Part B Environmental Guidelines		
B.2 Domestic Stormwater		
4. Performance criteria	4.1 The objectives of this plan may be achieved by compliance with the following criteria: (a) Retention capacity. (b) Location of feed lines. (c) Rain water tanks. (d) Configuration of stormwater lines (e) Stormwater lines over Council's nature strip. (f) Stormwater generated from hardstand areas (g) Mosquitoes.	Stormwater management is detailed on the Civil Engineering Plans prepared by DRB Engineers at **Appendix H.** Rainwater tank requirements are specified on the BASIX Certificates at **Appendix A.**
B.3 – Hunter River Floodplain		
1. Introduction	The Maitland LEP 2011 defines land which may be subject to flood-related development controls	The LEP does not map the site as flood affected, therefore this section of the DCP does not apply to the proposal. DCP mapping indicates the site is above the PMF.
B.5 Tree Management		
	Note 1: This chapter does not apply where clearing of vegetation forms part of the consideration of impacts associated with a development application under Part 4 or an activity under Part 5 of the Environmental Planning and Assessment Act 1979. In this circumstance, clearing of vegetation will be assessed under the Biodiversity Conservation Act 2016. No separate approval under this DCP chapter is required.	Tree and other vegetation removal and retention has been assessed in the Arborist Impact Assessment (AIA) contained at **Appendix C**.
B.6 – Waste Not – Site Waste Minimisation & Management		

2.1 Documentation to be submitted	All applications relating to residential developments, as well as commercial and industrial premises are to include a Site Waste Minimisation and Management Plan (SWMMP) as part of documentation submitted to Council. The development plans should also clearly indicate the location of waste management facilities, including recycling bins and the like.	A Waste Management Plan (WMP) is included at **Appendix F** and includes details on demolition, construction and estimated ongoing residential waste generation and disposal.
2.3 Waste/Recycling Generation Rates	In the absence of project specific calculations, the rates specified in Appendix C Waste/ Recycling Generation Rates, including rates for residential development can be used to inform the compilation of a SWMMP.	Refer to WMP included at **Appendix F**.
5. Operational Phase	a) Single dwellings, alterations and/or additions, ancillary structures: I. The location of the waste and recycling areas is to not create any adverse impact on neighbouring properties in terms of appearance, odour, noise or the like.	Waste areas for each dwelling will be discretely located and unlikely to cause adverse impacts to adjoining properties due to the low density of the proposal.
Part C Design Guidelines		
C.4 Heritage Conservation		
2.2 Heritage Impact Statement (HIS)	Clause 5.10(5) in the Maitland LEP 2011 provides for a consent authority to request the preparation of a Heritage Impact Statement (HIS) to assist in the assessment of a development application.	A SoHI has been prepared by John Carr Heritage Design and is enclosed at **Appendix D**. A historical analysis of Old Bolwarra has also been prepared by Hector Abrahams to inform potential future development and is also included in **Appendix D**.
4. General requirements for alterations and additions		
The proposed works to the existing dwelling have been designed to respect and enhance the heritage character of the building and the surrounding area as per the following.		

4.1 Sympathetic Design	Requirements: • An alteration or addition must consider the characteristics of the existing building, and buildings in the surrounding area, and sit comfortably in this context. • New work should generally not precisely mimic the design and materials of the building but be recognisable as new work on close inspection. • Mock historical details should not be applied as they will not be of any heritage value themselves and can confuse our understanding between the 'new' and the 'old'. • Alterations and additions should blend and harmonise with the existing building in terms of scale, proportion and materials. • Alterations and additions should not require the destruction of important elements such as chimneys, windows and gables.	The additions are discrete, located at the rear of the existing dwelling and are consistent with the architectural design and character of the existing dwelling and surrounding dwellings. Material selection allows the works to harmonise with the existing building. The scale and proportion of the extension sits comfortably in the context of the area with only a small increase to gross floor area (GFA). Retention of the original cottage is proposed. Demolition relates to the rear extension and outbuildings only.
4.2 Siting, Setback & Orientation	Requirements: • Generally, alterations or additions should occur at the rear of the existing building to minimise visual impact on the street frontage of the building, particularly where the additions and alterations involve a listed heritage item a building which contributes to the heritage character of the Conservation Area. • Side additions should not compromise the ability for driveway access to the rear of the block. • No new structures should be built forward of an established building line.	The extension works are at the rear of the building minimising visual impact on the streetscape. No front extensions are proposed and no built form protrudes forward of the established building line. A large area around the building including existing landscaping and trees is retained and enhanced. Front and side setbacks are generally retained. The rear additions are generally offset from the building line in order to retain tree

	• An adequate area around the building including landscaping, fencing, and any significant trees should be retained. • Larger additions can be successful when treated as a separate entity to retain the character of the original building in its own right. • Front and side setbacks should be typical of the spacing between buildings located in the vicinity of the new development. • The orientation pattern of buildings existing in the area should be maintained. • Rear additions are generally best stepped back from side building lines. • Where the wall of an existing residential building in a Conservation Area is located less than 900mm from a side boundary, additions may be permitted to be constructed at the same setback as the principal building only where: - they are small in scale and no greater than 20% of the existing building floor area; - there is no overhang of any part of the addition over the adjoining property; - there are no significant impacts on solar access to the adjoining property; - access for maintenance of the side wall of the addition can be provided wholly within the property boundaries. • An addition must be constructed in accordance with the Building Code of Australia including	T29. This will have little impact on the streetscape due to dense trees and other vegetation screening the house. The additions will be constructed in accordance with the Building Code of Australia (BCA) including requirements relating to fire safety, structural stability, and termite resistance.

	requirements relating to fire safety, structural stability and termite resistance; • Any addition greater than 20% of the existing building floor area must be not less than 900mm from the side boundary and comply with the above. • Extensions to the side elevation will not be appropriate if they alter established patterns of building and garden. • Additions to the side of a building should not remove or sever car access to the rear, where it is not sympathetically provided elsewhere. • Archaeological evidence should not be disturbed without Council approval. • Where there has been known building sections which have been removed, and the building fabric has been substantially altered such that only its position on the site maintains its original context, further alterations which remove footprint evidence may not be appropriate.	
4.3 Size and Scale	Requirements: • An alteration or addition should not be of a size or scale which overwhelms or dominates the existing building, substantially changes or destroys its identity or changes its contribution and importance in its surrounds. • New uses should be chosen which suit the size of the building, not requiring overwhelming changes. • Unless it can be demonstrated that greater scale would be appropriate in the individual	The addition at the rear of the existing cottage is a modest extension (38sqm) and does not dominate the existing building nor does it destroy the identity of the building with a clear delineation between old and new. The resultant built form is of a similar scale to surrounding residential development. It maintains single storey stature.

	circumstances, additions should be of the same scale as surrounding development.	
4.4 Roof Form and Shapes	Requirements: • Roofs of extensions should be carefully designed so that they relate to the existing roof in pitch, eaves and ridge height. Additional rooms can be added to heritage buildings appropriately where roof forms have been carefully integrated into the existing. • If it is important that the roof form remains unaltered, additional rooms can be added in a detached pavilion form placed at the rear or possibly the side. Roof pitch, ridge height, height of parapet and eaves on additions should relate to those of the original building. • Providing the roof space is large enough, attic rooms should be contained in roof forms for non- – habitable uses such as a study or a library. The volume required for habitable uses such as bedrooms may mean unacceptable alteration to roof form. • New roof elements such as dormer windows and skylights should not be located where they are visually prominent. • Chimneys should be retained. • Service utilities such as water heaters, air conditioning units, antennae, satellite dishes must not be located on the principal elevations of buildings.	The proposed roof form reflects the existing roof by duplicating the roof pitch and materials.

	• Use of roof materials should be the same as materials on the existing heritage building and those typically used in the Conservation Area.	
4.7 Materials and Colours	Requirements: General: • Traditional combinations of materials used in heritage buildings should be considered when designing additions. • It may not be appropriate or necessary to replicate the original combination of materials used in the original work. The use of a complementary material might make the increase in scale less noticeable and also enhance later understanding of the changes. For instance, timber weatherboard extensions to brick houses were a common practice which is still appropriate today, as was the use of corrugated iron roofs at the rear of houses behind main roofs constructed with tile or slate. • The use of highly reflective materials should be avoided.	The extension utilises tradition materials appropriate for the area. The timber windows at the front of the dwelling are retained. The colour scheme will be appropriate for the heritage conservation area.
4.12 Landscaping	Requirements: • When designing new gardens, reference should be made to surviving plants which indicate the basic garden structure and can be worked into new designs. • When selecting suitable trees, the following should be considered: the varieties that already exist in the area; the size of the tree when mature; the potential of the chosen species to interfere with services, retaining walls and other structures.	To maintain the landscape character of the locality, the existing gardens associated with the front dwelling are retained where viable and enhanced with new plantings suitable for the heritage conservation area. Tree selection by the Landscape Architect includes local natives to complement existing. Refer to Landscape Plans at **Appendix G**. Hard surfaces have been kept to a minimum at the front of the dwelling by minimising the driveway width.

	• Many heritage garden reference books are available to explain typical settings for houses of different styles and periods (See Bibliography). • Hard surfaces should be kept to a minimum. • Screening of hard surfaced areas is encouraged. • Garden structures should be appropriate to main buildings in terms of scale, style and materials. • Original surfaces such as close jointed brick paving or stone flagging common to Victorian and Federation sites, and pebble aggregate, quarry tile or mosaic tile aprons common to later Californian Bungalow styles should be retained.	
4.13 Fences	Requirements: • Original fences should be retained. • Fences should be located on building line. • Fences should be simple with a level of detail comparable with the house. Fencing should generally be open or transparent, or backed with a hedge, not solid. • Fences should be of a scale comparable with the street. • Front fences should be of materials characteristic to the surrounding area, particular to the street and suitable to the era of the house. Examples include timber picket, low masonry and hedges. • Plain or colour treated metal fences are not considered to be appropriate for Conservation Areas or Heritage Items on any street frontage or side boundary.	New post and rail fencing is proposed along the street frontage with a sandstone entry feature. Hedging shrubs are proposed behind the front fence and will enhance the streetscape appeal of the existing dwelling.

4.14 Garages, Carports and sheds	Requirements: • Garages and carports should preferably be detached and located at the rear or set well back at the side of a building behind the rear building line. • Garages should be set back a minimum of 500mm from the side and the rear boundary. • Garages and carports should make reference to any established historic patterns in the street. The use of landscaping such as screening or planting and front fences may be useful tools in integrating the structure with its site. • Colours and materials should blend into the surrounding landscape. Custom orb iron roof profile and timber board profile cladding wall are common materials used. • Garages should have simple hipped, gable or skillion roofs depending on the design of the existing main building. • Existing outbuildings should be maintained and reused wherever possible. • The pitch of a garage or carport roof should, in most cases, be comparable or slightly lower than that of the main building – generally 25° – 30°	The proposed single garage is detached from the dwelling and located well behind the existing building line, obscured from the street. Suitable side and rear setbacks are achieved noting proposed 1.8m high dividing boundary fencing. Colours and materials have been selected to complement the existing dwelling.
5. General requirements for new buildings in historic areas		
The two new dwellings have been designed to respect the heritage character of the Bolwarra Conservation Area as per the following.		
5.2 Siting a New Building	Requirements: • New development should have regard to the established patterns of the locality with regard to the typical location and orientation of buildings on an allotment.	The proposed dwellings are sited at the rear of the existing dwelling, hidden from the street. Generous gardens with established trees are provided for each dwelling.

	• The siting of a new residential building allowing for a generously sized front garden will usually assist in its successful integration. • New development should be sited behind the building line of any adjoining heritage item.	
5.3 Scale	Requirements: • The scale of a new house should be related to the size of the allotments laid out in the historical subdivision pattern of the area. This does not apply to consolidated lots. New buildings should be in scale of surrounding dwellings. Large houses on small allotments will tend to look awkward and dominate the surrounding area. • Large houses may be better located on large allotments in less sensitive areas. • New houses should generally remain at single storey in areas where the majority of buildings are single storey.	The new buildings are designed to be of consistent scale to general housing in the area. The dwellings are proposed to be single storey, consistent with the existing dwelling at the front of the lot.
5.4 Proportions	Requirements: • Openings in visible frontages should retain a similar ratio of solid to void as to that established by the original older buildings. • New buildings should incorporate the typical proportions of surrounding development, even when using modern materials. • New buildings should establish a neighbourly connection with nearby buildings by way of reference to important design elements such as verandahs, chimneys or patterns of openings.	The building(s) proportions are suitable for the heritage area.

5.5 Setbacks	Requirements: • Where there is a uniform historically based setback, it is generally advisable to maintain this setback in a new building. Where the new building will be obtrusive it should be set well back and heavily screened. • If the setback varies, the new building should not be set closer to the street than an adjoining historic building (even if it is not an identified heritage item). • Setback from side boundaries should be consistent with typical buildings in the immediate vicinity.	The new dwellings are set behind the existing dwelling and are non-obtrusive. Side and rear setbacks provide a good level of separation from adjoining residents.
5.6 Form & Massing	Requirements: • New buildings should be designed in sympathy with the predominant form and massing characteristics of the area. • Houses generally had ridges of the same height. It is therefore important in new buildings to ensure that the width of wings can maintain a consistent ridge and roof height.	The form and massing proposed is deliberately characteristic for the area. The ridge of the new dwellings is consistent (or lower) than the existing dwelling.
5.7 Landscaping	Requirements: • Generous green landscaped areas should be provided in the front of new residential buildings wherever possible. This will almost always assist in maintaining the character of the streets and Conservation Areas. • New landscaping should not interfere with the appreciation of significant building aspects such as shopfronts or contributory building facades.	Many existing trees and plantings will be retained and further landscaping will enhance the street character. Refer to Landscape Plan at **Appendix G**.

	• Important contributory landscape characteristics such as canopy cover or boundary plantings should be retained in new development.	
5.8 Detailing	Requirements: • Avoid fake or synthetic materials and detailing. These tend to give an impression of superficial historic detail. • Avoid slavishly following past styles in new development. Simple, sympathetic but contemporary detailing is more appropriate. Original materials and details on older buildings need not be copied but can be used as a reference point.	The style and materials used in the detailing is appropriate for the heritage area.
5.9 Building Elements & Materials	Requirements: <u>Doors and windows</u> • New doors and windows should proportionally relate to typical openings in the locality. • Simply detailed four panel doors or those with recessed panels are generally appropriate. • Mock panelling applied mouldings and bright varnished finishes should be avoided. • Older houses have windows which are of vertical orientation and this approach should be used in new buildings. • Standard windows often come in modules of 900mm wide. Their use should be limited to single or double format only. The most suitable windows are generally double hung, casement, awning or fixed type.	Generally achieved. Refer to Architectural Plans and comments contained within the SoHI at **Appendix A and D** respectively. Conditions attached to any consent could ensure consistency with specific controls.

	• If a large area of glass is required, vertical mullions should be used to suggest vertical orientation. A large window could also be set out from the wall to form a simple square bay window making it a contributory design element rather than a void. • Coloured glazing, imitation glazing bars and arched tops are not encouraged. <u>Roofs</u> • Corrugated galvanized iron (or zincalume finish) is a most appropriate roofing material for new buildings in historic areas. Itis also economical and durable. Prefinished iron in grey or other shades in some circumstances may also be suitable. • Tiles may be appropriate in areas with buildings dating to the 1900's – 1930's. Unglazed terracotta tiles are the most appropriate. The colour and glazing of many terra cotta tiles make them inappropriate. • Other materials to avoid include modern profile steel deck. • Ogee profile guttering is preferable to modern quad profile. Plastic downpipes should be avoided in prominent positions. <u>Paving</u> • Preferred materials for driveways include wheel strips and gravel. • It is important that the amount of hard driveway material does not dominate the front garden area. Walls Imitation. <u>Cladding</u>	

	• Cladding materials which set out to imitate materials such as brick, stone, and weatherboard should be avoided as they tend to detract from the authentic character of the surrounding original buildings. Weatherboard • 150mm weatherboards are generally appropriate for historic areas. They should be square edged profile unless the surrounding buildings are post 1920's. <u>Brick</u> • Plain, non-mottled bricks are preferable with naturally coloured mortar struck flush with the brickwork, not deeply raked. • Bricks of mixed colours (mottled) should be avoided, as should textured 'sandstock' bricks.	
7. Subdivision of Land		
7.1	Requirements: • The proposal should not substantially alter the density of development such that the character and heritage significance of the heritage item or Conservation Area is adversely affected. • The allotment and building spacing, i.e., frontage widths, side and front boundary setbacks, should be typical of surrounding development such that: - the rhythm of buildings in the Conservation Area is maintained; - so that vistas and views to and of any heritage items in the vicinity, especially the principal elevations of buildings, are not interrupted or obscured;	Careful consideration has been given to the layout of the proposed subdivision to ensure it respects the heritage significance and subdivision pattern of the Bolwarra conservation area. In this regard, the general size and shape of the lots is reflective of residential allotments in the surrounding areas with large lots and low site coverage (24%). The original allotment width is maintained to represent the earlier subdivision pattern. Refer to the SoHI for further details. The proposed subdivision will not detract from the conservation area's streetscape, nor will it have a visual impact on any nearby heritage items. Retention and restoration of the existing dwelling is consistent with the intent and controls of the DCP.

	- so that the landscape quality of the Conservation Area streetscape is retained; - so that the setting of the heritage item and a satisfactory curtilage, including important garden and landscape elements, is retained. • The scale and form of proposed new development should not detract from the significant and dominant heritage elements of the item or the Conservation Area's streetscape. • The details of required works and services, such as design and materials for kerbing and guttering, access crossings and the like should be consistent with original elements of the item or Conservation Area. • The subdivision should not require demolition of existing building stock or re-arranged vehicular access or car parking (on or off the site of the proposal) that would adversely affect the streetscape of the Conservation Area.	The enhancement of the existing driveway with new rural style fencing, hedging and a sandstone entrance feature will not detract from heritage elements in the area.
C.8 Residential Design		
2 Design Criteria		
2.1 Site Analysis & Site Context	**Site Analysis** a) A detailed site analysis shall be submitted with a development application for all residential development with the exception of a single detached dwelling.	A Site Analysis Plan is provided at **Appendix A** to highlight the opportunities and constraints of the site and its surrounds.
	Context Analysis d) A 'Context Analysis' will be required for all residential development with the exception of a single detached dwelling. The context analysis shall	A Context Analysis including photographs is included at **Appendix A**. The final development outcome is consistent with the scale and pattern of surrounding development and enhances the streetscape.

	describe the character of existing development in the vicinity of the site in order to understand the streetscape and pattern/form of development. This may be provided in the form of scaled sketches of streetscape elevations or photo compilation.	
	f) The design plans and the Statement of Environmental Effects shall demonstrate that the 'site analysis plan' and the 'site context analysis' have been taken into account in producing a design solution which mitigates against potential negative impacts and integrates appropriately with the streetscape.	The proposal will have a negligible impact on the streetscape as the new dwellings are behind the existing dwelling and will not dominate Kensington Road. Retention of significant trees and other vegetation will further limit any adverse visual impact.
3. Development Incorporating Existing Dwelling		
Design Requirements:	e) Where an existing dwelling is to be retained and incorporated into a residential redevelopment project, this dwelling is to be treated as if it were a new dwelling in the same redevelopment project and should meet all performance criteria and design controls specified in this chapter.	Noted. The retained dwelling at the front of the site meets design criteria as detailed within this table.
	(f) Where it is not possible for an existing dwelling to achieve compliance with all aspects of the chapter Council may, after consideration of a detailed submission lodged with the development application outlining grounds/justification for non-compliance, agree to vary one or more of the chapter requirements.	N/A
	g) Special provisions relating to heritage items or heritage conservation areas are contained in the	Noted and addressed within the SEE.

	Maitland LEP 2011 and the relevant chapters in this DCP must be taken into account where relevant.	
4. Bulk Earthworks and Retaining Walls		
	Design Requirements: i) A 'bulk earthworks plan (BEP)' shall be submitted with the development application for all forms of residential development showing the levels (relative to a datum benchmark at the site) of all finished ground levels for both the building platform and those areas of the site external to the building platform. The plan should also specify and show the extent and depth of cut/fill, and location of all retaining walls and/or battered slopes. The BEP shall also show existing ground levels adjoining the perimeter boundaries of the land (refer to Figure 4 for sample BEP).	Levels are indicated on the Civil Plans at **Appendix H**.
5. Street Building Setbacks		
Design Requirements:	Objectives: a) To provide setbacks that complement the streetscape, allow flexibility in the siting of buildings and allow for landscape settings and open space requirements. b) To ensure that new development establishes appropriate and attractive streetscapes which reinforce the function of the street and is sensitive to the landscape and environmental conditions of the locality.	The front setback to the existing dwelling remains unchanged under this DA. The proposal will have limited impact on the streetscape due to the new dwellings being screened by the existing dwelling and retention of a significant number of trees and other vegetation.

6. Side and Rear Setbacks		
	Design Requirements: h) Minimum side and rear setbacks for residential buildings in urban zones shall be in accordance with Figure 10 and described as follows: • 1.0m for walls up to 3.0m in height (to underside of eaves); • 1.0m plus 0.3m for every metre of wall height over 3.0m and less than 7.2m; • For that part of a wall over 7.2m in height, the minimum setback should be increased by 1.0m for every metre of height over 7.2m	Dwellings R2 and R3 comply in full with the building envelopes created under the specified setbacks. The existing dwelling complies with the exception of the garage located adjacent o the southern boundary. A lesser setback is considered acceptable in this instance due to limited amenity impact from the lesser setback and small scale built form of the garage.
7. Site Coverage and Unbuilt Areas		
	Design Principles: c) To ensure that development maximises permeable surfaces and maintains a balance between the 'built' and 'unbuilt' areas.	The proposed subdivision results in lots which are large for the R1 zoning of the land. Therefore, the ratio of built to unbuilt areas is generous and will allow for suitable retention of selected existing vegetation, onsite stormwater management, large private open space areas and gardens and optimal solar access for both indoor and outdoor spaces.
	Design Requirements: e) Site coverage shall satisfy the requirements detailed in Table 3 - Site Coverage and Unbuilt Areas. All development application plans for residential development shall provide a detailed 'percentage site coverage' calculation having regard to the requirements of Table 3.	Site coverage for each of the lots is less than 60% with greater than 40% unbuilt areas. The average site coverage sits at 24.2%. Refer to Architectural Plans for calculations.

<table>
<tr><td></td><td><table>
<tr><th>Housing Type</th><th>Maximum Site Coverage Ground Floor (%) (See Note 1)</th><th>Minimum Unbuilt Area (%) (See Note 2)</th></tr>
<tr><td>Dwelling House</td><td>60</td><td>40</td></tr>
<tr><td>Small Lot Housing</td><td>60</td><td>40</td></tr>
<tr><td>Dual Occupancy (2 units)</td><td>60</td><td>40</td></tr>
<tr><td>Multi Dwelling Housing (3 or more dwellings)</td><td>70</td><td>30</td></tr>
<tr><td>Residential Flat Buildings</td><td>70</td><td>30</td></tr>
</table></td><td></td></tr>
<tr><td></td><td>f) Development shall have site coverage appropriate for the site's capability and form of development and site coverage shall be consistent with the desired future density for the locality.</td><td>Achieved. The density and site coverage are appropriate for the site's capability and is consistent with surrounding residential development as shown in the Context Analysis Plan at Appendix A.</td></tr>
<tr><td colspan="3">8. Building Height, Bulk and Scale</td></tr>
<tr><td></td><td>Design Controls:
e) Maximum building height shall be in accordance with Table 4.<table>
<tr><th>Housing Type</th><th>Zone</th><th>Max Height (metres)</th></tr>
<tr><td>Dwelling</td><td>Rural and environmental zones</td><td>8</td></tr>
<tr><td></td><td>Residential zones</td><td>8</td></tr>
<tr><td></td><td>Business zones</td><td>8</td></tr>
<tr><td></td><td>Industrial zones</td><td>8</td></tr>
<tr><td>Dual occupancy (2 dwellings)</td><td>R1 General Residential</td><td>8</td></tr>
<tr><td></td><td>Business zones</td><td>11</td></tr>
<tr><td>Multi Dwelling Housing (3 or more dwellings)</td><td>R1 General Residential</td><td>8</td></tr>
<tr><td></td><td>Business zones</td><td>11</td></tr>
<tr><td>Residential flat building</td><td>R1 General Residential</td><td>11</td></tr>
<tr><td></td><td>Business zones</td><td>14</td></tr>
</table></td><td>The built form has specifically been limited to single storey despite 2 storeys being achievable under the DCP height limit (8m).</td></tr>
<tr><td colspan="3">9. External Appearance</td></tr>
<tr><td></td><td>Design Principles:
e) The building design and the Statement of Environmental Effects that accompanies the</td><td>The building design has been largely informed by heritage considerations to ensure a built outcome that respects the character and significance of the Bolwarra conservation area.</td></tr>
</table>

	proposal should demonstrate that the following matters have been addressed: i. Consideration of the existing character, scale and massing of development in the immediate area, including the surrounding landscape. ii. Architectural interest encouraged by: iii. the use of finishes which are textured rather than bland; iv. providing stepping of walls, pergolas, eaves, verandahs and blade walls etc. to establish articulation and create light and shadow to a building v. the coordinated use of diverse materials and appropriate decorative treatments vi. Consideration of both typical and rare fenestration (door and window patterns) and the relationship between glazed and solid wall areas. vii. Consideration of traditional relationship of roof mass to wall ratio, roof pitch and design, length of unbroken ridgelines, parapets, eaves and roof water guttering detailing. viii. The design shall provide a variety of experiences for the residents and passers by thorough attention to silhouette, pattern, texture and colour. The amount and length of unbroken roof ridgelines, unpunctuated facades, fencing and repetitive form should be minimised. ix. Design diversity should be achieved within and between developments by maximising the advantages of orientation, landforms, views and natural vegetation.	Refer to Architectural Plans at **Appendix A** and SoHI at **Appendix D** for full details.

	x. Where a dwelling has an elevation to a principal street frontage then the design shall ensure that the building has its primary pedestrian entry point addressed to this street. This entry shall be reinforced by landscaping and, where appropriate, fencing to provide a clear entry statement. xi. The following features of existing areas should be considered and integrated into new development where possible: ¬ Traditional street and lane patterns ¬ Street setbacks ¬ Groupings of buildings ¬ Corner feature sites ¬ Pedestrian walkways ¬ Promenades, squares and courtyards ¬ Characteristic kerb and gutter treatment ¬ Pavement design, materials and finishes. xiii. Repetitive building designs should be avoided particularly in new residential subdivisions where there may be a number of sites being developed simultaneously. Repetitive street elevations generally do not achieve variety and interest in the streetscape – designs should ensure that key elements such as materials, colour schemes, fencing and driveway treatments, landscaping, window configurations and roof forms are distinct and give individuality to each development.	
	Garaging f) The following matters shall be taken into consideration when designing a development to	Proposed garages associated with the new dwellings will not be visible from the street and are integrated into the building design.

	minimise the dominance of garaging particularly on the public streetscape and communal areas internal to the development site: i. Car parking structures such as garages and carports shall be designed as an integral part of the development and must be compatible with the overall building design in terms of height, roof form, detail, materials and colours. i. Garages and carports, as a forward element in the design of a dwelling, are discouraged particularly where the dwelling and its associated garage has a direct address and access to a street.	The new single garage for the existing dwelling is behind the building line and will not have an adverse impact on the streetscape.
12. Accessibility and Adaptable Housing		
	Objectives: a) To provide adaptable housing that helps sustain community and family networks by allowing people to stay in their houses over the whole of their life. b) To ensure that new development is accessible and useable by people with disabilities and mobility impairment. c) To provide an adequate supply of housing stock that is designed and constructed to be accessible or capable of being easily adapted for use by those in the community with a disability or mobility impairment.	The proposal generally meets the objectives of the control and is designed as single storey allowing optimal accessibility with at grade car parking for all dwellings.
14. Fencing and Walls		
	Design Principles: b) Fencing and walls shall:	Fencing between the properties has been designed in accordance with the DCP controls and objectives.

	I. Be compatible with the design and materials used in the proposed development; II. Provide some outlook from buildings to the street to facilitate casual surveillance and safety; III. Assist in highlighting entrances to dwellings and establishing a sense of identity in the streetscape; IV. Be proportionate in relation to the width of the allotment; V. Integrate with other facilities such as letter boxes and garbage screens.	Front fencing has been chosen to compliment the rural heritage of the area and existing streetscape. Landscaping has been designed to integrate with fencing and maintain privacy for the existing and proposed dwellings.
15. Driveway Access and Car Parking		
	<u>Driveways:</u> e) Driveways shall be located no closer than 900mm from any side boundary for the full depth of the building line. This 900mm offset shall be provided with landscaping of suitable scale to ensure that sight lines along the public footpath and the roadway are not obstructed.	Driveways have been designed around tree retention and to meet heritage recommendations. Landscaping along both sides of the driveway is proposed.
	f) Driveways within the site should be a minimum of 2.7 metres wide. (Note: In heritage conservation areas strip driveways may be a more suitable alternative – refer to Part E.3: Heritage Conservation Areas).	Single width driveways are proposed based on feedback from heritage architects.
	g) Landscaping shall be incorporated into the design of driveway and manoeuvring areas to minimise the expanse of hard surfaces and adverse visual impacts on the streetscape.	Achieved. Hardstand is kept to a minimum.
	h) Straight 'gun barrel' driveway arrangements are not supported. Where long driveways are	The northern driveway has been designed to meander rather than provide straight line access including landscaping along both

	proposed landscaping of minimum width 1.0 metres shall be provided along the boundary/fence line incorporating wider landscape 'blisters' to create a 'meandering' effect and contrasting pavement treatments should be used to reduce the expanse of a single pavement material.	sides of the driveway and a variable width to retain T19. Pavement treatment consist of rural permeable pavement to reduce any potential adverse impact on the TPZ of retained trees.
	i) Driveways within a site shall be at a maximum grade of 4:1 (H:V).	Noted.
	j) Driveway design from the road pavement across the public footpath area shall be in accordance with Council's "Manual of Engineering Standards" and appropriate structural drawings.	Noted.
	k) Driveways across the footway at the access point on the road reserve should be generally a maximum of 5 metres wide, although variation may be justified on turning and traffic safety issues.	Noted.
	l) Driveways across the footway shall be sited to avoid street trees, kerb inlet pits and other services such as light/power poles.	Achieved.
	p) Vehicle car parking spaces and manoeuvring areas (not including a driveway providing direct vehicle access to a garage or carport from the street) shall not be located within the building line setback area.	Achieved.
	<u>Car Parking:</u> q) The minimum number of off-street car spaces shall be as follows: I. One (1) space for each one or two bedroom dwelling;	Sufficient off-street parking is provided for each dwelling, compliant with the DCP (2 parking spaces for each dwelling).

	II. Two (2) spaces for each dwelling containing more than two bedrooms; III. One (1) visitor space for the first three dwellings and one (1) space for every five dwellings thereafter or part thereof.	
	r) A minimum of one (1) off-street parking space should be provided for each dwelling as a covered space in the form of either a garage, carport or within a secured basement parking area. The parking space(s) should be convenient and accessible to the dwelling which it services.	Garage space(s) are provided for each of the dwellings.
	u) Garages should comprise minimum dimensions in accordance with Figure 25.	Compliant.
16. Views and Visual and Acoustic Privacy		
View Sharing	d) All property owners should be able to develop their property within the established planning guidelines, however, existing views should not be substantially affected where it is possible to design for the sharing of views. e) Grand vistas and significant views that are recognised and valued by the community should not be obscured by new development. f) Heritage or familiar dominant landmarks should be retained and not obscured.	The proposal does not diminish existing views or obscure heritage landmarks.
<u>Visual Privacy</u>	h) Overlooking of private open space and direct views between living area windows shall be screened or obscured using one or more of the following methods (as shown in Figures 27 and 28): I. Separation distance between windows of habitable rooms or balconies	The design of the proposal ensures that overlooking of adjoining properties is prevented with fencing of appropriate height, landscape screening, building separation and limitations of facing openings.

	II. Separation by design III. Offset living room windows of opposing dwellings/units IV. Splay windows to redirect sight lines V. Build to a boundary and avoid window openings VI. Screen planting between units VII. Fencing design or privacy screens VIII. Use of fin walls IX. Planter boxes X. Louvre screens (vertical or horizontal) XI. Pergola XII. Change in level	
<u>Acoustic</u>	i) Where no design techniques and screening (e.g. fences or walls) are proposed, openings of adjacent dwellings shall be separated by a distance of at least 3.0m. j) Site layout shall separate active recreational areas, shared parking areas and driveways, and service equipment areas away from bedroom areas of dwellings. k) Mechanical plant or equipment (e.g. Air conditioning units) shall be designed and located to minimise noise nuisance. l) Shared walls and floors between dwellings shall be constructed to reduce noise transmission in accordance with the Building Code of Australia.	The dwellings will achieve an appropriate level of acoustic privacy through orientation, building materials and physical separation.

17. Water and Energy Conservation		
	Design Requirements: e) It is recommended that buildings be orientated with the main indoor and outdoor living spaces towards the north and north-east (the optimum orientation for indoor and outdoor living spaces are shown in Figure 20).	All three dwellings will obtain a high level of solar access for indoor and outdoor living areas with a north and north-eastern orientation.
	f) To the fullest extent possible, buildings should be insulated.	Achieved - refer to BASIX Certificates at **Appendix A**.
	g) Buildings should include adequate thermal mass and windows located, sized and shaded to facilitate thermal performance.	As above.
	h) Windows in west facing walls should be avoided. However, where not possible, west facing walls should be designed with windows fitted with appropriate shade structures and/or landscape screens.	West facing windows are minimised in the new dwellings. The existing dwelling retains the front elevation (western) with extensions at the rear.
	i) Building design should, wherever possible, include a north facing roof upon which a solar hot water system or collector could be installed. The building's internal plumbing should be designed to facilitate the installation of such a system.	Noted.
	j) The design of the building should maximise the cooling potential of natural ventilation by providing breeze pathways through the building (refer Figure 32).	Achieved.
	k) Shadow diagrams may be required for residential developments of two storeys and over in urban zones if, in the opinion of the assessing officer, they are required and for all residential	N/A- single storey buildings proposed with adequate setbacks to neighbours.

	developments comprising two (2) or more dwellings where ground level private open space is located in other than an "optimum" or "good" location as shown in Figure 20…	
18. Stormwater Management		
	Design Requirements: h) Due to downstream flooding/capacity issues and for developments other than single dwellings, on-site detention of stormwater is required in accordance with Council's Manual of Engineering Standards, to restrict the discharge rate of stormwater runoff. The methods may include tanks (either underground or aboveground) or surface storage areas such as driveways or landscape depressions. The amount of storage volume required is subject to detailed calculation but may be estimated at 9 cubic metres per 1000sqm of site area.	OSD is proposed as detailed on the Stormwater Management Plan at **Appendix H**.
	i) A detailed erosion and sediment control plan (ESCP) should be submitted with the development application. The ESCP should be prepared in accordance with the requirements of Council's Manual of Engineering Standards.	Refer to **Appendix G**.
	j) Ultimate discharge for collected stormwater runoff should be to a street drainage system, to an inter allotment drainage line, or by approval to a public area. The system should be gravity drained. Pumping of stormwater is not permitted.	Stormwater will discharge to the street, refer to Civil Plans at **Appendix H**.

	k) The development site must be provided with an overland flow path for the major storm event (1% AEP).	Achieved, refer to **Appendix H**.
	l) Stormwater storage tanks with a capacity in excess of that required to meet BASIX criteria may be installed to provide for on-site stormwater detention. Council's Manual of Engineering Standards provides details for calculations and 'BASIX' relationships. These tanks, unless provided underground, must not be located within an area of principal open space. The area occupied by the tank must not be included for the purposes of calculating the required private open space at ground level for each unit.	Achieved, refer to **Appendix H**. 2 x 3,500L above ground tanks are proposed for each dwelling.
	m) As a minimum requirement, a stormwater drainage "concept plan" shall be submitted with the development application. The plan should include: I. the pipeline/pit layout II. water storage means/area III. indicative levels at critical design points IV. overland flow paths including details of the means of capturing runoff from all impervious surfaces	Refer to **Appendix H.**
C.10 Subdivision		
3. Subdivision Design Process		
3.1 The Design Steps	To ensure that subdivision proposals address all relevant matters, the process for design should follow the basic steps of:	The proposal is consistent with the relevant objectives for subdivision. The proposed three lot Torrens title subdivision is reflective of the pattern of subdivision in the area and the resultant lots (and subsequent housing) taking into account the

	a) Site analysis to identify all constraints and opportunities, both on-site and external to the site; b) Mapping, measuring or quantifying of constraints and opportunities; and c) Development of a subdivision design that properly considers and takes account of those constraints and opportunities.	physical characteristic of the site, including established trees that demonstrate environmental or aesthetic value. Consistent with the approach outlined in the DCP, the process for design of the subdivision has involved: 1) preliminary site analysis to identify the site's constraints and opportunities; 2) engagement of a registered survey and Certificate 5 Qualified Arborist to locate and map all trees and vegetation within the site; 3) Early engagement of a heritage architect with extensive knowledge of Bolwarra Conservation Area for input into design; 3) Working with an experienced architect and second heritage consultant to development a subdivision design and housing form that is appropriate for the site. The outcome of the above process is a development proposal that doesn't compromise the historic identity of Bolwarra with appropriate stormwater management and tree retention.
4. Design Elements	*EC.1 Flora and Fauna* **Objective:** To protect remnant bushland, significant flora and fauna habitats and wildlife corridors from the impacts of subdivision and subsequent development, and to provide for the repair and enhancement of environmentally significant and/or degraded land.	As stated above, the layout of the proposal specifically avoids significant stands of vegetation. Building envelopes/ footprints are located to retain as many existing trees as possible. Noting the urban zoning, already developed nature and urban surrounds of the site, the proposal is highly unlikely to impact on fauna and there are no watercourses contained within the site.
	EC.2 Heritage and Archaeology **Objectives:**	The proposal is consistent with these objectives and has been duly assessed against Clause 5.10 in the Maitland LEP 2011 and

	• To protect heritage items, buildings with heritage significance and Conservation Areas. • To ensure that heritage items, buildings with heritage significance and Conservation Areas are properly considered in the design of new subdivisions. • To protect known and potential archaeological relics from damage or destruction as a result of subdivision works.	Parts C.4: Heritage Conservation and E.3: Heritage Conservation Areas in the Maitland DCP 2011.
	EC.3 Hazards **General Requirements:** All new subdivisions are to be designed to provide adequate, safe access for future users. Each new lot created must have adequate site area/building envelope which is free from hazard and can accommodate future development on the site without costly site works on individual lots and without the necessity for loss of significant areas of vegetation.	The site is generally free from hazard such as bushfire, flooding, mine subsidence, contamination and likely land slip. The proposal provides adequate, safe access for future users and minimises tree removal through site design and building location. All lots are wholly above Council's adopted flood standard (the 1% AEP or 1 in 100 flood event).
	DC.1 Lot Size and Dimensions Part 4 in the Maitland LEP 2011 includes development standards for the subdivision of certain land. The standards are presented as minimum lot sizes and are depicted on the associated Lot Size Map.	The proposed subdivision complies with the minimum lot size (450sqm) as contained within Clause 4.1 of Maitland LEP 2011.
	Residential i) Access handles must have a minimum width of 3.5 metres for single lots and be constructed in	The battle axe arrangement meets Council's specific controls. Suitable building envelopes are indicated on the plans.

	accordance with Council's Manual of Engineering Standards. No more than 2 lots may be serviced by a reciprocal right-of-carriageway which shall be centrally located within both access handles. j) A suitable building envelope with minimum dimensions of approximately 15 metres by 10 metres shall be provided behind the building line.	
	DC.2 Solar Access and Energy Efficiency *Objective:* To encourage the design of residential subdivisions which maximise solar access, allow flexibility in the siting of future buildings to take advantage of a northern orientation, and minimise reliance on private car use.	The lots have been designed so that they maximise solar access with dwellings located on the southern portion of the lot and open space to the north and east.
	DC.3 Drainage, Water Quality & Soil Erosion c) best management practices should be implemented to control runoff and soil erosion and to trap sediment on the subject land to ensure there is no net impact on downstream water quality. The quality of runoff water from the subject land should be the same or better than the quality of water prior to the subdivision taking place.	Best management practices have been implemented in terms of drainage and stormwater as detailed in the Civil Plans at **Appendix H.**
	DC.4 Landscape, Streetscape & Visual Impact Existing landscape and streetscape character should be maintained and enhanced through retention of existing vegetation, provision of additional landscaping and selection of other	The existing landscape and streetscape character will be maintained through the retention of the existing dwelling at the front of the site and retaining and enhancing selected landscaping within the front setback.

	streetscape items including surface treatments and street furniture	
	DC.5 Effluent Disposal The preferred method of effluent disposal for all new lots is by connection to a reticulated sewerage system. Lot size and layout must be adequate to allow appropriate effluent disposal systems to be provided for likely subsequent development.	The lots will be individually connected to the reticulated sewerage system in the street. Details to be provided at CC.
	DC.6 Roads & Access, Pedestrian & Cycleways n) Access ways to hatchet shaped or battle axe lots will serve a maximum of 2 lots, have a maximum grade of 25% (4H:1V) at any point.	Appropriate access is provided to each lot as shown on the plans. The battle axe handle serves a maximum of 2 lots and is less than 25% grade.
	DC.9 Reticulated Services (Water/Sewer/Electricity/ Telecommunications) Council requires provision of services to all new lots to a standard appropriate to the future use of the lots and to minimize environmental impacts	Reticulated water and sewer supply will be provided in accordance with Hunter Water Requirements. Electricity will be supplied to each lot independently.
C.11 Vehicular Access and Car Parking		
2. General Requirements		
2.2 Calculation of Parking Requirements	a) Development Generally The minimum number of parking spaces to be provided for a particular development is to be calculated in accordance with Appendix A of this policy.	Adequate parking has been provided for each dwelling, consistent with the rates provided in the DCP.
E.3 - Heritage Conservation Areas		
1. Bolwarra Heritage Conservation Area		

1.3 Conservation Policies	What to Keep: • Well defined edges of the Conservation Area due to floodplain; • Predominating single detached residential character; • Neighbourhood character of shopping precinct; • Existing form of road approaches to the town; • Existing density of development. • Landmark trees, including the large Bunyah Pine at the town's entrance. • Buildings and outbuildings associated with agricultural land use.	The proposal has specifically been designed with regard to the DCP in terms of what is sought to be retained in the conservation area. To this end, the development respects the residential character with single detached dwellings proposed, consistent with the existing density contained within the Bolwarra area. The large tree prominent to the street front has specifically been retained (T19) as well as several other less significant trees visible to Kensington Road to protect the streetscape character in this locality.
	What to Encourage: • Single detached residential dwellings; • Consistent scale and form of residential development, predominately single storey.	The proposal includes elements that are encouraged under the DCP including single detached residential dwellings that are consistent in scale and form with nearby dwellings and are limited to single storey.
	What to Avoid: • Medium density development and detached dual occupancy – which are inappropriate because of their scale, design, size of allotment, etc; • Re-subdivision of larger allotments to allow new dwellings in rear or front yards; • Large garages and carports on the street frontage, and details on them which mimic those on the dwelling	The proposal avoids medium density development but rather includes single dwellings on relatively large lots (site coverage average 24%). Whilst subdivision of larger allotments is discouraged under the DCP, an exception in this instance is considered acceptable as the proposed subdivision has been determined to have minimal impact on the heritage significance of the Bolwarra conservation area. The proposal is consistent with the existing subdivision pattern in the area and allows for better use of the land to achieve the key strategies of housing consolidation as contained within the MUSS. Refer to the SoHI and Old Bolwarra Heritage Report for further details.