Assessment of application against relevant Development Codes

APPLICATION DETAILS

APPLICATION		PREMISES	
FILE NO:	MCU/24/0005	**ADDRESS:**	269 Shanty Creek Road, Mareeba
APPLICANT:	Wallace Quarrying & Mining Pty Ltd	**RPD:**	Lot 231 on NR4837
LODGED BY:	Anson Advisory	**AREA:**	82.859 hectares
DATE LODGED:	29 January 2024	**OWNER:**	I & R Wallace
TYPE OF APPROVAL:	Development Permit		
PROPOSED DEVELOPMENT:	Material Change of Use – Extractive Industry (up to 5,000 tonnes per annum)		
PLANNING SCHEME:	Mareeba Shire Council Planning Scheme 2016		
ZONE:	Rural zone		
LEVEL OF ASSESSMENT:	Impact Assessment		
SUBMISSIONS:	Sixteen (16)		

Relevant Development Codes

The following Development Codes are considered to be applicable to the assessment of the application:

6.2.9 Rural zone code
8.2.1 Agricultural land overlay code
8.2.2 Airport environs overlay code
8.2.3 Bushfire hazard overlay code
8.2.4 Environmental significance overlay code
8.2.6 Flood hazard overlay code
8.2.8 Hill and slope overlay code
9.3.5 Industrial activities code
9.4.2 Landscaping code
9.4.3 Parking and access code
9.4.5 Works, services and infrastructure code

6.2.9 Rural zone code

6.2.9.1 Application

(1) This code applies to assessing development where:
  (a) located in the Rural zone; and
  (b) it is identified in the assessment benchmarks for assessable development and requirements for accepted development column of an assessment table in Part 5 of the planning scheme.

6.2.9.2 Purpose

(1) The purpose of the Rural zone code is to:
  (a) provide for rural uses including cropping, intensive horticulture, intensive animal industries, animal husbandry, animal keeping and other primary production activities;
  (b) provide opportunities for non-rural uses that are compatible with agriculture, the environmental features, and landscape character of the rural area where the uses do not compromise the long-term use of the land for rural purposes;
  (c) protect or manage significant natural resources and processes to maintain the capacity for primary production.

(2) Mareeba Shire Council's purpose of the Rural zone code is to recognise the importance of primary production to the economy of the region and to maintain and strengthen the range of primary industries which contribute to the rural economy.

The purpose of the Rural zone code is to:
  (a) recognise the diversity of rural uses that exists throughout the region;
  (b) protect the rural character of the region;
  (c) provide facilities for visitors and tourists that are accessible and offer a unique experience;
  (d) protect the infrastructure of the Mareeba-Dimbulah Irrigation Scheme Area from development which may compromise long term use for primary production;
  (e) maintain distinct boundaries between the rural areas and the villages, towns and urban areas of the region;
  (f) provide for a range of non-urban uses, compatible and associated with rural or ecological values including recreational pursuits and tourist activities;
  (g) prevent adverse impacts of development on ecological values;
  (h) preserve land in large holdings; and
  (i) facilitate the protection of strategic corridors across the landscape which link remnant areas of intact habitat and transport corridors.

(3) The purpose of the Rural zone code will be achieved through the following overall outcomes:
  (a) Areas for primary production and other rural activities are conserved and not fragmented below 60ha unless for a *public reconfiguration purpose*;
  (b) The establishment of a wide range of rural pursuits is facilitated, including cropping, intensive horticulture, forestry, intensive animal industries, animal husbandry and animal keeping and other compatible primary production uses;
  (c) The establishment of extractive industries, mining and associated activities and alternative forms of energy generation is appropriate where environmental impacts and land use conflicts are minimised;
  (d) Uses that require isolation from urban areas as a consequence of their impacts such as noise or odour may be appropriate where land use conflicts are minimised;

(e) Development is reflective of and responsive to the environmental constraints of the land;
(f) Residential and other uses are appropriate only where directly associated with the rural nature of the zone;
(g) Low-impact tourism and recreation activities do not compromise the long-term use of the land for rural purposes;
(h) The viability of both existing and future rural uses and activities is protected from the intrusion of incompatible uses;
(i) Visual impacts of clearing, building, materials, access ways and other aspects of development are minimised or appropriately managed;
(j) Adverse impacts of development both on-site and from adjoining areas are avoided and any impacts are minimised through location, design, operation and management; and
(k) Natural features such as creeks, gullies, waterways, wetlands and bushland are retained, managed, enhanced and separated from adjacent development.

6.2.9.3 Criteria for assessment

Table 6.2.9.3—Rural zone code - For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Complies	Comments
For accepted development subject to requirements and assessable development			
Height			
PO1 Building height takes into consideration and respects the following: (a) the height of existing buildings on adjoining premises; (b) the development potential, with respect to height, on adjoining premises; (c) the height of buildings in the vicinity of the site; (d) access to sunlight and daylight for the site and adjoining sites; (e) privacy and overlooking; and (f) site area and street frontage length.	**AO1.1** Development, other than buildings used for rural activities, has a maximum building height of: (a) 8.5 metres; and (b) 2 storeys above ground level.	n/a	There are no buildings or structures proposed as part of this development.
	AO1.2 Buildings and structures associated with a rural activity including machinery, equipment, packing or storage buildings do not exceed 10 metres in height.	n/a	There are no buildings or structures proposed as part of this development.
Siting, where not involving a Dwelling house Note—Where for Dwelling house, the setbacks of the Queensland Development Code apply.			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO2 Development is sited in a manner that considers and respects: (a) the siting and use of adjoining premises; (b) access to sunlight and daylight for the site and adjoining sites; (c) privacy and overlooking; (d) air circulation and access to natural breezes; (e) appearance of building bulk; and (f) relationship with road corridors.	**AO2.1** Buildings and structures include a minimum setback of: (a) 40 metres from a frontage to a State-controlled road; and (b) 10 metres from a boundary to an adjoining lot.	n/a	There are no buildings or structures proposed as part of this development.
	AO2.2 Buildings and structures, where for a Roadside stall, include a minimum setback of 0 metres from a frontage to a road that is not a State-controlled road.	✔	A roadside stall is not being proposed.
	AO2.3 Buildings and structures, expect where a Roadside stall, include a minimum setback of: (a) 10 metres from a frontage to a sealed road that is not a State-controlled road; and (b) 100 metres from a frontage to any other road that is not a State-controlled road;	n/a	There are no buildings or structures proposed as part of this development.
Accommodation density			
PO3 The density of Accommodation activities: (a) respects the nature and density of surrounding land use; (b) is complementary and subordinate to the rural and natural landscape values of the area; and (c) is commensurate to the scale and frontage of the site.	**AO3.1** Residential density does not exceed one dwelling house per lot.	n/a	An accommodation activity has not been proposed.
	AO3.2 Residential density does not exceed two dwellings per lot and development is for: (a) a secondary dwelling; or (b) Caretaker's accommodation and includes building work or minor building work with a maximum gross floor area of 100m^2; or (c) Rural worker's accommodation.	n/a	An accommodation activity has not been proposed.

Performance outcomes	Acceptable outcomes	Complies	Comments
For assessable development			
Site cover			
PO4 Buildings and structures occupy the site in a manner that: (a) makes efficient use of land; (b) is consistent with the bulk and scale of buildings in the surrounding area; and (c) appropriately balances built and natural features.	**AO4** No acceptable outcome is provided.	n/a	There are no buildings or structures proposed as part of this development.
PO5 Development complements and integrates with the established built character of the Rural zone, having regard to: (a) roof form and pitch; (b) eaves and awnings; (c) building materials, colours and textures; and (d) window and door size and location.	**AO5** No acceptable outcome is provided.	n/a	There are no buildings or structures proposed as part of this development.

Performance outcomes	Acceptable outcomes	Complies	Comments
Amenity			
PO6 Development must not detract from the amenity of the local area, having regard to: (a) noise; (b) hours of operation; (c) traffic; (d) advertising devices; (e) visual amenity; (f) privacy; (g) lighting; (h) odour; and (i) emissions.	**AO6** No acceptable outcome is provided.	✔	Previous sand extraction operations have demonstrated that their impacts are not significantly different to typical farming impacts. The proposed extraction area achieves the Planning Scheme's desired setbacks of 200m from any sensitive land use and the more intensive processing component of the development is setback in excess of 400 metres from the nearest sensitive land use. The applicants have prepared a comprehensive Site Based Management Plan and the extractive industry operation will be required to operate in accordance with this management plan at all times which will help ensure amenity impacts are mitigated and managed. The proposal is consistent with surrounding rural uses and will not adversely detract from the amenity of the local area.

Performance outcomes	Acceptable outcomes	Complies	Comments
PO7 Development must take into account and seek to ameliorate any existing negative environmental impacts, having regard to: (a) noise; (b) hours of operation; (c) traffic; (d) advertising devices; (e) visual amenity; (f) privacy; (g) lighting; (h) odour; and (i) emissions.	**AO7** No acceptable outcome is provided.	✔	The applicants have prepared a comprehensive Site Based Management Plan and the extractive industry operation will be required to operate in accordance with this management plan at all times which will help ensure amenity impacts are mitigated and managed. Additionally, a Site Based Rehabilitation Management Plan is required to be prepared for the development. The proposal is for a small-scale sand extraction operation and is considered to be consistent with surrounding rural uses and will not adversely detract from the amenity of the local area.
Rural uses			
PO8 Uses and other development include those that: (a) promote rural activities such as agriculture, rural enterprises and small scale industries that serve rural activities; or (b) promote low impact tourist activities based on the appreciation of the rural character, landscape and rural activities; or (c) are compatible with rural activities.	**AO8** No acceptable outcome is provided.	✔	Complies.

Performance outcomes	Acceptable outcomes	Complies	Comments
PO9 Areas for use for primary production and rural activities are conserved and protected from fragmentation, alienation and degradation.	**AO9** No acceptable outcome is provided.	✔	The proposed extractive industry operation will occur predominately within the footprint of the sites existing dam. The sand processing area is also pre-disturbed and not currently used for agricultural production or livestock grazing. Once complete, the increase capacity of the water storage dam will only value add to the sites agricultural production potential by increasing the amount of water available for agriculture.

8.2.1 Agricultural land overlay code

8.2.1.1 Application

(1) This code applies to assessing development where:
  (a) land the subject of development is located within the agricultural land areas identified on the **Agricultural land overlay maps (OM-001a-n)**; and
  (b) it is identified in the assessment benchmarks for assessable development and requirements for accepted development column of an assessment table in Part 5 of the planning scheme.

Note—Agriculture is appropriately reflected in Overlay Map 1 and is required to be mapped by State Government in response to Economic Growth State Interests.

8.2.1.2 Purpose

(1) The purpose of the Agricultural land overlay code is to protect or manage important agricultural areas, resources, and processes which contribute to the shire's capacity for primary production.

(2) The purpose of the code will be achieved through the following overall outcomes:
  (a) The alienation, fragmentation or reduction in primary production potential of land within the 'Class A' area or 'Class B' area is avoided, except where:
    (i) an overriding need exists for the development in terms of public benefit,
    (ii) no suitable alternative site exists; and
    (iii) the fragmentation or reduced production potential of agricultural land is minimised;
  (b) 'Class A' areas and 'Class B' areas continue to be used primarily for more intensive agricultural activities which utilise the land quality provided in these areas;
  (c) Grazing on very large land holdings is maintained as the dominant rural activity in the 'Broadhectare rural' area; and
  (d) Land with the 'Broadhectare rural' area is maintained in its current configuration.

8.2.1.3 Criteria for assessment

Table 8.2.1.3 – Agricultural land overlay code - For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Complies	Comments
For accepted development subject to requirements and assessable development			
PO1 The fragmentation or loss of productive capacity of land within the 'Class A' area or 'Class B' area identified on the **Agricultural land overlay maps (OM-001a-n)** is avoided unless: (a) an overriding need exists for the development in terms of public benefit; (b) no suitable alternative site exists; and (c) loss or fragmentation is minimised to the extent possible.	**AO1** Buildings and structures are not located on land within the 'Class A' area or 'Class B' area identified on the **Agricultural land overlay maps (OM-001a-n)** unless they are associated with: (a) animal husbandry; or (b) animal keeping; or (c) cropping; or (d) dwelling house; or (e) home based business; or (f) intensive animal industry (only where for feedlotting); or (g) intensive horticulture; or (h) landing; or (i) roadside stalls; or (j) winery.	✔	The proposed extraction area is mostly outside of the mapped Class A area. Some of the extraction area may be shown as Class A due to misalignment in the mapping layers. The stockpiling and processing area is a non-permanent activity within the Class A area which may be ceased whenever the underlying agricultural land is required. The extractive industry use does not conflict with the farming of the surrounding Class A area.
For assessable development			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO2 Sensitive land uses in the 'Class A' area, 'Class B' area or the 'Broadhectare rural' area identified on the **Agricultural land overlay maps (OM-001a-n)** are designed and located to: (a) avoid land use conflict; (b) manage impacts from agricultural activities, including chemical spray drift, odour, noise, dust, smoke and ash; (c) avoid reducing primary production potential; and (d) not adversely affect public health, safety and amenity.	**AO2** No acceptable outcome is provided.	n/a	The application is not proposing a sensitive land use.
PO3 Development in the 'Class A' area or 'Class B' area identified on the **Agricultural land overlay maps (OM-001a-n)**: (a) ensures that agricultural land is not permanently alienated; (b) ensures that agricultural land is preserved for agricultural purposes; and (c) does not constrain the viability or use of agricultural land.	**AO3** No acceptable outcome is provided.	✔	The proposed extraction area is mostly outside of the mapped Class A area. Some of the extraction area may be shown as Class A due to misalignment in the mapping layers. The stockpiling and processing area is a non-permanent activity within the Class A area which may be ceased whenever the underlying agricultural land is required. The extractive industry use does not conflict with the farming of the surrounding Class A area.

Performance outcomes	Acceptable outcomes	Complies	Comments
If for Reconfiguring a lot			
PO4 The 'Broadhectare rural area' identified on the **Agricultural land overlay maps (OM-001a-n)** is retained in very large rural holdings viable for broad scale grazing and associated activities.	**AO4** Development does not involve the creation of a new lot within the 'Broadhectare rural' area identified on the **Agricultural land overlay maps (OM-001a-n)**.	n/a	Not applicable.
PO5 Reconfiguring a lot in the 'Class A' area, 'Class B' area or the 'Broadhectare rural' area identified on the **Agricultural land overlay maps (OM-001a-n)** that is severed by a gazetted road occurs only where it does not fragment land used for agricultural purposes.	**AO5** No acceptable outcome is provided.	n/a	Not applicable.
PO6 Any Reconfiguring a lot in the 'Class A' area, 'Class B' area or the 'Broadhectare rural' area identified on the **Agricultural land overlay maps (OM-001a-n)**, including boundary realignments, only occurs where it: (a) improves agricultural efficiency; (b) facilitates agricultural activity; or (c) facilitates conservation outcomes; or (d) resolves boundary issues where a structure is built over the boundary line of two lots.	**AO6** No acceptable outcome is provided.	n/a	Not applicable.

8.2.2 Airport environs overlay code

8.2.2.1 Application

(1) This code applies to assessing development where:
  (a) land the subject of development is affected by a constraint category identified on the **Airport environs overlay maps (OM-002a-f)**; and
  (b) it is identified in the assessment benchmarks for assessable development and requirements for accepted development column of an assessment table in Part 5 of the planning scheme.

Note—Strategic airports and aviation facilities are appropriately reflected in Overlay Map 2 and is required to be mapped by State Government in response to Infrastructure State Interests.

8.2.2.2 Purpose

(1) The purpose of the Airport environs overlay code is to protect the current and ongoing operations of established airports, aerodromes and aviation infrastructure in Mareeba Shire.

(2) The purpose of the code will be achieved through the following overall outcomes:
  (a) The ongoing operation of Mareeba Airport and its associated infrastructure are protected from incompatible development;
  (b) Aerodromes in Chillagoe and Dimbulah are maintained to support recreation, mining and rural uses;
  (c) Operational airspace is protected;
  (d) Threats to aviation safety such as bird and bat strike and distraction or blinding of pilots are avoided or minimised;
  (e) State significant aviation facilities associated with the Mareeba Airport are protected from encroachment by sensitive land uses; and
  (f) Development in the vicinity of airports, aerodromes and aviation infrastructure does not compromise public safety.

8.2.2.3 Criteria for assessment

Table 8.2.2.3 - Airport environs overlay code - For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Complies	Comments
For accepted development subject to requirements and assessable development			
Protection of operational airspace			
PO1 Development does not interfere with movement of aircraft or the safe operation of an airport or aerodrome where within the: (a) Airport environs: OLS area of Mareeba Airport identified on **Airport environs overlay map (OM-002c)**; or (b) Airport environs: OLS area of Cairns Airport identified on **Airport environs overlay map (OM-002c.1)**; or (c) 'Airport environs: Airport buffer - 1 kilometre' of an aerodrome identified on **Airport environs overlay map (OM-002f)**; or (d) 'Airport environs: Airport buffer - 3 kilometres' of an aerodrome identified on **Airport environs overlay map (OM-002f)**.	**AO1.1** Development does not exceed the height of the Obstacle Limitation Surface (OLS) where located within the Airport environs: OLS area of: (a) Mareeba Airport identified on **Airport environs overlay map (OM-002c)**; or (b) Cairns Airport identified on **Airport environs overlay map (OM-002c.1)**.	n/a	Not applicable. The subject site is not within the OLS.
	AO1.2 Development has a maximum height of 10 metres where within the 'Airport environs: Airport buffer - 1 kilometre' of an aerodrome identified on **Airport environs overlay map (OM-002f)**.	n/a	The subject land is not within the 1 kilometre buffer.
	AO1.3 Development has a maximum height of 15 metres where within the 'Airport environs: Airport buffer - 3 kilometres' of an aerodrome identified on **Airport environs overlay map (OM-002f)**.	n/a	The subject land is not within the 3 kilometre buffer.
Lighting			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO2 Development does not include lighting that: (a) has the potential to impact on the efficient and safe operation of Mareeba Airport or an aerodrome; or (b) could distract or confuse pilots.	**AO2** Development within the 'Airport environs: Distance from airport - 6 kilometres' area for Mareeba Airport identified on **Airport environs overlay map (OM-002b)** or the 'Airport environs: Airport buffer - 3 kilometres' of an aerodrome identified on **Airport environs overlay map (OM-002f)** does not: (a) involve external lighting, including street lighting, that creates straight parallel lines of lighting that are more than 500 metres long; and (b) does not contain reflective cladding upwards shining lights, flashing lights or sodium lights.	n/a	The subject site is not with 6 kilometres of the Mareeba Airport.
Noise exposure			
PO3 Development not directly associated with Mareeba Airport is protected from aircraft noise levels that may cause harm or undue interference.	**AO3** Sensitive land uses are acoustically insulated to at least the minimum standards specified by AS2021 Acoustics - Aircraft Noise Intrusion - Building Siting and Construction where located within the 'Airport environs: 20-25 ANEF' area identified on **Airport environs overlay map (OM-002d)**.	n/a	Not applicable.
Public safety			
PO4 Development does not compromise public safety or risk to property.	**AO4** Development is not located within the 'Airport environs: Mareeba Airport public safety area' identified on **Airport environs overlay map (OM-002e)**.	n/a	Not applicable.
State significant aviation facilities associated with Mareeba Airport			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO5 Development does not impair the function of state significant aviation facilities by creating: (a) physical obstructions; or (b) electrical or electro-magnetic interference; or (c) deflection of signals.	**AO5.1** Development within 'Airport environs: Zone B (600 metre buffer)' for the 'Saddle Mountain VHF' facility identified on **Airport environs overlay map (OM-002a.1)** does not exceed a height of 640 metres AHD.	n/a	Not applicable.
	AO5.2 Development within 'Airport environs: Zone B (4,000 metre buffer)' for the 'Hahn Tableland Radar (RSR)' facility identified on **Airport environs overlay map (OM-002a)** does not exceed a height of 950 metres AHD, unless associated with Hann Tableland Radar facility.	n/a	Not applicable.
	AO5.3 Building work does not occur within 'Airport environs: Zone A (200 metre buffer)' of the 'Biboohra CVOR' facility identified on **Airport environs overlay map (OM-002a)** unless associated with the Biboohra CVOR facility.	n/a	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
	AO5.4 Development within 'Airport environs: Zone B (1,500 metre buffer)' of the 'Biboohra CVOR' facility identified on **Airport environs overlay map (OM-002a)**, but outside 'Zone A (200 metre buffer)' identified on **Airport environs overlay map (OM-002a)**, does not include: (a) the creation of a permanent or temporary physical line of sight obstruction above 13 metres in height; or (b) overhead power lines exceeding 5 metres in height; or (c) metallic structures exceeding 7.5 metres in height; or (d) trees and open lattice towers exceeding 10 metres in height; or (e) wooden structures exceeding 13 metres in height.	n/a	Not applicable.
For assessable development			
Mareeba Airport			
Protection of operational airspace			
PO6 Development within the vicinity of Mareeba Airport or an aerodrome does not interfere with the: (a) movement of aircraft; or (b) safe operation of the airport or facility.	**AO6.1** Development involving sporting and recreational aviation activities such as parachuting, hot air ballooning or hang gliding, does not occur within the Airport environs: OLS area of: (a) Mareeba Airport identified on **Airport environs overlay map (OM-002c)**; or (b) Cairns Airport identified on **Airport environs overlay map (OM-002c.1)**.	n/a	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
	AO6.2 Development involving temporary or permanent aviation activities does not occur within the 'Airport environs: Airport buffer - 3 kilometres' of an aerodrome identified on **Airport environs overlay map (OM-002f)**.	n/a	Not applicable.
PO7 Development does not affect air turbulence, visibility or engine operation in the operational airspace of Mareeba Airport or regional aerodromes.	**AO7** Development does not result in the emission of a gaseous plume, at a velocity exceeding 4.3 metres per second, or smoke, dust, ash or steam within: (a) the Airport environs: OLS area of Mareeba Airport identified on **Airport environs overlay map (OM-002c)**; or (b) the Airport environs: OLS area of Cairns Airport identified on **Airport environs overlay map (OM-002c.1)**; or (c) the 'Airport environs: Airport buffer - 1 kilometre' of a regional aerodrome identified on **Airport environs overlay map (OM-002f)**.	n/a	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
Managing bird and bat strike hazard to aircraft			
PO8 Development in the environs of Mareeba Airport or an aerodrome does not contribute to the potentially serious hazard from wildlife (bird or bat) strike.	**AO8.1** Development within the 'Airport environs: Distance from airport - 8 kilometres' Bird and bat strike zone of Mareeba Airport identified on **Airport environs overlay map (OM-002b)** or the 'Airport environs: Airport buffer - 3 kilometres' of an aerodrome identified on **Airport environs overlay map (OM-002f)** provides that potential food and waste sources are covered and collected so that they are not accessible to wildlife.	n/a	Not applicable.
	AO8.2 Development within the 'Airport environs: Distance from airport - 3 kilometres' Bird and bat strike zone of Mareeba Airport identified on **Airport environs overlay map (OM-002b)** or the 'Airport environs: Airport buffer - 1 kilometre' of an aerodrome identified on **Airport environs overlay map (OM-002f)** does not include: (a) food processing; or (b) abattoir; or (c) intensive horticulture; or (d) intensive animal husbandry; or (e) garden centre; or (f) aquaculture.	n/a	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
	AO8.3 Putrescible waste disposal sites do not occur within the 'Airport environs: Distance from airport - 13 kilometres' Bird and bat strike zone of: (a) Mareeba Airport identified on **Airport environs overlay map (OM-002b)**; or (b) Cairns Airport identified on **Airport environs overlay map (OM-002b.1)**.	✔	The proposed development does not include putrescible waste disposal.

8.2.3 Bushfire hazard overlay code

8.2.3.1 Application

(1) This code applies to assessing development where:
  (a) land the subject of development is located within a Bushfire hazard area and Potential impact buffer (100 metres) identified on the **Bushfire hazard overlay maps (OM-003a-o)**; and
  (b) it is identified in the assessment benchmarks for assessable development and requirements for accepted development column of an assessment table in Part 5 of the planning scheme.

Note—Natural hazards are appropriately reflected in Overlay Maps 3, 6 and 8 and are required to be mapped by State Government in response to Hazard and Safety State Interests.

8.2.3.2 Purpose

(1) The purpose of the Bushfire hazard overlay code is to minimise the threat of bushfire to people and property.

(2) The purpose of the code will be achieved through the following overall outcomes:
  (a) Development in a Bushfire hazard area is compatible with the nature of the hazard;
  (b) The number of people and properties subject to bushfire hazards are minimised through appropriate building design and location;
  (c) Development does not result in a material increase in the extent, duration or severity of bushfire hazard; and
  (d) Appropriate infrastructure is available to emergency services in the event of a bushfire.

8.2.3.3 Criteria for assessment

Table 8.2.3.3—Bushfire hazard overlay code — For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Complies	Comments
For accepted development subject to requirements and assessable development			
Water supply for fire-fighting purposes			
PO1 Development where within a 'Bushfire hazard area' and 'Potential impact buffer (100 metres)' identified on the **Bushfire hazard overlay maps (OM-003a-o)** maintains the safety of people and property by providing an adequate, accessible and reliable water supply for fire-fighting purposes which is safely located and has sufficient flow and pressure characteristics. Note— A Bushfire hazard management plan must be prepared by suitably qualified persons in seeking to demonstrate compliance with the Performance outcome.	**Where within a 'Bushfire hazard area' and 'Potential impact buffer (100 metres)' identified on the Bushfire hazard overlay maps (OM-003a-o)** **AO1.1** Where in a reticulated water service area, the on-site water supply has flow and pressure characteristics of 10 litres a second at 200 kPa. OR	n/a	Not applicable.
	AO1.2 Where access to the reticulated water network is not available, a minimum on site water storage of 5,000 litres is provided that must comprise:	✔	The existing farm dam exceeds this water storage requirement.

Performance outcomes	Acceptable outcomes	Complies	Comments
	(a) a separate tank; or (b) a reserve section in the bottom part of the main water supply tank; or (c) a dam; or (d) a swimming pool. Note—Where a water tank is provided for fire-fighting purposes it is fitted with standard rural fire brigade fittings and the tank is provided with a hardstand area for heavy vehicles.		
For assessable development			
Land use			
PO2 Development within a 'Bushfire hazard area' and 'Potential impact buffer (100 metres)' identified on the **Bushfire hazard overlay maps (OM-003a-o)** is appropriate to the bushfire hazard risk having regard to the: (a) the bushfire risk compatibility of development; (b) the vulnerability of and safety risk to persons associated with the use; and (c) consequences of bushfire in regard to impacts on essential infrastructure, buildings and structures. Note— A Bushfire hazard management plan must be prepared by suitably qualified persons in seeking to demonstrate compliance with the Performance outcome.	**AO2** All buildings, structures, infrastructure and facilities associated with the following uses are located outside any area of the site located within a 'Bushfire hazard area' and a 'Potential impact buffer (100 metres)' identified on the **Bushfire hazard overlay maps (OM-003a-o)**: (a) child care centre; or (b) community care centre; or (c) correctional facility; or (d) educational establishment; or (e) emergency services; or (f) hospital; or (g) residential care facility; or (h) retirement facility; or (i) rooming accommodation; or (j) shopping centre; or (k) tourist park; or (l) tourist attraction.	✔	The application does not propose any of the nominated uses.
Lot design			
PO3 Reconfiguring a lot within a 'Bushfire hazard area' and 'Potential impact buffer (100 metres)' identified on the **Bushfire hazard overlay maps (OM-003a-o)** minimises the potential adverse impacts of bushfire on the safety of people,	**Where within a 'Bushfire hazard area' and 'Potential impact buffer (100 metres)' identified on the Bushfire hazard overlay maps (OM-003a-o)** **AO3.1** No new lots are created. OR	n/a	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
property and the environment through lot design that: (a) is responsive to the nature and extent of bushfire risk; and (b) allows efficient emergency access to buildings for fire-fighting appliances. Note— A Bushfire hazard management plan must be prepared by suitably qualified persons in seeking to demonstrate compliance with the Performance outcome.	**AO3.2** All lots include a building envelope that achieves a radiant heat flux level of 29kW/m^2 at the permitter of the building envelope. Note—Where a radiant heat flux of 29kW/m^2 is achieved and this relies on cleared or maintained land external to the land the subject of the development application it must be demonstrated that land external to the site will be maintained to a standard that does not exceed the level of bushfire hazard identified in a Bushfire hazard management plan.		
Firebreaks and access			
PO4 In a 'Bushfire hazard area' and 'Potential impact buffer (100 metres)' identified on the **Bushfire hazard overlay maps (OM-003a-o)**, vehicular access is designed to mitigate against bushfire hazard by: (a) ensuring adequate access for fire-fighting and other emergency vehicles; (b) ensuring adequate access for the evacuation of residents and emergency personnel in an emergency situation, including alternative safe access routes should access in one direction be blocked in the event of a fire; and (c) providing for the separation of developed areas and adjacent bushland. Note—Where it is not practicable to provide firebreaks in accordance with A04.2 Fire Maintenance Trails are provided in accordance with the following: i. located as close as possible to the boundaries of the lot and the adjoining hazardous vegetation;	**AO4.1** In a 'Bushfire hazard area' and 'Potential impact buffer (100 metres)' identified on the **Bushfire hazard overlay maps (OM-003a-o)**, roads are designed and constructed: (a) with a maximum gradient of 12.5%; (b) to not use cul-de-sacs; and (c) a constructed road width and weather standard complying with Planning Scheme Policy 4 - FNQROC Regional Development Manual.	✔	No new roads are proposed.
	AO4.2 In a 'Bushfire hazard area' and 'Potential impact buffer (100 metres)' identified on the **Bushfire hazard overlay maps (OM-003a-o)**, firebreaks are provided: (a) consisting of a perimeter road that separates lots from areas of bushfire hazard; (b) a minimum cleared width of 20 metre; (c) a maximum gradient of 12.5%; and (d) a constructed road width and weather standard complying with Planning Scheme Policy 4 -	✔	The existing driveway and cleared paddock provides a firebreak for the affected corner of the processing area. All other aspects of the extractive industry are outside of the bushfire hazard areas.

Performance outcomes	Acceptable outcomes	Complies	Comments
ii. the minimum cleared width not less than 6 metres; iii. the formed width is not less than 2.5 metres; iv. the formed gradient is not greater than 15%; v. vehicular access is provided at both ends; *vi.* passing bays and turning areas are provided for fire-fighting appliances located on public land. Note— A Bushfire hazard management plan must be prepared by suitably qualified persons in seeking to demonstrate compliance with the Performance outcome.	FNQROC Regional Development Manual.		
Hazardous materials			
PO5 Public safety and the environment are not adversely affected by the detrimental impacts of bushfire of hazardous materials manufactured or stored in bulk. Note— A Bushfire hazard management plan must be prepared by suitably qualified persons in seeking to demonstrate compliance with the Performance outcome.	**AO5** The processing or storage of dangerous goods or hazardous materials is not undertaken in a 'Bushfire hazard area' and a 'Potential impact buffer (100 metres)' identified on the **Bushfire hazard overlay maps (OM-003a-o)**.	✔	The application is not proposing the processing or storage of dangerous good or hazardous materials.
Landscaping			
PO6 Landscaping within a 'Bushfire hazard area' and a 'Potential impact buffer (100 metres)' identified on the **Bushfire hazard overlay maps (OM-003a-o)** does not result in a material increase in the extent, duration or severity of bushfire hazard having regard to: (a) fire ecology; (b) slope of site; and (c) height and mix of plant species. Note–Frost hollows and the associated grass kill facilitates a rapid curing of fuel and exacerbates bushfire hazard.	**AO6** No acceptable outcome is provided.	✔	No landscaping is proposed.

Performance outcomes	Acceptable outcomes	Complies	Comments
Note— A Bushfire hazard management plan must be prepared by suitably qualified persons in seeking to demonstrate compliance with the Performance outcome.			
Infrastructure			
PO7 Infrastructure services located in a 'Bushfire hazard area' and a 'Potential impact buffer (100 metres)' identified on the **Bushfire hazard overlay maps (OM-003a-o)** are protected from damage or destruction in the event of a bushfire. Note— A Bushfire hazard management plan must be prepared by suitably qualified persons in seeking to demonstrate compliance with the Performance outcome.	**AO7** The following infrastructure services are located below ground: (a) water supply; (b) sewer; (c) electricity; (d) gas; and (e) telecommunications	✔	No new infrastructure is proposed within the mapped bushfire hazard area.
Private driveways			
PO8 All premises located in a 'Bushfire hazard area' and a 'Potential impact buffer (100 metres)' identified on the **Bushfire hazard overlay maps (OM-003a-o)** are provided with vehicular access that enables safe evacuation for occupants and easy access by fire-fighting appliances. Note— A Bushfire hazard management plan must be prepared by suitably qualified persons in seeking to demonstrate compliance with the Performance outcome.	**AO8** Private driveways: (a) do not exceed a length of 60 metres from the street frontage; (b) do not exceed a gradient of 12.5%; (c) have a minimum width of 3.5 metres; (d) have a minimum vertical clearance of 4.8 metres; (e) accommodate turning areas for fire-fighting appliances in accordance with the Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; and (f) serve no more than three dwellings or buildings.	✔	No new private driveway is proposed through the bushfire hazard area.

8.2.4 Environmental significance overlay code

8.2.4.1 Application

(1) This code applies to assessing development where:
   (a) land the subject of development is affected by a constraint category identified on the **Environmental significance overlay maps (OM-004a-z)**; and
   (b) it is identified in the assessment benchmarks for assessable development and requirements for accepted development column of an assessment table in Part 5 of the planning scheme.

Note—Biodiversity and Water quality are appropriately reflected in Overlay Map 4 and is required to be mapped by State Government in response to Environment and Heritage State Interests.

8.2.4.2 Purpose

(1) The purpose of the Environmental significance overlay code is to identify and protect matters of environmental significance, which include matters of state environmental significance (MSES) as defined under the state planning policy.

The Environmental significance overlay code ensures that:
   (a) waterways and high ecological significance wetlands are protected and enhanced to maintain ecosystem services and hydrological processes and provide aquatic habitat for flora and fauna; and
   (b) the environmental values of regulated vegetation, wildlife habitat, protected areas and legally secured offset areas are protected and managed.

(2) The purpose of the code will be achieved through the following overall outcomes:
   (a) the biodiversity values, ecosystem services and climate change resilience of areas of environmental significance are protected, managed, enhanced and rehabilitated;
   (b) the biodiversity values of protected areas and legally secured offset areas are protected from development unless overriding community need is demonstrated;
   (c) development is located, designed and managed to minimise the edge effects of development on areas of regulated vegetation and wildlife habitat;
   (d) areas of regulated vegetation and wildlife habitat are managed to minimise biodiversity losses;
   (e) development maintains, protects and enhances a regional network of vegetated corridors that assist in wildlife movement and contribute to the maintenance of habitat and biological diversity;
   (f) development is appropriately setback from waterways and high ecological significance wetlands to minimise direct and indirect impacts on water quality and biodiversity; and
   (g) riparian vegetation and vegetation associated with high ecological significance wetlands is protected and enhanced to improve water quality and natural ecosystem function.

8.2.4.3 Criteria for assessment

Table 8.2.4.3A - Environmental significance overlay code - For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Complies	Comments
For accepted development subject to requirements and assessable development			
Regulated vegetation			
PO1 Vegetation clearing in areas mapped as 'Regulated vegetation' identified on the **Environmental Significance Overlay Maps (OM-004a-o)** is avoided unless: (a) it is demonstrated that the area does not support regulated vegetation as mapped; (b) the loss or reduction in regulated vegetation is for community infrastructure and associated access facilities that cannot be avoided; (c) wildlife interconnectivity is maintained or enhanced at a local and regional scale; and (d) the loss or reduction in regulated vegetation is minimised and any residual impacts are offset. Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.	**AO1.1** No clearing of native vegetation is undertaken within areas of 'Regulated vegetation' identified on the **Environmental Significance Overlay Maps (OM-004a-o)**.	✔	Some clearing of small regrowth vegetation will occur within the proposed extraction site. Given the location of the proposed extraction site at the tail end of an already disconnected stretch of regulated vegetation, the proposed development is not likely to impact on wildlife interconnectivity across the site. An ecological assessment was not considered warranted in this instance. The proposed development is not considered to conflict with PO1.
PO2 Development on sites adjacent to areas of 'Regulated vegetation' identified on the **Environmental Significance Overlay Maps (OM-004a-o)** protects the environmental significance of regulated vegetation and: (a) does not interrupt, interfere, alter or otherwise impact on underlying natural	**AO2** Development (excluding roads, earthworks, drainage infrastructure and underground infrastructure) is not located within 20 metres of 'Regulated vegetation' areas identified on the **Environmental Significance Overlay Maps (OM-004a-o)**.	**n/a**	Not applicable. Refer to comment for AO.1.1/PO1

Performance outcomes	Acceptable outcomes	Complies	Comments
ecosystem processes such as water quality, hydrology, geomorphology and biophysical processes; (b) does not negatively impact the movement of wildlife at a local or regional scale; and (c) avoids noise, light, vibration or other edge affects, including weed and pest incursion on identified environmental values. Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.			
Regulated vegetation intersecting a watercourse			
PO3 Vegetation clearing in areas mapped as 'Regulated vegetation intersecting a watercourse', identified as 'Waterway' and 'Waterway buffer' on the **Environmental Significance - Waterway Overlay Maps (OM-004p-z)** is avoided unless wildlife interconnectivity between habitats is maintained or enhanced at a local and regional scale, to the extent that migration or normal movement of significant species between habitats or normal gene flow between populations is not inhibited. Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.	**Where within a 'Waterway buffer' on Environmental Significance - Waterway Overlay Maps (OM-004p-z)** **AO3.1** A minimum setback in accordance with **Table 8.2.4.3B** is provided between development and the top of the high bank of a 'Waterway' identified on the **Environmental Significance - Waterway Overlay Maps (OM-004p-z)**.	✔ **Complies with PO3**	The proposed development complies with PO3 – refer to comment for PO1.
	Where within a 'Waterway buffer' on Environmental Significance - Waterway Overlay Maps (OM-004p-z) **AO3.2** No clearing of native vegetation is undertaken within the minimum setback identified at **AO3.1**.	✔	Given the nature of the proposed development (a dam cleanout and enlargement, the clearing of a small amount of regrowth is unavoidable. The vegetation on the southern side of the dam/extraction area will be maintained. The development

Performance outcomes	Acceptable outcomes	Complies	Comments
			complies with PO3.
Waterways and wetlands			
PO4 'High ecological significance wetlands' identified on the **Environmental Significance Overlay Maps (OM-004a-o)** and 'Waterways' on **Environmental Significance - Waterway Overlay Maps (OM-004p-z)** and are protected by: (a) maintaining adequate separation distances between waterways/wetlands and development; (b) maintaining and enhancing aquatic and terrestrial habitat including vegetated corridors to allow for native fauna (terrestrial and aquatic) movement; (c) maintaining waterway bank stability by minimising bank erosion and slumping; (d) maintaining water quality by providing buffers to allow filtering of sediments, nutrients and other pollutants; and (e) retaining and improving existing riparian vegetation and existing vegetation associated with a wetland. Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.	**Where within a 'Waterway buffer' on Environmental Significance - Waterway Overlay Maps (OM-004p-z)** **AO4.1** A minimum setback in accordance with **Table 8.2.4.3B** is provided between development and the top of the high bank of a 'Waterway' identified on the **Environmental Significance - Waterway Overlay Maps (OM-004p-z)**.	✔	The proposed development will comply or be conditioned to comply with PO4.
	Where within a 'High ecological significance wetland buffer' on Environmental Significance Overlay Maps (OM-004a-o) **AO4.2** A minimum buffer of 200 metres is provided between development and the edge of a 'High ecological significance wetland' identified on the **Environmental Significance Overlay Maps (OM-004a-o)**.	**n/a**	Not applicable.
	Where within a 'Waterway buffer' on Environmental Significance - Waterway Overlay Maps (OM-004p-z) or 'High ecological significance wetland buffer' on Environmental Significance Overlay Maps (OM-004a-o) **AO4.3** No stormwater is discharged to a 'Waterway' on **Environmental Significance - Waterway Overlay Maps (OM-004p-z)** or 'High ecological significance wetland'	**n/a**	Not applicable given the nature of the proposed development. The existing dam will act as a sediment trap/settling pond and ensure the maintenance of the water quality of Emerald Creek.

Performance outcomes	Acceptable outcomes	Complies	Comments
	identified on the **Environmental Significance Overlay Maps (OM-004a-o)**. Note— An alternative outcome is required to demonstrate that the ecological impacts of stormwater discharge to a 'Waterway' or 'High ecological significance wetland' are mitigated in accordance with PO3 through appropriate stormwater management / treatment (where possible).		
	Where within a 'Waterway buffer' on Environmental Significance - Waterway Overlay Maps (OM-004p-z) or 'High ecological significance wetland buffer' on Environmental Significance Overlay Maps (OM-004a-o) **AO4.4** No wastewater is discharged to a 'Waterway' on **Environmental Significance - Waterway Overlay Maps (OM-004p-z)** or 'High ecological significance wetland' identified on the **Environmental Significance Overlay Map (OM-004a-z)**. Note— A alternative outcome is required to demonstrate that the ecological impacts of wastewater discharge to a 'Waterway' or 'High ecological significance wetland' are mitigated in accordance with PO3 through appropriate wastewater management / treatment (where possible).	**n/a**	Not applicable.
For assessable development			
Wildlife Habitat			
PO5 Development within a 'Wildlife habitat' area identified on the **Environmental Significance Overlay Maps (OM-004a-o)**: (a) protects and enhances the habitat of Endangered, Vulnerable and Near Threatened (EVNT) species and	**AO5** No acceptable outcome is provided	n/a	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
local species of significance; (b) incorporates siting and design measures to protect and retain identified ecological values and underlying ecosystem processes within or adjacent to the development site; (c) maintains or enhances wildlife interconnectivity at a local and regional scale; and (d) mitigates the impact of other forms of potential disturbance (such as presence of vehicles, pedestrian use, increased exposure to domestic animals, noise and lighting impacts) to protect critical life stage ecological processes (such as feeding, breeding or roosting). Note—Development applications must identify any EVNT species or their habitats that may be affected by the proposal. In particular, applications are to identify and describe how the development avoids adverse impacts on ecological processes within or adjacent to the development area. Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.			
Legally secured offset areas			
PO6 Development within a 'Legally secured offset area' identified on the **Environmental Significance Overlay Maps (OM-004a-o)** or other known Legally Secured Offset Area is consistent with the binding requirements of the offset and does not prejudice, undermine, or negatively impact the inherent	**AO6** No acceptable outcome is provided.	n/a	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
ecological values, including all naturally occurring native flora, fauna and their habitat within the Legally Secured Offset Area. Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.			
Protected areas			
PO7 Development within a 'Protected area' identified on the **Environmental Significance Overlay Maps (OM-004a-o)** is consistent with the values of the Protected Area and: (a) supports the inherent ecological and community values of the Protected Area asset; (b) maintains or enhances wildlife interconnectivity at a local and regional scale; and (c) does not prejudice, undermine, or negatively impact the inherent ecological values, including all naturally occurring native flora, fauna and their habitat within the Protected Area. Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.	**AO7** No acceptable outcome is provided	n/a	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
Ecological corridors and Habitat linkages			
PO8 Development located: (a) in the Conservation zone, Emerging community zone, Recreation and open space zone, Rural zone or Rural residential zone; and (b) within an 'Ecological corridor' or a 'Habitat linkage' identified on the **Environmental Significance Overlay Maps (OM-004a-o)** does not compromise the provision of habitat connectivity of the corridor/linkage, having regard to: (a) the environmental values of the area of the site identified in the 'Ecological corridor' or 'Habitat linkage'; (b) the environmental values of adjoining and nearby land within the 'Ecological corridor' or 'Habitat linkage'; (c) the extent of any modification proposed to the natural environment including (but not limited to) vegetation and topography; (d) the location and design of proposed improvements that may impact on the functions of the 'Ecological corridor' or 'Habitat linkage' including (but not limited to) buildings, structures, fences, lighting, vehicle movement areas and infrastructure services; and (e) the ability for the 'Ecological corridor' or	**AO8** No acceptable outcome is provided	n/a	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
'Habitat linkage' to be enhanced to improve ecological connectivity. Note—A supporting Ecological Assessment Report prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports may be appropriate to demonstrate compliance with PO8.			

Table 8.2.4.3B - Setback and buffer distances from waterways

Stream order	Setback and buffer from waterways
1	10 metres from top of high bank
2-4	25 metres from top of high bank
5 or more	50 metres from top of high bank

Note—The steam order of a 'waterway' is to be determined on a case by case basis.

8.2.6 Flood hazard overlay code

8.2.6.1 Application

(1) This code applies to assessing development where:
  (a) land the subject of development is located within a Flood hazard area identified on the **Flood hazard overlay maps (OM-006a-o)**; and
  (b) it is identified in the assessment benchmarks for assessable development and requirements for accepted development column of an assessment table in Part 5 of the planning scheme.

Note—Natural hazards are appropriately reflected in Overlay Maps 3, 6 and 8 and are required to be mapped by State Government in response to Hazard and Safety State Interests.

Note—where new information, including flood studies or flood modelling supersedes the Flood hazard overlay maps (OM-006a-o) Council may have regard to this new information in the application of the Flood hazard overlay code in the interests of the precautionary principle and the safety of persons and property.

8.2.6.2 Purpose

(1) The purpose of the Flood hazard overlay code is to manage development outcomes in flood hazard areas identified on the **Flood hazard overlay maps (OM-006a-o)** so that risk to life, property, community and the environment during flood events is minimised, and to ensure that development does not increase the potential for flood damage on site or to other property.

(2) The purpose of the code will be achieved through the following overall outcomes:

  (a) Development in the 'Extreme flood hazard area':
    i. maintains and enhances the hydrological function of the land;
    ii. does not involve filling (earthworks) or changes to existing landform or drainage lines that results in a loss of the flood conveyance and flood storage capacity of the land;
    iii. is limited to:
      A. flood proofed Sport and recreation activities;
      B. Rural activities where for Animal husbandry, Cropping or Permanent plantation;
      C. flood proofed Utility installations, Substations or Major electricity infrastructure;
      D. conservation and natural area management; and
      E. replacement of existing lawful development, including Accommodation activities where habitable rooms are elevated above the defined flood level and include freeboard;

    Where there is no increase to the number of persons at risk of flood and where development reduces existing or potential risks to life and property.

  (b) Development in the 'High flood hazard area':
    i. maintains the hydrological function of the land;
    ii. does not involve filling (earthworks) or changes to the existing landform or drainage lines that results in a loss of the flood conveyance and flood storage capacity of the land;
    iii. is limited to:
      A. flood proofed Sport and recreation activities and Club uses;
      B. Non-resident workforce accommodation, Relocatable home park, Resort complex, Rooming accommodation, Short term accommodation and

Tourist park uses where these uses comprise permanent on-site management and a flood evacuation management plan ensures the health and safety of persons during a flood event;

C. a Dwelling house only where the lot existed or had a lawful reconfiguring a lot approval at the commencement of the planning scheme and the land is included in a Residential zone or the Centre zone or where for minor intensification of existing Dwelling houses;
D. Rural activities where for Animal husbandry, Cropping or Permanent plantation;
E. Industrial activities and Commercial activities where it is accepted development that flood damage is incurred as an operational cost and where flood sensitive elements of the development or use are elevated above the defined flood level, including freeboard;
F. flood proofed Utility installations, Substations or Major electricity infrastructure;
G. conservation and natural area management; and
H. replacement of existing lawful development;

where there is no increase to the number of persons at risk of flood and where development reduces existing or potential risks to life and property.

iv. protects surrounding land and land uses from increased flood hazard impacts;
v. elevates habitable rooms for all accommodation activities (including where for minor building work) above the defined flood level, including freeboard.

(c) Development in the 'Significant flood hazard area':
i. minimises risk to life and property from flood events;
ii. involves changes to the existing landform and drainage lines in this area only where detrimental impacts to the flood hazard risk of surrounding areas is avoided;
iii. is limited to:
A. Sport and recreation activities;
B. Industrial activities and Commercial activities where it is accepted development that flood damage is incurred as an operational cost and where flood sensitive elements of the development or use are elevated above the defined flood level, including freeboard;
C. Rural activities;
D. Accommodation activities, excluding Residential care facility and Retirement facility;
E. flood proofed Community activities, excluding Child care centre, Hospital and Community use where a flood emergency evacuation plan ensures the safety of people during a flood event;
F. flood proofed Utility installations, Substations or Major electricity infrastructure;
G. conservation and natural area management;
iv. locates habitable rooms for all accommodation activities above the defined flood level, including freeboard; and
v. locates the minimum floor level for all buildings other than accommodation activities, industrial activities and business activities above the defined flood level.

(d) Development in the 'Low flood hazard area':
   i. minimises risk to life and property from flood events;
   ii. locates habitable rooms for all Accommodation activities above the defined flood level, including freeboard; and
   iii. locates the minimum floor level for all buildings other than Accommodation activities above the defined flood level, including freeboard.

(e) Development in the 'Potential flood hazard area':
   i. maintains the safety of people on the development site from flood events and minimises the potential damage from flooding to property;
   ii. does not result in adverse impacts on people's safety, the environment or the capacity to use land within the floodplain;
   iii. locates habitable rooms for all Accommodation activities above a 1% Annual Exceedance Probability (AEP), including freeboard; and
   iv. locates the minimum floor level for all building work other than Accommodation activities above the 1% AEP flood level, including freeboard.

8.2.6.3 Criteria for assessment

Table 8.2.6.3A - Flood hazard overlay code - For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Complies	Comments
For accepted development subject to requirements and assessable development			
All flood hazard areas			
PO1 Development prevents the carriage or dispersal of contaminants or pollutants into the receiving environment.	**AO1** The processing or storage of dangerous goods or hazardous materials is: (a) not undertaken in a flood hazard area identified on the **Flood hazard overlay maps (OM-006a-o)**; or (b) is located above the defined flood level plus 0.3 metre freeboard.	✔	In consideration of both sets of mapping, the proposed processing area is considered to be situated within a flood hazard area.
PO2 Essential community infrastructure is able to function effectively during and immediately after flood events.	**AO2** Design levels for buildings must comply with the flood immunity standards specified in **Table 8.2.6.3.B** and **Table 8.2.6.3.C** where within a flood hazard area identified on the **Flood hazard overlay maps (OM-006a-o)**.	**n/a**	Not applicable – no buildings or structures proposed.
Extreme flood hazard area			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO3 Development, where involving a Material change of use within an 'Extreme flood hazard area' on the **Flood hazard overlay maps (OM006a-o)**, is appropriate to the flood hazard risk having regard to the: (a) likelihood and frequency of flooding; (b) flood risk acceptability of development; (c) vulnerability of and safety risk to persons associated with the use; (d) associated consequences of flooding in regard to impacts on proposed buildings, structures, and supporting infrastructure; and (e) associated consequences of flooding in respect to undue burden on disaster response recovery capacity and capabilities.	**AO3.1** Uses within the following activity groups are not located within an 'Extreme flood hazard area identified' on the **Flood hazard overlay maps (OM006a-o)**: (a) Accommodation activities; (b) Commercial activities; (c) Community activities except where for a Club with a maximum gross floor area of 100m^2; (d) Industrial activities; (e) Rural activities, except where for Animal husbandry, Cropping, or Permanent plantation.	✔	Complies.
	AO3.2 Sport and recreation activities are not located within an 'Extreme flood hazard area' identified on the **Flood hazard overlay maps (OM006a-o)** except where for: (a) Environment facility; (b) Park; or (c) Outdoor sport and recreation (excluding the provision of ancillary facilities or amenities conducted within a building).	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
PO4 Development is located and designed to: (a) maintain and enhance the flood conveyance capacity of the premises; (b) not increase the number of people calculated to be at risk from flooding; (c) not increase the flood impact on adjoining premises; (d) ensure the safety of all persons by ensuring that development levels are set above the defined flood level; (e) reduce property damage; and (f) provide flood immune access to buildings. Note—Buildings may be constructed from flood resistant, waterproof materials below the defined flood level where certified by a qualified structural engineer to be flood proof (including the ability to withstand damage from floodwater and debris) and where an alternative outcome to AO4.1-AO4.4 is also demonstrated. Note—In the event that a lawful building or structure is destroyed by flood or other event the building may be replaced in situ where there is no increase in: i. gross floor area; or ii. the number of dwellings or bedrooms on the premises.	**AO4.1** Buildings, including extensions to existing buildings, are: (a) not located within an 'Extreme flood hazard area' identified on the **Flood hazard overlay maps (OM006a-o)**; or (b) elevated above the defined flood level, with 0.3 metres freeboard from the defined flood level provided for habitable rooms within a dwelling.	**n/a**	Not applicable.
	AO4.2 All building work must be high set and retains the flood storage and conveyance capacity of the premises. Note—Building work must be certified by a qualified structural engineer to be flood proof including the ability to withstand damage from floodwater and debris.	**n/a**	Not applicable.
	AO4.3 New buildings are provided with flood free pedestrian and vehicle evacuation access between the building and a flood safe accessible road. Note—A flood safe accessible road includes a road where identified as outside a flood hazard area or within a 'Low flood hazard area', 'Potential flood hazard area' or 'Significant flood hazard area' on the **Flood hazard overlay maps (OM006a-o)**.	**n/a**	Not applicable.
	AO4.4 Development does not increase the number of lots in the 'Extreme flood hazard area' identified on the **Flood hazard overlay maps (OM006a-o)** except where for the purposes of public open space.	✔	Complies.

Performance outcomes	Acceptable outcomes	Complies	Comments
PO5 Development involving earthworks in a Flood hazard area below the defined flood level must protect life and property on premises and off premises through maintaining: (a) flood storage capacity of land; (b) flood conveyance function of land; (c) flood and drainage channels; (d) overland flow paths; and (e) flood warning times.	**AO5** Filling above ground level is not undertaken in the 'Extreme flood hazard area' identified on the **Flood hazard overlay maps (OM006a-o)**.	**n/a**	Not applicable.
High flood hazard area			
PO6 Development, where for a Material change of use within a 'High flood hazard area' identified on the **Flood hazard overlay maps (OM-006a-o)**, is appropriate to the flood hazard risk having regard to the: (a) likelihood and frequency of flooding; (b) flood risk acceptability of development; (c) vulnerability of and safety risk to persons associated with the use; (d) associated consequences of flooding in regard to impacts on proposed buildings, structures and supporting infrastructure; and	**AO6.1** Uses within the following activity groups are not located within a 'High flood hazard area' identified on the **Flood hazard overlay maps (OM006a-o)**: (a) Accommodation activities, except where for Dwelling house and only where the lot existed or had a lawful reconfiguring a lot approval at the commencement of the planning scheme and the land is included in a Residential zone or the Centre zone; (b) Community activities except where for a Club with a maximum gross floor area of 100m^2; (c) Rural activities, except where for Animal husbandry, Cropping or Permanent plantation.	✔	Complies.

Performance outcomes	Acceptable outcomes	Complies	Comments
(e) associated consequences of flooding in respect to undue burden on disaster response recovery capacity and capabilities.	**AO6.2** Sport and recreation activities are not located within a 'High flood hazard area' identified on the **Flood hazard overlay maps (OM006a-o)** except where for: (a) Environment facility; (b) Park; or (c) Outdoor sport and recreation (excluding the provision of ancillary facilities or amenities conducted within a building).	**n/a**	Not applicable.
PO7 Development is located and designed to: (a) maintain hydrological function of the premises; (b) not increase the number of people calculated to be at risk from flooding; (c) minimises the flood impact on adjoining premises; (d) ensure the safety of all persons by ensuring that an appropriate	**AO7.1** Buildings, including extensions to existing buildings are: (a) not located within the 'High flood hazard area' identified on the **Flood hazard overlay maps (OM006a-o)**; or (b) elevated above the defined flood level, with 0.3 metres freeboard from the defined flood level provided for habitable rooms within a dwelling. OR	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
proportion of buildings are set above the defined flood level; (e) reduce the carriage of debris in flood waters; (f) reduce property damage; and (g) provide flood immune access to buildings. Note—Buildings may be constructed from flood resistant, waterproof materials below the defined flood level where certified by a qualified structural engineer to be flood proof (including the ability to withstand damage from floodwater and debris) and where an alternative outcome to AO8.1-AO8.9 is also demonstrated.	**AO7.2** Buildings used for Commercial activities or Industrial activities include a minimum floor level of 0.3 metres above the defined flood where for the following components of the use: (a) administrative areas; or (b) services, plant and equipment associated with the building. Note—AO8.2 accepts that the cost of flood impact is an operational cost of the Commercial activity or Industrial activity. Note—Building work must be certified by a qualified structural engineer to be flood proof including the ability to withstand damage from floodwater and debris.	**n/a**	Not applicable.
	AO7.3 All building work below the defined flood level must be high set (comprising pier and beam construction) and retains the flood storage and conveyance capacity of the premises.	**n/a**	Not applicable.
	AO7.4 New buildings are provided with flood free pedestrian and vehicle evacuation access between the building and a flood safe accessible road. Note—A flood safe accessible road includes a road where identified as outside a flood hazard area or within a 'Low flood hazard area', 'Potential flood hazard area' or 'Significant flood hazard area' on the **Flood hazard overlay maps (OM006a-o)**.	**n/a**	Not applicable.
	AO7.5 New temporary, relocatable or impermanent buildings and structures are to be anchored with the ability to withstand transportation by floodwater. Note—Building work must be certified by a qualified structural engineer.	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
	AO7.6 Dwellings do not exceed four bedrooms.	**n/a**	Not applicable.
	AO7.7 Building work on an existing dwelling does not comprise additional bedrooms.	**n/a**	Not applicable.
	AO7.8 Building work on an existing dwelling is limited to a maximum increase of 20 percent of the lawfully approved gross floor area of the existing dwelling.	**n/a**	Not applicable.
	AO7.9 Development does not increase the number of lots in the 'High flood hazard area; as identified on the **Flood hazard overlay maps (OM006a-o)** except where for the purposes of public open space.	**n/a**	Not applicable.
PO8 Development involving earthworks in a Flood hazard area below the defined flood level must protect life and property on premises and off premises through maintaining: (a) flood storage capacity of land; (b) flood conveyance function of land; (c) flood and drainage channels; (d) overland flow paths; and (e) flood warning times.	**AO8** Filling above ground level is not undertaken in the 'High flood hazard area' identified on the **Flood hazard overlay maps (OM006a-o)**.	**n/a**	Not applicable.
Significant flood hazard area			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO9 Development, involving a Material change of use, within a 'Significant flood hazard area' on the **Flood hazard overlay maps (OM006a-o)** is appropriate to the flood hazard risk having regard to the: (a) likelihood and frequency of flooding; (b) flood risk acceptability of development; (c) vulnerability of and safety risk to persons associated with the use; (d) associated consequences of flooding in regard to impacts on proposed buildings, structures and supporting infrastructure; and (e) associated consequences of flooding in respect to undue burden on disaster response recovery capacity and capabilities.	**AO9** The following uses are not located within a 'Significant flood hazard area' identified on the **Flood hazard overlay maps (OM006a-o)**: (a) Residential care facility; (b) Retirement facility; (c) Child care centre; (d) Hospital; or (e) Community use.	**n/a**	Not applicable.
Significant flood hazard area, Low flood hazard area or Potential flood hazard area			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO10 Development, where involving a Material change of use or Building work, is located and designed to: (a) maintain hydrological function of the premises; (b) not increase the number of people calculated to be at risk from flooding; (c) minimises the flood impact on adjoining premises; (d) ensure the safety of all persons by ensuring that a proportion of buildings are set above the defined flood level; (e) reduce the carriage of debris in flood waters; (f) reduce property damage; and (g) provide flood immune access to buildings. Note—Where the development is located in a 'Potential flood hazard area' identified on the **Flood hazard overlay maps (OM006a-o)** and there is no defined flood level a hydraulic (flood hazard assessment) report prepared by a RPEQ is required in substantiation of an alternative outcome is required or the defined flood level from the adjacent representative hazard zone is used.	**AO10.1** Buildings, including extensions to existing buildings are: (a) elevated above the defined flood level; and (b) the defined flood event does not exceed a depth of 600mm; and (c) elevated above the defined flood level plus 0.3 metres freeboard where for habitable rooms within a dwelling. OR	**n/a**	Not applicable.
	AO10.2 Buildings used for Commercial activities or Industrial activities include a minimum floor level of 0.3 metres above the defined flood where for the following components of the use: (a) administrative areas; or (b) services, plant and equipment associated with the building. Note—AO10.2 accepts that the cost of flood impact is an operational cost of the Commercial activity or Industrial activity. Note—Building work must be certified by a qualified structural engineer to be flood proof including the ability to withstand damage from floodwater and debris.	**n/a**	Not applicable.
	AO10.3 All building work below the defined flood level must be high set (comprising pier and beam construction) and retains the flood storage and conveyance capacity of the premises. Note—Building work must be certified by a qualified structural engineer to be flood proof including the ability to withstand damage from floodwater and debris.	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
PO11 Development involving earthworks in a Flood hazard area below the defined flood level must protect life and property on premises and off premises through maintaining: (a) flood storage capacity of land; (b) flood conveyance function of land; (c) flood and drainage channels; (d) overland flow paths; and (e) flood warning times.	**AO11** Development does not involve in excess of $50m^3$ of fill above ground level per $1,000m^2$ of site area.	✔	Complies – The proposed development will only increase the flood storage capacity of the land.
For assessable development			
Where for Material change of use or Reconfiguring a lot that involves new gross floor area or increases the number of persons living, working or residing in the Extreme flood hazard area, High flood hazard area or Significant flood hazard area other than a Dwelling house.			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO12 Flood risk management minimises the impact on property and appropriately protects the health and safety of persons at risk of Extreme, high or significant flood hazard, and: (a) indicates the position and path of all safe evacuation routes off the site; and (b) if the site contains or is within 100 metres of a flood hazard area, hazard warning signage and depth indicators are provided at key hazard points, such as at floodway crossings. Note—A Material change of use or Reconfiguring a lot that involves new gross floor area or increases the number of persons living, working or residing in the 'Extreme flood hazard area' identified on the **Flood hazard overlay map (OM006a-o)** is supported by a Flood Emergency Evacuation Plan prepared by suitably qualified persons having regard to Floodplain Management in Australia: Best Practice Principles and Guidelines (2000), prepared by Standing Committee on Agriculture and Resource Management (SCARM), CSIRO.	**AO12** No acceptable outcome is provided.	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
Significant flood hazard area, Low flood hazard area or Potential flood hazard area			
PO13 Development, where involving Reconfiguring a lot, is located and designed to: (a) maintain hydrological function of the premises; (b) not increase the number of people calculated to be at risk from flooding; (c) minimises the flood impact on adjoining premises; (d) ensure the safety of all persons by ensuring that a proportion of buildings are set above the defined flood level; (e) reduce the carriage of debris in flood waters; (f) reduce property damage; and (g) provide flood immune access to buildings. Note—Where the development is located in a 'Potential flood hazard area' identified on the **Flood hazard overlay maps (OM006a-o)** and there is no defined flood level a hydraulic (flood hazard assessment) report prepared by a RPEQ is required in substantiation of an alternative outcome is required or the defined flood level from the adjacent representative hazard zone is used.	**AO13** No acceptable outcome is provided.	**n/a**	Not applicable.

Table 8.2.6.3B Flood immunity levels

Development Category	Minimum design floor or pavement levels (mAHD)
Category A	1% AEP + 0.5 metres
Category B	1% AEP + 0.3 metres
Category C	1% AEP

Category D	1% AEP
Category E	2% AEP

Note—Refer Table 8.2.6.3D for building classification by Category.

Table 8.2.6.3C Community infrastructure flood immunity levels

Development Type	Minimum design floor or pavement levels (mAHD)
Emergency services, where for:	
• Emergency Shelters	0.1% AEP
• Police facilities	0.5% AEP
• Other Emergency services	0.1% AEP + 0.5 metres
Hospital	0.1% AEP+ 0.5 metres
Community use (where for the storage of valuable records or items of historic or cultural significance including libraries and museums)	0.5% AEP
Special industry (where for power station)	0.5% AEP
Substations	0.5% AEP
Utility installation (where for a sewage treatment plant)	Defined flood level
Utility installation (where for a water treatment plant)	0.5% AEP
Utility installation (other)	Alternative outcome required.
Air services	Alternative outcome required.

Table 8.2.6.3D Development category

Building Code of Australia Building classification(1)	Development types and design levels, assigned design floor or pavement levels	Category – refer to Table 8.2.6.3B for flood planning levels
Class 1–4	Habitable room	Category A
	Non-habitable room including patio and courtyard	Category B
	Non-habitable part of a Class 2 or Class 3 building excluding the essential services(2) control room	Category B
	Parking located in the building undercroft of a multiple dwelling	Category C
	Carport, unroofed car park; vehicular manoeuvring area	Category D
	Essential electrical services(2) of a Class 2 or Class 3 building only	Category A
	Basement parking entry	Category C + 0.3 metres
Class 5, Class 6, or Class 8	Building floor level	Category C
	Garage or car park located in the building undercroft	Category C

Building Code of Australia Building classification[1]	Development types and design levels, assigned design floor or pavement levels	Category – refer to Table 8.2.6.3B for flood planning levels
	Carport or unroofed car park	Category D
	Vehicular access and manoeuvring areas	Category D
	Basement parking entry	Category C
	Essential electrical services[2]	Class 8 – Category Class 5 & 6 – Category A
Class 7a	Refer to the relevant building class specified in this table	
Class 7b	Building floor level	Category C
	Vehicular access and manoeuvring area	Category D
	Essential electrical services[2]	Category C
Class 9	Building floor level	Category A
	Building floor level for habitable rooms in Class 9a or 9c where for a Residential care facility	0.2% AEP flood
	Building floor level for habitable rooms in Class 9b where involving children, such as a child care centre	0.2% AEP flood
	Garage or car park located in the building undercroft	Category C
	Carport or unroofed car park	Category D
	Vehicular access and manoeuvring areas	Category D
	Essential electrical services[2]	Category A
Class 10a	Car parking facility	Refer to the relevant building class specified in this table
	Shed or the like	Category D
Class 10b	Swimming pool	Category E
	Associated mechanical and electrical pool equipment	Category C
	Other structures	Flood planning levels do not apply

[1] Refer to the Building Code of Australia for definitions of building classifications.

[2] Essential electrical services include any area or room used for fire control panel, telephone PABX, sensitive substation equipment including transformers, low voltage switch gear, high voltage switch gear, battery chargers, protection control and communication equipment, low voltage cables, high voltage cables, and lift or pump controls.

8.2.8 Hill and slope overlay code

8.2.8.1 Application

(1) This code applies to assessing development where:
  (a) land the subject of development is located within a 'Hill and slope area' identified on the **Hill and slope overlay maps (OM-008a-o)**; and
  (b) it is identified in the assessment benchmarks for assessable development and requirements for accepted development column of an assessment table in Part 5 of the planning scheme.

Note—Natural hazards are appropriately reflected in Overlay Maps 3, 6 and 8 and are required to be mapped by State Government in response to Hazard and Safety State Interests.

8.2.8.2 Purpose

(1) The purpose of the Hill and slope overlay code is to ensure the ongoing stability of land within a hill and slope area to prevent risk to people or property.

(2) The purpose of the code will be achieved through the following overall outcomes:
  (a) Development is located to avoid sloping land where practical; and
  (b) Development on sloping land maintains slope stability and does not increase the potential for erosion or landslide.

8.2.8.3 Criteria for assessment

Table 8.2.8.3 – Hill and slope overlay code - For assessable development

Performance outcomes	Acceptable outcomes	Complies	Comment
For assessable development			
Slope stability			

Performance outcomes	Acceptable outcomes	Complies	Comment
PO1 Where clearing of vegetation, building work or filling or excavation occurs on land within a 'Hill and slope area' identified on the **Hill and slope overlay maps (OM-008a-o)**, a geotechnical report is prepared in accordance with Planning Scheme Policy 5 - Preparation of Geotechnical Reports that demonstrates: (a) the long term stability of the development site; (b) development will not be adversely affected by landslide activity originating on sloping land above the development site; and (c) development will not adversely affect other property outside the development site through landslide activity or alterations to surface or groundwater.	**AO1** No acceptable outcome is provided.	**n/a**	Neither the extraction area or processing area is mapped as Hill and slope area.
PO2 Development is designed and located to ensure that the use can appropriately function in the 'Hill and slope area' identified on the **Hill and slope overlay maps (OM-008a-o)** having regard to: (a) the nature and scale of the proposed use; (b) the gradient of the land; (c) the extent of land disturbance proposed;	**AO2.1** Development for a Child care centre or Educational establishment is not located on land in a 'Hill and slope area' identified on the **Hill and slope overlay maps (OM-008a-o).**	**n/a**	Not applicable.
	AO2.2 Development is not located on land with a gradient of greater than 25%.	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comment
(d) stormwater discharge and its potential for erosion.	**AO2.3** No lot less than 2,000m^2 is created in a 'Hill and slope area' identified on the **Hill and slope overlay maps (OM-008a-o).** Note – Where a minimum lot size of less than 2,000m^2 applies under the Reconfiguring a lot code, the lot size requirements of the Hill and slope overlay code prevail.	**n/a**	Not applicable.
Community infrastructure and essential services			
PO3 Community infrastructure and essential services located within a 'Hill and slope area' identified on the **Hill and slope overlay maps (OM-008a-o)** are able to function effectively during and immediately after landslide events.	**AO3** No acceptable outcome is provided.	**n/a**	Not applicable.

9.3.5 Industrial activities code

9.3.5.1 Application

(1) This code applies to assessing development where:
  (a) involving Industrial activities; and
  (b) it is identified in the assessment benchmarks for assessable development and requirements for accepted development column of an assessment table in Part 5 of the planning scheme.

9.3.5.2 Purpose

(1) The purpose of the Industrial activities code is to ensure Industrial activities are:
  (a) appropriately located within designated industrial areas;
  (b) established and operated in an efficient manner with minimal impact on the character, scale, amenity and environmental values of the surrounding area; and
  (c) managed to allow for progressive rehabilitation where involving Extractive industry.

(2) The purpose of the code will be achieved through the following overall outcomes:
  (a) Industrial activities are appropriately located having regard to topography, surrounding land uses, natural environment, accessibility, local character and potential social and community impacts;
  (b) Industrial activities meet the needs of the local community and the local economy through well located, safe and convenient points of service;
  (c) Industrial activities are designed to have minimal impact on the character, amenity and environment of the surrounding area;
  (d) Industrial activities provide a safe working environment;
  (e) Industrial activities are designed to promote sustainability and energy efficiency;
  (f) Industrial activities are co-located with complimentary and compatible uses;
  (g) External impacts associated with Extractive industry operations do not impact on the character and amenity of the surrounding area and the safety and wellbeing of the community;
  (h) Extractive industry operations are adequately separated from potentially incompatible land uses; and
  (i) Extractive industry sites are progressively rehabilitated.

9.3.5.3 Criteria for assessment

Table 9.3.5.3—Industrial activities code– For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Complies	Comments
For accepted development subject to requirements and assessable development			
Separation			
PO1 Industrial activities are appropriately separated from sensitive uses to ensure their amenity is maintained, having regard to: (a) noise; (b) odour; (c) light; and (d) emissions. Note—Development proposed to be located closer than the separation distances specified in AO2 requires supporting investigations to demonstrate that the expected impacts from the industry use have been adequately mitigated in consideration of the local context.	**AO1** Development is separated from sensitive uses as follows: (a) medium impact industry–250 metres; or (b) high impact industry–500 metres; or (c) special industry– 1.5 kilometres.	**n/a**	Not applicable. The proposed use is not classified as any of the three industry categories.
For assessable development			
Amenity			
PO2 Industrial activities protect and enhance the character and amenity of the locality and streetscape through the appropriate location and screening of: (a) air conditioning; (b) refrigeration plant; (c) mechanical plant; and (d) refuse bin storage areas.	**AO2** No acceptable outcome is provided.	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
PO3 Development avoids and, where unavoidable, mitigates impacts on ground water, particularly where ground water is heavily drawn upon for irrigation or domestic purposes.	**AO3** No acceptable outcome is provided.	✔	The proposed development is not likely to impact on groundwater quality. The proposed extraction and processing area is a considerable distance from any neighbouring bore water supply, and not impacts on the water quality of Emerald Creek is envisaged.
If for Extractive industry			
PO4 The site has sufficient area and dimensions to safely accommodate: (a) the extractive use; (b) vehicular access and on site vehicular movements; (c) buildings including staff facilities; (d) parking areas for visitors and employees; (e) storage areas and stockpiles; (f) any environmentally significant land; and (g) landscaping and buffer areas. Note—Refer to Planning Scheme Policy 3 - Extractive Industry.	**AO4** No acceptable outcome is provided.	✔	Complies.

Performance outcomes	Acceptable outcomes	Complies	Comments
PO5 Extractive industry is established and operated in a way that does not impact on public safety.	**AO5** Safety fencing is provided for the full length of the perimeter of the site and is appropriately signed with warning signs advising of the nature of the use and any danger or hazard.	✔	Given the size of the site and its location within the rural zone, safety fencing is not considered necessary. The extractive industry operation will not involve the creation of any deep pits.

PO6 Extractive industry is appropriately located to adequately mitigate visual, noise, vibration and dust impacts on sensitive uses.	**AO6** All aspects of the Extractive industry are setback from all boundaries: (a) 200 metres where not involving blasting or crushing; and (b) 1,000 metres for where involving blasting or crushing. Note—Refer to Planning Scheme Policy 3 - Extractive Industry.	✔ Complies with PO6	The proposed development is for the extraction of sand and sediment only. A condition will be included on any approval restricting blasting and crushing activities. Although AO6 stipulates that the extractive industry operation must be setback 200 metres from any property boundary, this is considered to be a discrepancy in the Planning Scheme and it is considered more appropriate that the 200 metre separation distance should be from any neighbouring sensitive land use (e.g. dwelling) which is the approach of other neighbouring Shire Planning Schemes like Douglas and Cairns. Further supporting this approach is higher order PO6 which aims to protect sensitive land uses specifically, instead of boundary setbacks. The closest dwelling to the proposed extraction area is situated approximately 230 metres to the south. The processing area is 440 metres from this dwelling. All other neighbouring dwellings are

Performance outcomes	Acceptable outcomes	Complies	Comments
			situated in excess of 400 metres from the extraction area, and 670 metres from the processing area. Considering that the operation is for sand extraction only (no blasting or crushing) and the scale of development proposed (only up to 5,000 tonnes per annum) the setbacks proposed are considered adequate to ensure amenity impacts are minimised.

Performance outcomes	Acceptable outcomes	Complies	Comments
PO7 The Extractive industry is designed and managed to appropriately address its interface with the natural environment and landscape, having regard to: (a) water quality; (b) existing vegetation; and (c) declared plants.	**AO7.1** The Extractive industry does not cause a reduction in the quality of ground water or receiving surface waters.	✔	The applicants only propose to extract sand from the extraction site during the dry season. A condition will be placed on any approval ensuring that sand extraction only occurs when water is not flowing over the dam spillway which will ensure the dam acts as a large sediment trap and settling pond for the extraction activity. The processing component of the development will be undertaken within the bunded ex racetrack area which will act as a sediment trap and ensure wastewater from the processing component of the development will not reach neighbouring receiving waters. The development will comply with AO7.1.

Performance outcomes	Acceptable outcomes	Complies	Comments
	AO7.2 Vegetation is retained on site that contributes towards alleviating the impact of the development on the visual amenity of surrounding sensitive land uses.	✔	A condition will be included on the approval restricting the removal of vegetation on the southern side of the dam, which will help maintain some visual buffering from the southern adjacent allotment which contains the closest dwelling.
	AO7.3 No declared plants are transported from the site.	✔	Can be conditioned to comply.
PO8 Extractive industry actively integrates rehabilitation into the ongoing operations on the site to progressively restore the site to its original (or an improved) condition, having regard to matters of: (a) locally prevalent plant species; (b) plant spacing; (c) local climatic conditions; (d) locations of waterways and wetlands; (e) ongoing maintenance; (f) potential habitat opportunities; (g) erosion and sediment control; and (h) fencing. Note—A revegetation plan must be prepared by a suitably experienced person in the field of natural area revegetation and rehabilitation, at a standard acceptable to Council, which addresses the items identified in Performance Outcome PO8.	**AO8** No acceptable outcome is provided.	✔	The proposed extraction operation is essentially a “dam cleanout’ operation. Once the extraction area is exhausted of material, it will remain in use as part of the larger water storage dam and will be used for water supply for the sites agricultural activities. A condition will be imposed requiring the planting of native species on dam edges once extraction is complete.

9.4.2 Landscaping code

9.4.2.1 Application

This code applies where it is identified in the assessment benchmarks for assessable development and requirements for accepted development column of an assessment table in Part 5 of the planning scheme.

9.4.2.2 Purpose

(1) The purpose of the Landscaping code is to ensure all development is landscaped to a standard that:
- (a) complements the scale and appearance of the development;
- (b) protects and enhances the amenity and environmental values of the site;
- (c) complements and enhances the streetscape and local landscape character; and
- (d) ensures effective buffering of incompatible land uses to protect local amenity.

(2) The purpose of the code will be achieved through the following overall outcomes:
- (a) Landscaping is a functional part of development design and is commensurate with the intended use;
- (b) Landscaping accommodates the retention of existing significant on site vegetation where appropriate and practical;
- (c) Landscaping treatments complement the scale, appearance and function of the development;
- (d) Landscaping contributes to an attractive streetscape;
- (e) Landscaping enhances the amenity and character of the local area;
- (f) Landscaping enhances natural environmental values of the site and the locality;
- (g) Landscaping provides effective screening both on site, if required, and between incompatible land uses;
- (h) Landscaping provides shade in appropriate circumstances;
- (i) Landscape design enhances personal safety and reduces the potential for crime and vandalism; and
- (j) Intensive land uses incorporate vegetated buffers to provide effective screening of buildings, structures and machinery associated with the use.

9.4.2.3 Criteria for assessment

Table 9.4.2.3A—Landscaping code - For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Complies	Comments
For accepted development subject to requirements and assessable development			
PO1 Development, other than in the Rural zone, includes landscaping that: (a) contributes to the landscape character of the Shire; (b) compliments the character of the immediate surrounds; (c) provides an appropriate balance between built and natural elements; and (d) provides a source of visual interest.	**AO1** Development, other than in the Rural zone, provides: (a) a minimum of 10% of the site as landscaping; (b) planting in accordance with Planning Scheme Policy 6 - Landscaping and preferred plant species; (c) for the integration of retained significant vegetation into landscaping areas; (d) on-street landscaping works in accordance with the Design Guidelines set out in Section D9 Landscaping, of the Planning Scheme Policy 4 - FNQROC Regional Development Manual. Note—Where development exceeds a site cover of 90%, areas of landscaping may be provided above ground level to achieve a total supply of landscaping equivalent to 10% of the site area.	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
PO2 Development, other than in the Rural zone, includes landscaping along site frontages that: (a) creates an attractive streetscape; (b) compliments the character of the immediate surrounds; (c) assists to break up and soften elements of built form; (d) screen areas of limited visual interest or servicing; (e) provide shade for pedestrians; and (f) includes a range and variety of planting.	**AO2** Development, other than in the Rural zone, includes a landscape strip along any site frontage: (a) with a minimum width of 2 metres where adjoining a car parking area; (b) with a minimum width of 1.5 metres in all other locations; and (c) in accordance with Planning Scheme Policy 6 - Landscaping and preferred plant species. Note—Where development is setback from a frontage less than 1.5 metres, the setback area is provided as a landscape strip	**n/a**	Not applicable.
PO3 Development includes landscaping and fencing along side and rear boundaries that: (a) screens and buffer land uses; (b) assists to break up and soften elements of built form; (c) screens areas of limited visual interest; (d) preserves the amenity of sensitive land uses; and (e) includes a range and variety of planting.	**AO3.1** Development provides landscape treatments along side and rear boundaries in accordance with **Table 9.4.2.3B**.	**n/a**	Not applicable.
	AO3.2 Shrubs and trees provided in landscape strips along side and rear boundaries: (a) are planted at a maximum spacing of 1 metre; (b) will grow to a height of at least 2 metres; (c) will grow to form a screen of no less than 2 metres in height; and (d) are mulched to a minimum depth of 0.1 metres with organic mulch.	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
	AO3.3 Any landscape strip provided along a side or rear boundary is designed in accordance with Planning Scheme Policy 6 - Landscaping and preferred plant species.	**n/a**	Not applicable.
PO4 Car parking areas are improved with a variety of landscaping that: (a) provides visual interest; (b) provides a source of shade for pedestrians; (c) assists to break up and soften elements; and (d) improves legibility.	**AO4.1** Landscaping is provided in car parking areas which provides: (a) a minimum of 1 shade tree for every 4 parking spaces, or part thereof, where the car parking area includes 12 or more spaces; (b) a minimum of 1 shade tree for every 6 parking spaces, or part thereof, otherwise; and (c) where involving a car parking area in excess of 500m^2: (i) shade structures are provided for 50% of parking spaces; and (ii) a minimum of 10% of the parking area as landscaping. Note—Where a shade structure is provided over part of a car parking area, shade tree planting is not required in this area of the car parking area.	**n/a**	Not applicable.
	AO4.2 Landscaping in car parking areas is designed in accordance with Planning Scheme Policy 6 - Landscaping and preferred plant species.	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
PO5 Landscaping areas include a range and variety of planting that: (a) is suitable for the intended purpose and local conditions; (b) contributes to the natural character of the Shire; (c) includes native species; (d) includes locally endemic species, where practical; and (e) does not include invasive plants or weeds.	**AO5.1** Plant species are selected from the Plant Schedule in Planning Scheme Policy 6 - Landscaping and preferred plant species.	**n/a**	Not applicable.
	AO5.2 A minimum of 25% of (new and existing) plants is provided as larger, advanced stock with a minimum plant height of 0.7 metres and mulched to a minimum depth of 0.1 metres with organic mulch.	**n/a**	Not applicable.
PO6 Landscaping does not impact on the ongoing provision of infrastructure and services to the Shire.	**AO6.1** Tree planting is a minimum of (a) 2 metres from any underground water, sewer, gas, electricity or telecommunications infrastructure; and (b) 4 metres from any inspection chamber.	**n/a**	Not applicable.
	AO6.2 Vegetation below or within 4 metres of overhead electricity lines and power poles has a maximum height of 3.5 metres at maturity.	**n/a**	Not applicable.
	AO6.3 Vegetation adjoining an electricity substation boundary, at maturity, will have: (a) a height of less than 4 metres; and (b) no foliage within 3 metres of the substation boundary, unless the substation has a solid wall along any boundary.	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
For assessable development			
PO7 Landscaping areas are designed to: (a) be easily maintained throughout the ongoing use of the site; (b) allow sufficient area and access to sunlight and water for plant growth; (c) not cause a nuisance to occupants of the site or members of the public; and (d) maintain or enhance the safety of pedestrians through the use of Crime Prevention Through Environmental Design principles.	**AO7** No acceptable outcome is provided.	**n/a**	Not applicable.

Table 9.4.2.3B—Side and rear boundary landscape treatments

Location or use	Landscape Strip Minimum Width	Screen Fencing Minimum Height	Extent of treatment
Where car parking, servicing or manoeuvring areas adjoin a side or rear boundary	1 metre	Not applicable	To the extent these areas adjoin the boundary
Where involving a use other than a dwelling house on a site with a common boundary with land in the Low density residential zone, the Medium density residential zone or the Rural residential zone:	1.5 metres	1.8 metres	Along the common boundary.
Development for an industrial activity which has a common boundary with land not within the Industry zone	2 metres	1.8 metres	Along the common boundary
Development involving (a) Tourist park not in the Rural zone (b) Sales office (c) Multiple dwelling (d) Residential care facility; or (e) Dual occupancy	Not applicable	1.8 metres	Along all side and rear boundaries and between dwellings for a Dual occupancy.
Development involving (a) Tourist park in the Rural zone (b) Service station (c) Car wash; or (d) Utility installation	2 metres	Not applicable	Along all side and rear boundaries
For: (a) waste storage; (b) equipment; (c) servicing areas; and (d) private open space and site facilities associated with Caretaker's accommodation.	Not applicable	1.8 metres	To prevent visibility

Note—Where more than one landscape treatment is applicable to a development in the above table, the development is to provide a landscape treatment that satisfies all applicable minimum specifications.

9.4.3 Parking and access code

9.4.3.1 Application

This code applies to assessing development where it is identified in the assessment benchmarks for assessable development and requirements for accepted development column of an assessment table in Part 5 of the planning scheme.

9.4.3.2 Purpose

(1) The purpose of the Parking and access code is to ensure:
- (a) parking areas are appropriately designed, constructed and maintained;
- (b) the efficient functioning of the development and the local road network; and
- (c) all development provides sufficient parking, loading/service and manoeuvring areas to meet the demand generated by the use.

(2) The purpose of the code will be achieved through the following overall outcomes:
- (a) Land uses have a sufficient number of parking and bicycle spaces designed in a manner to meet the requirements of the user;
- (b) Parking spaces and associated manoeuvring areas are safe, functional and provide equitable access;
- (c) Suitable access for all types of vehicles likely to utilise a parking area is provided in a way that does not compromise the safety and efficiency of the surrounding road network;
- (d) Premises are adequately serviced to meet the reasonable requirements of the development; and
- (e) End of trip facilities are provided by new major developments to facilitate alternative travel modes.

9.4.3.3 Criteria for assessment

Table 9.4.3.3A—Parking and access code – For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Complies	Comments
For accepted development subject to requirements and assessable development			
Car parking spaces			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO1 Development provides sufficient car parking to accommodate the demand likely to be generated by the use, having regard to the: (a) nature of the use; (b) location of the site; (c) proximity of the use to public transport services; (d) availability of active transport infrastructure; and (e) accessibility of the use to all members of the community.	**AO1** The number of car parking spaces provided for the use is in accordance with **Table 9.4.3.3B**. Note—Car parking spaces provided for persons with a disability are to be considered in determining compliance with AO1.	✔	Give the nature of the proposed development, formal parking is not considered necessary. All parties involved with day to day extraction and processing operations will reside on-site with no off-site staff proposed to be employed.
Vehicle crossovers			
PO2 Vehicle crossovers are provided to:: (a) ensure safe and efficient access between the road and premises; (b) minimize interference with the function and operation of roads; and (c) minimise pedestrian to vehicle conflict.	**AO2.1** Vehicular access to/from Council roads is designed and constructed in accordance with the Standard drawings in Planning Scheme Policy 4 - FNQROC Regional Development Manual.	✔	Will be conditioned to comply.
	AO2.2 Development on a site with two or more road frontages provides vehicular access from: (a) the primary frontage where involving Community activities or Sport and recreation activities, unless the primary road frontage is a State-controlled road; or (b) from the lowest order road in all other instances.	✔	Access will be restricted to Leotta Road. Lawful access is not achieved via Shanty Creek Road.

Performance outcomes	Acceptable outcomes	Complies	Comments
	AO2.3 Vehicular access for particular uses is provided in accordance with **Table 9.4.3.3E**.	✔	Will be conditioned to comply.
PO3 Access, manoeuvring and car parking areas include appropriate pavement treatments having regard to: (a) the intensity of anticipated vehicle movements; (b) the nature of the use that they service; and (c) the character of the surrounding locality.	**AO3** Access, manoeuvring and car parking areas include pavements that are constructed in accordance with **Table 9.4.3.3C**.	✔	Can be conditioned to comply.
For assessable development			
Parking area location and design			
PO4 Car parking areas are located and designed to: (a) ensure safety and efficiency in operation; and (b) be consistent with the character of the surrounding locality.	**AO4.1** Car parking spaces, access and circulation areas have dimensions in accordance with AS/NZS 2890.1 Off-street car parking.	**n/a**	Not applicable.
	AO4.2 Disabled access and car parking spaces are located and designed in accordance with AS/NZS 2890.6 Parking facilities - Off-street parking for people with disabilities.	**n/a**	Not applicable.
	AO4.3 The car parking area includes designated pedestrian routes that provide connections to building entrances.	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
	AO4.4 Parking and any set down areas are: (a) wholly contained within the site; (b) visible from the street where involving Commercial activities, Community activities, Industrial activities or a use in the Recreation and open space zone; (c) are set back behind the main building line where involving a Dual occupancy, Multiple dwelling, Residential care facility or Retirement facility; and (d) provided at the side or rear of a building in all other instances.	**n/a**	Not applicable.
Site access and manoeuvring			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO5 Access to, and manoeuvring within, the site is designed and located to: (a) ensure the safety and efficiency of the external road network; (b) ensure the safety of pedestrians; (c) provide a functional and convenient layout; and (d) accommodate all vehicles intended to use the site.	**AO5.1** Access and manoeuvrability is in accordance with : (a) AS28901 – Car Parking Facilities (Off Street Parking); and (b) AS2890.2 – Parking Facilities (Off-street Parking) Commercial Vehicle Facilities. Note—Proposal plans should include turning circles designed in accordance with AP34/95 (Austroads 1995) Design Vehicles and Turning Path Templates.	**n/a**	Not applicable.
	AO5.2 Vehicular access has a minimum sight distance in accordance with Part 5 of AUSTROADS.	✔	Complies – Access driveway is a continuation of Leotta Road.
	AO5.3 Vehicular access is located and designed so that all vehicles enter and exit the site in a forward gear.	✔	Will comply due to size of allotment.
	AO5.4 Pedestrian and cyclist access to the site: (a) is clearly defined; (b) easily identifiable; and (c) provides a connection between the site frontage and the entrance to buildings and end of trip facilities (where provided).	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
PO6 Development that involves an internal road network ensures that it's design: (a) ensure safety and efficiency in operation; (b) does not impact on the amenity of residential uses on the site and on adjoining sites, having regard to matters of: (i) hours of operation; (ii) noise (iii) light; and (iv) odour; (c) accommodates the nature and volume of vehicle movements anticipated to be generated by the use; (d) allows for convenient access to key on-site features by pedestrians, cyclists and motor vehicles; and (e) in the Rural zone, avoids environmental degradation.	**AO6.1** Internal roads for a Tourist park have a minimum width of: (a) 4 metres if one way; or (b) 6 metres if two way.	**n/a**	Not applicable.
	AO6.2 For a Tourist park, internal road design avoids the use of cul-de-sacs in favour of circulating roads, where unavoidable, cul-de-sacs provide a full turning circle for vehicles towing caravans having: (a) a minimum approach and departure curve radius of 12 metres; and (b) a minimum turning circle radius of 8 metres.	**n/a**	Not applicable.
	AO6.3 Internal roads are imperviously sealed and drained, apart from those for an Energy and infrastructure activity or Rural activity.	**n/a**	Not applicable.
	AO6.4 Speed control devices are installed along all internal roads, apart from those for an Energy and infrastructure activity or Rural activity, in accordance with Complete Streets.	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
	AO6.5 Internal roads, apart from those for an Energy and infrastructure activity or Rural activity, are illuminated in accordance with AS 4282 (as amended) - Control of Obtrusive effects of outdoor lighting.	**n/a**	Not applicable.
	AO6.6 Where involving an accommodation activity, internal roads facilitate unobstructed access to every dwelling, accommodation unit, accommodation site and building by emergency services vehicles.	**n/a**	Not applicable.
	AO6.7 For an Energy and infrastructure activity or Rural activity, internal road gradients: (a) are no steeper than 1:5; or (b) are steeper than 1:5 and are sealed.	**n/a**	Not applicable.
Servicing			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO7 Development provides access, maneuvering and servicing areas on site that: (a) accommodate a service vehicle commensurate with the likely demand generated by the use; (b) do not impact on the safety or efficiency of internal car parking or maneuvering areas; (c) do not adversely impact on the safety or efficiency of the road network; (d) provide for all servicing functions associated with the use; and (e) are located and designed to minimise their impacts on adjoining sensitive land uses and streetscape quality.	**AO7.1** All unloading, loading, service and waste disposal areas are located: (a) on the site; (b) to the side or rear of the building, behind the main building line; (c) not adjacent to a site boundary where the adjoining property is used for a sensitive use.	**n/a**	Not applicable.
	AO7.2 Unloading, loading, service and waste disposal areas allow service vehicles to enter and exit the site in a forward gear.	**n/a**	Not applicable.
	AO7.3 Development provides a servicing area, site access and maneuvering areas to accommodate the applicable minimum servicing vehicle specified in **Table 9.4.3.3B**.	**n/a**	Not applicable.
Maintenance			
PO8 Parking areas are used and maintained for their intended purpose.	**AO8.1** Parking areas are kept and used exclusively for parking and are maintained in a suitable condition for parking and circulation of vehicles.	**n/a**	Not applicable.
	AO8.2 All parking areas will be compacted, sealed, drained, line marked and maintained until such time as the development ceases.	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
End of trip facilities			
PO9 Development within the Centre zone; Industry zone or Emerging community zone provides facilities for active transport users that: (a) meet the anticipated demand generated from the use; (b) comprise secure and convenient bicycle parking and storage; and (c) provide end of trip facilities for all active transport users.	**AO9.1** The number of bicycle parking spaces provided for the use is in accordance with **Table 9.4.3.3D**.	**n/a**	Not applicable.
	AO9.2 End of trip facilities are provided in accordance with **Table 9.4.3.3D**.	**n/a**	Not applicable.
If for Educational establishment or Child care centre where involving more than 100 vehicle movements per day or Renewable energy facility, Sport and recreation activities or Tourist park			
PO10 The level of traffic generated by the development on the surrounding local road network must not result in unacceptable impacts on adjacent land and local road users.	**AO10** A traffic impact report is prepared by a suitably qualified person that identifies: (a) the expected traffic movements to be generated by the facility; (b) any associated impacts on the road network; and (c) any works that will be required to address the identified impacts.	**n/a**	Not applicable.
If for Educational establishment or Child care centre where involving more than 100 vehicle movements per day or Renewable energy facility, Sport and recreation activities or Tourist park			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO11 The level of traffic generated by the development on the surrounding local road network must not result in unacceptable impacts on adjacent land and local road users.	**AO11** A traffic impact report is prepared by a suitably qualified person that identifies: (d) the expected traffic movements to be generated by the facility; (e) any associated impacts on the road network; and (f) any works that will be required to address the identified impacts.	**n/a**	Not applicable.

9.4.5 Works, services and infrastructure code

9.4.5.1 Application

(1) This code applies to assessing development where it is identified in the assessment benchmarks for assessable development and requirements for accepted development column of an assessment table in Part 5 of the planning scheme.

9.4.5.2 Purpose

(1) The purpose of the Works, services and infrastructure code is to ensure that all development is appropriately serviced by physical infrastructure, public utilities and services and that work associated with development is carried out in a manner that does not adversely impact on the surrounding area.

(2) The purpose of the code will be achieved through the following overall outcomes:
- (a) Development provides an adequate, safe and reliable supply of potable, fire-fighting and general use water in accordance with relevant standards;
- (b) Development provides for the treatment and disposal of wastewater and ensures there are no adverse impacts on water quality, public health, local amenity or ecological processes;
- (c) Development provides for the disposal of stormwater and ensures that there are no adverse impacts on water quality or ecological processes;
- (d) Development connects to the road network and any adjoining public transport, pedestrian and cycle networks while ensuring no adverse impacts on the safe, convenient and efficient operation of these networks;
- (e) Development provides electricity and telecommunications services that meet its desired requirements;
- (f) Development is connected to a nearby electricity network with adequate capacity without significant environment, social or amenity impact;
- (g) Development does not affect the efficient functioning of public utility mains, services or installations;
- (h) Infrastructure dedicated to Council is cost effective over its life cycle;
- (i) Work associated with development does not cause adverse impacts on the surrounding area; and
- (j) Development prevents the spread of weeds, seeds or other pests.

9.4.5.3 Criteria for assessment

Table 9.4.5.3 - Works, services and infrastructure code – For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Complies	Comments
For accepted development subject to requirements and assessable development			
Water supply			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO1 Each lot has an adequate volume and supply of water that: (a) meets the needs of users; (b) is adequate for fire-fighting purposes; (c) ensures the health, safety and convenience of the community; and (d) minimises adverse impacts on the receiving environment.	**AO1.1** Development is connected to a reticulated water supply system in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development Manual other than where located: (a) in the Conservation zone, Rural zone or Rural residential zone; and (b) outside a reticulated water supply service area.	**n/a**	Not applicable.
	AO1.2 Development, where located outside a reticulated water supply service area and in the Conservation zone, Rural zone or Rural residential zone is provided with: (a) a bore or bores are provided in accordance with the Design Guidelines set out in the Planning Scheme Policy 4 – FNQROC Regional Development Manual; or (b) on-site water storage tank/s: (i) with a minimum capacity of 90,000L; (ii) fitted with a 50mm ball valve with a camlock fitting; and (iii) which are installed and connected prior to the occupation or use of the development.	**n/a**	Not applicable.
Wastewater disposal			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO2 Each lot provides for the treatment and disposal of effluent and other waste water that: (a) meets the needs of users; (b) is adequate for fire-fighting purposes; (c) ensures the health, safety and convenience of the community; and (d) minimises adverse impacts on the receiving environment.	**AO2.1** Development is connected to a reticulated sewerage system in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development Manual other than where located: (a) in the Conservation zone, Rural zone or Rural residential zone; and (b) outside a reticulated sewerage service area.	**n/a**	Not applicable.
	AO2.2 An effluent disposal system is provided in accordance with ASNZ 1547 On-Site Domestic Wastewater Management (as amended) where development is located: (a) in the Conservation zone, Rural zone or Rural residential zone; and (b) outside a reticulated sewerage service area.	**n/a**	Not applicable.
Stormwater infrastructure			
PO3 Stormwater infrastructure is designed and constructed to collect and convey the design storm event to a lawful point of discharge in a manner that mitigates impacts on life and property.	**AO3.1** Where located within a Priority infrastructure area or where stormwater infrastructure is available, development is connected to Council's stormwater network in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development Manual.	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
	AO3.2 On-site drainage systems are constructed: (a) to convey stormwater from the premises to a lawful point of discharge; and (b) in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development Manual.	**n/a**	Not applicable.
Electricity supply			
PO4 Each lot is provided with an adequate supply of electricity	**AO4** The premises: (a) is connected to the electricity supply network; or (b) has arranged a connection to the transmission grid; or (c) where not connected to the network, an independent energy system with sufficient capacity to service the development (at near average energy demands associated with the use) may be provided as an alternative to reticulated electricity where: (i) it is approved by the relevant regulatory authority; and (ii) it can be demonstrated that no air or noise emissions; and (iii) it can be demonstrated that no adverse impact on visual amenity will occur.	**n/a**	Not applicable.
Telecommunications infrastructure			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO5 Each lot is provided with an adequate supply of telecommunication infrastructure	**AO5** Development is provided with a connection to the national broadband network or telecommunication services.	**n/a**	Not applicable.
Existing public utility services			
PO6 Development and associated works do not affect the efficient functioning of public utility mains, services or installations.	**AO6** Public utility mains, services are relocated, altered or repaired in association with the works so that they continue to function and satisfy the relevant Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development Manual.	**n/a**	Not applicable.
Excavation or filling			
PO7 Excavation or filling must not have an adverse impact on the: (a) streetscape; (b) scenic amenity; (c) environmental values; (d) slope stability; (e) accessibility; or (f) privacy of adjoining premises.	**AO7.1** Excavation or filling does not occur within 1.5 metres of any site boundary.	✔	Complies.
	AO7.2 Excavation or filling at any point on a lot is to be no greater than 1.5 metres above or below natural ground level.	✔	Complies with PO7. Given the location of the proposed extraction area, any exceedance of this will not compromise PO7.

Performance outcomes	Acceptable outcomes	Complies	Comments
	AO7.3 Earthworks batters: (a) are no greater than 1.5 metres in height; (b) are stepped with a minimum width 2 metre berm; (c) do not exceed a maximum of two batters and two berms (not greater than 3.6 metres in total height) on any one lot; (d) have a slope no greater than 1 in 4; and (e) are retained.	✔	Can be conditioned to comply.
	AO7.4 Soil used for filling or spoil from excavation is not stockpiled in locations that can be viewed from: (a) adjoining premises; or (b) a road frontage, for a period exceeding 1 month from the commencement of the filling or excavation.	✔	Can be conditioned to comply.
	AO7.5 All batters and berms to be constructed in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development Manual.	✔	Can be conditioned to comply.
	AO7.6 Retaining walls have a maximum height of 1.5 metres and are designed and constructed in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development manual.	✔	Can be conditioned to comply.

Performance outcomes	Acceptable outcomes	Complies	Comments
	AO7.7 Excavation or filling at any point on a lot is to include measures that protect trees at the foot or top of cut or fill batters by the use of appropriate retaining methods and sensitive earth removal or placement and in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development manual.	✔	Can be conditioned to comply.
For assessable development			
Transport network			
PO8 The development has access to a transport network of adequate standard to provide for the safe and efficient movement of vehicles, pedestrians and cyclists.	**AO8.1** Vehicle access, crossovers, road geometry, pavement, utilities and landscaping to the frontage/s of the site are designed and constructed in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development manual.	✔	Can be conditioned to comply.
	AO8.2 Development provides footpath pavement treatments in accordance with Planning Scheme Policy 9 – Footpath Paving.	**n/a**	Not applicable.
Public infrastructure			
PO9 The design, construction and provision of any infrastructure that is to be dedicated to Council is cost effective over its life cycle and incorporates provisions to minimise adverse impacts.	**AO9** Development is in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development Manual.	✔	Can be conditioned to comply.
Stormwater quality			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO10 Development has a non-worsening effect on the site and surrounding land and is designed to: (a) optimise the interception, retention and removal of waterborne pollutants, prior to the discharge to receiving waters; (b) protect the environmental values of waterbodies affected by the development, including upstream, on-site and downstream waterbodies; (c) achieve specified water quality objectives; (d) minimise flooding; (e) maximise the use of natural channel design principles; (f) maximise community benefit; and (g) minimise risk to public safety.	**AO10.1** The following reporting is prepared for all Material change of use or Reconfiguring a lot proposals: (a) a Stormwater Management Plan and Report that meets or exceeds the standards of design and construction set out in the Queensland Urban Drainage Manual (QUDM) and the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development Manual; and (b) an Erosion and Sediment Control Plan that meets or exceeds the Soil Erosion and Sedimentation Control Guidelines (Institute of Engineers Australia), including: (i) drainage control; (ii) erosion control; (iii) sediment control; and (iv) water quality outcomes.	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
	AO10.2 For development on land greater than 2,500m^2 or that result in more than 5 lots or more than 5 dwellings or accommodation units, a Stormwater Quality Management Plan and Report prepared and certified by a suitably qualified design engineer (RPEQ) is prepared that demonstrates that the development: (a) meets or exceeds the standards of design and construction set out in the Urban Stormwater Quality Planning Guideline and the Queensland Water Quality Guideline; (b) is consistent with any local area stormwater water management planning; (c) accounts for development type, construction phase, local climatic conditions and design objectives; and (d) provides for stormwater quality treatment measures reflecting land use constraints, such as soil type, landscape features (including landform), nutrient hazardous areas, acid sulfate soil and rainfall erosivity.	**n/a**	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
PO11 Storage areas for stormwater detention and retention: (a) protect or enhance the environmental values of receiving waters; (b) achieve specified water quality objectives; (c) where possible, provide for recreational use; (d) maximise community benefit; and (e) minimise risk to public safety.	**AO11** No acceptable outcome is provided.	✔	Complies.
Excavation or filling			
PO12 Traffic generated by filling or excavation does not impact on the amenity of the surrounding area.	**AO12.1** Haul routes used for transportation of fill to or from the site only use major roads and avoid residential areas.	✔	**Complies.**
	AO12.2 Transportation of fill to or from the site does not occur: (a) within peak traffic times; and (b) before 7am or after 6pm Monday to Friday; (c) before 7am or after 1pm Saturdays; and (d) on Sundays or Public Holidays.	✔	Can be conditioned to comply.

Performance outcomes	Acceptable outcomes	Complies	Comments
PO13 Air pollutants, dust and sediment particles from excavation or filling, do not cause significant environmental harm or nuisance impacts.	**AO13.1** Dust emissions do not extend beyond the boundary of the site.	✔	Will be conditioned to comply.
	AO13.2 No other air pollutants, including odours, are detectable at the boundary of the site.	✔	Will be conditioned to comply.
	AO13.3 A management plan for control of dust and air pollutants is prepared and implemented.	✔	Will be conditioned to comply.
PO14 Access to the premises (including driveways and paths) does not have an adverse impact on: (a) safety; (b) drainage; (c) visual amenity; and (d) privacy of adjoining premises.	**AO14** Access to the premises (including all works associated with the access): (a) must follow as close as possible to the existing contours; (b) be contained within the premises and not the road reserve, and (c) are designed and constructed in accordance with the Design Guidelines and Specifications set out in the Planning Scheme Policy 4 – FNQROC Regional Development manual.	✔	Will be conditioned to comply where relevant.
Weed and pest management			
PO15 Development prevents the spread of weeds, seeds or other pests into clean areas or away from infested areas.	**AO15** No acceptable outcome is provided.	✔	Will be conditioned to comply.
Contaminated land			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO16 Development is located and designed to ensure that users and nearby sensitive land uses are not exposed to unacceptable levels of contaminants	**AO16** Development is located where: (a) soils are not contaminated by pollutants which represent a health or safety risk to users; or (b) contaminated soils are remediated prior to plan sealing, operational works permit, or issuing of building works permit.	**n/a**	Not applicable.
Fire services in developments accessed by common private title			
PO17 Fire hydrants are located in positions that will enable fire services to access water safely, effectively and efficiently.	**AO17.1** Fire hydrants are located in accessways or private roads held in common private title at a maximum spacing of: (a) 120 metres for residential development; and (b) 90 metres for any other development.	**n/a**	Not applicable.
	AO17.2 Fire hydrants are located at all intersections of accessways or private roads held in common private title.	**n/a**	Not applicable.