# 6.2.9 Recreation and open space zone code

# 6.2.9.1 Application - Recreation and open space zone

This code applies to undertaking development in the Recreation and open space zone, if:

- the development has been categorised as either accepted development subject to requirements or assessable development - code assessment, and this code is identified as applicable to that development in the assessment benchmarks for assessable development and requirements for accepted development column of a table of assessment (Part 5);
- 2. the development has been categorised as assessable development impact assessment (Part 5).

When using this code, reference should be made to section 5.3.2 Determining the category of development and category of assessment and, where applicable, section 5.3.3 Determining and applying the requirements for accepted development and the assessment benchmarks for assessable development located in Part 5.

For accepted development subject to requirements or assessable development under this Code:

- 1. Part A of the code applies to accepted development subject to requirements
- 2. Part B of the code applies to assessable development.

### 6.2.9.2 Purpose - Recreation and open space zone

- 1. The purpose of the Recreation and open space zone is to provide for a range of sporting, recreation, leisure, cultural and educational activities. It may provide for local, district and regional scale parks that serve the recreation needs of residents and visitors and may include areas for conservation. Areas such as parks, playing fields and playgrounds are generally accessible to the public; however, access may be limited in certain areas and at certain times. Where required to meet community needs, development may include built structures, such as shelters, amenity facilities, picnic tables, clubhouses, gymnasiums, public swimming pools and tennis courts, and other infrastructure to support the activities, provide safe access and support the management of these essential built structures. Commercial activities are provided for under limited circumstances. The Recreation and open space zone and associated precinct seeks to implement the policy direction set in Part 3, Strategic Framework.
- 2. The Recreation and open space zone includes one precinct, being the Sports and recreation precinct. The purpose for the Sports and recreation precinct is to recognise existing sport and recreation facilities, on both public and private land, and facilitate their ongoing development and use for the benefit and enjoyment of the community. Therefore, in addition to the general Recreation and open space zone purpose statement, overall outcomes and assessment criteria, there are specific precinct based purpose statements, overall outcomes and assessment criteria. These provide specific guidance and direction regarding the land use outcomes sought in the precinct that are in addition to the Recreation and open space zone. Where there is a conflict, the precinct specific overall outcomes and development tables take precedence and the Recreation and open space zone outcomes and development tables do not apply.
- 3. The purpose of the Recreation and open space zone will be achieved through the following overall outcomes:
  - a. A range of formal and informal, active and passive sport and recreation opportunities are provided to meet community needs. This includes, but not limited to, playing fields, club facilities, play grounds, botanic and community gardens, civic and cultural facilities, public swimming pools, outdoor courts, educational and community activities, indoor and outdoor sporting and recreation activities, recreation trails and camping areas. Ancillary structures and buildings such as shelters, amenity facilities, picnic tables and playgrounds are expected to establish as necessary.
  - b. Development is an appropriate size, scale and intensity and having minimal adverse impacts on the use, enjoyment, function and operation of the Council's open space network.
  - c. Commercial activities having a nexus with, and ancillary to, sport and recreation uses establish where they complement the social, leisure and recreation experience of open space users; or where on Council owned or controlled land, commercial activities occur where in accordance with a Council approved Master plan.

- Markets<sup>(46)</sup> or outdoor entertainment events are temporary or periodic in nature, and of a scale and intensity where any adverse impacts on the surrounds are mitigated and internalised to the site. Markets (46) and outdoor events do not adversely impact on the safe and efficient operation of the external road network.
- Where applicable, development is undertaken in accordance with a Council Master Plan approved under e. Council policy.
- f. Recreation and open space areas remain well connected, diverse, functional, safe, secure and accessible to the general public and includes:
  - well designed and quality usable areas and facilities; i.
  - ii. building design adopting principles of Crime Prevention Through Environment Design (CPTED)
  - passive and active recreation and open spaces areas and facilities;
  - iv. high level of connectivity of the open space and community green space areas to the active transport network; and
  - a consideration of the aims and aspirations of the Council's Green Infrastructure Network.
- Adverse or nuisance impact on surrounding land uses are minimised through appropriate design considerations, separation, buffering, siting and operation of facilities and infrastructure.
- General works associated with the development achieves the following: h.
  - new development is provided with a high standard of services to meet and support the current and i. future needs of users of the site, including roads, street lighting services, telecommunications and reticulated electricity (underground wherever possible), water and sewerage (where available);
  - the development manages stormwater to: ii.
    - A. ensure the discharge of stormwater does not adversely affect the quality, environmental values or ecosystem functions of downstream receiving waters;
    - B. prevent stormwater contamination and the release of pollutants;
    - C. maintain or improve the structure and condition of drainage lines and riparian areas;
    - avoid off-site adverse impacts from stormwater.
  - the development does not result in unacceptable impacts on the capacity and safety of the external road network;
  - the development ensures the safety, efficiency and useability of access ways and parking areas; iv.
  - site works including earthworks are managed to be safe and have minimal impacts on adjoining or adjacent premises, the streetscape or the environment.
- i. Activities associated with a use do not cause a nuisance by way of aerosols, fumes, light, noise, odour, particles or smoke;
- Noise generating uses are designed, sited and constructed to minimise the transmission of noise to appropriate levels and do not cause environmental harm or nuisance.
- k. Development in a Water supply buffer is undertaken in a manner which contributes to the maintenance and enhancement where possible of water quality to protect the drinking water and aquatic ecosystem environmental values in those catchments.
- Development avoids areas subject to constraint, limitation, or environmental value. Where development I. cannot avoid these identified areas, it responds by:
  - adopting a 'least risk, least impact' approach when designing, siting and locating development in any area subject to a constraint, limitation or environmental value to minimise the potential risk to people. property and the environment;
  - ii. ensuring no further instability, erosion or degradation of the land, water or soil resource;

- when located within a Water buffer area, complying with the Water Quality Vision and Objectives contained in the Segwater Development Guidelines: Development Guidelines for Water Quality Management in Drinking Water Catchments 2012.
- iv. maintaining, restoring and rehabilitating environmental values, including natural, ecological, biological, aquatic, hydrological and amenity values, and enhancing these values through the provision of planting and landscaping, and facilitating safe wildlife movement and connectivity through:
  - the provision of replacement, restoration, rehabilitation planting and landscaping; A.
  - B. the location, design and management of development to avoid or minimise adverse impacts on ecological systems and processes;
  - C. the requiring of environmental offsets in accordance with the Environmental Offsets Act 2014.
- protecting native species and protecting and enhancing species habitat; V.
- protecting and preserving the natural, aesthetic, architectural historic and cultural values of significant trees, places, objects and buildings of heritage and cultural significance;
- establishing effective separation distances, buffers and mitigation measures associated with identified infrastructure to minimise adverse effects on sensitive land uses from odour, noise, dust and other nuisance generating activities;
- establishing, maintaining and protecting appropriate buffers to waterways, wetlands, native vegetation and significant fauna habitat;
- ensuring it promotes and does not undermine the ongoing viability, integrity, operation, maintenance ix. and safety of identified infrastructure;
- ensuring effective and efficient disaster management response and recovery capabilities; Χ.
- χi. where located in an overland flow path:
  - development siting, built form, layout and access responds to the risk presented by the overland Α. flow and minimises risk to personal safety;
  - B. development is resilient to the impacts of overland flow by ensuring the siting and design accounts for the potential risks to property associated with the overland flow;
  - development does not impact on the conveyance of the overland flow for any event up to and including the 1% AEP for the fully developed upstream catchment;
  - development directly, indirectly and cumulatively avoid an increase in the severity of overland flow and potential for damage on the premises or other premises, public lands, watercourses, roads or infrastructure.
- Development in the Recreation and open space zone includes one or more of the following:

•	Animal husbandry <sup>(4)</sup>	•	Food and drink outlet <sup>(28)</sup>	•	Night club entertainment facility <sup>(51)</sup>
•	Animal keeping <sup>(4)</sup>	•	Function facility <sup>(29)</sup>	•	Outdoor sport and
•	Bar <sup>(7)</sup>	•	Garden centre <sup>(31)</sup>		recreation <sup>(55)</sup>
•	Caretaker's accommodation	•	Health care services <sup>(33)</sup>	•	Park <sup>(57)</sup>
•	Child care centre <sup>(13)</sup>	•	Indoor sport and recreation <sup>(38)</sup>	•	Parking station <sup>(58)</sup>
•	Club <sup>(14)</sup>	•	Intensive horticulture <sup>(40)</sup>	•	Research and technology industry <sup>(64)</sup>
•	Community care centre <sup>(15)</sup>				•
•	Community use <sup>(17)</sup>	•	Market <sup>(46)</sup>	•	Service industry <sup>(73)</sup>
•	Cropping <sup>(19)</sup>	•	Landing <sup>(41)</sup>	•	Shop <sup>(75)</sup>

•	Educational establishment <sup>(24)</sup>	•	Major sport, recreation and entertainment facility <sup>(44)</sup>	•	Telecommunications facility <sup>(81)</sup>
•	Emergency services <sup>(25)</sup> Environment facility <sup>(26)</sup>	•	Nature-based tourism <sup>(50)</sup>	•	Tourist attraction <sup>(83)</sup> Tourist park <sup>(84)</sup>
				•	Wholesale nursery <sup>(89)</sup>

Note - Generally the above uses are appropriate on Council owned or controlled land and where in accordance with an approved Council Master Plan. Refer to Part 5, Table of assessment for further information.

Development in the Recreation and open space zone does not include any of the following:

•	Adult store <sup>(1)</sup>	•	Hotel <sup>(37)</sup>	•	Residential care facility <sup>(65)</sup>
•	Agricultural supplies store <sup>(2)</sup>	•	Intensive animal industry <sup>(39)</sup>	•	Resort complex <sup>(66)</sup>
•	Air services <sup>(3)</sup>	•	Low impact industry <sup>(42)</sup>	•	Retirement facility <sup>(67)</sup>
•	Aquaculture <sup>(6)</sup>	•	Major electricity	•	Roadside stall <sup>(68)</sup>
•	Brothel <sup>(8)</sup>		infrastructure <sup>(43)</sup>	•	Rooming accommodation <sup>(69)</sup>
•	Bulk landscape supplies <sup>(9)</sup>	•	Marine industry <sup>(45)</sup>	•	Rural industry <sup>(70)</sup>
•	Car wash <sup>(11)</sup>	•	Medium impact industry <sup>(47)</sup>	•	Rural workers'
•	Cemetery <sup>(12)</sup>	•	Multiple dwelling <sup>(49)</sup>		accommodation <sup>(71)</sup>
•	Community residence <sup>(16)</sup>	•	Non-resident workforce accommodation <sup>(52)</sup>	•	Sales office <sup>(72)</sup>
•	Crematorium <sup>(18)</sup>	•	Office <sup>(53)</sup>	•	Service industry <sup>(73)</sup>
•	Detention facility <sup>(20)</sup>	•	Outdoor sales <sup>(54)</sup>	•	Shopping centre <sup>(76)</sup>
•	Dual occupancy <sup>(21)</sup>	•	Permanent plantation <sup>(59)</sup>	•	Short-term accommodation <sup>(77)</sup>
•	Dwelling house <sup>(22)</sup>	•	Place of worship <sup>(60)</sup>	•	Showroom <sup>(78)</sup>
•	Dwelling unit <sup>(23)</sup>	•	Port services <sup>(61)</sup>	•	Special industry <sup>(79)</sup>
•	Extractive industry <sup>(27)</sup>	•	Relocatable home park <sup>(62)</sup>	•	Theatre <sup>(82)</sup>
•	Funeral parlour <sup>(30)</sup>	•	Renewable energy facility <sup>(63)</sup>	•	Transport depot <sup>(85)</sup>
•	Hardware and trade		,	•	Veterinary services <sup>(87)</sup>
	supplies <sup>(32)</sup>			•	Warehouse <sup>(88)</sup>
•	High impact industry <sup>(34)</sup>			•	Winery <sup>(90)</sup>
•	Home based business <sup>(35)</sup>				
•	Hospital <sup>(36)</sup>				

Development not listed in the tables above may be considered on its merits and where it reflects and Ο. supports the outcomes of the zone.

- The purpose of the Sports and recreation precinct will be achieved through the following additional overall 4. outcomes:
  - a. Ongoing viability and relevancy of existing and new indoor and outdoor sports and recreation facilities to meet community sport and recreation needs.
  - b. Where applicable, development is undertaken in accordance with a Council Master Plan approved under Council policy.
  - Activities other than sports and recreation activities having a nexus with, and ancillary to, sports and C. recreation activities are supported where:
    - i. activities do not compete with similar uses in centres;
    - ii. activities do not detract from the primary sports and recreation activity occurring on a site;
    - iii. activities do not have adverse impacts on the character and amenity of the surrounding receiving environment, including noise, traffic generation, lighting, rubbish and waste disposal.
  - Development adopt a high standard of design and achieve quality buildings, and structures, including d. adopting the principles of Crime Prevention Through Environment Design (CPTED).
  - Development is compatible with the existing and intended scale and character of the streetscape and e. surrounding area and does not appear visually dominant or overbearing.
  - f. Development adopts sensitive design and siting considerations when adjoining residential areas. Design measures such as landscaping, screening and separation are adopted to minimise the visual impact of buildings and hard surfaces and nuisance effects associated with lighting, noise, dust and rubbish disposal.
  - Development mitigates potential traffic impacts by: g.
    - i. locating on roads of a standard and capacity to accommodate traffic demand;
    - ii. providing safe and accessible vehicle access points, on-site manoeuvring and parking areas; and
    - iii. providing for active transport opportunities.
  - h. Development on the Redcliffe Leagues Club site (Lot 10 SP 244080 at 148 Klingner Road or Lot 1 SP180303 at 160 Klingner Road, Kippa-Ring) facilitates a limited range of commercial activities that are compatible with, and ancillary to, the operation of the club and associated outdoor facilities as an integrated development. Commercial activities are limited to short term accommodation<sup>(77)</sup>, shops<sup>(75)</sup>, offices<sup>(53)</sup>, and health care services (33).
  - i. Development in the Sports and recreation precinct includes one or more of the following:

•	Animal husbandry <sup>(4)</sup>	•	Food and drink outlet <sup>(28)</sup>	•	Outdoor sport and recreation <sup>(55)</sup>
•	Animal keeping <sup>(5)</sup>	•	Function facility <sup>(29)</sup>		Park <sup>(57)</sup>
•	Bar <sup>(7)</sup>	•	Garden centre <sup>(31)</sup>		Parking station <sup>(58)</sup>
•	Caretaker's accommodation <sup>(10)</sup>	•	Health care services <sup>(31)</sup>	•	_
	Child care centre <sup>(13)</sup>	•	Indoor sport and recreation <sup>(38)</sup>	•	Research and technology industry <sup>(64)</sup>
•			Intensive horticulture <sup>(40)</sup>	•	Service industry <sup>(73)</sup>
•	Commercial Activities Activity Group (where on	•		•	Shop <sup>(75)</sup>
	Lot 10 SP244080 at 148	•	Landing <sup>(41)</sup>	•	Telecommunications facility
					reseconfinding allons facility

Klingner Road or Lot 1 SP180303 at 160 Klingner Road, Kippa-Ring)  Community care centre <sup>(15)</sup> Community use <sup>(17)</sup> Club <sup>(14)</sup> Cropping <sup>(19)</sup> Educational establishment <sup>(24)</sup> Emergency services <sup>(25)</sup> Environment facility <sup>(26)</sup>	<ul> <li>Major sport, recreation and entertainment facility<sup>(44)</sup></li> <li>Market<sup>(46)</sup></li> <li>Nature-based tourism<sup>(50)</sup></li> <li>Nightclub entertainment facility<sup>(51)</sup></li> </ul>	<ul> <li>Tourist attraction<sup>(83)</sup></li> <li>Tourist park<sup>(84)</sup></li> <li>Wholesale nursery<sup>(89)</sup></li> </ul>
--	--	--

Note - Generally the above uses are appropriate on Council owned or controlled land and where in accordance with an approved Council Master Plan. Refer to Part 5, Table of assessment for further information.

Note - Commercial Activities Activity Group = short term accommodation (77), shops (75), offices (53), and health care services (33).

#### j. Development in the Sports and recreation precinct does not include any of the following:

•	Adult store <sup>(1)</sup>	•	Home based business <sup>(35)</sup>	•	Resort complex <sup>(66)</sup>
•	Agricultural supplies store <sup>(2)</sup>	•	Hospital <sup>(36)</sup>	•	Commercial Activities
•	Air services <sup>(3)</sup>	•	Hotel <sup>(37)</sup>		Activity Group not on Lot 10 SP244080 to 148 Klingner
•	Aquaculture <sup>(6)</sup>	•	Intensive animal industry <sup>(39)</sup>		Road or Lot 1 SP180303 at 160 Klingner Road,
•	Brothel <sup>(8)</sup>	•	Low impact industry <sup>(42)</sup>		Kippa-Ring
•	Bulk landscape supplies (9)	•	Major electricity	•	Retirement facility <sup>(67)</sup>
•	Car wash <sup>(11)</sup>		infrastructure <sup>(43)</sup>	•	Roadside stall <sup>(68)</sup>
•	Cemetery <sup>(12)</sup>	•	Marine industry <sup>(45)</sup>	•	Rooming accommodation <sup>(69)</sup>
	Community residence <sup>(16)</sup>	•	Medium impact industry <sup>(47)</sup>		
		•	Multiple dwelling <sup>(49)</sup>	•	Rural industry <sup>(70)</sup>
•	Crematorium <sup>(18)</sup> Detention facility <sup>(20)</sup>	•	Non-resident workforce accommodation (52)	•	Rural workers' accommodation <sup>(71)</sup>
•	Dual occupancy <sup>(21)</sup>	•	Outdoor sales <sup>(54)</sup>	•	Sales office <sup>(72)</sup>
•	Dwelling house <sup>(22)</sup>	•	Permanent plantation <sup>(59)</sup>	•	Service industry <sup>(73)</sup>
•	Dwelling unit <sup>(23)</sup>	•	Relocatable home park <sup>(62)</sup>	•	Shopping centre <sup>(76)</sup>
•	Extractive industry <sup>(27)</sup>	•	Renewable energy	•	Showroom <sup>(78)</sup>
•	Funeral parlour <sup>(30)</sup>		facility <sup>(63)</sup>	•	Special industry <sup>(79)</sup>
	,	•	Residential care facility <sup>(65)</sup>	•	Theatre <sup>(82)</sup>
				l	

•	Hardware and trade supplies <sup>(32)</sup>	•	Transport depot <sup>(85)</sup>
		•	Veterinary services <sup>(87)</sup>
•	High impact industry <sup>(34)</sup>	•	Warehouse <sup>(88)</sup>
		•	Winery <sup>(90)</sup>

Note - Generally the above uses are appropriate where located on Council owned or controlled land and is in accordance with an approved Council Master Plan.

Note - Retail and Commercial Activity Group = short term accommodation<sup>(77)</sup>, shops<sup>(75)</sup>, offices<sup>(53)</sup>, and health care services<sup>(33)</sup>.

Development not listed in the tables above may be considered on its merits and where it reflects and supports the outcomes of the precinct and zone.

# 6.2.9.3 Accepted development subject to requirements

If development is to be categorised as accepted development subject to requirements it must comply with the requirements for accepted development set out in Part A, Table 6.2.9.1. Where the development does not meet a requirement for accepted development (RAD) within Part A ,Table 6.2.9.1, the category of development changes to assessable development under the rules outlined in section 5.3.3. (1), and assessment is against the corresponding performance outcome (PO) identified in the table below. This only occurs whenever a RAD is not met, and is therefore limited to the subject matter of the RADs that are not complied with. To remove any doubt, for those RADs that are complied with, there is no need for assessment against the corresponding PO.

Requirements for accepted development (RAD)	Corresponding performance outcomes (PO)
RAD1	PO1
RAD2	PO1
RAD3	PO1
RAD4	PO2
RAD5	PO3
RAD6	PO9
RAD7	PO8
RAD8	PO8
RAD9	PO10
RAD10	PO13
RAD11	PO14
RAD12	PO22
RAD13	PO17
RAD14	PO17
RAD15	PO17
RAD16	PO26
RAD17	PO28

Requirements for accepted development (RAD)	Corresponding performance outcomes (PO)
RAD18	PO25
RAD19	PO25
RAD20	PO29
RAD21	PO31
RAD22	PO32
RAD23	PO33
RAD24	PO32
RAD25	PO39
RAD26	PO34
RAD27	PO34
RAD28	PO37
RAD29	PO37
RAD30	PO38
RAD31	PO40
RAD32	PO43
RAD33	PO40
RAD34	PO40
RAD35	PO40
RAD36	PO45
RAD37	PO40
RAD38	PO40, PO43, PO44
RAD39	PO42
RAD40	PO42
RAD41	PO47
RAD42	PO47
RAD43	PO47
RAD44	PO48
RAD45	PO49
RAD46	PO50
RAD47	PO50
RAD48	PO50
RAD49	PO51
RAD50	PO51
RAD51	PO51

Requirements for accepted development (RAD)	Corresponding performance outcomes (PO)
RAD52	PO56
RAD53	PO56
RAD54	PO60
RAD55	PO61
RAD56	PO59, PO62
RAD57	PO62
RAD58	PO62
RAD59	PO62
RAD60	PO64
RAD61	PO65
RAD62	PO66
RAD63	PO66
RAD64	PO67
RAD65	PO68
RAD66	PO69
RAD67	PO70-PO81
RAD68	PO70-PO81
RAD69	PO82
RAD70	PO83
RAD71	PO84
RAD72	PO85
RAD73	PO86
RAD74	PO87
RAD75	PO87
RAD76	PO88, PO89
RAD77	PO88, PO89
RAD78	PO91
RAD79	PO91
RAD80	PO91
RAD81	PO92
RAD82	PO93
RAD83	PO94
RAD84	PO95
RAD85	PO96

Requirements for accepted development (RAD)	Corresponding performance outcomes (PO)
RAD86	PO96
RAD87	PO99
RAD88	PO97
RAD89	PO97
RAD90	PO97
RAD91	PO97
RAD92	PO98
RAD93	PO98
RAD94	PO100
RAD95	PO101
RAD96	PO102, PO103
RAD97	PO104
RAD98	PO106-PO108, PO110-PO112
RAD99	PO106-PO108, PO110-PO112
RAD100	PO106-PO108, PO110-PO112
RAD101	PO109
RAD102	PO113
RAD103	PO114
RAD104	PO115
RAD105	PO116
RAD106	PO117
RAD107	PO117
RAD108	PO118

Part A — Requirements for accepted development - Recreation and open space zone

Table 6.2.9.1 Requirements for accepted development - Recreation and open space zone

Requiren	Requirements for accepted development					
	General requirements					
Built forn	Built form outcomes for all development					
RAD1	Site cover does not exceed 10%, except in the Sport and recreation precinct where site cover does not exceed 40%					
RAD2	Building and structures are set back 10m from all boundaries.					
RAD3	RAD3 Building height does not exceed the maximum height identified on Overlay map - Building heights.					
Building	Building on sloping land between 10% and 15%					

Building and site design on slopes between 10% and 15%:

- a. use split-level, multiple-slab, pier or pole construction;
- b. avoid single-plane slabs and benching; and
- C. ensure the height of any cut or fill, whether retained or not, does not exceed 900mm.

Note - This provision does not apply to outbuildings or where a development footprint exists for a lot.

# Lighting

#### RAD5

Artificial lighting on-site is directed and shielded in such a manner as not to exceed the recommended maximum values of light technical parameters for the control of obtrusive light given in Table 2.1 of Australian Standard AS 4282 (1997) Control of Obtrusive Effects of Outdoor Lighting.

Note - "Curfewed hours" are taken to be those hours between 10pm and 7am on the following day

#### Waste

# RAD6

Bins and bin storage areas are provided, designed and managed in accordance with Planning scheme policy – Waste.

# Landscaping and screening

# RAD7

In the Sports and recreation precinct, a minimum area of 20% of the site is provided for landscaping.

# RAD8

Outdoor storage areas are screened from adjoining sites and roads by either planting, wall(s), fence(s) or a combination to at least 1.8m in height along the length of the storage area.

# Car parking

### RAD9

On-site car parking is provided in accordance with Schedule 7 - Car parking.

# Clearing of habitat trees where not located in the Environmental areas overlay map

### RAD10

Development does not result in the damaging, destroyed or clearing of a habitat tree. This does not apply to:

- Clearing of a habitat tree located within an approved development footprint; a.
- Clearing of a habitat tree within 10m from a lawfully established building reasonably necessary for b. emergency access or immediately required in response to an accident or emergency;
- Clearing of a habitat tree reasonably necessary to remove or reduce the risk vegetation poses to C. serious personal injury or damage to infrastructure;
- Clearing of a habitat tree reasonably necessary to construct and maintain a property boundary d. fence and not exceed 4m in width either side of the fence where in the Rural, Rural residential and Environmental management and conservation zones. In any other zone, clearing is not to exceed 2m in width either side of the fence;
- Clearing of a habitat tree reasonably necessary for the purpose of maintenance or works within a e. registered easement for public infrastructure or drainage purposes;
- f. Clearing of a habitat tree in accordance with a bushfire management plan prepared by a suitably qualified person, submitted to and accepted by Council;

- Clearing of a habitat tree associated with removal of recognised weed species, maintaining existing g. open pastures and cropping land, windbreaks, lawns or created gardens;
- h. Native forest practice where accepted development under Part 1, 1.7.7 Accepted development.

Editor's note - A native tree measuring greater than 80cm in diameter when measured at 1.3m from the ground is recognised as a 'habitat tree'. For further information on habitat trees, refer to Planning scheme policy – Environmental areas and corridors. Information detailing how this measurement is undertaken is provided in Australian Standard AS 4970 2009 Protection of Trees on Development Sites - Appendix A.

# Works requirements

### **Utilities**

#### RAD11

Development is provided with an appropriate level of service and infrastructure in accordance with Planning scheme policy - Integrated design (Appendix A).

### **Access**

#### RAD12

The frontage road is fully constructed to Council's standards.

Note - Roads are considered to be constructed in accordance with Council standards when there is sufficient pavement width, geometry and depth to comply with the requirements of Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. Testing of the existing pavement may be required to confirm whether the existing works meet the standards in Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

Note - Frontage roads include streets where no direct lot access is provided.

# RAD13

Any new or changes to existing crossovers and driveways are designed, located and constructed in accordance with:

- where for a Council-controlled road and associated with a Dwelling house:
  - Planning scheme policy Integrated design;
- b. where for a Council-controlled road and not associated with a Dwelling house:
  - i. AS/NZS2890.1 Parking facilities Part 1: Off street car parking;
  - ii. AS/NZS 2890.2 - Parking facilities Part 2: Off-street commercial vehicle facilities;
  - iii. Planning scheme policy - Integrated design;
  - Schedule 8 Service vehicle requirements;
- where for a State-Controlled road, the Safe Intersection Sight Distance requirements in Austroads and the appropriate IPWEAQ standard drawings, or a copy of a Transport Infrastructure Act 1994, section 62 approval.

# RAD14

Any new or changes to existing internal driveways and access ways are designed and constructed in accordance with AS/NZS 2890.1 Parking Facilities Part 1: Off street car parking and the relevant standards in Planning scheme policy - Integrated design.

Access driveways, manoeuvring areas and loading facilities are sealed and provide for service vehicles listed in Schedule 8 - Service vehicle requirements for the relevant use. The on-site manoeuvring is to be in accordance with Schedule 8 - Service vehicle requirements.

# Stormwater

### **RAD16**

Any new or changes to existing stormwater run-off from the site is conveyed to a point of lawful discharge without causing actionable nuisance to any person, property or premises in accordance with Planning scheme policy - Integrated design.

Note - A watercourse as defined in the Water Act may be accepted as a lawful point of discharge providing the drainage discharge from the site does not increase the downstream flood levels during events up to and including the 1% AEP storm. An afflux of +20mm may be accepted on Council controlled land and road infrastructure. No worsening is ensured when stormwater is discharged into a catchment that includes State Transport Infrastructure.

### RAD17

Development incorporates a 'deemed to comply solution' to manage stormwater quality where the development:

- is for an urban purpose that involves a land area of 2500m<sup>2</sup> or greater; and a.
- b. will result in:
  - i. 6 or more dwellings; or
  - ii. an impervious area greater than 25% of the net developable area.

Note - The deemed to comply solution is to be designed, constructed, established and maintained in accordance with the requirements of Water by Design 'Deemed to Comply Solutions - Stormwater Quality Management for South East Queensland' and Planning scheme policy - Integrated design.

#### RAD18

Development ensures that surface flows entering the premises from adjacent properties are not blocked, diverted or concentrated.

Note - A report from a suitably qualified Registered Professional Engineer Queensland may be required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding premises.

# **RAD19**

Development ensures that works (e.g. fences and walls) do not block, divert or concentrate the flow of stormwater to adjoining properties.

Note - A report from a suitably qualified Registered Professional Engineer Queensland may be required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding premises.

### RAD20

Stormwater drainage infrastructure (excluding detention and bio-retention systems) through or within private land is protected by easements in favour of Council (at no cost to Council). Minimum easement widths are as follows:

Pipe Diameter	Minimum Easement Width (excluding access requirements)
Stormwater Pipe up to 825mm diameter	3.0m

Stormwater Pipe up to 825mm diameter with Sewer pipe up to 225m diameter	4.0m
Stormwater pipe greater than 825mm diameter	Easement boundary to be 1m clear of the outside wall of the pipe and clear of all pits.
Note - Additional easement width may be required in certain circumstances in order to facilitate maintenance access to the stormwater system.	
Note - Refer to Planning scheme policy - Integrated design (A	ppendix C) for easement requirements over open channels.

Site work	Site works and construction management		
RAD21	The site and any existing structures are to be maintained in a tidy and safe condition.		
RAD22 Development does not cause erosion or allow sediment to leave the site.			
	Note - The International Erosion Control Association (Australasia) Best Practice Erosion and Sediment Control provides guidance on strategies and techniques for managing erosion and sedimentation.		
RAD23	No dust emissions extend beyond the boundaries of the site during soil disturbances and construction works.		
RAD24	Existing street trees are protected and not damaged during works.		
	Note - Where development occurs in the tree protection zone, measures and techniques as detailed in Australian Standard AS 4970 Protection of trees on developments sites are adopted and implemented.		
RAD25	Any damage to Council land or infrastructure is repaired or replaced with the same materials, prior to plan sealing, or final building classification.		
RAD26	Construction traffic including contractor car parking is controlled in accordance with a traffic management plan, prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) to ensure all traffic movements to and from the site are safe.		
RAD27	Any material dropped, deposited or spilled on the road(s) as a result of construction processes associated with the site are to be cleaned at all times.		
RAD28	All native vegetation to be retained on-site is temporarily fenced or protected prior to and during development works.		
	Note - No parking of vehicles or storage of machinery or goods is to occur in these areas during development works		
RAD29	Disposal of materials is managed in one or more of the following ways:		

- all cleared vegetation, declared weeds, stumps, rubbish, car bodies, scrap metal and the like are removed and disposed of in a Council land fill facility; or
- all native vegetation with a diameter below 400mm is to be chipped and stored on-site.

Note - No burning of cleared vegetation is permitted.

Note - The chipped vegetation must be stored in an approved location.

### RAD30

All development works are carried out within the following times:

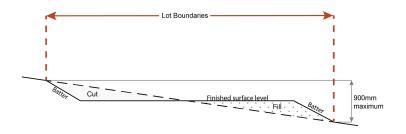
- Monday to Saturday (other than public holidays) between 6:30am and 6:30pm on the same day; a.
- b. no work is to be carried out on Sundays or public holidays.

#### **Earthworks**

#### RAD31

The total of all cut and fill on-site does not exceed 900mm in height.

# Figure - Cut and Fill



Note - This is site earthworks not building work.

# RAD32

Cut and fill batters, (other than batters to dams and water impoundments), have a finished slope no steeper than the following:

- a. any cut batter is no steeper than 1V in 4H;
- any fill batter, (other than a compacted fill batter), is no steeper than 1V in 4H; b.
- any compacted fill batter is no steeper than 1V in 4H.

# RAD33

All cut and fill batters are provided with appropriate scour, erosion protection and run-off control measures including catch drains at the top of batters and lined batter drains as necessary.

# RAD34

Stabilisation measures are provided, as necessary, to ensure long-term stability and low maintenance of steep slopes and batters.

Note - Inspection and certification of steep slopes and batters may be required by a suitably qualified and experienced RPEQ.

# RAD35

All fill and excavation is contained on-site and is free draining.

### RAD36

Earthworks undertaken on the development site are shaped in a manner which does not:

- a. prevent stormwater surface flow which, prior to commencement of the earthworks, passed onto the development site, from entering the land; or
- b. redirect stormwater surface flow away from existing flow paths; or
- divert stormwater surface flow onto adjacent land (other than a road) in a manner which: C.
  - i concentrates the flow; or
  - ii. increases the flow rates of stormwater over the affected section of the adjacent land above the situation which existed prior to the diversion; or
  - causes actionable nuisance to any person, property or premises.

All fill placed on-site is:

- limited to that necessary for the approved use; a.
- clean and uncontaminated (i.e. no building waste, concrete, green waste, actual acid sulfate soils, b. potential acid sulfate soils or contaminated material etc.).

#### RAD38

The site is prepared and the fill placed on-site in accordance with Australian Standard AS3798.

Note - The fill is to be inspected and tested in accordance with Planning scheme policy - Operational works inspection, maintenance and bonding procedures

# RAD39

No filling or excavation is undertaken in an easement issued in favour of Council or a public sector entity.

Note - Public sector entity is defined in Schedule 2 of the Act.

# RAD40

Filling or excavation that would result in any of the following is not carried out on site:

- a reduction in cover over any Council or public sector entity infrastructure to less than 600mm; a.
- an increase in finished surface grade over, or within 1.5m on each side of, the Council or public sector entity infrastructure above that which existed prior to the filling or excavation works being undertaken;
- prevent reasonable access to Council or public sector entity maintained infrastructure or any drainage feature on, or adjacent to the site for monitoring, maintenance or replacement purposes.

Note - Public sector entity is defined in Schedule 2 of the Act.

Note - All building work covered by QDC MP1.4 is excluded from this provision.

# Fire services

Note - The provisions under this heading only apply if:

- the development is for, or incorporates:
  - reconfiguring a lot for a community title scheme creating 1 or more vacant lots; or

- ii material change of use for 2 or more sole occupancy units on the same lot, or within the same community titles scheme; or
- material change of use for a Tourist park (84) with accommodation in the form of caravans or tents; or iii.
- material change of use for outdoor sales (54), outdoor processing or outdoor storage where involving combustible materials. iv.

#### **AND**

- none of the following exceptions apply: b.
  - the distributor-retailer for the area has indicated, in its netsery plan, that the premises will not be served by that entity's reticulated water supply; or
  - every part of the development site is within 60m walking distance of an existing fire hydrant on the distributor-retailer's reticulated water supply network, measured around all obstructions, either on or adjacent to the site.

Note - The provisions under this heading do not apply to buildings that are required by the Building Code of Australia to have a fire hydrant system complying with Australian Standard AS 2419.1 (2005) – Fire Hydrant Installations or other fire fighting facilities which provide equivalent protection.

#### RAD41

External fire hydrant facilities are provided on site to the standard prescribed under the relevant parts of Australian Standard AS 2419.1 (2005) - Fire Hydrant Installations.

Note - For this requirement for accepted development, the following are the relevant parts of AS 2419.1 (2005):

- in regard to the form of any fire hydrant Part 8.5 and Part 3.2.2.1, with the exception that for Tourist parks  $^{(84)}$  or development comprised solely of dwellings and their associated outbuildings, single outlet above-ground hydrants or suitably signposted in-ground hydrants would be an acceptable alternative;
- b. in regard to the general locational requirements for fire hydrants - Part 3.2.2.2 (a), (e), (f), (g) and (h) as well as Appendix B of AS 2419.1 (2005);
- C. in regard to the proximity of hydrants to buildings and other facilities - Part 3.2.2.2 (b), (c) and (d), with the exception that:
  - for dwellings and their associated outbuildings, hydrant coverage need only extend to the roof and external walls of those buildings:
  - for caravans and tents, hydrant coverage need only extend to the roof of those tents and caravans;
  - for outdoor sales  $^{(54)}$ , processing or storage facilities, hydrant coverage is required across the entire area of the outdoor sales  $^{(54)}$ , outdoor processing and outdoor storage facilities; and
- d. in regard to fire hydrant accessibility and clearance requirements - Part 3.5 and where applicable, Part 3.6.

#### RAD42

A continuous path of travel having the following characteristics is provided between the vehicle access point to the site and each external fire hydrant and hydrant booster point on the land:

- an unobstructed width of no less than 3.5m; a.
- an unobstructed height of no less than 4.8m; b.
- constructed to be readily traversed by a 17 tonne HRV fire brigade pumping appliance; C.
- d. an area for a fire brigade pumping appliance to stand within 20m of each fire hydrant and 8m of each hydrant booster point.

On-site fire hydrant facilities are maintained in effective operating order in a manner prescribed in Australian Standard AS1851 (2012) - Routine service of fire protection systems and equipment.

### RAD44

For development that contains on-site fire hydrants external to buildings:

- a. those external hydrants can be seen from the vehicular entry point to the site; or
- h. a sign identifying the following is provided at the vehicular entry point to the site:
  - i. the overall layout of the development (to scale);
  - ii. internal road names (where used);
  - iii. all communal facilities (where provided);
  - the reception area and on-site manager's office (where provided); iv.
  - external hydrants and hydrant booster points; ٧.
  - vi. physical constraints within the internal roadway system which would restrict access by fire fighting appliances to external hydrants and hydrant booster points.

Note - The sign prescribed above, and the graphics used are to be:

- in a form;
- b. of a size;
- illuminated to a level: C.

which allows the information on the sign to be readily understood, at all times, by a person in a fire fighting appliance up to 4.5m from the sign.

## RAD45

For development that contains on-site fire hydrants external to buildings, those hydrants are identified by way of marker posts and raised reflective pavements markers in the manner prescribed in the technical note Fire hydrant indication system produced by the Queensland Department of Transport and Main Roads.

Note - Technical note Fire hydrant indication system is available on the website of the Queensland Department of Transport and Main Roads.

# Use specific requirements

# Caretaker's accommodation<sup>(10)</sup>

RAD46	A caretaker's accommodation (10) has a maximum GFA of 80m <sup>2</sup> .
-------	--

#### No more than 1 caretaker's accommodation (10) is established per site. RAD47

RAD48 Does not gain access from a separate driveway from a road frontage.

# Food and drink outlet<sup>(28)</sup>

### RAD49

The GFA is no more than 150m<sup>2</sup>, except where located in the Sports and recreation precinct, this provision does not apply.

RAD50	The food and drink outlet <sup>(28)</sup> operates in conjunction with a recreation or open space use occurring on the same site. Where located in the Sports and recreation precinct, this provision does not apply.		
RAD51	The food and drink outlet does not have a liquor or gambling licence. Where located in the Sports and recreation precinct, this provision does not apply.		
Market <sup>(46</sup>			
RAD52	The market <sup>(46)</sup> does not impact on the ability to undertake activities associated with the primary recreation and open space purpose of the site.		
RAD53	Operates as follows:		
	a. No more than 2 days in any week;		
	b. No more than 50 individual stalls;		
	c. All activities, including set-up and pack-up, occur within the hours of 7.00am and 3.00pm;		
	d. No use of amplified music, public address systems and noise generating plant and equipment;		
	e. Waste containers are provided at a rate of 1 per food stall and 1 per 4 non-food stalls.		
	(84)		

# Telecommunications facility<sup>(81)</sup>

Editor's note - In accordance with the Federal legislation Telecommunications facilities (81) must be constructed and operated in a manner that will not cause human exposure to electromagnetic radiation beyond the limits outlined in the Radiocommunications (Electromagnetic Radiation - Human Exposure) Standard 2003 and Radio Protection Standard for Maximum Exposure Levels to Radiofrequency Fields - 3Khz to 300Ghz.

RAD54	A minimum area of 45m² is available to allow for additional equipment shelters and associated structures for the purpose of co-locating on the proposed facility.		
RAD55	The development results in no net reduction in the minimum quantity and standard of landscaping, private or communal open space or car parking spaces required under the planning scheme or under an existing development approval.		
RAD56	<ul> <li>Equipment shelters and associated structures are located:</li> <li>a. directly beside the existing equipment shelter and associated structures;</li> <li>b. behind the main building line;</li> <li>c. further away from the frontage than the existing equipment shelter and associated structures;</li> <li>d. a minimum of 10m from side and rear boundaries, except where in the Industry and Extractive industry zones, the minimum side and rear setback is 3m.</li> </ul>		
RAD57	Equipment shelters and other associated structures are either the same type of colour or material to match the surrounding locality.		
RAD58	The facility is enclosed by security fencing or by other means to ensure public access is prohibited.		
RAD59	A minimum 3m wide strip of dense planting is provided around the perimeter of the fenced area, between the development and street frontage and adjoining uses.  Note - Landscaping is provided in accordance with Planning scheme policy - Integrated design.		
	Note - Council may require a detailed landscaping plan, prepared by a suitably qualified person to ensure compliance with Planning scheme policy - Integrated design.		

All equipment comprising the telecommunications facility<sup>(81)</sup> which produces audible or non-audible sound is housed within a fully enclosed building incorporating sound control measures sufficient to ensure no noise from this equipment can be heard, or felt at the site boundary.

# Values and constraints requirements

Note - The relevant values and constraints requirements do not apply where the development is consistent with a current Development permit for Reconfiguring a lot or Material change of use or Operational work, where that approval has considered and addressed (e.g. through a development footprint plan (or similar in the case of Landslide hazard) or conditions of approval) the identified value or constraint under this planning scheme.

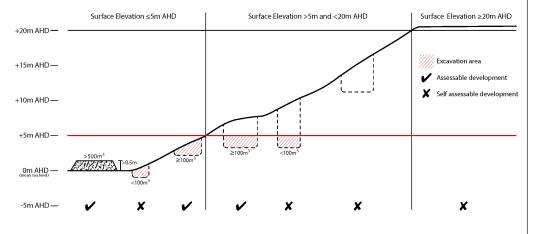
# Acid sulfate soils - (refer Overlay map - Acid sulfate soils to determine if the following requirements apply)

Note - Planning scheme policy - Acid sulfate soils provides guidance for requirements for accepted development that has the potential to disturb acid sulfate soils i.e. development involving filling or excavation works below the thresholds of 100m3 and 500m3 respectively.

#### RAD61

Development does not involve:

- excavation or otherwise removing of more than 100m<sup>3</sup> of soil or sediment where below 5m Australian Height Datum AHD, or
- b. filling of land of more than 500m<sup>3</sup> of material with an average depth of 0.5m or greater where below the 5m AHD.

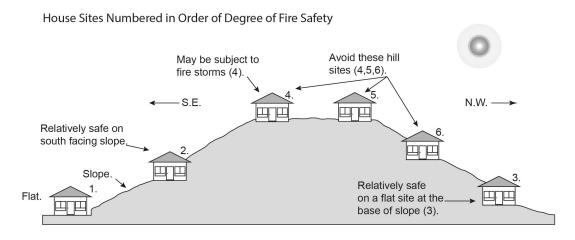


# Bushfire hazard (refer Overlay map - Bushfire hazard to determine if the following requirements apply)

Note - For the purposes of section 12 of the Building Regulation 2006, land identified as very high potential bushfire intensity, high potential bushfire intensity, medium potential bushfire intensity or potential impact buffer on the Bushfire hazard overlay map is the 'designated bushfire hazard area'. AS 3959-2009 Construction of buildings in bushfire hazard areas applies within these areas.

# RAD62

- Building and structures are: a.
  - not located on a ridgeline i.
  - not located on land with a slope greater than 15% (see Overlay map Landslide hazard)
- b. Dwellings are located on east to south facing slopes.



(1 being the safest, 6 being the most hazardous.) From Bushfire Prone Areas: Siting and Design of Residential Buildings (1997), Queensland Department of Local Government and Planning, and Queensland Fire & Rescue Service.

### RAD63

Buildings and structures have contained within the site:

- a separation from classified vegetation of 20m or the distance required to achieve a bushfire attack level (BAL) at the building, roofed structure or fire fighting water supply of no more than 29, whichever is the greater;
- a separation from low threat vegetation of 10m or the distance required to achieve a bushfire attack b. level (BAL) at the building, roofed structure or fire fighting water supply of no more than 29, whichever is the greater;
- a separation of no less than 10m between a fire fighting water supply extraction point and any C. classified vegetation, buildings and other roofed structures;
- d. an area suitable for a standard fire fighting appliance to stand within 3m of a fire fighting water supply extraction point; and
- an access path suitable for use by a standard fire fighting appliance having a formed width of at e. least 4m, a cross-fall of no greater than 5%, and a longitudinal gradient of no greater than 25%:
  - i. to, and around, each building and other roofed structure; and
  - ii. to each fire fighting water supply extraction point.

Note - The meaning of the terms classified vegetation and low threat vegetation as well as the method of calculating the bushfire attack level are as described in Australian Standard AS 3959.

### RAD64

The length of driveway:

- to a public road does not exceed 100m between the most distant part of a building used for any a. purpose other than storage and the nearest part of a public road;
- b. has a maximum gradient no greater than 12.5%;
- have a minimum width of 3.5m; C.
- d. accommodate turning areas for fire fighting appliances in accordance with Qld Fire and Emergency Services' Fire Hydrant and Vehicle Access Guideline.

# RAD65

A reticulated water supply is provided by a distributer retailer for the area or, where not connected to a reticulated water supply, on-site fire fighting water storage containing not less than 10 000 litres (tanks with fire brigade tank fittings, swimming pools) is provided and located within 10m of buildings and structures.

- b. Where a swimming pool is the nominated on-site fire fighting water storage source, vehicle access to within 3m of that water storage source is provided.
- C. Where a tank is the nominated on-site fire fighting water storage source, it includes:
  - a hardstand area allowing medium rigid vehicle (15 tonne fire appliance) access within 6m of the tank;
  - fire brigade tank fittings, comprising 50mm ball valve and male camlock coupling and, if underground, an access hole of 20mm (minimum) to accommodate suction lines.

Development does not involve the manufacture or storage of hazardous chemicals.

# Environmental areas (refer Overlay map - Environmental areas to determine if the following requirements apply)

Note - The following are excluded from the native clearing provisions of this planning scheme:

- Clearing of native vegetation located within an approved development footprint;
- Clearing of native vegetation within 10m from a lawfully established building reasonably necessary for emergency access or immediately h required in response to an accident or emergency;
- Clearing of native vegetation reasonably necessary to remove or reduce the risk vegetation poses to serious personal injury or damage C. to infrastructure;
- Clearing of native vegetation reasonably necessary to construct and maintain a property boundary fence and not exceed 4m in width either side of the fence where in the Rural, Rural residential and Environmental Management and Conservation zones. In any other zone, clearing is not to exceed 2m in width either side of the fence;
- e. Clearing of native vegetation reasonably necessary for the purpose of maintenance or works within a registered easement for public infrastructure or drainage purposes;
- Clearing of native vegetation in accordance with a bushfire management plan prepared by a suitably qualified person, submitted to and accepted by Council;
- Clearing of native vegetation associated with removal of recognised weed species, maintaining existing open pastures and cropping g. land, windbreaks, lawns or created gardens;
- h. Grazing of native pasture by stock;
- Native forest practice where accepted development under Part 1, 1.7.7 Accepted development.

Note - Definition for native vegetation is located in Schedule 1 Definitions.

Note - Native vegetation subject to this requirement primarily comprises of matters of national environmental significance (MNES), matters of state environmental significance (MSES). They also comprise some matters of local environmental significance (MLES). A MLES is defined in Schedule 1.2, Administrative definitions. A list of the elements that apply to the mapped MSES and MLES is provided in Appendix 1 of the Planning scheme policy - Environmental areas.

Editors' Note - The accuracy of overlay mapping can be challenged through the development application process (code assessable development) or by way of a planning scheme amendment. See Council's website for details.

Editors' Note - When clearing native vegetation within a MSES area, you may still require approval from the State government.

### RAD67

Where no suitable land cleared of native vegetation exists, clearing of native vegetation in a High Value Area or Value Area is for the purpose of a new dwelling house (22) or extension to an existing dwelling house<sup>(22)</sup> only on lots less than 750m<sup>2</sup>.

Editor's note - See in heading above for other uses excluded from native vegetation clearing requirements.

Editor's note - Where vegetation clearance is accepted development subject to requirements, care should be undertaken to avoid adverse impacts on koalas, koala habitat values and habitat connectivity and to encourage existing koala usage of the site. Measures to minimise impacts include:

- co-locating all associated activities, infrastructure and access strips;
- ii. be the least valued area of koala habitat on the site;
- iii. minimise the footprint of the development envelope area;
- İ۷. minimise edge effects to areas external to the development envelope;
- location and design consideration to ensure koala safety and movement in accordance with the Koala-sensitive Design Guideline and Planning scheme policy – Environmental areas;
- vi. sufficient area between the development and koala habitat trees to achieve their long-term viability.

Editor's note - Where vegetation clearing is accepted development subject to requirements, consideration should be given to avoid clearing habitat trees. Habitat trees may contain structural hollows where animals live, breed and shelter. The provision of nest boxes or salvaging of hollows will provide compensatory roosting and nesting opportunities for local wildlife including sugar gliders, possums and owls. For further information see Planning scheme policy - Environmental areas.

### RAD68

No clearing of native vegetation is to occur within the Value Offset Area MLES - Waterway buffer or Value Offset Area MLES - Wetland buffer.

This does not apply to the following:

- Clearing of native vegetation located within an approved development footprint; a.
- Clearing of native vegetation within 10m from a lawfully established building reasonably necessary h for emergency access or immediately required in response to an accident or emergency;
- Clearing of native vegetation reasonably necessary to remove or reduce the risk vegetation poses C. to serious personal injury or damage to infrastructure;
- d. Clearing of native vegetation reasonably necessary to construct and maintain a property boundary fence and not exceed 4m in width either side of the fence where in the Rural, Rural residential and Environmental management and conservation zones. In any other zone, clearing is not to exceed 2m in width either side of the fence:
- Clearing of native vegetation reasonably necessary for the purpose of maintenance or works within a registered easement for public infrastructure or drainage purposes;
- f. Clearing of native vegetation in accordance with a bushfire management plan prepared by a suitably qualified person, submitted to and accepted by Council;
- Clearing of native vegetation associated with removal of recognised weed species, maintaining g. existing open pastures and cropping land, windbreaks, lawns or created gardens;
- h. Grazing of native pasture by stock;
- Native forest practice where accepted development under Part 1, 1.7.7 Accepted development.

# Extractive resources separation area (refer Overlay map - Extractive resources (separation area) to determine if the following requirements apply)

#### Development does not result in more than one dwelling house<sup>(22)</sup> per lot within separation areas. RAD69 RAD70 Development within the separation area does not include the following uses: caretaker's accommodation<sup>(10)</sup>; a. community residence (16); b. dual occupancv<sup>(21)</sup>: C. dwelling unit<sup>(23)</sup>: d. hospital (36): e. rooming accommodation (69); f. multiple dwelling<sup>(49)</sup>; g. non-resident workforce accommodation (52); h. relocatable home park (62); i. residential care facility (65); j.

resort complex<sup>(66)</sup>: k. retirement facility (67); l. rural workers' accommodation<sup>(71)</sup>; m. short-term accommodation<sup>(77)</sup>: n. tourist park<sup>(84)</sup> RAD71 All habitable rooms within the separation area are: acoustically insulated to achieve the noise levels listed in Schedule 1 Acoustic Quality Objectives, Environmental Protection (Noise) Policy 2008; b. provided with mechanical ventilation. RAD72 Private open space areas are separated from the resource processing area by buildings or a 1.8m high solid structure. Extractive resources transport routes (refer Overlay map - Extractive resources (transport route and buffer) to determine if the following requirements apply) RAD73 The following uses are not located within the 100m wide transport route buffer: Caretaker's accommodation<sup>(10)</sup>, except where located in the Extractive industry zone; a. Community residence (16): b. Dual occupancy<sup>(21)</sup>; C. Dwelling house; (22) d. Dwelling unit<sup>(23)</sup>: e. Hospital (36): f. Rooming accommodation (69); g. Multiple dwelling<sup>(49)</sup>: Non-resident workforce accommodation (52); i. Relocatable home park<sup>(62)</sup>: j. Residential care facility<sup>(65)</sup>: Resort complex<sup>(66)</sup>: I. Retirement facility (67); m. Rural workers' accommodation<sup>(71)</sup>; n. Short-term accommodation<sup>(77)</sup>; 0. Tourist park<sup>(84)</sup>. RAD74 Except for an existing vacant lot, development does not create a new vehicle access point onto an Extractive resources transport route. RAD75 A vehicle access point is located, designed and constructed in accordance with Planning scheme policy Integrated design. Heritage and landscape character (refer Overlay map - Heritage and landscape character to determine if the following requirements apply) Note - Places, including sites, objects and buildings having local cultural heritage significance, are identified on Overlay map - Heritage and landscape character and listed in Schedule 1 of Planning scheme policy - Heritage and landscape character. Places also having cultural heritage significance at a State level and being entered in the Queensland Heritage Register, are also identified in Schedule 1 of Planning scheme policy - Heritage and landscape character. RAD76 Development is for the preservation, maintenance, repair and restoration of the site, object or building. This does not apply to Listed item 99, in Schedule 1 - List of sites, objects and buildings of significant historical and cultural value of Planning scheme policy - Heritage and landscape character.

	Note - Preservation, maintenance, repair and restoration are defined in Schedule 1 - Definitions		
RAD77	A cultural heritage conservation management plan is prepared in accordance with Planning scheme policy – Heritage and landscape character and submitted to Council prior to the commencement of any preservation, maintenance, repair and restoration works. Any preservation, maintenance, repair and restoration works are in accordance with the Council approved cultural heritage conservation management plan.		
	This does not apply to Listed item 99 in Schedule 1 - List of sites, objects and buildings of significant historical and cultural value of Planning scheme policy - Heritage and landscape character.		
RAD78	Development does not result in the removal of or damage to any significant tree identified on Overlay map – Heritage and landscape character and listed in Appendix 2 of Planning scheme policy – Heritage and landscape character.		
RAD79	The following development does not occur within 20m of the base of any significant tree, identified or Overlay map – Heritage and landscape character and listed in Appendix 2 of Planning scheme policy Heritage and landscape character:		
	<ul> <li>a. construction of any building;</li> <li>b. laying of overhead or underground services;</li> <li>c. any sealing, paving, soil compaction;</li> <li>d. any alteration of more than 75mm to the ground surface prior to work commencing.</li> </ul>		
RAD80	Pruning of a significant tree occurs in accordance with Australian Standard AS 4373-2007 - Pruning of Amenity Trees.		
Landslid	e hazard (refer Overlay map - Landslide hazard to determine if the following requirements apply)		
RAD81	Development does not:		
	<ul> <li>a. involve earthworks exceeding 50m³;</li> <li>b. involve cut and fill having a height greater than 600mm;</li> <li>c. involve any retaining wall having a height greater than 600mm;</li> <li>d. redirect or alter the existing flow of surface or groundwater.</li> </ul>		
RAD82	Buildings, excluding domestic outbuildings:		
	<ul><li>a. are split-level, multiple-slab, pier or pole construction;</li><li>b. are not single plane slab on ground.</li></ul>		
RAD83	Development does not involve the manufacture, handling or storage of hazardous chemicals.		
Infrastru apply)	cture buffers (refer Overlay map - Infrastructure buffers to determine if the following requirements		
RAD84	Development does not include the following uses within a Wastewater treatment site buffer:		
	a. Caretaker's accommodation <sup>(10)</sup> ; b. Community residence <sup>(16)</sup> ; c. Dual occupancy <sup>(21)</sup> ; d. Dwelling house; <sup>(22)</sup> e. Dwelling unit <sup>(23)</sup> ; f. Hospital <sup>(36)</sup> ; g. Rooming accommodation <sup>(69)</sup> ; h. Multiple dwelling <sup>(49)</sup> ; i. Non-resident workforce accommodation <sup>(52)</sup> ; j. Relocatable home park <sup>(62)</sup> ;		

	k. Residential care facility <sup>(65)</sup> ; l. Resort complex <sup>(66)</sup> ; m. Retirement facility <sup>(67)</sup> ; n. Rural workers' accommodation <sup>(71)</sup> ; o. Short-term accommodation <sup>(77)</sup> ; p. Tourist park <sup>(84)</sup> .		
RAD85	Development within a Water supply buffer does not include the incineration or burial of waste and all other waste is collected and stored in weather proof, sealed waste receptacles, located in roofed and bunded areas, for disposal by a licenced contractor.		
RAD86	Management, handling and storage of hazardous chemicals (including fuelling of vehicles) within a Water supply buffer, is undertaken in secured, climate controlled, weather proof, level and bunded enclosures.		
RAD87	Development does not restrict access to Bulk water supply infrastructure of any type or size, having regard to (among other things):		
	a. buildings or structures;		
	b. gates and fences;		
	c. storage of equipment or materials;		
	d. landscaping or earthworks or stormwater or other infrastructure.		
RAD88	On-site sewerage facilities in a Water supply buffer produce a minimum secondary treated effluent (90th percentile) and effluent application to ensure water quality is maintained and protected.		
RAD89	9 On-site sewerage facilities in a Water supply buffer for a dwelling house <sup>(22)</sup> include:		
	<ul> <li>a. emergency storage capacity of 1,000 litres and adequate buffering for shock loading/down time;</li> <li>b. a reserve land application area of 100% of the effluent irrigation design area;</li> <li>c. land application areas that are vegetated;</li> <li>d. the base of the land application field is at least 2 metres above the seasonal high water table/bedrock (whichever is the closest to the base of the application area);</li> <li>e. wastewater collection and storage systems must have capacity to accommodate full load at peak times.</li> </ul>		
RAD90	On-site sewerage facilities in a Water supply buffer for development other than a dwelling house include emergency storage capable of holding 3-6 hours peak flow of treated effluent in the event of emergencies/overload with provision for de-sludging.		
RAD91	Development involving Permanent plantation <sup>(59)</sup> within a Water supply buffer maintains a minimum of 30% ground cover at all times.		
RAD92	Development does not involve the construction of any buildings or structures within a Bulk water supply infrastructure buffer.		
RAD93	Development involving a major hazard facility or an Environmentally Relevant Activity (ERA) is setback 30m from a Bulk water supply infrastructure buffer.		
RAD94	Development does not involve the construction of any buildings or structures within the Gas pipeline buffer.		
RAD95	Development does not include the following uses located within a landfill site buffer:  a. caretaker's accommodation <sup>(10)</sup> ; b. community residence <sup>(16)</sup> ; c. dual occupancy <sup>(21)</sup> ;		

	d. dwelling house; (22) e. dwelling unit (23); f. hospital (36); g. rooming accommodation (69); h. multiple dwelling (49); i. non-resident workforce accommodation (52); j. relocatable home park (62); k. residential care facility (65); l. resort complex (66); m. retirement facility (67); n. rural workers' accommodation (71); o. short term accommodation (77); p. tourist park (84).	
RAD96	<ul> <li>All habitable rooms located within an Electricity supply substation buffer are:</li> <li>a. located a minimum of 10m from an electricity supply substation<sup>(80)</sup>; and</li> <li>b. acoustically insulated to achieve the noise levels listed in Schedule 1, Acoustic Quality Objectives, Environmental Protection (Noise) Policy 2008.</li> </ul>	
RAD97	Development does not involve the construction of any buildings or structures containing habitable rooms or sensitive land uses within a High voltage electricity line buffer.	
Overland	flow path (refer Overlay map - Overland flow path to determine if the following requirements apply)	
RAD98	Development for a material change of use or building work does not involve the construction of a building or structure in an Overland flow path area.	
RAD99	Development for a material change of use or operational work does not impede the flow of flood waters through the premises or worsen flood flows to other premises.  Note - A report from a suitably qualified Registered Professional Engineer Queensland is required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding premises.  Note - Reporting to be prepared in accordance with Planning scheme policy – Flood hazard, Coastal hazard and Overland flow	
RAD100	Development for a material change of use or building work ensures that fencing in an overland flow path area is at least 50% permeable.	
RAD101	Development for a material change of use or building work that involves a hazardous chemical ensures the hazardous chemicals is not located within an overland flow path area.	
RAD102	Development for a material change of use or building work for a Park <sup>(57)</sup> ensures that work is provided in accordance with the requirements set out in Appendix B of the Planning scheme policy - Integrated design.	
following	and wetland setbacks (refer Overlay map - Riparian and wetland setback to determine if the requirements apply)  W2 and W3 waterway and drainage lines, and wetlands are mapped on Schedule 2, Section 2.5 Overlay Maps – Riparian and tbacks.	
RAD103	No development is to occur within:  a. 50m from top of bank for W1 waterway and drainage line	
	b. 30m from top of bank for W2 waterway and drainage line	

- C. 20m from top of bank for W3 waterway and drainage line
- d. 100m from the edge of a Ramsar wetland, 50m from all other wetlands.

Note - W1, W2 and W3 waterways and drainage lines, and wetlands are mapped on Schedule 2, Section 2.5 Overlay Maps -Riparian and wetland setbacks.

Note - In some cases, the top of bank may not be easily defined, as such a hydraulic measurement may be applied instead. Moreton Bay Regional Council will provide further direction on how to determine and locate the setback boundary in these locations.

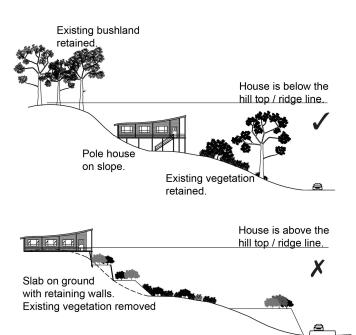
Note - The minimum setback distance applies to the each side of waterway.

# Scenic amenity - Regionally significant (Hills) and Locally important (Coast) - (refer Overlay map - Scenic amenity to determine if the following requirements apply)

### **RAD104**

Where located in the Regionally significant (Hills) scenic amenity overlay, buildings and structures are

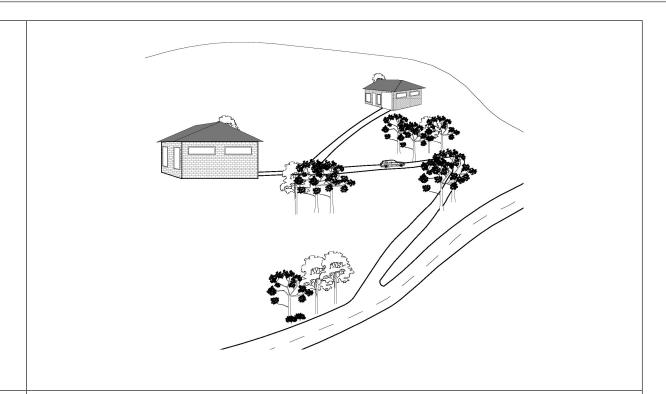
- located on a hill top or ridge line; and a.
- all parts of the building and structure are located below the hill top or ridge line. b.



### **RAD105**

Where located in the Regionally significant (Hills) scenic amenity overlay, driveways and accessways:

- go across land contours and do not cut straight up slopes; a.
- follow natural contours, not resulting in batters or retaining walls being greater than 1m in height. b.



Where located in the Regionally significant (Hills) scenic amenity overlay, roofs and wall surfaces of buildings and structures adopt the following colours:

Colours from Australian Standard AS2700s – 1996			
G12 – Holly	G53 – Banksia	N44 – Bridge Grey	
G13 – Emerald	G54 – Mist Green	N45 – Koala Grey	
G14 – Moss Green	G55 – Lichen	N52 – Mid Grey	
G15 – Rainforest Green	G56 – Sage Green	N54 – Basalt	
G16 – Traffic Green	G62 – Rivergum	N55 – Lead Grey	
G17 – Mint Green	G64 – Slate	X54 – Brown	
G21 – Jade	G65 – Ti Tree	X61 – Wombat	
G22 – Serpentine	N25 – Birch Grey	X62 – Dark Earth	
G23 – Shamrock	N32 – Green Grey	X63 – Iron Bark	
G24 – Fern Green	N33 – Lightbox Grey	Y51 – Bronze Olive	
G25 – Olive	N35 – Light Grey	Y61 – Black Olive	
G34 – Avocado	N41 – Oyster	Y63 – Khaki	
G52 – Eucalyptus	N42 – Storm Grey	Y66 – Mudstone	
	N43 – Pipeline Grey		

# RAD107

Where located in the Regionally significant (Hills) scenic amenity overlay, roofs and wall surfaces of buildings and structures are painted or finished such that reflectivity is less than 35%.

# **RAD108**

Where located in the Locally important (Coast) scenic amenity overlay;

landscaping comprises indigenous coastal species; a.

- b. fences and walls facing the coast are no higher than 1m. Where fences and walls are higher than 1m, they have 50% transparency. This does not apply to a fence or wall at an angle of 90o to the coast;
- where over 12m in height, the building design includes the following architectural character elements: C.
- i. curving balcony edges and walls, strong vertical blades and wall planes;









ii. balcony roofs, wall articulation expressed with different colours, curves in plan and section, and window awnings;









Roof top outlooks, tensile structure as shading devices; and iii.









lightweight structures use white frame elements in steel and timber, bold colour contrast.









existing pine trees, palm trees, mature fig and cotton trees are retained.

Note - A list of appropriate indigenous coastal species is identified in Planning scheme policy - Integrated design.

Transport noise corridors (refer Overlay map - Transport noise corridors)

Note - This is for information purposes only. No requirements for accepted development or criteria for assessable development apply. Development located within a Transport Noise Corridor must satisfy the requirements of the Queensland Development Code .

# Part B—Criteria for assessable development - Recreation and open space zone

Where development is categorised as assessable development - code assessment in the Table of Assessment, and located in a precinct, the assessment benchmarks are the criteria set out in Part B, Table 6.2.9.2 as well as the purpose statement and overall outcomes of this code.

Where development is categorised as assessable development - impact assessment, the assessment benchmarks become the whole of the planning scheme.

Table 6.2.9.2 Assessable development - Recreation and open space zone

Per	formance Outcome	Examples that achieve aspects of the Performance Outcomes
	Genera	l criteria
Bui	It form outcomes for all development	
PO <sup>1</sup>	1	E1.1
Dev	relopment will:  maintain the open and unbuilt character of a site,uncluttered by building and maintaining the availability of a site for unobstructed outdoor recreational use, except where in the Sports and recreation precinct where a higher density of built form is anticipated;	Site cover does not exceed 10%, except in the Sport and recreation precinct where site cover does not exceed 40%  E1.2  Building and structures are set back 10m from all
b. c.	ensure that buildings and structures are not overbearing, visually dominant or out of character with the surrounding built environment nor detract from the amenity of adjoining land; ensure buildings and structures do not result in overlooking of private areas when adjoining	E1.3  Building height does not exceed the maximum height identified on Overlay map - Building heights.
d.	residential areas, or block or impinge upon the receipt of natural sunlight and outlook;  be designed in accordance with the principles of Crime Prevention Through Environment Design (CPTED) to achieve a high level of safety, surveillance and security;	
e.	incorporate appropriate design response, relative to size and function of buildings, that acknowledge and reflect the region's sub-tropical climate;	
f.	reduce the visual appearance of building bulk through:	
	<ul> <li>design measures such as the provision of meaningful recesses and projections through the horizontal and vertical plane;</li> </ul>	

- use of a variety of building materials and colours:
- iii. use of landscaping and screening.
- g. maintain the open space character as a visual contrast to urban development, except where in the Sports and recreation precinct where a higher density of built form is anticipated;
- h. achieves the design principles outlined in Planning scheme policy - Integrated design.

# **Building on sloping land**

#### PO<sub>2</sub>

On slopes between 10% and 15%, building and site design must achieve the following:

- use split-level, multiple-slab, pier or pole a. construction;
- b. avoid single-plane slabs and benching:
- ensure the height of any cut or fill, whether retained C. or not, does not exceed 900mm;
- d. minimising any visual impact on the Recreation and open space zone landscape character; and
- protecting the amenity of adjoining properties.

# **E2**

Building and site design on slopes between 10% and 15%:

- use split-level, multiple-slab, pier or pole a. construction;
- b. avoid single-plane slabs and benching; and
- ensure the height of any cut or fill, whether retained C. or not, does not exceed 900mm.

# **Amenity**

# PO<sub>3</sub>

The amenity of the area and adjacent sensitive land uses are protected from the impacts of dust, odour, noise, light, chemicals and other environmental nuisances.

No example provided.

# **Hazardous Chemicals**

Note - To assist in demonstrating compliance with the following performance outcomes, a Hazard Assessment Report may be required to be prepared and submitted by a suitably qualified person in accordance with 'State Planning Policy Guideline - Guidance on development involving hazardous chemicals'.

Note - Terms used in this section are defined in State 'State Planning Policy Guideline - Guidance on development involving hazardous chemicals'

### PO4

Off sites risks from foreseeable hazard scenarios involving hazardous chemicals are commensurate with the sensitivity of the surrounding land use zones.

# E4.1

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of land zoned for vulnerable or sensitive land uses as described below:

# Dangerous Dose

- For any hazard scenario involving the release of gases or vapours:
  - i. AEGL2 (60minutes) or if not available ERPG2;
  - An oxygen content in air <19.5% or >23.5% at normal atmospheric pressure.
- b. For any hazard scenario involving fire or explosion:
  - i. 7kPa overpressure;
  - 4.7kW/m2 heat radiation. ii.

If criteria E4.1 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 0.5 x 10-6/year.

# E4.2

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of a commercial or community activity land use zone as described below:

# Dangerous Dose

- For any hazard scenario involving the release of gases or vapours:
  - AEGL2 (60minutes) or if not available ERPG2;
  - An oxygen content in air <19.5% or >23.5% at normal atmospheric pressure.
- For any hazard scenario involving fire or explosion:
  - 1. 7kPa overpressure:
  - 4.7kW/m2 heat radiation.

If criteria E4.2 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 5 x 10-6/year.

# E4.3

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of an industrial land use zone as described below:

**Dangerous Dose** 

- a. For any hazard scenario involving the release of gases or vapours:
  - AEGL2 (60minutes) or if not available ERPG2; i.
  - ii. An oxygen content in air <19.5% or >23.5% at normal atmospheric pressure.
- h. For any hazard scenario involving fire or explosion:
  - i. 14kPa overpressure:
  - ii. 12.6kW/m2 heat radiation.

If criteria E4.3 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 50 x 10-6/year.

#### **PO5**

Buildings and package stores containing fire-risk hazardous chemicals are designed to detect the early stages of a fire situation and notify a designated person.

#### **E**5

Buildings and package stores containing fire-risk hazardous chemicals are provided with 24 hour monitored fire detection system for early detection of a fire event.

### **PO6**

Common storage areas containing packages of flammable and toxic hazardous chemicals are designed with spill containment system(s) that are adequate to contain releases, including fire fighting media.

### **E6**

Storage areas containing packages of flammable and toxic hazardous chemicals are designed with spill containment system(s) capable of containing a minimum of the total aggregate capacity of all packages plus the maximum operating capacity of any fire protection system for the storage area(s) over a minimum of 60 minutes.

# **PO7**

Storage and handling areas, including manufacturing areas, containing hazardous chemicals in quantities greater than 2,500L or kg within a Local Government "flood hazard area" are located and designed in a manner to minimise the likelihood of inundation of flood waters from creeks, rivers, lakes or estuaries.

# E7.1

The base of any tank with a WC >2,500L or kg is higher than any relevant flood height level identified in an area's flood hazard area. Alternatively:

- bulk tanks are anchored so they cannot float if a. submerged or inundated by water; and
- b. tank openings not provided with a liquid tight seal, i.e. an atmospheric vent, are extended above the relevant flood height level.

# E7.2

The lowest point of any storage area for packages

>2,500L or kg is higher than any relevant flood height level identified in an area's flood hazard area. Alternatively, package stores are provided with impervious bund walls or racking systems higher than the relevant flood height level.

# Landscaping and screening

### **PO8**

Landscaping and screening is provided in a manner that:

- achieves a high level of privacy and amenity to adjoining properties and when viewed from the street:
- b. reduces the visual impact of building bulk and presence and hard surface areas on the local character and amenity of adjoining properties and from the street:
- creates a secure and safe environment by incorporating key elements of crime prevention through environmental design;
- d. achieves the design principles outlined in Planning scheme policy - Integrated design.

### E8.1

In the Sports and recreation precinct, a minimum area of 20% of the site is provided for landscaping.

### E8.2

Outdoor storages areas are screened from adjoining sites and roads by either planting, wall(s), fence(s) or a combination to at least 1.8m in height along the length of the storage area.

#### Waste

#### PO9

Bins and bin storage areas are provided, designed and managed in accordance with Planning scheme policy -Waste.

### **E9**

Development is designed to meet the criteria in the Planning scheme policy - Waste and is demonstrated in a waste management program.

# Car parking

# **PO10**

On-site car parking associated with an activity provides safe and convenient on-site parking and manoeuvring to meet anticipated parking demand.

Note - Refer to Planning scheme policy - Integrated transport assessment for guidance on how to achieve compliance with this outcome.

# E10

On-site car parking is provided at a rate identified Schedule 7 - Car parking.

# **Noise**

### **PO11**

Noise generating uses do not adversely affect existing noise sensitive uses.

Note - The use of walls, barriers or fences that are visible from or adjoin a road or public area are not appropriate noise attenuation measures unless adjoining a motorway, arterial road or rail line.

Note - A noise impact assessment may be required to demonstrate compliance with this PO. Noise impact assessments are to be prepared in accordance with Planning scheme policy - Noise.

No example provided.

**PO12** E12.1 Sensitive land uses are provided with an appropriate acoustic environment within designated external private outdoor living spaces and internal areas while:

contributing to safe and usable public spaces, through maintaining high levels of surveillance of parks, streets and roads that serve active transport purposes (e.g. existing or future pedestrian paths or cycle lanes etc);

maintaining the amenity of the streetscape. b.

Note - A noise impact assessment may be required to demonstrate compliance with this PO. Noise impact assessments are to be prepared in accordance with Planning scheme policy - Noise.

Note - Refer to Planning Scheme Policy - Integrated design for details and examples of noise attenuation structures.

Development is designed to meet the criteria outlined in the Planning Scheme Policy - Noise.

### E12.2

Noise attenuation structures (e.g. walls, barriers or fences):

- a. are not visible from an adjoining road or public area
  - i. adjoining a motorway or rail line; or
  - ii adjoining part of an arterial road that does not serve an existing or future active transport purpose (e.g. pedestrian paths or cycle lanes) or where attenuation through building location and materials is not possible.
- b. do not remove existing or prevent future active transport routes or connections to the street network:
- C. are located, constructed and landscaped in accordance with Planning scheme policy -Integrated design.

Note - Refer to Planning scheme policy - Integrated design for details and examples of noise attenuation structures.

Note - Refer to Overlay map - Active transport for future active transport routes.

# Clearing of habitat trees where not located within the Environmental areas overlay map

#### **PO13**

- Development ensures that the biodiversity quality and integrity of habitats is not adversely impacted upon but maintained and protected.
- b. Development does not result in the net loss of fauna habitat. Where development does result in the loss of a habitat tree, development will provide replacement fauna nesting boxes at the following rate of 1 nest box for every hollow removed. Where hollows have not yet formed in trees > 80cm in diameter at 1.3m height, 3 nest boxes are required for every habitat tree removed.
- Development does not result in soil erosion or land degradation or leave land exposed for an unreasonable period of time but is rehabilitated in a timely manner

Note: Further guidance on habitat trees is provided in Planning scheme policy - Environmental areas

No example provided.

#### Works criteria

#### **Utilities**

#### **PO14**

All services including water supply, sewage disposal, electricity, street lighting, telecommunications and gas (if available) are provided in accordance with Planning scheme policy - Integrated design (Appendix A).

No example provided.

#### Access

#### **PO15**

Where required, access easements contain a driveway and provision for services appropriate to the use. The easement covers all works associated with the access in accordance with Planning scheme policy - Integrated design.

No example provided.

#### **PO16**

The layout of the development does not compromise:

- the development of the road network in the area; a.
- the function or safety of the road network; b.
- C. the capacity of the road network.

Note - The road hierarchy is mapped on Overlay map -Road hierarchy.

#### E16.1

The development provides for the extension of the road network in the area in accordance with Council's road network planning.

#### E16.2

The development does not compromise future road widening of frontage roads in accordance with the relevant standard and Council's road planning.

# E16.3

The development layout allows forward vehicular access to and from the site.

# **PO17**

Safe access is provided for all vehicles required to access the site.

# E17.1

Site access and driveways are designed, located and constructed in accordance with:

- where for a Council-controlled road and associated with a Dwelling house:
  - i. Planning scheme policy - Integrated design;
- b. where for a Council-controlled road and not associated with a Dwelling house:
  - i. AS/NZS2890.1 Parking facilities Part 1: Off street car parking;

- AS 2890.2 Parking facilities Part 2: Off-street commercial vehicle facilities:
- iii. Planning scheme policy - Integrated design;
- iv. Schedule 8 - Service vehicle requirements;
- C. where for a State-Controlled road, the Safe Intersection Sight Distance requirements in Austroads and the appropriate IPWEAQ standard drawings, or a copy of a Transport Infrastructure Act 1994, section 62 approval.

#### E17.2

Internal driveways, car parks and access ways are designed and constructed with a sealed pavement and in accordance with:

- AS/NZS 2890.1 Parking Facilities Part 1: Off street car parking;
- b. AS 2890.2 Parking Facilities Part 2: Off street commercial vehicle facilities;
- C. Planning scheme policy - Integrated design; and
- d. Schedule 8 - Service vehicle requirements.

Note - This includes queue lengths (refer to Schedule 8 -Service vehicle requirements), pavement widths and construction.

# E17.3

Access driveways, manoeuvring areas and loading facilities are sealed and provide for service vehicles listed in Schedule 8 - Service vehicle requirements for the relevant use. The on-site manoeuvring is to be in accordance with Schedule 8 - Service vehicle requirements.

#### E17.4

Landscaping (including shade trees) is provided within car parks in accordance with Planning scheme policy -Integrated design.

#### **PO18**

Sealed and flood free road access during the minor storm event is available to the site from the nearest arterial or sub-arterial road.

#### E18

Roads or streets giving access to the development from the nearest arterial or sub-arterial road are flood free during the minor storm event and are sealed.

Editor's note - Where associated with a State-controlled road, further requirements may apply, and approvals may be required from the Department of Transport and Main Roads.

Note - The road network is mapped on Overlay map - Road hierarchy.

#### **PO19**

Roads which provide access to the site from an arterial or sub-arterial road remain trafficable during major storm events without flooding or impacting upon residential properties or other premises.

#### E19.1

Access roads to the development have sufficient longitudinal and cross drainage to remain safely trafficable during major storm (1% AEP) events.

Note - The road network is mapped on Overlay map - Road hierarchy.

Note - Refer to QUDM for requirements regarding trafficability.

#### E19.2

Culverts and causeways do not increase inundation levels or increase velocities, for all events up to the defined flood event, to upstream or downstream properties.

# Street design and layout

#### **PO20**

Streets are designed and constructed in accordance with Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. The street design and construction accommodates the following functions:

- access to premises by providing convenient a. vehicular movement for residents between their homes and the major road network;
- b. safe and convenient pedestrian and cycle movement;
- C. adequate on street parking;
- d. stormwater drainage paths and treatment facilities;
- efficient public transport routes; e.
- f. utility services location;
- emergency access and waste collection; g.
- setting and approach (streetscape, landscaping h. and street furniture) for adjoining residences;
- i. expected traffic speeds and volumes; and
- j. wildlife movement (where relevant).

No example provided.

Note - Preliminary road design (including all services, street lighting, stormwater infrastructure, access locations, street trees and pedestrian network) may be required to demonstrate compliance with this PO.

Note - Refer to Planning scheme policy - Environmental areas and corridors for examples of when and where wildlife movement infrastructure is required.

#### **PO21**

The existing road network (whether trunk or non-trunk) is upgraded where necessary to cater for the impact from the development.

Note - An applicant may be required to submit an Integrated Transport Assessment (ITA), prepared in accordance with Planning scheme policy - Integrated transport assessment to demonstrate compliance with this PO, when any of the following occurs:

- Development is within 200m of a transport sensitive location such as a school, shopping centre, bus or train station or a large generator of pedestrian or vehicular traffic;
- Forecast traffic to/from the development exceeds 5% of the two way flow on the adjoining road or intersection in the morning or afternoon transport peak within 10 years of the development completion;
- Development access onto a sub arterial, or arterial road or within 100m of a signalised intersection;
- Residential development greater than 50 lots or dwellings;
- Offices greater than 4,000m<sup>2</sup> Gross Floor Area (GFA);
- Retail activities including Hardware and trade supplies, Showroom, Shop or Shopping centre greater than 1,000m2 GFA;
- Warehouses and Industry greater than 6,000m<sup>2</sup> GFA;
- On-site carpark greater than 100 spaces;
- Development has a trip generation rate of 100 vehicles or more within the peak hour;
- Development which dissects or significantly impacts on an environmental area or an environmental corridor.

The ITA is to review the development's impact upon the external road network for the period of 10 years from completion of the development. The ITA is to provide sufficient information for determining the impact and the type and extent of any ameliorative works required to cater for the additional traffic. The ITA must include a future structural road layout of adjoining properties that will form part of this catchment and road connecting to these properties. The ITA is to assess the ultimate developed catchment's impacts and necessary ameliorative works, and the works or contribution required by the applicant as identified in the study.

Note - The road network is mapped on Overlay map - Road hierarchy.

#### E21.1

New intersections onto existing roads are designed to accommodate traffic volumes and traffic movements taken from a date 10 years from the date of completion of the last stage of the development. Detailed design is to be in accordance with Planning scheme policy -Integrated design.

Note - All turns vehicular access to existing lots is to be retained at new road intersections wherever practicable.

Note - Existing on-street parking is to be retained at new road intersections and along road frontages wherever practicable.

# E21.2

Existing intersections external to the site are upgraded as necessary to accommodate increased traffic from the development. Design is in accordance with Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

Note - All turns vehicular access to existing lots is to be retained at new road intersections wherever practicable.

Note - Existing on-street parking is to be retained at upgraded road intersections and along road frontages wherever practicable.

#### E21.3

The active transport network is extended in accordance with Planning scheme policy - Integrated design.

Note - The primary and secondary active transport network is mapped on Overlay map - Active transport.

#### **PO22**

All Council controlled frontage roads adjoining the development are designed and constructed in accordance with Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. All new works are extended to join any existing works within 20m.

Note - Frontage roads include streets where no direct lot access is provided.

Note - The road network is mapped on Overlay map - Road hierarchy.

Note - The Primary and Secondary active transport network is mapped on Overlay map - Active transport.

Note - Roads are considered to be constructed in accordance with Council's standards when there is sufficient pavement width, geometry and depth to comply with the requirements of Planning scheme policy - Integrated design and Planning scheme policy -Operational works inspection, maintenance and bonding procedures.

#### **E22**

Design and construct all Council controlled frontage roads in accordance with Planning scheme policy - Integrated design, Planning scheme policy - Operational works inspection, maintenance and bonding procedures and the following:

Situation	Minimum construction	
Frontage road unconstructed or gravel road only;  OR  Frontage road sealed but not constructed* to Planning scheme policy - Integrated design standard;  OR  Frontage road partially constructed* to Planning scheme policy - Integrated design standard.	Construct the verge adjoining the development and the carriageway (including development side kerb and channel) to a minimum sealed width containing near side parking lane (if required), cycle lane (if required), cycle lane (if required), 2 travel lanes plus 1.5m wide (full depth pavement) gravel shoulder and table drainage to the opposite side.  The minimum total travel lane width is:  6m for minor roads;  7m for major roads.	

Note - Major roads are sub-arterial roads and arterial roads. Minor roads are roads that are not major roads.

Note - Construction includes all associated works (services, street lighting and linemarking).

Note - Alignment within road reserves is to be agreed with Council.

Note - \*Roads are considered to be constructed in accordance with Council standards when there is sufficient pavement width, geometry and depth to comply with the requirements of Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. Testing of the existing pavement may be required to confirm whether the existing works meet the standards in Planning scheme policy -Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

# **Stormwater**

Minor stormwater drainage systems (internal and external) have the capacity to convey stormwater flows from frequent storm events for the fully developed upstream catchment whilst ensuring pedestrian and vehicular traffic movements are safe and convenient.

#### E23.1

The capacity of all minor drainage systems are designed in accordance with Planning scheme policy - Integrated design.

#### E23.2

Stormwater pipe network capacity is to be calculated in accordance with the Hydraulic Grade Line method as detailed in Australian Rainfall and Runoff or QUDM.

#### E23.3

Development ensures that inter-allotment drainage infrastructure is provided in accordance with the relevant level as identified in QUDM.

#### **PO24**

Major stormwater drainage system(s) have the capacity to safely convey stormwater flows for the 1% AEP event for the fully developed upstream catchment.

#### E24.1

The internal drainage system safely and adequately conveys the stormwater flows for the 1% AEP event for the fully developed upstream catchment through the site.

#### E24.2

The external (downstream) drainage system safely conveys the stormwater flows for the 1% AEP event for the fully developed upstream catchment without allowing the flows to encroach upon private lots.

# E24.3

Overland flow paths from roads and public open space areas do not pass through private lots. Drainage pathways are provided to accommodate overland flows from roads and public open space areas.

#### E24.4

The flow velocity in all unlined or soft faced open drains is kept within acceptable limits for the type of material or lining and condition of the channel.

Note - Refer to QUDM for recommended average flow velocities.

#### **PO25**

Provide measures to properly manage surface flows for the 1% AEP event (for the fully developed catchment) draining to and through the land to ensure no actionable nuisance is created to any person or premises as a result of the development. The development must not result in ponding on adjacent land, redirection of surface flows to

#### **E25**

The stormwater drainage system is designed and constructed in accordance with Planning scheme policy - Integrated design.

other premises or blockage of a surface flow relief path for flows exceeding the design flows for any underground system within the development.	
PO26	No example provided.
Stormwater run-off from the site is conveyed to a point of lawful discharge without causing actionable nuisance to any person, property or premises.	
Note - Refer to Planning scheme policy - Integrated design for details.	
Note - A downstream drainage discharge report in accordance with Planning scheme policy - Stormwater management may be required to demonstrate achievement of this performance outcome.	
Note - A watercourse as defined in the Water Act may be accepted as a lawful point of discharge providing the drainage discharge from the site does not increase the downstream flood levels during events up to and including the 1% AEP storm. An afflux of +20mm may be accepted on Council controlled land and road infrastructure. No worsening is ensured when stormwater is discharged into a catchment that includes State Transport Infrastructure.	
PO27  Stormwater generated from the development does not compromise the capacity of existing stormwater infrastructure downstream of the site.  Note - A downstream drainage discharge report in accordance with Planning scheme policy - Stormwater management may be required to demonstrate achievement of this performance outcome.	No example provided.
PO28	No example provided.
Where development:	
a. is for an urban purpose that involves a land area of 2500m² or greater; and	
b. will result in:	
i. 6 or more dwellings; or	
<li>an impervious area greater than 25% of the net developable area,</li>	
stormwater quality management systems are designed, constructed, established and maintained to minimise the environmental impact of stormwater on surface, groundwater and receiving water environments and meet the design objectives outlined in Schedule 10 - Stormwater management design objectives.	

Note - A site based stormwater management plan prepared by a suitably qualified professional will be required in accordance with Planning scheme policy - Stormwater management. Stormwater quality infrastructure is to be designed in accordance with Planning scheme policy - Integrated design (Appendix C).

#### **PO29**

Stormwater drainage pipes and structures through or within private land (including inter-allotment drainage) are protected by easements in favour of Council with sufficient area for practical access for maintenance purposes.

Note - In order to achieve a lawful point of discharge, stormwater easements may also be required over temporary drainage channels/infrastructure where stormwater discharges to a balance lot prior to entering Council's stormwater drainage system.

#### **E29**

Stormwater drainage infrastructure (excluding detention and bio-retention systems) through or within private land (including inter-allotment drainage) is protected by easements in favour of Council. Minimum easement widths are as follows:

Pipe Diameter	Minimum easement width (excluding access requirements)	
Stormwater pipe up to 825mm diameter	3.0m	
Stormwater pipe up to 825mm diameter with sewer pipe up to 225m diameter	4.0m	
Stormwater pipe greater than 825mm diameter	Easement boundary to be 1m clear of the outside wall of the stormwater pipe (each side).	

Note - Additional easement width may be required in certain circumstances in order to facilitate maintenance access to the stormwater system.

Note - Refer to Planning scheme policy - Integrated design (Appendix C) for easement requirements over open channels.

# **PO30**

Stormwater management facilities (excluding outlets) are located outside of riparian areas and prevent increased channel bed and bank erosion.

No example provided.

Site works and construction management		
PO31	No example provided.	
The site and any existing structures are maintained in a tidy and safe condition.		
PO32	E32.1	
All works on-site are managed to:	Works incorporate temporary stormwater runoff, erosion and sediment controls and trash removal devices designed in accordance with the Urban Stormwater	

- minimise as far as practicable, impacts on adjoining or adjacent premises and the streetscape in regard to erosion and sedimentation, dust, noise, safety and light;
- minimise as far as possible, impacts on the natural environment:
- ensure stormwater discharge is managed in a C. manner that does not cause actionable nuisance to any person or premises;
- d. avoid adverse impacts on street trees and their critical root zone.

Quality Planning Guidelines, State Planning Policy, Schedule 10 - Stormwater management design objectives, Planning scheme policy - Stormwater management and Planning scheme policy - Integrated design, including but not limited to the following:

- stormwater is not discharged to adjacent properties in a manner that differs significantly from pre-existing conditions;
- b. stormwater discharged to adjoining and downstream properties does not cause scour or erosion of any kind;
- stormwater discharge rates do not exceed C. pre-existing conditions;
- minimum design storm for all temporary diversion drains and sedimentation basins in accordance with Schedule 10 - Stormwater management design objectives;
- ponding or concentration of stormwater does not occur on adjoining properties.

#### E32.2

Stormwater runoff, erosion and sediment controls are constructed in accordance with Planning scheme policy - Integrated design (Appendix C) prior to commencement of any clearing or earthworks and are maintained and adjusted as necessary at all times to ensure their ongoing effectiveness.

Note - The measures are adjusted on-site to maximise their effectiveness.

#### E32.3

The completed earthworks area is stabilised using turf, established grass seeding, mulch or sprayed stabilisation techniques to control erosion and sediment and dust from leaving the property.

#### E32.4

Existing street trees are protected and not damaged during works.

Note - Where development occurs in the tree protection zone, measures and techniques as detailed in Australian Standard AS 4970 Protection of trees on development sites are adopted and implemented.

**PO33** 

E33

Dust suppression measures are implemented during soil disturbances and construction works to protect nearby premises from unreasonable dust impacts.

No dust emissions extend beyond the boundaries of the site during soil disturbances and construction works.

#### **PO34**

All development works including the transportation of material to and from the site are managed to not negatively impact the existing road network, the amenity of the surrounding area or the streetscape.

Note - A Traffic Management Plan may be required to demonstrate compliance with this PO. A Traffic Management Plan is to be prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD).

Note - A haulage route must be identified and approved by Council where imported or exported material is transported to the site via a road of Local Collector standard or less, and:

- the aggregate volume of imported or exported material is a. greater than 1000m3; or
- b. the aggregate volume of imported or exported material is greater than 200m3 per day; or
- the proposed haulage route involves a vulnerable land use C. or shopping centre.

Note - A dilapidation report (including photographs) may be required for the haulage route to demonstrate compliance with this PO.

Editor's note - Where associated with a State-controlled road, further requirements may apply, and approval may be required from the Department of Transport and Main Roads.

#### E34.1

Construction traffic including contractor car parking is controlled in accordance with a traffic management plan. prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) to ensure all traffic movements to and from the site are safe.

#### E34.2

All contractor car parking is either provided on the development site, or on an alternative site in the general locality which has been set aside for car parking. Contractors vehicles are generally not to be parked in existing roads.

#### E34.3

Any material dropped, deposited or spilled on the road(s) as a result of construction processes associated with the site are to be cleaned at all times.

#### E34.4

Construction traffic to and from the development site uses the highest classification streets or roads where a choice of access routes is available. Haul routes for the transport of imported or spoil material and gravel pavement material along Council roads below sub-arterial standard must be approved routes.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

Note - A dilapidation report may be required to demonstrate compliance with this E.

#### E34.5

Where works are carried out in existing roads, the works must be undertaken so that the existing roads are maintained in a safe and usable condition. Practical access for residents, visitors and services (including postal deliveries and refuse collection) is retained to existing lots during the construction period and after completion of the works.

Note - A traffic control plan prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) will be required for any works that will affect access, traffic movements or traffic safety in existing roads.

#### E34.6

Access to the development site is obtained via an existing lawful access point.

#### **PO35**

All disturbed areas are to be progressively stabilised during construction and the entire site rehabilitated and substantially stabilised at the completion of construction.

Note - Refer to Planning scheme policy - Integrated design for details.

#### E35

At completion of construction all disturbed areas of the site are to be:

- topsoiled with a minimum compacted thickness of a. fifty (50) millimetres:
- b. stabilised using turf, established grass seeding, mulch or sprayed stabilisation techniques.

Note - These areas are to be maintained during any maintenance period to maximise grass coverage.

#### **PO36**

Earthworks are undertaken to ensure that soil disturbances are staged into manageable areas.

Note - A site specific Erosion and Sediment Control Plan (ESCP) will be required to demonstrate compliance with this PO. An ESCP is to be prepared in accordance with Planning scheme policy -Stormwater management and Planning scheme policy - Integrated design (Appendix C).

#### **E36**

Soil disturbances are staged into manageable areas of not greater than 3.5 ha.

# **PO37**

The clearing of vegetation on-site:

- is limited to the area of infrastructure works, building areas and other necessary areas for the works; and
- includes the removal of declared weeds and other b. materials which are detrimental to the intended use of the land:
- is disposed of in a manner which minimises C. nuisance and annoyance to existing premises.

Note - No burning of cleared vegetation is permitted.

# E37.1

All native vegetation to be retained on-site is temporarily fenced or protected prior to and during development works.

Note - No parking of vehicles or storage of machinery or goods is to occur in these areas during development works.

# E37.2

Disposal of materials is managed in one or more of the following ways:

- all cleared vegetation, declared weeds, stumps, rubbish, car bodies, scrap metal and the like are removed and disposed of in a Council land fill facility; or
- all native vegetation with a diameter below 400mm b. is to be chipped and stored on-site.

Note - The chipped vegetation must be stored in an approved location.

All development works are carried out at times which minimise noise impacts to residents.

#### **E38**

All development works are carried out within the following times:

- a. Monday to Saturday (other than public holidays) between 6:30am and 6:30pm on the same day:
- b. no work is to be carried out on Sundays or public holidays.

Note - Work outside the above hours may be approved (in writing) where it can be demonstrated that the work will not cause significant inconvenience or disruption to the public, or the work is unlikely to cause annoyance or inconvenience to occupants of adjacent properties.

#### **PO39**

Any alteration or relocation in connection with or arising from the development to any service, installation, plant, equipment or other item belonging to or under the control of the telecommunications authority, electricity authorities, the Council or other person engaged in the provision of public utility services is to be carried with the development and at no cost to Council.

No example provided.

### **Earthworks**

# **PO40**

On-site earthworks are designed to consider the visual and amenity impact as they relate to:

- the natural topographical features of the site; a.
- b. short and long-term slope stability;
- soft or compressible foundation soils; C.
- d. reactive soils:
- low density or potentially collapsing soils; e.
- f. existing fill and soil contamination that may exist on-site;
- the stability and maintenance of steep slopes and g. batters:
- h. excavation (cut) and fill and impacts on the amenity of adjoining lots (e.g. residential).

# E40.1

All cut and fill batters are provided with appropriate scour, erosion protection and run-off control measures including catch drains at the top of batters and lined batter drains as necessary.

#### E40.2

Stabilisation measures are provided, as necessary, to ensure long-term stability and low maintenance of steep slopes and batters.

#### E40.3

Inspection and certification of steep slopes and batters is required by a suitably qualified and experienced RPEQ.

#### E40.4

All fill batters steeper than 1 (V) in 6 (H) on residential lots are fully turfed to prevent scour and erosion.

# E40.5

All filling or excavation is contained on-site and is free draining.

#### E40.6

All fill placed on-site is:

- limited to that area necessary for the approved use;
- b. clean and uncontaminated (i.e. no building waste, concrete, green waste, actual acid sulfate soils, potential acid sulfate soils or contaminated material etc.).

#### E40.7

The site is prepared and the fill placed on-site in accordance with AS3798.

Note - The fill is to be inspected and tested in accordance with Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

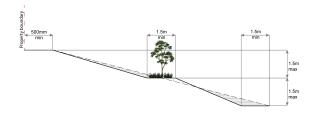
#### **PO41**

Embankments are stepped, terraced and landscaped to not adversely impact on the visual amenity of the surrounding area.

#### E41

Any embankments more than 1.5 metres in height are stepped, terraced and landscaped.

Figure - Embankment



# **PO42**

Filling or excavation is undertaken in a manner that:

- does not adversely impact on a Council or public sector entity maintained infrastructure or any drainage feature on, or adjacent to the land;
- does not preclude reasonable access to a Council b. or public sector entity maintained infrastructure or any drainage feature on, or adjacent to the land for monitoring, maintenance or replacement purposes.

Note - Public sector entity is defined in Schedule 2 of the Act.

# E42.1

No filling or excavation is undertaken in an easement issued in favour of Council or a public sector entity.

Note - Public sector entity is defined in Schedule 2 of the Act.

#### E42.2

Filling or excavation that would result in any of the following is not carried out on-site:

a. a reduction in cover over any Council or public sector entity infrastructure service to less than 600mm;

an increase in finished surface grade over, or within 1.5m on each side of, the Council or public sector entity infrastructure above that which existed prior to the earthworks being undertaken; prevent reasonable access to Council or public sector entity maintained infrastructure or any drainage feature on, or adjacent to the site for monitoring, maintenance or replacement purposes. Note - Public sector entity is defined in Schedule 2 of the Act. Note - All building work covered by QDC MP1.4 is excluded from this provision. **PO43** No example provided. Filling or excavation does not result in land instability. Note - Steep slopes and batters are inspected and certified for long-term stability by a suitably qualified and experienced geotechnical engineer with RPEQ qualifications. Stabilisation measures are provided, as necessary, to ensure long-term stability and low maintenance. **PO44** No example provided. Filling or excavation does not result in: adverse impacts on the hydrological and hydraulic capacity of the waterway or floodway; b. increased flood inundation outside the site; any reduction in the flood storage capacity in the C. floodway; d. any clearing of native vegetation. Note - To demonstrate compliance with this outcome, Planning Scheme Policy - Stormwater Management provides guidance on the preparation of a site based stormwater management plan by a suitably qualified professional. Refer to Planning scheme policy -Integrated design for guidance on infrastructure design and modelling requirements. **PO45** E45 Filling or excavation on the development site is Filling and excavation undertaken on the development

undertaken in a manner which does not create or accentuate problems associated with stormwater flows and drainage systems on land adjoining the site.

site are shaped in a manner which does not:

- a. prevent stormwater surface flow which, prior to commencement of the earthworks, passed onto the development site, from entering the land; or
- b. redirect stormwater surface flow away from existing flow paths; or
- divert stormwater surface flow onto adjacent land, C. (other than a road), in a manner which:

- i. concentrates the flow; or
- ii. increases the flow rates of stormwater over the affected section of the adjacent land above the situation which existed prior to the diversion; or
- iii. causes actionable nuisance to any person, property or premises.

All earth retaining structures provide a positive interface with the streetscape and minimise impacts on the amenity of adjoining residents.

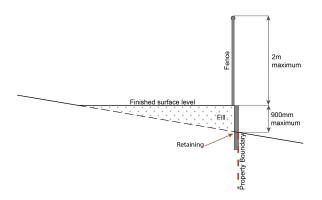
Note - Refer to Planning scheme policy - Residential design for guidance on how to achieve compliance with this performance outcome.

#### E46

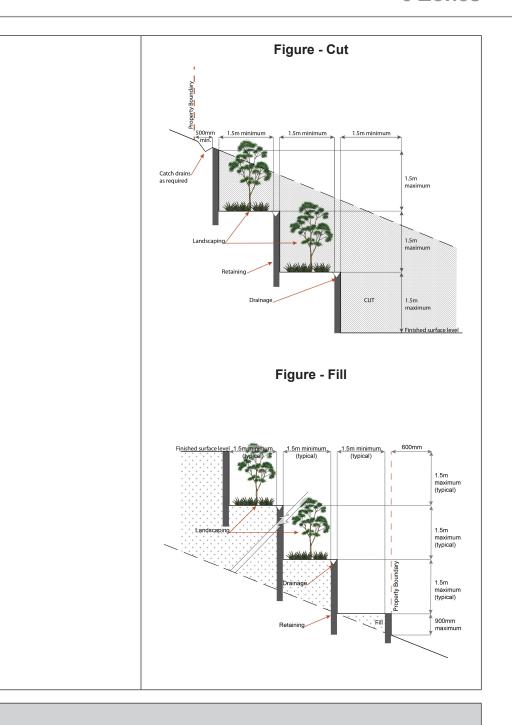
Earth retaining structures:

- are not constructed of boulder rocks or timber; a.
- b. where height is no greater than 900mm, are provided in accordance with Figure - Retaining on a boundary;

Figure - Retaining on boundary



- where height is greater than 900mm but no greater C. than 1.5m, are to be setback at least the equivalent height of the retaining structure from any property boundary;
- d. where height is greater than 1.5m, are to be setback and stepped 1.5m vertical: 1.5m horizontal, terraced, landscaped and drained as shown below.



# **Fire Services**

Note - The provisions under this heading only apply if:

- the development is for, or incorporates:
  - reconfiguring a lot for a community title scheme creating 1 or more vacant lots; or
  - material change of use for 2 or more sole occupancy units on the same lot, or within the same community titles scheme; or material change of use for a Tourist park<sup>(84)</sup> with accommodation in the form of caravans or tents; or material change of use for outdoor sales<sup>(54)</sup>, outdoor processing or outdoor storage where involving combustible materials. ii.

#### AND

- none of the following exceptions apply: b.
  - the distributor-retailer for the area has indicated, in its netserv plan, that the premises will not be served by that entity's reticulated
  - every part of the development site is within 60m walking distance of an existing fire hydrant on the distributor-retailer's reticulated water supply network, measured around all obstructions, either on or adjacent to the site.

Note - The provisions under this heading do not apply to buildings that are required by the Building Code of Australia to have a fire hydrant system complying with Australian Standard AS 2419.1 (2005) – Fire Hydrant Installations or other fire fighting facilities which provide equivalent protection.

#### **PO47**

Development incorporates a fire fighting system that:

- satisfies the reasonable needs of the fire fighting entity for the area;
- is appropriate for the size, shape and topography of the development and its surrounds;
- c. is compatible with the operational equipment available to the fire fighting entity for the area;
- d. considers the fire hazard inherent in the materials comprising the development and their proximity to one another:
- considers the fire hazard inherent in the surrounds to the development site;
- f. is maintained in effective operating order.

Note - The Queensland Fire and Emergency Services is the entity currently providing the fire fighting function for the urban areas of the Moreton Bay Region.

#### E47.1

External fire hydrant facilities are provided on site to the standard prescribed under the relevant parts of *Australian Standard AS 2419.1 (2005) – Fire Hydrant Installations*.

Note - For this requirement for accepted development, the following are the relevant parts of AS 2419.1 (2005) that may be applicable:

- a. in regard to the form of any fire hydrant Part 8.5 and Part 3.2.2.1, with the exception that for Tourist parks (84) or development comprised solely of dwellings and their associated outbuildings, single outlet above-ground hydrants or suitably signposted in-ground hydrants would be an acceptable alternative;
- in regard to the general locational requirements for fire hydrants - Part 3.2.2.2 (a), (e), (f), (g) and (h) as well as Appendix B of AS 2419.1 (2005);
- c. in regard to the proximity of hydrants to buildings and other facilities Part 3.2.2.2 (b), (c) and (d), with the exception that:
  - for dwellings and their associated outbuildings, hydrant coverage need only extend to the roof and external walls of those buildings;
  - ii. for caravans and tents, hydrant coverage need only extend to the roof of those tents and caravans;
     iii. for outdoor sales (54), processing or storage facilities,
  - for outdoor sales (34), processing or storage facilities, hydrant coverage is required across the entire area of the outdoor sales (54), outdoor processing and outdoor storage facilities;
- d. in regard to fire hydrant accessibility and clearance requirements - Part 3.5 and, where applicable, Part 3.6.

# E47.2

A continuous path of travel having the following characteristics is provided between the vehicle access point to the site and each external fire hydrant and hydrant booster point on the land:

- a. an unobstructed width of no less than 3.5m;
- b. an unobstructed height of no less than 4.8m;
- c. constructed to be readily traversed by a 17 tonne HRV fire brigade pumping appliance;
- d. an area for a fire brigade pumping appliance to stand within 20m of each fire hydrant and 8m of each hydrant booster point.

# E47.3

On-site fire hydrant facilities are maintained in effective operating order in a manner prescribed in *Australian Standard AS1851 (2012) – Routine service of fire protection systems and equipment.* 

PO48 E48

On-site fire hydrants that are external to buildings, as well as the available fire fighting appliance access routes to those hydrants, can be readily identified at all times from, or at, the vehicular entry point to the development site.

For development that contains on-site fire hydrants external to buildings:

- those external hydrants can be seen from the a. vehicular entry point to the site; or
- b. a sign identifying the following is provided at the vehicular entry point to the site:
  - i. the overall layout of the development (to scale);
  - ii. internal road names (where used);
  - iii. all communal facilities (where provided);
  - iv. the reception area and on-site manager's office (where provided);
  - external hydrants and hydrant booster points; ٧.
  - physical constraints within the internal roadway system which would restrict access by fire fighting appliances to external hydrants and hydrant booster points.

Note - The sign prescribed above, and the graphics used are to be:

- in a form: a.
- h of a size;
- C. illuminated to a level;

which allows the information on the sign to be readily understood, at all times, by a person in a fire fighting appliance up to 4.5m from the sign.

#### **PO49**

Each on-site fire hydrant that is external to a building is signposted in a way that enables it to be readily identified at all times by the occupants of any firefighting appliance traversing the development site.

#### E49

For development that contains on-site fire hydrants external to buildings, those hydrants are identified by way of marker posts and raised reflective pavement markers in the manner prescribed in the technical note Fire hydrant indication system produced by the Queensland Department of Transport and Main Roads.

Note - Technical note Fire hydrant indication system is available on the website of the Queensland Department of Transport and Main Roads.

#### Use specific criteria

# Caretaker's accommodation<sup>(10)</sup>

**PO50** 

E50

Development for a caretaker's accommodation (10):

- does not compromise the productivity of the use occurring on-site and in the surrounding area;
- b. is domestic in scale:
- provides adequate car parking provisions exclusive C. on the primary use of the site;
- d. is safe for the residents;
- e. has regard to the open space and recreation needs of the residents.

Development for caretaker's accommodation (10):

- a caretaker's accommodation (10) has a maximum GFA of 80m<sup>2</sup>;
- no more than 1 caretaker's accommodation (10) is b. established per site;
- does not gain access from a separate driveway C. from a road frontage.

# Food and drink outlet<sup>(28)</sup>

#### **PO51**

Food and drink outlets (28):

- remain secondary and ancillary to an open space, sport or recreation use;
- b. do not restrict or inhibit the ability for a recreation and open space area to be used for its primary sport and recreation purpose;
- not appear, act or function as a separate and stand-alone commercial activity but has a clearly expressed relationship with an open space, sport or recreation use;
- d. not generate nuisance effects such as noise, dust and odour on the character and amenity of the recreation and open space areas or on adjoining properties;
- where not in the Sports and recreation precinct, any liquor or gambling activities associated with a food and drink outlet (28) is a secondary and minor component.

#### E51.1

The GFA does not exceed 150m<sup>2</sup>, except where located in the Sports and recreation precinct where this provision does not apply.

#### E51.2

The food and drink outlet (28) operates in conjunction with a recreation or open space use occurring on the same site, except where located in the Sports and recreation precinct where this provision does not apply.

#### E51.3

The food and drink outlet (28) does not have a liquor or gambling licence, except where located in the Sports and recreation precinct where this provision does not apply.

# Landing<sup>(41)</sup>

#### **PO52**

Development associated with a landing (41):

- does not result in adverse impacts upon groundwater and surface water quality;
- does not adversely impact upon hydrological water b. flows;
- does not result in soil erosion; C.

No example provided.

- d. does not result in the loss of biodiversity quality and integrity of habitat;
- e. retains safe and convenient public access to waterways.

# Major electricity infrastructure<sup>(43)</sup>, Substation<sup>(80)</sup> and Utility installation<sup>(86)</sup>

# **PO53**

The development does not have an adverse impact on the visual amenity of a locality and is:

- a. high quality design and construction;
- b. visually integrated with the surrounding area;
- C. not visually dominant or intrusive;
- located behind the main building line; d.
- e. below the level of the predominant tree canopy or the level of the surrounding buildings and structures:
- f. camouflaged through the use of colours and materials which blend into the landscape;
- treated to eliminate glare and reflectivity; g.
- h. landscaped:
- i. otherwise consistent with the amenity and character of the zone and surrounding area.

#### E53.1

Development is designed to minimise surrounding land use conflicts by ensuring infrastructure, buildings, structures and other equipment:

- a. are enclosed within buildings or structures;
- b. are located behind the main building line;
- have a similar height, bulk and scale to the C. surrounding fabric;
- d. have horizontal and vertical articulation applied to all exterior walls.

#### E53.2

A minimum 3m wide strip of dense planting is provided around the outside of the fenced area, between the development and street frontage, side and rear boundaries.

#### **PO54**

Infrastructure does not have an impact on pedestrian health and safety.

#### E54

Access control arrangements:

- do not create dead-ends or dark alleyways adjacent to the infrastructure:
- b. minimise the number and width of crossovers and entry points;
- C. provide safe vehicular access to the site:
- do not utilise barbed wire or razor wire.

# **PO55**

All activities associated with the development occur within an environment incorporating sufficient controls to ensure the facility:

- generates no audible sound at the site boundaries a. where in a residential setting; or
- meet the objectives as set out in the Environmental b. Protection (Noise) Policy 2008.

#### E55

All equipment which produces audible or non-audible sound is housed within a fully enclosed building incorporating sound control measures sufficient to ensure noise emissions meet the objectives as set out in the Environmental Protection (Noise) Policy 2008.

# Market<sup>(46)</sup>

# **PO56**

Markets (46)

# E56.1

The market (46) does not impact on the ability to undertake activities associated with the primary recreation and open space purpose of the site.

- remain limited in size, scale and intensity to avoid adverse detrimental impacts on the character and amenity of an adjoining area, including vehicle access, traffic generation, on and off site car parking and pedestrian safety;
- do not restrict or inhibit the ability for a recreation and open space area to be used for its primary sport and recreation purpose;
- have minimal economic impact on established businesses on commercially zoned land in the immediate vicinity;
- not generate nuisance effects such as noise, dust, odour, hours and frequency of operation, on the character and amenity of the recreation and open space areas or on adjoining properties;
- e. does not adversely impact on the safe and efficient operation of the external road network.

#### E56.2

Market (46) operates as follows:

- a. No more than 2 days in any week;
- b. No more than 50 individual stalls;
- c. All activities, including set-up and pack-up, occur within the hours of 7.00am and 3.00pm;
- d. No use of amplified music, public address systems and noise generating plant and equipment;
- e. Waste containers are provided at a rate of 1 per food stall and 1 per 4 non-food stalls.

# **Commercial Activity Activity Group**

#### **PO57**

Development on Lot 10, SP24480 at 148 Klingner Road, Kippa-Ring and known as the Redcliffe Rugby League Club:

- a. is consistent with the intended role of the site which is to facilitate limited commercial activities associated with, and ancillary to, the operation of the Redcliffe Rugby League Club;
- b. is commercial activities is limited to short term accommodation<sup>(77)</sup>, office<sup>(53)</sup>, shops<sup>(75)</sup> and health services;
- c. is integrated with existing activities and uses on the site. Development does not act or perceived as a separate standalone development separate from the Redcliffe Rugby League Club; and
- d. does not undermine the viability, role or function of centres in the region.

Note - Council may require an Economic Impact Assessment (EIA) to demonstrate compliance with this performance outcome. A EIA must demonstrate that the size, scale, range of services and location of development is commensurate with the level of existing demand and that impacts on existing and future planned centres are justified and within acceptable limits. Further details on the methodology for a EIA is outlined in Planning scheme policy - Economic impact assessment.

No example provided.

# Tourist park (84)

**PO58** 

No example provided.

# Tourist park (84):

- is not, or does not act, as a permanent place of residence for persons where a typical period of time does not exceed 3 consecutive months;
- h. is located within a site area that is of sufficient size to:
  - i. accommodate the proposed use and associated facilities including car parking;
  - ii. safe and convenient access to and within the site:
  - iii. achieve a high level of convenience and privacy for occupants;
  - provide for a high level of open space and ίV. on-site amenity for users;
- C. is setback and screened from all property boundaries to minimise adverse visual impacts on adjoining properties:
- d. is landscaped and screened in a manner that achieves the design principles outlined in Planning scheme policy - Integrated design;
- create a safe environment by incorporating the key elements of crime prevention through environmental design (CPTED);
- does not adversely impact on the safe and efficient f. operations of the external road network.

# Telecommunications facility<sup>(81)</sup>

Editor's note - In accordance with the Federal legislation Telecommunications facilities (81) must be constructed and operated in a manner that will not cause human exposure to electromagnetic radiation beyond the limits outlined in the Radiocommunications (Electromagnetic Radiation - Human Exposure) Standard 2003 and Radio Protection Standard for Maximum Exposure Levels to Radiofrequency Fields - 3Khz to 300Ghz.

# **PO59**

Telecommunications facilities<sup>(81)</sup> are co-located with existing telecommunications facilities<sup>(81)</sup>, Utility installation<sup>(86)</sup>, Major electricity infrastructure<sup>(43)</sup> or Substation<sup>(80)</sup> if there is already a facility in the same coverage area.

#### E59.1

New telecommunication facilities (81) are co-located on existing towers with new equipment shelter and associated structures positioned adjacent to the existing shelters and structures.

#### E59.2

If not co-located with an existing facility, all co-location opportunities have been investigated and fully exhausted within a 2km radius of the site.

A new Telecommunications facility (81) is designed and constructed to ensure co-masting or co-siting with other carriers both on the tower or pole and at ground level is possible in the future.

#### E60

A minimum area of 45m<sup>2</sup> is available to allow for additional equipment shelters and associated structures for the purpose of co-locating on the proposed facility.

#### **PO61**

Telecommunications facilities (81) do not conflict with lawful existing land uses both on and adjoining the site.

#### E61

The development results in no net reduction in the minimum quantity and standard of landscaping, private or communal open space or car parking spaces required under the planning scheme or under an existing development approval.

#### **PO62**

The Telecommunications facility (81) does not have an adverse impact on the visual amenity of a locality and is:

- high quality design and construction; a.
- b. visually integrated with the surrounding area;
- not visually dominant or intrusive; C.
- d. located behind the main building line;
- e. below the level of the predominant tree canopy or the level of the surrounding buildings and structures:
- f. camouflaged through the use of colours and materials which blend into the landscape;
- treated to eliminate glare and reflectivity; g.
- h. landscaped;
- otherwise consistent with the amenity and character i. of the zone and surrounding area.

#### E62.1

Where in an urban area, the development does not protrude more than 5m above the level of the existing treeline, prominent ridgeline or building rooftops in the surrounding townscape.

#### E62.2

In all other areas towers do not exceed 35m in height.

#### E62.3

Towers, equipment shelters and associated structures are of a design, colour and material to:

- a. reduce recognition in the landscape;
- b. reduce glare and reflectivity.

#### E62.4

All structures and buildings are setback behind the main building line and a minimum of 10m from side and rear boundaries, except where in the Industry and Extractive industry zones, the minimum side and rear setback is 3m.

Where there is no established building line the facility is located at the rear of the site.

#### E62.5

The facility is enclosed by security fencing or by other means to ensure public access is prohibited.

#### E62.6

A minimum 3m wide strip of dense planting is provided around the perimeter of the fenced area, between the facility and street frontage and adjoining uses.

Note - Landscaping is provided in accordance with Planning scheme policy - Integrated design.

Note - Council may require a detailed landscaping plan, prepared by a suitably qualified person, to ensure compliance with Planning scheme policy - Integrated design.

#### **PO63**

Lawful access is maintained to the site at all times that does not alter the amenity of the landscape or surrounding uses.

#### E63

An Access and Landscape Plan demonstrates how 24 hour vehicular access will be obtained and maintained to the facility in a manner that is appropriate to the site's context.

#### **PO64**

All activities associated with the development occur within an environment incorporating sufficient controls to ensure the facility generates no audible sound at the site boundaries where in a residential setting.

#### E64

All equipment comprising the Telecommunications facility<sup>(81)</sup> which produces audible or non-audible sound is housed within a fully enclosed building incorporating sound control measures sufficient to ensure no noise from this equipment can be heard, or felt at the site boundary.

#### Values and constraints criteria

Note - The relevant values and constraints criteria do not apply where the development is consistent with a current Development permit for Reconfiguring a lot or Material change of use or Operational work, where that approval has considered and addressed (e.g. through a development footprint plan (or similar in the case of Landslide hazard) or conditions of approval) the identified value or constraint under this planning scheme.

# Acid sulfate soils - (refer Overlay map - Acid sulfate soils to determine if the following assessment criteria apply)

Note - To demonstrate achievement of the performance outcome, an Acid sulfate soils (ASS) investigation report and soil management plan is prepared by a qualified engineer. Guidance for the preparation an ASS investigation report and soil management plan is provided in Planning scheme policy - Acid sulfate soils.

# **PO65**

Development avoids disturbing acid sulfate soils. Where development disturbs acid sulfate soils, development:

- a. is managed to avoid or minimise the release of surface or groundwater flows containing acid and metal contaminants into the environment;
- b. protects the environmental and ecological values and health of receiving waters;
- protects buildings and infrastructure from the effects of acid sulfate soils.

#### E65

Development does not involve:

- excavation or otherwise removing of more than a. 100m<sup>3</sup> of soil or sediment where below than 5m Australian Height datum AHD; or
- filling of land of more than 500m<sup>3</sup> of material with b. an average depth of 0.5m or greater where below the 5m Australian Height datum AHD.

# Bushfire hazard (refer Overlay map - Bushfire hazard to determine if the following assessment criteria apply)

Note - To demonstrate achievement of the performance outcomes, a bushfire management plan is prepared by a suitably qualified person. Guidance for the preparation of a bushfire management plan is provided in Planning scheme policy – Bushfire prone areas.

Note - Unacceptable risk is defined as a situation where people or property are exposed to a predictable hazard event that may result in serious injury, loss of life, failure of community infrastructure, or property damage.

#### **PO66**

#### Development:

- minimises the number of buildings and people working and living on a site exposed to bushfire
- ensures the protection of life during the passage of b. a fire front:
- is located and designed to increase the chance of C. survival of buildings and structures during a
- d. minimises bushfire risk from build up of fuels around buildings and structures;
- e. ensure safe and effective access for emergency services during a bushfire.

#### E66.1

Buildings and structures are:

- not located on a ridgeline;
- not located on land with a slope greater than 15% b. (see Overlay map - Landslide hazard);
- C. dwellings are located on east to south facing slopes.

#### E66.2

Buildings and structures have contained within the site:

- a separation from classified vegetation of 20m or the distance required to achieve a bushfire attack level (BAL) at the building, roofed structure or fire fighting water supply of no more than 29, whichever is the greater;
- b. a separation from low threat vegetation of 10m or the distance required to achieve a bushfire attack level (BAL) at the building, roofed structure or fire fighting water supply of no more than 29, whichever is the greater;
- C. a separation of no less than 10m between a fire fighting water supply extraction point and any classified vegetation, buildings and other roofed structures:
- d. an area suitable for a standard fire fighting appliance to stand within 3m of a fire fighting water supply extraction point; and
- an access path suitable for use by a standard fire fighting appliance having a formed width of at least 4m, a cross-fall of no greater than 5%, and a longitudinal gradient of no greater than 25%:
  - i. to, and around, each building and other roofed structure: and
  - ii. to each fire fighting water supply extraction point.

Note - The meaning of the terms classified vegetation and low threat vegetation as well as the method of calculating the bushfire attack level are as described in Australian Standard AS 3959

#### **PO67**

Development and associated driveways and access ways:

avoid potential for entrapment during a bushfire; a.

#### **E67**

A length of driveway:

to a road does not exceed 100m between the most a. distant part of a building used for any purpose other than storage and the nearest part of a public road;

- b. ensure safe and effective access for emergency services during a bushfire;
- enable safe evacuation for occupants of a site C. during a bushfire.
- b. has a maximum gradient no greater than 12.5%;
- have a minimum width of 3.5m; C.
- accommodate turning areas for fire fighting d. appliances in accordance with Qld Fire and Emergency Services' Fire Hydrant and Vehicle Access Guideline.

Development provides an adequate water supply for fire-fighting purposes.

#### **E68**

- a reticulated water supply is provided by a a. distributer retailer for the area or;
- where not connected to a reticulated water supply, b. on-site fire fighting water storage containing not less than 10 000 litres (tanks with fire brigade tank fittings, swimming pools) is located within 10m of buildings and structures.
- Where a swimming pool is the nominated on-site fire fighting water storage source, vehicle access is provided to within 3m of that water storage source.
- Where a tank is the nominated on-site fire fighting water storage source, it includes:
  - a hardstand area allowing medium rigid vehicles (15 tonne fire appliance) access within 6m of the tank:
  - fire brigade tank fittings, comprising 50mm ii. ball valve and male camlock coupling and, if underground, an access hole of 200mm (minimum) to accommodate suction lines.

### **PO69**

Development:

- does not present unacceptable risk to people or environment due to the impact of bushfire on dangerous goods or combustible liquids;
- b. does not present danger or difficulty to emergency services for emergency response or evacuation.

Editor's note - Unacceptable risk is defined as a situation where people or property are exposed to a predictable hazard event that may result in serious injury, loss of life, failure of community infrastructure, or property damage.

#### E69

Development does not involve the manufacture or storage of hazardous chemicals.

# Environmental areas (refer Overlay map - Environmental areas to determine if the following assessment criteria apply)

Note – The following are excluded from the native vegetation clearing provisions of this planning scheme:

- Clearing of native vegetation located within an approved development footprint; a.
- b. Clearing of native vegetation within 10m from a lawfully established building reasonably necessary for emergency access or immediately required in response to an accident or emergency;
- Clearing of native vegetation reasonably necessary to remove or reduce the risk vegetation poses to serious personal injury or damage C. to infrastructure:

- d Clearing of native vegetation reasonably necessary to construct and maintain a property boundary fence and not exceed 4m in width either side of the fence where in the Rural, Rural residential and Environmental Management and Conservation zones. In any other zone, clearing is not to exceed 2m in width either side of the fence;
- Clearing of native vegetation reasonably necessary for the purpose of maintenance or works within a registered easement for public e. infrastructure or drainage purposes;
- Clearing of native vegetation in accordance with a bushfire management plan prepared by a suitably qualified person, submitted to and accepted by Council;
- Clearing of native vegetation associated with removal of recognised weed species, maintaining existing open pastures and cropping g. land, windbreaks, lawns or created gardens;
- Grazing of native pasture by stock; h.
- Native forest practice where accepted development under Part 1, 1.7.7 Accepted development

Note - Definition for native vegetation is located in Schedule 1 Definitions.

Note - Native vegetation subject to this criteria primarily comprises of matters of national environmental significance (MNES), matters of state environmental significance (MSES). They also comprise some matters of local environmental significance (MLES). A MLES is defined in Schedule 1.2, Administrative definitions. A list of the elements that apply to the mapped MSES and MLES is provided in Appendix 1 of the Planning scheme policy - Environmental areas.

Editors' Note - The accuracy of overlay mapping can be challenged through the development application process (code assessable development) or by way of a planning scheme amendment. See Council's website for details.

Note - To demonstrate achievement of the performance outcome, an ecological assessment, vegetation management plan and fauna management plan, as required, are prepared by a suitably qualified person. Guidance for the preparation of above mentioned reports is provided in Planning scheme policy - Environmental areas.

# Vegetation clearing, ecological value and connectivity

#### **PO70**

Development avoids locating in a High Value Area or a Value Offset Area. Where it is not practicable or reasonable for development to avoid establishing in these areas, development must ensure that:

- the quality and integrity of the biodiversity and ecological values inherent to a High Value Area and a Value Offset Area is maintained and not lost or degraded;
- on-site mitigation measures, mechanisms or processes are in place demonstrating the quality and integrity of the biodiversity and ecological values inherent to a High Value Area and a Value Offset Area are maintained. For example, this can be achieved through replacement, restoration or rehabilitation planting as part of any proposed covenant, the development of a Vegetation Management Plan, a Fauna Management Plan, and any other on-site mitigation options identified in the Planning scheme policy - Environmental areas\*.

No example provided.

<sup>\*</sup> Editor's note - This is not a requirement for an environmental offset under the Environmental Offsets Act 2014.

# PO71 No example provided. Development provides for safe, unimpeded, convenient and ongoing wildlife movement and establishes and maintains habitat connectivity by: retaining habitat trees; a. b. providing contiguous patches of habitat; provide replacement and rehabilitation planting to C. improve connectivity; d. avoiding the creation of fragmented and isolated patches of habitat; providing wildlife movement infrastructure. e. Editor's note - Wildlife movement infrastructure may include refuge poles, tree boulevarding, 'stepping stone' vegetation plantings, tunnels, appropriate wildlife fencing; culverts with ledges, underpasses, overpasses, land bridges and rope bridges. Further information is provided in Planning scheme policy – Environmental areas. Vegetation clearing and habitat protection **PO72** No example provided. Development ensures that the biodiversity quality and integrity of habitats is not adversely impacted upon but maintained and protected. **PO73** No example provided. Development does not result in the net loss or degradation of habitat value in a High Value Area or a Value Offset Area. Where development does result in the loss or degradation of habitat value, development will: rehabilitate, revegetate, restore and enhance an a. area to ensure it continues to function as a viable and healthy habitat area; provide replacement fauna nesting boxes in the b. event of habitat tree loss in accordance with Planning scheme policy - Environmental areas; undertake rehabilitation, revegetation and C. restoration in accordance with the South East Queensland Ecological Restoration Framework. **PO74** No example provided. Development ensures safe, unimpeded, convenient and ongoing wildlife movement and habitat connectivity by: providing contiguous patches of habitat; a.

avoiding the creation of fragmented and isolated

providing replacement and rehabilitation planting

providing wildlife movement infrastructure;

b.

C. d. patches of habitat;

to improve connectivity.

Vegetation clearing and soil resource stability		
PO75	No example provided.	
Development does not:		
<ul> <li>a. result in soil erosion or land degradation;</li> <li>b. leave cleared land exposed for an unreasonable period of time but is rehabilitated in a timely manner.</li> </ul>		
Vegetation clearing and water quality		
PO76	No example provided.	
Development maintains or improves the quality of groundwater and surface water within, and downstream, of a site by:		
<ul> <li>a. ensuring an effective vegetated buffers and setbacks from waterbodies is retained to achieve natural filtration and reduce sediment loads;</li> <li>b. avoiding or minimising changes to landforms to maintain hydrological water flows;</li> <li>c. adopting suitable measures to exclude livestock from entering a waterbody where a site is being used for animal husbandry<sup>(4)</sup> and animal keeping<sup>(5)</sup> activities.</li> </ul>		
PO77	No example provided.	
Development minimises adverse impacts of stormwater run-off on water quality by:  a. minimising flow velocity to reduce erosion; b. minimising hard surface areas; c. maximising the use of permeable surfaces; d. incorporating sediment retention devices; e. minimising channelled flow.		
Vegetation clearing and access, edge effects and urban heat island effects		
PO78  Development retains safe and convenient public access in a manner that does not result in the adverse edge effects or the loss or degradation of biodiversity values within the environment.	No example provided.	
PO79	No example provided.	
<ul> <li>Development minimises potential adverse 'edge effects' on ecological values by:</li> <li>a. providing dense planting buffers of native vegetation between a development and environmental areas;</li> <li>b. retaining patches of native vegetation of greatest possible size where located between a development and environmental areas;</li> <li>c. restoring, rehabilitating and increasing the size of existing patches of native vegetation;</li> </ul>		

- d. ensuring that buildings and access (public and vehicle) are setback as far as possible from environmental areas and corridors;
- e. landscaping with native plants of local origin.

Editor's note - Edge effects are factors of development that go to detrimentally affecting the composition and density of natural populations at the fringe of natural areas. Factors include weed invasion, pets, public and vehicle access, nutrient loads, noise and light pollution, increased fire frequency and changes in the groundwater and surface water flow.

#### **PO80**

Development avoids adverse microclimate change and does not result in increased urban heat island effects. Adverse urban heat island effects are minimised by:

- pervious surfaces; a.
- b. providing deeply planted vegetation buffers and green linkage opportunities;
- landscaping with local native plant species to C. achieve well-shaded urban places;
- d. increasing the service extent of the urban forest canopy.

No example provided.

# Vegetation clearing and Matters of Local Environmental Significance (MLES) environmental offsets

#### **PO81**

Where development results in the unavoidable loss of native vegetation within a Value Offset Area MLES waterway buffer or a Value Offset Area MLES wetland buffer, an environmental offset is required in accordance with the environmental offset requirements identified in Planning scheme policy - Environmental areas.

Editor's note - For MSES Koala Offsets, the environmental offset provisions in schedule 11 of the Regulation, in combination with the requirements of the Environmental Offset Act 2014, apply.

No example provided.

# Extractive resources separation area (refer Overlay map - Extractive resources (separation area) to determine if the following assessment criteria apply)

Note - To demonstrate achievement of the performance outcomes, a noise impact assessment report is prepared by a suitably qualified person. Guidance to preparing noise impact assessment report is provided in Planning scheme policy - Noise.

#### **PO82** E82 One dwelling house<sup>(22)</sup> permitted per lot within separation Development does not increase the number of people living in the Extractive Resources separation area. area. **PO83** E83 Development: Development within the separation area does not include the following activities: does not introduce or increase uses that are sensitive to the impacts of an Extractive industry (27); Caretaker's accommodation<sup>(10)</sup>; a.

- b. is compatible with the operation of an Extractive industry<sup>(27)</sup>;
- does not comprise or undermine the function and C. integrity of the separation area in providing a buffer between key extractive and processing activities and sensitive, incompatible uses outside the separation area.
- Community residence<sup>(16)</sup>: b.
- Dual occupancy<sup>(21)</sup>; C.
- Dwelling unit<sup>(23)</sup>: d.
- Hospital (36): e.
- Rooming accommodation (69); f.
- Multiple dwelling<sup>(49)</sup>: g.
- Non-resident workforce accommodation (52); h.
- Relocatable home park (62); i.
- Residential care facility (65): j.
- Resort complex<sup>(66)</sup>; k.
- Retirement facility<sup>(67)</sup>; I.
- Rural workers' accommodation<sup>(71)</sup>; m.
- Short-term accommodation<sup>(77)</sup>; n.
- Tourist park (84). 0.

Habitable rooms achieve the noise levels listed in Schedule 1 Acoustic Quality Objectives, Environmental Protection (Noise) Policy 2008 and provides a safe, healthy and disturbance free living environment.

#### E84

All habitable rooms within the separation area are:

- a. acoustically insulated to achieve the noise levels listed in Schedule 1 Acoustic Quality Objectives, Environmental Protection (Noise) Policy 2008;
- b. provided with mechanical ventilation.

# **PO85**

Development provides open space areas for passive recreation in a manner where impacts from key extractive/processing activities, particularly noise, is minimised.

# E85

Private open space areas are separated from the resource processing area by buildings or a 1.8m high solid structure.

Extractive resources transport route (refer Overlay map - Extractive resources (transport route and buffer) to determine if the following assessment criteria apply)

# **PO86**

Development:

- does not increase in the number of people living in a. close proximity to a transport route and being subject to the adverse effects from the transportation route;
- b. does not result in the establishment of uses that are incompatible with the operation of Extractive resources transport routes;
- adopts design and location measures to satisfactorily mitigate the potential adverse impacts associated with transportation routes on sensitive land uses. Such measures include, but are not limited to:
  - locating the furthest distance possible from i. the transportation route;
  - habitable rooms being located the furthest ii. from the transportation route;
  - iii. shielding and screening private outdoor recreation space from the transportation routes.

#### E86

The following uses are not located within the 100m wide transport route buffer:

- Caretaker's accommodation<sup>(10)</sup>, except where a. located in the Extractive industry zone;
- Community residence<sup>(16)</sup>: b.
- Dual occupancy<sup>(21)</sup>; C.
- Dwelling house<sup>(22)</sup>; d.
- Dwelling unit<sup>(23)</sup>: e.
- Hospital (36): f.
- Rooming accommodation (69); g.
- Multiple dwelling<sup>(49)</sup>; h.
- Non-resident workforce accommodation (52); i.
- Relocatable home park (62); j.
- Residential care facility<sup>(65)</sup>; k.
- Resort complex<sup>(66)</sup>; l.
- Retirement facility<sup>(67)</sup>; m.
- Rural workers' accommodation<sup>(71)</sup>; n.
- Short-term accommodation<sup>(77)</sup>; Ο.
- Tourist park (84). p.

#### Development:

- does not adversely impact upon the efficient and effective transportation of extractive material along a transportation route:
- ensures vehicle access and egress along b. transportation routes are designed and located to achieve a high degree of safety, having good visibility;
- utilises existing vehicle access points and where C. existing vehicle access points are sub-standard or poorly formed, they are upgraded to an appropriate standard.

#### E87.1

Development does not create a new vehicle access point onto an Extractive resources transport route.

#### E87.2

A vehicle access point is located, designed and constructed in accordance with Planning scheme policy - Integrated design.

# Heritage and landscape character (refer Overlay map - Heritage and landscape character to determine if the following assessment criteria apply)

Note - To assist in demonstrating achievement of heritage performance outcomes, a Cultural heritage impact assessment report is prepared by a suitably qualified person verifying the proposed development is in accordance with The Australia ICOMOS Burra Charter.

Note - To assist in demonstrating achievement of this performance outcome, a Tree assessment report is prepared by a qualified arborist in accordance with Planning scheme policy - Heritage and landscape character. The Tree assessment report will also detail the measures adopted in accordance with AS 4970-2009 Protection of trees on development sites.

Note - Places, including sites, objects and buildings having local cultural heritage significance, are identified on Overlay map - Heritage and landscape character and listed in Schedule 1 of Planning scheme policy - Heritage and landscape character. Places also having cultural heritage significance at a State level and being entered in the Queensland Heritage Register, are also identified in Schedule 1 of Planning scheme policy - Heritage and landscape character.

#### **PO88**

#### Development will:

- a. not diminish or cause irreversible damage to the cultural heritage values present on the site, and associated with a heritage site, object or building;
- b. protect the fabric and setting of the heritage site, object or building;
- C. be consistent with the form, scale and style of the heritage site, object or building;
- utilise similar materials to those existing, or where d. this is not reasonable or practicable, neutral materials and finishes;
- incorporate complementary elements, detailing and e. ornamentation to those present on the heritage site, object or building;
- f. retain public access where this is currently provided.

#### E88

Development is for the preservation, maintenance, repair and restoration of a site, object or building of cultural heritage value.

Note - A cultural heritage conservation management plan for the preservation, maintenance, repair and restoration of a site, object or building of cultural heritage value is prepared in accordance with Planning scheme policy - Heritage and landscape character. The plan is sent to, and approved by Council prior to the commencement of any preservation, maintenance, repair and restoration works.

# **PO89**

Demolition and removal is only considered where:

a report prepared by a suitably qualified a. conservation architect or conservation engineer demonstrates that the building is structurally unsound and is not reasonably capable of economic repair; or

No example provided.

- b. demolition is confined to the removal of outbuildings, extensions and alterations that are not part of the original structure; or
- limited demolition is performed in the course of C. repairs, maintenance or restoration; or
- demolition is performed following a catastrophic event which substantially destroys the building or object.

Where development is occurring on land adjoining a site of cultural heritage value, the development is to be sympathetic to and consistent with the cultural heritage values present on the site and not result in their values being eroded, degraded or unreasonably obscured from public view.

No example provided.

#### **PO91**

Development does not adversely impact upon the health and vitality of significant trees. Where development occurs in proximity to a significant tree, construction measures and techniques as detailed in AS 4970-2009 Protection of trees on development sites are adopted to ensure a significant tree's health, wellbeing and vitality.

Significant trees are only removed where they are in a poor state of health or where they pose a health and safety risk to persons or property. A Tree Assessment report prepared by a suitably qualified arborist confirming a tree's state of health is required to demonstrate achievement of this performance outcome.

#### E91

Development does:

- not result in the removal of a significant tree; a.
- not occur within 20m of a protected tree; b.
- involve pruning of a tree in accordance with C. Australian Standard AS 4373-2007 - Pruning of Amenity Trees.

# Landslide hazard (refer Overlay map - Landslide hazard to determine if the following assessment criteria apply)

Note - To demonstrate achievement of the performance outcomes, a site-specific geotechnical assessment report is prepared by a qualified engineer. Guidance for the preparation of a geotechnical assessment report is provided in Planning scheme policy - Landslide hazard.

# **PO92**

# Development:

- a. maintains the safety of people and property on a site and neighbouring sites from landslides;
- ensures the long-term stability of the site b. considering the full nature and end use of the development;
- ensures site stability during all phases of C. construction and development;
- d. minimises disturbance of natural drainage patterns of the site and does not result in the redirection or

#### E92

# Development does not:

- a. involve earthworks exceeding 50m<sup>3</sup>;
- b. involve cut and fill having a height greater than 600mm:
- involve any retaining wall having a height greater than 600mm;
- d. redirect or alter the existing flow of surface or groundwater.

- alteration of the existing flow if surface or groundwater
- minimises adverse visual impacts on the amenity of adjoining residents and provides a positive interface with the streetscape.

#### E93

Buildings are designed to respond to sloping topography in the siting, design and form of buildings and structures by:

- minimising overuse of cut and fill to create single a. flat pads and benching;
- b. avoiding expanses of retaining walls, loss of trees and vegetation and interference with natural drainage systems;
- minimising any adverse visual impact on the C. landscape character;
- d. Protect the amenity of adjoining properties.

Buildings, excluding domestic outbuildings:

- are split-level, multiple-slab, pier or pole a. construction;
- b. are not single plane slab on ground.

#### **PO94**

**PO93** 

Development protects the safety of people, property and the environment from the impacts of landslide on hazardous chemicals manufactured, handled or stored by incorporating design measures to ensure:

- a. the long-term stability of the development site considering the full nature and end use of the development;
- b. site stability during all phases of construction and development;
- the development is not adversely affected by landslide activity originating on sloping land above the site;
- d. emergency access and access from the site for the public and emergency vehicles is available and is not at risk from landslide.

#### **E94**

Development does not involve the manufacture, handling or storage of hazardous chemicals.

Infrastructure buffers (refer Overlay map - Infrastructure buffers to determine if the following assessment criteria apply)

#### **PO95**

Odour sensitive development is separated from Wastewater treatment plants so they are not adversely affected by odour emission or other air pollutant impacts.

#### E95

The following uses are not located within a wastewater treatment site buffer:

- Caretaker's accommodation (10); a.
- Community residence<sup>(16)</sup>: b.
- Dual occupancy<sup>(21)</sup>; C.
- Dwelling house<sup>(22)</sup> d.
- Dwelling unit<sup>(23)</sup>: e.
- Hospital (36): f.
- Rooming accommodation (69): g.
- Multiple dwelling<sup>(49)</sup>; h.
- Non-resident workforce accommodation (52); i.
- Relocatable home park<sup>(62)</sup>; j.
- Residential care facility (65): k.

- Resort complex<sup>(66)</sup>: I.
- Retirement facility<sup>(67)</sup>; m.
- Rural workers' accommodation<sup>(71)</sup>; n.
- Short-term accommodation (77); 0.
- Tourist park<sup>(84)</sup>. p.

Development within a Water supply buffer captures solid or liquid waste from all land use, development and activities is designed, constructed and managed to prevent the release of contaminants to surface water or groundwater bodies.

#### E96.1

Run-off and sediment from roadways and impervious surfaces within a Water supply buffer are intercepted and treated on-site to remove oil, grease, chemicals, silt, trace metals and nutrients such as nitrogen and phosphorous.

#### E96.2

Incineration or burial of waste within a Water supply buffer is not undertaken onsite.

#### E96.3

Solid waste within a Water supply buffer is collected and stored in weather proof, sealed waste receptacles, located in roofed and bunded areas, for disposal by a licenced contractor.

#### E96.4

Holding tanks within a Water supply buffer are used for all liquid waste and provide for the separation of oils/solvents and solids prior to pump-out and collection by a licenced contractor.

#### E96.5

Management, handling and storage of hazardous chemicals (including fuelling of vehicles) within a Water supply buffer, is undertaken in secured, climate controlled, weather proof, level and bunded enclosures.

# **PO97**

On-site sewerage systems within a Water supply buffer are designed and operated to ensure there is no worsening or adverse impacts to health risks, environmental risks and water quality.

Editor's Note - For guidance refer to the Seq water Development Guidelines: Development Guidelines for Water Quality Management in Drinking Water Catchments 2012.

#### E97

Secondary treated wastewater treatment systems within a Water supply buffer include:

- emergency storage capable of holding 3-6 hours peak flow of treated effluent in the event of emergencies or overload with provision for de-sludging;
- b. back up pump installation and backup power;
- C. MEDLI modelling to determine irrigation rates and sizing of irrigation areas;

#### d. vegetated land application areas are not located in overland flow paths or on areas that perform groundwater recharge or discharge functions; and

e. wastewater collection and storage systems have a capacity to accommodate full load at peak times and includes temporary facilities.

#### **PO98**

Development within a Bulk water supply infrastructure buffer is located, designed and constructed to:

- protect the integrity of the water supply pipeline; a.
- b. maintain adequate access for any required maintenance or upgrading work to the water supply pipeline;

#### E98

Development:

- does not involve the construction of any buildings or structures within a Bulk water supply infrastructure buffer:
- b. involving a major hazard facility or environmentally relevant activity (ERA) is setback 30m from a Bulk water supply infrastructure buffer.

#### **PO99**

Development is located and designed to maintain required access to Bulk water supply infrastructure.

#### E99

Development does not restrict access to Bulk water supply infrastructure of any type or size, having regard to (among other things):

- a. buildings or structures;
- b. gates and fences;
- C. storage of equipment or materials;
- landscaping or earthworks or stormwater or other infrastructure.

# **PO100**

Development within the Gas pipeline buffer:

- avoids attracting people in large numbers to live, a. work or congregate;
- b. avoids the storage of hazardous chemicals;
- C. maintains adequate access for any required maintenance or upgrading work;
- d. minimises risk of harm to people and property.

Editor's note - The Petroleum and Gas (Production and Safety) Act 2004 (sections 807 and 808) requires that building or changes in surface level on pipeline land must not occur unless all the pipeline licence holders consent.

## E100

Development does not involve the construction of any buildings or structures within the Gas pipeline buffer.

Editor's note - The Petroleum and Gas (Production and Safety) Act 2004 (sections 807 and 808) requires that building or changes in surface level on pipeline land must not occur unless all the pipeline licence holders consent.

#### PO101

Odour sensitive development is separated from landfill sites so they are not adversely affected by odour emission or other air pollutant impacts.

#### E101

The following uses are not located within a Landfill buffer:

- Caretaker's accommodation (10): a.
- Community residence (16); b.
- Dual occupancy<sup>(21)</sup>; C.
- Dwelling house<sup>(22)</sup>; d.
- Dwelling unit<sup>(23)</sup>; e.
- Hospital<sup>(36)</sup>: f.
- Rooming accommodation (69); g.

Multiple dwelling<sup>(49)</sup>; h.

- Non-resident workforce accommodation (52); i.
- Relocatable home park (62): j.
- Residential care facility<sup>(65)</sup>; k.
- Resort complex<sup>(66)</sup>; I.
- Retirement facility<sup>(67)</sup>; m.
- Rural workers' accommodation<sup>(71)</sup>; n.
- Short-term accommodation<sup>(77)</sup>: 0.
- Tourist park<sup>(84)</sup>.

#### PO102

Habitable rooms within an Electricity supply substation buffer are located a sufficient distance from substations (80) to avoid any potential adverse impacts on personal health and wellbeing from electromagnetic fields.

Note - Habitable room is defined in the Building Code of Australia (Volume 1)

# E102

Habitable rooms:

- a. are not located within an Electricity supply substation buffer; and
- proposed on a site subject to an Electricity supply supply substation<sup>(80)</sup> are acoustically insulted to b. achieve the noise levels listed in Schedule 1, Acoustic Quality Objectives, Environmental Protection (Noise) Policy 2008.

Note - Habitable room is defined in the Building Code of Australia (Volume 1)

#### PO103

Habitable rooms within an Electricity supply substation buffer are acoustically insulated from the noise of a substation (80) to achieve the noise levels listed in Schedule 1 Acoustic Quality Objectives, Environmental Protection (Noise) Policy 2008 and provides a safe, healthy and disturbance free living environment.

Note - To demonstrate achievement of the performance outcome, a noise impact assessment report is prepared by a suitably qualified person. Guidance to preparing an noise impact assessment report is provided in Planning scheme policy - Noise.

Note - Habitable room is defined in the Building Code of Australia (Volume 1)

No example provided.

#### PO104

Development within a High voltage electricity line buffer provides adequate buffers to high voltage electricity lines to protect amenity and health by ensuring development:

- a. is located and designed to avoid any potential adverse impacts on personal health and wellbeing from electromagnetic fields in accordance with the principle of prudent avoidance;
- is located and designed in a manner that maintains a high level of security of supply;
- is located and design so not to impede upon the functioning and maintenance of high voltage electrical infrastructure.

#### E104

Development does not involve the construction of any buildings or structures within a High voltage electricity line buffer.

# PO105 E105 Development within a Pumping station buffer is located, Development does not involve the construction of any designed and constructed to: buildings or structures within a Pumping station buffer. ensure that odour or other air pollutant impacts on the amenity of the development met the air quality of objectives in the Environmental Protection (Air) Policy 2008; ensure that noise impacts on the amenity of the development met the indoor noise objectives set out in the Environmental Protection (Noise) Policy 2008. Overland flow path (refer Overlay map - Overland flow path to determine if the following assessment criteria apply) Note - The applicable river and creek flood planning levels associated with defined flood event (DFE) within the inundation area can be obtained by requesting a flood check property report from Council. **PO106** No example provided. Development: minimises the risk to persons from overland flow; a. does not increase the potential for damage from overland flow either on the premises or other premises, public land, watercourses, roads or infrastructure. PO107 No example provided. Development: maintains the conveyance of overland flow predominantly unimpeded through the premises for any event up to and including the 1% AEP for the fully developed upstream catchment; does not concentrate, intensify or divert overland b. flow onto an upstream, downstream or surrounding property. Note - A report from a suitably qualified Registered Professional Engineer Queensland is required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding premises. Note - Reporting to be prepared in accordance with Planning scheme policy - Flood hazard, Coastal hazard and Overland flow. **PO108** No example provided.

Development does not:

- directly, indirectly or cumulatively cause any a. increase in overland flow velocity or level;
- increase the potential for flood damage from b. overland flow either on the premises or other premises, public lands, watercourses, roads or infrastructure.

Note - Open concrete drains greater than 1m in width are not an acceptable outcome, nor are any other design options that may increase scouring.

## PO109

Development ensures that public safety and the risk to the environment are not adversely affected by a detrimental impact of overland flow on a hazardous chemical located or stored on the premises.

#### E109

Development ensures that a hazardous chemical is not located or stored in an Overland flow path area.

Note - Refer to the Work Health and Safety Act 2011 and associated Regulation and Guidelines, the Environmental Protection Act 1994 and the relevant building assessment provisions under the Building Act 1975 for requirements related to the manufacture and storage of hazardous substances.

#### PO110

Development which is not in a Rural zone ensures that overland flow is not conveyed from a road or public open space onto a private lot.

# E110

Development which is not in a Rural zone that an overland flow paths and drainage infrastructure is provided to convey overland flow from a road or public open space area away from a private lot.

#### PO111

Development ensures that inter-allotment drainage infrastructure, overland flow paths and open drains through private property cater for overland flows for a fully developed upstream catchment and are able to be easily maintained.

Note - A report from a suitably qualified Registered Professional Engineer Queensland is required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding premises.

Note - Reporting to be prepared in accordance with Planning scheme policy - Flood hazard, Coastal hazard and Overland flow

# E111.1

Development ensures that roof and allotment drainage infrastructure is provided in accordance with the following relevant level as identified in QUDM:

- a. Urban area - Level III;
- Rural area N/A; b.
- Industrial area Level V; C.
- Commercial area Level V.

#### E111.2

Development ensures that inter-allotment drainage infrastructure is designed to accommodate any event up to and including the 1% AEP for the fully developed upstream catchment.

#### **PO112**

Development protects the conveyance of overland flow such that an easement for drainage purposes is provided over:

a. a stormwater pipe if the nominal pipe diameter exceeds 300mm;

No example provided.

- b. an overland flow path where it crosses more than one premises;
- C. inter-allotment drainage infrastructure.

Note - Refer to Planning scheme policy - Integrated design for details and examples.

Note - Stormwater Drainage easement dimensions are provided in accordance with Section 3.8.5 of QUDM.

# Additional criteria for development for a Park<sup>(57)</sup>

#### PO113

Development for a Park<sup>(57)</sup> ensures that the design and layout responds to the nature of the overland flow affecting the premises such that:

- public benefit and enjoyment is maximised; a.
- impacts on the asset life and integrity of park h structures is minimised;
- C. maintenance and replacement costs are minimised.

#### E113

Development for a Park<sup>(57)</sup> ensures works are provided in accordance with the requirements set out in Appendix B of the Planning scheme policy - Integrated design.

#### Riparian and wetland setbacks

#### PO114

Development provides and maintains a suitable setback from waterways and wetlands that protects natural and environmental values. This is achieved by recognising and responding to the following matters:

- impact on fauna habitats: a.
- impact on wildlife corridors and connectivity; b.
- C. impact on stream integrity;
- d. impact of opportunities for revegetation and rehabilitation planting;
- edge effects.

#### E114

Development does not occur within:

- a. 50m from top of bank for W1 waterway and drainage line
- b. 30m from top of bank for W2 waterway and drainage line
- 20m from top of bank for W3 waterway and C. drainage line
- d. 100m from the edge of a Ramsar wetland, 50m from all other wetlands.

Note - W1, W2 and W3 waterway and drainage lines, and wetlands are mapped on Schedule 2, Section 2.5 Overlay Maps - Riparian and wetland setbacks.

Scenic amenity - Regionally significant (Hills) and Locally important (Coast) (refer Overlay map - Scenic amenity to determine if the following assessment criteria apply)

### **PO115**

#### Development:

avoids being viewed as a visually conspicuous built form on a hill top or ridgeline;

### E115

Where located in the Regionally significant (Hills) scenic amenity overlay, buildings and structures are not:

- retain the natural character or bushland settings as the dominant landscape characteristic;
- is viewed as being visually consistent with the C. natural landscape setting and does not diminish the scenic and visual qualities present in the environment.
- a. located on a hill top or ridge line;
- all parts of the building and structure are located b. below the hill top or ridge line.

#### Development:

- does not adversely detract or degrade the quality of views, vista or key landmarks;
- retains the natural character or bushland settings b. as the dominant landscape characteristic.

#### E116

Where located in the Regionally significant (Hills) scenic amenity overlay, driveways and accessways:

- go across land contours, and do not cut straight up a. slopes;
- b. follow natural contours, not resulting in batters or retaining walls being greater than 900mm in height.

### PO117

Buildings and structures incorporate colours and finishes that:

- are consistent with a natural, open space character a. and bushland environment;
- b. do not produce glare or appear visual incompatible with the surrounding natural character and bushland environment;
- are not visually dominant or detract from the natural C. qualities of the landscape.

#### E117.1

Where located in the Regionally significant (hills) scenic amenity overlay, roofs and wall surfaces of buildings and structures adopt the following colours:

Colours from Australian Standard AS2700s – 1996		
G12 – Holly	G54 – Mist Green	N 44 – Bridge Grey
G13 – Emerald	G55 – Lichen	N45 – Koala Grey
G14 – Moss Green	G56 – Sage Green	N52 – Mid Grey
G15 – Rainforest Green	G62 – Rivergum	N54 – Basalt
G16 – Traffic Green	G64 – Slate	N55 – Lead Grey
G17 – Mint Green	G65 – Ti Tree	X54 – Brown
G21 – Jade	N25 – Birch Grey	X61 – Wombat
G22 – Serpentine	N32 – Green Grey	X62 – Dark Earth
G23 – Shamrock	N33 – Lightbox Grey	X63 – Iron Bark
G24 – Fern Green	N35 – Light Grey	Y51 – Bronze Olive
G25 – Olive	N41 – Oyster	Y61 – Black Olive
G34 – Avocado	N42 – Storm Grey	Y63 – Khaki
G52 – Eucalyptus	N43 – Pipeline Grey	Y66 – Mudstone
G53 – Banksia		

#### E117.2

Where located in the Regionally significant (hills) scenic amenity overlay, roofs and wall surfaces of buildings and structures are painted or finished such that reflectivity is less than 35%.

**PO118** E118

# Landscaping

- complements the coastal landscape character and amenity:
- has known resilience and robustness in the coastal b. environment:

#### Fences and walls:

- do not appear visually dominant or conspicuous a. within its setting:
- reduce visual appearance through the use of built b. form articulation, setbacks, and plant screening;
- use materials and colours that are complementary C. to the coastal environment.

Building design responds to the bayside location and complements the particular bayside character and amenity by adopting and incorporating a range of architectural character elements.

Vegetation that contributes to bayside character and identity are:

- retained: a.
- protected from development diminishing their b. significance.

Where located in the Locally Important (Coast) scenic amenity overlay:

- landscaping comprises indigenous coastal species; a.
- fences and walls are no higher than 1m; and b.
- existing pine trees, palm trees, mature fig and C. cotton trees are retained.
- where over 12m in height, the building design d. includes the following architectural character elements:
  - i. curving balcony edges and walls, strong vertical blades and wall planes;
  - ii. balcony roofs, wall articulation expressed with different colours, curves in plan and section, and window awnings;
  - iii. roof top outlooks, tensile structures as shading devices:
  - iv. lightweight structures use white frame elements in steel and timber, bold colour contrast.

Transport noise corridors (refer Overlay map - Transport noise corridors to determine if the following assessment criteria apply)

This is for information purposes only. No requirements for accepted development or criteria for assessable development apply. Development located within a Transport Noise Corridor must satisfy the requirements of the Queensland Development Code.