Manentia
Ubicumque

BYRON BAY PLANNING & PROPERTY CONSULTANTS
CHRIS LONERGAN – Town Planner
Town Planning Consultants : Environmental Impact Assessment : *Project Design : Sustainable Design*
5/130 Jonson St. Byron Bay
P.O. Box 2585 Byron Bay 2481 Bundjalung Country
Ph. (02)66809255 Email – chris @byronbayplanning.com.au

STATEMENT OF ENVIRONMENTAL EFFECTS

Use of Two Exempt Sheds for a Rural Industry.
Lot 2 D.P. 735538
No 736 Federal Drive Federal

INDEX

ANNEXURES

- **Site & Building Plans(SHE Architects)**
- **Safety Data Sheets**
- **Waste Water Report (Aldersons)**
- **Access Design Drawings (Aldersons)**
- **Parking and Landscape Plan (Byron Bay Planning).**

LOCALITY & ZONING PLAN

Use of Two Exempt Sheds for a Rural Industry.
Lot 2 D.P. 735538 No 736 Federal Drive Federal

1 INTRODUCTION

This report accompanies a Development Application for the proposed use of Two Exempt Sheds as a Rural Industry, on Lot 2 D.P. 735538 No 736 Federal Drive Federal, which has an area of approx 1.9ha.

The existing steel framed structures, (both under construction), being exempt development, are to be operated by Synthesis Organics. The Rural Industry will involve the manufacture of organic skincare and botanical skincare products, which will use herbs to be grown on site, as well as those supplied by local farmers.
Substances used are to be managed on site in accordance with the annexed Safety Data Sheets, which accord to Regulation (EC) no. 1907/2006.

The two existing access points off Federal Drive are to be rationalised into a single access in the SW of the site off Federal Drive. This upgrade is to accord with the annexed Alderson Engineering plans. Sight distances are good at the access point, thus optimising traffic safety.

The two, two level buildings are steel framed slab on ground structure with Mid Grey Klip Lock 700 roofing, and wall cladding. This achieves a blending colour scheme which is sensitive to the rural landscape and visual integrity of the area.
Walls and roof linings are to be insulated.
Maximum height achieved is a complying 7.3m.
The existing onsite waste water treatment system is to be upgraded as part of this application. See annexed Aldersons Report.

The two sheds to be used as a Rural Industry are set back from Federal Drive and side boundaries as follows.

Shed 1 - 20.5m Setback to Federal Drive, 10.5m from the southern boundary.
Shed 2 - 45m Setback to Federal Drive, 22m from the southern boundary.

The site sits well above flood levels, however it does sit within a Bushfire Buffer, and to this end a detailed report accompanies this application.

An existing Power line which crosses the site is currently in the process of being put underground, and as such it will not effect a constraint on the proposed development of the site.

Parking is to be provided at the following rate:-
5 Spaces for western building 1, (including a disabled accessible space), and 3 Spaces for eastern building 2.
An AS2890.2 compliant Loading Bay is to be provided adjacent to the western Rural Industry building, being 4m wide and 7m long. 12.5m Radii has been applied to the access corridor to permit the small delivery vehicles which will use it, to leave and enter the site in a forward direction.
The two existing access driveways are to be rationalised into a single driveway.

1.1 Development Overview from Synthesis Organics

Synthesis Organics is an internationally award winning certified organic skincare, aromatherapy and wellness company offering products direct to consumer and through its network of spas and five star wellness destinations around Australia and the world.

This project is supported by a NSW regional development government grant to expand our production capacity and ability to incorporate organically certified native botanicals grown on site and sourced from local growers to be processed through our proprietary extraction system and incorporated into our small batch skincare products. Having this level of connection to the land where our botanicals will be grown is a fundamental aspect of our brand and company values.

The grant requires us to have a combination of 23 full and part time staff by 2023. One half of our staffing requirements are allotted to production staff (736 Federal Drive). Here, we approximate a total number of 11 employees, combining both part time and full time, so rarely if ever all at the site at the same time. The remaining staff will be engaged in sales, marketing, business development, retail, treatments etc, and will be working off-site and at our Byron Bay business address in the industrial estate which offers retail products, ecommerce dispatch and treatment spaces. At present, we currently have 14 staff members and growing steadily.
Our operating hours are 8am-5pm Monday through Friday and this will remain so at Federal Drive as well.

Our orders are picked up daily by AusPost in a regular passenger van and our deliveries usually come via courier van and small cube truck.

We have a roadmap towards B-Corp certification for 2023, and for this we must go over and beyond in our efforts to demonstrate the highest level of sustainability principles throughout every aspect of our business. In preparation to make 736 Federal Drive the new site for our industrial operations we are:

- Setting up an EV shuttle to offer pick up and drop off for our employees from a central location such as Mullumbimby. This will eliminate the need for large scale parking, reduce our carbon footprint as a business and traffic on local roads.
- We have engaged experts and farm manager specialists in native bush regeneration, regenerative syntropic farming and commercial organic agriculture to create our farm management plan so that the property functions as a perfect eco-system between our primary production requirements and the rehabilitation of the land to restore native trees and vegetation.
- For the internal fit out of our manufacturing sheds, we will be using the highest level of sustainable building materials to create energy efficient structures at a level rarely seen yet in Australia. By using wood fibre insulation (Life Panels), permeable membrane skins, and compressed hay Durra Panels as the wall units, our industrial spaces will control moisture and be 100% mould proof, allowing the entire building to respirate and preclude the need for all day air conditioning in the summer months to keep ingredients at optimal temperature. The manufacturing sheds will rely on solar panels and rainwater, and we will use living green walls both inside and out to produce clean air and reduce carbon footprint even further.

2.1 STATUTORY – BYRON SHIRE L.E.P. & 4.15(1) (E.P.A. ACT)

The property is located within an RU1 Primary Production zone under the provisions of Byron Shire Local Environmental Plan 2014, and the proposed use of Two Exempt Sheds as a "Rural Industry", is a landuses permissible with consent under the RU1 Zone landuse table.

2.2 Byron LEP 2014 – RU1 (Primary Production) Zone Statutory Objectives

The development satisfies the objectives of the RU1 zone as follows:-

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area.
- To minimise the fragmentation and alienation of resource lands.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To encourage consolidation of lots for the purposes of primary industry production.
- To enable the provision of tourist accommodation, facilities and other small-scale rural tourism uses associated with primary production and environmental conservation consistent with the rural character of the locality.
- To protect significant scenic landscapes and to minimise impacts on the scenic quality of the locality.

The proposed use of Two Exempt Sheds as a Rural Industry ensures minimal environmental and scenic quality impacts due to compliant setbacks, the use of existing structures, and the use of existing cleared land.
The structures use earth toned materials, retain the surrounding vegetation, and use a driveway to be upgraded to effect traffic safety and opitmise sight distances at the access point.
The landuse is low key in terms of its impact on the rural amenity of the area, and it does not compromise the continued operation of grazing and farming activities on site.
The landuse, which is ancillary to local primary production, promotes local primary production, and as such it is a landuse which promotes the achievement of these statutory objectives.

SUMMARY
The planning and landuse assessment of the development contained in this report, shows that the proposed use of the Two Sheds as a Rural Industry, will not compromise the statutory objectives of this RU1 Zone under the provisions of Byron L.E.P. 2014.

2.3 Definition Byron LEP 2014 – Rural Industry

rural industry means the handling, treating, production, processing, storage or packing of animal or plant agricultural products for commercial purposes, and includes any of the following:

(a) agricultural produce industries,
(b) livestock processing industries,
(c) composting facilities and works (including the production of mushroom substrate),
(d) sawmill or log processing works,
(e) stock and sale yards,
(f) the regular servicing or repairing of plant or equipment used for the purposes of a rural enterprise.

The proposed use of the two sheds as a Rural industry will involve the manufacture of organic skincare and botanical skincare products from herbs to be grown on site, as well as those supplied by local farmers.
This is permissible within the RU1 zone.

2.4 Byron LEP - CLAUSE 4.3 Height of Buildings

(1) The objectives of this clause are as follows:
(a) building not exceed spec. max. height from existing ground level to finished roof or parapet,
(b) height of buildings complements streetscape and character of the local area,
(c) minimise visual impact, disruption of views, loss of privacy & loss of solar access to existing development.
(2) height of building not to exceed max. height shown for the land on Height of Buildings Map.

Maximum Height Permitted 9m. - Max Height Maintained at 7.3m.

2.5 Development Control Plan 2014 General

PRESCRIPTIVE MEASURES	PROPOSALS COMPLIANCE WITH D.C.P.
Part D.1.2.1:- Building Ht. Plane **Objective** - reduce overshadowing, maximise privacy, view sharing, optimise access to winter sun. **Performance Criteria** - progressive setback from side boundaries. **Requirement** - All walls & roof are to be contained within is a line drawn 1.8 meters vertically above the southern and western side boundaries and then extended, sloping in over the site, at a 45 degree angle. This may exclude pergolas, verandahs, lattice walls & the like.	Complies. The minimum 10.5m side boundary setback ensures that the buildings sit well below the Building Height Plane. On this basis it meets these DCP requirements. "*reduce overshadowing, maximise privacy, view sharing, optimise access to winter sun*", and thus it can be approved by Council
D1.2.2 Setbacks from Boundaries **Objectives** 1. varied and interesting streets that harmonise with existing & planned street scapes and development in the locality. 2. good orientation, spacing, living environments - sunlight, shade, wind, weather, amenity, proximity to neighbours. 3. achieve useable and liveable private open space and courtyards. 4. provide flexibility in siting and design of dwelling houses in residential areas. **Performance Criteria** 1. flexible provided achieve Objectives and Performance Criteria. 2. Street façade of building, open space between it and street - contribute to the attractiveness of the streetscape. Integrate with existing pattern of setbacks, variety in the streetscape. 3. Private open space and common landscaped areas must be useable as part of living environment. Spaces between buildings and the street lack privacy. 4. setback from a street determined on its merits, having regard to: a) the Objectives; b) any specific location DCP; c) existing buildings in the locality; d) the size and shape of the allotment; e) vehicular safety and visibility, particularly on corner sites; f) orientation of allotment re: sun & winds; g) location of private open space, courtyard or landscaped areas; h) the facade building facing the street and landscape treatment visible from street; i) location and treatment of car parking. 5. Notwithstanding above criteria, buildings must comply with the building height plane as detailed in Section D1.2.1. 6. Dwelling house encroach into the side setback and building height plane where it enhances the design, complements street scape and not detract privacy, solar access, microclimate, traffic safety or amenity.	

7. variations to have regard to: a) the Objectives; b) compliance with the Performance Criteria; c) visual impact of variation on the street; d) impact on amenity, privacy, views and access of surrounding properties; e) the existing and future status of the road; f) traffic impacts & sight lines AS2890; and g) compliance with the BCA. **Prescriptive Measures** **1.Minimum Street Frontage Setbacks** Rural Local Roads - 15 metres. **2. Minimum Side and Rear Boundary Setbacks** a) 900mm, also comply to building height plane.	The closest shed, Shed 1 at a Setback of 20.5m to Federal Drive, exceeds the minimum 15m required, thus preserving the rural amenity of the area. Minimum side boundary setback is 10.5m
D1.2.3 Screening Underfloor Space **Objectives** 1. improve external appearance of elevated buildings. 2. provide compatibility in appearance and character between buildings. **Performance Criteria** 1. underfloor space of elevated buildings be provided with infill panelling, advanced landscaping or other forms of visual screening. 2. In flood liable land screening may not be appropriate. Screening below the flood planning level must have openings to allow for entry and exit of flood water and must be structurally adequate and not reduce the structural capacity of the building during a 1 in 100 year flood event. 3. Where buildings are proposed on bush fire prone land, underfloor screening may be required to comply with specific req of BCA and Australian Standard AS3959 - Construction of Buildings in Bushfire Prone Areas. **Prescriptive Measures** There are no Prescriptive Measures.	Slab On Ground. (Complies)
D1.2.4 Character & Visual Impact **Objectives** 1. retain and enhance unique character of Shire, distinctive landscapes, ecology, towns, villages, rural and natural areas. 2. ensure new development respects and complements important aspects of natural and built environment re existing character. **Performance Criteria** 1. Site, building and landscaping design must address the climate; 2. The street face of building, and front open space contribute to attractiveness of streetscape by - design, materials and landscaping; 3. minimise loss of privacy; 4. integration with existing built & natural environment, & variety in streetscapes; 5. Long, straight walls to be broken up visually by materials /	The two, two level buildings are steel framed slab on ground structure with Mid Grey Klip Lock 700 roofing, and wall cladding. This achieves a blending colour scheme which is sensitive to the rural landscape and visual integrity of the area. This combined with the broken elevations, provides visually soft structures which minimise the bulk and scale of the development.

changes in wall plane; 6. verandahs, balconies, pergolas encouraged for visual, climatic and energy efficiency reasons; 7. Well-designed overhanging eaves to protect against heavy rainfall and summer sun, while allowing winter sun penetration; 8. building materials compatible with environment. metal roofs not highly reflective. White or light-coloured roofing only where not visually intrusive. Details submitted with development application. **Prescriptive Measures** There are no Prescriptive Measures.	
B4.2.5 Car Parking - Objectives 1. Unless otherwise specified elsewhere in this DCP, car parking is to be provided in accordance with the schedule contained in Table B4.1 2. Where a proposed use is not represented in Table B4.1 or elsewhere in this DCP, the rates under the RMS Guide to Traffic Generating Developments (as amended from time to time by a superseding document prepared by RMS) will apply. 3. If a rate is not provided by the RMS Guide to Traffic Generating Developments (as amended from time to time by a superseding document prepared by RMS) a merit based assessment will apply. In such circumstances applicants are encouraged to review car parking rates for adjoining or surrounding Councils and to contact Council's Development Engineers as to what an appropriate rate may be.	The two existing access points off Federal Drive are to be rationalised into a single access in the SW of the site off Federal Drive. This upgrade is to accord with the annexed Alderson Engineering plans. Sight distances are good at the access point, thus optimising traffic safety. Parking for Industrial uses is required at the following rate :- 1 space per 100 m2 or two per factory unit which ever is the greater. Shed 1 has a floor area of Ground Floor 91m2 and Mezzanine 63.2m2. This would generally require 2 car spaces, however 5 are proposed. Shed 2 has a floor area of Ground Floor 100m2 and Mezzanine 62.5m2. This would generally require 2 car spaces, however 3 are proposed. In addition to this, given that research and development staff are also to be housed in each building, traffic movements per day are to be minimised by Staff being serviced by a shuttle bus which will pick up and drop off staff. Parking is to be provided at the following rate:-

B4.2.9 Loading Bays 1. All developments have a need for a safe loading and unloading area (service area) which does not obstruct the passage of vehicles or pedestrians. Unless designed specifically for a nominated vehicle type or types appropriate to the use of the proposed development, loading bays should be provided in accordance with the schedule contained in Table B4.2. 2. Where a proposed use is not represented in Table B4.2, the rates under the RMS Guide to Traffic Generating Developments (as amended from time to time by a superseding document prepared by RMS) will apply. 3. Access, loading bays and manoeuvering for a service area must be designed in accordance with the current editions of AS 2890 Parking Facilities. 4. In general, service areas should satisfy the following requirements: a) The service area must be a physically defined location, screened from public view, and not used for purposes other than servicing, loading and unloading. b) Service area layout must facilitate its efficient use and must effectively discourage on-street loading and unloading. c) Requirements for storage and collection of waste must be taken into account in service area design. d) All service vehicles must be able to enter and leave the site in a forward direction, i.e. adequate manoeuvring space is required on site. e) Internal roadways must be of a size adequate for the largest vehicle anticipated to use the site. f) Service vehicle movements should be separated from car movements.	5 Spaces for western building 1, (including a disabled accessible space), and 3 Spaces for eastern building 2. An AS2890.2 compliant Loading Bay is to be provided adjacent to the western Rural Industry building, being 4m wide and 7m long. 12.5m Radii has been applied to the access corridor to permit the small delivery vehicles which will use it, to leave and enter the site in a forward direction. The two existing access driveways are to be rationalised into a single driveway. These meet the minimum parking requirements set within DCP 2014, and are designed so that vehicles can turn on site and leave and enter the property in a forward direction.
D5.2.7 and B4.1.11 Landscaping **Objectives** 1. Ensure landscape features are provided on industrial sites to create a quality industrial estate setting. 2. Provide for the design of landscaping to assist in energy conservation in buildings, control microclimatic conditions and provide shade. 3. Encourage the use of landscape plantings to assist in screening storage, service and waste disposal areas and the integration of landscaping with stormwater management. **Performance Criteria** Landscaping provided in association with industry or on land within Industrial zones must comply with the requirements of Chapter B9 Landscaping. As an integral and important component of outdoor parking area design, suitable landscaping must be provided in accordance with the requirements of Chapter B9 Landscaping. In particular shade trees can assist with cooling the car parking area and the vehicles parked therein, and assist with managing the microclimate of urban areas. Specifically outdoor car parks comprising 10 or more vehicle spaces are to incorporate a landscape bay of a suitable dimension to support the healthy growth of shade trees with a minimum height of 8 metres (at maturity) to shade every 2-	Landscape plantings are proposed to screen the new internal driveway, as well as provide shade within the parking area as required by DCP 2014. See details in the following landscape plan assessment and site landscape plan.

5 parking spaces. The bay can also incorporate water sensitive urban design principles to facilitate stormwater disposal and also irrigation of the trees. Figure B4.1 below illustrates various car park landscaping configurations.	

2.6 DCP 2014 Part B Sec B.14 Earthworks.

The objectives of the 1 m maximum earth works required under this Clause are:
To minimise Environmental Impact; To blend the development into the site.
To minimise erosion risk; To minimise disturbance to the natural landform.
To encourage designs which blend into the natural landform.
In relation to the proposed design all earth works occur over flat and cleared areas of the site and meet the 1m maximums permitted.

The development is designed to minimise site works by the use of slab existing ground construction where minor works to achieve slab levels have been battered and seeded to provide vegetative cover and minimise the potential for erosion.

Additional site works required for the upgrade of the existing Onsite Waste Water System (See Aldersons Report), and to achieve access and parking, will follow existing site grades, and will result in minimal site disturbance.

As such the development proposed will ensure no adverse impact.
The site works proposed over this cleared section of the site, will occur over well grassed and cleared land. All earth works will occur following the construction of small berms of straw bails, filter mesh fences or similar, to be positioned and secured by metal stakes e.g. star pegs, in rills down hill from site works. These porous bails will act to reduce water velocity and collect sediment during construction.
This inexpensive method of sediment control will afford additional protection to the local drainage system. The collected sediment will need to be removed from these porous berms from time to time to ensure proper functioning, and after heavy rain straw bails may need to be replaced as they fill with fine sediment.

EROSION CONTROL DETAILS

a) No disturbed area is to remain denuded longer than 30 days
b) All erosion and siltation control measures are to be placed as the first step in grading.
c) All stormwater and sewer lines not in streets are to be mulched and seeded within 15 days after backfill. No more than 150 metres are to be opened at any one time. Electrical power, telephone and gas supply trenches are to be compacted, seeded, and mulched within 15 days after backfill.
d) All temporary earthbanks, diversions and sediment control devices are to be machine compacted, seeded and mulched for temporary vegetation cover within 10 days of completion of grading. Straw or hay mulch is required.
e) All fills are to be left with a lip at the top of the slope at the end of each days operation. Cut and fill slopes are to be seeded & mulched within 10 days of completion of grading.
f) Any disturbed areas not paved, sodded or built upon are to be seeded within 15 days with sudan grass or equivalent, and mulched with straw or hay mulch at the rate of 2 tonnes per hectare.
g) Refer to Soil and Water Management for Urban Development NSW Department of Housing, January 1993.

10a. All sediment control devices as specified in the soil and water management plan at locations marked "EC" and maintained in place till grass is re-established at completion of construction.

10b. Sediment traps as shown "ST" to be placed across all pit entrances.

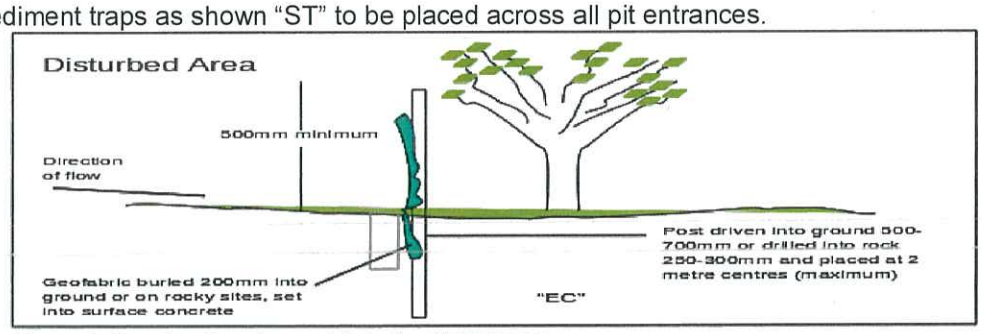


Figure 1: Construction of a geofabric-lined 'silt' fence

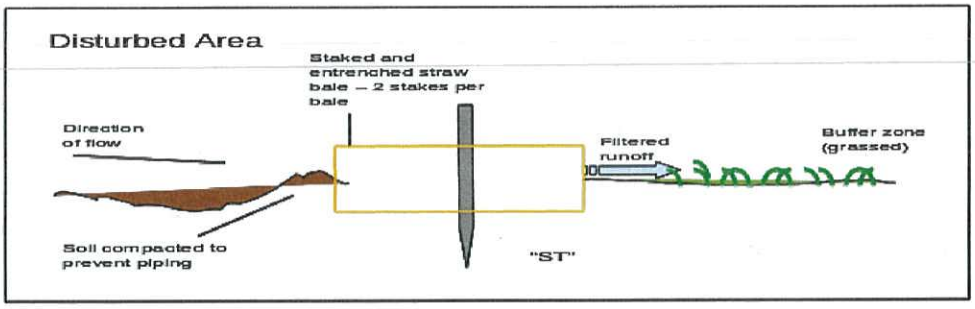


Figure 2: Cross-section of a properly installed straw bale bund

2.7 DCP 2014 Part B.8 – Waste Management.

Waste minimisation Objectives

1. To minimise resource requirements and construction waste through reuse and recycling and the efficient selection and use of resources.
2. To minimise demolition waste by promoting adaptability in building design and focussing upon end of life deconstruction.
3. To encourage building designs, construction and demolition techniques in general which minimise waste generation.
4. To maximise reuse and recycling of household waste and industrial/commercial waste.

Waste management Objectives

5. To assist applicants in planning for sustainable waste management, through the preparation of a Site Waste Minimisation and Management Plan.
6. To assist applicants to develop systems for waste management that ensure waste is transported and disposed of in a lawful manner.
7. To provide guidance in regards to space, storage, amenity and management of waste management facilities.
8. To ensure waste management systems are compatible with collection services.
9. To minimise risks associated with waste management at all stages of development.

WASTE MANAGEMENT

The proposed landuse will minimise waste production, and all waste resulting from the delivering of packaging and processing will be sorted on site to ensure optimum recycling and minimisation of waste. All organic waste will be composted on site.

Waste Management is achieved by providing a Rubbish Bin, Green Waste Bin and a Recycling Bin.

2.8 DCP 2014 Sec 3.4 Stormwater Concept Plan

Development applications not seeking concurrent approvals for the stormwater management system must be supported by a Stormwater Concept Plan generally containing the following information:

1. Existing and proposed finished surface contours at relevant intervals (i.e. 0.1m for flat sites to 1.0m for sloping sites) and spot levels.
2. Proposed and existing building locations and floor levels.
3. Street levels including gutter.
4. Proposed infiltration measures (e.g. soakage trenches, swales, landscaping, permeable pavements, etc.). Where infiltration failure will affect a neighbouring property and the development involves more than a single dwelling (e.g. multi unit residential, commercial, industrial etc) then detailed infiltration test results and detailed designs are required.
5. Proposed discharge points to the public stormwater drainage system (show levels at these locations).
6. Site constraints such as trees, services or structures that may affect the drainage system.
7. Existing or proposed drainage easements.
8. Any surface flow paths or flood-affected areas.
9. Conceptual location and levels of proposed stormwater pipes and drainage pits.
10. Conceptual location and approximate area of proposed on-site detention facilities.
11. Proposed on-site detention stored water invert levels and emergency spillways.
12. Proposed management controls for flows entering, within and leaving the site.
13. Preliminary on-site detention calculations.
14. Justification that the proposed design measures will not cause adverse stormwater impacts on adjoining properties Copies of Deposited Plan(s) and section 88B Instruments, showing details of easements over downstream properties, must also be submitted with the development application.

The attached site plan shows a gently sloping site, and stormwater will continue to be directed to the eastern absorption trench, via the Water Tanks to be fitted.

B3.2.3 Stormwater Management Objectives

1. To promote on-site stormwater management practices that support the 'predevelopment' hydrological regime (surface flow, streams and groundwater).
2. To ensure that new development does not reduce the effectiveness of existing drainage patterns (including built infrastructure).
3. To minimise the impacts of stormwater runoff from a site on adjoining properties.
4. To provide an acceptable level of protection against personal injury and property damage due to localised stormwater runoff.
5. To promote on-site retention, detention and infiltration of stormwater.
6. To promote stormwater harvesting and other forms of innovative water conservation.
7. To promote better integration of stormwater management into development proposals.
8. To ensure that on-site stormwater management facilities can be economically maintained, and that adequate arrangements are made for on-going maintenance.
9. To provide for the ongoing environmental health of receiving waters;
10. To ensure that stormwater management systems protect ground and surface water and other ecological values;
11. To achieve best practice stormwater treatment targets for stormwater quality.

The attached site plan shows a gently sloping site, and stormwater will continue to be directed to the eastern absorption trench, via the Water Tanks to be fitted.

Performance Criteria There are no performance criteria.

Prescriptive Measures

1. Development Applications

Development applications must contain sufficient information to assess whether the proposed stormwater system is effective and feasible, both within the site and in its connection to the public

drainage system. An approval of the stormwater management system may be required under Section 68 of the Local Government Act 1993 or Section 138 of the Roads Act 1993.
An applicant may lodge detailed stormwater management plans with the development application for concurrent approval under Section 68 of the Local Government Act 1993 and Section 138 of the Roads Act 1993, as necessary. Alternatively stormwater management concept plans must be lodged with the development application and a condition of consent will require the relevant approvals prior to issue of the Construction Certificate.
Plans showing the method of draining the land are to be in accordance with the Northern Rivers Local Government Development Design and Construction Manuals, Byron Shire Council Comprehensive Guidelines for Stormwater Management and relevant Australian Standards. Sample drawings developed as part of the Northern Rivers Local Government Development Design and Construction Manuals provide guidance on the type of information that should be included in stormwater management plans for subdivision works. AS/NZS 3500.3:2003 Plumbing and drainage - Stormwater drainage is the relevant Australian Standard at the time of writing this document. Appendices C and K of AS/NZS 3500.3:2003 provide guidance on the type of information that should be included in stormwater management plans for building works. Council's manuals, and guidelines, including standard and sample drawings, are available on Council's website.
The attached site plan shows a gently sloping site, and stormwater will continue to be directed to the eastern absorption trench, via the Water Tanks to be fitted.

2. Properties adjacent to or containing waterways
Lands identified as containing or directly adjoining waterways may be subject to inundation (during the 1 in 100 year ARI storm event). Development applications must demonstrate that the proposal complies with the requirements of the Northern Rivers Development and Design Manual. Development proposals in close proximity to waterways or other areas of possible inundation must be accompanied by a hydrologic study submitted by an appropriately qualified person to demonstrate that the proposal or any future development will not interfere with the natural flowpath or be subject to flooding (refer to Chapter C2 Areas Affected by Flood). Appropriate buffers to waterways must be provided.
The property does not contain a waterway.

3. Site Drainage
a) Site drainage shall be in accordance with the Northern Rivers Local Government Development Design and Construction Manuals, Byron Shire Council Comprehensive Guidelines for Stormwater Management and relevant Australian Standards.
b) For building works, the piped property drainage system is to capture and convey to a lawful point of discharge all stormwater runoff from the following areas of the development site:
i) impervious areas including roofs, paved areas and driveways
ii) areas subject to changes to ground level (existing) including excavation or filled areas
iii) areas where the natural or pre-development overland flow regime is disrupted to the potential detriment of an adjoining property.
c) The development must not introduce, impede or divert stormwater runoff in such a manner as to increase stormwater flow across a boundary onto adjoining property. Concentrated, collected or diverted stormwater flow onto an adjoining property must be at a lawful point of discharge.
The attached site plan shows a gently sloping site, and stormwater will continue to be directed to the eastern absorption trench, via the Water Tanks to be fitted.

4. Lawful Point of Discharge
a) A lawful point of discharge exists at a particular location, if:
i) the location of the discharge is under the lawful control of the Council or other statutory authority from whom permission to discharge has been received; and
ii) in discharging in that location, the discharge will not cause an actionable nuisance.

b) Where a lawful point of discharge is not available in the vicinity drainage may need to be constructed and any easements may need to be acquired to direct collected stormwater to a lawful point of discharge. Negotiations with property owners must be undertaken along feasible easement routes to determine whether an easement can be obtained to provide stormwater system that will drain by gravity to a public drainage system. Where easements are proposed over downstream properties for drainage purposes, a letter of consent from the owner(s) of the downstream properties must be submitted with the development application.
c) For properties involving building works generally at a higher level than the adjoining road, where the site drainage system can be piped under gravity to the road drainage system, then the discharge is to be connected to the street drainage system.
d) For properties involving building works generally at a lower level than the adjoining road, where the site drainage system cannot be piped under gravity to the road drainage system, the discharge is to be carried out entirely in accordance with one of the following options:
i) Discharge to a public drainage system within the development site.
ii) Private drainage easement across neighbouring properties. Byron Shire Development Control Plan 2014 – Chapter B3 – Services Adopted 22 March 2018 Effective 12 April 2018 14
iii) Charged systems, but ONLY for residential developments up to and including a single dwelling where it can be demonstrated that an easement cannot be obtained and where the roof gutters are sufficiently above the road gutter to permit drainage via a (pressurised) sealed system.
iv) Dispersion trenches, but ONLY for residential developments up to and including a single dwelling, where demonstrated an easement cannot be obtained and sufficient land is available.
v) Infiltration trenches, but ONLY where it can be demonstrated that: an easement cannot be obtained; there is sufficient land available; the underlying soil is sandy enough to infiltrate all runoff up to the 20 year ARI storm; and infiltration will not lead to contamination of the groundwater. Other storm events may be considered having regard to the consequences of failure and impacts on downstream properties.
vi) Pump-out systems, but ONLY for basement car park areas where: it can be demonstrated that, if gravity drainage is not possible, an easement cannot be obtained; the contributing catchment is the driveway ramp only, up to a maximum of 60 m2 ; and, pump failure will not cause overflow affecting neighbouring properties or habitable floor areas.
The attached site plan shows a gently sloping site, and stormwater will continue to be directed to the eastern absorption trench, via the Water Tanks to be fitted.

5. Easements
a) Easements are to be in accordance with the Northern Rivers Local Government Development Design and Construction Manuals.
b) Where a site is traversed by a drain (under the control of Council) that is not within an easement, a suitable easement must be created in favour of the Council.
c) Where an easement is benefiting private property(s) only, the easement is not to be to the benefit of Council.
d) Where an easement is required to be created a written agreement must be made between all relevant parties agreeing to its creation. Evidence of the written agreement to the creation of the easement is to be submitted with a Development Application. Council may grant deferred commencement consent subject to easement creation.
No Drainage Easement. The property remains unencumbered.

6. On-site Stormwater Detention (OSD)
a) On-site Stormwater Detention (OSD) shall be provided in accordance with the Northern Rivers Local Government Development Design and Construction Manuals, Byron Shire Council Comprehensive Guidelines for Stormwater Management and relevant Australian Standards.
b) OSD shall generally be incorporated into all development (except as provided by 'c)' below), including the following:
i) residential, commercial and industrial development;
ii) educational establishments, hospitals, community services and other institutions;

iii) public buildings;
iv) impervious car parks; and v) tennis and other impervious playing courts.
c) OSD is not required in the following circumstances:
i) where the total net increase in impervious area is less than 150 m2 ; Byron Shire Development Control Plan 2014 – Chapter B3 – Services Adopted 22 March 2018 Effective 12 April 2018 15
ii) if the application is for or relates to a dwelling house unless a restriction on title specifies otherwise;
iii) if the application is for development on land zoned RU1, RU2, or R5 unless needed to provide a lawful point of discharge;
iv) where site drains directly to a trunk drainage system within the tidal reach of a river or stream;
v) where the site is located within a catchment within which a regional detention structure has been provided for the ultimate development of the catchment;
vi) where dispersion or infiltration is used as the means of stormwater discharge from the site; or
vii) where a Consulting Engineer has undertaken a detailed analysis of the entire catchment and demonstrated that the provision of detention on the subject property, including consideration of the cumulative affect of detention provision across the catchment, will provide no benefit to any downstream drainage system for storm frequencies between the 5 year and 100 year ARI.
Not Applicable.

7. Stormwater Quality and Treatment

a) Applications for development types listed in Table B3.1 (including redevelopment) must address the "key" pollutants identified in that table (see below).

Table B3.1 – Key pollutants in stormwater flows to be addressed

Development Type	Litter	Coarse Sediment	Fine Particles	Total Phosphorous	Total Nitrogen	Hydrocarbons, motor fuels, oils & grease
Low Density Residential [1.] bed and breakfast accommodation & farm stay accommodation	Y	N	N	Y	Y	N
Medium Density Residential [2.] & tourist and visitor accommodation (excluding bed and breakfast accommodation & farm stay accommodation)	Y	Y	Y	Y	Y	N
Commercial, Shopping & Retail Outlets	Y	Y	Y	N	N	N
Industrial	Y	Y	Y	?	?	Y
Car Parks, Service Stations & Wash Bays	Y	Y	Y	N	?	Y

Y - Key pollutant, needs to be addressed.
? - Variable, requires site specific assessment.
N - Not significant.
(Source: Adapted from the *Byron Shire Urban Stormwater Management Plan*)
1. - "Low Density Residential" development refers to dual occupancies, dwelling houses, rural workers' dwellings, secondary dwellings, shop top housing comprising 2 or less dwellings and semi-detached dwellings.
2. - "Medium Density residential" development refers to attached dwellings, boarding houses, group homes, hostels, multi dwelling housing, residential flat buildings, seniors housing and shop top housing comprising 3 or more dwellings.

Table B3.2 – Pollutants and Retention Criteria

Pollutant / Issue	Retention Criteria
Litter	70% of average annual load greater than 5mm.
Coarse Sediment	80% of average annual load for particles 0.5mm or less.
Fine Particles	50% of average annual load for particles 0.1mm or less.
Total Phosphorous	45% of average annual load.
Total Nitrogen	45% of average annual load.
Hydrocarbons, motor fuels, oils & grease	90% of average annual load.

b) Applications for subdivisions and developments involving an area of land greater than 2,500m2 must provide measures to address the "key" pollutants in accordance with Table B3.2 for all stormwater flows up to 25% of the 1 year ARI peak flow from the development site.

c) Runoff from all areas (including roofs and paved areas) needs to be treated. Significant water quality improvements can be achieved by configuring a sequence of treatment measures (a 'treatment train'). Such measures may include roofwater tanks, infiltration devices, filtration & bio-retention devices, porous paving, grassed swales, better landscape practices, ponds & wetlands and stormwater tanks. The suitability of treatment measures will depend largely on site conditions. For example, infiltration devices are not suitable in areas with heavy clay soils and subsoils.

The attached site plan shows a gently sloping site, and stormwater will continue to be directed to the eastern absorption trench, via the Water Tanks to be fitted.
There will be no pollutants, litter, or sediment, as the water is just roof water.

2.9 LANDSCAPING – DCP 2014 Part B.9

The following landscape plantings will add to habitat value within the subject sites rural location, and assist in the development meeting DCP 2014 design guidelines, particularly in relation to screening, and shade within the parking area and about Rural Industry Building sites. (See Landscape Plan).
Landscape plantings propose native species with a proven track record, to improve the visual integrity of the site, and to achieve a broad habitat base within a rural fringe location.
Landscaping is proposed to thus effect privacy, visual softening, and broaden the habitat base of the area, as per. the attached plan.
The basic aims of these landscape plans are:-
1) The embellishment of the natural eco-base;
2) To create an environment of privacy for the residents;
3) The creation of usable spaces within the design;
4) The enhancement of the visual atmosphere of the site.
5) To provide a landscape design that is easy to maintain and construct.

LANDSCAPE DEVELOPMENT PLAN :
These landscape details have been prepared in conjunction with Mr. D. Sweet Ecologist, to meet the design requirements specified in Part B9 of DCP 2014.
To assure Council that the proposal meets the requirements of DCP 2014 part B9, the following checklist precedes the Landscape Plan details.

DCP 2014 - Part "B9"

PRESCRIPTIVE MEASURES	PROPOSALS COMPLIANCE WITH D.C.P.
B9.5 Dual Occupancies and Semi Detached Dwellings	Vegetation removal is limited pasture, with all

Objectives - Ensure high quality landscape and aesthetic environment for dual occupancies, and semi detached dwellings. **Performance Criteria** - provide high quality landscape that enhances amenity and function of development and a pleasant environment for residents. **Prescriptive Measures**	trees retained. These are to be protected through the construction phase by the erection of high visibility exclusion tape.
1: a) retention of suitable existing vegetation; b) screen planting to street frontages and driveway areas, to provide privacy between dwelling houses and around the boundaries of the site; c) provision of pleasant landscaped settings for the enjoyment of residents; d) planting selection that relates to building scale and mass. 2. Each dwelling minimum landscaped area of 90m2, excluding any area used for vehicle circulation or parking. At least 25% of the site must consist of deep soil areas.	Screening is proposed between the buildings, with private areas created through plantings to achieve windbreaks and micro-climates. Plantings assist in blending the building into the site, and the site into the local environment. Over 90% of the site consists of deep soil areas.
B9.3 General Landscaping Principles **Objectives** - Specify general landscape design principles **Performance Criteria** - Landscape Plans demonstrate consistency with following general principles:	**Requirement** set within DCP 2014 are complied with as follows:-
1. Landscape design for crime prevention and safety, comply with requirements of Chapter B11 Planning for Crime Prevention, and must minimise the potential for crime and vandalism. 2. Not to interfere with utilities and services 3. Or function and accessibility of underground or overhead services and facilities, including inspections pits/ meters. 4. Landscaping not interfere with the structural integrity of buildings and structures	1. Landscape Design maintains clear lines of sight between the access road and the proposed Rural Industry Buildings, thus meeting B11 Crime Prevention objectives. 2. & 3. All landscaping is located well clear of services within the site. 4. Landscaping is positioned to be well clear of foundations, driveways and paths.
a) Trees to be planted 3 m from buildings. b) Consideration given to the size and spread of the tree when it is mature. Adequate space for branches and roots without interfering with building eaves, walls, concrete slabs, foundations, driveways, paths, retaining walls or other built structures.	Trees are located such that their mature height and spread will not detract from the integrity of assets, nor impede solar access.
5. Conserve and improve natural resources and biodiversity . Design must: a) retain and protect existing significant native vegetation on the site wherever possible; b) retain any trees or other vegetation of cultural or heritage significance; c) incorporate the retention of existing	5. Addition Plantings are proposed, and all significant vegetation is to be retained and protected from the development through the erection of exclusion tape during construction. Vegetation chosen within landscape plantings relates to the nearby coastal forests, and as such provides a planting schedule which mirrors off site habitat.

mature trees (with the exception of weed species) into the landscape design wherever possible; d) utilise plant species locally indigenous to the area (and preferably) sourced from the local area, in preference to exotic plant material, wherever practicable; e) Ensure that weed species are removed from the site and are not used in the landscape design; f) Incorporate compensatory plantings whenever significant native vegetation is removed or damaged; g) on larger land parcels, incorporate bushland restoration/ regeneration works in strategic areas to consolidate naturally occurring plant communities and assist in the remediation of damaged lands. Where a street or a locality has a specific character derived from existing vegetation, similar or compatible species are planted on the site (except where the existing species are undesirable weed species).	
6. Landscaping contributes to streetscape amenity and integrates development into landscape setting; endeavour to soften hard-surfacing, e.g. walls, car parks and pavements. Height of plants relate to the scale of the building(s).	6. Landscaping contributes to softening the bulk and scale of the proposed development, and ensures visual continuity with the revegetating character of the local area since recent urban development occurred.
7. Plant species are selected for long-term survival, minimal maintenance and visual interest . 8. Plant species used in landscaping must: a) be suited to prevailing site conditions (such as soil characteristics, sun, shade, wind, rainfall and drainage regimes) and require minimal maintenance; b) be hardy and long-lived; c) be predominantly locally indigenous species (sourced from the local area wherever practicable), in preference to exotic plant species; d) provide on-going visual interest through form, colour, texture, floral display and the like. Landscaping improves the microclimate in and around buildings and enhances the function of outdoor living spaces Landscaping must provide year-round shade, shelter and amenity to outdoor living areas and help to define the function of different outdoor spaces.	7. & 8. All species chosen relate to the nearby coastal forests and have been selected for their low maintenance and low water requirements. Form, shape, height and colour attributes of the plants proposed form an integral component of the design, which blends the building into the site, and the site into the local environment.
9. Landscaping of public and semi-public areas provides clearly defined pedestrian	9. Public and semi public areas within the site are clearly defined by paths and plantings.

pathways and assists with way-finding 10. The landscape design of public areas and semi-public spaces such as car parking areas and the frontages of commercial and industrial buildings must incorporate: a) pathways have a different surface finish and clearly differentiated from driveways; b) planting / design elements to aid drivers and pedestrians locate entry/ exit points; c) planting assist pedestrians find their way around safely & locate entry/exit points into the building(s). Adequate landscape buffers between incompatible landuses.	10. Industrial spaces proposed. Internal paths are of a different finish to driveways to achieve visual separation and pedestrian safety.
11. Landscaping complies with bushfire protection requirements Where the proposed development is located on land mapped as Bushfire Prone Land, landscaping around proposed buildings must comply with the current legislative requirements of the Rural Fires Act, 1997 in regards to measures required to protect the proposed development from bushfires. Further standards for landscape design specific to different types of development (e.g. multi-dwelling housing, business or industrial development) are included in the relevant Sections below.	11. Landscape plantings are kept well clear of the buildings external surfaces to optimise fire safety.

B9.12.2 - Roof Decks and Balconies **Objectives** enhance the visual amenity and appearance of rooftops and balconies.	N/A.
B9.12.3 Climate and Microclimate **Objectives** ensure design of developments and landscaped areas addresses climatic characteristics of area & site microclimate. **Performance Criteria** 1. Landscaping should be designed to enhance and reinforce positive climatic influences and minimise the impact of adverse climatic features. 2. Microclimate control aspects of landscaping must be designed to maximise comfortable environment, and take into account evergreen and deciduous species to ensure winter sun penetration and summer shade to buildings and outdoor open space/ recreation areas. . **Prescriptive Measures - I**n summer western elevations be protected from afternoon sun with trees of suitable mature height.	The form, shape, height and colour attributes of the plants proposed form an integral component of the design, which blends the building into the site, and the site into the local environment. This achieves an effective micro-climate about the buildings to improve rural amenity, and the health of the plants proposed.
B9.12.4 Existing Vegetation **Objectives** eco sustainability & optimise aesthetics by max retention of existing veg. **Performance Criteria** 1. Landscaping should retain, protect and enhance existing natural vegetation. 2. Vegetation retention must be considered at the initial stages of development design. Buildings, roads, parkland, or other components of a development must be located to retain maximum vegetation on a site. Design intent is important in the protection of significant vegetation. 3. Maximum advantage should be taken of existing mature trees and shrubs on the site. The retention adds an "established" effect and an immediate vertical dimension to the design & has ecological benefits. In addition, existing vegetation on a site may be significant for historical, aesthetic or environmental reasons and may be required to be retained by Council provisions. 4. Protection of existing vegetation during construction works – for example, fencing barriers and appropriate signage should be provided. Protect the root zone of those trees to be retained, by avoiding compaction of this area by construction vehicles, and by ensuring that any stockpiling of materials occurs well away from the drip line of the tree. 5. The effective use of vegetation on a site	The sites are cleared land covered in pasture. The proposed landscape plantings, ensure that the buildings will be well screened both within the site and from adjacent properties and the road such that the development is not visually dominant. Additional native plantings proposed. The landuse will thus not cause any adverse environmental impact, as new plantings will mirror species found within and adjacent to the site, and will positively add to the quality of the environment.

can also substantially reduce the landscaping costs of a development and should be considered in the design process.	
B9.12.5 Planting Size, Density and Species Objectives 1. ensure landscaping design is compatible with the scale and character of development. 2. ensure density of landscaping achieve long term & short term character of development. 3. promote landscape based on locally indigenous plant species and the natural, subtropical environment of the area. 4. promote sustainability - provision of edible species in appropriate locations.	Plants selected are to accord with the planting sizes recommended, i.e. Trees- 300mm minimum pot size. Large shrubs- 200mm minimum pot size Groundcovers- 140mm minimum pot size.
Performance Criteria 1. planting size, density & species dependent upon a number of factors, inc scale and nature of project, availability of planting stock and conditions in a development consent. Often follow-up planting is advantageous. 2. Landscape plan address size, density and species to achieve landscape design. **Prescriptive Measures** 1. following planting sizes are min required to achieve initial impact in the landscape design: 2. a) street and feature trees: 45 litre min. b) trees: 300mm minimum pot size c) large shrubs: 200mm minimum pot size d) groundcovers: 140mm minimum pot size Min 90% of plants used be locally indigenous. Species listed in the Native Species Planting Guide to Byron Shire (see Council website). 3. No species listed as undesirable in Ch B2 Preservation Trees & Other Vegetation shall be used in landscaping on any site. 4. Threatened species under the Threatened Species Conservation Act 1995 not be used for landscaping purposes unless the genetic provenance can be demonstrated in terms of locally sourced seed stock. 5. In new developments, consideration will be given to provision of dedicated areas for growing of vegetables, fruit trees etc as part of the landscaped areas.	
B9.13 Landscape Works and Maintenance **B9.13.1 Landscape Works Objectives** 1. To ensure the viability and survival of landscape and planting works. 2. To ensure survival and ongoing functioning of landscaping and planting. **Performance Criteria** Landscape areas shall be constructed and maintained in accordance with best practice landscape architecture or landscape design principles.	These requirements have been met. See landscape plan details in this section of the report.

In relation to compliance with Part B9 **of DCP 2014**, the following information is provided:

- No species of threatened native flora exist on site, and the site is currently devoid of significant natural vegetation stands which create an ecosystem, apart from isolated trees planted as part of the landscaping.
- Soil type is "Volcanic Soil, Clay and degraded rock", and as detailed on the plans, all planting holes will need to be deeply dug to approx. 400mm and soil mixed with a 50/50 mix of compost as part of the landscape design. Also mulch layers are proposed over planted areas to improve soil conditions, maintain soil moisture levels, increase micro-organism levels, and regulate soil temperature.
- As can be seen from the engineering plans, the plantings proposed are clear of overhead power lines and underground services within the road reserve.
- Landscape Specification details planting structure. "Over excavate each plant hole by at least twice the pot diameter and pot height".
  No deep plantings are required other than as specified, due to the nature of the imported soils.
  Spot levels are shown on plans, and as can be seen the site is relatively flat.
- Drainage achieved by adequate planter hole preparation and the intrinsic nature of the local soils at ground level, and via the soil profile and drainage created within planted areas.
- Location of species marked on annexed plans.
- A quote from contractors is being sought.

Maintenance Program - Provide and install plants, including but not limited to: Palms, Trees, Shrubs, and Under Story Plantings.
Fertiliser - Organic Life - 10 kg.
Mulch - Tea Tree Waste, Straw, or Chipped tree waste - 20 cubic meters.
Mulch to be applied 75 mm thick. N.B. plastic is NOT to be used beneath mulch as this interferes with air and water entering the soil and results in the death of soil fauna which are essential to the maintenance of healthy plants. After the placement and planting out of the plant material in all garden beds, spread mulch to an average depth of 75mm (+/- 10mm). Keep mulch away from the trunks to avoid rotting at ground level.
Stakes - 38 x 38 mm x 1.8 m. Hardwood - Total 10 - (Two per palm or tree over 1 meter high).
Plants requiring staking will be supported by loose hessian strips looped around the plant and connected to 2 stakes set in the ground 300 mm from the plant. This will enable the young tree to sway slightly in the wind which is important as it stimulates root growth and ensures that the tree has greater stability when the stakes are later removed.
Planting procedure -
Thoroughly soak the plant before planting; Clear mulch 500-1000mm around hole for replacement after planting.
Over excavate each plant hole by at least twice pot diameter & height; If the soil is very dry fill with water and allow to drain completely. Fertilise at the rates recommended by manufacturer:
Place the fertiliser in the bottom of the hole and cover with soil to ensure there is no contact between the roots and fertiliser.
Place the plant into the hole and backfill with approved garden soil free from weeds, stones, clods of sub soil and other extraneous matter.
Set plants plumb & level with adjacent soil - ensure no soil placed against stem of root crown.
Form a "bowl" around the plant to hold at least 10 litres of water.
Remove the plant label from the trunk of the plant. Tie to the stake (if available) or leave visible in the adjacent earth.

Related Work - Co-ordinate and co-operate with the following trades: Site preparation; Irrigation systems.

Delivery, Handling and Storage - Arrange with Builder for dates of delivery and installation of specified materials, completion of installation and maintenance arrangements. Move carefully. Minimise damage to plants.
Project Conditions - Inspect drawings and visit site. Check aspects of required work and refer any discrepancy to Builder and/or Architect, for decision.
Warranty - Provide a warranty to the Proprietor via the Architect that materials which fail within a period of one year from the date of Practical Completion will be replaced without cost providing maintenance is carried out as contracted, where maintenance is not performed by this Contractor.
Maintenance - Provide an agreement form to be submitted to the owner detailing those plants and other material for which maintenance will be undertaken. Maintenance period should be at least two years, with weed maintenance to occur every six months.

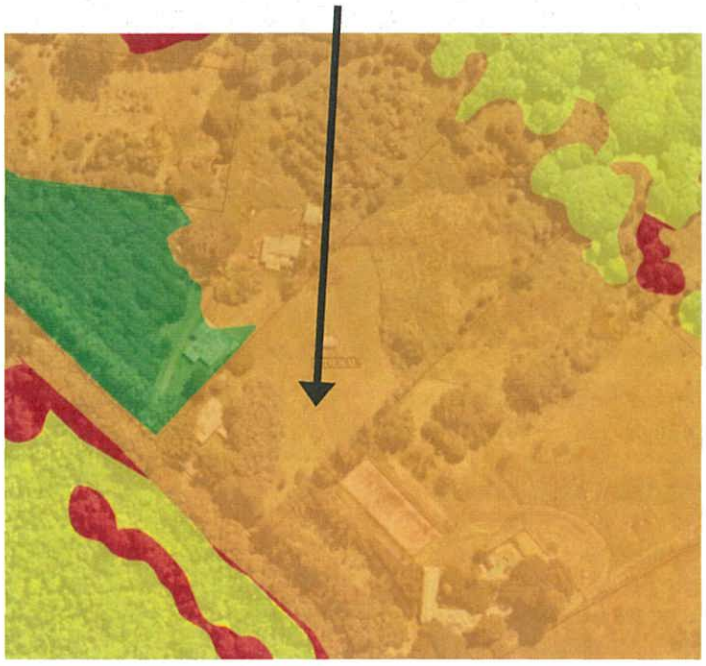
PLANTING SCHEDULE

Scientific Name	Common Name	No.	Symbol	Pot Size	Mature Ht.	Spread
PALMS						
Archonotophenix cunninghamiana	Bangalow Palm	12	A	4ltr	10m	2.5m
TREES (Car Park Shade Trees)						
Cupaniopsis archranodies	Tuckeroo	3	B	300mm	10m	5m
Melicope elleryana	Pink Euodia	3	C	300m	10m	5m
SHRUBS						
Acmena smithii (minor)	Creek Lilli Pilli	6	D	200mm	3m	2.5m
Cordyline congesta	Coastal Cordyline	10	E	100mm	3m	0.6m
Melaleuca thymilofolia	Myrtle	6	F	150mm	1.5m	1m
Westingria fruticose	Native Rosemary	5	G	100mm	1.6m	1.4m
SHRUBS & UNDERSTOREY						
Alpinia caerula	Native Ginger	20	H	75mm	1.2m	1m
Lomandra longifolia	Spiny-headed mat-rush	20	I	100mm	0.8m	0.8m
Melastroma affine	Native lasiandra	20	J	100mm	0.6m	0.6m

2.10 Planning for Bushfire 2019.

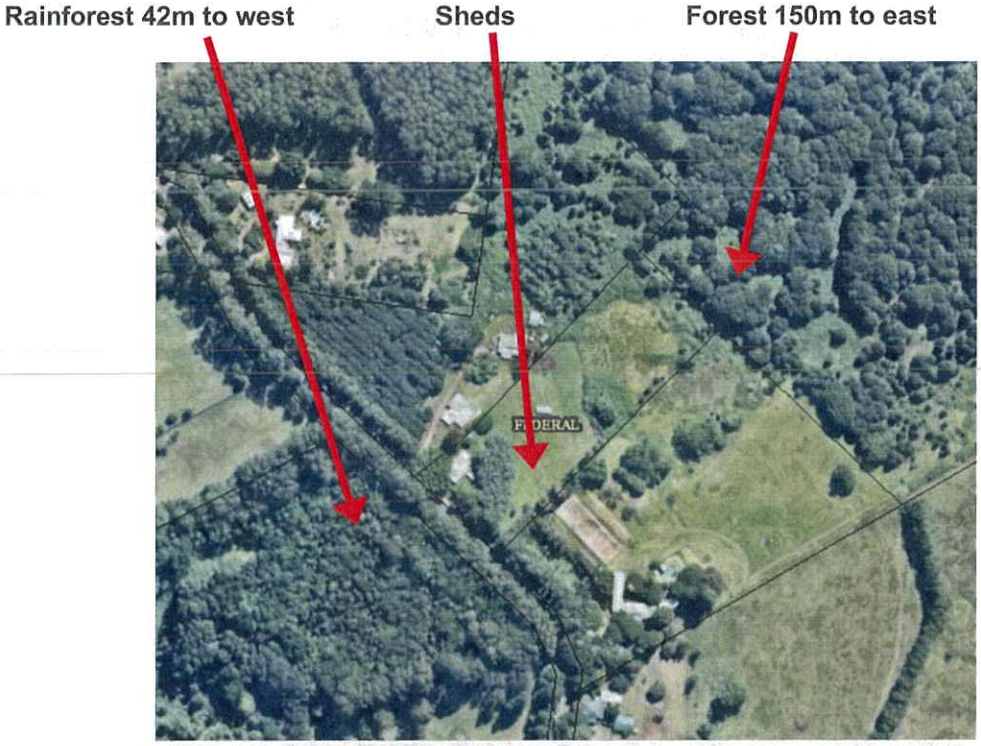
To assist in the assessment of this application by the RFS under the provisions of Planning for Bush Fires 2019, the following assessment is provided.
The use of Two Exempt Sheds as a Rural Industry on Lot 2 D.P. 735538 No 736 Federal Drive Federal, occurs on a site that is unlikely to come under severe bush fire risk due to the cleared nature of the site and the buffer the northern, western, eastern and southern managed lands provide.
Rainforest is located off site, down slope 42m to the west, and Forest is located down slope 150m to the east, and with unmanaged Grassland 40m down slope.
This low risk situation is further aided by the close proximity of the site to the Federal Rural Fire Station, the fact that tank water is connected, and it is a high rainfall area.

Use of Two Exempt Sheds as a Rural Industry.
Lot 2 D.P. 735538 No 736 Federal Drive Federal



Vegetation
The vegetation has been assessed over a distance of 140 m from the two shed, back to existing bush vegetation both on and off site, in all directions in accordance with section A1.12.3 of *Planning for Bushfire Protection*.
The site is adjacent to managed rural lands.

Use of Two Exempt Sheds as a Rural Industry.
Lot 2 D.P. 735538 No 736 Federal Drive Federal



Slope Based on the site inspection, the slope of the land over a distance of 100 m from the indicative building lines in all directions has been assessed. In accordance with *Planning for Bushfire Protection*, the slope has been assessed based on the gradient that will most significantly influence the fire behaviour of the site. The site is flat land.

Asset Protection Zone The Asset Protection Zone (APZ) acts as a buffer zone between the development and the hazard. The primary purpose of an APZ is to ensure that a progressive reduction of bushfire fuels occurs between the bushfire hazard and any habitable structures. The APZ consists of an Inner Protection Area (IPA) and an Outer Protection Area (OPA). Table A1.12.3, within *Planning for Bushfire Protection*, specify the minimum APZ required in bushfire-prone areas, in this instance with a FDI 80 Fire Area provision relevant to all calculations. Based upon the foregoing assessment of vegetation and slopes the following APZ's would be required from Table A1.12.3.

Shed (Industrial Development)

Site Aspect	Hazard/Veg within 140m	Predominant Vegetation Class	Average Slope of Land	Recommended Width of Asset Protection Zone
North	Managed	Managed	Across	No APZ. BAL Zero
South	Managed	Managed	Across Slope	No APZ. BAL Zero
East	Managed 40m then Grassland	Grassland	Down slope	12m APZ required. 40m provided. BAL 12.5
West	Managed 42m then Rainforest	Rainforest	Down slope	15m APZ required. 42m provided. BAL 12.5

Level of Construction
Planning for Bushfire Protection allow the determination of the relevant level of construction in accordance with AS 3959-1999: *Construction of Buildings in Bushfire-Prone Areas.* Based upon the assessment of this report taking into account the vegetation type, slope and available APZ this development's category of Bushfire Attack is Low. Despite this the sheds do not need to meet specific construction standards, as managed lands are to be achieved about the building, thus achieving a defendable space.
At a minimum Aluminium Screens should be fitted to Windows and a 10,000 litre Static Water Supply with a 35mm Storz Outlet should be located proximate to the sheds and within 4m of the access driveway to provide the RFS with a Water Source should the buildings need to be protected, or a fire controlled.

Fire Fighting Personnel Access
Public Road Access Access is provided to the Site via sealed public road, Federal Drive is capable of supporting fully loaded fire fighting vehicles.
Property Access Property Access will be directly from Federal Drive. The access road will comply with the requirements of Appendix 3, Property Access Roads of *Planning for Bushfire Protection 2019.*
Electricity Supply transmission lines have been installed underground.
Gas Reticulated or bottled gas shall be installed and maintained in accordance with AS/NZS 1596-2002: *Storage and Handling of LP Gas* and the requirements of the relevant authorities. If gas cylinders are to be kept close to buildings, the release valve must be directed away from the building and away from any hazardous materials such as firewood, so that it does not act as a catalyst to combustion.
Water Supply 10,000 litre Static Water Supply with a 35mm Storz Outlet should be located proximate to the sheds and within 4m of the access driveway to provide the RFS with a Water Source should the buildings need to be protected, or a fire controlled.

Recommendations
Based on my site inspection and assessment, the following recommendations would be required for future development of Rural Industry Sheds:
APZ's be maintained in accordance with this report:
If any trees are to be located within the envisaged APZs, this is considered acceptable, providing the following conditions are met:
Vegetation is not to touch or overhang buildings (canopy vegetation must not be within 2 metres of any building);
Vegetation is not species that retain dead material or deposit excessive quantities of ground fuel in a short period or in a danger period; and
Vegetation is located far enough away from sheds so that it will not ignite the sheds by direct flame contact or radiant heat emission.
Woodpiles, combustible material storage sheds, large areas/quantities of garden mulch and stacked flammable building materials should not be located within IPA of buildings;

The sheds do not need to meet specific construction standards, however it is recommended that Aluminium Screens be fitted to Windows to minimise bushfire threat.

Reticulated or bottled gas shall be installed and maintained in accordance with AS/NZS 1596-2002: *Storage and Handling of LP Gas* and the requirements of the relevant authorities.

Summary : Viewed in total, the proposed Rural Industry Sheds will in no way prejudice the proper future planning of the area, or the development of adjoining land, as they accord with Zoning, Zone Objective, D.C.P., and Planning for Bushfire 2019 requirements.

2.11 State Environmental Planning Policy (Resilience & Hazards - Coastal Management Areas) 2021

Use of Two Exempt Sheds as a Rural Industry. Lot 2 D.P. 735538 No 736 Federal Drive Federal

The property sits outside mapped areas for :-
Division 1 Coastal wetlands and littoral rainforests area
2.7 Development on certain land within coastal wetlands and littoral rainforests area
2.8 Development on land in proximity to coastal wetlands or littoral rainforest
Division 2 Coastal vulnerability area
2.9 Development on land within the coastal vulnerability area
Division 3 Coastal environment area
2.10 Development on land within the coastal environment area
Division 4 Coastal use area
2.11 Development on land within the coastal use area
Division 5 General
2.12 Development in coastal zone generally—development not to increase risk of coastal hazards
2.13 Development in coastal zone generally—coastal management programs to be considered
2.14 Other development controls not affected
2.15 Hierarchy of development controls if overlapping

Conclusion
The subject development is to take place on land not mapped under SEPP (Resilience & Hazard - Coastal Management Areas) 2021, as such no formal assessment is required under this State Policy.

3 Sec. 4.15(b) IMPACT ON ENVIRONMENT

The proposed use of Two Exempt Sheds as a Rural Industry on Lot 2 D.P. 735538 No 736 Federal Drive Federal, occurs within the existing cleared areas of the site, within two sheds, one completed and one under construction.
The flora species specifically targeted in the study of the site found that the development did not impact upon threatened species.

As the proposed two Rural Industry Sheds mirror the planned landuse character of the area, and as the works associated with the proposed development have taken place on existing cleared areas, and the driveway and parking and waste water areas are also cleared.
Based on this, the sensitive development proposed will have a minimal impact on the environment of the area.
It is there fore considered that the proposed development will have no adverse impact on the environment of the area, and the development areas within the property have no regional habitat significance.
No native trees will be affected, particularly as cleared land exists about the existing buildings.

The property is gently sloping land, located within the catchment of the Wilsons River.
The development site constitutes developed rural grazing land.
In addition to this, existing native plantings are retained, and additional native plantings are proposed.
With this in mind all efforts have been made within the design to ensure that the development has the least impact possible on this area, and run off is to be controlled.

3.1. Impact On Cultural And Heritage Significance Of The Land. Aboriginal Sites

Previous Shire Studies have found no aboriginal sites within the development area of the property, or on adjacent lands.
This is confirmed by a check with the Tweed - Byron Aboriginal Land Council.
The survey of the area undertaken as part of this study found no buildings or sites of other historic or cultural significance.
The flora species specifically targeted in the study of the site found that the development did not impact upon threatened species over this cleared and already developed site.
Native species planted about are to be retained. This will effect screening, visual softening, and the broadening of the habitat base of the area.

These hinterland areas of the Byron Shire, proximate to local ridges and waterways could have been a path of travel for aboriginal people, although no sites are mapped proximate to this property.
These physical characteristics indicate the potential for Aboriginal cultural heritage values.
The Aboriginal Heritage Information Management System was contacted for specific comment on the proposal, however the response indicates no know Aboriginal Heritage proximate to the site.
Despite this, all development is restricted to existing cleared areas, which are the site of historic cattle grazing.
Local residents in the area have stated that no aboriginal objects have ever been sighted in the disturbed former grazing lands on site, to which the development is restricted.
No caves exist on site, and water holes are possible sites where aboriginal people many have visited pre white invasion, however these areas are not to be changed or modified or impacted.
In any case it is proposed to carry out all works on site following the exercise of caution and to proceed with care, and with awareness of the legislative requirements of the NPW Act 1974 relating to 'harm' of an Aboriginal object.

The site is a Significantly Altered Environment, the land has always only been used for cattle, and that until recent years it was completely cleared land. On this basis it is unlikely to retain previous aboriginal usage characteristics, other than the likely use of the ridge upon which the development sits, as a pathway through the area.

No disturbance of the distant creek bank areas is proposed, and as such the RISK of DISTURBANCE is LOW.
On this basis there is no requirement for an Aboriginal cultural heritage assessment.
However, the property owners are advised to exercise due diligence as the requirements under the NPW Act to avoid "harm" continue to apply.
It is noted that any discovery of objects or human remains requires immediate stop work procedures.

AHIMS Web Services (AWS)
Search Result

Your Ref/PO Number : Clunes
Client Service ID : 733299

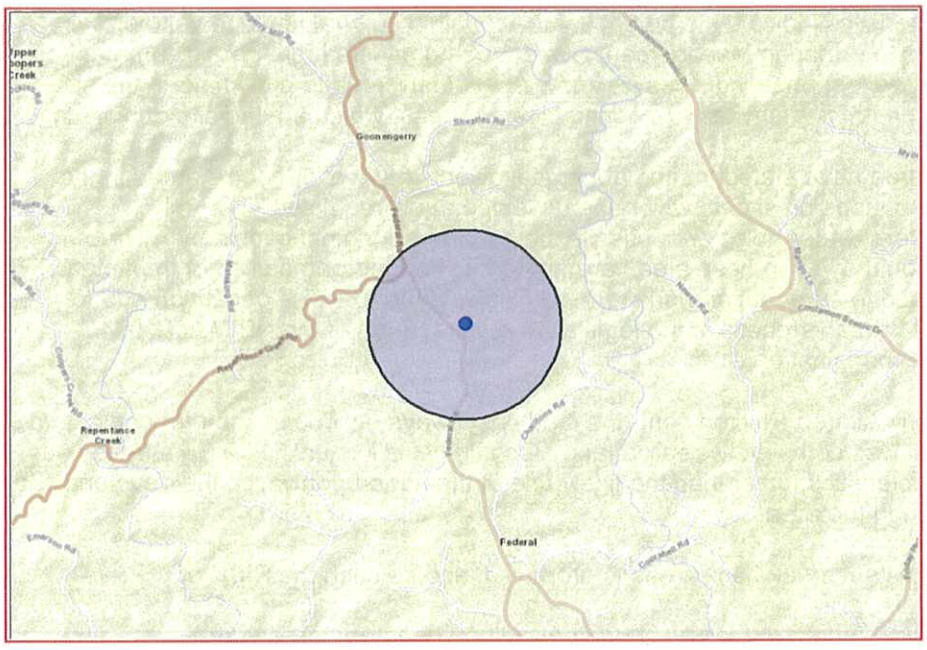
Christopher Lonergan
P.O. Box 2585
Byron Bay New South Wales 2481
Attention: Christopher Lonergan
Email: chris@byronbayplanning.com.au

Date: 17 November 2022

Dear Sir or Madam:

AHIMS Web Service search for the following area at Address : 736 FEDERAL DRIVE FEDERAL 2480 with a Buffer of 1000 meters, conducted by Christopher Lonergan on 17 November 2022.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

3.2 EPA Act Sec 5.5 Duty to consider environmental impact

(1) For the purpose of attaining the objects of this Act relating to the protection and enhancement of the environment, a determining authority in its consideration of an activity shall, notwithstanding any other provisions of this Act or the provisions of any other Act or of any instrument made under this or any other Act, examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity.
As stated above, the native species are to be retained to effect screening, visual softening, and the broadening of the habitat base of the area, with additional native plantings proposed.

On this basis the proposal results in development meets the Sec 5.5 requirements of the EPA Act in that it results in the "protection and enhancement of the environment".

3.3 Biodiversity Conservation Regulation 2017

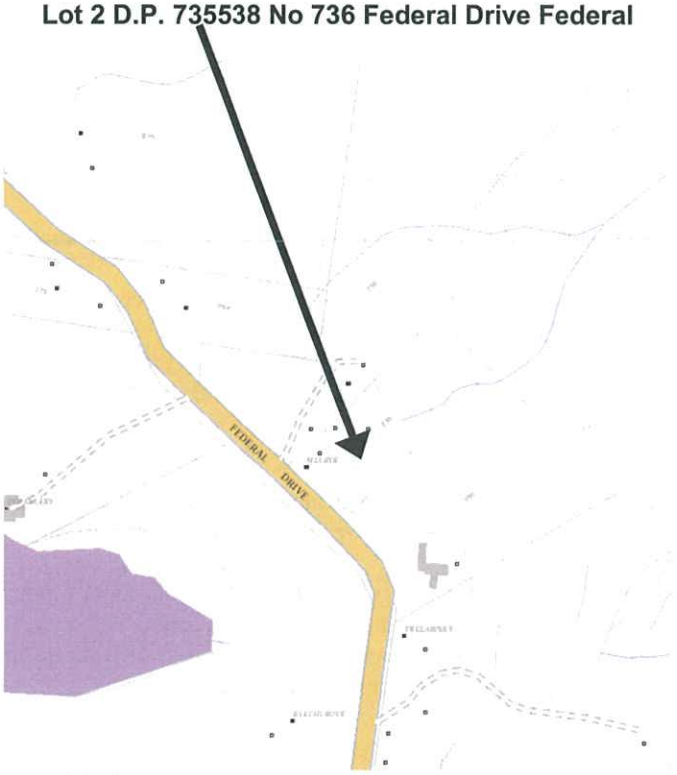
The Biodiversity Conservation Regulation 2017 sets out threshold levels for when the Biodiversity Offsets Scheme will be triggered. The threshold has two elements:

- Whether the amount of native vegetation being cleared exceeds a threshold area, or
- Whether the impacts occur on an area mapped on the Biodiversity Values map published by the Minister for the Environment

If clearing and other impacts exceeds either trigger, the Biodiversity Offset Scheme applies to the proposed development including biodiversity impacts prescribed by clause 6.1 of the Biodiversity Regulation 2017.
If the Biodiversity offsets scheme is not triggered, the test of significance detailed in section 7.3 of the Biodiversity Conservation Act 2016 must be used to determine whether a local development is likely to significantly affect threatened species.

As can be seen from the following extract from the Biodiversity Values map, as published by the Minister for the Environment, the proposed development sits outside the areas mapped on the Biodiversity Values map.

Lot 2 D.P. 735538 No 736 Federal Drive Federal



Use of Two Exempt Sheds as a Rural Industry. Lot 2 D.P. 735538 No 736 Federal Drive Federal

3.3.1 Sec 7.3 of the Biodiversity Conservation Act 2016

Sec 7.3 Test for determining whether proposed development or activity likely to significantly affect threatened species or ecological communities, or their habitats

(1) The following is to be taken into account for the purposes of determining whether a proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats:
(a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,

In these areas of the Shire, the following Endangered or rare species could occur:

Endangered or rare tree species:-	
Acianthus amplexicaulis; Acronychia littoralis	(Scented Acronychia)
Amorphospermum whiteii	(Rusty Plum)
Archidendron muellerianum	(Veiny Lace Flower)
Cordyline congesta; Cryptocarya foetida	(Stinking cryptocarya)
Endiandra hayseii	(Velvet Laurel)
Syzygium hodgkinsoniae	(Red Lilli Pilli)
Syzygium moorei	(Durobby)
Thozetia racemosa; Randia moorei	(Spiny Gardenia)
Endangered or rare Bat Species:-	
Chalinolobus nigrogriseus	(Whorie Bat)
Miniopterus australis	(Mini Bent Wing Bat)
Nyctophilus bifax	(Small Cave Bat)
Endangered or rare animal Species:-	
Phascolarctos cinereus	(Koala)
Potorous tridactylus	(Potoroo)

Threatened species were not identified on this site, and the cleared nature of the site, and the retention of native plantings as proposed, plus the additional native plantings proposed, ensures minimisation of impact.
In general the habitat contained on site is not one conducive to the habitat needs of threatened species, particularly given its small size, disturbed nature, and residential RU1 Zone location.

(b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:
(i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or
(ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,
As previously indicated, no habitat is to be removed, and the native species retained within landscape plantings proposed, effect screening, visual softening, and the broadening of the habitat base of the area.

(c) in relation to the habitat of a threatened species or ecological community:
(i) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and
(ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and
(iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality,

Due to there being no native trees to be removed, and with additional plantings proposed, then no habitat areas in the district will become isolated from interconnecting or proximate areas of habitat for a threatened species, population or ecological communities.
The native landscape plantings retained and proposed will effect screening, visual softening, and result in the broadening of the habitat base of the area.

(d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly),
As detailed, no critical habitat will be affected.

(e) whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.
The proposed use of the sheds for a Rural Industry, takes place on the cleared, already developed, and grossly disturbed areas of the site.
The native landscape plantings retained and proposed will effect screening, visual softening, and result in the broadening of the habitat base of the area.
It is thus considered that the development will not be a threatening development or activity.

(2) The Minister may, by order published in the Gazette with the concurrence of the Minister for Planning, issue guidelines relating to the determination of whether a proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats. Any such guidelines may include consideration of the implementation of strategies under the Biodiversity Conservation Program.
In this instance no Ministerial order has been issued in relation to the proposed development, and to this end the proposal is not considered to be one which will impact on any declared area of outstanding biodiversity value.

3.4 IMPACT ON FLORA AND FAUNA

The proposed development of the site will not adversely impact upon the habitat potential of the area provided existing vegetation bands are retained.
Plant Species:- Only one major plant community exists within the site.
COMMUNITY 1 - Grassland.
Structure: Generally close cover of various grass species with occasional landscape plantings and isolated regrowth, particularly in the east. These are to remain unaffected and protected by the proposed development.
Habitat: Generally sloping grass land which covers the site.
Distribution: All of the property.
Grasses- Mostly Couch and Carpet Grass.

FAUNA :-
The areas of regrowth in tree stands off site to the west and east provide areas of local and regional habitat significance.
Bird and mammal populations in this area consist of native and introduced species frequenting tree stands.
Mammal, Reptile, Bird and Bat Species:-
The study area was traversed on foot, with fauna identified by tracks, scats, and visual sighting.
REPTILES A number of reptiles were sighted on and proximate to the site :-
Skinks:- Lampropholis delicata (Common Garden Skink)
Snakes (previously sighted in area by local land owners):-

Demansia psamophis (Yellow Faced Whip Snake)
Dewrelapinis punctulatus (Green Tree Snake).
Morelia spiloties (Carpet Snake)

AMPHIBIANS

Litoria caerulea (Green Tree Frog)
Litoria spp. (Striped Marsh Frog)
Bufo marinus (Cane Toad)

BIRDS

Of the numerous birds which could be heard throughout the trees the following were sighted or identified by call:

Ardea garzetta (Little Egret)
Cracticus torquatus (Grey Butcher-Bird)
Dacelo novaeguineae (Kookaburra)
Gymnorhina tibicen hypoleuca (Magpie)
Lichmera indistincta (Brown Honeyeater)
Malurus cyaneus (Superb Blue Wren)
Malurus melanocephalus (Red-backed Fairy-Wren)
Podargus strigoides (Tawny Frogmouth)
Rhipidura leucophrys (Willie Wagtail)
Strepera graculina (Pied Currawong)

NATIVE MAMMALS

Native Mammals not identified on site.

Although relatively small, the property does support a diversity of common wildlife. The abundance of this wildlife is a function of the sites' location close to regrowth forest to the west and east of the site.

3.5 S.E.P.P. (Biodiversity and Conservation) 2021.

9 Development assessment process—no approved koala plan of management for land

(1) This clause applies to land to which this Policy applies if the land—
(a) is identified on the *Koala Development Application Map*, and
(b) has an area of at least 1 hectare (including adjoining land within the same ownership), and
(c) does not have an approved koala plan of management applying to the land.
(2) Before a council may grant consent to a development application for consent to carry out development on the land, the council must take into account—
(a) the requirements of the Guideline, or
(b) information, prepared by a suitably qualified and experienced person in accordance with the Guideline, provided by the applicant to the council demonstrating that—
(i) the land does not include any trees belonging to the feed tree species listed in Schedule 2 for the relevant koala management area, or
(ii) the land is not core koala habitat.

The property only has an area of approximately 1.9ha. All trees on site are to be retained, including isolated eucalypt species found within on site plantings. The site is not core Koala Habitat, and it is not covered by a Koala Plan of Management.

Koala Habitat Protection Guideline.

1. Understand and identify koala habitat values including landscape connectivity (such as habitat extent and habitat linking areas).

Core Koala Habitat means—
(a) an area of land where koalas are present, or

(b) an area of land— (i) which has been assessed by a suitably qualified and experienced person in accordance with the Guideline as being highly suitable koala habitat, and (ii) where koalas have been recorded as being present in the previous 18 years

Few Koala food trees existing in the site, however none are to be removed, and no Koala visitation to the site is evident on the trees.
The proposed Rural Industry will not require the removal of any koala food trees, and Koala Food trees represent less than 1% of the tree species on this site, which is dominated by Camphor Laurel, Ornamental Exotic Trees and numerous Rainforest trees.

2. Avoid inappropriate land uses or intensifying land uses in koala habitat areas through appropriate landscape planning and site selection.

The proposed Rural Industry is located on a totally cleared and already developed section of the site, well removed from the major vegetation areas in the centre of the site.
As stated all existing trees, including Koala Food Trees are to be retained within the site.

3. Encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas.

The spatial isolation of the Rural Industry from Koala Habitat, and the retention of all existing Koala Food, Rainforest, and Ornamental Trees on site, ensures the proper conservation and management of areas of natural vegetation that provide habitat for koalas.

4. Minimise potential impacts to koalas and their habitat through design that avoids fragmentation or direct loss of koala habitat, and maintains the function of the koala habitat.
e.g. Dog Attack; Vehicle Strike, Drowning in Pools, APZ, Impediments to movement.

The spatial isolation of the Rural Industry from Koala Habitat, and the retention of all existing Koala Food, Rainforest, and Ornamental Trees on site, ensures the proposal minimises the potential adverse impacts on koalas and their habitat through a design that avoids fragmentation or direct loss of koala habitat, and maintains the function of the koala habitat.

5. Implement best practice measures to manage identified threats to koalas and their habitat.

The isolated Koala food trees that have been identified on site, are not impacted by the Rural Industry, in the cleared S.W. development areas.
All existing Koala food trees are to be retained by the owners, thus maintaining Koala Food Trees within the property.

6. Use compensatory (i.e., offsetting) measures only where they can be shown to meet the aim of the SEPP.

As stated above, all Koala food trees identified on site are to be retained, thus maintaining Koala Food Trees within the property.

7. Use adaptive management strategies to monitor, evaluate and deliver appropriate planning outcomes for koalas in their local setting.

Current habitat restoration plans include regular weed management activities.
These can include the monitoring and evaluation of Koala habitat trees within the site.

The proposal therefore meets all of the aims and objectives of SEPP 2021 for Koalas.

3.6 S.E.P.P. (Resilience and Hazards) 2021 *CONTAMINATED LAND.*

Clause 4.6 Contamination and remediation to be considered in determining development application

(1) A consent authority must not consent to the carrying out of any development on land unless— (a) it has considered whether the land is contaminated, and (b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and (c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.

(2) Before determining an application for consent to carry out development that would involve a change of use on any of the land specified in subsection (4), the consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines.

(3) The applicant for development consent must carry out the investigation required by subsection (2) and must provide a report on it to the consent authority. The consent authority may require the applicant to carry out, and provide a report on, a detailed investigation (as referred to in the contaminated land planning guidelines) if it considers that the findings of the preliminary investigation warrant such an investigation.

(4) The land concerned is— (a) land that is within an investigation area, (b) land on which development for a purpose referred to in Table 1 to the contaminated land planning guidelines is being, or is known to have been, carried out, (c) to the extent to which it is proposed to carry out development on it for residential, educational, recreational or child care purposes, or for the purposes of a hospital—land— (i) in relation to which there is no knowledge (or incomplete knowledge) as to whether development for a purpose referred to in Table 1 to the contaminated land planning guidelines has been carried out, and

(ii) on which it would have been lawful to carry out such development during any period in respect of which there is no knowledge (or incomplete knowledge).

Table 1. Some Activities that may Cause Contamination • acid/alkali plant and formulation • agricultural/horticultural activities • airports • asbestos production and disposal • chemicals manufacture and formulation • defence works • drum re-conditioning works • dry cleaning establishments • electrical manufacturing (transformers) • electroplating and heat treatment premises • engine works • explosives industry • gas works • iron and steel works • landfill sites • metal treatment • mining and extractive industries • oil production and storage • paint formulation and manufacture • pesticide manufacture and formulation • power stations • railway yards • scrap yards • service stations • sheep and cattle dips • smelting and refining • tanning and associated trades • waste storage and treatment • wood preservation

The site of the Rural Industry is formerly cleared grazing land, has not been used for cropping, and was formally part of a large dairy farm dating back to the early 1900s. On this basis there is no historic use of this site which would have resulted in contamination, and as such no additional testing is required over the cleared land where the proposed adaptive reuse of to sheds as a Rural Industry is to take place.

The assessment satisfies Clauses 1(a) and 2 of SEPP **(Resilience and Hazards) 2021** ***C****ONTAMINATED LAND, as there is no likelyhood of contamination from the types of landuses listed in Table 1, and as such no further detailed assessment is required.*

3.7 IMPACT ON SCENIC QUALITY

The proposed Rural Industry maintains the existing sheds form and visual integrity, and as such does not alter the existing scenic amenity of the rural environment as the Rural Industry site sits well below the main ridge, and thus minimises the potential for visual impact.
Thus the Development will have no adverse impact on the visual amenity of the area.

3.8 IMPACT ON THE BUILT ENVIRONMENT

The proposed Rural Industry is a development which reflects the needs of the owner to optimise long term development of the land, minimise access impacts, optimise its RU1 Agricultural potential within the developed nature of the site, and meet the requirements of Councils L.E.P. and D.C.P.s.
This development will promote the proper future planning for the area due to the location of this development site close to the main service centres of Mullumbimby and Byron Bay.
Development is to occur on a site which is already cleared, and developed, and is spatially well removed from forest and habitat areas to the east and west.
The proposed Rural Industry maintains the existing broken elevations, providing a visually soft structure which minimise the bulk and scale of the development.
This reduction of visual impact is further aided by the Rural Indusrty being well setback from boundaries (See previous DCP 2014 assessment).

3.9 SOCIAL & ECONOMIC IMPACTS IN LOCALITY

The proposed development will, by virtue of it being the use of two existing sheds as a Rural Industry, provides a use totally compatible with the sites location in an established RU1 Zoning, and is of a low density and comparable scale, compatible with the rural character of the area.
The proposal assists in strengthening and broadening specific sectors of the local economy as the internal changes to the sheds will meet rural economic needs.
As such the proposed Rural Industry, which value adds primary produce, will have a positive economic, cultural and social effect within the Byron Shire.

3.10 RELATIONSHIP TO ADJOINING DEVELOPMENT

The proposed Rural Industry sheds are located in an area experiencing similar infill development, and as such is in keeping with the developed character of the general area.
The buildings are spatially well removed from adjacent dwellings to minimise amenity loss, and maintain privacy levels.
As such, the Rural Industry approval minimises the possibility of amenity loss.

4 Sec. 4.15(1)(c) SUITABILITY OF THE SITE

The Rural Industry achieves adequate unbuilt upon site area to maintain the character of this established rural area. The site is thus adequate in terms of it's ability to accommodate the use proposed, and as such the development in no way represents an over development of the site.
Also as previously stated, the site is located close to the main service centre of Mullumbimby, with the Village of Federal, proximate and to the south.
As such the overall social impact of the Rural Industry is positive. This is particularly so as it meets the objectives set by D.C.P. 2014.

4.1 PHYSICAL CONSTRAINTS

The site is developed rural land, above flood level and as detailed previously, the bushfire risk is minimal.

4.2 ACCESS AND PARKING

Parking for Industrial uses is required at the following rate :-

1 space per 100 m2 or two per factory unit which ever is the greater.

Shed 1 has a floor area of Ground Floor 91m2 and Mezzanine 63.2m2.
This would generally require 2 car spaces, however 5 are proposed.

Shed 2 has a floor area of Ground Floor 100m2 and Mezzanine 62.5m2.
This would generally require 2 car spaces, however 3 are proposed.

In addition to this, given that research and development staff are also to be housed in each building, traffic movements per day are to be minimised by Staff being serviced by a shuttle bus which will pick up and drop off staff.

Parking is to be provided at the following rate:- 5 Spaces for western building 1, (including a disabled accessible space), and 3 Spaces for eastern building 2.
An AS2890.2 compliant Loading Bay is to be provided adjacent to the western Rural Industry building, being 4m wide and 7m long. 12.5m Radii has been applied to the access corridor to permit the small delivery vehicles which will use it, to leave and enter the site in a forward direction.

These design features meet the minimum parking requirements set within DCP 2014, and are designed so that vehicles can turn on site and leave and enter the property in a forward direction. A single access driveway is proposed off Federal Drive (See Plans), and its location optimises sight distances and therefore traffic safety.

4.3 TRAFFIC

It is unlikely that the proposed Rural Industry will result in significant increase in vehicle movements, particularly have regard to the low scale of the development, the small number of deliveries to the site, and the fact that a mini bus will ferry works from local towns to the site each day.
The development will thus remain within the capacity of Federal Drive, which is well designed, and is easily capable of handling the traffic volume generated.
As such the proposed development will not adversely impact on traffic movement systems within the area. Good sight distance exists at the access point onto Federal Drive.

4.4 SERVICES

The changes result in an increase in service demands, and they can occur within the design capacity of the proposed On-Site Waste Water System (See Aldersons Report).
An existing Power line which crosses the site is currently being in the process of being put underground, and as such it will not effect a constraint on the proposed development of the site.

5 Sec. 4.15(1)(d) SUBMISSIONS UNDER ACT OR REGULATIONS

Not Applicable.

6 Sec. 4.15(1)(e) PUBLIC INTEREST

Due to the innocuous and complying nature of this landuse, and the fact that it is in keeping with the recent settlement pattern of the area, particularly as no tree removal will result, then no loss of local area amenity will occur.
The development blends into the built form of the area, and the site is located close to the local service centre of Mullumbimby, and the Village of Federal, thus making its location ideal for this style of development, which value adds to local agricultural produce.
Large spatial buffers exist between the proposed development and adjacent dwellings, thus ensuring minimal loss of residential amenity.

As such the overall social impact of this Rural Industry is positive.

7 MERIT CONSIDERATIONS

It is considered that the proposed Rural Industry will have no adverse impact on the environment of the area as native vegetation is retained, thus ensuring the visual softening and screening of the building.

In addition, the proposed adaptive reuse is designed such that the development is low key, provides broken roof lines and elevations, and blends with the planned residential development direction set for this RU1 Zoned land under LEP 2014, and DCP 2014.

The design is such that it is visually pleasing and meets or exceeds D.C.P. and L.E.P. Objective requirements, and prescriptive measurements.

The net result of these factors is that the Rural Industry effects a development of the site which has a positive social and environmental impact.

As already stated, the use is one which will not be a major traffic generator, more than adequate access and on site parking can be provided, and it will not be visually obtrusive.

CHRIS LONERGAN. B.A. (Town Planning U.N.E.)
29th. November 2022.