

5. Overlays

5.1 Assessment Table for Natural Hazards Overlay

5.1.1 Assessment categories for Natural Hazards Overlay

The assessment categories are identified for development affected by a Natural Hazards Overlay in column 2 of Table 5.1 as follows—

- (a) making a material change of use for a defined use listed in column 1;
- (b) other development listed in column 1 including—
 - (i) carrying out building work not associated with a material change of use;
 - (ii) excavating or filling not associated with a material change of use;
 - (iii) reconfiguring a lot; and
 - (iv) carrying out operational work for reconfiguring a lot.

5.1.2 Relevant assessment criteria for development affected by a Natural Hazards Overlay

The relevant assessment criteria for development affected by a Natural Hazards Overlay are referred to in column 3 of Table 5.1.

For self-assessable development and code assessable development, the relevant assessment criteria are applicable codes.

5.1.3 Table 5.1 Assessment Categories and Relevant Assessment Criteria for Natural Hazards Overlay

Column 1 Development Type	Column 2 Assessment Category	Column 3 Applicable Codes
POTENTIAL ACID SULFATE SOILS OVERLAY		
Material change of use		
All material change of use except where otherwise identified in Column 1 of this table.	<i>Exempt</i> if the criteria for <i>code assessable</i> do not apply <i>or</i>	
	<i>Code assessable</i> if - (a) the site is located within Area 1 of Natural Hazard Overlay Map 1 Potential Acid Sulfate Soils and involving:	Natural Hazards Overlay Code - overall outcomes and performance criteria for Potential Acid Sulfate Soils

Column 1 Development Type	Column 2 Assessment Category	Column 3 Applicable Codes
	(i) excavating or otherwise removing 100m ³ or more of soil or sediment from at or below 5m AHD; or (ii) filling of land involving 500m ³ or more of material with an average depth of 0.5m or greater where the ground level is below 5m AHD; or (b) the site is located within area 2 of Natural Hazard Overlay Map 1 Potential Acid Sulfate Soils and involving excavating or otherwise removing 100m ³ or more of soil or sediment from at or below 5m AHD	
Local Utility	<i>Exempt</i>	
Other Development		
All other development where not associated with a material change of use	<i>Exempt</i> if the criteria for <i>code assessable</i> do not apply or	
	<i>Code assessable</i> if - (a) the site is located within Area 1 of Natural Hazard Overlay Map 1 Potential Acid Sulfate Soils and involving: (i) excavating or otherwise removing 100m ³ or more of soil or sediment from at or below 5m AHD; or (ii) filling of land involving 500m ³ or more of material with an average depth of 0.5m or greater where the ground level is below 5m AHD; or (b) the site is located within area 2 of Natural Hazard Overlay Map 1 Potential Acid Sulfate Soils and involving excavating or otherwise removing 100m ³ or more of soil or sediment from at or below 5m AHD	Natural Hazards Overlay Code - overall outcomes and performance criteria for Potential Acid Sulfate Soils
BUSHFIRE HAZARD MANAGEMENT OVERLAY		
Material change of use		
All material change of use except where otherwise identified in column 1 of this table	<i>Exempt</i> if - (a) within an existing building; or (b) the criteria for <i>code assessable</i> do not apply or <i>Code assessable</i> if within a Medium	Natural Hazards Overlay Code -

Column 1 Development Type	Column 2 Assessment Category	Column 3 Applicable Codes
	Bushfire Hazard area on Natural Hazard Overlay Map 2 Bushfire Hazard Management	overall outcomes and performance criteria for Bushfire Hazard Management
Agriculture Animal Husbandry Aquaculture (Minor Impact) Extractive Industry Local Utility	<i>Exempt</i>	
Detached Dwelling	<i>Self assessable</i> if within a Medium Bushfire Hazard area on Natural Hazard Overlay Map 2 Bushfire Hazard Management <i>or</i> <i>Code assessable</i> if acceptable solutions of applicable code are not complied with	Natural Hazards Overlay Code - acceptable solutions for Bushfire Hazard Management Natural Hazards Overlay Code - overall outcomes and performance criteria for Bushfire Hazard Management
Other Development		
Building work (including Minor Building Work) where not associated with a material change of use	<i>Self assessable</i> if within a Medium Bushfire Hazard area on Natural Hazard Overlay Map 2 Bushfire Hazard Management <i>or</i> <i>Code assessable</i> if acceptable solutions of applicable code are not complied with	Natural Hazards Overlay Code - acceptable solutions for Bushfire Hazard Management Natural Hazards Overlay Code - overall outcomes and performance criteria for Bushfire Hazard Management
Operational work associated with reconfiguring a lot Reconfiguring a lot	<i>Code assessable</i> if within a Medium Bushfire Hazard area on Natural Hazard Overlay Map 2 Bushfire Hazard Management	Natural Hazards Overlay Code - overall outcomes and performance criteria for Bushfire Hazard Management
Other	<i>Exempt</i>	
FLOOD MANAGEMENT OVERLAY		
Material change of use		
All material change of use except where otherwise identified in column 1 of this table	<i>Exempt</i> if – (c) within an existing building; or (d) the criteria for <i>code assessable</i> do not apply <i>or</i> <i>Code assessable</i> if within a Low Hazard or High Hazard area on Natural Hazard Overlay Map 3 Flood Management	Natural Hazards Overlay Code - overall outcomes and performance criteria for Flood Management
Agriculture Animal Husbandry Aquaculture (Minor Impact) Open Space and Recreation Local Utility	<i>Exempt</i>	

Column 1 Development Type	Column 2 Assessment Category	Column 3 Applicable Codes
Other Development		
Building work (including Minor Building Work) where not associated with a material change of use Operational work for excavation or filling of land not associated with a material change of use Operational work associated with reconfiguring a lot Reconfiguring a lot	<i>Exempt</i> if the criteria for <i>code assessable</i> do not apply <i>or</i> <i>Code assessable</i> if within a Low Hazard or High Hazard area on Natural Hazard Overlay Map 3 Flood Management	Natural Hazards Overlay Code - overall outcomes and performance criteria for Flood Management

5.2 Assessment Criteria for Natural Hazards Overlay

5.2.1 Natural Hazards Overlay Code

The provisions in this section comprise the Natural Hazards Overlay Code. They are:

- (a) Compliance with the Natural Hazards Overlay Code;
- (b) Overall Outcomes for the Natural Hazards Overlay Code; and
- (c) Assessment Criteria (performance criteria and associated acceptable solutions) for the Natural Hazards Overlay Code.

5.2.2 Compliance with the Natural Hazards Overlay Code

Development that is consistent with the performance criteria of the Natural Hazards Overlay Code complies with the Natural Hazards Overlay Code.

5.2.3 Overall Outcomes for the Natural Hazards Overlay Code

The overall outcomes are the purpose of the Natural Hazards Overlay Code. The overall outcomes sought for the Natural Hazards Overlay Code are the following:

- (a) the generation or release of acid and metal contaminants from acid sulfate soils does not have significant adverse effects on the natural and built environment and human health;
- (b) development maintains the safety of people and works form bushfires and is located, designed and managed to be compatible with the nature of bushfire hazard; and
- (c) development has an appropriate level of flood immunity and does not result in an increase in flood level or duration on surrounding properties.

5.2.4 Assessment Guidance: Explanation of Key Terms

"**acid sulfate soils (ASS)**" means soil or sediment containing highly acidic soil horizons or layers affected by the oxidation of iron sulfides (actual ASS) and/or soil or sediment containing iron sulfides or other sulfidic material that has not been exposed to air and oxidised (potential ASS).

Note: The term "acid sulfate soil" generally includes both actual and potential ASS. Actual and potential ASS are often found in the same soil profile, with actual ASS generally overlying potential acid sulfate soil horizons.

"**actual acid sulfate soils**" means soil or sediment containing highly acidic soil horizons or layers affected by the oxidation of soil materials that are rich in iron sulfides, primarily pyrite. This oxidation produces hydrogen ions in excess of the sediment's capacity to neutralise the acidity, resulting in soils of pH 4 or less. These soils can usually be identified by the presence of jarosite.

"**potential acid sulfate soils**" means soil or sediment containing iron sulfides or sulfidic material that have not been exposed to air and oxidised. The field pH of these soils in their undisturbed state is pH 4 or more, and may be neutral or slightly alkaline.

5.2.5 Natural Hazards Overlay Code Assessment Criteria

Performance Criteria		Acceptable Solutions	
<p><i>Note: Self assessable development must comply only with the acceptable solutions identified with an asterisk (*). Development that is identified as self assessable in the assessment tables but does not comply with the acceptable solutions identified with an asterisk is code assessable development.</i></p>			
<p>Acid Sulfate Soils</p>			
PC1	<p>Development does not disturb acid sulfate soils</p> <p>OR</p> <p>Development is managed to avoid or minimise the release of acid and metal contaminants.</p>	AS1.1	<p>The disturbance of acid sulfate soils is avoided by:</p> <ul style="list-style-type: none"> (a) not excavating or otherwise removing soil or sediment identified as containing acid sulfate soils; (b) not permanently or temporarily extracting groundwater that results in the aeration of previously saturated acid sulfate soils; (c) not undertaking filling that results in: <ul style="list-style-type: none"> (i) acid sulfate soils being moved below the watertable; and (ii) previously saturated acid sulfate soils being aerated. <p>OR</p>
		AS1.2	<p>The disturbance of acid sulfate soils avoids the release of acid or metal contaminants</p>

Performance Criteria		Acceptable Solutions	
		by: (a) neutralising all existing and potential acidity of disturbed and insitu soil materials thereby preventing the generation of acid or metal contaminants; and (b) ensuring containment and adequate treatment or neutralisation of all acid surface and groundwater flows, before releasing off-site.	
Bushfire Hazard Management³³			
PC2	Development in bushfire hazard areas: (a) does not materially intensify the use of land; or (b) provides for the highest intensity of use in parts of a site which are least bushfire prone and limits the intensity of use elsewhere.	AS2.1 Development does not increase the number of lots within a medium bushfire hazard area on Natural Hazards Overlay Map 2 Bushfire Hazard Management . AS2.2* Where part of a site is included in a medium bushfire hazard area as shown on Natural Hazards Overlay Map 2 Bushfire Hazard Management , buildings and structures are not located in that area. AS2.3 Development does not result in a concentration of people on any part of a site which is a medium bushfire hazard area (e.g. Retirement Accommodation, Educational Establishment, Hospital).	
PC3	Buildings in bushfire hazard areas are sited or able to be sited: (a) in cleared areas where the environmental impacts of vegetation clearing can be managed acceptably; (b) on land which is least prone to bushfire risk, having regard to aspect, elevation, slope and vegetation; and (c) to incorporate adequate and effective design measures which minimise bushfire hazard.	AS3.1 Buildings are sited: (a) in an existing cleared area able to accommodate the building(s) with a 20 metre firebreak, at least the first 10m of which is cleared while the outer 10m may be planted with fire retardant species or otherwise designed and managed to mitigate the impact of bushfire on the buildings; (b) away from the tops of ridgelines; (c) in locations other than on north to west facing vegetated slopes; and (d) on land which is not identified as Significant Natural Habitat on Natural Features and Resources Overlay Map 3 Significant Natural Habitats .	

³³ The Building Code of Australia (BCA) contains provisions applying to building in bushfire prone areas. The Council may identify land as a "Designated Bushfire Prone Area" for the purposes of the *Standard Building Regulation 1993* (Section 55) and the BCA.

Performance Criteria		Acceptable Solutions
		AS3.2* In the Rural Protected Zone (Category 1 and Category 2) and Rural Zone, a minimum cleared area of 20 metres width serving as a firebreak is provided around all buildings.
PC4	Buildings and fencing are designed to minimise radiation pick-up and the potential for debris build-up and are constructed to provide protection in the event of a bushfire.	<p>AS4.1* Buildings have simple plan and roof shapes with roof pitches of between 12 and 21 degrees.</p> <p>AS4.2* Non-residential buildings are designed and constructed in accordance with the provisions of Australian Standard AS3959 <i>Construction of buildings in bushfire prone areas</i>.</p> <p>AS4.3* Any outbuilding is designed as part of the main building or is located no more than 5m from the main building.</p> <p>AS4.4* No fences constructed of timber or other combustible materials are installed on boundaries adjoining large areas of vegetation.</p>
PC5	<p>Development in bushfire hazard areas incorporates road and driveway layouts which provide:</p> <p>(a) safe and efficient movement systems away from any encroaching fire; and</p> <p>(b) alternative safe access routes should access in one direction be blocked in the event of a fire.</p>	<p>AS5.1* The road layout provides for "through-roads" and avoids culs-de-sac and "dead end" roads.</p> <p>OR</p> <p>Where the use of a single entry road is unavoidable because of topographical constraints, a fire-trail with a minimum width of 20 metres is incorporated to allow for safe access in an alternative direction to the road.</p>
PC6	<p>Development in bushfire hazard areas incorporates firebreaks provided by:</p> <p>(a) roadways situated around the outside of the development site; or</p> <p>(b) fire breaking trails:</p> <p>(i) situated around or through individual lots;</p> <p>(ii) situated between the development site and surrounding vegetated areas;</p> <p>(iii) having sufficient width to both serve as an effective fire break and allow continuous access for firefighting vehicles; and</p> <p>(iv) are located on public land or in an access easement granted in favour of the Council and Queensland Fire and Rescue Service.</p>	<p>AS6.1* Firebreaks are provided by:</p> <p>(a) a minimum 20 metre wide cleared road reserve located between the development site and surrounding vegetated lands; or</p> <p>(b) fire breaking trails or access easements between the development site and surrounding vegetated lands where such trails:</p> <p>(i) have a minimum cleared width of 6 metres;</p> <p>(ii) have a minimum formed width of 4 metres;</p> <p>(iii) have a maximum gradient of 1 in 4;</p> <p>(iv) are constructed and maintained to prevent erosion and provide continuous access for firefighting vehicles;</p>

Performance Criteria		Acceptable Solutions
		<p>(v) allow for vehicle access at least every 200 metres; and</p> <p>(vi) provide passing or turning areas at least every 400 metres.</p>
PC7	Development in bushfire hazard areas provides sufficient water supply for firefighting purposes.	<p>AS7.1* Premises are connected to the Council's reticulated water supply system.</p> <p>OR</p> <p>Premises have a dam, on-site water tank incorporating a suitable hose coupling or swimming pool having a total minimum capacity of 5,000 litres kept available for firefighting purposes.</p> <p>AS7.2* Where water storage is fitted with an outlet pipe, the outlet pipe is 50mm in diameter and fitted with a 50mm male camlock standard Rural Fire Brigade fitting.</p>
PC8	Landscaping species do not exacerbate potential bushfire hazard.	AS8.1 Landscape planting comprises fire retardant species.
Flood Management		
PC9	Development does not alter the shape, direction or capacity of drainage paths in a way that diverts flood flows onto other land or prevents or slows the escape of flood water from other land.	<p>AS9.1 <i>Apple Tree Creek</i></p> <p>In the Low Hazard area and High Hazard area on Natural Hazards Overlay Map 3 Flood Management, filling within the 1% AEP (Q100) floodplain does not exceed 400mm in depth and 250 m³ in volume except:</p> <p>(a) east of Drummond Street, either side of Spencer Street;</p> <p>(b) between Tyndall Street and the unnamed road reserve east thereof; and</p> <p>(c) on Lot 1 on RP809376 to provide a maximum building site of 1,000m² above the 1% AEP (Q100) flood level.</p>
PC10	Natural hydrological systems, landforms and drainage lines and the flood conveyance capacity of floodplains and waterways are maintained.	AS10.1 No acceptable solution prescribed.
PC11	Development and community infrastructure has an acceptable level of flood immunity, providing for the protection of development at an acceptable level of risk.	<p>AS11.1 Development other than filling in accordance with acceptable solution AS9.1 is not located in the High Hazard Area on Natural Hazards Overlay Map 3 Flood Management,.</p> <p>AS11.2 Development within the Low Hazard area on Natural Hazards Overlay Map 3 Flood Management is designed to retain its structural integrity in flood conditions.</p>

Performance Criteria	Acceptable Solutions
	AS11.3 The floor level of any habitable room within the Low Hazard Area on Natural Hazards Overlay Map 3 Flood Management is a minimum of 300mm above the 1% AEP (Q100) flood level.

5.3 Assessment Table for Natural Features and Resources Overlay

5.3.1 Assessment categories for Natural Features and Resources Overlay

The assessment categories are identified for development affected by a Natural Features and Resources Overlay in column 2 of Table 5.2 as follows—

- (a) making a material change of use for a defined use listed in column 1;
- (b) other development listed in column 1 including—
 - (i) carrying out building work not associated with a material change of use;
 - (ii) excavating or filling not associated with a material change of use;
 - (iii) reconfiguring a lot; and
 - (iv) carrying out operational work for reconfiguring a lot.

5.3.2 Relevant assessment criteria for development affected by a Natural Features and Resources Overlay

The relevant assessment criteria for development affected by a Natural Features and Resources Overlay are referred to in column 3 of Table 5.2.

For self-assessable development and code assessable development, the relevant assessment criteria are applicable codes.

5.3.3 Table 5.2 Assessment Categories and Relevant Assessment Criteria for Natural Features and Resources Overlay

Column 1 Development Type	Column 2 Assessment Category	Column 3 Applicable Codes
EXTRACTIVE RESOURCES OVERLAY		
Material change of use		
All material change of use except where otherwise identified in Column 1 of this table	<i>Exempt</i> if the criteria for <i>code assessable</i> do not apply <i>or</i>	Natural Features and Resources Overlay Code – overall outcomes and performance criteria for Extractive Resources
	<i>Code assessable</i> if – (a) within the Key Resource Area boundary of the Redridge quarry; or (b) on or within 1000m of a hardrock extractive resource area otherwise identified on Natural Features and Resources Overlay Map 1	

Column 1 Development Type	Column 2 Assessment Category	Column 3 Applicable Codes
	<p>Extractive Resources; or</p> <p>(c) on or within 200m of a sand or gravel extractive resource area identified on Natural Features and Resources Overlay Map 1 Extractive Resources; or</p> <p>(d) on or within 200m of a mining lease or mineral development licence identified on Natural Features and Resources Overlay Map 1 Extractive Resources</p>	
<p>Agriculture Carpark Extractive Industry Forest Practice Rural Home Industry Telecommunications Facilities</p>	<p><i>Exempt</i></p>	
Other Development		
<p>Building work for a Class 1 or Class 10 building</p>	<p><i>Exempt</i> if the criteria for <i>self assessable</i> or <i>code assessable</i> do not apply</p> <p><i>or</i></p> <p><i>Self assessable</i> if –</p> <p>(a) within the Key Resource Area boundary of the Redridge quarry; or</p> <p>(b) on or within 1000m of an extractive resource area otherwise identified on Natural Features and Resources Overlay Map 1 Extractive Resources; or</p> <p>(c) on or within 200m of a sand or gravel extractive resource area identified on Natural Features and Resources Overlay Map 1 Extractive Resources; or</p> <p>(d) on or within 200m of a mining lease or mineral development licence identified on Natural Features and Resources Overlay Map 1 Extractive Resources</p> <p><i>or</i></p> <p><i>Code assessable</i> if acceptable solutions of applicable code are not complied with</p>	<p>Natural Features and Resources Overlay Code – acceptable solutions for Extractive Resources</p> <p>Natural Features and Resources Overlay Code – overall outcomes and performance criteria for Extractive Resources</p>
<p>Building work where not associated with a material change of use, other than for a Class 1 or Class 10 building</p>	<p><i>Exempt</i> if the criteria for <i>code assessable</i> do not apply</p> <p><i>or</i></p>	

Column 1 Development Type	Column 2 Assessment Category	Column 3 Applicable Codes
	<p><i>Code assessable</i> if –</p> <ul style="list-style-type: none"> (a) within the Key Resource Area boundary of the Redridge quarry; or (b) on or within 1000m of an extractive resource area otherwise identified on Natural Features and Resources Overlay Map 1 Extractive Resources; or (c) on or within 200m of a sand or gravel extractive resource area identified on Natural Features and Resources Overlay Map 1 Extractive Resources; or (d) on or within 200m of a mining lease or mineral development licence identified on Natural Features and Resources Overlay Map 1 Extractive Resources 	<p>Natural Features and Resources Overlay Code – overall outcomes and performance criteria for Extractive Resources</p>
Operational work for excavation or filling of land not associated with a material change of use	<i>Exempt</i>	
Operational work associated with reconfiguring a lot	<i>Exempt</i>	
Reconfiguring a lot	<p><i>Code assessable</i> if –</p> <ul style="list-style-type: none"> (a) within the Key Resource Area boundary of the Redridge quarry; or (b) on or within 1000m of an extractive resource area otherwise identified on Natural Features and Resources Overlay Map 1 Extractive Resources; (c) on or within 200m of a sand or gravel extractive resource area identified on Natural Features and Resources Overlay Map 1 Extractive Resources; or (d) on or within 200m of a mining lease or mineral development licence identified on Natural Features and Resources Overlay Map 1 Extractive Resources <p><i>or</i></p>	<p>Natural Features and Resources Overlay Code – overall outcomes and performance criteria for Extractive Resources</p>
	<i>Exempt</i> otherwise	
Other	<i>Exempt</i>	
FISH HABITAT AREAS OVERLAY		
Material change of use		
All material change of use except where otherwise identified in	<i>Exempt</i> if the criteria for <i>code assessable</i> do not apply	

Column 1 Development Type	Column 2 Assessment Category	Column 3 Applicable Codes
Column 1 of this table	<p><i>or</i></p> <p><i>Code assessable</i> if in or within 500m of a Fish Habitat Area identified on Natural Features and Resources Overlay Map 2 Fish Habitat Areas and Natural Waterways</p>	Natural Features and Resources Overlay Code – overall outcomes and performance criteria for Fish Habitat Areas
Detached Dwelling Open Space and Recreation Relative’s Apartment	<i>Exempt</i>	
Other Development		
Building work for a Class 1 or Class 10 building	<i>Exempt</i>	
<p>Building work where not associated with a material change of use, other than for a Class 1 or Class 10 building</p> <p>Operational work for excavation or filling of land not associated with a material change of use</p> <p>Operational work associated with reconfiguring a lot</p> <p>Reconfiguring a lot</p>	<p><i>Exempt</i> if the criteria for <i>code assessable</i> do not apply</p> <p><i>or</i></p> <p><i>Code assessable</i> if in or within 500m of a Fish Habitat Area identified on Natural Features and Resources Overlay Map 2 Fish Habitat Areas and Natural Waterways</p>	Natural Features and Resources Overlay Code – overall outcomes and performance criteria for Fish Habitat Areas
Other	<i>Exempt</i>	
NATURAL WATERWAYS OVERLAY		
Material change of use		
All material change of use except where otherwise identified in Column 1 of this table	<p><i>Exempt</i> if the criteria for <i>code assessable</i> do not apply</p> <p><i>or</i></p> <p><i>Code assessable</i> if in or within 100m of Natural Waterways identified on Natural Features and Resources Overlay Map 2 Fish Habitat Areas and Natural Waterways</p>	Natural Features and Resources Overlay Code – overall outcomes and performance criteria for Natural Waterways
Detached Dwelling Open Space and Recreation Relative’s Apartment	<i>Exempt</i>	
Other Development		
Building work for a Class 1 or Class	<i>Exempt</i>	

Column 1 Development Type	Column 2 Assessment Category	Column 3 Applicable Codes
10 building		
Building work where not associated with a material change of use, other than for a Class 1 or Class 10 building	<i>Exempt</i> if the criteria for <i>code assessable</i> do not apply	
Operational work for excavation or filling of land not associated with a material change of use		
Operational work associated with reconfiguring a lot		
Reconfiguring a lot	<i>or</i>	
	<i>Code assessable</i> if in or within 100m of Natural Waterways identified on Natural Features and Resources Overlay Map 2 Fish Habitat Areas and Natural Waterways	Natural Features and Resources Overlay Code – overall outcomes and performance criteria for Natural Waterways
Other	<i>Exempt</i>	
SIGNIFICANT NATURAL HABITAT OVERLAY		
Material change of use		
All material change of use except where otherwise identified in Column 1 of this table	<i>Exempt</i> if the criteria for <i>code assessable</i> do not apply	
	<i>or</i>	
	<i>Code assessable</i> if in or adjoining Significant Natural Habitat identified on Natural Features and Resources Overlay Map 3 Significant Natural Habitat	Natural Features and Resources Overlay Code – overall outcomes and performance criteria for Significant Natural Habitat
Detached Dwelling Open Space and Recreation Relative's Apartment	<i>Exempt</i>	
Other Development		
Building work for a Class 1 or Class 10 building	<i>Exempt</i>	
Building work where not associated with a material change of use, other than for a Class 1 or Class 10 building	<i>Exempt</i> if the criteria for <i>code assessable</i> do not apply	
Operational work for excavation or filling of land not associated with a material change of use		
Operational work associated with reconfiguring a lot		
Reconfiguring a lot	<i>or</i>	
	<i>Code assessable</i> if in or adjoining	Natural Features and Resources

Column 1 Development Type	Column 2 Assessment Category	Column 3 Applicable Codes
	Significant Natural Habitat identified on Natural Features and Resources Overlay Map 3 Significant Natural Habitat	Overlay Code – overall outcomes and performance criteria for Significant Natural Habitat
Other	<i>Exempt</i>	
GOOD QUALITY AGRICULTURAL LAND OVERLAY		
Material change of use		
All material change of use except where otherwise identified in Column 1 of this table	<i>Exempt</i> if the criteria for <i>code assessable</i> do not apply <i>or</i> <i>Code assessable</i> if located on Good Quality Agricultural Land identified on Natural Features and Resources Overlay Map 4 Good Quality Agricultural Land	Natural Features and Resources Overlay Code – overall outcomes and performance criteria for Good Quality Agricultural Land
Agriculture Animal Husbandry Detached Dwelling Home Based Business Open Space and Recreation	<i>Exempt</i>	
Other Development		
Building work for a Class 1 or Class 10 building	<i>Exempt</i>	
Building work where not associated with a material change of use, other than for a Class 1 or Class 10 building Operational work associated with reconfiguring a lot Reconfiguring a lot	<i>Exempt</i> if the criteria for <i>code assessable</i> do not apply <i>or</i> <i>Code assessable</i> if located on Good Quality Agricultural Land identified on Natural Features and Resources Overlay Map 4 Good Quality Agricultural Land	Natural Features and Resources Overlay Code – overall outcomes and performance criteria for Good Quality Agricultural Land
Other	<i>Exempt</i>	

5.4 Assessment Criteria for Natural Features and Resources Overlay

5.4.1 Natural Features and Resources Overlay Code

The provisions in this section comprise the Natural Features and Resources Code. They are:

- (a) Compliance with the Natural Features and Resources Code;
- (b) Overall Outcomes for the Natural Features and Resources Code; and
- (c) Assessment Criteria (performance criteria and associated acceptable solutions) for the Natural Features and Resources Code.

5.4.2 Compliance with the Natural Features and Resources Code

Development that is consistent with the performance criteria of the Natural Features and Resources Code complies with the Natural Features and Resources Code.

5.4.3 Overall Outcomes for the Natural Features and Resources Code

The overall outcomes are the purpose of the Natural Features and Resources Code. The overall outcomes sought for the Natural Features and Resources Code are the following:

- (a) development occurring on or near extractive resource areas (including mineral resources) and associated haulage routes keeps the resource available for feasible extraction by avoiding significant conflicts with such extraction;
- (b) the potential impacts of extractive industries and mining on sensitive uses contained within extractive resources areas are minimised;
- (c) Fish Habitat Areas (under the *Queensland Fisheries Act 1944*) are protected to preserve their open space, recreational, environmental, scientific, commercial and cultural values;
- (d) Natural waterways are protected to preserve their important contribution to ecological processes, shore line and bank stabilisation, hydraulic and flood carrying capacity, and their open space, recreational, environmental, scientific, commercial and cultural values;
- (e) Significant natural habitat for flora and fauna species and other valued natural areas is protected, linked and where appropriate rehabilitated or restored;
- (f) Good quality agricultural land (GQAL) is protected from development that fragments, alienates or diminishes the productivity of the natural resource;
- (g) The landscape value of natural landmarks within areas of significant natural habitat is retained.

5.4.4 Assessment Guidance: Explanation of Key Terms

"**extractive resource area**" means an area identified on **Natural Features and Resources Overlay Map 1 Extractive Resources**. For the purposes of the Natural Features and Resources Code the term includes the Resource Processing Area within a Key Resource Area identified in the State Planning Policy for the Protection of Extractive Resources or the Guideline to the State Planning Policy for the Protection of Extractive Resources (when adopted).

"**extractive resource separation area**" means:

- (a) for a Key Resource Area, the area between the outer boundary of the Key Resource Area and the Resource Processing Area; or
- (b) for any other extractive resource area, an area within:
 - (i) 1,000m from a hardrock resource where blasting, crushing or screening is involved; or
 - (ii) 200m from a sand or gravel resource or other resource which does not involve blasting or crushing; or
 - (iii) 200m from the boundary of a mining lease or a mineral development licence.

The separation distance from the extractive resource is to be measured from the known limit of the extractive resource area.

"**haulage route**" for the purposes of the Natural Features and Resources Code means any State-controlled Road or local road of regional significance shown on the Regional Infrastructure Overlay Map.

"**haulage route buffer**" means an area of 100m width on each side of the Bruce Highway, Isis Highway (Bundaberg - Childers Section) and Goodwood Road and 40m width on each side of all other State-controlled Roads and local roads of regional significance shown on the **Regional Infrastructure Overlay Map**.

5.4.5 Natural Features and Resources Code assessment criteria

Performance Criteria		Acceptable Solutions	
<p><i>Note: Self assessable development must comply only with the acceptable solutions identified with an asterisk (*). Development that is identified as self assessable in the assessment tables but does not comply with the acceptable solutions identified with an asterisk is code assessable development.</i></p>			
Extractive Resources			
PC1	Development does not prevent or constrain the current or future viability and efficient winning or processing of extractive	AS1.1	Uses in extractive resource areas are one or more of the following:

Performance Criteria		Acceptable Solutions
	resources or mining within an extractive resource area.	<p>(a) Agriculture;</p> <p>(b) Animal Husbandry;</p> <p>(c) Extractive Industry; and</p> <p>(d) Forest Practice.</p> <p>AS1.2 Uses in extractive resource separation areas are one or more of the following:</p> <p>(a) Agriculture;</p> <p>(b) Animal Husbandry;</p> <p>(c) Aquaculture (Minor Impact)</p> <p>(d) Aquaculture (Major Impact)</p> <p>(e) Extractive Industry;</p> <p>(f) Forest Practice;</p> <p>(g) Open Space and Recreation;</p> <p>(h) Public Infrastructure;</p> <p>(i) Rural Home Industry;</p> <p>(j) Saleyard;</p> <p>(k) Salvage Yard;</p> <p>(l) Stable;</p> <p>(m) Telecommunications Facilities; and</p> <p>(n) Vehicle Depot</p> <p>AS1.3 Reconfiguring a lot in an extractive resource area or an extractive resource separation area does not involve the creation of any additional lots.</p> <p>AS1.4 Development incorporates design, orientation and construction measures that mitigate the effects of noise, dust, ground vibration or air blast overpressure from extractive industry to an acceptable level with respect to the amenity of persons living, working or congregating on the premises.</p>
PC2	<p>Development adjoining haulage routes and within haulage route buffers ensures that:</p> <p>(a) transport operations are able to occur in an efficient manner;</p> <p>(b) a suitable level of amenity is enjoyed by residents and other users of land</p>	<p>AS2.1* Development involving a sensitive receptor³⁴ is not located:</p> <p>(a) within 100m of the road reserve boundary of:</p> <p>(i) Bruce Highway;</p>

³⁴ "Sensitive receptor" is defined in Part 2.1.2 Other Development and Administrative Terms

Performance Criteria		Acceptable Solutions
	<p>within haulage route buffers; and</p> <p>(c) access from the development to the haulage route is safe and efficient.</p>	<p>(ii) Isis Highway (Bundaberg – Childers Section); or</p> <p>(iii) Goodwood Road;</p> <p>or</p> <p>(b) within 40m of the road reserve boundary of any other State-controlled Road or local road of regional significance.</p> <p>(refer to Regional Infrastructure Overlay Map)</p>
		<p>AS2.2 Development for:</p> <p>(a) a sensitive receptor; or</p> <p>(b) reconfiguring a lot to increase the number of lots for a sensitive receptor</p> <p>incorporates measures that overcome potential adverse impacts and land use conflicts, including but not limited to:</p> <p>(A) landscape buffer strips;</p> <p>(B) mounding and screening; and</p> <p>(C) the maintenance of adequate separation distances.</p> <p>No acceptable solution is prescribed in relation to traffic safety and efficiency for access to the haulage route.</p>
Fish Habitat Areas		
PC3	The productive capacity and other values of Fish Habitat Areas are protected from the impacts of development.	AS3.1 Development within 500m of the Highest Astronomical Tide (HAT) level is located at least 100m from the boundary of a Fish Habitat Area and within an existing cleared area on the site.
Natural Waterways		
PC4	Development retains, enhances and maintains the environmental values of waterways by providing adequate setbacks and buffers.	AS4.1 Natural buffer areas are maintained to waterways, with a minimum width of: <p>(a) 100 metres from the high or outer bank where the waterway is within Significant Natural Habitat identified on Natural Features and Resources Overlay Map 3 Significant Natural Habitat; or</p>

Performance Criteria		Acceptable Solutions
		<p>(b) otherwise, 100 metres from the high or outer bank in the case of aquaculture (major impact), aquaculture (minor impact), intensive animal husbandry including piggery, saleyard and kennel, and 50 metres in the case of all other development.</p> <p>AS4.2 Development does not interfere with the natural drainage systems associated with a waterway.</p>
PC5	Bank stability, channel integrity and in-stream habitat is protected from degradation and maintained or improved at a standard commensurate with pre-development environmental conditions.	AS5.1 No direct interference or modification of waterway channels, banks or riparian and in-stream habitat occurs.
PC6	Development ensures that water quality levels are protected, maintained or improved by incorporating water-sensitive urban design.	<p>AS6.1 Water quality levels for stormwater, on-site wastewater and any site run-off meet the standards set in the <i>Australian and New Zealand Guidelines for Fresh and Marine Water Quality</i> (ANZECC, 2000) or the <i>Queensland Water Quality Guidelines</i>.</p> <p>AS6.2 Discharge of stormwater to a waterway occurs only where the water has been treated prior to discharge to remove or reduce contaminants such as sediment, litter, excess nutrients, oil and grease.</p> <p>AS6.3 Development is carried out so that it will not lead to an increased nutrient load or nutrient enrichment (particularly nitrogen and phosphorus).</p> <p>AS6.4 Stormwater and on-site wastewater do not contaminate surface and ground water flows.</p>
PC7	Development retains the existing hydrological regime (surface and ground water cycle and flow) to protect significant vegetation and habitats.	<p>AS7.1 Existing flows of surface and ground water are not altered through construction of channelled flows or the redirection or interruption of flows</p> <p>OR</p> <p>AS7.2 Earthworks and changes to drainage, groundwater levels, flooding and tidal hydraulics are designed and constructed to avoid detrimental impacts on waterway habitat.</p>
PC8	Construction and operational management of development mitigates adverse impacts	AS8.1 Environmental protection and management measures are in place to prevent or control sedimentation, erosion

Performance Criteria		Acceptable Solutions
	on waterways.	and other pollutants from construction activities.
PC9	<p>Any potentially adverse effect of filling or excavation on:</p> <p>(a) any property, watercourse or stormwater drainage works in the vicinity; or</p> <p>(b) any watercourse</p> <p>is prevented or adequately mitigated.</p>	<p>AS9.1 The excavation or filling does not:</p> <p>(a) Cause ponding on the site or on any nearby land;</p> <p>(b) Increase flooding on any land in the vicinity;</p> <p>(c) Increase run-off characteristics for storm events.</p> <p>(d) Reduce the waterway area available in any natural or artificial watercourse for either present or estimated future flood flows;</p> <p>(e) Interfere with the flow of water in any overland flow path; or</p> <p>(f) Reduce the volume within a flood plain available for the storage of floodwaters.</p>
Significant Natural Habitat		
PC10	<p>Development does not impact adversely upon the environmental integrity, function or values of the Shire's Significant Natural Habitat.</p>	<p>AS10.1* Development is not located within Significant Natural Habitat identified on Natural Features and Resources Overlay Map 3 Significant Natural Habitat</p> <p>OR</p> <p>Development occurs within an existing cleared or degraded area on land identified as Significant Natural Habitat on Natural Features and Resources Overlay Map 3 Significant Natural Habitat.</p>
PC11	<p>Adverse impacts of development on ecologically significant areas are avoided or minimised</p> <p>AND</p> <p>Ecological and other natural features on or adjacent to the site are identified and incorporated into the layout and design of development.</p>	<p>AS11.1 The layout and design of development:</p> <p>(a) locates buildings and associated infrastructure (including roads) outside ecologically significant areas;</p> <p>(b) minimises the area affected by vegetation clearing;</p> <p>(c) minimises the extent of earthworks and other construction activities;</p> <p>(d) provides functional ecological corridors and buffers;</p> <p>(e) avoids disruption to natural drainage</p>

Performance Criteria		Acceptable Solutions
		<p>lines and hydrology; and</p> <p>(f) minimises the length and width of road pavements.</p> <p>AS11.2 Habitat is retained in manageable configurations which retain ecological viability and minimise edge effects.</p> <p>AS11.3 Development adjacent to retained habitat provides buffers to protect the nature conservation value of the habitat and incorporates appropriate fire management measures, controlled access for maintenance and fencing.</p>
PC12	Ecological corridors are provided of dimensions sufficient to facilitate the movement of fauna between ecologically significant areas on or adjacent to the site.	AS12.1 Ecological corridors have a minimum width of 200m and a ratio of width to length of 1:5 or wider.
PC13	Degraded areas not occupied by development are rehabilitated as near as is practical to the naturally occurring composition of plant species, respond to the habitat requirements of fauna and avoid the occurrence of any pest and environmental weed species.	AS13.1 No acceptable solution prescribed.
PC14	<p>Landscaping supports the continued viability of ecologically significant areas on or adjoining the site through:</p> <p>(a) species composition and structure that reflects the native remnant vegetation present on the site or surrounds;</p> <p>(b) incorporation of all remnant vegetation including isolated vegetation stands and individual trees living or dead;</p> <p>(c) creation or enhancement of linkages between existing areas of ecological significance; and</p> <p>(d) promotion of natural regeneration in areas previously cleared or degraded by weeds.</p>	<p>AS14.1 Site landscaping includes the following elements:</p> <p>(a) native plants of local provenance;</p> <p>(b) known food and habitat trees and shrubs;</p> <p>(c) replication of adjacent healthy remnant habitats, including understorey vegetation;</p> <p>(d) no declared noxious plants or invasive plants likely to displace native flora species or degrade fauna habitat; and</p> <p>(e) is located to provided additional buffering to or enhance links between ecologically significant areas.</p>
PC15	<p>Works associated with development avoid:</p> <p>(a) fragmentation of habitat areas; and</p> <p>(b) creating barriers to fauna movement.</p>	AS15.1 Any necessary habitat disturbance is sequenced so that fauna is not isolated from adjoining areas of habitat.

Performance Criteria		Acceptable Solutions
		<p>AS15.2 Roads are designed and constructed to provide safe wildlife crossing points through measures including but not limited to:</p> <p>(a) fencing that directs wildlife to a crossing point and prevents wildlife crossing in other locations; and</p> <p>(b) a low speed environment through the provision of narrow pavement widths and appropriate surface treatment, lighting and signage.</p> <p>AS15.3 Fencing adjoining areas of retained habitat allows for movement of native fauna and controls unrestricted access of domestic cats and dogs.</p> <p>AS15.4 Traversing of retained habitat and corridors by roads, fencing, service lines, buildings and other structures is avoided.</p>
PC16	Development respects the Shire's significant natural landmarks.	<p>AS16.1 Development does not undermine the aesthetic, cultural and functional values of Noake's Lookout.</p> <p>AS16.2 Any noteworthy natural landmarks including ridgelines, rocky outcrops or other geological formations are protected and incorporated into the development design and site layout.</p>
<i>Good Quality Agricultural Land</i>		
PC17	Development does not result in the alienation or loss of good quality agricultural land.	<p>AS17.1 Development on good quality agricultural land identified on Natural Features and Resources Overlay Map 4 Good Quality Agricultural Land directly supports sustainable agricultural and rural production, unless there is an overriding need for the development in terms of public benefit and no other site is suitable for the particular purpose.</p>

5.5 Assessment Table for Regional Infrastructure Overlay

5.5.1 Assessment categories for Regional Infrastructure Overlay

The assessment categories are identified for development affected by a Regional Infrastructure Overlay in column 2 of Table 5.3 as follows—

- (a) making a material change of use for a defined use listed in column 1;
- (b) other development listed in column 1 including—
 - (i) carrying out building work not associated with a material change of use;
 - (ii) excavating or filling not associated with a material change of use;
 - (iii) reconfiguring a lot; and
 - (iv) carrying out operational work for reconfiguring a lot.

5.5.2 Relevant assessment criteria for development affected by a Regional Infrastructure Overlay

The relevant assessment criteria for development affected by a Regional Infrastructure Overlay are referred to in column 3 of Table 5.3.

For self-assessable development and code assessable development, the relevant assessment criteria are applicable codes.

5.5.3 Table 5.3 Assessment Categories and Relevant Assessment Criteria for Regional Infrastructure Overlay

Column 1 Development Type	Column 2 Assessment Category	Column 3 Applicable Codes
BUNDABERG AIRPORT OPERATIONAL AIRSPACE OVERLAY		
Material change of use		
Extractive Industry Industry Open Space and Recreation Outdoor Entertainment Public Infrastructure where a putrescible waste management facility Tourist Facility	<i>Code assessable</i> if located within Bundaberg airport operational airspace (15 km radius from runway) on the Regional Infrastructure Overlay Map <i>or</i> <i>Exempt</i> otherwise	Regional Infrastructure Overlay Code – overall outcomes and performance criteria for Bundaberg Airport Operational Airspace
All other material change of use	<i>Exempt</i>	
Other Development		
All other development	<i>Exempt</i>	

Column 1 Development Type	Column 2 Assessment Category	Column 3 Applicable Codes
GAS PIPELINE OVERLAY		
Material change of use		
All material change of use except where otherwise identified in Column 1 of this table	<p><i>Self assessable</i> if premises within 200m of the Gas Pipeline alignment on the Regional Infrastructure Overlay Map; <i>or</i> <i>Code assessable</i> if acceptable solutions of the applicable code are not complied with;</p> <p><i>or</i></p> <p><i>Exempt</i> otherwise</p>	<p>If self assessable, Regional Infrastructure Overlay Code – acceptable solutions for Gas Pipeline</p> <p>If code assessable, Regional Infrastructure Overlay Code – overall outcomes and performance criteria for Gas Pipeline</p>
Agriculture Animal Husbandry Aquaculture (Minor Impact)	<i>Exempt</i>	
Other Development		
<p>Building work where not associated with a material change of use</p> <p>Operational work for excavation or filling of land not associated with a material change of use</p> <p>Operational work associated with reconfiguring a lot</p> <p>Reconfiguring a lot</p>	<p><i>Exempt</i> if the criteria for <i>self assessable</i> do not apply</p> <p><i>or</i></p> <p><i>Self assessable</i> if premises within 200m of the Gas Pipeline on the Regional Infrastructure Overlay Map <i>or</i> <i>Code assessable</i> if acceptable solutions of the applicable code are not complied with</p>	<p>If self assessable, Regional Infrastructure Overlay Code – acceptable solutions for Gas Pipeline</p> <p>If code assessable, Regional Infrastructure Overlay Code – overall outcomes and performance criteria for Gas Pipeline</p>
Other	<i>Exempt</i>	
HIGH VOLTAGE ELECTRICITY TRANSMISSION LINE OVERLAY		
Material change of use		
All material change of use except where otherwise identified in Column 1 of this table	<p><i>Self assessable</i> if premises within 30m of the 275 kVA Powerlines alignment on the Regional Infrastructure Overlay Map; <i>or</i> <i>Code assessable</i> if acceptable solutions of the applicable code are not complied with</p> <p><i>or</i></p> <p><i>Exempt</i> otherwise</p>	<p>If self assessable, Regional Infrastructure Overlay Code – acceptable solutions for High Voltage Electricity Transmission Line</p> <p>If code assessable, Regional Infrastructure Overlay Code – overall outcomes and performance criteria for High Voltage Electricity Transmission Line</p>
Agriculture Animal Husbandry Aquaculture (Minor Impact) Aquaculture (Major Impact) Bulk Store Bulky Goods Retailing Carpark Extractive Industry	<i>Exempt</i>	

Column 1 Development Type	Column 2 Assessment Category	Column 3 Applicable Codes
Fast food Premises Funeral Parlour Hotel Indoor Entertainment Industry Intensive Animal Husbandry Kennel Manufacturer’s Shop Open Space and Recreation Outdoor Entertainment Packing Shed Plant Nursery Public Infrastructure Restaurant Roadside Stall Rural Home Industry Rural Industry Saleyard Salvage Yard Shop - Neighbourhood Shop Stable Tavern Telecommunications Facilities		
Other Development		
Building work where not associated with a material change of use Reconfiguring a lot	<i>Self assessable</i> if premises within 30m of the 275 kVA Powerlines alignment on the Regional Infrastructure Overlay Map ; or <i>Code assessable</i> if acceptable solutions of the applicable code are not complied with or Exempt otherwise	If self assessable, Regional Infrastructure Overlay Code – acceptable solutions for High Voltage Electricity Transmission Line If code assessable, Regional Infrastructure Overlay Code – overall outcomes and performance criteria for High Voltage Electricity Transmission Line
Other	<i>Exempt</i>	
LAND TRANSPORT INFRASTRUCTURE OVERLAY		
Material change of use		
All material change of use for a Sensitive Receptor ³⁵	<i>Self assessable</i> if premises located within – (a) 100m of the Bruce Highway, Isis Highway (Bundaberg – Childers Section) or Goodwood Road; or (b) 100m of the Bruce Highway Childers Bypass alignment; or (c) 40m of any other State-controlled Road or local road of regional significance; or (d) 100m of any railway; or (e) 40m of any tramway or tramway siding identified on the Regional Infrastructure Overlay Map	If self assessable, Regional Infrastructure Overlay Code – acceptable solutions for Land Transport Infrastructure

³⁵ Sensitive Receptor is defined in Part 2 Interpretation, section 2.1.2.

Column 1 Development Type	Column 2 Assessment Category	Column 3 Applicable Codes
	<p><i>or</i> Code assessable if acceptable solutions of applicable code are not complied with</p> <p><i>or</i> Exempt otherwise</p>	<p>If code assessable, Regional Infrastructure Overlay Code – overall outcomes and performance criteria for Land Transport Infrastructure</p>
All other material change of use	Exempt	
Other Development		
<p>Reconfiguring a lot in the Rural Protected Zone, Rural Zone, Rural Residential Zone or Residential Zone</p>	<p><i>Self assessable</i> if premises located within –</p> <p>(a) 100m of the Bruce Highway, Isis Highway (Bundaberg – Childers Section) or Goodwood Road; or</p> <p>(b) 100m of the Bruce Highway Childers Bypass alignment; or</p> <p>(c) 40m of any other State-controlled Road or local road of regional significance; or</p> <p>(d) 100m of any railway; or</p> <p>(e) 40m of any tramway or tramway siding identified on the Regional Infrastructure Overlay Map</p> <p><i>or</i> Code assessable if acceptable solutions of applicable code are not complied with</p> <p><i>or</i> Exempt otherwise</p>	<p>If self assessable, Regional Infrastructure Overlay Code – acceptable solutions for Land Transport Infrastructure</p> <p>If code assessable, Regional Infrastructure Overlay Code – overall outcomes and performance criteria for Land Transport Infrastructure</p>
Other	Exempt	

5.6 Assessment criteria for Regional Infrastructure Overlay

5.6.1 Regional Infrastructure Overlay Code

The provisions in this section comprise the Regional Infrastructure Overlay Code. They are:

- (a) Compliance with the Regional Infrastructure Overlay Code;
- (b) Overall Outcomes for the Regional Infrastructure Overlay Code; and
- (c) Assessment Criteria (performance criteria and associated acceptable solutions) for the Regional Infrastructure Overlay Code.

5.6.2 Compliance with the Regional Infrastructure Overlay Code

Development that is consistent with the performance criteria of the Regional Infrastructure Overlay Code complies with the Regional Infrastructure Overlay Code.

5.6.3 Overall Outcomes for the Regional Infrastructure Overlay Code

The overall outcomes are the purpose of the Regional Infrastructure Overlay Code. The overall outcomes sought for the Regional Infrastructure Overlay Code are the following:

- (a) Aircraft safety in operational airspace is maintained;
- (b) The existing and future operation and function of the gas pipeline is not compromised by development within or adjacent to the alignment of the pipeline;
- (c) The existing and future operation and function of the high voltage electricity transmission line corridors (Woolooga – Gin Gin 275 kVA line and South Pine – Gin Gin No. 2 275kVA line) is not compromised by development within or adjacent to the alignment of the transmission line corridors;
- (d) The acoustic environment of future noise sensitive developments (future sensitive receptors³⁶) adjacent to arterial roads, railways and tramways is appropriate for the intended use;
- (e) The existing and future operation and function of the arterial road network, the railway line and the tramway network is not compromised by adjacent development.

5.6.4 Regional Infrastructure Overlay Code assessment criteria

Performance Criteria		Acceptable Solutions	
<p><i>Note: Self assessable development must comply only with the acceptable solutions identified with an asterisk (*). Development that is identified as self assessable in the assessment tables but does not comply with the acceptable solutions identified with an asterisk is code assessable development.</i></p>			
Bundaberg Airport Operational Airspace			
PC1	(a) Permanent or temporary physical obstructions do not adversely affect	AS1.1	Activities associated with development do not involve parachuting, hot air

³⁶ "Sensitive receptor" is defined in Part 2.1.2 Other Development and Administrative Terms

Performance Criteria		Acceptable Solutions
	operational airspace; (b) Emissions do not significantly affect turbulence, visibility, or engine operation in operational airspace; and (c) Wildlife, particularly flying vertebrates, such as birds and bats, are not attracted into operational airspace in significant numbers.	ballooning, hang-gliding, soaring or other transient intrusion into airspace at high altitude. AS1.2 None of the following is emitted: (a) a gaseous plume at a velocity exceeding 4.3m per second; or (b) smoke, dust, ash or steam. AS1.3 Development does not involve the disposal of putrescible waste.
Gas Pipeline		
PC2	Development provides a suitable separation distance from the gas pipeline and maintains the integrity and safety of the gas pipeline ³⁷ .	AS2.1* Develop does not occur within 200m of the gas pipeline alignment identified on the Regional Infrastructure Overlay Map .
High Voltage Electricity Transmission Line		
PC3	Development provides a suitable separation distance from the high voltage electricity transmission line and maintains the integrity and safety of the high voltage electricity transmission line.	AS3.1* Development involving a sensitive receptor is set back a minimum distance of 30m from the most proximate boundary of an electricity transmission line easement for the 275kV transmission lines shown on the Regional Infrastructure Overlay Map
Land Transport Infrastructure		
<i>Roads</i>		
PC4	Development involving a sensitive receptor achieves a satisfactory level of amenity for occupants and does not impact on the cost of maintaining the safety and efficiency of the road network.	AS4.1* Development involving a sensitive receptor, is not located: (a) within 100m of the road reserve boundary of: (i) Bruce Highway; (ii) Isis Highway (Bundaberg – Childers Section); (iii) Goodwood Road; or (iv) Bruce Highway Childers Bypass

³⁷ Written agreement to development from the pipeline licence holder may be required under the *Petroleum and Gas (Production and Safety) Act 2004*

Performance Criteria	Acceptable Solutions
	<p>alignment</p> <p>or</p> <p>(b) within 40m of the road reserve boundary of any other State-controlled Road or local road of regional significance.</p> <p>(refer to Regional Infrastructure Overlay Map)</p> <p>OR</p> <p>AS4.2 Development involving a sensitive receptor that is located:</p> <p>(a) within 100m of the road reserve boundary of:</p> <p>(i) Bruce Highway;</p> <p>(ii) Isis Highway (Bundaberg – Childers Section);</p> <p>(iii) Goodwood Road; or</p> <p>(iv) Bruce Highway Childers Bypass alignment</p> <p>or</p> <p>(b) within 40m of the road reserve boundary of any other State-controlled Road or local road of regional significance,</p> <p>is positioned, oriented, designed and constructed to comply with Table 5.4 - Road Traffic Noise Primary Design Level Criteria by:</p> <p>(A) locating bedrooms and internal and external living areas furthestmost from the noise source;</p> <p>(B) using construction, insulation and glazing materials with a high noise transmission loss, in accordance with <i>Australian Standard 3671-1989 Acoustic-Road Traffic Noise Intrusion - Building Siting and Construction</i>;</p> <p>(C) minimising openings in walls facing the noise source;</p>

Performance Criteria	Acceptable Solutions
	<p>(D) establishing noise barriers including acoustic fencing, earth mounding and landscape planting between the building and the noise source; and</p> <p>(E) providing an effective separation distance between the building and the noise source.</p> <p>AS4.3 Except for boundary realignments and lots created for nature conservation or buffering purposes, reconfiguring a lot does not create any additional lots that are within a Rural Zone, Rural Protected Zone (Category 1 or Category 2), Rural Residential Zone or Residential Zone and located:</p> <p>(a) within 100m of the road reserve boundary of:</p> <ul style="list-style-type: none"> (i) Bruce Highway; (ii) Isis Highway (Bundaberg – Childers Section); (iii) Goodwood Road; or (iv) Bruce Highway Childers Bypass alignment <p>or</p> <p>(b) within 40m of the road reserve boundary of any other State-controlled Road or local road of regional significance.</p> <p>OR</p> <p>AS4.4 Except for boundary realignments and lots created for nature conservation or buffering purposes, any additional lot that is within a Rural Zone, Rural Protected Zone (Category 1 or Category 2), Rural Residential Zone or Residential Zone and located:</p> <p>(a) within 100m of the road reserve boundary of:</p> <ul style="list-style-type: none"> (i) Bruce Highway; (ii) Isis Highway (Bundaberg – Childers Section);

Performance Criteria		Acceptable Solutions
		<p>(iii) Goodwood Road; or</p> <p>(iv) Bruce Highway Childers Bypass alignment</p> <p>or</p> <p>(b) within 40m of the road reserve boundary of any other State-controlled Road or local road of regional significance</p> <p>is capable of occupation by a sensitive receptor without the need for subsequent noise attenuation measures in the design and construction of any building or outdoor area associated with the use.</p>
PC5	<p>Reconfiguring of lots does not:</p> <p>(a) interfere with the safety and efficiency of the road network; or</p> <p>(b) encourage the use of State-controlled Roads or local roads of regional significance for local trips.</p>	<p>AS5.1 Reconfiguring a lot, whether by subdivision or realignment of boundaries, does not increase the number of lots having direct access to a State-controlled Road or a local road of regional significance.</p> <p>AS5.2 New roads providing access to new lots do not directly connect with State-controlled Roads or local roads of regional significance.</p>
Railway and Tramways		
PC6	<p>Development involving a sensitive receptor achieves a satisfactory level of amenity for occupants and does not impact on the cost of maintaining the safety and efficiency of the railway or tramway network.</p>	<p>AS6.1* Development involving a sensitive receptor is not located within:</p> <p>(a) 100m of any railway; or</p> <p>(b) 40m of any tramway or tram siding identified on the Regional Infrastructure Overlay Map.</p> <p>OR</p> <p>AS6.2 Development involving a sensitive receptor that is located within:</p> <p>(a) 100m of any railway; or</p> <p>(b) 40m of any tramway or tram siding identified on the Regional Infrastructure Overlay Map, is positioned, oriented, designed and constructed to comply with Table 5.5 –</p>

Performance Criteria	Acceptable Solutions
	<p>Rail Traffic Noise Primary Design Level Criteria by:</p> <ul style="list-style-type: none"> (A) locating bedrooms and internal and external living areas furthest from the noise source; (B) using construction, insulation and glazing materials with a high noise transmission loss, in accordance with <i>Australian Standard 3671-1989 Acoustic-Road Traffic Noise Intrusion - Building Siting and Construction</i>; (C) minimising openings in walls facing the noise source; (D) establishing noise barriers including acoustic fencing, earth mounding and landscape planting between the building and the noise source; and (E) providing an effective separation distance between the building and the noise source. <p>AS6.3 Except for boundary realignments and lots created for nature conservation or buffering purposes, reconfiguring a lot does not create any additional lots that are within a Rural Zone, Rural Protected Zone (Category 1 or Category 2), Rural Residential Zone or Residential Zone and located within:</p> <ul style="list-style-type: none"> (a) 100m of any railway; or (b) 40m of any tramway or tram siding <p>identified on the Regional Infrastructure Overlay Map.</p> <p>OR</p> <p>AS6.4 Except for boundary realignments and lots created for nature conservation or buffering purposes, any additional lot within a Rural Zone, Rural Protected Zone (Category 1 or Category 2), Rural Residential Zone or Residential Zone and located within:</p> <ul style="list-style-type: none"> (a) 100m of any railway; or (b) 40m of any tramway or tram siding

Performance Criteria		Acceptable Solutions
		identified on the Regional Infrastructure Overlay Map , is capable of occupation by a sensitive receptor without the need for subsequent noise attenuation measures in the design and construction of any building or outdoor area associated with the use.
PC7	Reconfiguration of lots adjacent to railways, tramways and tramway sidings does not have an impact upon the safety and efficiency of the adjacent transport infrastructure.	AS7.1 Roads and streets do not cross existing railways and tramways where there is an existing crossing which can provide access, or an alternative access to the site can be provided.

Table 5.4 – Road Traffic Noise Primary Design Level Criteria

Measurement Location	Primary Design Level Criteria
One metre in front of the most exposed part of a proposed noise sensitive place.	Road traffic noise levels are to comply with the external noise criteria specified in Section B6 (Proposed Residential Developments) of the Road Traffic Noise Management Code of Practice January 2000, Department of Man Roads. That is, for a residential development (temporary or permanent occupancy): (a) 60 dB (A) L ₁₀ (18 hour) or less, where existing levels measured at the local government deemed-to-comply dwelling setback distance are greater than 40 dB (A) L ₉₀ (8 hour) between 10pm and 6am. (L ₁₀ (18 hour) is the arithmetic average of 18 hourly L ₁₀ levels measured in dB (A) between the hours of 6am and midnight); or (b) 57 dB (A) L ₁₀ (18 hour) or less, where existing levels measured at the local government deemed-to-comply dwelling setback distance are less than or equal to 40 dB (A) L ₉₀ (8 hour) between 10pm and 6am; (c) where the above criteria cannot be met, internal maximum design criterion levels specified in Table 1, AS2107-2000 Acoustics – Recommended Design Sound Levels and Reverberation Times for Building Interiors apply, particularly for buildings greater than one storey high.
Balconies and formal external open space	Road traffic noise levels are to comply with the following requirements from the Road Traffic Noise Management Code of Practice January 2000, Department of Man Roads: (a) 60 dB (A) L ₁₀ (18 hour) or less, where existing levels measured at the local government deemed-to-comply dwelling setback distance are greater than 45 dB (A) L ₉₀ (18 hour); or (b) 57 dB (A) L ₁₀ (18 hour) or less, where existing levels measured at the local government deemed-to-comply dwelling setback distance are less than or equal to 45 dB (A) L ₉₀ (18 hour).
Classrooms, meeting or habitable rooms	Road traffic noise levels are to comply with the following requirements from the Road Traffic Noise Management Code of Practice January 2000,

Measurement Location	Primary Design Level Criteria
	Department of Man Roads: (a) 48 dB (A) L ₁₀ (1 hour) or less, as measured or calculated (in the centre of the room) as an indoor level between the hours of 8am and 4pm.
Parks, outdoor educational and recreational areas	Road traffic noise levels are to comply with the following requirements from the Road Traffic Noise Management Code of Practice January 2000, Department of Man Roads: (a) 63 dB (A) L ₁₀ (12 hour) or less, taking into consideration the full circumstances surrounding the provision and future use of the park or recreational area (the level is a free field level).

Notes:

For the measurements above, all external levels stated are free field, and the expectation is that an additional 2.5 dB (A) increase is applied for the façade correction when the building is constructed. This will achieve a level of equal to or less than 63 dB (A) and 60 dB (A), respectively, 1 metre from the most exposed façade of a building.

The calculation and prediction of road noise levels is to be in accordance with the Road Traffic Noise Management Code of Practice January 2000, Department of Man Roads, and measurement to be in accordance with Australian Standard AS2702-1984: Acoustics – Methods for the Measurement of Road Traffic Noise. Alternative road traffic noise prediction models may be used where they can be justified as being appropriate to the circumstances of the particular situation and location and have been validated for Australian conditions.

An assessment of road traffic noise is to be based on an ultimate ten-year traffic planning horizon for the road, from the completion of construction of the development.

The determination of building construction, siting and design measures required to achieve internal noise levels shall be in accordance with Australian Standard 2107: Acoustics – Recommended Design Sound Levels and Reverberation Times for Building Interiors and Australian Standard 3671: Acoustics – Road Traffic Noise Intrusions – Building Siting and Construction. Alternative methods may be used where they can be justified as being appropriate to the circumstances of the particular situation and location.

All noise barriers shall be designed and constructed in accordance with the requirements of Main Roads Standard Specification MRS11.15. Certified (RPEQ) structural drawings shall be submitted to Main Roads for review prior to construction. The "as constructed" noise barriers will be inspected by a Main Roads officer prior to final acceptance.

When the requirements of AS2107 and AS3671 need to be achieved, the developer / owner shall engage the service of an acoustical engineer to certify (RPEQ) that the architectural measures (including air-conditioning / mechanical ventilation system if proposed) have been incorporated into the building envelope. This will require the engineer to undertake inspections both during and at the end of construction.

Earth mounds shall be designed and constructed in accordance with Main Roads Standard Specification MRS11.04.

Table 5.5 – Rail Traffic Noise Primary Design Level Criteria

Measurement Location	Primary Design Level Criteria
Internal design noise criteria	Average maximum sound pressure levels of train passby events between 10pm and 6am does not exceed 50dB(A) (applied only to bedrooms of

	dwelling units)
External design noise criteria	(a) 65dB(A), assessed as the 24 hour average equivalent continuous A-weighted sound pressure level; and (b) 87dB(A), assessed as a single event maximum sound pressure level.