

DEVELOPMENT APPLICATION PLANNING REPORT

MATERIAL CHANGE OF USE FOR DWELLING AND ANCILLARY SHED



LOT 10, ANDREW RD, FOREST CREEK, QLD, 4873
FORMERLY DESCRIBED AS LOT 10 OF RP735853
FEBRUARY 2023.

1. Summary

1.1 Development application details

Proposed development:	Four Bedroom house 332m2 and Ancillary shed
Type of approval sought:	Development permit for Material change of use.
Site address:	Lot 10 Andrew Road, Forest Creek, QLD, 4873
Real property description:	Lot 10 of RP735853
Site area:	20720m2
Assessment manager:	Douglas Shire Council
Owner details:	Brenden Murphy and Lucie Feneul
Applicant details:	Brenden Murphy and Lucie Feneul

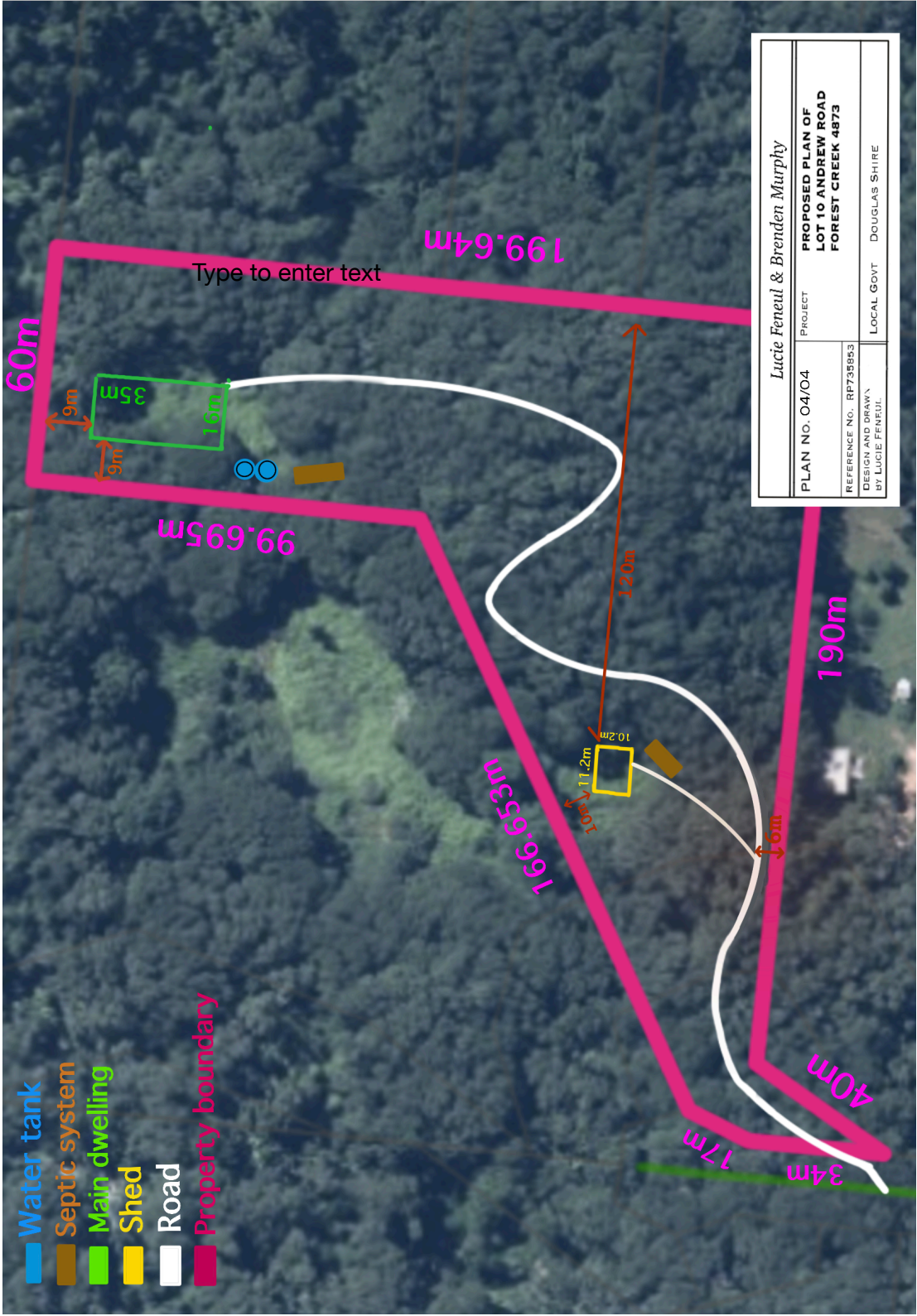
1.2 Planning instrument details

Planning scheme:	Douglas Shire Planning Scheme 2018
Zone:	Environmental Management
Level of assessment:	Code
Applicable overlays:	Acid Sulphate soils, Bushfire Hazard, Hillslopes, Landscape values, Landslide, Natural Areas, and Road Hierarchy
Applicable codes:	Acid Sulphate soils, Bushfire Hazard, Hillslopes, Landscape values, Landslide, Natural Areas, and Road Hierarchy

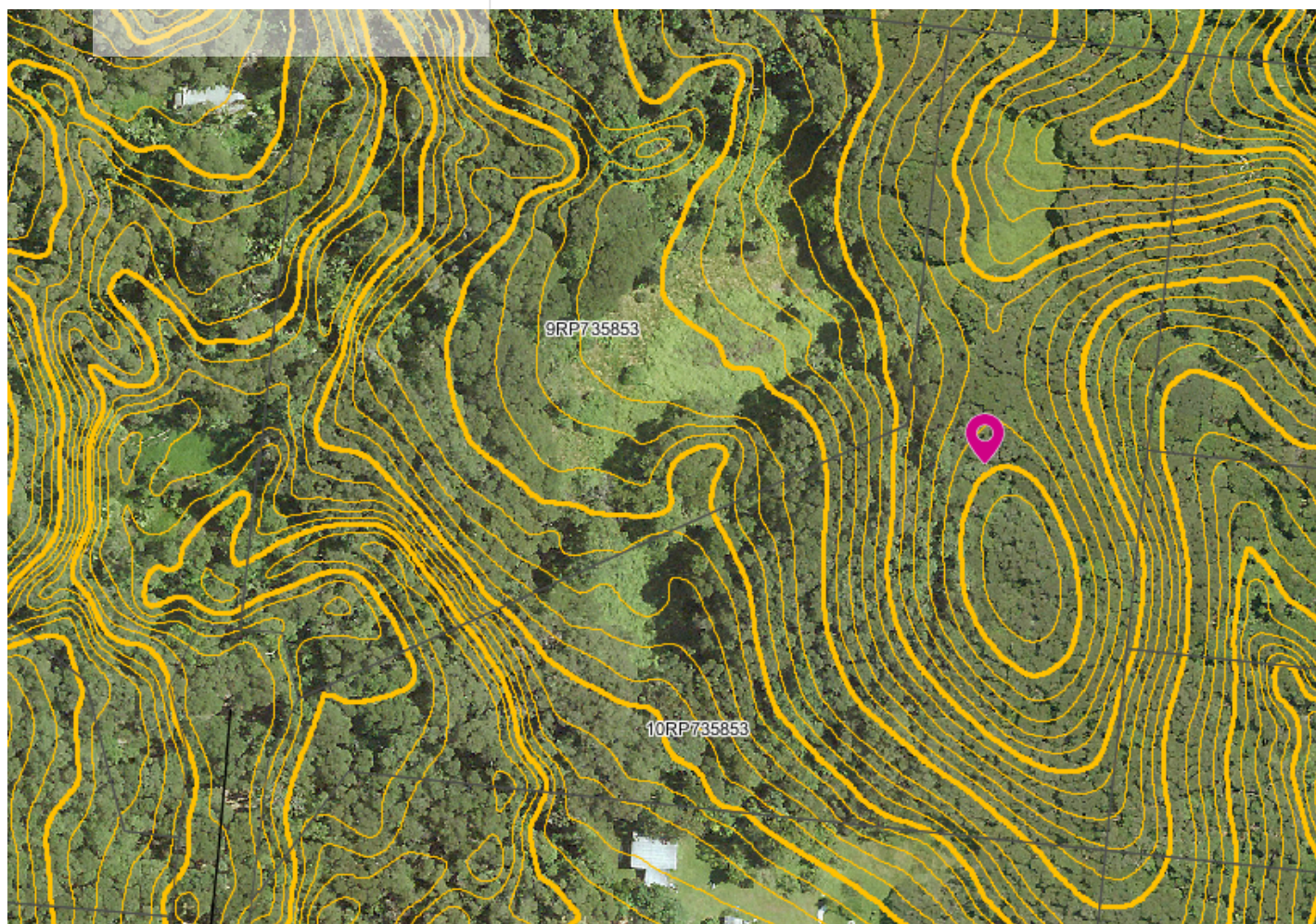
2. Site details

2.1. Site description

Site characteristic	Description
Existing land use	Vacant Land, Historic cattle grazing area - Regrowth occurring
Existing structures	Not Applicable
Frontage and access	51m of Road frontage to Andrew road. There is an original access road following the angled boundary that is largely over grown
Topography and views	Topography map attached. Site has various slopes and clearings, that in general are all on a slope facing SSW
Existing vegetation	<p>The site is recovering from being cleared and grazed aprox 30 years ago. There is a good foundation of Black Wattle and other Wattle species that are the pioneer species but they are getting to the end of the safe lifespan and are regenerating naturally, These trees provide all the cover as they are at heights @15m. Ferns, Wait a while and palms are dominant in the undergrowth. I have begun planting some native timbers to regenerate the original diversity which includes Figs, Cedar, Black Bean, Silky Oak and Mahogany as well as different ferns and coverings.</p> <p>The construction of the driveway will require some trees to be removed but will be minimised and replaced upon completion.</p>
Existing waterways	There is a small Creek that cuts through the easement at the front of the property



50 m





2.2. Surrounding land uses

Table 2: Surrounding land uses

Surrounding land uses	
North	To the North of the property is State owned protected bush
South	There is a House and fully cleared land to the south
East	There is a vacant block to the East which is regrowth forest
West	There is a vacant block to the East which is semi cleared regrowth forest



3. Proposed development details

The Proposal is for a Material Change of use for a 4 bedroom Dwelling to be constructed as well as an ancillary shed, These would be positioned on the existing clearings present on the Lot.

The house has 4 bedrooms and 2 bathrooms and because of the slope would be of a split level design so as to follow the contours of the land. The house design is of a tropical house design and thus has provision for good airflow, outdoor living areas and is positioned for the prevailing breeze for a passive solar advantage.

The House would have a provision for a water tank (minimum 10000l) to collect water from the roof. Both the Shed and Dwelling would have an Advanced Enviro - Septic Design sewage treatment set up to treat onsite waste.

Table 3: Summary of development aspects

Material change of use (If your development application does not include a material change of use, please delete this section)	
Building height	8.1m Split level
Gross floor area (GFA)	332m ²
Non GFA site use area	114m ²
Site coverage	Total GFA = 446m ² from 20720m ² = 2.15%
Car parking	3 x Car Spaces and turn around point will be maintained adjacent to the proposed dwelling
Site access	A Driveway is to be constructed from Andrew road utilising the historic entrance ramp off Andrew RD and will wind up through the property so to not require excessive cut and fill as well as maintaining minimum gradient
Proposed lots	1 x 4 Bedroom house and Ancillary shed
Proposed servicing arrangements	Council Bins would be collected from Andrew Rd
Building height	8.1m
Gross floor area (GFA)	446m ²
Building or operational work (If your development application does not include building or operational work, please delete this section)	
Building work	Construction of a Dwelling and Ancillary shed
Value of proposed work	500000 AUD
Operational work	Driveway and associated drains
Value of proposed work	50000

Table 8.2.1.3.a – Acid sulfate soils overlay code – assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For assessable development		
PO1 The extent and location of potential or actual acid sulfate soils is accurately identified.	AO1.1 No excavation or filling occurs on the site. or AO1.2 An acid sulfate soils investigation is undertaken. Note - Planning scheme policy SC 6.12– Potential and actual acid sulfate soils provides guidance on preparing an acid sulfate soils investigation.	Complies with AO1.2 An investigation will be carried out if required in relation to proposed driveway and necessary road based fill required, No excavation is planned in this area.

Performance outcomes	Acceptable outcomes	Applicant response
<p>P02 Development avoids disturbing potential acid sulfate soils or actual acid sulfate soils, or is managed to avoid or minimise the release of acid and metal contaminants.</p>	<p>AO2.1 The disturbance of potential acid sulfate soils or actual acid sulfate soils is avoided by:</p> <ul style="list-style-type: none"> (a) not excavating, or otherwise removing, soil or sediment identified as containing potential or actual acid sulfate soils; (b) not permanently or temporarily extracting groundwater that results in the aeration of previously saturated acid sulfate soils; (c) not undertaking filling that results in: <ul style="list-style-type: none"> (i) actual acid sulfate soils being moved below the water table; (ii) previously saturated acid sulfate soils being aerated. <p>or</p> <p>AO2.2 The disturbance of potential acid sulfate soils or actual acid sulfate soils is undertaken in accordance with an acid sulfate soils management plan and avoids the release of metal contaminants by:</p> <ul style="list-style-type: none"> (a) neutralising existing acidity and preventing the generation of acid and metal contaminants; (b) preventing the release of surface or groundwater flows containing acid and metal contaminants into the environment; (c) preventing the in situ oxidation of potential acid sulfate soils and actual acid sulfate soils through ground water level management; (d) appropriately treating acid sulfate soils before disposal occurs on or off site; (e) documenting strategies and reporting requirements in an acid sulfate soils environmental management plan. <p>Note - Planning scheme policy SC 6.12 – Acid sulfate soils provides guidance on preparing an acid sulfate soils management plan.</p>	<p>Complies with AO2.1 (a), (b), (c)</p>

Performance outcomes	Acceptable outcomes	Applicant response
PO3 No environmental harm is caused as a result of exposure to potential acid sulfate soils or actual acid sulfate soils.	AO3 No acceptable outcomes are prescribed.	Complies with PO3 No exposure is planned

Table 8.2.2.3.a – Bushfire hazard overlay code –assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For self-assessable and assessable development		
Compatible development		
PO1 A vulnerable use is not established or materially intensified within a bushfire hazard area (bushfire prone area) unless there is an overriding need or other exceptional circumstances. Note - See the end of this code for examples of vulnerable uses.	AO1 Vulnerable uses are not established or expanded. Note – Where, following site inspection and consultation with Council, it is clear that the mapping is in error in identifying a premises as being subject to a medium, high, very high bushfire hazard or potential impact buffer sub-category, Council may supply a letter exempting the need for a Bushfire Management Plan. Note – Where the assessment manager has not previously approved a Bushfire Management Plan (either by condition of a previous development approval), the development proponent will be expected to prepare such a plan. Note – Planning scheme policy SC6.9 - Natural hazards, provides a guide to the preparation of a Bushfire Management Plan.	Complies with PO1 No Vulnerable structures are proposed in the area identified.
PO2 Emergency services and uses providing community support services are able to function effectively during and immediately after a bushfire hazard event.	AO2 Emergency Services and uses providing community support services are not located in a bushfire hazard sub-category and have direct access to low hazard evacuation routes.	Complies with AO2
PO3 Development involving hazardous materials manufactured or stored in bulk is not located in bushfire hazard sub-category.	AO3 The manufacture or storage of hazardous material in bulk does not occur within bushfire hazard sub-category.	Not Applicable

Performance outcomes	Acceptable outcomes	Applicant response
Development design and separation from bushfire hazard – material change of use		
<p>PO10 Development is located and designed to ensure proposed buildings or building envelopes achieve a radiant heat flux level at any point on the building or envelope respectively, of:</p> <p>(a) 10kW/m² where involving a vulnerable use; or (b) 29kW/m² otherwise.</p> <p>The radiant heat flux level is achieved by separation unless this is not practically achievable.</p> <p>Note - The radiant heat levels and separation distances are to be established in accordance with method 2 set out in AS3959-2009.</p>	<p>AO10 Buildings or building envelopes are separated from hazardous vegetation by a distance that:</p> <p>(a) achieves a radiant heat flux level of at any point on the building or envelope respectively, of 10kW/m² for a vulnerable use or 29kW/m² otherwise; and (b) is contained wholly within the development site.</p> <p>Note - Where a separation distance is proposed to be achieved by utilising existing cleared developed areas external to the site, certainty must be established (through tenure or other means) that the land will remain cleared of hazardous vegetation.</p> <p>For staged developments, temporary separation distances, perimeter roads or fire trails may be absorbed as part of subsequent stages.</p> <p>Note - The achievement of a cleared separation distance may not be achievable where other provisions within the planning scheme require protection of certain ecological, slope, visual or character features or functions.</p>	<p>Complies with AO10</p>

Performance outcomes	Acceptable outcomes	Applicant response
<p>PO11 A formed, all weather fire trail is provided between the hazardous vegetation and the site boundary or building envelope, and is readily accessible at all times for the type of fire fighting vehicles servicing the area.</p> <p>However, a fire trail will not be required where it would not serve a practical fire management purpose.</p> <p>Note - Fire trails are unlikely to be required where a development site involves less than 2.5ha</p>	<p>AO11 Development sites are separated from hazardous vegetation by a public road or fire trail which has:</p> <ul style="list-style-type: none"> (a) a reserve or easement width of at least 20m; (b) a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation; (c) no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path; (d) a minimum of 4.8m vertical clearance; (e) turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; (f) a maximum gradient of 12.5%; (g) a cross fall of no greater than 10 degrees; (h) drainage and erosion control devices in accordance with the standards prescribed in a planning scheme policy; (i) vehicular access at each end which is connected to the public road network which is connected to the public road network at intervals of no more than 500m; (j) designated fire trail signage; (k) if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and (l) if a fire trail, has an access easement that is granted in favour of Council and Queensland Fire and Emergency Services. 	<p>Complies with AO11</p>
All development		

Performance outcomes	Acceptable outcomes	Applicant response
PO12 All premises are provided with vehicular access that enables safe evacuation for occupants and easy access by fire fighting appliances.	AO12 Private driveways: (a) do not exceed a length of 60m from the street to the building; (b) do not exceed a gradient of 12.5%; (c) have a minimum width of 3.5m; (d) have a minimum of 4.8m vertical clearance; (e) accommodate turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; and (f) serve no more than 3 dwellings or buildings.	Complies with PO12 Vehicular access is provided for fire fighting appliances and evacuation route

Performance outcomes	Acceptable outcomes	Applicant response
PO13 Development outside reticulated water supply areas includes a dedicated static supply that is available solely for fire fighting purposes and can be accessed by fire fighting appliances.	AO13 A water tank is provided within 10m of each building (other than a class 10 building) which: (a) is either below ground level or of non-flammable construction; (b) has a take off connection at a level that allows the following dedicated, static water supply to be left available for access by fire fighters: (i) 10,000l for residential buildings Note – A minimum of 7,500l is required in a tank and the extra 2,500l may be in the form of accessible swimming pools or dams. (ii) 45,000l for industrial buildings; and (iii) 20,000l for other buildings; (c) includes shielding of tanks and pumps in accordance with the relevant standards; (d) includes a hardstand area allowing medium rigid vehicle (15 tonne fire appliance) access within 6m of the tank; (e) is provided with fire brigade tank fittings – 50mm ball valve and male camlock coupling and, if underground, an access hole of 200mm (minimum) to accommodate suction lines; and (f) is clearly identified by directional signage provided at the street frontage.	Complies with AO13 Appropriate tanks are proposed

Performance outcomes	Acceptable outcomes	Applicant response
PO14 Landscaping does not increase the potential bushfire risk.	AO14 Landscaping uses species that are less likely to exacerbate a bushfire event, and does not increase fuel loads within separation areas.	Complies with AO14

Performance outcomes	Acceptable outcomes	Applicant response
PO15 The risk of bushfire and the need to mitigate that risk is balanced against other factors (such as but not limited to, biodiversity or scenic amenity).	AO15 Bushfire risk mitigation treatments do not have a significant impact on the natural environment or landscape character of the locality where this has value.	Complies with AO15

Note – 'Vulnerable activities' are those involving:

- (1) the accommodation or congregation of vulnerable sectors of the community such as child care centres, community care centre, educational establishments, detention facilities, hospitals, rooming accommodation, retirement facilities or residential care facilities; or
- (2) the provision of essential services including community uses, emergency services, utility installation, telecommunications facility, substations and major electricity infrastructure.

Table 6.2.4.3.a – Environmental management zone – assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For self-assessable and assessable development		
PO1 The height of all buildings and structures is in keeping with the natural characteristics of the site. Buildings and structures are low-rise and not unduly visible from external sites.	AO1.1 Buildings and structures are not more than 8.5 metres and two storeys in height. Note – Height is inclusive of the roof height. AO1.2 Buildings have a roof height not less than 2 metres.	Complies with AO1.1 The proposed building is 2 storey in part, (split level) and is 8.04m from ground Complies with AO1.2 Roof height at lowest is approx 2.1m
PO2 Buildings and structures are set back to: (a) maintain the natural character of the area; (b) achieve separation from neighbouring buildings and from road frontages.	AO2 Buildings and structures are set back not less than: (a) 40 metres from the frontage of a state controlled road; (b) 25 metres from the frontage to Cape Tribulation Road; (c) 6 metres from any other road; (d) 6 metres from the side and rear boundaries of the site.	Complies with AO2 Both proposed house and shed are 9m from boundaries and not near any road
For assessable development		
PO3 Development is consistent with the purpose of the Environmental management zone and protects the zone from the intrusion of inconsistent uses.	AO3 Inconsistent uses as identified in Table 6.2.4.3.b are not established in the Environmental management zone.	Complies with AO3 Proposal is for a house and shed
PO4 The site coverage of all buildings and structures and associated services do not have an adverse effect on the environmental or scenic values of the site.	PO4 No acceptable outcomes are prescribed.	Complies with PO4
PO5 Development is located, designed, operated and managed to respond to the characteristics, features and constraints of the site and its surrounds. Note - Planning scheme policy – Site assessments provides guidance on identifying the characteristics, features and constraints of a site and its surrounds.	AO5.1 Buildings, structures and associated access, infrastructure and private open space are sited: (a) within areas of the site which are already cleared; or (b) within areas of the site which are environmentally degraded; (c) to minimise additional vegetation clearing.	Complies with AO5.1 a - c The two existing clearings will be used for the proposed buildings as to minimise vegetation clearing Proposed Driveway is sited to minimise high value vegetation clearing.
	AO5.2 Buildings and structures and associated infrastructure are not located on slopes greater than 1 in 6 (16.6%) or on a ridgeline.	Does not Comply Available cleared land is on a slope greater than 1 in 6, But is designed to follow the contour so to minimise cut and fill.

Performance outcomes	Acceptable outcomes	Applicant response
PO6 Buildings and structures are responsive to steep slope through innovative construction techniques so as to: (a) maintain the geotechnical stability of slopes; (b) minimise cut and/or fill; (c) minimise the overall height of development.	AO6.1 Where development on land steeper than 1 in 6 (16.6%) cannot be avoided, development follows the natural contours of the land and single plane concrete slab on-ground methods of construction are not utilised. AO6.2 Access and vehicle manoeuvring and parking areas are constructed and maintained to: (a) minimise erosion; (b) minimise cut and fill; (c) follow the natural contours of the site.	Complies with AO6.1 Proposed building is split level and follows existing contours. Complies with AO6.2
PO7 The exterior finishes of buildings and structures are consistent with the surrounding natural environment.	PO7 The exterior finishes and colours of buildings and structures are non-reflective and are moderately dark to darker shades of grey, green, blue and brown or the development is not visible external to the site.	Complies with PO7 Proposed House and shed will be blended with the natural colours present and no reflective finishes will be utilised
PO8 Development does not adversely affect the amenity of the zone and adjoining land uses in terms of traffic, noise, dust, odour, lighting or other physical or environmental impacts.	AO8 No acceptable outcomes are prescribed.	Complies with PO8 It is considered that the construction of the proposed dwelling house will not affect the amenity of the adjoining land users. The proposed development is small scale and measures will be taken to control dust, noise etc as required.
PO9 The density of development ensures that the environmental and scenic amenity values of the site and surrounding area are not adversely affected.	AO9 The maximum residential density is one dwelling house per lot.	Complies to AO9
PO10 Lot reconfiguration results in no additional lots. Note - Boundary realignments to resolve encroachments and lot amalgamation are considered appropriate.	AO10 No acceptable outcomes are prescribed.	Not applicable

Table 8.2.5.3.a – Hillslopes overlay code –assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For self-assessable development		
PO1 The landscape character and visual amenity quality of hillslopes areas is retained to protect the scenic backdrop to the region.	AO1.1 Development is located on parts of the site that are not within the Hillslopes constraint sub-category as shown on the Hillslopes overlay Maps contained in schedule 2.	Does not Comply Ao1.1 Proposed dwelling is located on an area zoned affected by hill slope. This is a pre cleared site from many years ago and is not visible from any viewpoint, Structure will be clad in similar hues to existing environment that are not reflective and follow the hill slope by utilising stepped construction thus Complying with PO1
For assessable development		

Performance outcomes	Acceptable outcomes	Applicant response
<p>P02 The landscape character and visual amenity quality of hillslopes areas is retained to protect the scenic backdrop to the region.</p>	<p>AO2.1 Development does not occur on land with a gradient in excess of 1 in 6 (16.6%)</p> <p>or</p> <p>AO2.2 Where development on land steeper than 1 in 6 (16.6%) cannot be avoided, development follows the natural contours of the site.</p> <p>AO2.3 Access ways and driveways are:</p> <ul style="list-style-type: none"> (a) constructed with surface materials that blend with the surrounding environment; (b) landscaped with dense planting to minimise the visual impact of the construction; (c) provided with erosion control measures immediately after construction. <p>AO2.4 The clearing or disturbance of vegetation is limited to clearing and disturbance that:</p> <ul style="list-style-type: none"> (a) is necessary for the construction of driveways; (b) is necessary to contain the proposed development; (c) minimises canopy clearing or disturbance; (d) minimises riparian clearing or disturbance. <p>AO2.5 On land with slopes greater than 1 in 6 (16.6%) or greater, alternative construction methods to concrete slab on ground are utilised (i.e. split level or post and beam constructed buildings that minimise modification to the natural terrain of the land).</p> <p>AO2.6 Development does not alter the sky line.</p> <p>AO2.7 Buildings and structures:</p> <ul style="list-style-type: none"> (a) are finished predominantly in the following exterior colours or surfaces: (b) moderately dark to darker shades of olive green, brown, green, blue, or charcoal; or (c) moderately dark to darker 	<p>Complies with AO2.2 Development follows natural contours of the site</p> <p>Complies with AO2.3 Dense planting and erosion control measures are proposed for Access ways</p> <p>Complies with AO2.4 Driveway will follow the path of minimum impact to existing vegetation</p> <p>Complies with AO2.5 Split levels are proposed to follow natural contours of the site</p>

Performance outcomes	Acceptable outcomes	Applicant response
PO3 Excavation or filling does not have an adverse impact on the amenity, safety, stability or function of the site or adjoining premises through: <ul style="list-style-type: none"> (a) loss of privacy; (b) loss of access to sunlight; (c) intrusion of visual or overbearing impacts; (d) complex engineering solutions. 	AO3 Excavation or fill: <ul style="list-style-type: none"> (a) is not more than 1.2 metres in height for each batter or retaining wall; (b) is setback a minimum of 2 metres from property boundaries; (c) is stepped with a minimum 2 metre wide berm to incorporate landscaping in accordance with Planning scheme policy SC6.7 – Landscaping; (d) does not exceed a maximum of 3 batters and 3 berms (i.e. not greater than 3.6 metres in height) on any one lot. 	Complies with PO3

Performance outcomes	Acceptable outcomes	Applicant response
Lot reconfiguration		
PO4 For development that involves reconfiguring a lot, lot layout and design is responsive to the natural constraints of the land and each lot is capable of being used for its intended purpose.	AO4.1 The frontage and depth of all lots is of sufficient width to: <ul style="list-style-type: none"> (a) allow driveways to follow the natural contours of the site and not exceed a gradient of 1 in 6 (16.6%); (b) accommodate any changes in gradient between the road and lot within the lot boundary and not within the road reserve. AO4.2 Development does not create new lots containing land of greater than 1 in 6 (16.6%), except where a rectangular area of land of lesser grade is contained within the new lots to accommodate the intended land use, with the balance left in its natural state to the greatest extent possible. Note – The size of rectangular areas is outlined within each zone code. AO4.3 Development does not alter ridgelines. AO4.4 Lots are designed to ensure rooflines of future buildings and structures do not protrude above a ridgeline.	Complies with AO4.1 Driveway will follow natural contours to minimise gradient Complies to AO4.2 Complies with AO4.3 Complies with AO4.4

Table 8.2.6.3.z – Landscape values overlay code – assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For assessable development		
Development in a High landscape value area		
<p>PO1 Development within High landscape value areas identified on the Landscape values overlay maps contained in Schedule 2:</p> <p>(a) avoids detrimental impacts on the landscape values of forested skylines, visible hillslopes, ridgelines, the coastal foreshore or the shoreline of other water bodies through the loss of vegetation;</p> <p>(b) is effectively screened from view from a road, lookout or other public place by an existing natural landform or native vegetation, or will be effectively screened by native vegetation within 3 years of construction;</p>	<p>AO1.1 Buildings and structures are not more than 8.5 metres and two storeys in height.</p> <p>Note - Height is inclusive of roof height.</p> <p>AO1.2 Buildings and structures are setback not less than 50 metres from ridgelines or peaks.</p> <p>AO1.3 Development is screened from view from roads or other public places by an existing natural landform or an existing native vegetation buffer.</p>	<p>Complies with AO1.1 Buildings are less than 8.5m high</p> <p>Complies with AO1.2</p> <p>Complies with AO1.3 Natural existing vegetation shield the proposed buildings additional native plantings will improve the screening</p>

Performance outcomes	Acceptable outcomes	Applicant response
<p>(c) retains existing vegetation and incorporates new landscaping to enhance existing vegetation and visually soften built form elements;</p> <p>(d) incorporates development of a scale, design, height, position on site, construction materials and external finishes that are compatible with the landscape values of the locality;</p> <p>(e) avoids detrimental impacts on landscape values and excessive changes to the natural landform as a result of the location, position on site, scale, design, extent and alignment of earthworks, roads, driveways, retaining walls and other on-ground or in-ground infrastructure;</p> <p>(f) avoids detrimental impacts on landscape values and views as a result of the location, position on site, scale, design and alignment of telecommunications facilities, electricity towers, poles and lines and other tall infrastructure;</p> <p>(g) extractive industry operations are avoided.</p> <p>Note - A visual impact assessment is undertaken in accordance with Planning scheme policy SC6.6 – Landscape values in order to satisfy performance outcomes.</p>	<p>AO1.4 Where development on land steeper than 1 in 6 (16.6%) cannot be avoided: (a) development follows the natural; contours of the site; buildings are split level or suspended floor construction, or a combination of the two; lightweight materials are used to areas with suspended floors.</p> <p>Note - Examples of suitable lightweight materials include timber or fibre cement boards or sheeting for walls and factory treated metal sheeting for walls and roofs.</p> <p>AO1.5 The external features, walls and roofs of buildings and structures have a subdued and non-reflective palette.</p> <p>Note - Examples of suitable colours include shades of green, olive green, blue green, grey green, green blue, indigo, brown, blue grey, and green yellow.</p> <p>AO1.6 No clearing of native vegetation occurs on land with a slope greater than 1 in 6 (16.5%).</p> <p>AO1.7 Where for accommodation activities or reconfiguration of a lot in a High landscape value area, development demonstrates that the height, design, scale, positioning on-site, proposed construction materials and external finishes are compatible with the landscape values.</p> <p>Note - A visual impact assessment undertaken in accordance with Planning scheme policy SC6.6 – Landscape values may be required.</p> <p>AO1.8 Advertising devices do not occur.</p>	<p>Complies with AO1.4 Building is split level and follows existing contours</p> <p>Complies with AO1.5 Buildings to be clad in non reflective cladding in Hues similar to existing vegetation</p> <p>Complies to AO1.6 Buildings are proposed for existing site clearings</p> <p>Complies with AO1.7 Construction is compatible with the land scape values described</p> <p>Complies with AO1.8 No advertising will be used</p>
<p>PO5 Development is to maximise opportunities to maintain and/or enhance natural landscape values through the maintenance and restoration of vegetated buffers between development and coastal waters, where practical.</p> <p>Note – A visual impact assessment is undertaken in accordance with Planning scheme policy SC6.6 – Landscape values in satisfaction of a performance outcome.</p>	<p>AO5 No clearing of native vegetation is undertaken within a Coastal scenery area zone, except for exempt vegetation damage undertaken in accordance with the Vegetation management code</p>	

Table 8.2.7.3.a - Natural areas overlay code – assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For self-assessable and assessable development		
Protection of matters of environmental significance		
PO1 Development protects matters of environmental significance.	AO1.1 Development avoids significant impact on the relevant environmental values. or AO1.2 A report is prepared by an appropriately qualified person demonstrating to the satisfaction of the assessment manager, that the development site does not contain any matters of state and local environmental significance. or AO1.3 Development is located, designed and operated to mitigate significant impacts on environmental values. For example, a report certified by an appropriately qualified person demonstrating to the satisfaction of the assessment manager, how the proposed development mitigates impacts, including on water quality, hydrology and biological processes.	Complies with PO1 - AO1.1 Development is located in previous cleared areas. Further enhancement of regrowth wooded areas will be achieved by planting of plant species native to the area. This will increase the biodiversity of the land parcel. Watercourse and related impacts from driveway will be minimised by selecting specific routes to minimise damage to existing vegetation and no interruption to existing watercourse will take place.

Performance outcomes	Acceptable outcomes	Applicant response
Management of impacts on matters of environmental significance		
PO2 Development is located, designed and constructed to avoid significant impacts on matters of environmental significance.	AO2 The design and layout of development minimises adverse impacts on ecologically important areas by: <ul style="list-style-type: none"> (a) focusing development in cleared areas to protect existing habitat; (b) utilising design to consolidate density and preserve existing habitat and native vegetation; (c) aligning new property boundaries to maintain ecologically important areas; (d) ensuring that alterations to natural landforms, hydrology and drainage patterns on the development site do not negatively affect ecologically important areas; (e) ensuring that significant fauna habitats are protected in their environmental context; and (f) incorporating measures that allow for the safe movement of fauna through the site. 	Complies with PO2 - AO2 Buildings are located in cleared areas Robust native planting will take place in natural areas around development to improve regrowth forest from 25 years ago Construction does not effect natural drainage patterns, Under road drains will be utilised where required to achieve this External boundaries will not be fenced to allow fauna to pass through/ forage in the natural areas joining the development
PO3 An adequate buffer to areas of state environmental significance is provided and maintained.	AO3.1 A buffer for an area of state environmental significance (Wetland protection area) has a minimum width of: <ul style="list-style-type: none"> (a) 100 metres where the area is located outside Urban areas; or (b) 50 metres where the area is located within a Urban areas. or AO3.2 A buffer for an area of state environmental significance is applied and maintained, the width of which is supported by an evaluation of environmental values, including the function and threats to matters of environmental significance.	NA
PO4 Wetland and wetland buffer areas are maintained, protected and restored. Note – Wetland buffer areas are identified in AO3.1.	AO4.1 Native vegetation within wetlands and wetland buffer areas is retained. AO4.2 Degraded sections of wetlands and wetland buffer areas are revegetated with endemic native plants in patterns and densities which emulate the relevant regional ecosystem.	NA

Performance outcomes	Acceptable outcomes	Applicant response
PO5 Development avoids the introduction of non-native pest species (plant or animal), that pose a risk to ecological integrity.	AO5.1 Development avoids the introduction of non-native pest species. AO5.2 The threat of existing pest species is controlled by adopting pest management practices for long-term ecological integrity.	Complies with PO5 - AO5.1 No Non native species are to be introduced in the defined property Complies AO5.2 Existing pest species will be removed if located
Ecological connectivity		
PO6 Development protects and enhances ecological connectivity and/or habitat extent.	AO6.1 Development retains native vegetation in areas large enough to maintain ecological values, functions and processes. and AO6.2 Development within an ecological corridor rehabilitates native vegetation. and AO6.3 Development within a conservation corridor mitigates adverse impacts on native fauna, feeding, nesting, breeding and roosting sites and native fauna movements.	Complies with PO6 - AO6.1 Natural vegetation will be retained and enhances by planting of native species
PO7 Development minimises disturbance to matters of state environmental significance (including existing ecological corridors).	AO7.1 Development avoids shading of vegetation by setting back buildings by a distance equivalent to the height of the native vegetation. and AO7.2 Development does not encroach within 10 metres of existing riparian vegetation and watercourses.	Complies with PO7 - AO7.1 Building is positioned on existing clearing and is below the level of possible shading Complies AO7.2 Does not encroach within ten metres of existing riparian vegetation
Waterways in an urban area		
PO8 Development is set back from waterways to protect and maintain: <ul style="list-style-type: none"> (a) water quality; (b) hydrological functions; (c) ecological processes; (d) biodiversity values; (e) riparian and in-stream habitat values and connectivity; (f) in-stream migration 	AO8.1 Where a waterway is contained within an easement or a reserve required for that purpose, development does not occur within the easement or reserve; or AO8.2 Development does not occur on the part of the site affected by the waterway corridor. Note – Waterway corridors are identified within Table 8.2.7.3.b.	NA
Waterways in a non-urban area		

Performance outcomes	Acceptable outcomes	Applicant response
PO9 Development is set back from waterways to protect and maintain: <ul style="list-style-type: none"> (a) water quality; (b) hydrological functions; (c) ecological processes; (d) biodiversity values; (e) riparian and in-stream habitat values and connectivity; (f) in-stream migration. 	AO9 Development does not occur on that part of the site affected by a waterway corridor. Note – Waterway corridors are identified within Table 8.2.7.3.b.	Complies with PO9 - AO9.1 Dwelling is not located near easement/ waterway

Table 8.2.7.3.b — Widths of waterway corridors for waterways

Waterways classification	Waterway corridor width
Waterways in Urban areas	10 metres measured perpendicular from the top of the high bank.
Waterways in Other areas	For a dwelling house, 10 metres measured perpendicular from the top of the high bank. For all other development, 20 metres measured perpendicular from the top of the high bank.

Table 8.2.9.20a – Potential landslide hazard overlay code – assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For self-assessable and assessable development		
PO1 The siting and design of development does not involve complex engineering solutions and does not create or increase the potential landslide hazard risk to the site or adjoining premises through: (a) building design; (b) increased slope; (c) removal of vegetation; (d) stability of soil; (e) earthworks; (f) alteration of existing ground water or surface water paths; (g) waste disposal areas.	AO1.1 Development is located on that part of the site not affected by the Potential landslide hazard overlay. or AO1.2 Development is on an existing stable, benched site and requires no further earthworks or AO1.3 A competent person certifies that: (a) the stability of the site, including associated buildings and infrastructure, will be maintained during the course of the development and will remain stable for the life of the development; (b) development of the site will not increase the risk of landslide hazard activity on other land, including land above the site; (c) the site is not subject to the risk of landslide activity on other land; (d) any measures identified in a site-specific geotechnical report for stabilising the site or development have been fully implemented; (e) development does not concentrate existing ground water and surface water paths; (f) development does not incorporate on-site waste water disposal.	Complies with PO1 - AO1.1 - AO1.2 Development is positioned on existing cleared stable areas. Vegetation will be improved around the site to improve the stability to adjoining areas. The Building design steps down the slope rather than cutting into it, thus reducing disruptive earthworks to the site.
	Note – Planning scheme policy SC6.9 – Natural hazards provides guidance on preparing a site specific geo-technical assessment. Note – Development may alter the conditions of ground water and surface water paths in accordance with a site-specific geotechnical report, but should ensure that its final disbursement is as-per pre-developed conditions. Consideration for location, velocity, volume and quality should be given	

Performance outcomes	Acceptable outcomes	Applicant response
PO2 The siting and design of necessary retaining structures does not cause an adverse visual impact on landscape character or scenic amenity quality of the area.	AO2 Excavation or fill: (a) is not more than 1.2 metres in height for each batter or retaining wall; (b) is setback a minimum of 2 metres from property boundaries; (c) is stepped with a minimum 2 metre wide berm to incorporate landscaping in accordance with Planning scheme policy SC6.7 – Landscaping; (d) does not exceed a maximum of 3 batters and 3 berms (i.e. Not greater than 3.6 metres in height) on any one lot.	NA
Additional requirements for Community infrastructure		
PO3 Development for community infrastructure: (a) is not at risk from the potential landslide hazard areas; (b) will function without impediment from a landslide; (c) provides access to the infrastructure without impediment from the effects of a landslide; (d) does not contribute to an elevated risk of a landslide to adjoining properties.	AO3 Development is designed in accordance with the recommendations of a site-specific geotechnical assessment which makes reference to the community infrastructure and its needs and function. Note - A site specific geotechnical assessment will detail requirements that will address the Acceptable Outcomes of this Performance Outcome. Planning scheme policy SC6.9 – Natural hazards provides guidance on preparing a site specific geotechnical assessment.	NA

Table 8.2.10.3 a – Transport network overlay code – assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For assessable development		
PO1 Development supports the road hierarchy for the region. Note -A Traffic impact assessment report prepared in accordance with Planning scheme policy SC6.10 - Parking and access is one way to demonstrate achievement of the Performance Outcomes.	AO1.1 Development is compatible with the intended role and function of the transport network as identified on the Transport network overlay maps contained in Schedule 2. AO1.2 Development does not compromise the safety and efficiency of the transport network.	Complies with PO1 - AO1.1

Performance outcomes	Acceptable outcomes	Applicant response
	AO1.3 Development is designed to provide access via the lowest order road, where legal and practicable access can be provided to that road.	
PO2 Transport infrastructure is provided in an integrated and timely manner. Note - A Traffic impact assessment report prepared in accordance with Planning scheme policy SC6.10 - Parking and access is one way to demonstrate achievement of the Performance Outcomes.	AO2 Development provides infrastructure (including improvements to existing infrastructure) in accordance with: (a) the Transport network overlay maps contained in Schedule 2; (b) any relevant Local Plan. Note – The Translink Public Transport Infrastructure Manual provides guidance on the design of public transport facilities.	NA
PO3 Development involving sensitive land uses within a major transport corridor buffer area is located, designed and maintained to avoid or mitigate adverse impacts on amenity for the sensitive land use.	AO3 No acceptable outcomes are prescribed. Note – Part 4.4 of the Queensland Development Code provides requirements for residential building design in a designated transport noise corridor.	NA
PO4 Development does not compromise the intended role and function or safety and efficiency of major transport corridors. Note - A Traffic impact assessment report prepared in accordance with Planning scheme policy SC6.10 - Parking and access is one way to demonstrate achievement of the Performance Outcomes.	AO4.1 Development is compatible with the role and function (including the future role and function) of major transport corridors. AO4.2 Direct access is not provided to a major transport corridor where legal and practical access from another road is available.	NA

Performance outcomes	Acceptable outcomes	Applicant response
	<p>AO4.3 Intersection and access points associated with major transport corridors are located in accordance with:</p> <p>(a) the Transport network overlay maps contained in Schedule 2; and</p> <p>(b) any relevant Local Plan.</p> <p>AO4.4 The layout of development and the design of the associated access is compatible with existing and future boundaries of the major transport corridor or major transport facility.</p>	
<p>PO5 Development retains and enhances existing vegetation between a development and a major transport corridor, so as to provide screening to potential noise, dust, odour and visual impacts emanating from the corridor.</p>	<p>AO5 No acceptable outcomes are prescribed.</p>	<p>Complies with PO5 - Development is not visible from any road and is not proposed near any major transport corridor. No dust. Odour and noise is proposed above any normal land use</p>
Pedestrian and cycle network		
<p>PO6 Lot reconfiguration assists in the implementation of the pedestrian and cycle movement network to achieve safe, attractive and efficient pedestrian and cycle networks</p>	<p>AO6.1 Where a lot is subject to, or adjacent to an element of the pedestrian and cycle Movement network (identified on the Transport network overlay maps contained in Schedule 2) the specific location of this element of the pedestrian and cycle network is incorporated in the design of the lot layout.</p> <p>AO6.2 The element of the pedestrian and cycle network is constructed in accordance with the Design Guidelines set out in Sections D4 and D5 of the Planning scheme policy SC6.5 – FNQROC Regional Development Manual.</p>	<p>NA</p>

DA Form 1 – Development application details

Approved form (version 1.3 effective 28 September 2020) made under section 282 of the Planning Act 2016.

This form **must** be used to make a development application **involving code assessment or impact assessment**, except when applying for development involving only building work.

For a development application involving **building work only**, use *DA Form 2 – Building work details*.

For a development application involving **building work associated with any other type of assessable development (i.e. material change of use, operational work or reconfiguring a lot)**, use this form (*DA Form 1*) and parts 4 to 6 of *DA Form 2 – Building work details*.

Unless stated otherwise, all parts of this form **must** be completed in full and all required supporting information **must** accompany the development application.

One or more additional pages may be attached as a schedule to this development application if there is insufficient space on the form to include all the necessary information.

This form and any other form relevant to the development application must be used to make a development application relating to strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994*, and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*. For the purpose of assessing a development application relating to strategic port land and Brisbane core port land, any reference to a planning scheme is taken to mean a land use plan for the strategic port land, Brisbane port land use plan for Brisbane core port land, or a land use plan for airport land.

Note: All terms used in this form have the meaning given under the *Planning Act 2016*, the *Planning Regulation 2017*, or the *Development Assessment Rules (DA Rules)*.

PART 1 – APPLICANT DETAILS

1) Applicant details	
Applicant name(s) (individual or company full name)	BRENDEN MURPHY & LUCIE FENEUL
Contact name (only applicable for companies)	
Postal address (P.O. Box or street address)	PO BOX 686
Suburb	MOSSMAN
State	QLD
Postcode	4873
Country	AUSTRALIA
Contact number	402009989
Email address (non-mandatory)	brendenmurphy1@gmail.com
Mobile number (non-mandatory)	402009989
Fax number (non-mandatory)	
Applicant's reference number(s) (if applicable)	

2) Owner's consent	
2.1) Is written consent of the owner required for this development application?	
No – proceed to 3)	

PART 2 – LOCATION DETAILS

3) Location of the premises (complete 3.1) or 3.2), and 3.3) as applicable)

Note: Provide details below and attach a site plan for any or all premises part of the development application. For further information, see [DA Forms Guide: Relevant plans](#).

3.1) Street address and lot on plan

Street address **AND** lot on plan (all lots must be listed), **or**

Street address **AND** lot on plan for an adjoining or adjacent property of the premises (appropriate for development in water but adjoining or adjacent to land e.g. jetty, pontoon. All lots must be listed).

a)	Unit No.	Street No.	Street Name and Type	Suburb
		10	ANDREW ROAD	FOREST CREEK
	Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)
		10	10RP735853	DOUGLAS SHIRE
b)	Unit No.	Street No.	Street Name and Type	Suburb
	Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)

3.2) Coordinates of premises (appropriate for development in remote areas, over part of a lot or in water not adjoining or adjacent to land e.g. channel dredging in Moreton Bay)

Note: Place each set of coordinates in a separate row.

Coordinates of premises by longitude and latitude

Longitude(s)	Latitude(s)	Datum	Local Government Area(s) (if applicable)
		WGS84 GDA94 Other: <input type="text"/>	

Coordinates of premises by easting and northing

Easting(s)	Northing(s)	Zone Ref.	Datum	Local Government Area(s) (if applicable)
		54 55 56	WGS84 GDA94 Other: <input type="text"/>	

3.3) Additional premises

~~Additional premises are relevant to this development application and the details of these premises have been attached in a schedule to this development application~~
Not required

4) Identify any of the following that apply to the premises and provide any relevant details

In or adjacent to a water body or watercourse or in or above an aquifer

Name of water body, watercourse or aquifer: MINOR SEASONAL CREEK

On strategic port land under the <i>Transport Infrastructure Act 1994</i>	
Lot on plan description of strategic port land:	
Name of port authority for the lot:	
In a tidal area	
Name of local government for the tidal area (if applicable):	
Name of port authority for tidal area (if applicable):	
On airport land under the <i>Airport Assets (Restructuring and Disposal) Act 2008</i>	
Name of airport:	
Listed on the Environmental Management Register (EMR) under the <i>Environmental Protection Act 1994</i>	
EMR site identification:	
Listed on the Contaminated Land Register (CLR) under the <i>Environmental Protection Act 1994</i>	
CLR site identification:	

5) Are there any existing easements over the premises?

Note: Easement uses vary throughout Queensland and are to be identified correctly and accurately. For further information on easements and how they may affect the proposed development, see [DA Forms Guide](#).

Yes – All easement locations, types and dimensions are included in plans submitted with this development application

PART 3 – DEVELOPMENT DETAILS

Section 1 – Aspects of development

6.1) Provide details about the first development aspect
a) What is the type of development? <i>(tick only one box)</i>
Material change of use
b) What is the approval type? <i>(tick only one box)</i>
Development permit
c) What is the level of assessment?
Code assessment
d) Provide a brief description of the proposal <i>(e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots):</i>
DEVELOPMENT APPLICATION FOR A DWELLING HOUSE AND ANCILLARY SHED
e) Relevant plans
Note: <i>Relevant plans are required to be submitted for all aspects of this development application. For further information, see DA Forms guide: Relevant plans.</i>
Relevant plans of the proposed development are attached to the development application
6.2) Provide details about the second development aspect
a) What is the type of development? <i>(tick only one box)</i>
Material change of use
b) What is the approval type? <i>(tick only one box)</i>
Development permit
c) What is the level of assessment?
Code assessment
d) Provide a brief description of the proposal <i>(e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots):</i>
e) Relevant plans
Note: <i>Relevant plans are required to be submitted for all aspects of this development application. For further information, see DA Forms Guide: Relevant plans.</i>
Relevant plans of the proposed development are attached to the development application
6.3) Additional aspects of development
Additional aspects of development are relevant to this development application and the details for these aspects that would be required under Part 3 Section 1 of this form have been attached to this development application
Not required

Section 2 – Further development details

7) Does the proposed development application involve any of the following?	
Material change of use	Yes – complete division 1 if assessable against a local planning instrument
Reconfiguring a lot	Yes – complete division 2
Operational work	Yes – complete division 3
Building work	Yes – complete <i>DA Form 2 – Building work details</i>

Division 1 – Material change of use

Note: This division is only required to be completed if any part of the development application involves a material change of use assessable against a local planning instrument.

8.1) Describe the proposed material change of use			
Provide a general description of the proposed use	Provide the planning scheme definition <i>(include each definition in a new row)</i>	Number of dwelling units <i>(if applicable)</i>	Gross floor area (m ²) <i>(if applicable)</i>
SINGLE DETACHED RESIDENTIAL DWELLING	DWELLING HOUSE	1	332m2

8.2) Does the proposed use involve the use of existing buildings on the premises?	
Yes	
No	

Division 2 – Reconfiguring a lot

Note: This division is only required to be completed if any part of the development application involves reconfiguring a lot.

9.1) What is the total number of existing lots making up the premises?	

9.2) What is the nature of the lot reconfiguration? <i>(tick all applicable boxes)</i>	
Subdivision <i>(complete 10))</i>	Dividing land into parts by agreement <i>(complete 11))</i>
Boundary realignment <i>(complete 12))</i>	Creating or changing an easement giving access to a lot from a constructed road <i>(complete 13))</i>

10) Subdivision				
10.1) For this development, how many lots are being created and what is the intended use of those lots:				
Intended use of lots created	Residential	Commercial	Industrial	Other, please specify:
Number of lots created				

10.2) Will the subdivision be staged?	
Yes – provide additional details below	
No	
How many stages will the works include?	

What stage(s) will this development application apply to?	
---	--

11) Dividing land into parts by agreement – how many parts are being created and what is the intended use of the parts?				
Intended use of parts created	Residential	Commercial	Industrial	Other, please specify:
Number of parts created				

12) Boundary realignment			
12.1) What are the current and proposed areas for each lot comprising the premises?			
Current lot		Proposed lot	
Lot on plan description	Area (m ²)	Lot on plan description	Area (m ²)
12.2) What is the reason for the boundary realignment?			

13) What are the dimensions and nature of any existing easements being changed and/or any proposed easement? (attach schedule if there are more than two easements)				
Existing or proposed?	Width (m)	Length (m)	Purpose of the easement? (e.g. pedestrian access)	Identify the land/lot(s) benefitted by the easement

Division 3 – Operational work

Note: This division is only required to be completed if any part of the development application involves operational work.

14.1) What is the nature of the operational work?	
Road work	Stormwater
Drainage work	Earthworks
Landscaping	Water infrastructure
	Sewage infrastructure
	Clearing vegetation
Other – please specify:	
14.2) Is the operational work necessary to facilitate the creation of new lots? (e.g. subdivision)	
Yes – specify number of new lots:	
No	
14.3) What is the monetary value of the proposed operational work? (include GST, materials and labour)	
\$	

PART 4 – ASSESSMENT MANAGER DETAILS

DOUGLAS SHIRE COUNCIL

16) Has the local government agreed to apply a superseded planning scheme for this development application?

~~Yes — a copy of the decision notice is attached to this development application~~

~~The local government is taken to have agreed to the superseded planning scheme request — relevant documents attached~~

No

PART 5 – REFERRAL DETAILS

17) Does this development application include any aspects that have any referral requirements?

Note: A development application will require referral if prescribed by the Planning Regulation 2017.

No, there are no referral requirements relevant to any development aspects identified in this development application – proceed to Part 6

Matters requiring referral to the **Chief Executive of the *Planning Act 2016***:

Clearing native vegetation
 Contaminated land (*unexploded ordnance*)
 Environmentally relevant activities (ERA) (*only if the ERA has not been devolved to a local government*)
 Fisheries – aquaculture
 Fisheries – declared fish habitat area
 Fisheries – marine plants
 Fisheries – waterway barrier works
 Hazardous chemical facilities
 Heritage places – Queensland heritage place (*on or near a Queensland heritage place*)
 Infrastructure-related referrals – designated premises
 Infrastructure-related referrals – state transport infrastructure
 Infrastructure-related referrals – State transport corridor and future State transport corridor
 Infrastructure-related referrals – State-controlled transport tunnels and future state-controlled transport tunnels
 Infrastructure-related referrals – near a state-controlled road intersection
 Koala habitat in SEQ region – interfering with koala habitat in koala habitat areas outside koala priority areas
 Koala habitat in SEQ region – key resource areas
 Ports – Brisbane core port land – near a State transport corridor or future State transport corridor
 Ports – Brisbane core port land – environmentally relevant activity (ERA)
 Ports – Brisbane core port land – tidal works or work in a coastal management district
 Ports – Brisbane core port land – hazardous chemical facility
 Ports – Brisbane core port land – taking or interfering with water
 Ports – Brisbane core port land – referable dams
 Ports – Brisbane core port land – fisheries
 Ports – Land within Port of Brisbane’s port limits (*below high-water mark*)
 SEQ development area
 SEQ regional landscape and rural production area or SEQ rural living area – tourist activity or sport and recreation activity
 SEQ regional landscape and rural production area or SEQ rural living area – community activity
 SEQ regional landscape and rural production area or SEQ rural living area – indoor recreation
 SEQ regional landscape and rural production area or SEQ rural living area – urban activity
 SEQ regional landscape and rural production area or SEQ rural living area – combined use
 Tidal works or works in a coastal management district
 Reconfiguring a lot in a coastal management district or for a canal
 Erosion prone area in a coastal management district
 Urban design
 Water-related development – taking or interfering with water
 Water-related development – removing quarry material (*from a watercourse or lake*)
 Water-related development – referable dams
 Water-related development – levees (*category 3 levees only*)
 Wetland protection area

Matters requiring referral to the local government:

Airport land
 Environmentally relevant activities (ERA) (*only if the ERA has been devolved to local government*)
 Heritage places – Local heritage places

Matters requiring referral to the Chief Executive of the distribution entity or transmission entity:

Infrastructure-related referrals – Electricity infrastructure

Matters requiring referral to:

- The **Chief Executive of the holder of the licence**, if not an individual
 - The **holder of the licence**, if the holder of the licence is an individual
- Infrastructure-related referrals – Oil and gas infrastructure

Matters requiring referral to the Brisbane City Council : Ports – Brisbane core port land
Matters requiring referral to the Minister responsible for administering the <i>Transport Infrastructure Act 1994</i> : Ports – Brisbane core port land <i>(where inconsistent with the Brisbane port LUP for transport reasons)</i> Ports – Strategic port land
Matters requiring referral to the relevant port operator , if applicant is not port operator: Ports – Land within Port of Brisbane's port limits <i>(below high-water mark)</i>
Matters requiring referral to the Chief Executive of the relevant port authority : Ports – Land within limits of another port <i>(below high-water mark)</i>
Matters requiring referral to the Gold Coast Waterways Authority : Tidal works or work in a coastal management district <i>(in Gold Coast waters)</i>
Matters requiring referral to the Queensland Fire and Emergency Service : Tidal works or work in a coastal management district <i>(involving a marina (more than six vessel berths))</i>

18) Has any referral agency provided a referral response for this development application?		
Yes — referral response(s) received and listed below are attached to this development application No		
Referral requirement	Referral agency	Date of referral response
Identify and describe any changes made to the proposed development application that was the subject of the referral response and this development application, or include details in a schedule to this development application <i>(if applicable)</i> .		

PART 6 – INFORMATION REQUEST

19) Information request under Part 3 of the DA Rules
I agree to receive an information request if determined necessary for this development application I do not agree to accept an information request for this development application
Note: By not agreeing to accept an information request I, the applicant, acknowledge: <ul style="list-style-type: none"> that this development application will be assessed and decided based on the information provided when making this development application and the assessment manager and any referral agencies relevant to the development application are not obligated under the DA Rules to accept any additional information provided by the applicant for the development application unless agreed to by the relevant parties Part 3 of the DA Rules will still apply if the application is an application listed under section 11.3 of the DA Rules. Further advice about information requests is contained in the DA Forms Guide .

PART 7 – FURTHER DETAILS

20) Are there any associated development applications or current approvals? <i>(e.g. a preliminary approval)</i>
Yes — provide details below or include details in a schedule to this development application No

List of approval/development application references	Reference number	Date	Assessment manager
Approval Development application			
Approval Development application			

21) Has the portable long service leave levy been paid? *(only applicable to development applications involving building work or operational work)*

~~Yes — a copy of the receipted QLeave form is attached to this development application~~

No – I, the applicant will provide evidence that the portable long service leave levy has been paid before the assessment manager decides the development application. I acknowledge that the assessment manager may give a development approval only if I provide evidence that the portable long service leave levy has been paid

~~Not applicable (e.g. building and construction work is less than \$150,000 excluding GST)~~

Amount paid	Date paid (dd/mm/yy)	QLeave levy number (A, B or E)
\$		

22) Is this development application in response to a show cause notice or required as a result of an enforcement notice?

~~Yes — show cause or enforcement notice is attached~~

No

23) Further legislative requirements

Environmentally relevant activities

23.1) Is this development application also taken to be an application for an environmental authority for an Environmentally Relevant Activity (ERA) under section 115 of the *Environmental Protection Act 1994*?

~~Yes — the required attachment (form ESR/2015/1791) for an application for an environmental authority accompanies this development application, and details are provided in the table below~~

No

Note: Application for an environmental authority can be found by searching “ESR/2015/1791” as a search term at www.qld.gov.au. An ERA requires an environmental authority to operate. See www.business.qld.gov.au for further information.

Proposed ERA number:		Proposed ERA threshold:	
Proposed ERA name:			

Multiple ERAs are applicable to this development application and the details have been attached in a schedule to this development application.

Hazardous chemical facilities

23.2) Is this development application for a hazardous chemical facility?

~~Yes — Form 69: Notification of a facility exceeding 10% of schedule 15 threshold is attached to this development application~~

No

Note: See www.business.qld.gov.au for further information about hazardous chemical notifications.

Clearing native vegetation

23.3) Does this development application involve **clearing native vegetation** that requires written confirmation that the chief executive of the *Vegetation Management Act 1999* is satisfied the clearing is for a relevant purpose under section 22A of the *Vegetation Management Act 1999*?

~~Yes — this development application includes written confirmation from the chief executive of the *Vegetation Management Act 1999* (s22A determination)~~

No

Note: 1. Where a development application for operational work or material change of use requires a s22A determination and this is not included, the development application is prohibited development.

2. See <https://www.qld.gov.au/environment/land/vegetation/applying> for further information on how to obtain a s22A determination.

Environmental offsets

23.4) Is this development application taken to be a prescribed activity that may have a significant residual impact on a **prescribed environmental matter** under the *Environmental Offsets Act 2014*?

~~Yes — I acknowledge that an environmental offset must be provided for any prescribed activity assessed as having a significant residual impact on a prescribed environmental matter~~

No

Note: The environmental offset section of the Queensland Government's website can be accessed at www.qld.gov.au for further information on environmental offsets.

Koala habitat in SEQ Region

23.5) Does this development application involve a material change of use, reconfiguring a lot or operational work which is assessable development under Schedule 10, Part 10 of the Planning Regulation 2017?

~~Yes — the development application involves premises in the koala habitat area in the koala priority area~~

~~Yes — the development application involves premises in the koala habitat area outside the koala priority area~~

No

Note: If a koala habitat area determination has been obtained for this premises and is current over the land, it should be provided as part of this development application. See koala habitat area guidance materials at www.des.qld.gov.au for further information.

Water resources

23.6) Does this development application involve **taking or interfering with underground water through an artesian or subartesian bore, taking or interfering with water in a watercourse, lake or spring, or taking overland flow water under the *Water Act 2000***?

~~Yes — the relevant template is completed and attached to this development application and I acknowledge that a relevant authorisation or licence under the *Water Act 2000* may be required prior to commencing development~~

No

Note: Contact the Department of Natural Resources, Mines and Energy at www.dnrme.qld.gov.au for further information.

DA templates are available from <https://planning.dsdmip.qld.gov.au/>. If the development application involves:

- Taking or interfering with underground water through an artesian or subartesian bore: complete DA Form 1 Template 1
- Taking or interfering with water in a watercourse, lake or spring: complete DA Form 1 Template 2
- Taking overland flow water: complete DA Form 1 Template 3.

Waterway barrier works

23.7) Does this application involve **waterway barrier works**?

~~Yes — the relevant template is completed and attached to this development application~~

No

DA templates are available from <https://planning.dsdmip.qld.gov.au/>. For a development application involving waterway barrier works, complete DA Form 1 Template 4.

Marine activities

23.8) Does this development application involve **aquaculture, works within a declared fish habitat area or removal, disturbance or destruction of marine plants**?

~~Yes — an associated resource allocation authority is attached to this development application, if required under the Fisheries Act 1994~~

No

Note: See guidance materials at www.daf.qld.gov.au for further information.

Quarry materials from a watercourse or lake

23.9) Does this development application involve the **removal of quarry materials from a watercourse or lake** under the *Water Act 2000*?

~~Yes — I acknowledge that a quarry material allocation notice must be obtained prior to commencing development~~

No

Note: Contact the Department of Natural Resources, Mines and Energy at www.dnrme.qld.gov.au and www.business.qld.gov.au for further information.

Quarry materials from land under tidal waters

23.10) Does this development application involve the **removal of quarry materials from land under tidal water** under the *Coastal Protection and Management Act 1995*?

~~Yes — I acknowledge that a quarry material allocation notice must be obtained prior to commencing development~~

No

Note: Contact the Department of Environment and Science at www.des.qld.gov.au for further information.

Referable dams

23.11) Does this development application involve a **referable dam** required to be failure impact assessed under section 343 of the *Water Supply (Safety and Reliability) Act 2008* (the Water Supply Act)?

~~Yes — the 'Notice Accepting a Failure Impact Assessment' from the chief executive administering the Water Supply Act is attached to this development application~~

No

Note: See guidance materials at www.dnrme.qld.gov.au for further information.

Tidal work or development within a coastal management district

23.12) Does this development application involve **tidal work or development in a coastal management district**?

~~Yes — the following is included with this development application:~~

- ~~— Evidence the proposal meets the code for assessable development that is prescribed tidal work (only required if application involves prescribed tidal work)~~
- ~~— A certificate of title~~

No

Note: See guidance materials at www.des.qld.gov.au for further information.

Queensland and local heritage places

23.13) Does this development application propose development on or adjoining a place entered in the **Queensland heritage register** or on a place entered in a local government's **Local Heritage Register**?

~~Yes — details of the heritage place are provided in the table below~~

No

Note: See guidance materials at www.des.qld.gov.au for information requirements regarding development of Queensland heritage places.

Name of the heritage place:		Place ID:	
-----------------------------	--	-----------	--

Brothels

23.14) Does this development application involve a **material change of use for a brothel**?

~~Yes — this development application demonstrates how the proposal meets the code for a development application for a brothel under Schedule 3 of the *Prostitution Regulation 2014*~~

No

Decision under section 62 of the *Transport Infrastructure Act 1994*

23.15) Does this development application involve new or changed access to a state-controlled road?

~~Yes — this application will be taken to be an application for a decision under section 62 of the *Transport Infrastructure Act 1994* (subject to the conditions in section 75 of the *Transport Infrastructure Act 1994* being satisfied)~~

No

Walkable neighbourhoods assessment benchmarks under Schedule 12A of the Planning Regulation

23.16) Does this development application involve reconfiguring a lot into 2 or more lots in certain residential zones (except rural residential zones), where at least one road is created or extended?

~~Yes — Schedule 12A is applicable to the development application and the assessment benchmarks contained in schedule 12A have been considered~~

No

Note: See guidance materials at www.planning.dsdmip.qld.gov.au for further information.

PART 8 – CHECKLIST AND APPLICANT DECLARATION

24) Development application checklist

I have identified the assessment manager in question 15 and all relevant referral requirement(s) in question 17

Yes

Note: See the *Planning Regulation 2017* for referral requirements

If building work is associated with the proposed development, Parts 4 to 6 of [DA Form 2 – Building work details](#) have been completed and attached to this development application

~~Yes~~

Not applicable

Supporting information addressing any applicable assessment benchmarks is with the development application

Note: This is a mandatory requirement and includes any relevant templates under question 23, a planning report and any technical reports required by the relevant categorising instruments (e.g. local government planning schemes, State Planning Policy, State Development Assessment Provisions). For further information, see [DA Forms Guide: Planning Report Template](#).

Yes

Relevant plans of the development are attached to this development application

Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see [DA Forms Guide: Relevant plans](#).

Yes

The portable long service leave levy for QLeave has been paid, or will be paid before a development permit is issued (see 21)

Yes

~~Not applicable~~

25) Applicant declaration

By making this development application, I declare that all information in this development application is true and correct - AGREED

Where an email address is provided in Part 1 of this form, I consent to receive future electronic communications from the assessment manager and any referral agency for the development application where written information is required or permitted pursuant to sections 11 and 12 of the *Electronic Transactions Act 2001* - AGREED

Note: It is unlawful to intentionally provide false or misleading information.

Privacy – Personal information collected in this form will be used by the assessment manager and/or chosen assessment manager, any relevant referral agency and/or building certifier (including any professional advisers which may be engaged by those entities) while processing, assessing and deciding the development application.

All information relating to this development application may be available for inspection and purchase, and/or published on the assessment manager's and/or referral agency's website.

Personal information will not be disclosed for a purpose unrelated to the *Planning Act 2016*, Planning Regulation 2017 and the DA Rules except where:

- such disclosure is in accordance with the provisions about public access to documents contained in the *Planning Act 2016* and the Planning Regulation 2017, and the access rules made under the *Planning Act 2016* and Planning Regulation 2017; or
- required by other legislation (including the *Right to Information Act 2009*); or
- otherwise required by law.

This information may be stored in relevant databases. The information collected will be retained as required by the *Public Records Act 2002*.

PART 9 – FOR COMPLETION OF THE ASSESSMENT MANAGER – FOR OFFICE USE ONLY

Date received:

Reference
number(s):

Notification of engagement of alternative assessment manager

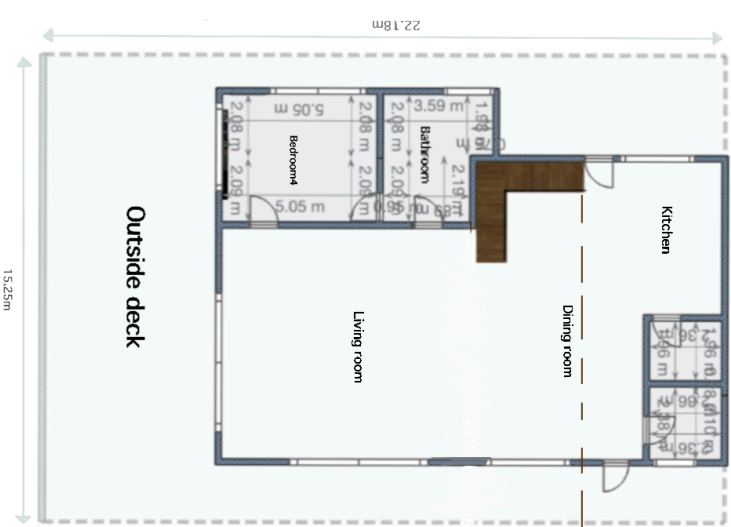
Prescribed assessment manager	
Name of chosen assessment manager	
Date chosen assessment manager engaged	
Contact number of chosen assessment manager	
Relevant licence number(s) of chosen assessment manager	

QLeave notification and payment

Note: For completion by assessment manager if applicable

Description of the work	
QLeave project number	
Amount paid (\$)	Date paid (dd/mm/yy)
Date receipted form sighted by assessment manager	
Name of officer who sighted the form	

Lucie Feneuil & Brenden Murphy	
PLAN NO. 01/04	PROJECT
PROPOSED PLAN OF LOT 10 ANDREW ROAD FOREST CREEK 4873	
REFERENCE NO. RP735953	
DESIGN AND DRAWN BY LUCIE FENEUIL	LOCAL GOVT DOUGLAS SHIRE



WARNING—FOLDING OR MUTILATING WILL LEAD TO REJECTION—PLAN MAY BE ROLLED

L.A.D. 80-082

TRAVERSES, ETC.

LINE	BEARING	DIST.
1-1"	114°10'30"	21.85
A-D	ORIB.	29.85 ORIS.
13-36	90°27'	20.0

LINE PE65

STN	BEARING	DIST.
26	180°27'	21.33

DIAGRAM 'A'

1:1000

REFERENCE MARKS

STN	TO	BEARING	DIST.	BRAND
1	Pin	At Station		
1"	OIR	180°27'	1.0	
2	OIR	159°10'	1.42	
3	OIR	0°27'	1.0	
4	Pin	296°45'	1.0	
5	Pin	269°24'	1.0	
9	OIR	180°27'	1.335	
10	Pin	90°27'	1.0	
13	Pin	270°27'	1.0	
15	Pin	270°27'	1.0	
16	Pin	270°27'	1.0	
17	OIR	270°27'	1.0	
18	OIR	118°0'	1.0	
31	Pin	180°27'	1.0	
24	Pin	0°27'	0.812	
	Scrub.	98°09'	4.795	
26	Pin	270°27'	1.063	

PERMANENT MARKS

PM	BEARING	DIST.	NUMBER
10 - PM.	270°27'	1.0	716/3

DIAGRAM 'B'

Not to Scale

PLAN MUST BE DRAWN WITHIN BLUE LINES

35853

Amendments in red by me on 9.1.81

Peter Stopford
Licensed Surveyor.

Area of New Road

(A-B-C-D-A) 8862 m²Original information compiled from RP's 33654
33655 in the Titles Office, Townsville.

NO FIELD NOTES LOGGED

LINES NOT SURVEYED

STNS

ORIGINAL PORTION

130

ORIGINAL GRANT

68792

PLAN OF Lots 5 to 13

Cancelling part of Lot 80 on RP33655

CORNERS NOT MARKED

STNS

23

TOWN

PARISH ALEXANDRA

COUNTY Solander

M.F.

MAP REF.

PROCLAIMED SURVEY AREA

SURVEYED BY Peter Stopford

MERIDIAN

RP 33654

SCALE

1:3000

REGISTERED PLAN 35853

CROWN COPYRIGHT RESERVED, REGISTRAR OF TITLES, QUEENSLAND

CISP

35853

PLAN MUST BE DRAWN WITHIN BLUE LINES

35853



QBCC Lic No. 79358

POSTAL: PO BOX 107, MOSSMAN QLD 4873 FACTORY: 8 THERESE DRIVE, MOSSMAN QLD 4873
PHONE: 07 4092 2774 EMAIL: info@zammataro.com.au ABN: 57 060 397 293 QBSA: 79358

PLUMBING | DRAINAGE | GASFITTING | ROOFING | SHEETMETAL | BOBCAT & EXCAVATOR | VACUUM
TRUCK | WATER JETTER | DRAIN MACHINE | LEAK DETECTOR | GUTTER/FASCIA MACHINES | WATER
TANKS

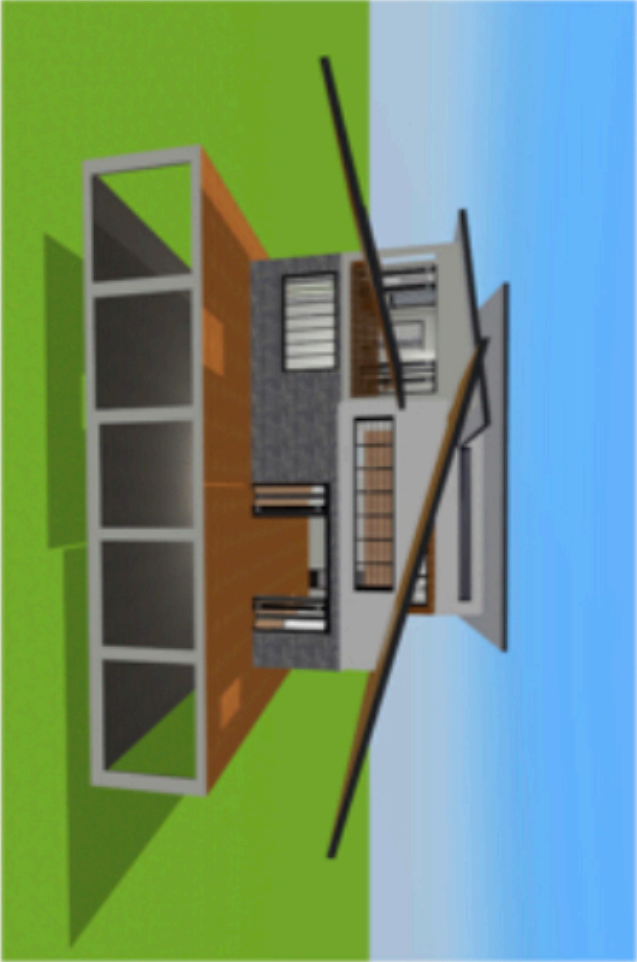
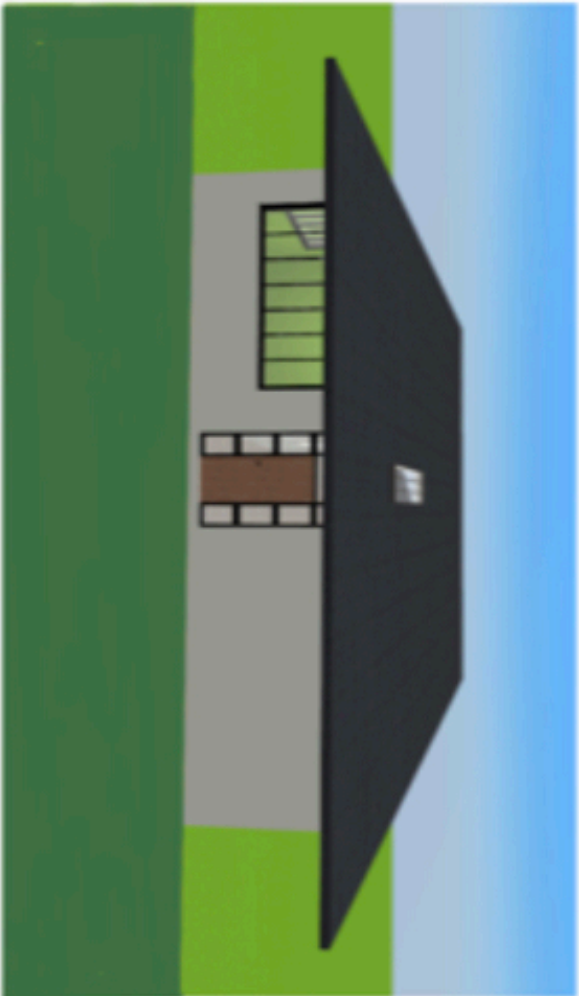
SOIL SITE ASSESSMENT

SEPTEMBER 30TH 2020

LOT 10 ANDREW ROAD,
FOREST CREEK QLD 4877

LOT 10- RP735853





Lucie Feneuil & Brendan Murphy	
PLAN NO. 02/04	PROJECT
PROPOSED PLAN OF LOT 10 ANDREW ROAD FOREST CREEK 4873	
REFERENCE NO. 88735593	
DESIGN AND DRAWN BY MELANIE FENEUIL	LOCAL GOVT DOUGLAS SHIRE

Zammataro Plumbing Pty Ltd

Postal: PO Box 107, Mossman QLD 4873

Factory: 8 Therese Drive, Mossman QLD 4873

ON SITE SEWERAGE FACILITY SITE AND SOIL EVALUATION REPORT

A: SITE EVALUATOR

Name: Anthony Zammataro

Signature: 

Date: 29th September 2020

B: SITE INFORMATION (desk-top evaluation)

Location Details,

Locality: Andrew Road Forest Creek 4873

Owner: Brenden Murphy

Phone 0402009989

Survey Plan Details:

RP: 735853

Lots No: 10

Local Government: D.S.C.

Parish: Alexander

County: Solander

Site Plan Details Attached, Yes

Soil Type from Soil Maps etc:

N/A

Climate

Annual Rainfall: 2245 mm

Annual Potential Evapotranspiration: 1474 mm

Intended Water Supply Source:

Town Water Supply

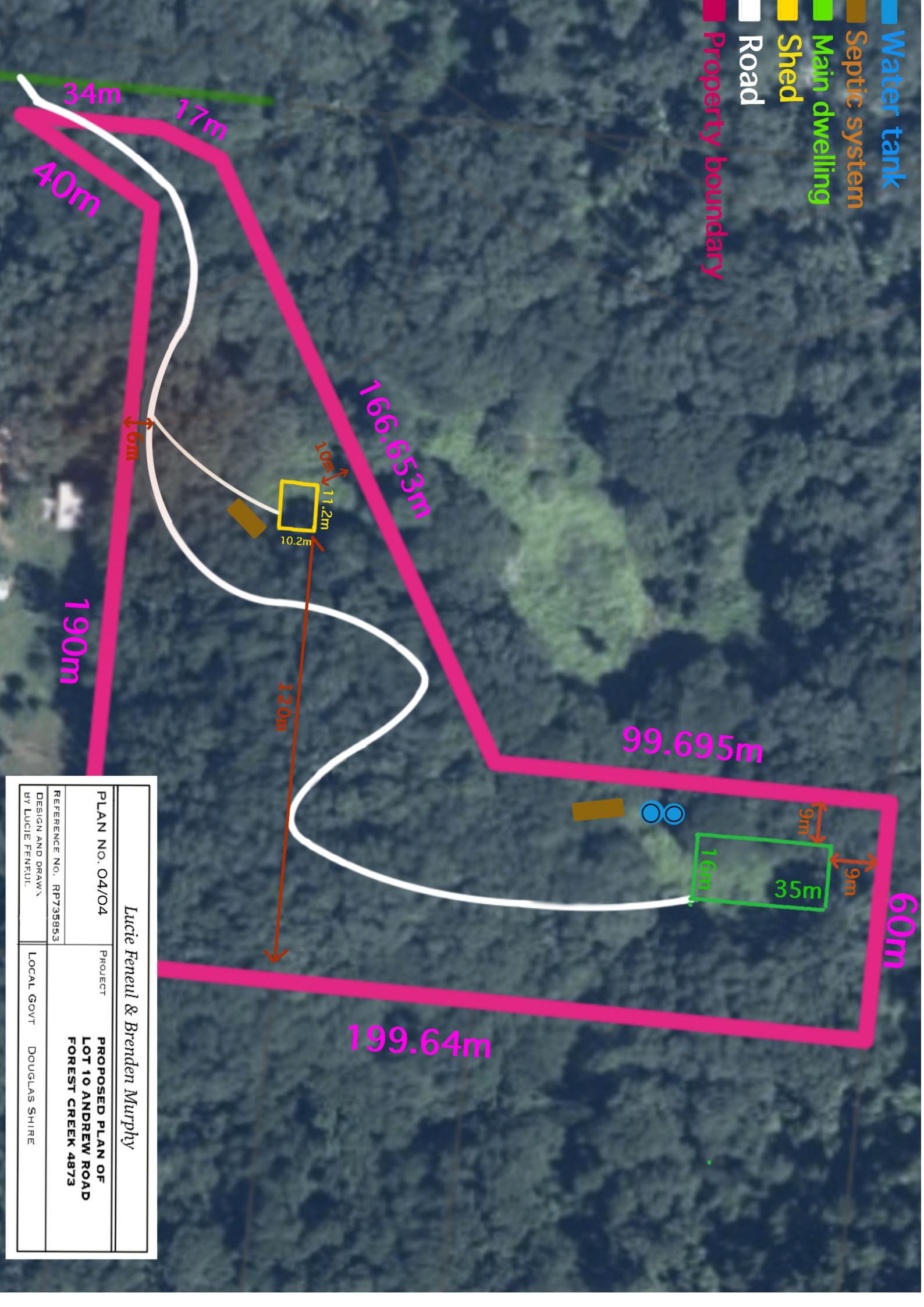
Rainwater (Roof Collection)

Dam

Bore/Well *****

Other Water Tanks

- Water tank
- Septic system
- Main dwelling
- Shed
- Road
- Property boundary



Lucie Feneuil & Brenden Murphy

PLAN NO. 04/04

PROJECT

PROPOSED PLAN OF
LOT 10 ANDREW ROAD
FOREST CREEK 4873

REFERENCE NO. RP735853

DESIGN AND DRAWN
BY LUCIE FENEUIL

LOCAL GOVT DOUGLAS SHIRE

Lucie Feneul & Brenden Murphy

PLAN NO.

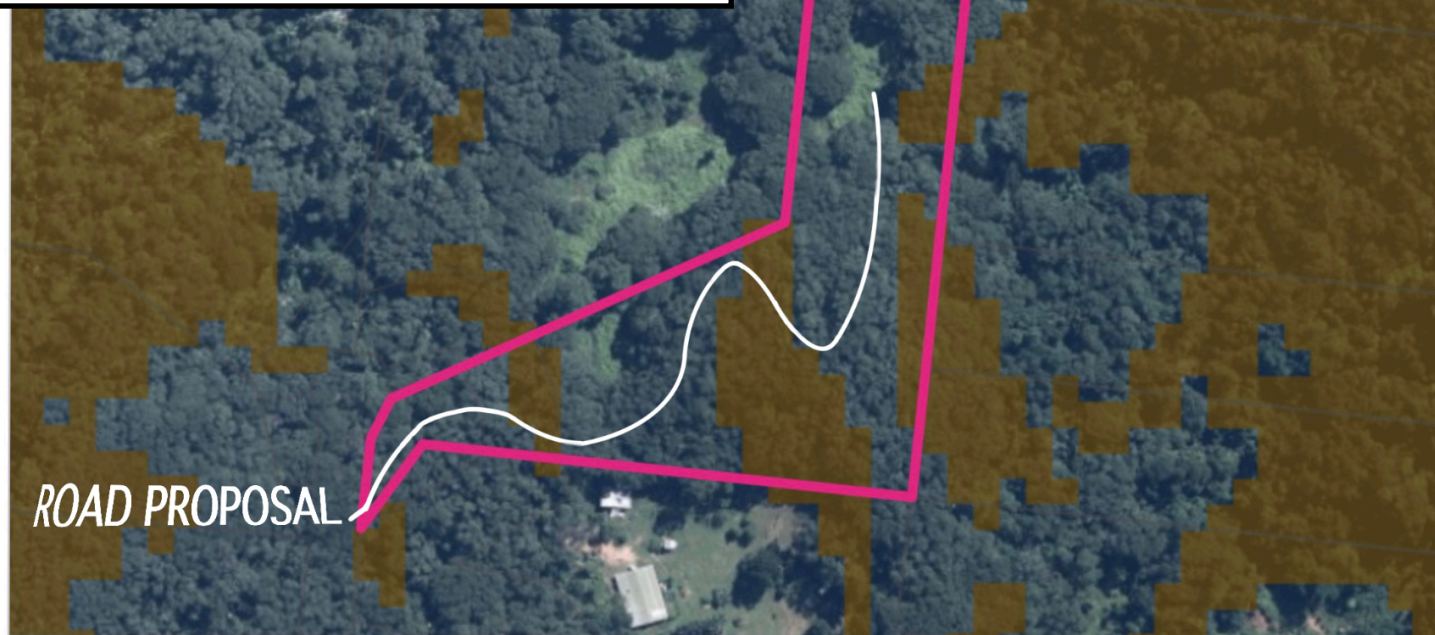
PROJECT

**PROPOSED PLAN OF
LOT 10 ANDREW ROAD
FOREST CREEK 4873**

REFERENCE NO. RP735853

DESIGN AND DRAWN
BY LUCIE FENEUL

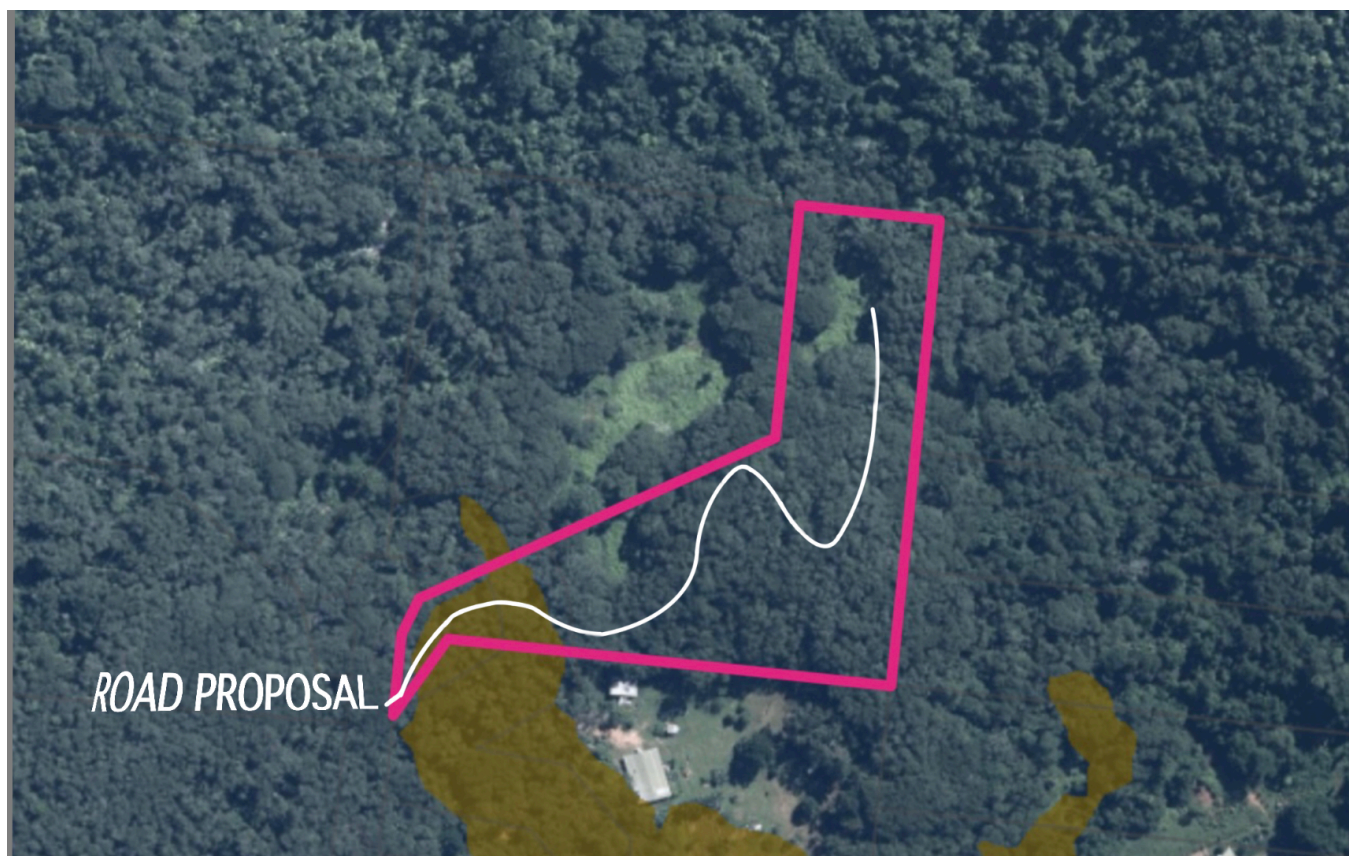
LOCAL GOVT DOUGLAS SHIRE



☒ Selected Property

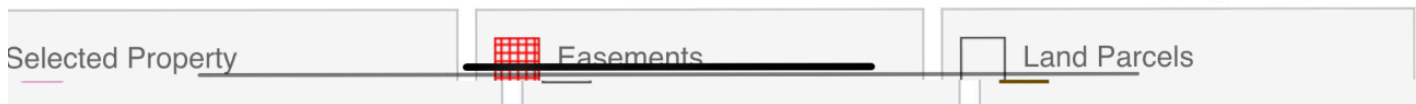
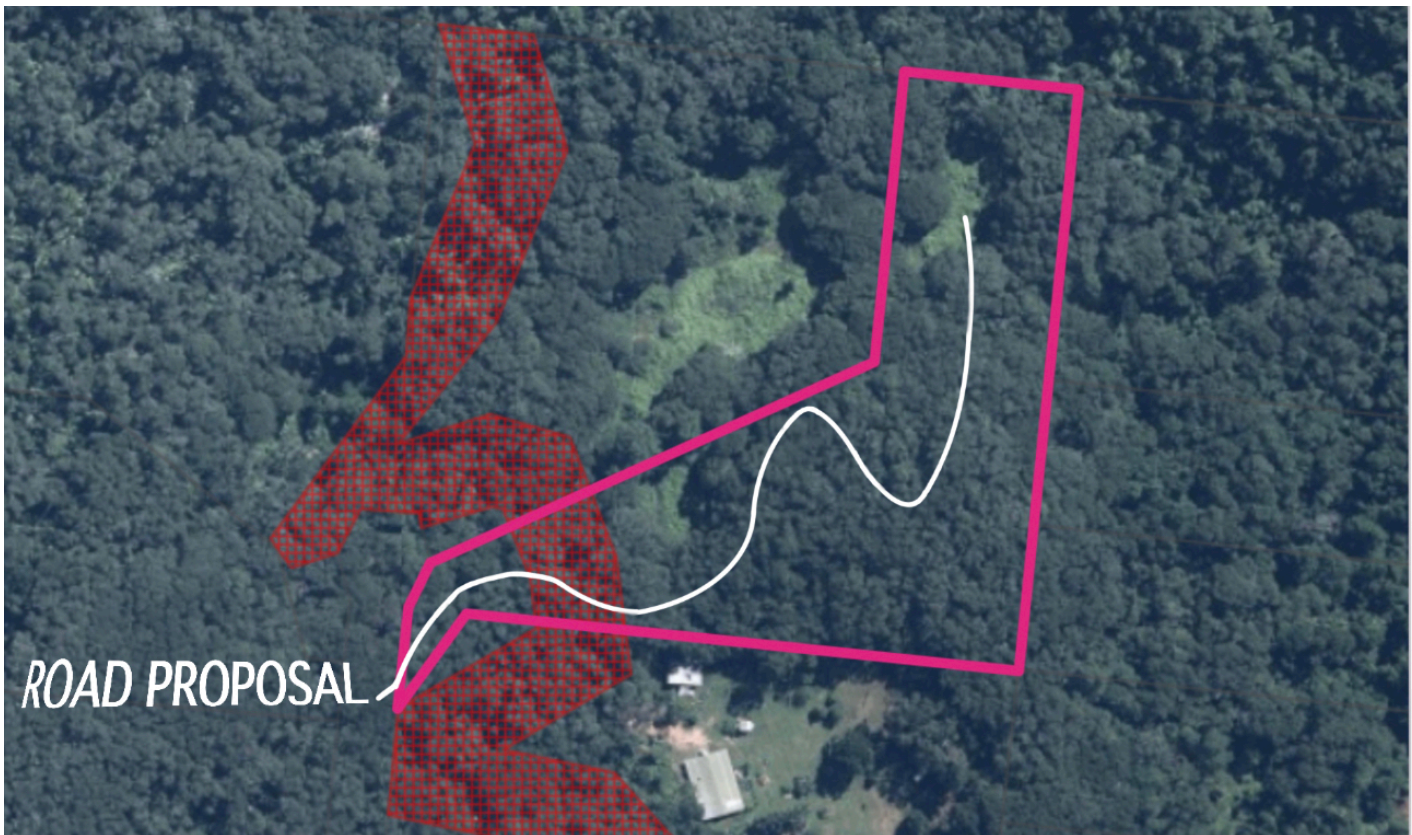
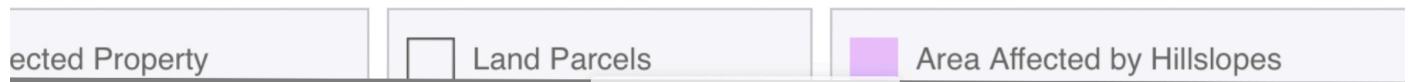
☐ Land Parcels

☒ Potential Landslide Hazard



ted Property

☐ Land Parcels



SITE AND SOIL EVALUATION REPORT

C: SITE ASSESSMENT

Topography

Slope: **Slight slope House to disposal area**

Ground Cover: **Yes**

Geology: **N/A**

Drainage Patterns: **N/A**

Available Clearances: (Site Plan details attached)

Boundaries: more then 2 Metres as required (refer to site plan)

Wells Bores: Not in Disposal Area

Embankments: None in disposal area

Stands of Trees, Clearing in Exiting Rainforest

Buildings: New Dwelling

Other: _____

Site History (Land Use): Unknown

Environmental Concerns: None

Site Stability:

Is expert Evaluation Necessary? **Yes / No**

If yes, attach stability report and give details here of:

Author: _____ Designation: _____

Company: _____ Date: _____

Drainage Controls

Depth of Seasonal water table (dug to depth of 3 metre did not strike water)

WINTER: AO

SUMMER: AO.

Need for groundwater cut-off drains? **Yes**

Need for surface water collection / cut-off drains? **No**

Availability of Reserve / Setback Areas

Reserve Area available for disposal: **Yes**

Evaluator's Photographs attached **No**

SITE AND SOIL EVALUATION REPORT

Method: Falling Water *****

Test Pit

Other Soil Texture Test \ Soil Classification Test *****

D: SUBSOIL INVESTIGATION

Soil Profile Determination

Report: _____

Estimated Soil Category:

Soil Category	Description	Tick One
1.	Gravels and Sand	
2	Sandy Loams	
3	Loams	
4.	Clay Loams	
5	Light Clays	*****
6.	Medium to Heavy Clays	

Reasons for placing in Stated Soil Category: **On Site Test**

Reasons for Design Irrigation Rate (DIR) recommendation: **Based on Test and have assumed DLR of 10 From AS 1547:2012**

General Comments

Need for Groundwater Quality Protection: No

Type of Land Application Facility considered best suited to site. 3000 Litre Septic Tank to AES bed

Evaluator's preliminary assessment of minimum Land Application Area for the site: 60 Square Metres

Estimated Daily Flow (Residence) **Based on a3 bed home = 4 people x 150 litres per day = 600 Litres**

Design Considerations: Cat. 5 Soil, 3 Bedroom house, DLR of 10

Consultation with other parties:

Neighbours	Local Environment Groups	
Environment Agencies	Not Applicable	*
Report Attached	No	

DISPOSAL SYSTEMS for EFFLUENT from DOMESTIC PREMISES A.S 1547-2000
SIZING OF DISPOSAL AREA CALCULATIONS
(Secondary treatment)

1. ABSORPTION AREA OR TRENCH

$$Aw = Q / DLR$$

Aw = wetted area in square meters

Q = daily flow in litres

DLR = long term acceptance rate in litres per day

$$Aw = (3 \text{ bedroom} = 4 \text{ persons} \times 150 \text{ lit per person per day}) / 10$$

$$Aw = 600/10$$

$$Aw = 60\text{m}^2 \text{ of wetted area required (9.6 long x 6.25 m wide) Refer to site plan}$$

2. CONCLUSION

Area and reserve area is available on-site for this amount of bed / The AES bed option is the Preferred option for on site disposal on the property (refer to site plan)



Advanced Enviro-septic Design Calculator V8.6 ©

"Always the BEST Option" until site and soil conditions rule it out.

Site Address	Lot 10 Andrew rd Forest Creek	State	QLD	Post Code	4873
Client Name	Brenden Murphy	Date of Site Visit	28/09/20		
Designers Name	A. Zammataro	Designers Ph Number	07 40982774	Designer Lic Number (as OBCO)	79358
Plumber Name	A. Zammataro	Plumber Ph Number		Plumb / Drainer Lic Number	
Council Area	Douglas	Designers AES Cert Number		Date	28/09/20

This Calculator is a guide only, receiving soil classification, surface water, water tables and all other site constraints addressed by the qualified designer.

System Designers site and soil calculation data entry

IMPORTANT NOTES

litre/meter loading rate, "30" for Advanced Secondary or "38" Secondary	38	>> This design is for a SECONDARY system.
Is this a new installation Y or N	y	>> Minimum single vent size is 80mm or 2 x 50mm house vents
Number of person	4	a septic tank outlet filter is NOT RECOMMENDED
Daily Design Flow Allowance Litre/Person/Day	150	
Number of rows required to suit site constraints	2	>> The maximum lth of a single AES pipe run is 30 meters
Surface Soil Category as established by site and soil evaluation. CATEGORY	5	>> Category may require design considerations. Ref AS1547
Design Loading Rate based on site & soil evaluation DLR (mm/day)	10	>> Soil conditioning may be necessary. Ref AS1547 & Comments.
Bore log depth below system Basel area	600mm	>> Min depth below basal area is 600 mm to establish water table or rest
Enter System footprint Slope in % for standard AES systems to calculate	2	>> Some Councils have minimum falls to Land application areas ?
Is this design a gravity system with no outlet filter? Y or N	y	>> A House Vent & LOW VENT required on this system

PLEASE CHECK YOU HAVE FALL FROM TANK TO AES SYSTEM PIPES

COMMENTS :- "The outcome must be important to everyone."

- Ripping of receiving surface is required in clay soil structures in Cat 4,5,6. In addition refer to AS 1547. Always excavate and rip parallel to the site slope/AES pipe.

- Specialist soils advice and special design techniques will be required for clay dominated soil having dispersive or shrink/swell behaviour. Refer AS1547

- Designers need to be familiar with special requirements of Local Authorities. IE - Minimum falls from Septic tank outlets to Land application areas. etc

- Plumbers are reminded that good construction techniques as per AS1547 are especially important in these soil types. Refer AS1547 & AES installation Instructions

AES System Calculator Outcomes			AES dimensions		
Total System load - litres / day (Q).	600	l/d	AES System	System Extension	
Min Length of AES pipe rows to treat loading	7.9	lm	Lth m : (L)	9.6	34.8
Number of FULL AES Pipe lengths per row	3	lths	Width m:(W)	1.35	4.90
Total Capacity of AES System pipe in Litres	1272	ltr.	Sand Depth	0.75	0.15
			Area m2	13.0	47.0

DO YOU WISH TO USE CUT LENGTHS OF PIPE IN THIS DESIGN? (Y or N) ☒ n

IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPTION ENTER "Y" ☐ n

Enter Custom Width in metre

AES INFILTRATION FOOT PRINT AREA - $L = Q / (DLR \times W)$		Length	Width	Minimum AES foot print required .	
		9.6	x 6.25	=	60.0 m2 total

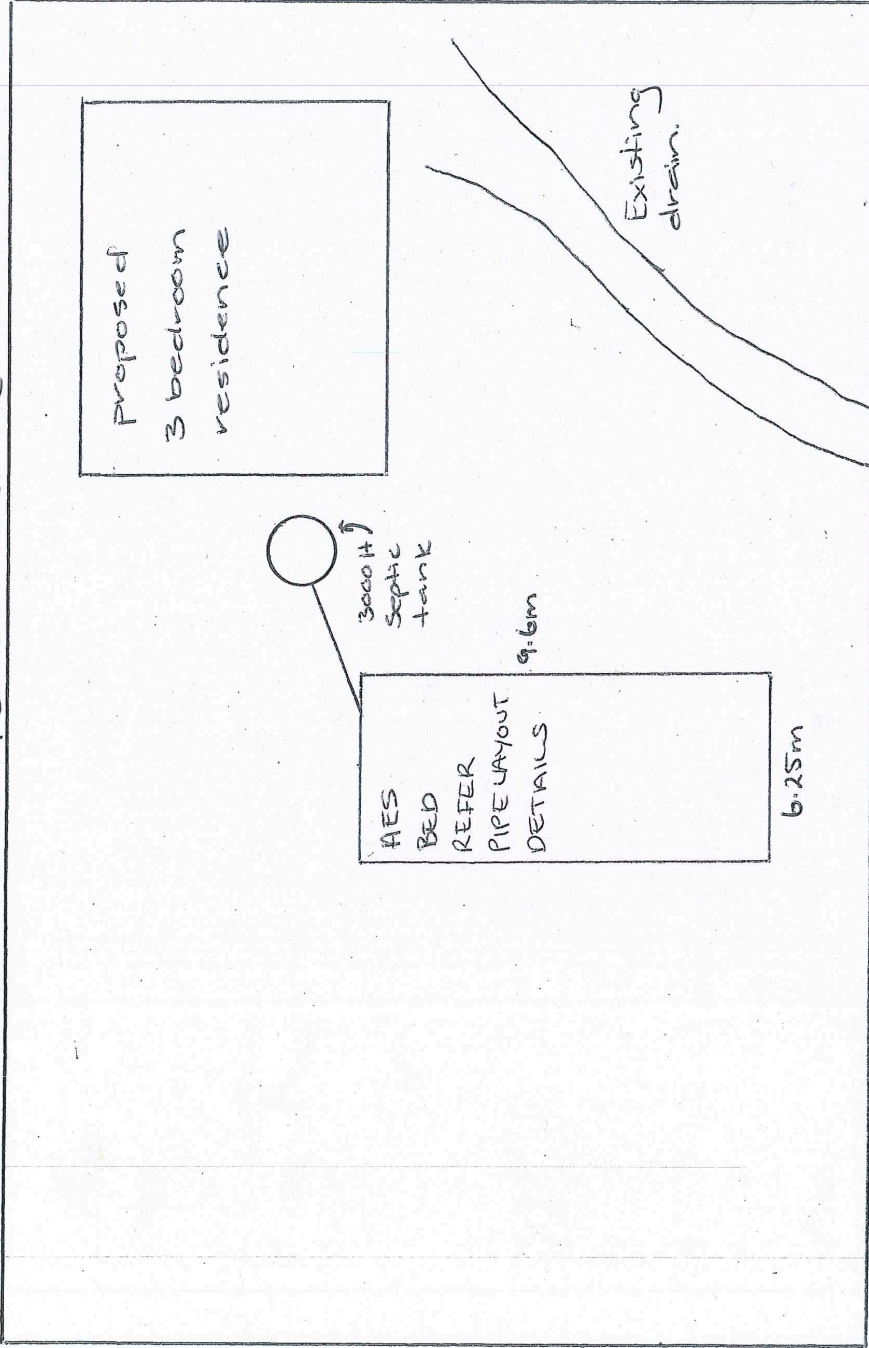
Code	AES System Bill of Materials.		Chankar Environmental Use Only	
AES-PIPE	AES 3 mtr Lths required	6 lths		
AESC	AESC Couplings required	4 ea		
AESO	AESO Offset adaptors	4 ea		
AESODV	AES Oxygen demand vent	1 ea		
AES-IPB	AES 100mm Inspection point base	2 ea		
AES Equ	AES Speed Flow Equaliser	ea		
AES DESC	Double Offset Adaptors	ea		
	TOTAL SYSTEM SAND REQUIRED (Guide Only)	20 m3		
PLEASE email your AES CALC and Drawings to			Designreview@enviro-septic.com.au	
DESIGNREVIEW@ENVIRO-SEPTIC.COM.AU				

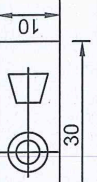
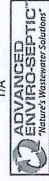
> The AES Calculator is a design aid to allow checking of the AES components and configuration and is a guide only. Site and soil conditions referencing the AS 1547 standard are calculated and designed by a Qualified Designer.

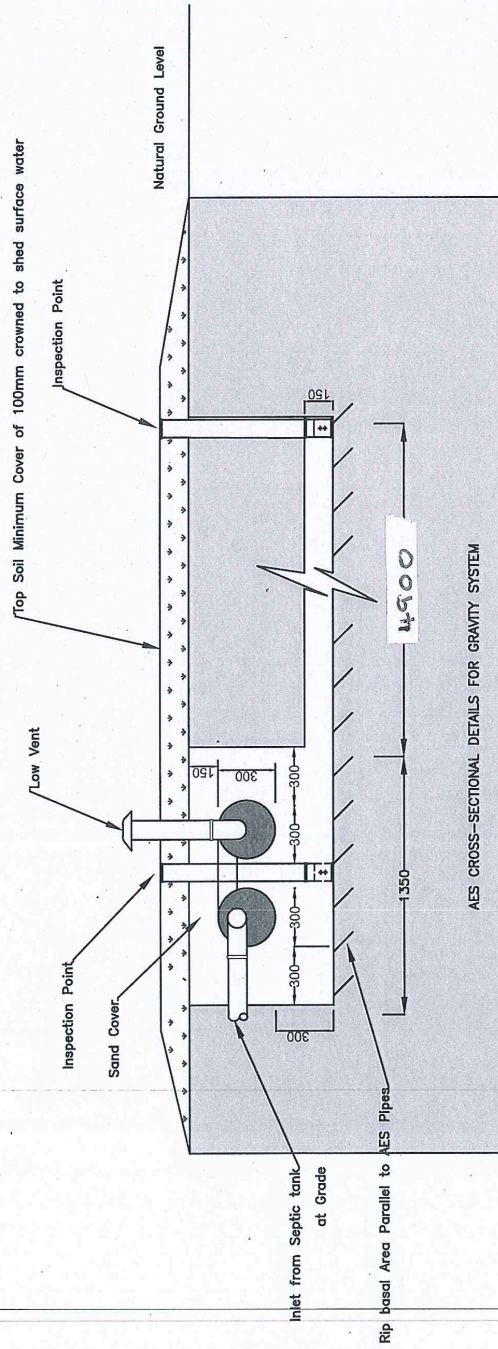
> Chankar Environmental has no responsibility for the soil evaluation, loading calculations or DLR entered by the designer for this calculator.

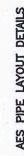
> AES pipes can be cut to length on site. They are supplied in 3 meter lths only.

LOT 10 ANDREW RD FOREST CREEK



SCALE			
ADVANCED ENVIRO - SEPTIC		OWNER / ENGAGED BY	
LOT AND PLAN		N	
AMENDMENTS		T/A CHANKAR ENVIRONMENTAL PTY LTD  QBCC LICENCE NUMBER 150 238 31 Phone: +61 7 5474 4055 Fax: +61 7 5335 1691 Email: designreview@enviro-septic.com.au www.enviro-septic.com.au	
ISSUE	DATE	SUBJECT	AUTHORISED
A		REVISION A	
DESIGNER		DATE	
T.SHERPA			
ADVANCED ENVIRO-SEPTIC CROSS SECTIONAL DETAILS FOR TWO ROWS GRAVITY SYSTEM			
SCALE: 1:30 (A4)		PROJECT JOB NUMBER	
AES - CHK		REVISION A	
		SHEET NO SL1	



SCALE

NOTICE TO LAND OWNER

Your sanitary drainage installation consists of a septic tank and land application system. To ensure the operational effectiveness of this installation the following advice should be adhered to.

OPERATION AND MAINTENANCE: GENERALLY

On-site sewerage treatment plants and the associated land application facilities are complex systems that are prone to failure if operated and maintained incorrectly. All on-site sewerage facilities require a high degree of user dedication in terms of operation and maintenance to ensure that the design performance of the facility is achieved for the expected life of the facility.

All on-site sewerage facilities or components of the facility have a finite life. For instance, septic tanks may have an expected life of 25 years, whilst the associated land application facility may have an expected life of 5 to 15 years depending on the nature of the specific site.

OPERATION & MAINTENANCE PROCEDURES

Operation and maintenance procedures are undertaken to a regular schedule appropriate to the nature and type of treatment and land application facility and in accordance with any manufacturers instructions; and Continuity of operation and maintenance is achieved throughout changes of ownership and/or changes in use or development of the site.

OPERATION

Practice water conservation, and avoid exceeding the hydraulic capacity of the facility.

Minimise the input of cleaning agents, detergents, disinfectants, bleaches, alkalis, oil, petrol, acids, degreasers, photography chemicals, cosmetics, lotions, pesticides and herbicides into the facility.

Not place materials such as disposal nappies, female napkins, paper towels, cigarette butts, bones and coffee grounds into the facility.

Be observant regarding signs of unsatisfactory performance, including unusual odours, leaks from the facility or choking.

Contact the service agent following observation of unsatisfactory performance or breakdown.

Protect facility components from structural damage, such as from vehicles.

Be familiar with safety procedures.

Establish a time pattern of desludging.

Keep the area in the vicinity of the on-site sewerage facility tidy to facilitate ease of operation and maintenance.

Where appropriate, or required by a condition of approval, enter into an annual service contract with a service agent, and

Retain copies of all service reports.

SEPTIC TANKS

It is recommended that septic tanks be inspected at two yearly intervals. The inspection should include an assessment of the sludge and scum levels and checking of the outlet and inlet square junctions for blockages. Septic Tanks should be deslugged when:

- The scum layer is within 100mm of the bottom of the inlet square junction or the sludge layer is within 200mm from the bottom of the inlet.
- The sludge occupies the basic allowance of the septic tank; or
- The sludge scum occupy two-thirds the volume of the tank (or first stage of a two stage system).

The desludging procedure should ensure that 400-500mm of liquid is retained in the tank, and that the tank is immediately refilled with water to the outlet level.

LAND APPLICATION SYSTEMS

Regular visual checking of correct system operation by households, and an annual inspection by service contractors should be undertaken. Signs of system failure include:

- Surface ponding and run-off of treated effluent;
- Degrading of soil structure (Sheet or Rill erosion, surface crusts, hard surface);
- Poor vegetation growth; and
- Unusual odours.

SUITABLE VEGETATION FOR WET SOILS

(Informative)

TYPES OF VEGETATION

(a) CLIMBERS

Bougainvillea
Hardenbergia
Hibbertia Scandens

Kennedia
Lonicera Japonica
Pandorea Jasminoides

(b) GRASSES

Buffalo

Kikuyu

(c) GROUND COVER

Acanthus Mollis
Coprosma X Kirki
Grevillea Poorinda

Liriope Muscari
Ophiopogon
Royal Mantle

(d) PERENNIALS

Agapanthus Preaeco
Astor Novi-Belgii
Canna X Generalis
Chrysanthemum Maximum

Gazania X Hybrida
Salvia X Superba
Stokesia Laevis
Viola Hederacea

(e) SHRUBS

Abelia X Grandiflora
Acacia Longifolia
Callistemon Citrinus
Cassia Bicapsularis
Ceratostigma
Chaenomeles Lagenaria
Correa Alba
Cotoneaster Glaucophyllus
Cotoneaster Lacteus
Cotoneaster Pannosus
Caphea Ignea
Euonymus Japonicus
Euphorbia Millii

Euphorbia Pulcherrima
Hebe Speciosa
Jasminum Mesnyi
Jasminum Officinale
Jasminum Polyanthum
Lantana Camara
Lantana Montevicensis
Leptospermum Flavescens
Narium Oleander
Plumbago Auriculate
Pyracantha Fortuneana
Thunbergia Alata
Westringia Fruticosa

(f) TREES

Angophora Costata
Banksia Integrifolia
Callistemon Salignus
Callistemon Viminalis
Casuarina Glauca
Casuarina Stricta
Eucalyptus Botryoides
Eucalyptus Robusta
Hakea Salicifolia
Hakea Saligna

Leptospermum Laevigatum
Leptospermum Petersonii
Melaleuca Armillaris – Sandy Soil
Melaleuca Linariifolia – Clay Soil
Melaleuca Quinquenervia – Sandy Soil
Melaleuca Styphelioides – Clay Soil
Nyssa Sylvatica
Photinea X Frasieri 'Robusta'
Tristanopsis Laurina

All vegetation should be checked with Local Authorities and Nurseries prior to installation for suitability to each region.

