

Part 8 Overlays

8.1 Preliminary

- (1) Overlays identify areas in the planning scheme that reflect state or local level interests and that have one or more of the following characteristics:
 - (a) there is a particular sensitivity to the effects of development;
 - (b) there is a constraint on land use or development outcomes;
 - (c) there is the presence of valuable resources; and
 - (d) there are particular opportunities for development.
- (2) Overlays are mapped and included in Schedule 2.
- (3) The changed category of development and assessment, if applicable, for development affected by an overlay are stated in Part 5.
- (4) Some overlays may be included for information purposes only. This will not result in a change to the category of development and assessment or any additional assessment benchmarks.
- (5) Assessment benchmarks for an overlay may be contained in one or more of the following:
 - (a) a map for an overlay;
 - (b) a code for an overlay;
 - (c) a zone code; and
 - (d) a development code.

Editor's note—In this planning scheme all assessment benchmarks for an overlay are contained in an overlay code.

- (6) Where development is proposed on premises partly affected by an overlay, the assessment benchmarks for the overlay only relate to the part of the premises affected by the overlay.
- (7) The overlays for the planning scheme are:
 - (a) Airport environs overlay;
 - (b) Bushfire hazard overlay;
 - (c) Coastal environment overlay;
 - (d) Cultural heritage overlay;
 - (e) Extractive resources overlay;
 - (f) Flood hazard overlay;
 - (g) Landslide hazard overlay;
 - (h) Natural assets overlay; and
 - (i) Water resource catchment overlay.
- (8) The following overlays for the planning scheme are for information purposes only:
 - (a) Infrastructure noise corridors overlay.

Editor's note—The Infrastructure noise corridors identify land affected by transport noise in accordance with Chapter 8B of the *Building Act 1975*. In these areas building work will be assessable against the [Queensland Development Code Part 4.4 – Buildings in a Transport Noise Corridor](#).

8.2 Overlay codes

8.2.1 Airport environs overlay code

8.2.1.1 Application

This code applies to development where the code is identified as applicable in the categories of development and assessment for the Airport environs overlay. When using this code, reference should be made to section 5.3.2 and where applicable, section 5.3.3 located in Part 5.

8.2.1.2 Purpose

- (1) The purpose of the Airport environs overlay code is to ensure the safe and efficient operations of the airport, RAAF base and aviation facilities are protected.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) development avoids adversely affecting the safety and efficiency of an airport's operational airspace or the functioning of aviation facilities;
 - (b) large increases in the numbers of people adversely affected by significant aircraft noise are avoided; and
 - (c) development does not increase the risk to public safety near airport runways.

8.2.1.3 Assessment benchmarks

Table 8.2.1.3 - Accepted development subject to requirements and assessable development (Part)

Editor's note—This code will apply to accepted development subject to requirements as well as assessable development.

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Operational airspace (overlay map OM-01.1)	
<p>PO1 Development does not involve permanent or temporary physical obstructions that will adversely affect the airport's operational airspace area identified on overlay map OM-01.1.</p> <p>Editor's note—The <i>Defence (Areas Control) Regulation</i> (DACR) is a Commonwealth regulation under the <i>Defence Act 1903</i>. Development in the area covered by this regulation which exceeds certain heights will require a separate assessment process under Regulation 8 of the DACR by the Department of Defence. The Department of Defence also requires that all tall structures (30m high within 30km of the airport and 45m high elsewhere) are registered by forwarding "as constructed" information to Airservices Australia at the following email address: vod@airservices.com.</p>	<p>AO1.1 Development involving a permanent or temporary building, structure or landscaping does not enter operational airspace areas identified on overlay map OM-01.1.</p> <p>Editor's note—Alternative heights which enter the operational airspace areas may be possible. In particular, building heights which meet the acceptable outcomes for a particular zone or precinct under this planning scheme. However, applicants should note the requirement for assessment under the Defence (Areas Control) Regulation (DACR) for development which exceed AO1 above.</p>
	<p>AO1.2 Development on land within the area identified on overlay map OM-01.1 as operational airspace areas does not involve transient intrusions within the operational airspace.</p>
<p>PO2 Emissions do not significantly affect air turbulence, visibility or aircraft engine operation in the airport's operational airspace area identified on overlay map OM-01.1.</p>	<p>AO2 Development does not generate:</p> <ol style="list-style-type: none"> (a) a gaseous plume with a velocity exceeding 4.3m per second; or (b) smoke, dust, ash or steam that will penetrate operational airspace areas identified on overlay map OM-01.1.

Table 8.2.1.3 - Accepted development subject to requirements and assessable development (Part)

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Wildlife hazard buffer zones (overlay map OM-01.2)	
PO3 Development does not attract a significant number of flying vertebrates, such as birds and bats, into areas identified on overlay map OM-01.2.	AO3.1 Within 13km of airport runways, development does not involve a putrescible waste disposal facility.
	AO3.2 Within 8km of airport runways, development does not involve: <ul style="list-style-type: none"> (a) aquaculture; or (b) food handling or processing of an industrial nature; or (c) stock handling or slaughtering; or (d) pig production; or (e) fruit production; or (f) turf production; or (g) the keeping or protection of wildlife outside enclosures.
	AO3.3 Within 3km of airport runways, development does not involve: <ul style="list-style-type: none"> (a) the keeping, handling or racing of horses; or (b) outdoor dining, food handling or food consumption.

Table 8.2.1.3—Accepted development subject to requirements and assessable development (Part)

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Public safety areas (overlay map OM-01.2)	
PO4 A significant increase in the numbers of people living, working or congregating in public safety areas identified on overlay map OM-01.2 is avoided.	AO4 Within a public safety area identified on overlay map OM-01.2, development does not involve the following: <ul style="list-style-type: none"> (a) residential uses; or (b) a new building or an increase in the gross floor area of an existing building accommodating a non-residential use, other than an industrial use; or (c) any activities involving the manufacture or bulk storage of hazardous or flammable materials.

Table 8.2.1.3—Accepted development subject to requirements and assessable development (Part)

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Aviation facilities (overlay map OM-01.3)	
<p>PO5 Development within the area identified on overlay map OM-01.3 is located and designed to protect the function of aviation facilities from physical obstructions, electrical or electromagnetic interference and deflection of signals.</p>	<p>AO5.1 No building, structures or other works which exceed 7.9m in height are located between 150m and 500m of non-directional beacon (NDB) site (as depicted on overlay map OM-01.3).</p> <p>AO5.2 Within the buffer area of the Townsville Airport distance measuring equipment (DME) site (as depicted on overlay map OM-01.3), no building, structure or other works involving a change to, or a physical projection above, the ground level are located:</p> <ul style="list-style-type: none"> (a) within 115m of the DME site; or (b) between 115m and 230m of the DME site if exceeding 1m in height; or (c) between 230m and 500m of the DME site if exceeding 2m in height; or (d) between 500m and 1,000m of the DME site if exceeding 4m in height; or (e) between 1,000m and 1,500m of the DME site if exceeding 8.5m in height. <p>AO5.3 Within the buffer area of the Townsville Airport VHF omni-directional radio range (VOR) site (as depicted on overlay map OM-01.3):</p> <ul style="list-style-type: none"> (a) no building, structures or other works involving a change to, or a physical projection above, the ground level are located within 300m of the site; and (b) the following are not located between 300m and 1,000m of the site: <ul style="list-style-type: none"> (i) fences exceeding 2.5m in height; or (ii) overhead lines exceeding 5m in height; or (iii) metallic structures exceeding 8m in height; or (iv) trees and open lattice towers exceeding 10m in height; or (v) wooden structures exceeding 13m in height.

	<p>AO5.4 Within the buffer area of the Townsville Airport Glidepath site (as depicted on overlay map OM-01.3), no building, structures or other works involving a change to, or a physical projection above, the ground level are located between:</p> <p>(a) 700m and 1,000m of the site if exceeding 6m in height; or</p> <p>(b) 1,000m and 1,500m of the site if exceeding 8.7m in height.</p>
	<p>AO5.5 Within the buffer area of the Townsville Airport middle marker site (as depicted on overlay map OM-01.3, no buildings, structures or other works involving a change to, or a physical projection above, the ground level occurs that exceed 20m in height.</p>
	<p>AO5.6 No buildings, fences or landscaping are established within the buffer area of the Townsville Airport localiser (as depicted on overlay map OM-01.3).</p>

Table 8.2.1.3—Accepted development subject to requirements and assessable development (Part)

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Australian noise exposure forecast contours (overlay map OM-01.4)	
<p>PO6 Development within the area identified on overlay map OM-01.4 is compatible with forecast levels of aircraft noise unless there is an overriding need in the public interest and there is no reasonable alternative site available for the use.</p> <p>Editor's note—Where the acceptable outcomes cannot be met, an appropriately qualified acoustic practitioner may be required to be engaged in order to demonstrate compliance with this performance outcome.</p>	<p>AO6.1 Above the 25 ANEF contour (as depicted on overlay map OM-01.4), development does not involve the following:</p> <p>(a) child care centre;</p> <p>(b) educational establishment; or</p> <p>(c) hospital.</p>
	<p>AO6.2 Above the 30 ANEF contour (as depicted on overlay map OM-01.4), development does not involve a community use or community care centre.</p>
	<p>AO6.3 Above the 35 ANEF contour areas (as depicted on overlay map OM-01.4), development does not involve residential uses.</p>
	<p>AO6.4 The siting and design of any building is in accordance with Australian Standard AS2021 and Australian Standard AS/NZS2107.</p>

Table 8.2.1.3—Accepted development subject to requirements and assessable development (Part)

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Lighting area buffer zones (overlay map OM-01.5)	
<p>PO7 Development within the area identified on overlay map OM-01.5 does not involve external lighting or reflective surfaces that could distract or confuse pilots. Editor's note—The standards specified in CASA Guidelines: Lighting in the vicinity of aerodromes: Advice to lighting designers, may be used to demonstrate compliance with this performance outcome.</p>	<p>A07.1 Development within the 6km radius shown on overlay map OM-01.5 does not involve:</p> <ul style="list-style-type: none"> (a) straight parallel lines of lighting 500m to 1000m long; or (b) lighting which extends more than 3 degrees above the horizon; or (c) flare plumes; or (d) buildings with reflective cladding; or (e) upward-shining lights; or (f) flashing lights; or (g) sodium lights.
	<p>A07.2 In zone A shown on overlay map OM-01.5, lighting does not exceed 0 candela.</p>
	<p>A07.3 In zone B shown on overlay map OM-01.5, lighting does not exceed 50 candela.</p>
	<p>A07.4 In zone C shown on overlay map OM-01.5, lighting does not exceed 150 candela.</p>
	<p>A07.5 In zone D shown on overlay map OM-01.5, lighting does not exceed 450 candela.</p>

8.2.2 Bushfire hazard overlay code

8.2.2.1 Application

This code applies to development where the code is identified as applicable in the categories of development and assessment for the Bushfire hazard overlay. When using this code, reference should be made to section 5.3.2 and where applicable, section 5.3.3 located in Part 5.

8.2.2.2 Purpose

- (1) The purpose of the Bushfire hazard overlay code is to ensure that development does not:
 - (a) increase the extent or the severity of bushfire hazard; or
 - (b) increase the risk to life, property, community and the environment.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) development is compatible with the nature of the bushfire hazard except where there is an overriding need for the development in the public interest and no other site is suitable and reasonably available for the proposal;
 - (b) where development is not compatible with the nature of the bushfire hazard and there is an overriding need for the development in the public interest and no other site is suitable and reasonably available for the proposal; and
 - (c) wherever practicable, facilities with a role in emergency management and vulnerable community services are located and designed to function effectively during and immediately after bushfire hazard events.

8.2.2.3 Assessment benchmarks

Table 8.2.2.3 - Accepted development subject to requirements and assessable development (Part)

Performance outcomes	Acceptable outcomes
<p>General — all development Editor's note — Applicants should also refer to the Mitigating bushfire hazard planning scheme policy no. SC6.8 for additional information.</p>	
<p>PO1 Development maintains the safety of people and property.</p>	<p>No acceptable outcome is nominated.</p>
<p>PO2 Highly vulnerable development does not occur in high hazard areas unless there is an overriding need for the development in the public interest and no other site is suitable and reasonably available for the proposal.</p>	<p>AO2 The following uses are not located in a high bushfire hazard area:</p> <ul style="list-style-type: none"> (a) child care centre; or (b) detention facility; or (c) educational establishment; or (d) emergency services; or (e) hospital; or (f) industry activities involving manufacture or storage of hazardous materials in bulk; or (g) multiple dwelling; or (h) residential care facility; or (i) retirement facility; or (j) relocatable home park; or (k) rooming accommodation; or (l) shopping centre; or (m) short-term accommodation; or (n) telecommunications facility; or (o) tourist park; or (p) tourist attraction; or (q) transport depot; or (r) utility installation.
<p>PO3 Development mitigates the risk of bushfire hazard through the siting and design of the development. Editor's note—In demonstrating compliance with this performance outcome, applicants should be aware that setbacks and buffers for fire management purposes are in addition to any buffers or setbacks required for ecological purposes and are located outside of areas of ecological significance to the greatest extent possible.</p>	<p>No acceptable outcome is nominated.</p>
<p>PO4 Development provides for an adequate and accessible water supply for firefighting purposes.</p>	<p>AO4.1.1 The development is connected to a reticulated water supply where within a water supply area. OR AO4.1.2 Where outside a water supply area a tank water supply is provided, at least one tank is within 100m of a class 1, 2, 3 or 4 building which has fire brigade fittings. Editor's note - Applicant should also refer to the Development manual planning scheme policy SC6.4 - SC6.4.3.11 On site water supply for additional information.</p>

<p>PO5 Public safety and the environment are not adversely affected by the detrimental impacts of bushfire on hazardous materials manufactured or stored in bulk.</p>	<p>AO5 Development does not involve the manufacture or storage of hazardous materials within a high or medium bushfire hazard area as identified on overlay map OM-02.</p>
<p>PO6 Facilities with a role in emergency management and vulnerable community services are able to function effectively during and immediately after bushfire events.</p>	<p>No acceptable outcome is nominated.</p>
<p>PO7 Additional lots are not created in bushfire hazard areas.</p>	<p>AO7 Development does not involve the creation of additional lots in areas mapped as high or medium hazard on overlay map OM-02.</p>
<p>PO8 Development is designed to allow for efficient emergency access to buildings for firefighting appliances, including by avoiding long, narrow access arrangements.</p>	<p>No acceptable outcome is nominated.</p>
<p>PO9 Development provides a fire break which also facilitates adequate access for firefighting and emergency vehicles, and safe evacuation.</p>	<p>AO9.1 Lot boundaries and development sites are separated from hazardous vegetation by a distance of 20m where adjacent to high hazard areas and 10m where adjacent to medium hazard.</p>
	<p>AO9.2 The separation area mentioned in AO9.1 contains a fire access trail that:</p> <ul style="list-style-type: none"> (a) has a minimum cleared and formed width of 6m; (b) has vehicular access at each end; (c) provides passing bays and turning areas for fire-fighting appliances; and (d) are either located on public land, or within an access easement that is granted in favour of council and QFRS.
	<p>AO9.3 Roads and trails:</p> <ul style="list-style-type: none"> (a) have a maximum gradient of 12.5%; and (b) do not involve a cul-de-sac. <p>Editor's note—Applicants should also be aware that Part 9 of the planning scheme sets out additional requirements for the construction of roads and other operational works associated with reconfiguration.</p>

8.2.3 Coastal environment overlay code

8.2.3.1 Application

This code applies to development where the code is identified as applicable in the categories of development and assessment for the Coastal environment overlay. When using this code, reference should be made to section 5.3.2 and where applicable, section 5.3.3 located in Part 5.

8.2.3.2 Purpose

- (1) The purpose of the Coastal environment overlay code is to ensure development in the coastal zone is planned, designed, constructed and operated to:
 - (a) avoid risk to people and property from coastal hazards, including storm tide inundation and coastal erosion, and taking into account the predicted effects of climate change; and
 - (b) manage the coast to protect coastal resources and allow for the natural fluctuations of coastal processes as far as possible.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) the foreshore and foreshore ecosystems are protected and managed to maintain their protective functions and allow for natural fluctuations to continue as far as possible;
 - (b) the exposure of communities and development to coastal hazards is minimised;
 - (c) urban and rural residential development does not expand into coastal hazard areas beyond areas zoned for urban and rural residential purposes;

Editor's note—To remove any doubt areas zoned for urban purposes includes the Emerging community zone.

- (d) in areas zoned for urban and rural residential purposes and located in a coastal hazard area, the risks of storm tide inundation and erosion are avoided, or are mitigated and managed;
- (e) opportunities for sustainable coastal-dependent development are protected;
- (f) coastal-dependent development is undertaken in a manner that minimises impacts on coastal resources;
- (g) public access to the foreshore is maintained and enhanced for current and future generations; and
- (h) wherever practicable, facilities with a role in emergency management and vulnerable community services are located and designed to function effectively during and immediately after coastal hazard events.

8.2.3.3 Assessment benchmarks

Table 8.2.3.3(a) -Accepted development subject to requirements and assessable development (Part)

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements	
Development in coastal hazard areas	
PO1 Development is designed and located to minimise susceptibility to, and the potential impacts of, storm tide inundation and erosion. Editor's note —Applicants must be aware that in some areas flood hazard areas will also co-exist with storm tide hazard areas. In these instances, the floor levels and other design responses will need to be sufficient to comply with both this code and the Building Regulation 2006 .	AO1.1 Floor levels of all habitable rooms are above the defined storm tide event level. Editor's note —For Townsville the defined storm tide event level can be taken as RL 4.5m AHD, within 100m of the coastline or RL 3.9m AHD in other areas.
	AO1.2 Underground parking is designed to prevent the intrusion of storm tide waters by the incorporation of a bund above the defined storm tide event level.
	AO1.3 Buildings have open ground floors that allow for the flow through of storm tide water and buildings are not designed as slab on ground.

AO1.4

Buildings are located outside the erosion prone area or where this would be impractical, do not extend any further seaward than existing immediately adjacent buildings.

Table 8.2.3.3(a) -Accepted development subject to requirements and assessable development (Part)

Performance outcomes	Acceptable outcomes
For assessable development	
Development in coastal hazard areas - erosion prone area	
<p>PO2 Development locates outside erosion-prone areas identified on overlay map OM-03.3, apart from:</p> <ul style="list-style-type: none"> (a) temporary or relocatable structures for safety and recreational purposes; or (b) development that does not intensify the extent of existing development within the erosion prone area; or (c) development that does not extend any further seaward than the existing adjacent buildings. 	No acceptable outcome is nominated.
<p>PO3 Development mitigates any increase in risk to people and property from adverse coastal-erosion impacts, avoiding the need for coastal protection works as far as practicable, having regard to:</p> <ul style="list-style-type: none"> (a) minimising the footprint of the development of the part within the erosion prone area and locating the development as far landward as possible; (b) the practical design life of the development in the context of future erosion threat; (c) the ability for buildings or structures to be decommissioned, dis-assembled or relocated either on the site or to another site; and (d) use of appropriate foundations for the building or structure. 	No acceptable outcome is nominated.
<p>PO4 Where used, coastal protection works are:</p> <ul style="list-style-type: none"> (a) consistent with a shoreline erosion management plan that has been prepared for the area; or (b) in response to a demonstrated need to protect existing permanent structures from an imminent threat of coastal erosion, if abandonment or relocation of the structures is not feasible, and a relevant shoreline erosion management plan has not been prepared. 	No acceptable outcome is nominated.

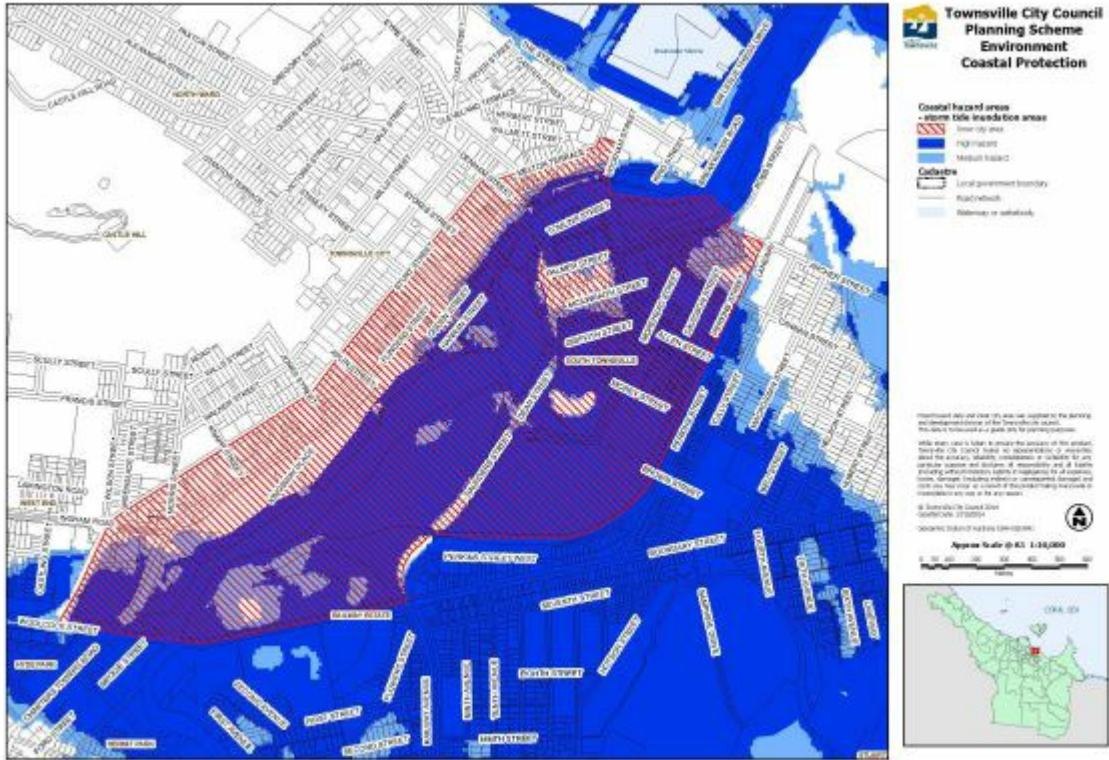
<p>PO5 Coastal erosion is mitigated by:</p> <ul style="list-style-type: none"> (a) beach nourishment undertaken in accordance with a program of nourishment works; or (b) the construction of an erosion control structure where it is demonstrated that installing an erosion control structure is the only feasible option for protecting existing permanent structures from an imminent threat of coastal erosion at the location. <p>Editor's note—Where a shoreline erosion management plan has not been prepared and coastal protection work is required to protect existing structures from coastal erosion threats, beach nourishment is favoured in preference to erosion control structures, such as seawalls and groynes. The location and materials for beach nourishment works are to ensure the natural characteristics and landform of the beach or foreshore is maintained. Applications involving erosion control structures must demonstrate the consideration of beach nourishment techniques and include a statement of why nourishment (in whole or part) has not been adopted as the preferred means of controlling the erosion risk.</p>	<p>No acceptable outcome is nominated.</p>
<p>PO6 Any development using erosion control structures to protect private property from threat of coastal erosion ensures:</p> <ul style="list-style-type: none"> (a) erosion control structures are located wholly on private land; and (b) physical coastal processes outside the area subject to the coastal protection work are maintained. <p>Editor's note—Applications for coastal protection work must be supported by a report certified by a registered professional engineer with coastal engineering experience that demonstrates how the engineering solution sought by the work will be achieved.</p>	<p>No acceptable outcome is nominated.</p>

Table 8.2.3.3(a) - Accepted development subject to requirements and assessable development (Part)

Performance outcomes	Acceptable outcomes
For assessable development	
Development in coastal hazard areas — storm tide inundation areas	
<p>PO7 Development is located outside high or medium storm tide inundation areas and erosion areas from sea level rise identified on overlay maps OM-03.1 and OM-03.2 unless it:</p> <ul style="list-style-type: none"> (a) does not result in an increase in the intensity of development on the site; or (b) is located within the inner city area shown on Figure 8.1 — Coastal hazard areas: storm tide inundation areas and provides measures to ensure critical services remain operational up to the defined storm tide event; or (c) avoids any increase in risk to people or property from coastal hazard impacts (including impacts on the development's ongoing operation). 	<p>No acceptable outcome is nominated.</p>
<p>PO8 Development in storm tide inundation areas and erosion areas from sea level rise identified on overlay maps OM-03.1-OM-03.2 is located, designed, constructed and operated to:</p> <ul style="list-style-type: none"> (a) ensure structures can sustain flooding from a defined storm tide event; and (b) maintain the safety of people living and working on the premises from a defined storm tide event. 	<p>AO8.1 Development within a high or medium storm tide inundation area identified on overlay maps OM-03.1-OM-03.2 ensures:</p> <ul style="list-style-type: none"> (a) habitable rooms of built structures are located above the defined storm tide event level; (b) underground parking is designed to prevent the intrusion of flood waters by the incorporation of a bund above the defined storm tide event level; and (c) where reconfiguring a lot, at least one evacuation route remains passable for emergency evacuations during a defined storm tide event. <p>Editor's note—For Townsville the defined storm tide event level can be taken as RL 4.5m AHD, within 100m of the coastline or RL 3.9m AHD in other areas.</p> <p>AO8.2 Structures used for the manufacture or storage of hazardous materials in bulk are designed to prevent the intrusion of waters from a defined storm tide event.</p>
<p>PO9 Facilities with a role in emergency management and vulnerable community services are located, designed and constructed to ensure it is able to function during and after a storm tide inundation event.</p>	<p>AO9.1 Development is either:</p> <ul style="list-style-type: none"> (a) located in an area that is above the storm tide event level specified for that activity in table 8.2.3.3(b); or (b) designed to ensure any components of the infrastructure that are likely to fail to function or may result in contamination when inundated by storm tide inundation are above the storm tide event level for that activity in table 8.2.3.3(b).

AO9.2

Emergency services and shelters, police facilities and hospitals, and associated facilities have an emergency rescue area above the storm tide event level specified for that infrastructure in table 8.2.3.3(b).



[Click here](#) to view PDF high resolution map.

Figure 8.1 - Coastal hazard areas: storm tide inundation areas

Table 8.2.3.3(a) -Accepted development subject to requirements and assessable development (Part)

Performance outcomes	Acceptable outcomes
For assessable development	
Public access	
PO10 Development maintains or enhances safe and convenient public access to the foreshore.	No acceptable outcome is nominated.

Table 8.2.3.3(a) -Accepted subject to requirements and assessable development (Part)

Performance outcomes	Acceptable outcomes
For assessable development	
Canals and artificial waterways	
PO11 Development that involves the construction of canals or artificial waterways connected to tidal water (either directly or indirectly) does not adversely affect coastal resources and their values.	No acceptable outcome is nominated.
PO12 The design, location, construction and operation of artificial tidal waterways are to maintain the tidal prism volume of the natural waterway to which it is connected.	No acceptable outcome is nominated.

Table 8.2.3.3(b)-Storm tide event levels for essential community services and facilities

Development	Level of immunity annual exceedance probability (AEP)
Development involving: (a) hospitals and associated facilities; or (b) major electricity infrastructure.	0.2% AEP event
Development involving: <ul style="list-style-type: none"> • emergency/evacuation shelters; or • fire and police stations; or • the storage of valuable records or items of historic or cultural significance (e.g. libraries, galleries); or • aeronautical facilities; or • telecommunication facilities; or • substations; or • water treatment plants; or • regional fuel storage; or • food storage warehouse; or • retirement facility and residential care facility. 	0.5% AEP event
Development involving sewerage treatment plants requiring licensing as an environmentally relevant activity.	1% AEP event

8.2.4 Cultural heritage overlay code

8.2.4.1 Application

This code applies to development where the code is identified as applicable in the categories of development and assessment for the Cultural heritage overlay. When using this code, reference should be made to section 5.3.2 and where applicable, section 5.3.3 located in Part 5.

Editor's note—Places of cultural heritage significance are identified in Schedule 7, as well as on overlay maps OM-04.1, OM-04.2, OM-04.3 and OM-04.4.

8.2.4.2 Purpose

- (1) The purpose of the Cultural heritage overlay code is to ensure:
 - (a) the cultural heritage of Townsville continues to be a major contributor to the identity of the city and local communities;
 - (b) the cultural heritage of Townsville is conserved for present and future communities;
 - (c) development is consistent with the Burra Charter;
 - (d) new development reflects and respects cultural heritage significance; and
 - (e) places of cultural heritage significance are appropriately re-used.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) places having cultural heritage significance in Townsville are conserved;
 - (b) change is managed to ensure significant heritage features and values of a place are retained;
 - (c) any demolition, removal or relocation of a heritage place does not have an adverse impact on the heritage significance of that place;
 - (d) development on or adjoining a heritage place does not detract from the cultural heritage significance of the heritage place and its cultural heritage values;
 - (e) development on or adjoining a heritage place is visually subservient to the heritage place and does not cause adverse impacts on significant views or the visual setting of the heritage place;
 - (f) development on or adjoining a place of cultural heritage significance incorporates features which complement rather than replicate the heritage place;
 - (g) restoration or reconstruction of known earlier states of heritage places is encouraged where practical; and
 - (h) places of Aboriginal and Torres Strait Islander cultural heritage significance are conserved and managed in a culturally appropriate way.

Editor's note—Cultural heritage planning scheme policy no. SC6.3 will provide applicants with guidance in meeting the requirements of this code.

Editor's note—Council's process for adding or removing a place within Schedule 7 Places of cultural heritage value is stated in the Cultural heritage planning scheme policy SC6.3.

8.2.4.3 Assessment benchmarks

Table 8.2.4.3—Assessable development (Part)

Performance outcomes	Acceptable outcomes
Demolition or removal of, or within, a heritage place	
<p>PO1 The removal or partial or total demolition, or relocation of a building or structure that is a heritage place only occurs if it can be demonstrated that the:</p> <p>(a) loss of the building or structure will not contribute to the loss of cultural heritage values; and</p> <p>(b) building or structure is not capable of structural repair.</p>	<p>No acceptable outcome is nominated.</p> <p>Editor's note—A heritage impact statement produced by a suitably qualified professional will be required to demonstrate there is no adverse impact on the cultural heritage significance of the place, and a suitably qualified professional provides a report on the building's condition, demonstrating that the place is not capable of repair.</p> <p>Editor's note— Refer to the Cultural heritage planning scheme policy no. SC6.3 for guidance on writing a Heritage Impact Statement.</p>
<p>PO2 When demolition or relocation of a heritage place occurs, appropriate archival recording is undertaken.</p>	<p>No acceptable outcome is nominated.</p> <p>Editor's note—Refer to the Cultural heritage planning scheme policy no. SC6.3 for guidance on the archival recording of heritage places, with which the action should be consistent.</p>

Table 8.2.4.3—Assessable development (Part)

Performance outcomes	Acceptable outcomes
Development within a heritage place	
<p>PO3 Development is sympathetic to, and consistent with the significant features and values of the heritage place, including:</p> <p>(a) maintaining significant views to and from the heritage place;</p> <p>(b) built form and setback;</p> <p>(c) scale; and</p> <p>(d) open space and landscaping features.</p>	<p>No acceptable outcome is nominated.</p> <p>Editor's note—A heritage impact statement produced by a suitably qualified professional will be required to demonstrate there is no adverse impact on the cultural heritage significance of the place, and any change will be effectively managed.</p> <p>Editor's note—Refer to the Cultural heritage planning scheme policy no. SC6.3 for guidance on writing a Heritage Impact Statement.</p>
<p>PO4 New buildings within a heritage place are visually subservient to the cultural heritage significance of the heritage place.</p>	<p>No acceptable outcome is nominated.</p> <p>Editor's note—A heritage impact statement produced by a suitably qualified professional may be required to demonstrate compliance with this performance outcome. Cultural heritage planning scheme policy no. SC6.3 provides guidance on how to write a heritage impact statement. It also sets out relevant parts of the Burra Charter.</p> <p>Editor's note—A proposed development should be designed by a suitably qualified architect or a building designer with demonstrated relevant experience.</p>
<p>PO5 Development incorporates compatible elements which complement rather than reproduce traditional building forms and details in terms of:</p> <p>(a) architecture;</p> <p>(b) scale;</p> <p>(c) external materials; and</p> <p>(d) finishes and colours.</p>	<p>No acceptable outcome is nominated.</p> <p>Editor's note—Refer to the Cultural heritage planning scheme policy no. SC6.3 for guidance on achieving performance outcomes.</p>
<p>PO6 Development does not alter, remove or conceal the significant features or values of the heritage place.</p>	<p>No acceptable outcome is nominated.</p> <p>Editor's note—Refer to the Cultural heritage planning scheme policy no. SC6.3 for guidance on achieving performance outcomes.</p>

<p>PO7 Development being a reconfiguration of a lot reflects the pattern and lot layout of the original subdivision in the locality and does not:</p> <p>(a) reduce public access to the place; or</p> <p>(b) obscure or destroy the historical context, the landscape settings or the scale and consistency of the built environment.</p>	<p>No acceptable outcome is nominated. Editor's note—Refer to the Cultural heritage planning scheme policy no. SC6.3 for guidance on writing a Heritage Impact Statement.</p>
<p>PO8 Any new fencing, landscaping, advertising device, access or parking arrangements are designed and sited in a manner that:</p> <p>(a) does not have a detrimental impact on the significant values or view of the place;</p> <p>(b) enhances the overall appearance of the heritage place; and</p> <p>(c) is sensitive to materials, colours, scale, placement and layout of the place.</p>	<p>No acceptable outcome is nominated. Editor's note—Refer to the Cultural heritage planning scheme policy no. SC6.3 for guidance on achieving performance outcomes.</p>

Table 8.2.4.3—Assessable development (Part)

Performance outcomes	Acceptable outcomes
Signage	
<p>PO9 Signage on Flinders Street East does not adversely affect the fabric and setting of the heritage place.</p>	<p>AO9 For heritage places on Flinders Street East, signage is in accordance with the Cultural heritage planning scheme policy no. SC6.3.</p>
<p>PO10 If the loss of a heritage place occurs, interpretive signage is erected.</p>	<p>No acceptable outcome is nominated. Editor's note—Refer to the Cultural heritage planning scheme policy no. SC6.3 for guidance on how such signage should be established.</p>

Table 8.2.4.3—Assessable development (Part)

Performance outcomes	Acceptable outcomes
Archaeology	
<p>PO11 Development does not adversely impact on known or potential archaeological deposits.</p>	<p>No acceptable outcome is nominated. Editor's note—The Cultural heritage planning scheme policy no. SC6.3 provides guidance on how this may be achieved to council's satisfaction. Earthworks, including those associated with demolition, should be monitored by a suitably qualified archaeologist and archaeological deposits should be managed in accordance with the policy.</p>

Table 8.2.4.3—Assessable development (Part)

Performance outcomes	Acceptable outcomes
Indigenous heritage significance	
<p>PO12 There are no adverse impacts on any place that has cultural heritage significance to Aboriginal or Torres Strait Islander people.</p>	<p>No acceptable outcome is nominated. Editor's note—All proposed development on or adjacent to identified sites of indigenous cultural heritage significance is required to be carried out in accordance with the latest version of the Aboriginal Cultural Heritage Act 2003 - Duty of Care Provisions.</p>

Table 8.2.4.3—Assessable development (Part)

Performance outcomes	Acceptable outcomes
Development adjoining a heritage place	
<p>PO13 Development is sympathetic to and consistent with the features and values of the heritage place, including:</p> <ul style="list-style-type: none"> (a) maintaining views to and from the heritage place where significant; (b) consistency of built form and setback; (c) potential for overshadowing; and (d) consistency with open space and landscaping features. 	<p>No acceptable outcome is nominated. Editor's note—Refer to the Cultural heritage planning scheme policy no. SC6.3 for guidance on achieving performance outcomes.</p>
<p>PO14 Reconfiguring a lot does not:</p> <ul style="list-style-type: none"> (a) reduce public access to the heritage place; or (b) create the potential to adversely affect significant views to and from the heritage place; or (c) obscure, destroy or disrupt any pattern of historic subdivision, the historical context, the landscape settings or the scale and consistency of the built environment relevant to the heritage place. 	<p>No acceptable outcome is nominated.</p>

Table 8.2.4.3—Assessable development (Part)

Performance outcomes	Acceptable outcomes
Elements in the road reserve	
PO15 Elements in the road reserve make a positive contribution to cultural heritage values of a place. Introduced features are compatible with significant features of the place.	No acceptable outcome is nominated.

8.2.5 Extractive resources overlay code

8.2.5.1 Application

This code applies to development where the code is identified as applicable in the categories of development and assessment for the Extractive resources overlay. When using this code, reference should be made to section 5.3.2 and where applicable, section 5.3.3 located in Part 5.

8.2.5.2 Purpose

- (1) The purpose of the Extractive resources overlay code is to ensure:
 - (a) extractive resources are protected from development that might prevent or constrain current or future extraction or mining when the need for the resource arises; and
 - (b) extractive industry uses are operated in a way that minimises impacts on surrounding land uses and environmental values.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) development not associated with extractive industry is not located where likely to have an adverse impact upon existing and future extraction, processing and transportation of extractive resources;
 - (b) development is compatible with the existing and future mining within mining tenements granted or renewed under the *Mineral Resources Act 1989*;
 - (c) development does not increase the number of people living within a separation area for a resource/processing area or transport route; and
 - (d) development for the purpose of extractive industry
 - (i) protects personal health and safety;
 - (ii) minimises impacts to the amenity of surrounding land uses;
 - (iii) avoids impacts to environmental values on external premises; and
 - (iv) minimises impacts to environmental values on the premises.

8.2.5.3 Assessment benchmarks

Table 8.2.5.3—Assessable development (Part)

Performance outcomes	Acceptable outcomes
Development other than extractive industry	
<p>PO1 Development located within a resource/processing area maintains the long-term availability and efficient winning of the extractive resource for extraction and processing, except where the following can be demonstrated:</p> <ol style="list-style-type: none"> (a) there is an overriding benefit to the community; and (b) the development cannot reasonably be located elsewhere. 	No acceptable outcome is nominated.

<p>PO2 Development located in a separation area for a resource/processing area:</p> <p>(a) does not increase the number of people living in the separation area; and</p> <p>(b) minimises impacts from existing and future extractive industries on people working or congregating in the separation area; and does not compromise the function of the separation area as a buffer from incompatible uses outside the buffer area.</p>	No acceptable outcome is nominated.
<p>PO3 Development in a separation area for a transport route does not increase the number of people living in the separation area and is compatible with the safe and efficient operation of the transport route.</p>	No acceptable outcome is nominated.
<p>PO4 Development in the vicinity of mining-related leases:</p> <p>(a) does not compromise current or future utilisation of mineral resources; and</p> <p>(b) is not located where likely to be adversely impacted upon by existing and future mining activities.</p>	No acceptable outcome is nominated.
<p>PO5 Development with direct vehicle access to a transport route does not adversely impact the safety and efficiency of transport route.</p>	No acceptable outcome is nominated.

Table 8.2.5.3—Assessable development (Part)

Performance outcomes	Acceptable outcomes
Extractive industry	
<p>PO6 Extractive industry is operated such that:</p> <p>(a) blasting activities do not create a public safety risk; and</p> <p>(b) on-site workers and the public are adequately warned of the activities and safety hazards.</p>	No acceptable outcome is nominated.
<p>PO7 Measures are taken to avoid or minimise adverse impacts from dust, sand, or soil on nearby properties.</p>	No acceptable outcome is nominated.
<p>PO8 Premises are secured to ensure that a person not involved in the operation is unable to gain entry to the premises.</p>	No acceptable outcome is nominated.
<p>PO9 The development maintains the extractive industry transport route to a standard commensurate with the volume, type, and nature of vehicular traffic utilising the transport route.</p>	No acceptable outcome is nominated.

<p>PO10 Development avoids adverse impacts on land uses, having regard to:</p> <ul style="list-style-type: none"> (a) noise; (b) vibration; (c) airblast overpressure; (d) dust; (e) flyrock; (f) visual amenity; and (g) safety. 	<p>No acceptable outcome is nominated.</p>
<p>PO11 The extractive industry use is screened from any adjoining major road.</p>	<p>No acceptable outcome is nominated.</p>
<p>PO12 Development avoids or minimises impact on areas of ecological significance, ecological processes or biodiversity values external to the site.</p>	<p>No acceptable outcome is nominated.</p>
<p>PO13 Surface and groundwater quality external to the site is protected.</p>	<p>No acceptable outcome is nominated.</p>
<p>PO14 Development provides for the rehabilitation of the premises to restore the nature conservation values of the premises prior to the extractive industry as far as is reasonably practicable. Editor's note—A rehabilitation plan and expert ecological advice may be required to demonstrate achievement of this performance outcome.</p>	<p>No acceptable outcome is nominated.</p>

8.2.6 Flood hazard overlay code

8.2.6.1 Application

This code applies to development where the code is identified as applicable in the categories of development and assessment for the Flood hazard overlay. When using this code, reference should be made to section 5.3.2 and where applicable, section 5.3.3 located in Part 5.

8.2.6.2 Purpose

- (1) The purpose of the Flood hazard overlay code is to manage development outcomes in flood hazard areas so that risk to life, property, community, economic activity and the environment during future 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 is compatible with the nature of the flood hazard except where there is an overriding need for the development in the public interest and no other site is suitable and reasonably available for the proposal;
 - (b) where development is not compatible with the nature of the flood hazard and there is an overriding need for the development in the public interest and no other site is suitable and reasonably available for the proposal:
 - (i) development minimises as far as practicable the adverse impacts from the hazard; and
 - (ii) does not result in unacceptable risk to people or property;
 - (c) wherever practicable, facilities with a role in emergency management and vulnerable community services are located and designed to function effectively during and immediately after flood hazard event;
 - (d) development maintains the safety of people and minimises the potential damage to property from flood events on the development site; and
 - (e) development does not result in adverse impacts on people's safety, the environment or the capacity to use land within the floodplain.

8.2.6.3 Assessment benchmarks

Note—To avoid any doubt, the term medium hazard area used in this code includes areas shown on the overlay maps as medium hazard – further investigation areas.

Editor's note—Areas shown on the overlay maps as medium hazard — further investigation areas are based on Queensland Reconstruction Authority mapping. Limited information is available on flood characteristics in these areas. Further investigation may be required as a result. Flood hazard planning scheme policy no. SC6.7 will provide applicants with guidance in meeting the requirements of this code in these and other identified hazard areas.

Table 8.2.6.3(a)-Accepted development subject to requirements and assessable development (Part)

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
<p>PO1 Development in medium and high hazard areas is designed and located to minimise susceptibility to and potential impacts of flooding.</p> <p>Editor's note—The <i>Building Regulation 2006</i> may also establish requirements with which development will need to comply. The defined flood event is identified in this planning scheme as the 1% annual exceedance probability (AEP) flood and is mapped as the combined extent of the high and medium flood hazard areas identified on overlay map OM-06.1 and 06.2. Other than in the medium hazard — further investigation area, council will be able to make available the height of the flood level for any particular location upon request.</p> <p>Applicants must be aware that in some areas storm tide hazard areas will also co-exist with flood hazard areas. In these instances, the floor levels and other design responses will need to be sufficient to comply with this code, the Coastal environment overlay code and the <i>Building Regulation 2006</i>.</p>	<p>AO1.1 Where the development is located within an area shown on overlay map OM-06.1 or 06.2 as medium hazard — further investigation area, new buildings containing habitable rooms:</p> <ul style="list-style-type: none"> (a) are sited on a part of the site which is outside the medium hazard — further investigation area; or (b) are sited on the highest part of the site. <p>OR</p> <p>AO1.2 Where development is located within another hazard area shown on overlay map OM-06.1 or 06.2:</p> <ul style="list-style-type: none"> (a) floor levels of all habitable rooms are a minimum of 300mm above the defined flood level; (b) floor levels of all non-habitable rooms (other than class 10 buildings) are above the defined flood event; (c) parking spaces associated with non-residential development are located outside the high hazard areas identified on overlay map OM-06.1 or 06.2; and <p>Editor's note—Class 10 buildings are identified under the Building Code of Australia and includes carports and outbuildings.</p> <ul style="list-style-type: none"> (d) underground parking is designed to prevent the intrusion of flood waters by the incorporation of a bund or similar barrier with a minimum height of 300mm above the defined flood level.
<p>PO2 Development in high hazard areas does not significantly impede the flow of flood waters through the site or worsen flood flows external to the site.</p>	<p>AO2.1 Development in high hazard areas do not involve:</p> <ul style="list-style-type: none"> (a) filling with a height greater than 150mm; or (b) block or solid walls or solid fences; or (c) garden beds or other structures with a height more than 150mm; or (d) the planting of dense shrub hedges.

Table 8.2.6.3(a)-Self-assessable and assessable development (Part)

Performance outcomes	Acceptable outcomes
For assessable development	
<p>PO3 Development does not intensify use in high hazard areas, in order to avoid risks to people and property. Editor's note—High hazard areas are those likely to experience deep and/or fast moving water in a defined flood event.</p>	<p>AO3.1 New buildings are located outside high hazard areas identified on overlay map OM-06.1 or 06.2.</p> <p>AO3.2 New lots or roads are not created within high hazard areas identified on overlay map OM-06.1 or 06.2.</p> <p>AO3.3 Sites for non-permanent accommodation such as tents, cabins or caravans (whether intended for short or long-term accommodation) are located outside the high hazard areas identified on overlay map OM-06.1 or 06.2.</p>
<p>PO4 Siting and layout of development maintains the safety of people and property in medium hazard areas. Editor's note—The <i>Building Regulation 2006</i> establishes requirements with which development will need to comply. The defined flood event is identified in this planning scheme as the 1% annual exceedance probability (AEP) flood and is mapped as the combined extent of the high and medium flood hazard areas identified on overlay map OM-06.1 and 06.2. Other than in the medium hazard — further investigation area, council will be able to make available the height of the flood level for any particular location upon request.</p> <p>Applicants must be aware that in some areas storm tide hazard areas will also co-exist with flood hazard areas. In these instances, the floor levels and other design responses will need to be sufficient to comply with this code, the Coastal environment overlay code and the <i>Building Regulation 2006</i>.</p>	<p>On existing lots</p> <p>AO4.1 Floor levels for residential buildings are 300mm above the defined flood level. Editor's note—In medium hazard — further investigation area, a flood assessment in accordance with the Flood hazard planning scheme policy no. SC6.7 may be needed to establish the defined flood level.</p> <p>AO4.2 Floor levels of non-residential buildings (other than class 10 buildings) are above the defined flood level. Editor's note—Class 10 buildings are identified under the <i>Building Code of Australia</i> and includes carports and outbuildings.</p> <p>AO4.3 Underground parking is designed to prevent the intrusion of flood waters by the incorporation of a bund or similar barrier with a minimum height of 300mm above the defined flood level.</p> <p>AO4.4 Development for non-permanent accommodation such as tents, cabins or caravans (whether intended for short or long-term accommodation) are located outside the medium hazard areas identified on overlay map OM-06.1 or 06.2.</p> <p>Where reconfiguring a lot</p> <p>AO4.5 Where reconfiguring a lot, new lots contain designated building envelopes (whether or not for residential purposes) outside the medium hazard areas identified on overlay map OM-06.1 or 06.2 and those building envelopes are of a sufficient size to accommodate buildings associated with the development.</p> <p>AO4.6 In new subdivisions, arterial, sub-arterial or major collector roads are located above the 2% AEP flood level.</p>

	<p>AO4.7 Reconfiguration of lots does not involve cul-de-sacs or dead end streets within medium hazard areas identified on overlay map OM-06.1 or 06.2.</p>
<p>PO5 Signage is provided within high and medium hazard areas to alert residents and visitors to the flood hazard.</p>	<p>AO5 Signage is provided on-site (regardless of whether land will be public or private ownership) to indicate depth at key hazard points, such as at floodway crossings, entrances to low-lying reserves or parking areas.</p>
<p>PO6 Development within high and medium hazard areas ensures any changes to the depth, duration, velocity of flood waters are contained within the site. Editor's note—Impacts on a range of floods may need to be assessed and in most instances can be evaluated by analysing the minor drainage system capacity event and the defined flood event for the catchment wide critical duration, unless the site is located in an area noted in the Flood hazard planning scheme policy SC6.7.</p>	<p>No acceptable outcome is nominated.</p>
<p>PO7 Development within high and medium hazard areas does not directly, indirectly or cumulatively worsen flood characteristics outside the development site, having regard to:</p> <ul style="list-style-type: none"> (a) increased scour and erosion; or (b) loss of flood storage; or (c) loss of or changes to flow paths; or (d) flow acceleration or retardation; or (e) reduction in flood warning times. <p>Editor's note—To adequately assess the impacts of development on flooding regimes, applicants may need to have a hydrological and hydraulic assessment carried out by a suitably qualified and experienced hydrologist or engineer.</p>	<p>No acceptable outcome is nominated.</p>
<p>PO8 Facilities with a role in emergency management and vulnerable community services are able to function effectively during and immediately after flood events. Editor's note—This provision applies to high, medium and low flood hazard areas.</p>	<p>AO8 The development is provided with the level of flood immunity set out in Table 8.2.6.3(b).</p>
<p>PO9 Public safety and the environment are not adversely affected by the detrimental impacts of flooding on hazardous materials manufactured or stored in bulk.</p>	<p>AO9.1 Development does not involve the manufacture or storage of hazardous materials within a high flood hazard area identified on overlay map OM-06.1 or 06.2.</p>
	<p>AO9.2 Within the low or medium flood hazard area identified on overlay map OM-06.1 or 06.2, structures used for the manufacture or storage of hazardous materials in bulk are designed to prevent the intrusion of flood waters up to at least a 0.2% AEP flood event.</p>

Table 8.2.6.3(b)-Flood immunity for community services and facilities

Development	Level of flood immunity annual exceedance probability (AEP)
Development involving: (a) emergency services; (b) hospitals and associated facilities; (c) major electricity infrastructure.	0.2% AEP flood event
Development involving: (a) emergency/evacuation shelters; (b) the storage of valuable records or items of historic/cultural significance (e.g. libraries, galleries); (c) aeronautical facilities; (d) telecommunication facilities; (e) substations; (f) water treatment plants; (g) regional fuel storage; (h) food storage warehouse; (i) retirement facility and residential care facility.	0.5% AEP flood event
Sewerage treatment plants (requiring licensing as an environmentally relevant activity).	1% AEP flood event

8.2.7 Landslide hazard overlay code

8.2.7.1 Application

This code applies to development where the code is identified as applicable in the categories of development and assessment for the Landslide hazard overlay. When using this code, reference should be made to section 5.3.2 and where applicable, section 5.3.3 located in Part 5.

8.2.7.2 Purpose

- (1) The purpose of the Landslide hazard overlay code is to manage development so that there is no increase to the extent or the severity of a landslide hazard and risk to life, property, community and the environment during landslide events is avoided.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) development is compatible with the nature of the landslide hazard except where there is an overriding need for the development in the public interest and no other site is suitable and reasonably available for the proposal;
 - (b) where development is not compatible with the nature of the landslide hazard and there is an overriding need for the development in the public interest and no other site is suitable and reasonably available for the proposal:
 - (i) development minimises as far as practicable the adverse impacts from landslide hazards; and
 - (ii) does not result in unacceptable risk to people or property.
 - (c) wherever practicable, facilities with a role in emergency management and vulnerable community services are located and designed to function effectively during and immediately after landslide hazard events.

8.2.7.3 Assessment benchmarks

Table 8.2.7.3-Assessable development

Editor's note—The Development manual planning scheme policy no. SC6.4 - SC6.4.3.7 Steep land development design guidelines will provide applicants with guidance in meeting requirements of this code.

Performance outcomes	Acceptable outcomes
PO1 Development is not subject to potential debris flow hazard.	AO1 Development does not occur within the potential debris flow areas identified on OM-07.1.
PO2 People and property within the development site are protected from landslide hazard originating from inside or external to the site.	No acceptable outcome is nominated. Editor's note —The Development manual planning scheme policy no. SC6.4 - SC6.4.3.18 Geotechnical investigations will provide applicants with guidance in meeting requirements of this code.
PO3 Development does not increase the risk of landslide to adjoining properties.	No acceptable outcome is nominated. Editor's note —The Development manual planning scheme policy no. SC6.4 - SC6.4.3.18 Geotechnical investigations will provide applicants with guidance in meeting requirements of this code.
PO4 The development ensures the long-term stability of the development site.	No acceptable outcome is nominated. Editor's note —The Development manual planning scheme policy no. SC6.4 - SC6.4.3.18 Geotechnical investigations will provide applicants with guidance in meeting requirements of this code.
PO5 Site access is not at risk from being permanently impeded by a landslide event.	No acceptable outcome is nominated. Editor's note —The Development manual planning scheme policy no. SC6.4 - SC6.4.3.18 Geotechnical investigations will provide applicants with guidance in meeting requirements of this code.

<p>PO6 The siting, design and construction works of development minimises the impacts on the natural landform and do not have a detrimental impact on slope stability or erosion potential.</p>	<p>No acceptable outcome is nominated. Editor's note—The Development manual planning scheme policy no. SC6.4 - SC6.4.3.18 Geotechnical investigations will provide applicants with guidance in meeting requirements of this code.</p>
<p>PO7 Development maintains the safety of hazardous materials manufactured or stored in bulk. Editor's note— The term "hazardous material" is defined in the State Planning Policy.</p>	<p>AO7 The manufacture or storage of hazardous materials in bulk does not occur:</p> <ul style="list-style-type: none"> (a) within the medium, high or potential debris flow areas identified on overlay map OM-07.1; or (b) on land with a slope angle >23 degrees identified on overlay map OM-07.2.
<p>PO8 Facilities with a role in emergency management and vulnerable community services are able to function effectively during and immediately after landslide events.</p>	<p>AO8.1 Facilities with a role in emergency management and vulnerable community services are not located on land:</p> <ul style="list-style-type: none"> (a) within the medium, high or potential debris flow areas identified on overlay map OM-07.1; or (b) on land with a slope angle >23 degrees identified on overlay map OM-07.2. <p>OR</p> <p>AO8.2 The development does not:</p> <ul style="list-style-type: none"> (a) result in any new building work other than an addition to an existing building; (b) involve vegetation clearing; or (c) alter site levels or stormwater conditions.

8.2.8 Natural assets overlay code

8.2.8.1 Application

This code applies to development where the code is identified as applicable in the categories of development and assessment for the Natural assets overlay. When using this code, reference should be made to section 5.3.2 and where applicable, section 5.3.3 located in Part 5.

8.2.8.2 Purpose

- (1) The purpose of the Natural assets overlay code is to:
 - (a) protect areas of environmental significance, and the ecological processes and biodiversity values of terrestrial and aquatic ecosystems;
 - (b) maintain ecosystem services and other functions performed by Townsville's natural areas; and
 - (c) protect water quality, ecosystem health and the natural hydrological functioning of waterways, wetlands and their riparian areas.

- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) development avoids or minimises direct and indirect impacts on areas of environmental significance and their associated ecological functions and biophysical processes;
 - (b) development provides for the protection or enhancement of a linked network of habitat areas, including maximising opportunities for rehabilitation and restoration of degraded ecosystems, ecological communities, remnant vegetation and connecting corridors wherever possible;
 - (c) development, including infrastructure, is located and designed to maintain or enhance ecological functions including facilitation of wildlife movement for native terrestrial and aquatic species and native and migratory avian species;
 - (d) the water quality values and ecological functions of wetlands, waterways and their riparian areas and buffers are protected or enhanced;
 - (e) development maintains, protects or enhances the natural hydrological regime and functioning of waterways and wetlands, including surface and ground waters and their interaction;
 - (f) fragmentation of remnant vegetation and habitat areas is avoided to maintain ecological function and biodiversity values, and to maintain or increase the resilience of natural assets to threatening processes, including climate change; and
 - (g) development incorporates appropriate buffering and mitigation strategies to avoid or minimise potential damage to natural areas and other environmental assets.

Editor's note—Natural assets planning scheme policy no. SC6.9 will provide applicants with guidance in meeting the requirements of this code.

8.2.8.3 Assessment benchmarks

Table 8.2.8.3—Assessable development (Part)

Performance outcomes	Acceptable outcomes
Protection of biodiversity values and ecological processes	
<p>PO1 In areas identified as having high or very high environmental importance, significant values are protected and associated ecological functions and biophysical processes are maintained to ensure long term viability. Editor's note—Applicants should also refer to other state and federal legislation which may also require applicants to obtain additional approvals.</p>	<p>No acceptable outcome is nominated. Editor's note—Natural assets planning scheme policy no. SC6.9 provides information on the primary attributes included in very high, high and medium environmental importance areas. The overlay map has been produced using local government area wide data. Site-specific investigation will be required to confirm the extent and nature of values indicated on the overlay map or otherwise identify site-specific natural assets and ecological functions.</p>
<p>PO2 In areas identified as having medium environmental importance, development is located, designed and operated to: (a) retain and protect significant values; and (b) maintain the underlying ecological functions and biophysical processes. Editor's note—Applicants should also refer to other state and federal legislation which may also require applicants to obtain additional approvals.</p>	<p>No acceptable outcome is nominated. Editor's note—This category of environmental importance will also require a high level of investigation as part of any development application, to determine on the ground values and priority for protection. A detailed environmental assessment is to be undertaken by applicants in accordance with the guidance provided in the Natural assets planning scheme policy no. SC6.9.</p>
<p>PO3 Degraded areas with significant ecological and environmental values or important to the maintenance of underlying ecological functions and biophysical processes required to maintain biodiversity and ecosystem services are rehabilitated as near as is practical to the naturally occurring suite of native plant species and ecological communities.</p>	<p>No acceptable outcome is nominated. Editor's note—A rehabilitation plan supported by expert ecological advice prepared in accordance with Natural assets planning scheme policy no. SC6.9 will assist in demonstrating achievement of this performance outcome.</p>

Table 8.2.8.3—Assessable development (Part)

Performance outcomes	Acceptable outcomes
Significant species and ecological communities	
<p>PO4 Development avoids direct and indirect impacts on significant ecological communities and significant species and their habitats, including disturbance from the presence of vehicles, pedestrian use, increased exposure to domestic animals and noise and lighting impacts. Editor's note—Significant species and ecological communities include those identified in the Natural assets planning scheme policy no. SC6.9.</p>	<p>No acceptable outcome is nominated. Editor's note—Applications for development should identify any significant species or communities that may be affected by the proposal. A detailed environmental assessment is to be undertaken by applicants in accordance with the guidance provided in the Natural assets planning scheme policy no. SC6.9.</p>
<p>PO5 Areas of habitat that support a critical life cycle stage such as feeding, breeding or roosting or ecological function for threatened species, ecological communities or migratory species are not impacted by development.</p>	<p>No acceptable outcome is nominated.</p>

Table 8.2.8.3—Assessable development (Part)

Performance outcomes	Acceptable outcomes
Buffering and edge impacts	
<p>PO6 Development provides a vegetated buffer to an area of significant ecological or environmental value, in order to:</p> <ul style="list-style-type: none"> (a) protect core habitat areas from threatening processes; (b) maintain connectivity or support linkages; (c) reduce threats to the environmental values from non-native or pest fauna or flora; and (d) avoid undesirable microclimate effects. <p>Any setbacks or other areas required for bushfire management, safety, recreation, maintenance or any other purpose, are provided in addition to a vegetated buffer provided for ecological and environmental protection purposes.</p>	<p>AO6 A buffer extending from the outside edge of a declared fish habitat area (measured from highest astronomical tide (HAT)) has a minimum width of 100m.</p> <p>For other areas, no acceptable outcome is nominated.</p> <p>Editor's note—Areas which are expected to constitute core habitat as well as declared fish habitat areas are identified on maps contained in the Natural assets planning scheme policy no. SC6.9. Declared fish habitat areas may also be obtained from the relevant state agency.</p> <p>Buffers for significant species and ecological communities, including areas of habitat for listed threatened and migratory species, should be based on best practice and current scientific knowledge of individual species requirements and supported by an environmental assessment prepared in accordance with the Natural assets planning scheme policy no. SC6.9. Other legislation, including the <i>Nature Conservation Act</i> and <i>Environment Protection and Biodiversity Conservation Act</i> may establish other requirements with which applicants must comply.</p>
<p>PO7 Buffering, rehabilitation or restoration:</p> <ul style="list-style-type: none"> (a) uses site appropriate or endemic native vegetation; (b) replicates as far as practicable, the species composition and structural components of healthy remnant native vegetation and associated habitats, including understorey vegetation; and (c) excludes declared plants, environmental weeds and other non-native plants likely to displace native flora species or degrade habitat. 	<p>No acceptable outcome is nominated.</p> <p>Editor's note—A site-based management and rehabilitation plan prepared in accordance with the Natural assets planning scheme policy no. SC6.9 will assist in demonstrating achievement of this performance outcome.</p>
<p>PO8 Pest species are prevented from encroaching into ecologically significant areas.</p>	<p>No acceptable outcome is nominated.</p> <p>Editor's note—A site-based management and rehabilitation plan prepared in accordance with the Natural assets planning scheme policy no. SC6.9 will assist in demonstrating achievement of this performance outcome.</p>
<p>PO9 During construction and operation of development, measures are implemented to prevent light, noise, visual and other disturbances.</p>	<p>No acceptable outcome is nominated.</p> <p>Editor's note—A site-based management and rehabilitation plan prepared in accordance with the Natural assets planning scheme policy no. SC6.9 will assist in demonstrating achievement of this performance outcome.</p>

Table 8.2.8.3—Assessable development (Part)

Performance outcomes	Acceptable outcomes
Ecological corridors and habitat connectivity	
<p>PO10 Significant ecological corridors and habitat linkages are protected and have dimensions and characteristics to support:</p> <ul style="list-style-type: none"> (a) ecological processes and functions that enable the natural change in distributions of species and provide connectivity between populations of species over long periods of time; (b) ecological responses to climate change; (c) connectivity between large tracts and patches of remnant vegetation and habitat areas; and (d) effective and unhindered day-to-day and seasonal movement of avian, terrestrial and aquatic fauna. 	<p>No acceptable outcome is nominated where in an urban residential zone or centre zone.</p> <p>In all other zones (including the Emerging community zone, Rural residential zone or industry zones):</p> <p>AO10 Major ecological corridors identified on Figure SC6.9.3 in the Natural assets planning scheme policy no. SC6.9 are maintained and restored to achieve a minimum width of 350m, consisting of:</p> <ul style="list-style-type: none"> (a) a 250m wide core corridor to support avian species and most arboreal mammals; and (b) a 50m wide vegetated buffer extending from the outside edges on both sides of the core corridor. <p>No acceptable outcome is nominated for the great eastern ranges conservation corridor identified on Figure SC6.9.3 in the Natural assets planning scheme policy no SC6.9.</p>
<p>PO11 Corridors and linkages are provided to supplement and create additional ecological corridors and habitat linkages along waterways, drainage lines, ridgelines, coastlines and other areas where possible.</p>	<p>No acceptable outcome is nominated.</p>
<p>PO12 Development facilitates unimpeded use and movement of terrestrial and aquatic fauna that are associated with or are likely to use an ecological corridor as part of their normal life cycle by:</p> <ul style="list-style-type: none"> (a) ensuring development, including roads, pedestrian access and in-stream structures, does not create barriers to the movement of fauna along or within ecological corridors; (b) providing effective wildlife management infrastructure to direct fauna to locations where wildlife movement infrastructure has been provided to enable fauna to safely negotiate a development area; and (c) separating fauna from potential hazards through the use of appropriate barriers and buffers. 	<p>No acceptable outcome is nominated.</p>

Table 8.2.8.3—Assessable development (Part)

Performance outcomes	Acceptable outcomes
Riparian and buffer area management for wetlands and waterways	
<p>PO13 Development locates outside of, and does not impact on wetlands, to ensure long-term ecological function.</p>	<p>AO13 Development, including any associated filling or excavation (other than restorative works) is located outside of any mapped, defined or identified boundary of a wetland and its associated buffer. Editor's Note—Natural assets planning scheme policy no. SC6.9 contains Figure SC6.9.2 which identifies wetland areas. This information may also be obtained from the relevant state agency.</p>
<p>PO14 Development provides a buffer to a wetland area to:</p> <ul style="list-style-type: none"> (a) protect or enhance habitat values, connectivity and other ecological functions and values; (b) protect water quality and aquatic conditions; (c) maintain natural micro-climatic conditions; (d) maintain natural hydrological processes; (e) prevent mass movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, stream bank erosion, wind erosion, or scalding; and (f) avoid loss or modification of chemical, physical or biological properties or functions of soil. <p>Any setbacks or other areas required for bushfire management, safety, recreation, maintenance or any other purpose, are provided in addition to a vegetated buffer provided for ecological purposes.</p>	<p>AO14 A development-free buffer is provided and maintained with a minimum width of:</p> <ul style="list-style-type: none"> (a) for wetlands designated as high ecological significance (HES) by the Queensland Government: <ul style="list-style-type: none"> (i) 50m from the outermost part of the wetland where located in an urban area; or (ii) 200m from the outermost part of the wetland where located in a non-urban area; or (b) for other wetlands: 50m from the outermost part of the wetland in either urban or non-urban areas. <p>Editor's note—Natural assets planning scheme policy no. SC6.9 contains Figure SC6.9.2 which identifies wetland areas. This information may also be obtained from the relevant state agency.</p> <p>Editor's note—To avoid conflict, where a development requires multiple buffers to be established by this code to protect watercourses, corridors, wetlands or core habitat, the greatest distances required by this code will prevail to the extent of any inconsistency.</p>
<p>PO15 Development (including operation) and construction maintains or enhances the natural hydrological regime of wetlands, including surface and ground waters.</p> <p>Editor's note—The hydrological regime of surface waters includes:</p> <ul style="list-style-type: none"> (i) peak flows; (ii) volume of flows; (iii) duration of flows; (iv) frequency of flows; (v) seasonability of flows; (vi) water depth (seasonal average); and (vii) wetting and drying cycle. 	<p>AO15.1 Development does not change the existing surface hydrological regime of a wetland including through channelisation, redirection or interruption of flows.</p> <p>AO15.2 There is no change to the reference duration high-flow and low-flow duration frequency curves, low-flow spells frequency curve and mean annual flow to and from the wetland.</p> <p>AO15.3 Any relevant stream flows into the wetland comply with relevant environmental flow objectives.</p> <p>AO15.4 The water table and hydrostatic pressure in the wetland is either:</p> <ul style="list-style-type: none"> (a) returned to its natural state; or (b) not lowered or raised outside the bounds of variability under existing pre-development conditions.

	<p>AO15.5 Development does not result in the ingress of saline water into freshwater aquifers.</p>
<p>PO16 Development provides a buffer to a waterway, in order to:</p> <p>(a) protect or enhance habitat values, connectivity and other ecological processes and values;</p> <p>(b) protect water quality and aquatic conditions;</p> <p>(c) maintain natural micro-climatic conditions;</p> <p>(d) maintain natural hydrological processes;</p> <p>(e) prevent mass movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, stream bank erosion, wind erosion, or scalding; and</p> <p>(f) prevent loss or modification of chemical, physical or biological properties or functions of soil.</p> <p>Any setbacks or other areas required for bushfire management, safety, recreation, maintenance or any other purpose, are provided in addition to a vegetated buffer provided for ecological purposes.</p>	<p>No acceptable outcome is nominated where in an urban residential zone or centre zone.</p> <p>Elsewhere (including the Emerging community zone, Rural residential zone or industry zones):</p> <p>AO16 Other than where cropping for forestry for wood production, a development-free buffer is provided and maintained, extending from top of the bank of a waterway and with a minimum width of:</p> <p>(a) where in the Wet Tropics bioregion:</p> <p>(i) stream order 1 to 4: 25m; or</p> <p>(ii) stream order 5 and above: 50m;</p> <p>OR</p> <p>(b) in all other regions (Brigalow Belt North Bioregion or the Einasleigh Uplands Bioregion):</p> <p>(i) stream order 1 or 2: 25m; or</p> <p>(ii) stream order 3 or 4: 50m; or</p> <p>(iii) stream order 5 and above: 100m;</p> <p>Editor's note—Natural assets planning scheme policy no. SC6.9 contains Figure SC6.9.1 which identifies stream orders and bioregions. This information may also be obtained from the relevant state agency.</p> <p>Editor's note— Where a development requires multiple buffers to be established by this code to protect watercourses, corridors, wetlands or core habitat, the greatest distances required by this code will prevail to the extent of any inconsistency.</p>

Table 8.2.8.3—Assessable development (Part)

Performance outcomes	Acceptable outcomes
Ongoing management, construction and operation	
<p>PO17 During construction and operation of development, ongoing management, monitoring and maintenance is undertaken to ensure impacts on significant ecological areas, underlying ecological functions and biophysical processes and environmental values are avoided or minimised.</p>	<p>No acceptable outcome is nominated.</p> <p>Editor's note—Applicants will be asked to prepare an site based management plan to guide construction and operation.</p>
<p>PO18 Management arrangements facilitate the effective conservation and protection of significant ecological areas and underlying ecological functions and biophysical processes.</p>	<p>AO18 Significant ecological areas are:</p> <p>(a) transferred into public ownership where the land is required for public access or for some other public purpose consistent with its values; or</p> <p>(b) incorporated within private open space and included within a voluntary statutory covenant by registration under the Land Title Act 1994.</p>

8.2.9 Water resource catchment overlay code

8.2.9.1 Application

This code applies to development where the code is identified as applicable in the categories of development and assessment for the Water resource catchment overlay. When using this code, reference should be made to section 5.3.2 and where applicable, section 5.3.3 located in Part 5.

8.2.9.2 Purpose

- (1) The purpose of the Water resource catchment overlay code is to ensure:
 - (a) the quality of surface and ground waters and the ecological values and hydrological processes of water resource catchments are protected;
 - (b) natural environment values and the ecological processes of terrestrial and aquatic ecosystems within the catchment area are protected;
 - (c) the water resource catchment area is maintained predominantly in a natural state and is protected from development and activities that would have unacceptable impacts on water quality, either directly or indirectly.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) the establishment, expansion or intensification of development is avoided in a water resource catchment area;
 - (b) rural residential development is contained within the zoned Oak Valley community and development densities minimise the potential for impact on the catchment;

Editor's note—Applicants should refer to the Rural residential zone code.

- (c) the ecological values, hydrological processes and water quality values of ground and surface waters in water resource catchment areas are protected from direct and indirect development impacts;
- (d) development does not adversely affect the physical integrity of waterways, wetlands, lakes, springs, riparian areas and natural ecosystems that support water quality; and
- (e) vegetated buffers to the full supply level of a water storage area are provided and maintained.

8.2.9.3 Assessment benchmarks

For accepted development subject to requirements

Table 8.2.9.3-Accepted development subject to requirements and assessable development (Part)

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
PO1 Development is set back from features contributing to catchment waters and incorporates a buffer to protect and enhance water quality values of ground and surface waters for ecosystem health and human consumption.	AO1 Development, including all buildings and supporting infrastructure, is set back from the top of the bank of a waterway as shown on Figure 8.2 – Waterways within the Ross Dam Catchment with a minimum width of: <ol style="list-style-type: none"> (a) for stream order 3 or 4: 50m; or (b) for stream order 5 and above: 100m.

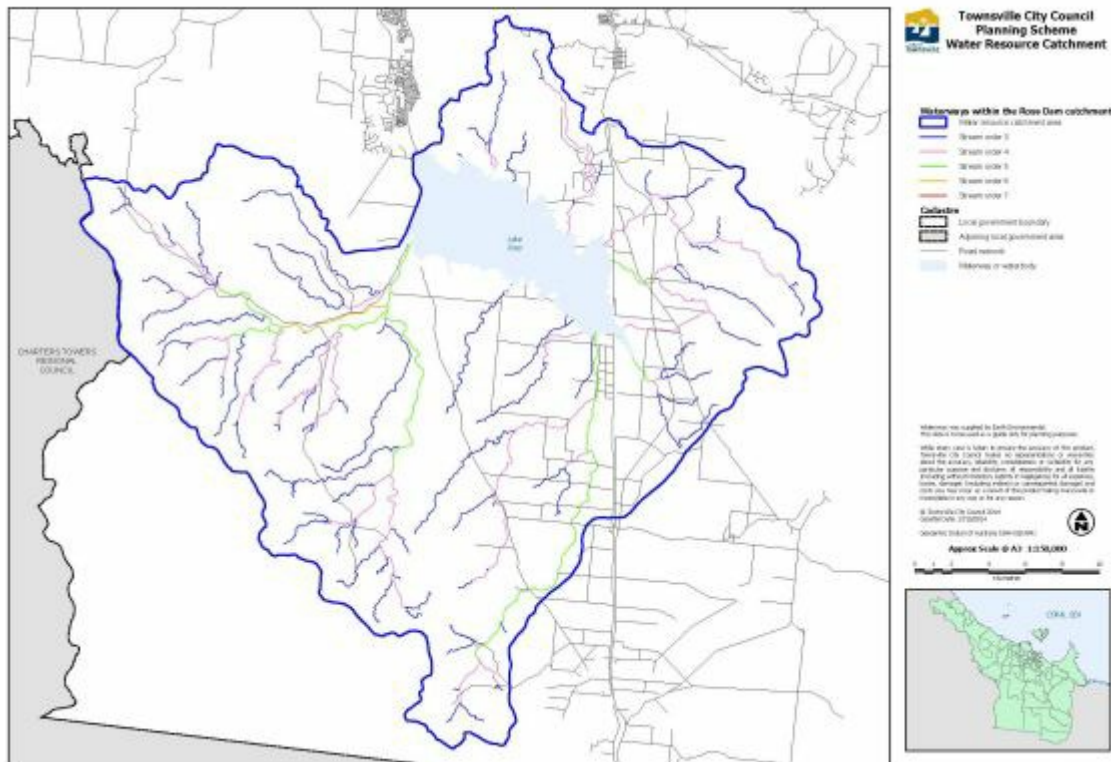
Table 8.2.9.3-Accepted development subject to requirements and assessable development (Part)

Performance outcomes	Acceptable outcomes
For assessable development	
Nature of development	
<p>PO2 The intensification of activities within catchments is avoided, including any:</p> <p>(a) development, land use and management practices with the potential to degrade or contribute to the degradation of water quality in the water resource catchment area; and</p> <p>(b) development, use or activity that adversely affects the physical integrity of waterways, lakes, springs, riparian areas, wetlands and natural ecosystems.</p>	No acceptable outcome is nominated.
<p>PO3 Reconfiguration of lots does not increase the number of lots within the catchment, other than within the zoned Oak Valley rural residential area.</p>	No acceptable outcome is nominated.
<p>PO4 Within Oak Valley, the creation of additional lots is minimised.</p>	<p>AO4 The minimum lot size in the rural residential zone within the catchment is 4ha.</p>
<p>PO5 Development in a water resource catchment area minimises land disturbance through appropriate siting, design and construction of buildings, structures, roadways and other work, and does not result in land degradation.</p>	<p>AO5.1 Development does not involve earthworks.</p>
	<p>AO5.2 Development locates on slopes that do not exceed a 6% gradient.</p>
<p>PO6 Development in a water resource catchment area is managed in a way that maintains the structure and function of remnant vegetation and including erosion and associated loss to the soil fertility.</p>	<p>AO6 Development does not involve vegetation clearing.</p>

Table 8.2.9.3-Accepted development subject to requirements and assessable development (Part)

Performance outcomes	Acceptable outcomes
For assessable development	
Buffers	
<p>PO7 Development adjoining the water storage area identified on overlay map OM-09 protects and restores a vegetated buffer to avoid sediment, nutrients and pollutants from entering a waterway, wetland, lake, spring, riparian area or water storage area.</p>	<p>AO7.1 Development including buildings, infrastructure, structures, enclosures and ancillary activities are not carried out within 500m of the water storage area identified on overlay map OM-09 and all existing vegetation is retained within the buffer.</p>
	<p>AO7.2 A vegetated buffer having a minimum width of 100m is established and maintained from the water storage area identified on overlay map OM-09.</p>

<p>PO8 Riparian vegetation within the water resource catchment area is protected.</p>	<p>AO8 Development does not result in the clearing of any native riparian vegetation.</p>
<p>PO9 Development is set back from features contributing to catchment waters and incorporates a buffer to protect and enhance water quality values of ground and surface waters for ecosystem health and human consumption.</p>	<p>AO9 Development, including all buildings and supporting infrastructure, is set back from the top of the bank of a waterway as shown on Figure 8.2 – Waterways within the Ross Dam Catchment with a minimum width of:</p> <p>(a) for stream order 3 or 4: 50m; or</p> <p>(b) for stream order 5 and above: 100m.</p>



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Figure 8.2 - Waterways within the Ross Dam Catchment