permit under this clause cannot allow any ringbarking, cutting down, topping, lopping, removal, injuring or destruction of a tree or other vegetation:*
 - a) *that is or forms part of a heritage item or that is within a heritage conservation area, or*
 - b) *that is or forms part of an Aboriginal object or that is within an Aboriginal place of heritage significance, unless the Council is satisfied that the proposed activity:*
 - c) *is of a minor nature or is for the maintenance of the heritage item, Aboriginal object, Aboriginal place of heritage significance or heritage conservation area, and*
 - d) *would not adversely affect the heritage significance of the heritage item, Aboriginal object, Aboriginal place of heritage significance or heritage conservation area.**Note. As a consequence of this subclause, the activities concerned will require development consent. The heritage provisions of clause 5.10 will be applicable to any such consent.*
- 8) *This clause does not apply to or in respect of:*
 - a) *the clearing of native vegetation:*
 - i) *that is authorised by a development consent or property vegetation plan under the Native Vegetation Act 2003, or*
 - ii) *that is otherwise permitted under Division 2 or 3 of Part 3 of that Act, or*

- b) *the clearing of vegetation on State protected land (within the meaning of clause 4 of Schedule 3 to the Native Vegetation Act 2003) that is authorised by a development consent under the provisions of the Native Vegetation Conservation Act 1997 as continued in force by that clause, or*
 - c) *trees or other vegetation within a State forest, or land reserved from sale as a timber or forest reserve under the Forestry Act 1916, or*
 - d) *action required or authorised to be done by or under the Electricity Supply Act 1995, the Roads Act 1993 or the Surveying and Spatial Information Act 2002, or*
 - e) *plants declared to be noxious weeds under the Noxious Weeds Act 1993.*
- Note: Permissibility may be a matter that is determined by or under any of these Acts.*
- 9) *Subclause (8) (a) (ii) does not apply in relation to land in Zone RU6 Transition, Zone R5 Large Lot Residential, Zone E2 Environmental Conservation, Zone E3 Environmental Management or Zone E4 Environmental Living.*

COMPLIANCE:

Although the site has been partially cleared, native vegetation remains within and around the Environmental Management Corridor. It is proposed that this vegetation remain and be supplemented as part of this development. All vegetation on this site has been assessed by a qualified Ecologist, and a detailed Report prepared with recommendations to achieve compliance with these requirements.

This Assessment Report forms part of the Development Application submission to Council.

BUSHFIRE HAZARD REDUCTION

Part 5.11

Bush fire hazard reduction work authorised by the Rural Fires Act 1997 may be carried out on any land without development consent. Note. The Rural Fires Act 1997 also makes provision relating to the carrying out of development on bush fire prone land.

COMPLIANCE:

The northern portion of the subject site has been identified as containing Bush Fire Zoned Vegetation Category 1, while the southern side addressing Kanowna Road has been classified as Buffer Zone.

A qualified Bush Fire Consultant, has undertaken an inspection of the site and prepared a Bushfire Hazard Assessment Report, addressing the requirements of the Rural Fire Services document known as 'Planning for Bush Fire Protection 2006' for the purposes of bushfire hazard determination, and Australian Standard 3959 2009 Titled 'Construction of buildings in bushfire-prone areas' as amended for building/structural provisions. As part of this assessment, the bush fire consultant has also identified the properties to the east of this site as being a Bush Fire Hazard, requiring the establishment of a managed APZ. The perimeter road for this development will form the majority of this zone. In addition to the above recommendations the detention basin (Lot 38) is to be managed as part of the Asset Protection Zone until such a time as the adjoining lots have been developed.

This Assessment Report forms part of the Development Application submission to Council.

ACID SULFATE SOILS

Part 7.1

- 1) *The objective of this clause is to ensure that development does not disturb, expose or drain acid sulfate soils and cause environmental damage.*
- 2) *Development consent is required for the carrying out of works described in the Table to this subclause on land shown on the Acid Sulfate Soils Map as being of the class specified for those works.*

<i>Class of land</i>	<i>Works</i>
<i>1</i>	<i>Any works.</i>
<i>2</i>	<i>Works below the natural ground surface.</i>
	<i>Works by which the watertable is likely to be lowered.</i>
<i>3</i>	<i>Works more than 1 metre below the natural ground surface.</i>

- Works by which the watertable is likely to be lowered more than 1 metre below the natural ground surface.*
- 4 *Works more than 2 metres below the natural ground surface.*
Works by which the watertable is likely to be lowered more than 2 metres below the natural ground surface.
- 5 *Works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum and by which the watertable is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land.*
- 3) *Development consent must not be granted under this clause for the carrying out of works unless an acid sulfate soils management plan has been prepared for the proposed works in accordance with the Acid Sulfate Soils Manual and has been provided to the consent authority.*
- 4) *Despite subclause (2), development consent is not required under this clause for the carrying out of works if:*
- a) a preliminary assessment of the proposed works prepared in accordance with the Acid Sulfate Soil Manual indicates that an acid sulfate soils management plan is not required for the works, and*
 - b) the preliminary assessment has been provided to the consent authority and the consent authority has confirmed the assessment by notice in writing to the person proposing to carry out the works.*
- 5) *Despite subclause (2), development consent is not required under this clause for the carrying out of any of the following works by a public authority (including ancillary work such as excavation, construction of access ways or the supply of power):*
- a) emergency work, being the repair or replacement of the works of the public authority, required to be carried out urgently because the works have been damaged, have ceased to function or pose a risk to the environment or to public health and safety,*
 - b) routine maintenance work, being the periodic inspection, cleaning, repair or replacement of the works of the public authority (other than work that involves the disturbance of more than 1 tonne of soil),*
 - c) minor work, being work that costs less than \$20,000 (other than drainage work).*
- 6) *Despite subclause (2), development consent is not required under this clause to carry out any works if:*
- a) the works involve the disturbance of less than 1 tonne of soil, and*
 - b) the works are not likely to lower the watertable.*

COMPLIANCE:

The subject site has been identified as NOT containing Acid Sulphate Soil.

ESSENTIAL SERVICES

Part 7.9

Development consent must not be granted to development unless the consent authority is satisfied that any of the following services that are essential for the development are available or that adequate arrangements have been made to make them available when required:

- a) the supply of water,*
- b) the supply of electricity,*
- c) the disposal and management of sewage,*
- d) stormwater drainage or on-site conservation,*
- e) suitable vehicular access.*

COMPLIANCE:

All essential services will be introduced to the site, including; Water Supply, Electricity Supply, Sewerage Disposal, Stormwater Drainage and Vehicular access, in full compliance with these requirements.

The complete stormwater drainage system including on-site detention, in combination with the road network and driveway access has been designed by Daly Smith, with documentation forming part of this Development Application submission. Appropriate easements have been negotiated by the Client to provide a sewerage connection into the service mains within Virginia Street. A qualified Hydraulic Engineer will design and document the complete sewerage disposal system, in full consultation and compliance with Central Coast Council's requirements for the proposed development.

A suitably qualified Electrical Engineer will design the Electrical supply system, include substation if required, in full consultation and compliance with the supply authority's requirements for the proposed development.

6.0 PLANNING CONTROLS – WYONG SHIRE DCP 2013

CHAPTER 2.1 HOUSING & ANCILLARY STRUCTURES

2.0 SCALE

BUILDING HEIGHT

Part 2.1

OBJECTIVES

- To ensure that buildings are compatible with the height, bulk and scale of the existing and desired future character of the locality
- To ensure that the height of buildings protects the amenity of neighbouring properties in terms of visual bulk, access to sunlight, privacy and views

REQUIREMENTS

- a) Wyong Local Environmental Plan 2013 contains a Height of Building Map for certain areas within the Shire. In accordance with Clause 4.3 (2) of Wyong Local Environmental Plan 2013, the height of a building contained in these areas is not to exceed the maximum height indicated on this map.
- b) The maximum building height for dwellings if not specifically mapped by the WLEP 2013 is 10m.
- c) The maximum building height for outbuildings and detached ancillary development is:
 - i) 4.8m on land zoned R1, R2, R3 or RU5
 - ii) 7m on land zoned RU1, RU2, RU6, R5, E3 or E4
- d) Building Height shall generally not exceed two storeys. Three storey dwellings will generally only be supported on steeply sloping sites, where the three-storey component extends for only a small section of the dwelling or where the lowest storey is contained predominantly within a basement level below natural ground and the maximum building heights are not exceeded.

COMPLIANCE:

The maximum overall building height for any dwelling proposed in this development is 8.0m, in full compliance with maximum building height of 10m required in Part 2.1(b). The maximum number of storeys for any dwelling proposed in this development is 2 storeys, in full compliance with the requirements of Part 2.1(d)

SITE COVERAGE

Part 2.2

The following definitions are relevant for the calculation of site coverage:

site coverage means the proportion of a site area covered by buildings. However, the following are not included for the purpose of calculating site coverage:

- a) any basement,
- b) any part of an awning that is outside the outer walls of a building and that adjoins the street frontage or other site boundary,
- c) any eaves,
- d) unenclosed balconies, decks, pergolas and the like.

site area is defined under Wyong LEP 2013. Generally if the proposed development is to be carried out on only one lot, then the site area is the areas of that lot.

basement means the space of a building where the floor level of that space is predominantly below the existing ground level and where the floor level of the storey immediately above is less than 1 metre (at any point) above existing ground level.

OBJECTIVES

- To ensure that the density, bulk and scale of development is appropriate for a site
- To ensure that the density, bulk and scale of development integrates with the streetscape and character of the area in which the development is located
- To provide an appropriate area on site for landscaping, outdoor activities and stormwater infiltration

REQUIREMENTS

- a) The site coverage of dwellings and all ancillary development shall not exceed:
- i) 60% on a lot that has a site area greater than or equal to 250 m².
 - ii) 65% on a lot that has a site area less than 250 m².

COMPLIANCE:

The site coverage for each residential lot, measured in accordance with the “definitions” and Figure 2 Site Coverage diagram, has been demonstrated in the following Site Coverage Table.

Table of Site Areas

Lot Number	Site Area (sqm)	Site Coverage Area (sqm)	Percentage (%)	POS (m2)
1	430.7 sqm	166.4 sqm	39%	30.6
2	364.3 sqm	167.0 sqm	46%	93.8
3	321.6 sqm	167.0 sqm	52%	38.5
4	321.6 sqm	167.0 sqm	52%	38.5
5	321.6 sqm	167.0 sqm	52%	38.5
6	251.4 sqm	112.2 sqm	45%	51.8
7	251.4 sqm	112.2 sqm	45%	51.3
8	251.4 sqm	112.2 sqm	45%	51.3
9	251.4 sqm	112.2 sqm	45%	51.3
10	321.6 sqm	167.0 sqm	52%	38.0
11	321.6 sqm	167.0 sqm	52%	38.0
12	321.6 sqm	167.0 sqm	52%	38.0
13	321.6 sqm	167.0 sqm	52%	38.0
14	321.6 sqm	167.0 sqm	52%	38.0
151	403.9 sqm	135.0 sqm	33%	55.9
152	297.3 sqm	153.8 sqm	52%	40.8
161	297.3 sqm	153.8 sqm	52%	41.7
162	403.5 sqm	153.8 sqm	38%	38.5
17	379.2 sqm	169.9 sqm	45%	82.7
18	386.4 sqm	169.9 sqm	44%	87.0
19	400.8 sqm	182.0 sqm	45%	80.8
20	400.8 sqm	182.0 sqm	45%	79.2
21	400.8 sqm	182.0 sqm	45%	79.2
22	400.8 sqm	182.0 sqm	45%	79.2
23	400.8 sqm	182.0 sqm	45%	79.2
24	386.9 sqm	169.9 sqm	44%	88.7
25	421.2 sqm	166.4 sqm	40%	26.6
26	321.6 sqm	167.0 sqm	52%	38.6
27	251.4 sqm	112.2 sqm	45%	51.9
28	251.4 sqm	112.2 sqm	45%	51.3
29	320.5 sqm	167.0 sqm	52%	38.0
301	457.2 sqm	169.2 sqm	37%	65.8
302	735.6 sqm	182.0 sqm	25%	104.1
311	407.8 sqm	181.7 sqm	45%	89.1

Lot Number	Site Area (sqm)	Site Coverage Area (sqm)	Percentage (%)	POS (m2)
312	397.9 sqm	181.7 sqm	46%	82.1
32	320.5 sqm	167.0 sqm	52%	37.4
33	321.6 sqm	167.0 sqm	52%	38.3
34	321.6 sqm	167.0 sqm	52%	38.3
35	858.0 sqm	182.0 sqm	21%	39.2
361	360.0 sqm	165.4 sqm	46%	63.4
362	341.5 sqm	171.0 sqm	50%	50.0
37	279.6 sqm	141.0 sqm	50%	32.4
38	1,062.9 sqm	Detention Basin		
39	333.4 sqm	169.9 sqm	51%	49.2
40	335.0 sqm	169.9 sqm	51%	49.6
41	335.0 sqm	169.9 sqm	50%	49.6
421	339.3 sqm	169.9 sqm	43%	53.0
422	365.2 sqm	156.9 sqm	51%	50.9
43	332.2 sqm	171.0 sqm	52%	44.7
44	331.0 sqm	171.0 sqm	43%	44.1
45	258.7 sqm	112.2 sqm	43%	58.7
46	258.7 sqm	112.2 sqm	43%	58.6
47	331.0 sqm	171.0 sqm	52%	44.0
481	331.0 sqm	171.0 sqm	52%	43.8
482	449.6 sqm	182.7 sqm	41%	61.8
491	429.8 sqm	169.9 sqm	40%	88.7
492	396.2 sqm	176.4 sqm	45%	58.6
50	412.9 sqm	171.0 sqm	41%	98.1
51	323.9 sqm	158.6 sqm	49%	63.6
521	325.2 sqm	158.6 sqm	49%	63.6
522	597.3 sqm	182.7 sqm	31%	80.0

With a maximum site coverage of 52% for any lot this proposed development is well under the maximum of 60% permitted for compliance with the requirements for sites equal to or greater than 250sqm.

FLOOR SPACE RATIO

Part 2.2

OBJECTIVES

- To ensure that the density, bulk and scale of development is appropriate for a site
- To ensure that the density, bulk and scale of development integrates with the streetscape and character of the area in which the development is located

REQUIREMENTS

- In accordance with Clause 4.4 (2) of Wyong Local Environmental Plan 2013, the maximum floor space ratio for building on any land is not to exceed the floor space ratio shown for the land on the Floor Space Ratio Map.

COMPLIANCE:

The Floor Space Ratio Maps contained in the Wyong LEP2013 show NO maximum FSR being applied to this site.

SETBACKS

Part 3.0

A building line or setback is the shortest horizontal distance between the property boundary or other stated boundary (measured at 90 degrees from the boundary) and:

- a building wall, or
- the outside face of any balcony, deck or the like, or
- the supporting posts of an open roofed structure such as a carport, verandah or the like

The following definitions are relevant for the calculation of setbacks:

primary road means the road to which the front of a dwelling house, or a main building, on a lot faces or is proposed to face.

secondary road means, in the case of a corner lot that has boundaries with adjacent roads, the road that is not the primary road.

parallel road means, in the case of a lot that has boundaries with parallel roads, the road that is not the primary road (the rear boundary) and must be 7m or more in width.

lane (laneway) means a public road, with a width greater than 3m but less than 7m, that is used primarily for access to the rear of premises.

OBJECTIVES

- To ensure that setbacks are compatible with adjacent development and complements the streetscape, public reserve, or coastal foreshore
- To ensure the visual focus of a development is the dwelling, not the garage
- To protect the privacy and solar access of adjacent properties
- To maintain view corridors to coastal foreshores and other desirable outlooks
- To provide appropriate articulation of facades and horizontal elements reduce the appearance of bulk and provides visual interest to the building and subsequent streetscape where they face a street frontage/s.

SETBACKS - RESIDENTIAL LOTS

Part 3.1

The following setback requirements apply to dwellings and all ancillary development on a lot zoned R1, R2, R3 or RU5:

A. Front boundary (primary frontage) for dwellings and ancillary development	i. To a local roadway on lots with a site area greater than 300m ²	- 4.5m
	ii. To a Classified Road	- 7.5m
	iii. To a local roadway on lots with a site area up to 300m ²	- 3.0m
	iv. The minimum required car parking space/length	- 5.5m
B. Rear boundary setbacks for dwellings and ancillary development (excluding outbuildings)	v. To a private allotment	- for any part of the building with a height of up to 4.5m - 0.9m, and - for any part of the building with a height of more than 4.5m - 0.9m plus one-quarter of the height of the building above 4.5m
	vi. To a parallel roadway or public reserve	- 3.0m

	vii. a laneway	<ul style="list-style-type: none"> - 0 (Zero) for 50% of the length of that boundary and as per point b(i) above for the remainder
C. Side Boundary setback for dwellings and ancillary structures (excluding outbuildings)	viii. all lots greater than 12.5m wide at the building line	<ul style="list-style-type: none"> - for any part of the building with a height of up to 4.5m - 0.9m, and - for any part of the building with a height of more than 4.5m - 0.9m plus one-quarter of the height of the building above 4.5m
	ix. for lots up to 12.5m wide at the building line	<ul style="list-style-type: none"> - 0 (Zero) to one side only for a maximum length of 10m and - as per point c(i) above for the remainder
	x. for lots less than 8m wide at the building line	<ul style="list-style-type: none"> - 0 (Zero) for 20m or 50% of the depth of the lot whichever is the lesser and - as per point c(i) above for the remainder
	xi. carports that comply with the BCA exemption provisions	<ul style="list-style-type: none"> - for any part of the building with a height of up to 3.3m—0 (zero) and - for any part of the building with a height of more than 3.3m—one-quarter of the height of the building above 3.3m
D. Secondary boundary setback (on corner lots)	Note: a corner lot must have an interior angle at the corner less than 135°, otherwise it's a continuation of an irregular front boundary (see figure 3)	<ul style="list-style-type: none"> - 2m

Note: reference to any point of a building with regard to side and rear setbacks excludes an eave up to 450mm wide and other permissible associated structures in accordance with the BCA.

COMPLIANCE:

This development has established minimum Front Boundary setbacks to Nikko Road, (local road) and Kanowna Road (local road) of 4.5m to the building line and 5.5m to the garage doors. The Front Boundary minimum setbacks from all new roads within the development are also 4.5m to the building line and 5.5m to the garage doors.

The building setback from all Secondary Street boundaries (corner lots) is a minimum of 2m with garages being set back a minimum of an additional 1m.

Rear boundary setbacks are a minimum of 4.65m for the 2 storey dwellings and 1.9m minimum for the single storey dwellings. Side boundary setbacks vary from 0 (zero) for the attached components of the dwelling to a minimum of 0.9m for single storey components adjacent side boundaries, and 1.5m for any 2 storey components.

A Zero side boundary setback has been established for a maximum length of 9.7m for the semi-detached dwellings types 16 & 17 (8 dwellings total). This is approximately 40% of the typical shared boundary for these lots.

As all these walls with zero boundary setback are shared internal “party walls” between 2 dwellings there will be no adverse impact on the privacy or solar access of either of the adjoining properties. These party walls will be designed

to achieve full compliance with the Fire Rating and Acoustic requirements of the BCA, as well as being burdened with a cross easement of titles for either side of the wall in accordance with s88BB Conveyancing Act 1919.

PRIMARY ROAD ARTICULATION FOR DWELLING HOUSES

Part 3.2.1

Architectural elements which address the street frontage and permitted in the articulation zone include the following:

- *entry feature or portico,*
- *a balcony, deck, patio, pergola, terrace or verandah,*
- *a window box treatment such as a bay window or similar feature,*
- *an awning or other sun shading feature over a window.*

REQUIREMENTS

- a) *An articulation zone within the designated setback area is only available to the primary road frontage and is measured 1.5m from the building to the minimum required setback from the subject road.*
- b) *The maximum total area of all building elements within the articulation zone must not be more than 25% of the area of the articulation zone in accordance with Figure 5 above.*
- c) *Dwellings and all ancillary development on a lot zoned R1, R2, R3 or RU5 must have elevations facing road frontages articulated as follows:*
 - i) *elevations when within 7.5m and facing a primary road frontages with unbroken lengths of walls that exceed 10m in length.*
 - ii) *elevations facing and less than 4.5m from a secondary or parallel road frontage with unbroken lengths of walls that exceed 10m in length.*

Note: unbroken lengths of walls that exceed 10m in length can either be articulated with architectural elements as permitted in in primary road articulation zones or wall projections and or indentations (min. 0.45m x 1.5m in length) to ensure that a wall is not blank and has design elements that improve the streetscape.

Note: secondary and parallel road articulation is to occur behind the required minimum setback not within the designated setback as permitted with primary road articulation.

COMPLIANCE:

All dwelling houses are located behind the 4.5m building setback line from the primary street frontage and 2m from the second street frontages as required.

All dwellings in this proposed development have street elevations that are either less than 10m in length or articulated in accordance with the requirements of Part 3.2.1(c).

GARAGE DOOR ARTICULATION

Part 3.2.2

To ensure the visual focus of a development is the dwelling, not the garage doors facing and dominating the streetscape, the need to limit garage doors when within close proximity of a road frontage is required.

- a) *The total width of all garage doors openings when within 7.5m and facing a primary road or parallel road on a lot zoned R1, R2, R3, or RU5 must not exceed:*
 - i) *6m if the lot has a width measured at the building line of 12m or less, or*
 - ii) *6m, or 60% of the width of the building (whichever is the greater) if the lot has a width measured at the building line of more than 12m.*

COMPLIANCE:

The garage doors on all dwelling vary in width from 5m for double garages and 2.5m for single garage. With the minimum width of sites being 10.0m, and the garage doors being less than 6m, the development is in full compliance with this Part 3.2.2 (a) i).

OPEN SPACE AREAS

Part 4.0

Open space areas are provided within the site to provide for outdoor living and landscaping areas.

OBJECTIVES

- *To provide dwellings with individual private open space areas promoting a practical outdoor living area for residents*
- *To facilitate solar access to the living areas of the dwelling*
- *To assist in the reduction of stormwater runoff from a site*
- *To enable landscaping of the site and where possible retain existing significant vegetation*

PRIVATE OPEN SPACE

Part 4.1

REQUIREMENTS

- a) *For all dwellings the principal private open space areas should be directly accessible from and adjacent to a habitable room other than a bedroom and shall be provided in accordance with the following:*
 - i) *Lots with a width less than 10m wide at the building line or secondary dwellings 16m².*
 - ii) *Lots with a width greater than 10m wide at the building line 24m².*
 - iii) *Minimum dimension of 3m.*

Note: the principal private open space area should be sited behind the front building line and should be generally level and may be in the form of a deck, terrace or paved area. This area should be determined having regard to dwelling design, allotment orientation, and adjoining development and to minimise disturbance from any significant noise sources.

COMPLIANCE:

Each dwelling in this development has been provided with a dedicated Private Courtyard well in meeting the minimum 24sqm and 3m wide as required. Architectural drawing A02 demonstrates diagrammatically the nominated location for this area of Private Open Space (POS) with a highlighted area. Table 3 of this Statement contains the areas of Private Open Space (POS) for each dwelling, measured in accordance with the requirements

All dwellings in this development, have their nominated area of POS directly accessible from the principal living area of the dwelling

SUNLIGHT ACCESS

Part 4.2

REQUIREMENTS

- a) *On June 21, 50% of the required principal private open space area for all dwellings should receive at least 3 hours of unobstructed sunlight access between 9am and 3pm.*
- b) *On June 21, 50% of the required principal private open space on adjoining land should receive at least 3 hours of unobstructed sunlight access between 9am and 3pm. Council may consider adopting a lesser standard than provided under this provision in circumstances where:*
 - i) *the proposed development complies with the building height and building envelope setbacks with this chapter*
 - ii) *the proposal adequately considers site constraints including slope and site orientation*
 - iii) *it can be identified that the adjoining development has not sufficiently considered likely future development and site constraints such as lot orientation in the location of private open space.*

COMPLIANCE:

Of the 60 dwellings proposed in this development, all dwellings have their principal private open space areas orientated to obtain the required 3 hours of sunlight on June 21 to 50% of the required POS. The extent of sunlight available in all areas of private open spaces for each dwelling between 9am and 3pm on June 21 is demonstrated in the Solar Access Report forming part of this Development Application submission.

CARPARKING & ACCESS*Part 5.0*

A car parking space may be an open hard stand space, a carport or garage, whether attached to or detached from the dwelling house and is to provide safe entry and exit from a roadway.

OBJECTIVES

- *Car parking to be designed in sympathy with the development without becoming the dominant feature on the streetscape.*
- *To provide adequate on-site parking relative to the occupancy of the dwelling.*
- *To have car parking access that minimises the potential for pedestrian and vehicle conflict.*

REQUIREMENTS

Minimum off-street car parking provisions is required to be provided or retained for all dwelling houses as follows:

- a) 1 space if dwelling has 3 or less bedrooms.*
- b) 2 spaces if dwelling has 4 or more bedrooms.*
- c) An open hard stand car parking space must measure at least 2.6m wide and 5.4m long.*
- d) have driveway access to a public road.*
- e) car parking provision for a battle-axe lot or classified roadway should be designed so that vehicles can leave the site in a forward direction for safer vehicle entry and exit and pedestrian access.*

Note: parking on site within a street setback may be used to satisfy the second (not primary) car parking provision.

COMPLIANCE:

This proposed development includes a mix of double and single garages for the dwellings. Additional to the garage parking the driveways of all but 3 dwellings have been sized to accommodate parking for one car.

Table 4 – Carparking

CARPARKING	DWELLINGS	SPACES
4 Bed Dwellings (Single Garage)	4	4
4 Bed Dwellings (Double Garage)	44	88
4 Bed Dwellings (Tandem Garage)	8	16
3 Bed Dwellings (Single Garage)	2	2
3 Bed Dwellings (Double Garage)	2	4
Driveway Parking	57	57
TOTAL SPACES PROVIDED		171

The total number of carpark provided for this development well exceeds the 116 spaces required for compliance with this Part.

EARTHWORKS, STRUCTURAL SUPPORT, & DRAINAGE

Part 6.0

Sloping sites as opposed to relatively flat sites presents design consideration for development to manage fall in land which may take the form of benching or stepping the site and or development depending on the severity in the fall/slope of land.

OBJECTIVES

- *To accommodate development on a site without the need for excessive excavation and fill or construction of high retaining walls adjacent to site boundaries*
- *To encourage designs conforming to natural land forms and site constraints*
- *To manage stormwater discharge in a manner that minimises impacts on adjoining properties or public land*
- *To ensure that the amenity of adjoining residents and the streetscape is not adversely affected*

EARTHWORKS

Part 6.1

REQUIREMENTS

- a) *Excavation for the purposes of development must not exceed a maximum depth measured from existing ground level of 1m if less than 1m from any boundary, or 3m if located more than 1m from any boundary.*
- b) *Fill for the purpose of erecting a dwelling must not exceed 1m above existing ground level. No retaining wall for fill is to be within 1m of a side or rear boundary unless within 1.5m of any external wall of a dwelling.*

Note: Fill for development other than for a dwelling is to generally comply with the exempt provisions SEPP (Exempt & Complying Development codes) 2008.

Note: Fill to flood lots generally is not supported and would be subject to meeting the objectives and requirements of DCP 2013 Chapter 3.3 Floodplain Management.

COMPLIANCE:

The civil earthworks for this development has been designed by Daly Smith achieving compliant grades for roads and driveways, and required falls and detention areas for the complete stormwater drainage system. The principles of achieving a balanced cut and fill for these works has been applied to this design.

The extent, type and heights of all retaining are shown on Architectural Drawings, numbered A04 to A08. Refer also to the Earthworks Plan contained in the Civil Engineering documentation prepared by Daly Smith.

RETAINING WALLS AND STRUCTURAL SUPPORT

Part 6.2

- a) *Retaining walls that are more than 600mm above or below existing ground level and within 1m of any boundary, or more than 1m above or below existing ground level in any other location, must be designed by a professional engineer.*

Note: The height of a retaining wall is measured from the base of the retaining wall to its uppermost portion and may include a combination of height above and below ground level (existing).

Note: All retaining walls visible from a public place are to be constructed in masonry.

- b) *Earthworks not structurally supported by a retaining wall having an unprotected sloping embankment or batter must:*
- i) *not have an embankment slope greater than that required by the BCA for its soil type*
 - ii) *generally not extend by more than 3m from the dwelling or have the toe of the embankment or batter within 1m from a side or rear boundary.*

Note: Retaining walls or earthworks not structurally supported shall be designed so as not to redirect the flow of any surface water onto adjoining land.

COMPLIANCE:

All retaining walls proposed for this development will be designed and documented by a qualified engineer, in full compliance with this part.

The extent, type and levels of all retaining are shown on Site Retaining Wall Sketches, numbered RT1 to RT4.

OUTBUILDINGS & OTHER ANCILLARY DEVELOPMENT

Part 7.0

OBJECTIVES

- *To ensure that ancillary development is appropriately sited, sized and compatible with the local context*
- *To ensure development does not compromise the privacy, views and solar access of adjoining properties*
- *To ensure fencing and other ancillary development meets the requirements of residents in terms of privacy and security, as well as contributing positively to the streetscape*

FENCING

Part 7.5

Note: Fencing should integrate with the colour scheme and design of the dwelling and where possible with the colours and materials of fencing on adjoining lands.

REQUIREMENTS

- a) *The construction or installation of a dividing fence or fence within the setbacks of a road frontage is to comply with:*
- i) *maximum height of 1.8m above natural or approved ground level.*
 - ii) *any fence opening for provision of vehicle access to be in accordance with AS/NZS 2890.1, Parking facilities, Part 1: Off-street car parking to ensure pedestrian and vehicle sight distance safety is maintained.*
 - iii) *any fence to be constructed or installed within the front setback of a lot from the intersection of the two road boundary lines (corner allotment) is to comply with the Safe Intersection & Sight distance requirements of the Austroads Guides.*
 - iv) *any fence located along the boundary of, or within 1.5m to a primary road must be open for at least 25% of the area of the fence that is more than 0.9m above ground level (existing), excluding any post or piers to a maximum width of 350mm, or be setback 1.5m from the boundary to provide for a streetscape landscaping provision.*
 - v) *if it is constructed of metal components be of low reflective, factory pre-coloured materials.*
 - vi) *if it is constructed or installed on a flood control lot not redirect or interrupt the flow of surface water on that lot (a minimum opening under the fence bottom rail of 100mm is required).*
 - vii) *any masonry fencing requires an application/approval under the Water Management Act (S305) to ensure services are not impacted upon (if water and sewer is provided to that lot).*

Note. If the fence is a dividing fence, the Dividing Fences Act 1991 also applies.

COMPLIANCE:

The development incorporates a combination of; timber lapped and capped fencing, timber slat fencing and decorative concrete walls, with maximum heights of 1800mm, to side and rear boundaries of each property. The decorative timber and concrete fence will be utilised where the fence can be seen from the street and these shall be stepped down to lessen their impact on the streetscape while still reinforcing the private open spaces of the dwellings.

The extent, details and heights of all boundary fences are shown on Architectural Drawings, numbered A04 to A08.

CHAPTER 2.3	DUAL OCCUPANCY
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3.0 SCALE**3.1 HEIGHT***Part 3.1.1*

In accordance with WLEP 2013, building height is defined as the vertical distance between ground level (existing) and the highest point of the building, including plant and lift overruns, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.

WLEP 2013 contains a Height of Building Map for certain areas within the Shire. In accordance with Clause 4.3(2) of WLEP 2013, the height of a building is not to exceed the maximum height indicated on this map.

In determining appropriate building heights Council shall have regard to WLEP 2013, for the scale of future development for which provision is made in the locality and where appropriate, the Warnervale Aerodrome Obstacle Limitation Surfaces Map and the New South Wales Government Coastal Policy.

COMPLIANCE:

The maximum height of buildings is not defined on the relevant Height of Building Map contained within WLEP 2013.

3.1.2 Natural Ground Level to Ceiling Height (Ceiling Height)

For the purposes of this Chapter, ceiling height is defined as the vertical distance from natural ground level at any point within a building to the top-most ceiling of the building directly above that point

OBJECTIVES

To encourage development which:

- *is consistent with the objectives of the zone*
- *is not visually obtrusive*
- *relates to the topography of a site*
- *enhances privacy and amenity for neighbouring residents, and*
- *maintains solar access*

REQUIREMENTS

- a) *The maximum ceiling heights for dual occupancy development shall not exceed 7 metres in height and shall generally not exceed two storeys.*
- b) *In areas where the building height requirements of the Local Environmental Plan are appropriate and surrounding development exceeds two storeys, three storey development may be considered.*
- c) *Where a front-and-rear dual occupancy design is proposed within the R2 zone, the building height of the rear dwelling shall not exceed single storey, regardless of whether the dwellings are attached or detached.*

Note: Basement car parking does not constitute a storey, provided the top of the car parking level is not more than 1.0 metres above natural ground level.

COMPLIANCE:

The maximum height of the ceiling above ground level shall be 5.4m. Refer to architectural drawings for more details.

3.2 Site Coverage

OBJECTIVES

- To provide an area on site that enables soft landscaping and deep soil planting
- To provide a pleasant outlook
- To provide appropriate separation between buildings in the local context
- To provide areas on site that permits stormwater infiltration

REQUIREMENTS

- A minimum 25% of site area at ground level shall be 'soft' landscaping, excluding all hardstand areas. Open space areas and setback areas may be included in this calculation only where these do not include hardstand surfaces.
- WLEP 2013 contains a Floor Space Ratio Map for certain areas within the Shire. For areas not identified under the Floor Space Ratio Map the floor space ratio for dual occupancy housing is restricted to 0.5:1.

COMPLIANCE:

Each Dual Occupancy Lots provides a minimum of 25% soft landscaping area for areas exclusive of the access handle.

Lot Number	Lot Size Exclusive of Access Handle	Soft Landscaping Area	Percentage
301	457 m ²	200 m ²	43%
302	422 m ²	112 m ²	25%
311	407 m ²	144 m ²	35%
312	397 m ²	141 m ²	35%

4.0 BUILT FORM

4.1 Construction and Appearance of Development

OBJECTIVES

To ensure design of development is:

- of a high quality which contributes positively to the streetscape
- compatible with the desired character of the area, and
- visually interesting, offering variety to the observer whilst presenting an integrated design outcome

REQUIREMENTS

4.1.1 Building Design

- The appearance and functionality of dual occupancy housing shall be of a high architectural quality. Dual occupancy housing shall be compatible with the objectives of the zone in its scale, function and visual appearance.
- Council requires facades to be articulated in length and height. Monotonous and unbroken lengths of wall exceeding 10 metres in length and 3 metres in height shall not be permitted. Physical design elements in two storey (or greater) designs shall be used to provide visual interest to the building. These elements may include roof, wall and eave projections and indentations (min. 0.45m x 1.5m run), roofed decks, pergolas, awnings and other permanent shading structures, etc. A mixture of building materials including masonry, timber and glass is encouraged. See Figure 4.
- "Mirror-image" side-by-side dual occupancies are generally not acceptable. The shape of the building shall be articulated and varied, for example, stepping back adjoining garages where located on the front elevation, massing of different materials, stepping of walls, alterations to the roofline, etc.
- Garages shall not dominate the street elevation(s) or presentation of the development.
- Suitable architectural features shall be incorporated in the design to provide visual relief and to minimise the bulk and scale of development.
- For elevated dwelling designs, sub-floor fender walls are required on all facades.
- Street number(s) shall be clearly identifiable for the development.

- h) *Each dwelling shall have a clearly identifiable entry.*

4.1.2 Roof Design

- a) *Relate roof design to the desired built form. Some design solutions may include:*
- i) *articulating the roof, or breaking down its massing to minimise the apparent bulk or to relate to a context of smaller building forms;*
 - ii) *using a similar roof pitch or material to adjacent buildings, particularly in existing special character areas or heritage conservation areas;*
 - iii) *using special roof features which relate to the desired character of an area, or to express important corners.*
- b) *Design the roof to relate to the size and scale of the buildings, the building elevations and three dimensional building form.*
- c) *Design roofs to respond to the orientation of the site. For example by using eaves and skillion roofs to respond to solar access.*
- d) *Roof top structures shall not detract from the architectural merit of the building.*
- e) *Roof top gardens, terraces, decks and enclosures shall be suitably set back from the building edge to maintain the privacy of adjoining sites.*

COMPLIANCE:

The proposed Dual Occupancy have been designed to a high standard of architectural merit utilising setbacks, roof form and façade treatment to differentiate the 4 proposed dwellings from each other which still establishing the same character as the overall development. Garage openings are designed to limit their impact on the overall streetscape and sit well within the front elevation of each dwelling. Each dwelling has a clearly identified entry from the primary access handle to the battle-axe lots.

Refer to Architectural Drawings for more details.

4.2 CUT AND FILL

OBJECTIVES

- *To accommodate the proposed development on site, without the need for excessive cutting and filling of the site or construction of high retaining walls*
- *To control surface water and / or stormwater on the subject land with any changes to water flows, as a result of cut or fill, not impacting upon any adjoining properties*
- *To ensure that the design of the development is appropriate for site conditions with consideration given to slope, stability of the land and the privacy of adjoining properties*
- *To ensure all boundary fencing is erected at natural ground level, permitting light and ventilation to ensure reasonable amenity to adjacent developments*

REQUIREMENTS

- a) *The amount of cut and / or fill required on a site shall be minimised. This may be achieved by stepping buildings down a site, and by locating the finished ground floor level as close to natural ground level as practicable.*
- b) *No building, cut, fill, or retaining works shall be permitted which may affect sewer or drainage lines, or inter-allotment easements over the property.*
- c) *The placement of any fill on the land in excess of 100mm (topdressing) requires development consent.*
- d) *Retaining walls where viewed from the street or public places shall be of a decorative masonry product complementing the landscape design and integrating with the development.*
- e) *Retaining walls shall be constructed in accordance with the manufacturer's specifications, or in accordance with an approved engineering design which complies with Australian Standard AS4068 and Council's Civil Works – Design Guideline and Construction Specification.*

Note: Each of the above elements is to be wholly contained within the subject allotment.

- f) *The construction of any retaining wall or associated drainage work adjacent to a common boundary shall not impede the structural integrity of any existing retaining walls or structures.*

Note: It is the legal responsibility of the lot cutting to retain other land / structures.

- g) All dividing fencing shall be erected on ground level.
- h) Specific restrictions on cut:
 - i) no boundary retaining wall for cut shall exceed 900mm in height;
 - ii) where any adjacent wall of the dwelling is setback less than 1300mm from the side boundary the height of cut at that boundary is restricted to a maximum of 600mm and the area between the wall of the building and the boundary retaining wall shall be provided as a generally level surface; and
 - iii) where any adjacent wall of the dwelling is setback 1300mm or greater from the side boundary, the height of cut at the boundary is restricted to a maximum of 900mm and the area between the wall of the building and the boundary retaining wall shall be provided as a generally level surface.
- i) Specific restrictions on fill:
 - i) all filling for the slabs shall be contained within the footprint of the building by the use of drop-edge beams to natural ground level, such that a generally level area is created between the wall of the building and the boundary;
 - ii) battered fill or retaining walls within areas such as front or rear yards and courtyard areas external to the dwelling footprint shall not exceed 600mm in height;
 - iii) all proposed fill (e.g. to support courtyard areas) is to be graded at a batter not exceeding 1:4, or retained to a maximum height of 600mm, such that natural ground level is achieved at a distance of 900mm from the side boundary; and
 - iv) the grading of fill, at a batter not exceeding 1:4, with the rear yard or front setback area to existing ground level at these boundaries is acceptable.

COMPLIANCE:

The development has been designed in conjunction with the civil engineer to minimise overall cut and fill to only what is necessary to maximise the overall amenity and constructability of the proposed dwellings.

4.2.1 Retaining Walls

Details of any proposed retaining walls, including construction details, height and location on the site shall be provided with the development application.

COMPLIANCE:

All retaining walls proposed for this development will be designed and documented by a qualified engineer, in full compliance with this part.

The extent, type and levels of all retaining are shown on Site Retaining Wall Sketches, numbered RT1 to RT4.

4.3.2 Setbacks

The required minimum setbacks for all dual occupancy housing in residential zones are provided in following table.

The following setback requirements apply to dwellings and all ancillary development on a lot zoned R1, R2, R3 or RU5:

Front Setbacks	"Category A" roads	- 7.5m
	"Category B" roads	- 6.0m
	"Category C" roads	- 4.5m
	Note: For "Category C" roads where the road reserve is < 12 metres and development is proposed on both sides of the road, the minimum setback is 6.0 metres.	
Side and rear setbacks	0.9 Metres	
Garages	6.0 metres applies to garages where they are accessed directly from the road systems	
Corner Allotments	2.0 metres, plus compliance with sight preservation lines	

COMPLIANCE:

The proposed Dual Occupancy dwellings are located on battle-axe lots and have been sited to provide adequate amenity and open space to each dwelling while complying with the setback requirements of this clause.

4.4.2 Resident Parking

- a) *The total number of car parking spaces required is shown in table below.*
- b) *At least one of the required resident car parking spaces for each dwelling must be provided in the form of an enclosed space (garage) with minimum dimensions of 3 metres width by 5.5 metres length and a minimum opening of 2.7 metres.*
- c) *Car parking numbers to be rounded up to the nearest whole number.*

One to three bedroom	1 space per dwelling
Four or more bedroom	2 spaces per dwelling

COMPLIANCE:

Each Dual Occupancy dwelling provides a double garage suitable for 2 cars in full compliance with this part.

5.0 DENSITY

5.1 Lot Size Requirements

OBJECTIVES

- *To have development sites and densities that are appropriate in the zone and compatible with the local context*
- *To ensure building bulk and site coverage provisions are compatible with neighbouring development*

REQUIREMENTS

The following minimum site areas apply within residential zones:

Dual occupancy on an existing battle-axe allotment – 800 square metres

COMPLIANCE:

Each Dual Occupancy lot is greater than 800 m² exclusive of the access handle in full compliance with this part.

6.0 AMENITY

6.1 Private Open Space

OBJECTIVES

- *To provide dwellings with individual private open space areas*
- *To ensure private open space areas are functional and responsive to the environment, thereby promoting the enjoyment of outdoor living for residents*
- *To ensure private open space areas integrate with the overall architectural form and detail of the development*

REQUIREMENTS

- a) *Private open space is required for each dwelling with a minimum area of 45 square metres and a minimum dimension of 4.5 metres (this does not include the area required to house above ground rainwater tanks). These areas are required to be located at ground level and directly accessible from living areas of the dwelling.*
- b) *Required private open space may be provided in up to two locations for each dwelling.*
- c) *Ground level courtyards may be located within the front building setback area on Category A roads.*
- d) *Ground level courtyards may be located within the front building setback area on Category B roads only where solar access is optimised.*

- e) *Ground level courtyards are not permitted within the front building setback area on Category C roads.*
- f) *Required private open space shall not exceed a maximum grade of 1:14 to optimise useability for residents.*
- g) *Patios, decks, balconies and the like at or near ground level may only be counted as courtyard area when they are not enclosed by the line of the roof of the building (not including the eaves projection).*
- h) *Wherever a dimension is less than 4.5 metres it shall not be counted as part of the calculation for private open space areas.*
- i) *Private open space for a single dwelling above commercial premises shall be provided as a private terrace or balcony having minimum area of 30 square metres and a minimum dimension of 4.5 metres, directly accessible from a living area within the dwelling.*

COMPLIANCE:

Each Dual Occupancy lot is greater than 45 m² provided as a generally level area directly accessible from the main living area of the dwelling in full compliance with this part.

Table of Site Areas

Lot Number	Site Area (sqm)	Site Coverage Area (sqm)	Percentage (%)	POS (m2)
301	457.2 sqm	169.2 sqm	37%	65.8
302	735.6 sqm	182.0 sqm	25%	104.1
311	407.8 sqm	181.7 sqm	45%	89.1
312	397.9 sqm	181.7 sqm	46%	82.1

6.2 Solar Access

OBJECTIVES

- *To ensure that solar access is available to all private open space areas of dual occupancy housing*
- *To provide adequate ambient lighting and minimise the need for artificial lighting during daylight hours*
- *To ensure that a minimum standard of solar access is available during the winter solstice to private open space areas and internal living areas to provide for a reasonable standard of residential amenity*

REQUIREMENTS

6.2.1 General Requirements

- a) *At least 75% of each required private open space area shall receive at least three hours unobstructed sunlight between the hours of 9 am and 3 pm on June 21 (winter solstice).*
- b) *New development shall have due regard for maintaining solar access to adjoining properties and not cause overshadowing. At least 75% of required private open space areas on adjoining lands shall receive at least three hours unobstructed sunlight between the hours of 9 am and 3 pm on June 21 (winter solstice).*
- c) *Dwellings should be orientated to allow optimum solar access for internal and external living areas.*
- d) *Buildings shall be designed to minimise adverse impact by wind velocities, intensities and directions on the amenity of the development and surrounding areas.*

6.2.2 Shadow Diagrams

- a) *Developments of 2 storeys height and above shall provide shadow diagrams based on a survey of the site and adjoining development, showing shadow casting at 9 am, 12 noon and 3 pm on June 21 (winter solstice). The shadow diagrams must show the impact of shadowing from the proposed development as well as existing development, on the proposed development and adjoining properties.*
- b) *In assessing the impact of shadow on an adjoining property, Council shall have regard for the solar access standards stated above.*

Note: Shadow diagrams may be required for single storey development if adjoining development is 2 storeys or greater.

COMPLIANCE:

Each Dual Occupancy receives greater than 75% direct sunlight to the private open space area of each dwelling in full compliance with this part. Refer to provided Solar Access Report and Shadow Diagrams for more details.

6.3 Privacy

OBJECTIVES

- To provide and maintain reasonable levels of visual privacy both internally and externally, during day and night
- To maximise outlook and views from living rooms and private open space without compromising visual privacy
- To ensure a high level of amenity by protecting the privacy of residents both within the apartments and in private open space areas

REQUIREMENTS

6.3.1 Visual Privacy

- a) Direct overlooking of internal living areas and private open space to surrounding dwellings shall be minimised by building layout, location and design of windows and balconies, screening devices and landscaping.
- b) Where living area windows or balconies of dwellings are proposed within 12 metres and facing living area windows or balconies of adjacent dwellings, windows should offset from the edge of the opposite window and balconies be screened or oriented to ensure visual privacy. Window openings at first floor level and above should be orientated or designed to minimise the potential for overlooking of adjacent properties and this consequent loss of privacy. Windows which are orientated towards adjoining properties and do not adequately restrict overlooking will be required to be opaque finish or located at appropriate heights above floor level to minimise overlooking of adjoining properties.

6.3.2 Acoustic Privacy

- a) Site layout should separate active recreational areas, parking areas, vehicle access ways and service equipment areas from bedroom areas of dwellings.
- b) Development adjacent to high levels of uncontrollable external noise shall minimise the entry of that noise through building design and external wall treatment.

COMPLIANCE:

The development has been designed to respond to the slope of the site while maximising the amenity and privacy of the dwellings. Where the two storey dwellings are located they shall be screened from adjoining properties through a mix of fencing and screening planting. Private open space areas are designed to minimise their impact on adjoining properties while still allowing sufficient area and solar access for residents.

CHAPTER 2.11 PARKING AND ACCESS

GENERAL INFORMATION REQUIRED WITH A DEVELOPMENT APPLICATION

Part 2.1

The details required with a development application will vary depending on the scale and type of development.

Where the development is of a small scale and with minimal traffic impacts, a parking plan and parking assessment based on this Plan are usually acceptable with a Development Application. These could be included in a section of the Statement of Environmental Effects that is submitted as part of the Development Application.

TRANSPORT MANAGEMENT PLAN

Part 2.2

Traditional traffic studies tend to extrapolate existing travel patterns and plan for increased road capacity to accommodate those trends, thus tending to favour private vehicle use over alternative transport modes. The emphasis now in NSW Government policy is to plan major developments and development in major centres for the management of travel demand as part of an integrated land use and transport strategy.

A Transport Management Plan aims to:

- manage the transport impacts of the development;
- encourage increased use of public transport, walking and cycling;
- reduce the potential growth in use of cars and commercial vehicles generated by the development;
- reduce the impact of freight transport, while allowing for efficient freight movement.
- For all residential developments larger than a dual occupancy, or other development generating more than 20 one-way vehicle trips per day, a Transport Management Plan (TMP) prepared in accordance with Appendix B is required. For smaller developments, the TMP could be included in a section of the Statement of Environmental Effects that is submitted as part of the Development Application.

The TMP is to identify how those accessing the proposed development will be encouraged to walk, cycle and use public transport in lieu of the motor car. (Public transport includes bus, rail and taxis.) The TMP may identify and justify an appropriate parking ration for that particular development.

Where a proposed development is located in a major centre or a town centre, an applicant who prepares a satisfactory TMP may propose alternate parking ratios than those identified in Section 5 Table 1: Parking Requirements for Specific Land Uses.

TRAFFIC IMPACT STUDY

Part 2.3

For large-scale and/or more complex developments, which are likely to have a greater impact on parking demand and/or traffic movement, an appropriate Traffic Impact Study, including parking requirements, prepared by a suitably qualified consultant, is to be provided with the development application. This includes development proposals that generate 50 or more vehicle trips per hour and development proposals considered to be Traffic Generating Developments under Schedule 3 of SEPP Infrastructure. The issues to be addressed in a Traffic Impact Study are listed in Appendix A.

CONSULTATION WITH THE STATE ROADS AUTHORITY

Part 2.4

Under the requirements of State Environmental Planning Policy (Infrastructure) 2007, certain development applications are required to be referred to Roads and Maritime Services (RMS), for consideration and advice of RMS requirements. The type and size of development that is to be referred to RMS are listed in Schedule 3 of State Environmental Planning Policy (Infrastructure) 2007. All developments abutting classified roads will also be referred to RMS. However, Council may seek the comments from the RMS for any development where Council considers it appropriate.

COMPLIANCE:

To ensure compliance with the requirements of this Chapter a Traffic Management Assessment has been prepared by INTERSECT TRAFFIC, Traffic Engineers, and forms part of this submission to Council.

CHAPTER 3.1	SITE WASTE MANAGEMENT
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WASTE CONTROL GUIDELINES

Part 2.2

- a) A Waste Management Plan (written document/completed form) shall be prepared in accordance with the Waste Control Guidelines, to provide the following information:
 - i) type and amount of waste / recyclable materials which will be generated;
 - ii) how waste / recyclable materials will be stored and treated on site;

- iii) *how disposal of waste / management or resale of recyclable materials will take place, and*
- iv) *how ongoing waste management will be accommodated in the design of the building or use.*
- b) *The Waste Management Plan is required to cover the following stages of a development:*
 - i) *Clearing;*
 - ii) *Demolition;*
 - iii) *Site preparation;*
 - iv) *subdivision;*
 - v) *construction; and*
 - vi) *long term operation.*

COMPLIANCE:

A standard Waste Management Plan has been prepared to address all stages of the development and forms part of this submission to Council. Refer to standard WASTE MANAGEMENT PLAN document forming part of this application

PART 4 SUBDIVISION

STORMWATER MANAGEMENT AND FLOODING

Part 3.1

OBJECTIVES

- *To ensure that land can be adequately drained so as not to impact on adjacent sites and that the development does not contribute to drainage or flooding problems elsewhere*
- *To ensure applicants are aware of Council's requirements for the quality and the quantity of water, managing catchment run on and runoff, and the efficient reuse of water to minimise demands on the potable water supply*
- *To ensure measures are undertaken to achieve soil stability to prevent erosion and sedimentation*
- *To ensure stormwater discharge from the site is managed so as not to pollute receiving systems and waterways*
- *To promote water sensitive urban development and provide a more integrated approach to urban water cycle management*
- *To ensure conservation of water and reduction in mains water consumption by utilising stormwater as a natural water resource for larger subdivisions*
- *To protect sensitive ecosystems and to maintain hydrological regimes to downstream environments*

REQUIREMENTS

Part 3.1.1

General Requirements

- a) *All development must comply with the requirements of Council's Council's Civil Works – Design Guideline and Construction Specification.*
- b) *Site works are not to obstruct or divert overland flows from upstream properties.*
- c) *Adequate provision for gravity drainage is to be demonstrated for each of the lots created. Some subdivisions may require detention systems and / or inter-allotment drainage provision, with appropriate easements created.*
- d) *All excess stormwater runoff from roof and paved areas shall be collected via rainwater tank systems, prior to eventual discharge into inter-allotment or street stormwater drainage systems.*
- e) *Where easements over downstream properties are required, evidence of agreement with the relevant property owners shall be submitted with the development application.*
- f) *Water conservation measures shall:*
 - i) *reduce the reliance on potable water supplies;*
 - ii) *harvest rainwater and urban stormwater runoff for use where appropriate;*
 - iii) *capture, treat and reuse wastewater where appropriate;*
 - iv) *ensure infrastructure will compliment any current or future water use.*
- g) *Within the shire, key wetlands and waterways are protected. The design shall include measures and controls necessary, as detailed in the publication: Water Sensitive Urban Design for Catchments Above Wetlands, by Ecological Engineering.*
- h) *The level of information to be submitted for stormwater management will depend on the size of the subdivision and the sensitivity of downstream environments.*

- i) *Water Sensitive Urban Design (WSUD) principles are to be adopted throughout the development to promote sustainable and integrated land and water resource management. Best practice stormwater management, water conservation and environmental protection measures are to be incorporated.*

COMPLIANCE:

To ensure compliance with these requirements a complete stormwater management design for this development has been undertaken by Daly Smith, Consulting Engineers with their detailed documentation forming part of this submission to Council.

STREET LAYOUT AND DESIGN

Part 3.4

OBJECTIVES

- *To provide a legible hierarchy of streets according to the specific purpose and function of the streets*
- *To ensure street connectivity and legibility for pedestrians, cyclists and drivers*
- *To provide and promote an attractive and safe streetscape*
- *To control street design speed by geometry, traffic calming treatments, length, width and streetscape treatments*
- *To provide safe and effective access opportunities for pedestrians, cyclists and drivers*
- *To provide appropriate access for larger and special purpose vehicles including garbage trucks, emergency service vehicles, delivery vehicles and buses where appropriate*
- *To minimise through design the negative impact of high traffic volumes and vehicle speed throughout the subdivision*
- *To accommodate sufficient on street parking*
- *To avoid cul-de-sacs where possible, and*
- *To encourage the use of a grid pattern layout where possible*

REQUIREMENTS

- a) *Subdivisions are to establish a road hierarchy which distinguishes between access lanes / places, access streets, local streets, collector streets and distributor roads (see example Figure 3 below). For the purpose of this Part the street hierarchy is defined as follows:*
- b) *Access lanes / places are generally used for small lot housing and have very limited through traffic. The maximum capacity for these laneways is 100 vehicles per day and they are designed for a maximum street speed of 30 km/h.*
- c) *Access streets are minor streets that have limited through traffic. The capacity of these streets is up to 500 vehicles per day and they are designed for a maximum street speed of 30 km/h.*
- d) *Local streets can carry up to 2000 vehicles per day and are designed for a maximum street speed of 40 km/h.*
- e) *Collector streets are linked to major roads. The capacity of these streets is between 2000 and 5000 vehicles per day. They are to be designed for a maximum street speed of 50 km/h.*
- f) *Distributor roads are major roads that are designed for considerable traffic loads, generally greater than 5000 vehicles per day. These roads are generally used to facilitate access to major facilities such as shops and schools. Unless identified otherwise, they are to be designed for a maximum street speed of 50 km/h.*
- g) *The street network shall respond to the area's topography and natural features. Where possible, residential subdivisions are to create streets oriented generally in a North/South and East/West direction, to enable future dwellings to obtain maximum solar access.*
- h) *Streets are to be designed in accordance with the components for Design Speed, Carriageways and Verge Widths detailed within the table in Appendix B.*
- i) *The street network must form a basic layout design that provides interconnection between neighbourhood elements, transport modes and integration with adjoining developments.*
- j) *Streets are to be designed to enable each lot to access street frontage.*
- k) *Where there is an existing subdivision street pattern, new streets are to be designed to connect with the existing pattern.*
- l) *Roads are to be widened appropriately at intersections.*
- m) *Roads are to be widened where necessary (e.g., Bends in the road) to accommodate manoeuvring for larger vehicles (i.e., trucks and buses).*
- n) *The street design and lot layout is to consider the likely location of lot accesses, with regards to adequate sight distances in accordance with ASNZS 2890 and the Austroads Guidelines, Part 5.*

- o) Residential street blocks shall be no more than 80 metres deep and no more than 160 metres long.*
- p) Cul de Sacs are to be avoided where possible. If they are unavoidable; the length of the cul-de-sac is to be no more than 75 metres.*
- q) Where the land abuts open space or remnant bushland, a carriageway and footpath along the boundary of the open space or remnant bushland is to be provided (refer Figure 4). The Urban Interface Area (UIA) requirements outlined in s.3.9 apply.*
- r) Appropriate intersection controls are to be provided. They are to take into account safety as well as capacity requirements.*

COMPLIANCE:

The complete road design for this development, including subdivision pattern and street hierarchy, has been undertaken by Daly Smith, Consulting Engineers, to ensure full compliance with the requirements of this Part.

Their detailed documentation including; road layouts, road profiles and drainage profiles forms part of this submission to Council.

FOOTPATH AND CYCLEWAYS

Part 3.5

OBJECTIVES

- To provide safe and convenient routes for pedestrians and cyclists*
- To provide a safe environment by the appropriate separation of all road users, pedestrians, cyclists and vehicles*
- To ensure 'Safer By Design' principles are implemented for safety and security*
- To promote 'Healthy By Design' principles in subdivision design, in accordance with the guidelines issued by the Premiers Council for Active Living (PCAL), the NSW Heart Foundation and NSW Health*

REQUIREMENTS

- a) Footpaths shall be provided on one side of the street for Access Places / Lanes, Access Streets and Local Roads, in accordance with the diagrams in Appendix A and the standards in Appendix B.*
- b) Subdivisions are to provide pedestrian links between street networks and cul de sacs where possible and shall be designed in accordance with 'Safer by Design' (CPTED) principles.*
- c) Cycleways may be required on major roads such as Collectors and Distributors as well as through parks or other areas to provide connections for pedestrians and cyclists. This requirement will be determined on individual development merits and/or identified in the Transport Report (Refer Section 2.7.4).*
- d) Shared pedestrian and cycleways are to be provided in all new residential estates as identified in the Transport Report and/or to provide direct, safe and convenient access to facilities such as shops, schools, playgrounds, public transport, as well as encouraging healthier lifestyles.*

COMPLIANCE:

The inclusion of footpaths and cycleways in this development has been undertaken by Daly Smith, Consulting Engineers, as part of the overall road design for the project.

Detailed documentation including site layouts and profiles for footpaths and cycleways forms part of this submission to Council.

STREET TREES AND LANDSCAPING

Part 3.6

OBJECTIVES

- To encourage a visually appealing and attractive streetscape without compromising the street's function or maintenance*
- To integrate with the existing character of an area*
- To provide a healthy tree canopy within the constraints of urban development conditions that is safe, robust and provides amenity within the local area*

1) REQUIREMENTS

- a) *Subdivisions are to incorporate street tree plantings at a minimum rate of one (1) semi-advanced tree per 15 metres of frontage.*
- b) *A street tree planting plan is to be included as part of the Landscape Assessment and Design Report prepared by a suitably qualified landscape professional: .*
- c) *Street trees are to be maintained and nurtured until established.*
- d) *Where infill subdivision is proposed, existing street trees shall remain.*
- e) *Native tree species are to be selected in accordance with “Natural Vegetation of Wyong LGA”).*
- f) *When selecting street trees, the following functional issues shall be considered:*
 - i) *safe pedestrian use and movement within the street;*
 - ii) *safe traffic movement;*
 - iii) *intersection sight lines;*
 - iv) *micro climate amenity;*
 - v) *likely scale of adjacent structures; and*
 - vi) *selection of trees with a growth habit appropriate to the overhead and below ground services, potential driveway locations and the selected road pavement.*

COMPLIANCE:

The locations and planting schedule for all street trees and other landscape elements for compliance with this part has been undertaken by suitably qualified Landscape Architects. Detailed Landscape documentation prepared by Moir Landscape Architecture forms part of this submission to Council.

VEGETATION MANAGEMENT, THREATENED SPECIES & URBAN INTERFACE

Part 3.9

OBJECTIVES

- *To incorporate existing vegetation on site into the subdivision landscape design*
- *To retain natural character and significant vegetation*
- *To locate potential development outside environmentally sensitive areas*
- *To suitably locate bushfire protection and WSUD infrastructure*
- *To retain natural vegetation where possible, to maintain the level of biodiversity of native flora and fauna*
- *To not impact on adjoining land and surrounding communities*
- *To have regard to the likely impacts of urban development and to incorporate buffer requirements to remnant vegetation on adjacent land*

LAND CLEARING

Part 3.9.1

REQUIREMENTS

- a) *If the subdivision requires the removal of any tree or native vegetation in any non-urban zone, it is recommended that the Hunter-Central Rivers Catchment Management Authority (the CMA) is contacted to determine if consent is required under the Native Vegetation Act (2003), prior to lodging a development application with Council.*
- b) *Should consent for clearing not be required from the CMA it is still likely that consent for clearing is required from Council. Information to be submitted with the application is contained within S.2.2 of this Part and S.3.0 of Chapter 3.6 - Tree Management.*
- c) *To clear land an ecological assessment and management plan is likely to be required, which includes a Threatened Species Assessment pursuant to Section 5A of the Environmental Planning and Assessment Act, 1979. For the specific requirements, refer to the Wyong Shire Council Flora and Fauna Guidelines.*

THREATENED SPECIES OR ECOLOGICAL COMMUNITIES

Part 3.9.2

REQUIREMENTS

- a) *Some sites have potential for threatened species, or threatened ecological communities, or habitats to occur on site or adjacent areas. In these cases an assessment under section 5A of the Environmental Planning and Assessment Act, 1979 is required to be submitted, to determine whether there will be a significant effect on the threatened species, ecological communities or their habitats.*
- b) *Subdivisions are to be designed appropriately so as not to affect any threatened species or ecological communities on site or on adjoining land.*

COMPLIANCE:

To ensure compliance with these requirements, detailed Flora and Fauna surveys have been undertaken by ENVIRO ECOLOGY, qualified ecologists to determine the extent of any native vegetation and threatened species on the site.

This detailed report, assessing the impact of this development, and proposing remedial solutions where appropriate, forms part of this submission to Council.

COMMUNITY SAFETY AND SECURITY

Part 3.10

OBJECTIVES

- *To encourage subdivision design which promotes a safe environment for all pedestrians and cyclists, particularly the elderly and children, at all times*
- *To facilitate development which enhances community safety*
- *To enable design which facilitates access and egress by emergency service vehicles*
- *To encourage the development of a sense of community amongst neighbourhood residents in new areas*
- *To ensure the principles of Crime Prevention Through Environmental Design (CPTED) are implemented and sustained*

REQUIREMENTS

- a) *Street design is to limit vehicular speeds, and include design criteria and devices which enhance pedestrian safety.*
- b) *Lot design must enable appropriate surveillance of future development, transport and access routes and open space while protecting the privacy of residents.*
- c) *Lot layout is to enhance personal safety and minimise potential for crime and vandalism.*
- d) *Sight lines are to be preserved at all intersections.*
- e) *Lighting shall be provided for safety and to engender a feeling of security and shall satisfy the relevant Australian Standards.*
- f) *Public footpaths/thoroughfares are to be visible from dwellings and roadways in the subdivision design to promote natural and passive surveillance.*
- g) *Public areas (e.g. Public phones and public furniture, common areas, footpaths, vehicle access and building entries) are to have focused lighting for safety and surveillance.*

COMPLIANCE:

This development has been designed with full consideration to the principles of CPTED as follows;

- Road designs incorporate the required hierarchy system to limit traffic speed.
- Splayed boundary setbacks at all intersection increases visibility.
- Footpaths are provided on both sides of the local streets to minimise the need for pedestrian to cross.
- Footpaths have been designed for compliant access.
- Dedicated cycleways have been provided on the Type 7 local streets.
- Residential Dwelling are designed with habitable rooms and windows to the street for casual surveillance.
- There are no front fence to the street fronts, assisting in visibility of the public domain.

- Street lighting is provided for safe access of a night.

RESIDENTIAL SUBDIVISION

Part 4.0

Lots are to have sufficient area to enable the construction of a permissible development (primarily for residential purposes) and its necessary services, vehicle access, parking and optimal private open space, without the need for excessive terracing (earthworks) and with maximum opportunities for privacy, solar access and the retention of significant vegetation.

OBJECTIVES

- *To ensure that lot size takes account of the natural features of a site and locality*
- *To encourage subdivision lot sizes which meet community and economic needs, while ensuring that ecological, social and scenic values are secured*
- *To provide for lots of sufficient size to satisfy the needs of future residents and a variety of development types*
- *To encourage diversity in lot size and opportunities for housing choice*
- *To provide for lots which will accommodate well designed and innovative development*
- *To encourage a range of infill subdivision developments without compromising the character and the resources of established areas*

REQUIREMENT

All residential zone subdivision design is to have regard for the General Design Principles within Section 3 of this Part, together with the following.

LOT SIZE

Part 4.1

OBJECTIVES

- *Lots are to have sufficient area and take into account opportunities:*
- *To enable water and energy efficient design of buildings and services*
- *To encourage waste minimisation, collection and disposal*
- *To assist conservation of habitat for native fauna and flora*
- *To retain of significant natural features*
- *To ensure privacy and security of residents*
- *To preserve local character*

REQUIREMENTS

- The minimum area for lots proposed within the Residential R2 zone is 450m² under WLEP 2013. Appropriate areas and dimensions for the proposed lots will have further regard to the slope and character of the land (Table 2).*
- The appropriate minimum lot size within other residential zones is generally considered to be 450m², however, will range according to the site characteristics, such as location, slope, drainage, vegetation, required setbacks, and the form of development proposed.*
- The minimum width of a lot is 15 metres, measured at the building line.*
- For multi-lot subdivisions, a range of lot sizes is required to be provided. Council will favourably consider a mix of lot sizes which exceed the minimum requirements in order to accommodate a variety of housing types (Refer Figure 7).*
- In order to promote diversity, affordability and housing choice, where the subdivision of land under 450m² is permissible, any subdivision of land with slopes less than 10% and proposing 10 or more lots, is required to have at least 10% but not more than 20% of the lots meeting the minimum lot size of 450m².*
- Lots are to have street access and frontage or legal and physical access to a street frontage.*

- g) Additional requirements apply to corner and battle-axe allotments which may exceed the minimum requirements detailed in Table 2 (refer s.4.1.3 and s.4.1.4).*
- h) Special requirements apply where Small Lot Housing Development is proposed (refer s.4.1.5)*

COMPLIANCE:

The development has been designed to provide a mix of lot sizes from 250sqm to 800sqm to provide a variety of house types. The specific requirements for Corner Lots, Battle Axe Lots and Small Lots are addressed below. For further details refer to Architectural Drawings prepared by Shaddock Architects and Civil Engineering Drawings prepared by Daly Smith.

CORNER LOTS

Part 4.1.2

REQUIREMENTS

- i) Corner lots should have a minimum area of 700m² for the purpose of providing adequate area for addressing dual streetscape impacts, privacy issues, setback implications and intersection sight lines. The larger area will also provide opportunities for subdividable corner lot Dual Occupancies.*
- j) Safe intersection sight distance and essential sight distance are to be provided in accordance with Austroads Part 5 and 6 for conventional intersections and roundabouts respectively.*
- k) c A 5 metres x 5 metres corner boundary splay shall be provided on every corner lot to improve sight lines for vehicles and pedestrians (Refer Figure 8).*
- l) Driveways for corner lots at non-signalised intersections are to be set back as far as possible from the intersection, and must be a minimum of 6 metres from the tangent point of the kerb return, as shown in Figure 8.*
- m) Driveways for corner lots at signalised intersections are to be generally set further back to beyond the influence of queue lengths or are required to be serviced by alternate means, e.g. an access handle or right of carriageway from another street.*
- n) Driveways for corner lots adjacent to roundabouts or channelled intersections are to be generally clear of the intersection islands and pavement marking unless the intersection can be safely designed to accommodate access to the lots. Alternatively an access handle or right of carriageway from another street will be required.*

COMPLIANCE:

We request that the lot size of 700sqm minimum for the purpose of providing sufficient space for subdividing into 2 Dwellings be varied as development proposes to subdivide the corner lots of the development into 2 Lots with Dwellings as small lot housing. This application also includes individual dwelling houses designed for the corner lots to achieve full compliance with the provisions contained within Chapter 2.1 Housing and Ancillary Structures of the WDCP 2012. Each dwelling achieves the minimum requirements for amenity and privacy and is more in keeping with the overall development and will achieve a greater variety in the housing choice within the Warnervale Area.

The proposed driveway has been designed by a qualified Civil Engineer and is set out greater than 6m from the tangent point of the corner in full compliance with this part. Refer to documentation prepared by Daly Smith for more details.

BATTLE AXE LOTS

Part 4.1.4

REQUIREMENTS

- a) Battle Axe Lots are allotments that only have a driveway access frontage to the street. Access to these lots is obtained via a battle axe access handle from the street or a right of carriageway over an adjoining property which has street frontage (Refer Figures 9-12 below).*
- b) The recommended lot size for Battle Axe Lots is 750m². For the purpose of calculating the lot size, the access handle to the lot is excluded.*
- c) The minimum access handle width varies depending on the number of lots that are proposed to be serviced (refer Table 4).*
- d) The maximum number of allotments or dwellings to share an access handle is 4 lots (refer Figure 11).*

- e) *The maximum longitudinal grade for an access handle shall be 20% and shall be in compliance with AS/NZS 2890.1.*
- f) *Passing bays may be required where an access handle contains a bend.*
- g) *Services are to be provided within each access handle.*
- h) *Where the access handle services more than one lot or passes through another lot, the handle shall be supported by a right of access easement (Right of Carriageway).*
- i) *Where the handle access is to a collector road or where it serves 3 or 4 lots, pavement and access handle widening will be required to provide for vehicle swept paths for the queuing and the simultaneous entry of vehicles.*
- j) *Where the handle serves three or more dwellings or is greater than 50m in length, vehicles must be able to enter and exit the access handle in a forward direction. Turning heads must be provided at the end of the handle. The turning head must be supported by a right of carriageway.*
- k) *The egress point must provide adequate sight distance in accordance with the relevant standard for vehicles and pedestrians on the frontage road.*
- l) *Blind bends are not permitted for new subdivisions. Consideration may be given to these for infill development provided a suitable traffic control measure is provided.*

ACCESS HANDLE RESTRICTIONS AFFECTING LOT LAYOUT AND DESIGN

Part 4.1.4.1

REQUIREMENTS

- a) *Right of carriageway or access to battle-axe handles are not permitted to be located within the restricted areas to intersections as defined in AS/NZS 2890, Parts 1 and 2.*
- b) *Access driveways shall not be located over or in the vicinity of Pedestrian or School Crossings or other traffic management facilities.*
- c) *The street design and lot layout is to consider the likely location of lot accesses, with regards to the provision of adequate sight distances in accordance with AS/NZS 2890 and the Austroads Guidelines, Part 5.*

COMPLIANCE:

The proposed Battle Axe Housing component of this development consists of lot size of 750sqm minimum exclusive of the access handle. This application also includes individual dwelling house designed to achieve full compliance with the provisions contained within Chapter 2.1 Housing and Ancillary Structures of the WDCP 2012. Additionally, the Lots 30 (301 & 302) & 31 (312 & 312) are proposed for Dual Occupancy style subdivision and provide a minimum lot size of 800sqm to provide sufficient area for this style of development.

The access handle and proposed driveway has been designed by a qualified Civil Engineer. Refer to documentation prepared by Daly Smith for more details.

This is in full compliance with the Requirements of this Part for Battle Axe Lots in the R2 Zone.

SMALL LOT HOUSING DEVELOPMENT

Part 4.1.5

Small Lot Housing Development refers to subdivision of five (5) or more lots where overall site planning and individual dwelling designs are provided concurrently with the subdivision application.

OBJECTIVES

- *To encourage diversity in lot size and opportunities for housing choice*
- *To ensure that lot size takes account the natural features of the site and the locality*
- *To encourage development which takes account of the constraints and challenges presented by small lot housing and maximises opportunities for quality development*
- *To facilitate affordable housing opportunities within a locality*

- To preserve the essential character of the locality while providing for contemporary housing needs in keeping with community expectations in established areas

SMALL LOT HOUSING IN THE R2 ZONE

Part 4.1.5.1

In accordance with WLEP 2013 Clause 4.1B - Exceptions to minimum lot sizes for certain residential development, in the R2 Low Density Residential Zone, development consent may be granted to a single development application for development that is subdivision of land into 5 or more lots and the erection of a dwelling house on each lot resulting from the subdivision.

REQUIREMENTS

- d) *Applications for Small Lot Housing must address the requirements of Clause 4.1B of WLEP 2013.*
- e) *Building Design:*
 - i) *small lot housing development proposals shall include the submission of individual dwelling designs for each lot;*
 - ii) *applicants shall have regard for the principles within Chapter 2.1 Housing and Ancillary Structures*
 - iii) *dwelling designs shall provide for variation and architectural interest.*
- f) *Lot Size and Design:*
 - i) *small lot housing development is to be confined to areas where the natural slope of the land is no greater than 15%;*
 - ii) *lot size is within the range of 200m² to 450m². These lot sizes are only considered when lodged as part of a Small Lot Housing Development;*
 - iii) *lots should have a minimum lot area of 200m² and a minimum width of 7.5m at the building line;*
 - iv) *lots are to be generally rectangular in shape;*
 - v) *lots are to have sufficient area to enable the construction of an energy and water efficient dwelling house with adequate services, vehicle access and parking;*
 - vi) *proposals for achievement of the maximum potential lot yield are required to satisfy Council that an acceptable level of privacy and solar access will be available for residents of the site and for neighbouring sites.*
- g) *Setbacks:*
 - i) *proposals may seek to justify variations to the setback requirements of Chapter 2.1, based on the qualities of the design;*
 - ii) *a zero side or rear boundary setback will not be permitted where the land adjoins a conventional housing lot;*
 - iii) *where the development proposes (and justifies) a zero side boundary setback to an allotment within the development, no windows or openings will be permitted in that part of the wall standing on the boundary. In this circumstance, a 1.0m wide maintenance easement is to be created on the adjoining title. No gutter, downpipe, eave or the like shall project onto the adjoining lot.*
- h) *Summary of Application Requirements:*
 - i) *all applications for 'small lot housing development' as defined in this Part, shall include complete details of the proposal which identify:*
 - *site analysis;*
 - *proposed lot boundaries and dimensions;*
 - *proposed house designs;*
 - *side and front setbacks;*
 - *driveway and car parking locations;*
 - *relationship of private open space to neighbouring properties;*
 - *the length of any external wall on a boundary and proposed easements for maintenance, etc.;*
 - *details of any retaining walls (including height, location and extent of cut and/or fill, drainage details, etc.).*

Note: A subdivision certificate will not be issued until all works required under the relevant development consent are completed, unless outstanding works are bonded appropriately.

COMPLIANCE:

The proposed Small Lot Housing component of this development consists of lots with sizes varying from 250sqm to 450sqm. This application also includes individual dwelling houses designed to achieve full compliance with the provisions contained within Chapter 2.1 Housing and Ancillary Structures of the WDCP 2012.

This is in full compliance with the Requirements of this Part for Small Lot Housing in the R2 Zone.

CHAPTER 6.5 WARNERVALE SOUTH

INTRODUCTION

Part 1.0

OBJECTIVES

- *To provide a high quality and varied residential environment with accessible open space, convenience 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.*
- *To create a mix of housing promoted with denser development responding to amenity and proximity to local services.*
- *To retain and restore flood affected bushland areas to form part of the wider vegetation corridor.*
- *To adopt water sensitive urban design that employs best practice in quality and quantity controls.*
- *To support public transport initiatives and resultant improved air quality emission/sustainability objectives.*
- *To appropriately integrate development with the existing built and natural environment.*

LAND TO WHICH THIS CHAPTER APPLIES.

This Chapter applies to land as shown in Figure 1.

COMPLIANCE:

This site is contained within the area defined Figure 1 as Warnervale South, and therefore the provisions of this chapter apply to this development.

Figure 2, Structure Plan – Precinct 7A, identifies this site as LOW DENSITY RESIDENTIAL.

SUBDIVISION GENERALLY

Part 2.3

OBJECTIVES

- *To encourage subdivision design of high quality, which controls and mitigates the potential environmental impacts arising from development*
- *To allow for an appropriate mix of lot sizes to provide for a mix of housing types and business opportunities*
- *To ensure that any subdivision design meets the appropriate standards of Council*
- *To ensure that the existing and proposed future character of the area is considered in subdivision works*
- *To ensure the economic and orderly development and servicing of land*

REQUIREMENTS

- a) *Proposals for the subdivision of land shall be in accordance with DCP 2012 Section 4 –Subdivision and Council's Civil Works – Design Guideline and Construction Specification Where there is any conflict between*

the requirements of this DCP 2012 Section 4 – Subdivision and Council’s Civil Works – Design Guideline and Construction Specification, the provisions of this Chapter apply.

- b) Proposals for the subdivision of land shall consider Section 2.1 – Character Consideration - Subdivision and Provision of Open Space.*
- c) Council will consider subdivision/development proposals that involve independent site servicing such as Community Title developments. Any such proposal should be discussed with Council prior to lodgement with specific reference to:
 - i) any impact on the servicing of surrounding land*
 - ii) ongoing maintenance*
 - iii) the range of services that will be maintained totally independent of Council**

COMPLIANCE:

The subdivision component of this development is in full compliance with Part 4 SUBDIVISION of the Wyong Shire DCP 2013. Refer to Compliance statements in previous sections of this Statement.

OPEN SPACE

Part 2.2

OBJECTIVES

- To provide a range of public open spaces, sufficient for the active and passive recreation needs of residents.*
- To provide linkages between open space, streets, significant places and drainage features to create a distinguishable public domain.*
- To enhance the appearance, amenity and energy efficiency of urban development through integrated open space and landscape design.*
- To enable multiple use of open space and open space corridors for recreation, conservation, access and drainage without diminishing the recreation or conservation values of that space.*
- To provide safe and convenient pedestrian and cycleway networks with clear internal links and connections to external regional network and nodes of importance within the area such as the rail station, shops, schools and sports fields.*

REQUIREMENTS

- a) Open Space shall be provided as indicated in Figure 3. Design plans are to be approved by Council as part of the appropriate subdivision application and will occur in accordance with the relevant Section 94 Contribution Plan.*
- b) Parks are to be located to retain existing vegetation where possible.*
- c) Residents shall have access to, at a minimum, a formalised small neighbourhood park within 400m of their homes.*
- d) Subdivision design should consider potential sites for the location of community gardens on land that would be easily accessible to residents and as guided by Council Policy C7 – Community Gardens.*

COMPLIANCE:

The corner of the site on intersection of Nikko Road and Kanowna Road site has been identified on Figure 3 as an *Optional additional park location*. This Park has not been included within this proposed development.

ROAD LAYOUT & HIERARCHY

Part 2.4

OBJECTIVES

- To establish a hierarchy of streets which maximises convenience, amenity and safety for vehicles, pedestrians and cyclists*
- To provide a legible, connected and permeable grid of local streets that are sympathetic to the topography terminating with views to open space*

- To protect conservation areas through the appropriate location of roads, paths and developable area

REQUIREMENTS

- a) The road and intersection layout and hierarchy is to be generally in accordance with Figure 4 above and the diagrams in Appendix A.
- b) All streets are to have, street trees and foot or shared paths as required in accordance with the diagrams in Appendix A.
- c) Roads and intersections are to be designed and constructed in accordance with Appendix A and with the Wyong Shire Council -Civil Works – Design Guideline and Construction Specification.
- d) Design plans are to be approved by Council as part of the appropriate subdivision application and staging will occur in accordance with the relevant Section 94 Contribution Plan.
- e) Roads and intersection works shall be designed and constructed to Roads and Maritime Services (RMS) requirements where land fronts Sparks Road. Applicants with land seeking access from Sparks Road are to confirm with Council and the RMS design requirements for any Sparks Road intersection to ensure that sufficient land is allocated.
- f) A 43m wide asset protection zone (APZ) bushfire buffer is provided on park edge roads and to the edge of the Porters Creek wetland adjacent to the employment precinct. A 10 metre building setback requirement will form part of this APZ.
- g) All park edge streets are to have the cycleway/footpath located on the park side of the road.
- h) New streets are to connect into the existing street network where possible while minimising four way intersections on busy roads.
- i) Landscaped buffers are to be provided to create separation for visual and acoustic privacy between residential areas and major roads.
- j) Provide a safer street environment by ensuring appropriate lighting, and using crime prevention through environmental design principles.
- k) Incorporate views to open space from terminating streets where possible.
- l) Provide roads at the perimeter of all open spaces to maximise the public amenity and access to these areas. Ensuring lots do not back onto the open spaces increases amenity and safety within those spaces.
- m) Any subdivision “entry treatments” are to be approved by Council. No expectation is to be given that Council will take ownership of entry treatments or be responsible for ongoing maintenance.

COMPLIANCE:

The road layout and hierarchy for this development, including roadways, intersections, footpaths and shared zones have all been designed by Daly Smith, Consulting Engineers for full compliance with Figure 4 and the diagrams in Appendix A of this Section.

Refer to the Draft Civil Construction Details, documentation forming part of this submission to Council.

PUBLIC TRANSPORT

Part 2.6

OBJECTIVES

To make provision for convenient local transport links and stops

REQUIREMENTS

- a) Bus stops are to be provided along approved bus routes, no greater than 400 metres apart. Development proposals are to have regard to the relatively convenient access of the rail network and ensure connectivity to the rail network is considered.

COMPLIANCE:

As this site is located in close proximity to the Warnervale Railway Station and on local bus routes, it is considered that no further infrastructure is required as part of this development.

RESIDENTIAL SUBDIVISIONS

Part 2.7

In accordance with the Final Structure Plan that informs this document:

- *an 18 dwelling per hectare target has been established for the land zoned R1 (medium density residential).*
- *a 10 dwelling per hectare target has been established for the existing residential land in areas not immediately adjacent to the train station (i.e. – existing low density residential).*
- *the new release R2 zoned land has a 15 dwelling per hectare target (new low density residential).*

OBJECTIVES

- *To provide a range of residential development densities to cater for various and changing demographics*
- *To provide for appropriate densities in proximity to a developing town centre and railway station*
- *To ensure that the residential density targets of the NSW State Government and Council are achieved*
- *To provide for a variety in lot sizes to assist in providing greater housing choice*
- *To ensure that lots are appropriately located to maximise amenity and energy efficiency*

REQUIREMENTS

- a *Subdivision Applications are to be prepared in accordance with WLEP 2013 and DCP 2013 Part 4 - Subdivision.*
- b *In order to ensure that population targets listed above are achieved, applicants are required to demonstrate to Council that the density targets will be achieved.*
- c *Where variation to the density target is proposed, the applicant is to demonstrate that the density targets can be achieved on a per hectare basis as a minimum.*
- d *Smaller lot sizes will be encouraged in the R1 Zone. Any proposal that exclusively involves the creation of lots with an area of greater than 450m² on land zoned R1 will not be encouraged. Any application that proposes to create a majority of lots greater than 450m² on land zoned R1 must provide adequate justification as to why Council should support relatively large lots in this locality and provide evidence why small lot development would not be viable*

COMPLIANCE:

With this site having a total area of 3.6 Hectares, and a target of 15 dwelling per hectare being desirable, the 60 dwellings proposed, achieves slightly above the 54 dwelling targets established by this Part (11% variance). When taken in context with the surrounding area this development proposes to supply a greater variety of lot sizes for the community, which is appropriate considering the proximity to the Warnervale Neighbourhood Centre and Warnervale Train Station. Additional to this, the mix of lot sizes and variation in housing types ensures compliance with the Objectives and Requirements for residential subdivisions.

NOISE ASSESSMENT AND MITIGATION

Part 2.9

OBJECTIVES

- *To minimise noise impacts on residential and other noise sensitive land uses located in the vicinity of significant noise generating sources*
- *To establish consistent and appropriate built forms to mitigate noise and vibration impacts*

REQUIREMENTS

- a. *A landscaped acoustic barrier shall be provided in locations shown in Figure 7. This shall generally take the form of a landscape mound within a 10 metre treatment zone. Other alternative treatments may be appropriate for some sites where the width of the buffer may be reduced or involve fenced treatments. However the applicant will need to demonstrate that visual, noise and/or vibration management issues are effectively managed.*
- b. *A report by a suitably qualified acoustic consultant shall be submitted with any development application for subdivision or residential development adjacent to Sparks Road, Link Road and the Great Northern Railway Warnervale Road, Albert Warner Drive or Minnesota Road. The report is to address the following:*
 - i *Identify existing and potential future noise sources*

- ii *Identify areas within the precinct where specific development should be restricted due to likely noise*
- iii *Identify mitigation measures to reduce existing or potential noise effects to allow development to occur while meeting appropriate environmental and amenity requirements. This shall involve giving consideration to incorporating setback distances, noise barriers and at-property treatments in the form of architectural treatments, or combinations of these, for noise sensitive developments (e.g. residential developments) fronting major roads;*
- iv *Development Near Rail Corridors and Busy Roads - Interim Guideline, inclusive of a vibration assessment where development is proposed in the vicinity of the railway;*
- v *NSW Roads Noise Policy, 2011*
- c. *Details of any physical treatments proposed along property boundaries are to be submitted to Council with the relevant development application to ensure that treatments are consistent with other noise mitigation measures required in the local area. This includes consideration of works required to the north of Sparks Road as required under the Warnervale Town Centre Development Control Plan.*

COMPLIANCE:

An assessment of the noise impact on residents within this development from the Great Northern Rail Line, on the other side of Nikko Road has been undertaken by a suitably qualified acoustic consultant and their recommendations contained in an Acoustic Report.

Refer to report prepared by GLOBAL ACOUSTICS forming part of this submission

POTENTIAL SITE CONTAMINATION

Part 2.12

All development proposals are required to consider the potential for any existing site contamination impacting on future land uses. A Preliminary Contaminated Lands Assessment provided as part of the rezoning process for the Warnervale South area has identified sites where historic land uses have increased the potential for site contamination to be present and are likely to require management prior to changes in land use. The identified sites will require further investigation with regard to potential on-site contamination due to historic land use.

OBJECTIVE

To provide proponents with information that can be used to supplement the requirement to consider potential site contamination in preparing a development proposal

REQUIREMENT

Consideration of Schedule B – Potential Site Contamination – Areas of Concern in the assessment of development proposals.

COMPLIANCE:

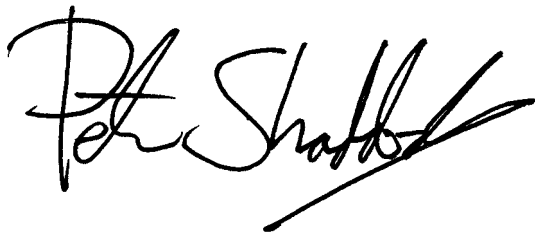
As the site was identified by Council as potentially being utilised for poultry farming, site testing, contamination assessment and a report was prepared by a suitably qualified environmental scientist. Refer to Preliminary Contamination Assessment prepared by QUALTEST forming part of this submission.

7.0 CONCLUSION

This proposed development will contribute 60 new residential dwelling in a mix of house types and lot sizes on a vacant site in Warnervale, close to transport and associated infrastructure where affordable housing is well sought after.

The design has been undertaken by a team of professional consultants to ensure compliance with the Wyong LEP2013, Wyong Shire DCP2013 and the Warnervale South area plan, achieving a positive lifestyle for the residents with minimal impact on the amenity of existing neighbours or the surrounding environment.

We believe that this development will make a positive aesthetic and social contribution to Warnervale South and we look forward to Council's support.

A handwritten signature in black ink, appearing to read 'Peter Shaddock', with a long, sweeping horizontal stroke extending to the right.

PETER SHADDOCK
Nominated Architect Registration No 5388
SHADDOCK ARCHITECTS

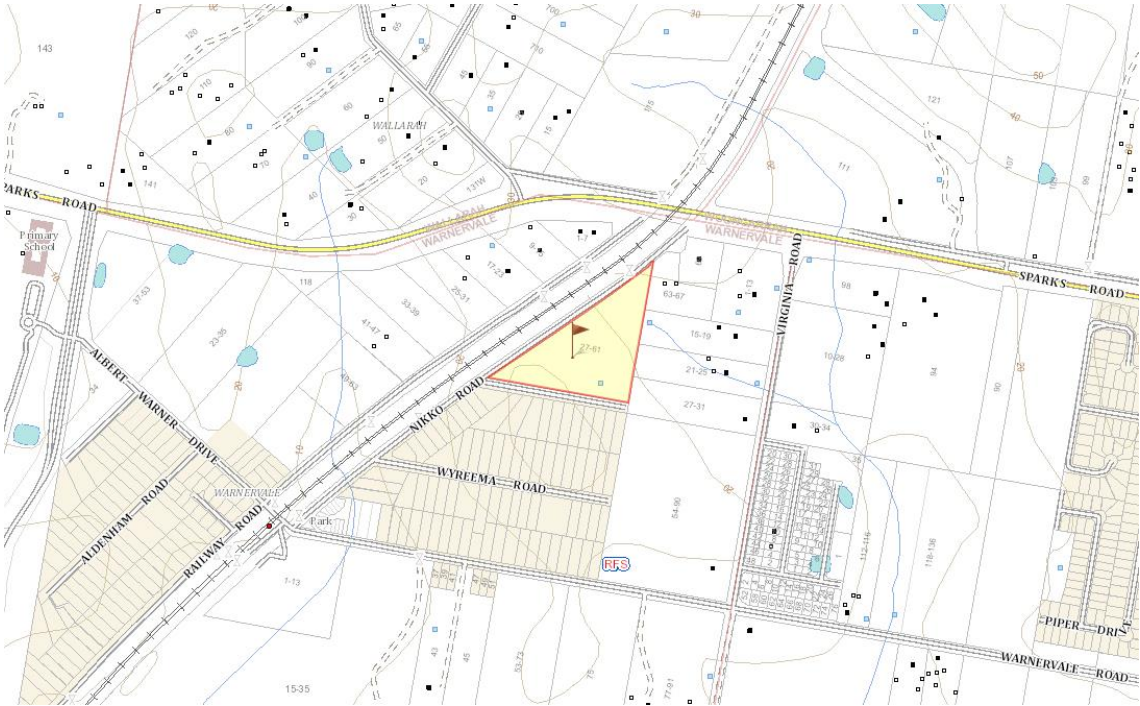


FIGURE 1: Map showing subject site highlighted yellow (source: sixmaps)



FIGURE 2: Aerial image showing subject site highlighted yellow (source: sixmaps)

9.0 EXISTING STREETSCAPE



FIGURE 3: Photo of the site and existing access from Nikko Road



FIGURE 4: Photo of the site and existing access from Kanowna Road

9.0 EXISTING STREETScape CONT.



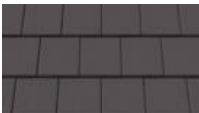


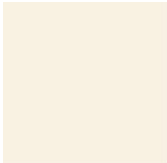

FIGURE 5: Photo of Nikko Road adjacent the site.



FIGURE 6: Photo of Kanowna Road adjacent the site.



10.0 MATERIAL & COLOUR SCHEDULES

COLOUR SCHEDULE TYPE 1

ITEM	MATERIAL	COLOUR	SAMPLE
External Masonry Walls	Brickwork	PGH <i>Polaris</i>	
Roof Tiles	Pre-finished Ceramic Roof Tiles	WUNDERLICH <i>Nullarbor Slate Grey</i>	
Fascia & Barge	Pre-finished Steel	COLORBOND <i>Jasper</i>	
Gutters & Downpipes	Pre-finished Steel	COLORBOND <i>Jasper</i>	
Soffit Lining	Fibre Cement Painted	DULUX <i>PCW5 Off White</i>	
Weatherboards	Weatherboards Painted	DULUX <i>PCW5 Off White</i>	


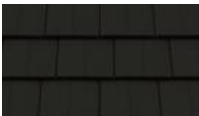


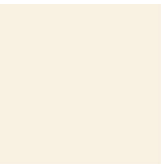
11.0 MATERIAL & COLOUR SCHEDULES CONT.

COLOUR SCHEDULE TYPE 2

Item	Material	Colour	Sample
External Masonry Walls	Brickwork	PGH <i>Cashmere</i>	
Roof Tiles	Pre-finished Roof Tiles	WUNDERLICH <i>Nullarbor Earth</i>	
Fascia & Barge	Pre-finished Steel	COLORBOND <i>Headland</i>	
Gutters & Downpipes	Pre-finished Steel	COLORBOND <i>Headland</i>	
Soffit Lining	Fibre Cement Painted	DULUX <i>PCW5 Off White</i>	
Weatherboards	Weatherboards Painted	DULUX <i>PCW5 Off White</i>	

11.0 MATERIAL & COLOUR SCHEDULES CONT.

COLOUR SCHEDULE TYPE 3

Item	Material	Colour	Sample
External Masonry Walls	Brickwork	PGH <i>Mowbray Blue</i>	
Roof Tiles	Pre-finished Roof Tiles	WUNDERLICH <i>Nullarbor Granite</i>	
Fascia & Barge	Pre-finished Steel	COLORBOND <i>Dune</i>	
Gutters & Downpipes	Pre-finished Steel	COLORBOND <i>Dune</i>	
Soffit Lining	Fibre Cement Painted	DULUX <i>PCW5 Off White</i>	
Weatherboards	Weatherboards Painted	DULUX <i>PCW5 Off White</i>	