4.0 Codes

Introduction

The Integrated Planning Act requires planning schemes to include measures including codes that facilitate the achievement of the Desired Environmental Outcomes. A code is a performance based provision that regulates or controls development identified in the Development Assessment Tables (Part 3) as being code assessable. It achieves this by adopting a performance based system that sets standards defining how development must perform to achieve the required outcomes identified as performance criteria. Codes are also relevant for developments requiring impact assessment and self assessment.

Under the Act development that is in conflict with a code may only be approved if there are sufficient planning grounds to justify this conflict, having regard to the purpose of the code.

4.1 Code Structure

There are two types of codes contained in the Planning Scheme. These are:

- **Land use specific** codes; and
- **General codes** which apply to different types of development activities;

Each code contained in the Planning Scheme is structured as follows:

- Purpose of the code; and
- Performance criteria and acceptable or probable solutions.

Performance criteria are usually qualitative statements that have more than one way of being achieved. Solutions provide an applicant with one or more means to achieve the specified performance criteria. The performance criteria and solutions are set out in a two-column format, with the solution opposite the performance criterion to which it corresponds.

4.1.1 Land Use Codes

Land use codes included in the Planning Scheme are as follows:

Land Use Codes	Section
House Code	Section 4.2.1
Medium Density Residential Code	Section 4.2.2
Recreation Indoor and Recreation Outdoor Code	Section 4.2.3
Commercial Activity Code	Section 4.2.4
Industry near Residences Code	Section 4.2.5
General Industry Code	Section 4.2.6
Community Activity Code	Section 4.2.7
Rural Activity Code	Section 4.2.8

4.1.2 General Codes

General codes included in the Planning Scheme are as follows:

General Codes	Section
Infrastructure Services Code	Section 4.3.1
Filling and Excavation Code	Section 4.3.2
Lot Reconfiguration Code	Section 4.3.3
Signs Code	Section 4.3.4
Landscaping Code	Section 4.3.5
Vehicle Parking and Access Code	Section 4.3.6
Ecology Protection Code	Section 4.3.7
Flood Management Code	Section 4.3.8
Built Heritage and Character Protection Code	Section 4.3.9
Acid Sulfate Soils Code	Section 4.3.10
Indigenous and Non-European Cultural Heritage Code	Section 4.3.11
On-Site Effluent Disposal Code	Section 4.3.12
Bundaberg Airport Code	Section 4.3.13

4.2 Land Use Codes

4.2.1 House Code

PURPOSE OF THE CODE

To ensure that the building form, siting, design and use of each residential single unit and caretaker's residence is consistent with the desired character of the area, that an acceptable level of infrastructure provision is achieved and that adverse off-site impacts are within limits acceptable to the local community.

Performance Criteria And Acceptable/Probable Solutions

PERFORMANCE CRITERIA		SOLUTIONS	
The purpose of the code may be achieved if the following criteria are satisfied.		**SELF-ASSESSMENT - Acceptable Solutions** *(illustrate how compliance with the Performance Criteria **is to** be achieved)* **CODE ASSESSMENT – Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*	
General			
P1	The residential single unit or caretaker's residence must be provided with an acceptable standard of infrastructure.	A1.1	In the Non Urban Precinct on an allotment existing at the date the planning scheme commences, the residential single unit or caretaker's residence is connected to electricity and telephone services; or
		A1.2	In any other Precinct, the residential single unit or caretaker's residence is connected to reticulated water supply, reticulated sewerage, stormwater drainage, electricity and telephone services, and
		A1.3	Excavation and filling near sewers or stormwater mains is conducted in accordance with the Queensland Development Code – Part 5; and
		A1.4	Driveways are provided in accordance with the Queensland Development Code – Part 6 and Part 19; and
		A1.5	Stormwater drainage is provided in accordance with the Queensland Development Code – Part 9 and Part 16; and
		A1.6	Retaining walls and excavation and filling are provided in accordance with the Queensland Development Code – Part 10.
P2	Development design optimises the efficient use of a lot, provides an acceptable amenity for residents and facilitates off-street parking.	A2.1	Residential single units and caretaker's residences are sited and designed in accordance with the Queensland Development Code – Part 12.
P3	Development design reflects the principles of energy efficiency.	A3.1	Residential single units and caretaker's residences are sited and designed in accordance with the Queensland Development Code – Part 13.

PERFORMANCE CRITERIA		SOLUTIONS	
P4	The use of a residential single unit or caretaker's residence maintains acceptable levels of noise emissions.	A4.1	Any noise produced by the use of the residential single unit or caretaker's residence does not exceed the background noise level plus 5db(A) (6am-6pm) or background noise level plus 3db(A) (6pm-10pm) or background noise level (10pm-6am) (measured as the adjusted maximum sound pressure level at any noise sensitive place).
P5	Any additional building on the site of a residential single unit must not be visually dominant.	A5.1	Buildings other than a residential single unit and relatives units do not exceed a total of 60 m^2 floor area where the site is less than 2000 m^2 in area, or 100 m^2 floor area for larger sites. Height of outbuildings is not to exceed 3m at the eaves line and 4m maximum overall height.
P6	Any outdoor recreational activity used in conjunction with the residential single unit or caretaker's residence must avoid lighting and other visual impacts on adjacent residential development.	A6.1	A tennis court is setback at least 5m from all boundaries of the allotment and this setback area is landscaped with plants spaced a maximum of 3m apart. (Council's *Landscaping Planning Scheme Policy* is a guide to species that exhibit a shrub or small tree character suitable for this application), and
		A6.2	Illumination levels parallel to, and at a distance of 1.5m outside the site for a height of 10m do not exceed 8 lux in either the vertical or the horizontal plane.
		A6.3	Horizontally mounted lighting is to be shielded so as to eliminate any upward component of light.
Relative's Unit			
P7	Any relative's unit used in conjunction with the residential single unit must be consistent with adjacent residential amenity and give the appearance of a single house from the street frontage, with a consistent architectural style.	A7.1	No more than one relative's unit is erected on any allotment; and
		A7.2	The gross floor area of the relatives unit does not exceed 50m^2; and
		A7.3	The residential single unit and the relative's unit share a common driveway; and
		A7.4	The relative's unit contains only one bedroom; and
		A7.5	The relative's unit shall abut or be annexed to the principle dwelling; and
		A7.6	The relative's unit shall be constructed with the same building materials and a continual roof line.
Home Occupation			
P8	Any business activity carried out in conjunction with the residential occupation of a residential single unit (on the same allotment) must maintain levels of noise, traffic and waste generation and visual appearance that are consistent with adjacent residential development	A8.1	There is no public display or sale of goods on or from the premises; and
		A8.2	The use is conducted only by residents of the residential single unit; and
		A8.3	The floor area used for the business activity does not exceed 25 m^2; and
		A8.4	The use is not conducted outside the hours of 8:30 am and 5:00 pm Monday to Friday, 8:00 am and 12:00 noon Saturday; and

PERFORMANCE CRITERIA		SOLUTIONS	
		A8.5	The use does not involve the storage of petrol, diesel or other flammable goods on the site; and
		A8.6	The use does not generate trips by vehicles heavier than 2 tonnes gross vehicle weight; and
		A8.7	The use does not involve the storage or parking of heavy vehicles eg. A prime mover or semi-trailer on the site or adjoining road; and
		A8.8	The use does not generate more than 10 vehicle movements per day; and
		A8.9	2 car parking spaces are provided on site in accordance with the *Vehicle Parking and Access Code*.
		A8.10	Signage is provided in accordance with the *Signs Code*.
Display Home			
P9	Display homes contribute to the surrounding land uses and are provided with an acceptable standard of service	A9.1	No Probable Solution prescribed

4.2.2 Medium Density Residential Code

PURPOSE OF THE CODE

To ensure that medium-density residences and caravan parks are provided in appropriate locations, that building form, siting, design and use provides an acceptable on-site residential environment, that an acceptable level of infrastructure provision is achieved and that adverse off-site impacts are within limits acceptable to the local community.

PERFORMANCE CRITERIA AND ACCEPTABLE/PROBABLE SOLUTIONS

PERFORMANCE CRITERIA		SOLUTIONS	
The purpose of the code may be achieved if the following criteria are satisfied.		**CODE ASSESSMENT – Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*	
General			
P1	All residential development must be provided with an acceptable standard of infrastructure.	A1.1	The residential multi unit, dual occupancy, caravan park or relocatable/manufactured home park is connected to reticulated water supply, sewerage, stormwater drainage, electricity and telephone services; and
		A1.2	Concrete kerb and channel to the full frontage of the site is provided; and
		A1.3	Road widening to kerb and channelling to full frontage of site is provided; and
		A1.4	A sealed pedestrian pavement is provided for the full frontage of the site in accordance with the *Infrastructure Services Code*, and
		A1.5	Driveways are provided in accordance with the Queensland Development Code – Part 6 and part 19; and
		A1.6	Stormwater drainage is provided in accordance with the Queensland Development Code – Part 9 and Part 16.
P2	Development design must reflect the principles of energy efficiency.	A2.1	Residential Multi Units are designed in accordance with the Acceptable Solutions contained within the Queensland Development Code – Part 13.
P3	Residential Multi Units, dual occupancies, caravan parks and relocatable/manufactured home parks must be on allotments of sufficient size and dimensions to enable the establishment of buildings and the provision of open space around buildings.	A3.1	Residential multi units are not located on battle axe/hatchet shaped allotments; and
		A3.2	Residential multi units do not rely on easement access, excluding where access is combined with an adjacent property; and
		A3.3	Sites are in accordance with the dimensions outlined in Table 4.1.
P4	The siting and scale of residential development must be consistent with the siting and scale of other residential development within the street.	A4.1	In the Residential C Precinct buildings have a maximum of 5 storeys with a maximum overall height of 20m and building envelopes comprise of maximum site coverage of 50%.
		A4.2	In all other residential precincts, buildings are wholly sited within the following building envelope: • planes projected at 45 degrees from a height of 3 m above natural ground level at the side and rear

PERFORMANCE CRITERIA	SOLUTIONS
	boundaries, to a have a maximum of 2 storeys with a maximum overall height of 10 m; • a maximum site coverage of 40%. A4.3 Densities of new development are consistent with Table 4.1.1; A4.4 Backpacker Hostels and Motels are located in Commercial, Residential B and Residential C Precincts and within 400m of – • a public park or reserve; and • local shops; and • a public transport route.
P5 The siting and design of residential development must complement the predominant character of buildings in the locality and contribute positively to the existing streetscape.	A5.1 In residential A and B precincts, the side and rear setbacks are equal to half the height of the building at that point, but not less than 3 m except where in accordance with A5.3 below; A5.2 In all other Precincts, the side and rear setbacks are no less than 3m; A5.3 Walls built to within 1.5 m of side and/or rear boundaries: • have a maximum wall height is 3.0m, • contain no openings or have windows filled with translucent or opaque materials and with sills a minimum of 1.5m above the floor level of the room in which they are provided, and • have maximum wall length is 50% of the length of the adjoining property boundary. AND A5.4 Buildings have a maximum unarticulated length of 15m to the street frontage. Bay windows, verandahs, balconies or wall offsets are used to create articulation; and. A5.5 Car accommodation must not occupy more than 40% of the street frontage; and A5.6 A 2m wide landscaped area is provided to any vehicle parking or movement areas along the street boundary; and A5.7 Signage is provided in accordance with the *Signs Code*.
P6 Residential development is orientated to the street and protects the visual and acoustic amenity of nearby residential uses.	A6.1 Buildings living area windows or balconies face the street or are on the front of the building; and A6.2 No unscreened window is closer to a side or rear boundary than 2m at ground floor level or 6m above ground floor level; and A6.3 Any noise produced by the use of the residential multi unit does not exceed the background noise level plus 5db(A) (6am-6pm) or background noise level plus 3db(A) (6pm-10pm) or background noise level (10pm-6am) (measured as the adjusted maximum sound pressure level at any noise sensitive place); and A6.4 Vehicle parking is screened in accordance with A6.7m of this Code; and

PERFORMANCE CRITERIA		SOLUTIONS	
		A6.5	A 1.8m high screen fence is provided along the side and rear boundary of the site; and
		A6.6	Screening or obscuring is provided through the provision of: • 1.8 m high solid fences or walls between ground floor level windows; and/or • screening that has a maximum area of 25% openings, is permanently fixed and is made of durable materials; and/or • effective landscape screening by landscaping with plants spaced a maximum of 3m apart. (Council's *Landscaping Planning Scheme Policy* is a guide to species that exhibit a shrub or small tree character suitable for this application)
P7	Carports and garages are consistent with and subordinate to the building design of residential buildings on the site and adjacent development.	A7.1	Outbuildings associated with Residential Multi Units or Dual Occupanciy Units do not exceed a total of 60 m^2 floor area where the site is less than 2000 m^2 in area, or 100 m^2 floor area for larger sites. Height of outbuildings is not to exceed 3m at the eaves line and 4m maximum overall height.
P8	The siting and scale of residential development must not cause unacceptable shadow impacts on nearby development.	A8.1	For buildings greater than 2 storeys in height, sunlight to the ground-level private open space of adjacent development is not reduced (ie. to less than 4 hours between 9 am and 3 pm on 21 June or by 20% less than existing).
P9	Adequate on-site facilities and services must be provided.	A9.1	Garbage bin storage areas are provided and screened from the street and adjoining properties in accordance with A6.7 of this Code; and
		A9.2	Open-air clothes drying facilities are provided and visually screened from the street in accordance with A6.7 of this Code.
P10	All vehicle parking and access areas must operate in a safe and efficient manner.	A10.1	All car parking and vehicle manoeuvring areas are provided in accordance with the *Vehicle Parking and Access Code*, and
		A10.2	Not more than 50% of visitor carparking spaces are sited within the building setback area.
P11	Development design must provide for security.	A11.1	Lighting is provided to all pedestrian paths between public and shared areas, parking areas and building entries. Lighting is to be shielded so as not to shine into adjacent properties; and
		A11.2	Pedestrian site access and carparking is clearly defined, visible to the street and provides direct access to buildings; and.
		A11.3	No access is available between roofs, balconies and windows of adjoining dwellings or rooming units.

PERFORMANCE CRITERIA	SOLUTIONS
P12 Adequate landscape and recreation areas must be provided on-site. Landscaping and fencing does not reduce the safety of residents and is placed in such a way as to minimise screening near security risk areas. Private, communal and public open space is clearly differentiated and physically defined.	A12.1 Ground-level open space (excluding Motels) has: • a minimum dimension of 4 m, and • a total minimum area equal to 30% of the total area of the site. AND A12.2 The provision of part of the on-site total ground-level open space is provided for communal purposes, where such communal open space (excluding caravan parks) has: • a minimum dimension of 4 m, and • a minimum area equal to 15% of the total area of the site. AND A12.3 Part of the total ground-level open space on the site (excluding caravan parks) is provided as private open space for each ground storey dwelling unit, where: • an area of at least 35 m^2 is provided for each such dwelling unit; • the minimum dimension is 3 m; • one part has an area of not less than 16 m^2 with a minimum dimension of 4 m, and is directly accessible from a living room of the dwelling unit. AND A12.4 Above-ground open space is provided for each dwelling unit above ground storey provided in the form of a balcony or balconies having a minimum area of 8 m^2, and a minimum dimension of 2 m, with direct access from a main living room of the dwelling unit.
P13 Residential development adjacent to arterial roads is not adversely affected by road traffic noise.	A13.1 Residential development adjacent to arterial roads is subject to external noise levels equal to or less than: • 63 dB(A) L10 (18hour), where the L90 (8hour) between 10pm and 6am is greater than 40dB(A); or • 60dB(A) L10 (18hour) or less, where the L90 (8hour) between 10pm and 6am is less than or equal to 40dB(A).
Motels	
P14 **Motels** must not have an adverse impact on the amenity of an area.	A14.1 Levels of lighting associated with the motel are in accordance with Australian Standards AS 1158 and AS 4282, and A14.2 Parking areas, driveways, plant and equipment and communal facilities are not adjacent to residential buildings on adjoining land; and A14.3 On-site landscaping having an area of not less than 20% of the total area of the site is provided and maintained.

PERFORMANCE CRITERIA		SOLUTIONS	
Caravan Parks and Relocatable / Manufactured Home Parks			
P15	**Caravan parks and relocatable / manufactured home parks** provide an adequate level of service, amenity and safety.	A15.1	Caravan Parks and relocatable/manufactured home parks provide a minimum of 10% of the site for communal open space, in addition to landscape buffer areas, that is maintained clear of obstacles including clothes hoists, accessways, parking spaces and garbage receptacles; and
		A15.2	A games/common room is provided; and
		A15.3	Caravan Parks and relocatable/manufactured home parks are located within 400m of existing community services or public transport node; and
		A15.4	The entrance/exit road widths meet the following requirements: • two-way entrance/exit road – 7m • one-way entrance road – 7m • one-way exit road – 5m. AND
		A15.5	The reception office is located adjacent to the entrance/exit road and a vehicle holding area 4m X 20m is provided, either as a separate bay or as part of a one-way entrance road, for the temporary parking of a vehicle and caravan while conducting check-in/check-out; and
		A15.6	Internal accessways have a minimum carriageway width of 4m for one way traffic or 5.5m for two way traffic; and
		A15.7	Internal accessways are looped to allow for service vehicles manoeuvring; or Turning bays at the end of internal accessways allow service vehicles to reverse direction with a maximum of two movements; and
		A15.8	Internal accessways and footpaths provide: • directional signage; • night lighting; and • opportunities for public surveillance. AND
		A15.9	Emergency services have direct access to every site and building without height impediment
P16	The surrounding road system must be capable of accommodating additional traffic generated by the caravan park without adverse impacts.	A16.1	External access from the caravan park or relocatable/manufactured home park is provided to a street type defined as a trunk collector street or higher category in Table 4.6 of the *Lot Reconfiguration Code*.
P17	**Caravan park and relocatable / manufactured home park** layouts have all residential buildings and sites set back from	A17.1	The site layout has landscaped buffer setbacks along all external boundaries, that include the following requirements: • 6m buffer adjoining any site frontage; and • 5m buffer adjoining any other boundary. AND

PERFORMANCE CRITERIA		SOLUTIONS	
	property boundaries to ensure sufficient light, odour and noise buffering to surrounding properties.	A17.2	Buffers, that may include earth mounding, are planted with vegetation that grows in a range of heights to at least 5m; and
		A17.3	Landscaping is provided in accordance with the *Landscaping Code*; and
		A17.4	No residential site has direct access to an external roadway.
P18	Vehicle parking areas are conveniently located, while preserving the amenity of the caravan park for other users.	A18.1	Each residential building and site is provided with an adjoining car park area; and
		A18.2	Visitor parking is provided adjacent to the reception office at the ratio of one space per 10 sites; and
		A18.3	With the exception of tent and overnight caravan parking areas, all car parking and vehicle manoeuvring areas are provided in accordance with the *Vehicle Parking and Access Code*.
Retirement Village			
P19	The size and dimensions of the site is suited to accommodate a Retirement Village.	A19.1	Sites are in accordance with the dimensions outlined in Table 4.1.
		A19.2	The site has a depth to width ratio of no greater than 4:1.
P20	The site is located in close proximity to existing shopping, park and public transport services or such services are provided on-site for the convenience of the residences.	A20.1	No Probable Solution prescribed
P21	Safe and attractive communal open space is provided in locations throughout the site that are accessible and are appropriate for passive recreational pursuits.	A21.1	Not less than 30% of the site area is provided as communal open space (which space may include communal recreation facilities) with a minimum dimension of 5m; and
		A21.2	Communal open space is directly accessible from at least 50% of the units; and
		A21.3	Landscaping avoids the creation of screens of dense foliage between 0.5m and 2m in height; and
		A21.4	Communal open space is clearly defined and distributed equally throughout the site; and
		A21.5	Communal open space is useable and clear of obstacles including cloths lines, accessways, balconies, parking spaces, vehicle manoeuvring areas and garbage receptacles.
P22	Private open space is provided as part of each self-contained unit or serviced apartment.	A22.1	In the case of a self-contained unit, a minimum private open space area of $20m^2$ with a minimum dimension of 3m is provided. In the case of a serviced apartment, a minimum private open space area of $9m^2$ with a minimum dimension of 2.4m is provided.
		A22.2	Screening is provided to ensure privacy for users of the private open space

PERFORMANCE CRITERIA		SOLUTIONS	
P23	For a Retirement Village that has more than ten accommodation units, the premise shall incorporate communal open space with outdoor facilities such as garden shelters or circuit walkways.	A23.1	No Probable Solution prescribed
P24	On-site recreational facilities are centrally located within the premises.	P24.1	No Probable Solution prescribed
P25	The Retirement Village includes a range of self-contained services and recreational facilities appropriate for the size of the premises and potential age and number of residents.	A25.1	For between 10 and 25 units, the premises includes a village meeting room that is capable of seating 50% of residents simultaneously and outdoor areas that provide for seating, weather protection, shade and access to winter sunlight;
		A25.2	For more than 25 units, the premises includes a village meeting room that is capable of seating 50% of residents simultaneously and outdoor areas that provide for seating, weather protection, shade, access to winter sunlight and outdoor recreational facilities such as a swimming pool, lawn bowls, tennis court or fitness circuit.
P26	Retirement Villages provide an adequate level of service, amenity and safety.	A26.1	Internal accessways are looped to allow for service vehicles manoeuvring; or Turning bays at the end of internal accessways allow service vehicles to reverse direction with a maximum of two movements; and
		A26.2	All dwelling units within retirement communities are accessible for emergency vehicles.

Table 4.1
Minimum Lot Dimensions

Development Type	Minimum Lot Size	Minimum Frontages	Minimum Set Back Distances
Accommodation Units, and Multiple Dwellings	4,000m^2 Residential A 600m^2 Residential B	20m Residential A 15m Residential B	6m from any street frontage; and 1.5m from side and rear boundary.
Motel	1,000m^2	20m	
Dual Occupancy	800m^2 Residential A 600m^2 Residential B	20m Residential A 15m Residential B	
Retirement Village	1 hectare	-	
Caravan Park or Relocatable/Manufactured Home Park	2 hectares	-	

Table 4.1.1
Maximum Residential Precinct Densities

Local Area	Precinct		
	Residential A	Residential B	Residential C
Local Area 1 – Western Bundaberg	50 persons per Hectare	120 persons per Hectare	N/A
Local Area 2 – Southern Industrial	N/A	N/A	N/A
Local Area 3 – Takalvan Street	120 persons per Hectare	120 persons per Hectare	300 persons per Hectare
Local Area 4 –Higher Density Residential	N/A	120 persons per Hectare	N/A
Local Area 5 – Central Business District (CBD)	N/A	N/A	N/A
Local Area 6 – Eastern Bundaberg	50 persons per Hectare	120 persons per Hectare	N/A
Local Area 7 – Eastern Industrial	50 persons per Hectare	N/A	N/A
Local Area 8 – North Bundaberg	50 persons per Hectare	120 persons per Hectare	N/A

4.2.3 Recreation Indoor and Recreation Outdoor Code

PURPOSE OF THE CODE

To ensure that indoor and outdoor recreation uses limit their adverse off-site impacts.

PERFORMANCE CRITERIA AND ACCEPTABLE/PROBABLE SOLUTIONS

PERFORMANCE CRITERIA		SOLUTIONS	
The purpose of the Code may be achieved if the following criteria are satisfied.		**SELF-ASSESSMENT - Acceptable Solutions** *(illustrate how compliance with the Performance Criteria **is to** be achieved)* **CODE ASSESSMENT – Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*	
P1	Emissions from the use must be within acceptable limits.	A1.1	External lighting is provided in accordance with Australian Standard AS 2560; and
		A1.2	Illuminated signs are in accordance with the requirements of the *Signs Code*; and
		A1.3	Any noise produced by the use does not exceed the background noise level plus 5dB(A) (6am-6pm) or background noise level plus 3dB(A) (6pm-10pm) or background noise level (10pm-6am) (measured as the adjusted maximum sound pressure level at any noise sensitive place).
P2	The surrounding road system must be capable of accommodating additional traffic generated by the proposal without adverse impacts.	A2.1	Development traffic levels are within the function of the street to which vehicle access is proposed, as defined in Tables 4.5 and 4.6 of the *Lot Reconfiguration Code*.
P3	The proposal and its scale, design and character must not adversely impact on and must reflect the existing and likely future amenity of the surrounding area	A3.1	No solution is prescribed for Code Assessable development.
		A3.2	For Self Assessable development no additional buildings or structures are proposed.
P4	Hours of operation must be appropriate for the area in which the use is operated.	A4.1	Recreational Activities being undertaken in or adjoining a Residential A or Residential B Precinct are confined within the hours of 6am to 10pm.
P5	The design and siting of the operational works associated with recreational uses must maintain the amenity of nearby development.	A5.1	Signage is provided in accordance with the *Signs Code*; and
		A5.2	A minimum 3m wide landscaped area is provided along all street frontages, and side and rear boundaries adjoining land in the Residential A or Residential B Precinct.
P6	Development must be on allotments of sufficient size and dimensions to enable the establishment of buildings and the provision of carparking, vehicle manoeuvring, delivery of goods and open space on-site.	A6.1	Development is not located on battle axe/hatchet shaped allotments; and
		A6.2	Development does not rely on easement access, excluding where access is combined with an adjacent property.

PERFORMANCE CRITERIA		SOLUTIONS	
P7	Sufficient carparking and service vehicle access must be provided as part of the development.	A7.1	On-site carparking and service vehicle access is provided in accordance with the *Vehicle Parking and Access Code*.
P8	Any buildings associated with outdoor recreation must be ancillary to the outdoor recreation use.	A8.1	Buildings are limited to: • Stands • Shelters and other public conveniences • Kiosks • Clubhouses

4.2.4 Commercial Activity Code

PURPOSE OF THE CODE

To facilitate new commercial development that makes a positive contribution to streetscape through building design, siting and scale while ensuring that adverse off-site impacts are within limits acceptable to the local community.

PERFORMANCE CRITERIA AND ACCEPTABLE/PROBABLE SOLUTIONS

PERFORMANCE CRITERIA		SOLUTIONS	
The purpose of the code may be achieved if the following criteria are satisfied.		**SELF-ASSESSMENT - Acceptable Solutions** *(illustrate how compliance with the Performance Criteria **is to** be achieved)* **CODE ASSESSMENT – Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*	
P1	Developments must be provided with infrastructure services necessary to mitigate external impacts generated by the development.	A1.1	Infrastructure is provided in accordance with the *Infrastructure Services Code.*
P2	Building design and siting must contribute positively to the existing streetscape.	A2.1	Front walls have a maximum unbroken length of 8m in Local Area 5 or 15m elsewhere; and
		A2.2	Buildings are orientated to the street frontage with the main entrance visible from the street; and
		A2.3	Full width continuous awnings are provided along the front of all commercial buildings.
P3	Emissions from commercial activities must be within acceptable limits.	A3.1	External lighting is provided in accordance with Australian Standard AS 4282; and
		A3.2	Illuminated signs are in accordance with the requirements of the *Signs Code*; and
		A3.3	Any noise produced by the use does not exceed the background noise level plus 5dB(A) (6am-6pm) or background noise level plus 3dB(A) (6pm-10pm) or background noise level (10pm-6am) (measured as the adjusted maximum sound pressure level at any noise sensitive place).
P4	Building design, scale and siting must be consistent with the character of the street in which the site is situated.	A4.1	Buildings are: • one or two storeys in height and not exceeding an overall height of 10m when not located in Local Area 5; • within the following height limits for Local Area 5: Central Activity Area Precinct – 30m; River Front Area Precinct – 30m; and City Frame Area Precinct – 15m. AND
		A4.2	A maximum plot ratio of: • 1:1 when located outside of Local Area 5; • when located in Local Area 5: ➢ Central Activity Area Precinct – 4:1; ➢ River Front Area Precinct – 2:1; and ➢ City Frame Area Precinct – 2:1. AND

PERFORMANCE CRITERIA		SOLUTIONS	
		A4.3	A 3m wide boundary setback is provided at the interface with the Residential A or Residential B Precincts; and
		A4.4	Building setbacks are 3.6m for the ground level of development in the Central Activity Area Precinct and 4m for buildings in other commercial precincts in Local Area 5 and other commercial precincts elsewhere in the City.
P5	Advertising signage makes a positive contribution to the built character of the local street in which the site is situated and reduces the impact of visual clutter.	A5.1	Advertising signage is developed in accordance with the *Signs Code*.
P6	Developments must be provided with an on-site car parking and service area that avoids unacceptable off-site impacts and operates in a safe and efficient manner.	A6.1	On-site vehicle parking and service areas are developed in accordance with the *Vehicle Parking and Access Code*; and
		A6.2	Outdoor storage and loading areas are screened so that they are not visible from the street; and
		A6.3	Car parking landscaping is developed in accordance with the *Landscaping Code*.
P7	Commercial development must be on allotments of sufficient size and dimensions to enable the establishment of buildings and the provision of carparking, vehicle manoeuvring, delivery of goods and open space on-site.	A7.1	Commercial development is not located on battle axe/hatchet shaped allotments; and
		A7.2	Commercial development does not rely on easement access, excluding where access is combined with an adjacent property.
P8	There is provision for secure and convenient cycle parking spaces, safe cycle access to and from the site, safe cycle movement within the site and end-of-trip cycle facilities, while maintaining the safe movement of pedestrians and other vehicles.	A8.1	Cycle visitor parking is located in a visible area close to the main entrance; and
		A8.2	Cycle visitor parking is provided at the following rates: a Commercial Activity A – one space per 750m^2 b Commercial Activity B and C – one space per 500m^2 AND
		A8.3	Cycle staff parking is provided at the rate of one space per 500m^2; and
		A8.4	One locker is provided for every two staff cycle parking spaces.
P9	Building design and siting must incorporate landscaping compatible with existing landscaping in the street.	A9.1	Landscaping is provided in accordance with the *Landscaping Code*.

PERFORMANCE CRITERIA		SOLUTIONS	
P10	Stormwater drainage must not result in unacceptable water quality or erosion impacts.	A10.1	Stormwater drainage is provided in accordance with the *Infrastructure Services Code*; and
		A10.2	Storage of hazardous, toxic or noxious materials is provided in accordance with the requirements of the *Flood Management Code*.

4.2.5 Industry Near Residences Code

PURPOSE OF THE CODE

To facilitate industrial development while ensuring that industrial building and structure siting, scale, design and appearance has regard to the proximity of residences and that the adverse impacts of development and operation of industry on nearby properties are kept within limits acceptable to the local community having regard to the proximity of residences.

PERFORMANCE CRITERIA AND ACCEPTABLE/PROBABLE SOLUTIONS

PERFORMANCE CRITERIA		SOLUTIONS	
The purpose of the code may be achieved if the following criteria are satisfied.		**SELF-ASSESSMENT - Acceptable Solutions** *(illustrate how compliance with the Performance Criteria* ***is to*** *be achieved)* **CODE ASSESSMENT – Probable Solutions** *(illustrate how compliance with the Performance Criteria* ***may*** *be achieved)*	
P1	Development must be provided with infrastructure services necessary to mitigate external impacts generated by the development.	A1.1	Infrastructure is provided in accordance with the *Infrastructure Services Code*.
P2	Disposal of wastewater must not result in unacceptable impacts.	A2.1	Wastewater is disposed of to Council's sewerage system; and
		A2.2	Noise generating equipment utilised to pre-treat liquid waste is acoustically baffled to comply with A6.3 of this Code; and
		A2.3	Covers are provided over odour generating processes with odour stripping of waste air; and
		A2.4	There is no discharge to local streams, natural wetlands or dry watercourses; and
		A2.5	Liquid wastes that cannot be disposed of to the sewerage system in accordance with the Sewerage and Water Supply Act are to be disposed of off-site to an approved waste disposal facility.
P3	Solid waste disposal must not result in unacceptable impacts.	A3.1	Solid wastes are disposed of in accordance with the *Environmental Protection (Waste) Policy* 2000, *Environmental Protection (Waste Management) Regulations* 2000.
P4	Stormwater drainage must not result in unacceptable water quality or erosion impacts.	A4.1	Stormwater drainage is provided in accordance with the *Infrastructure Services Code*; and
		A4.2	Storage of hazardous, toxic or noxious materials is provided in accordance with the requirements of the *Flood Management Code*.

PERFORMANCE CRITERIA		SOLUTIONS	
P5	The siting, scale and design of industrial buildings and structures must maintain consistency with the visual amenity of nearby development.	A5.1	Walls have a maximum unbroken length of 50m, or if the wall lengths exceed 50m, screening is provided by landscaping in accordance with the *Landscaping Code*; and
		A5.2	The maximum height of any unbroken elevation is 15m; and.
		A5.3	No openings are provided along that side of a building facing land in a Residential A, Residential B Precinct or any other area which is residential in character; and
		A5.4	Buildings are orientated to the street frontage with the main entrance visible from the street; and
		A5.5	Building setbacks are: • 6m from front property boundary; • 3m from any additional street frontages; • 30m from any boundary with adjoining land in the Residential A, Residential B Precincts or any other area which is residential in character.
P6	Industrial development must be on allotments of sufficient size and dimensions to enable the establishment of buildings and the provision of carparking, vehicle manoeuvring, delivery of goods and open space on-site.	A6.1	Industrial development is not located on battle axe/hatchet shaped allotments; and
		A6.2	Industrial development does not rely on easement access, excluding where access is combined with an adjacent property; and
P7	Emissions from industry must be within acceptable limits.	A7.1	Illumination levels 1.5m outside the site do not exceed 8 lux; and
		A7.2	Illuminated signs are provided in accordance with the *Signs Code*; and
		A7.3	Any noise produced by the use does not exceed the background noise level plus 5db(A) (6am-6pm) or background noise level plus 3db(A) (6pm-10pm) or background noise level (10pm-6am) (measured as the adjusted maximum sound pressure level at any noise sensitive place).
P8	Advertising signage must contribute positively to the desired character for the surrounding area.	A8.1	Advertising signage is developed in accordance with the *Signs Code.*
P9	Outdoor storage and vehicle parking areas must not detract from the visual amenity of the locality, must operate in a safe and efficient manner and unacceptable off-site impacts are minimised.	A9.1	Outdoor storage areas are screened so as not to be visible from the street; and
		A9.2	Vehicle parking and access areas are provided in accordance with the *Vehicle Parking and Access Code.*

PERFORMANCE CRITERIA		SOLUTIONS	
P10	Landscape elements must be provided to enhance the appearance of development when viewed from main roads or residential areas.	A10.1	Landscaping is developed in accordance with the *Landscaping Code*.

4.2.6 General Industry Code

PURPOSE OF THE CODE

To facilitate industrial development while ensuring that building design, scale and appearance are consistent with nearby development and that industrial development and operation limits the adverse impacts on nearby properties and the environment.

PERFORMANCE CRITERIA AND ACCEPTABLE/PROBABLE SOLUTIONS

PERFORMANCE CRITERIA		SOLUTIONS	
The purpose of the code may be achieved if the following criteria are satisfied.		**SELF-ASSESSMENT - Acceptable Solutions** *(illustrate how compliance with the Performance Criteria **is to** be achieved)* **CODE ASSESSMENT – Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*	
P1	Development must be provided with infrastructure services necessary to mitigate external impacts generated by the development.	A1.1	Infrastructure is provided in accordance with the *Infrastructure Services Code.*
P2	Disposal of wastewater must not result in unacceptable impacts.	A2.1	Wastewater is disposed of to Council's sewerage system unless A2.5 or A2.6 are adopted; and
		A2.2	Noise generating equipment utilised to pre-treat liquid waste is acoustically baffled to comply with A6.3 of this Code; and
		A2.3	Covers are provided over odour generating processes with odour stripping of waste air; and
		A2.4	There is no discharge to local streams, natural wetlands or dry watercourses; and
		A2.5	Liquid wastes that cannot be disposed of to the sewerage system in accordance with the Sewerage and Water Supply Act are to be disposed of off-site to an approved waste disposal facility; and
		A2.6	Where industrial on-site treatment systems are provided, the associated off-site sludge disposal is to an approved waste disposal facility.
P3	Solid waste disposal must not result in unacceptable impacts.	A3.1	Solid wastes are disposed of in accordance with the *Environmental Protection (Waste) Policy* 2000, *Environmental Protection (Waste Management) Regulations* 2000.
P4	Stormwater drainage must not result in unacceptable water quality or erosion impacts.	A4.1	Stormwater drainage is provided in accordance with the *Infrastructure Services Code*; and
		A4.2	Storage of hazardous, toxic or noxious materials is provided in accordance with the requirements of the *Flood Management Code*.

PERFORMANCE CRITERIA		SOLUTIONS	
P5	The siting, scale and design of industrial buildings and structures must maintain consistency with the visual amenity of nearby development.	A5.1	Walls have a maximum unbroken length of 50m, or if the wall lengths exceed 50m, screening is provided by landscaping in accordance with the *Landscaping Code*; and
		A5.2	The maximum height of any unbroken elevation is 15m; and.
		A5.3	Buildings are orientated to the street frontage with the main entrance visible from the street; and
		A5.4	Building setbacks are: • 6m from front property boundary; • 3m from any additional street frontages;
P6	Industrial development must be on allotments of sufficient size and dimensions to enable the establishment of buildings and the provision of carparking, vehicle manoeuvring, delivery of goods and open space on-site.	A6.1	Industrial development is not located on battle axe/hatchet shaped allotments ; and
		A6.2	Industrial development do not rely on easement access, excluding where access is combined with an adjacent property; and
P7	Emissions from industry must be within acceptable limits.	A7.1	Illumination levels 1.5m outside the site do not exceed 8 lux; and
		A7.2	Illuminated signs are provided in accordance with the *Signs Code*; and
		A7.3	Any noise produced by the use does not exceed the background noise level plus 5db(A) (6am-6pm) or background noise level plus 3db(A) (6pm-10pm) or background noise level (10pm-6am) (measured as the adjusted maximum sound pressure level at any noise sensitive place).
P8	Advertising signage must contribute positively to the desired character for the surrounding area.	A8.1	Advertising signage is developed in accordance with the *Signs Code.*
P9	Outdoor storage and vehicle parking areas must not detract from the visual amenity of the locality, must operate in a safe and efficient manner and unacceptable off-site impacts are prevented.	A9.1	Outdoor storage areas are screened so as not to be visible from the street; and
		A9.2	Vehicle parking and access areas are provided in accordance with the *Vehicle Parking and Access Code.*
P10	Landscape elements must be provided to enhance the appearance of development, especially when viewed from main roads.	A10.1	Landscaping is developed in accordance with the *Landscaping Code*.

4.2.7 Community Activity Code

PURPOSE OF THE CODE

To ensure that the development of community activities, special uses and utilities limit the adverse impacts on nearby properties and the environment.

PERFORMANCE CRITERIA AND ACCEPTABLE/PROBABLE SOLUTIONS

PERFORMANCE CRITERIA		SOLUTIONS	
The purpose of the code may be achieved if the following criteria are satisfied.		**SELF-ASSESSMENT - Acceptable Solutions** *(illustrate how compliance with the Performance Criteria **is to** be achieved)* **CODE ASSESSMENT – Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*	
P1	All community activities, special uses and utilities must be provided with an acceptable standard of infrastructure.	A1.1	Infrastructure is provided in accordance with the *Infrastructure Services Code*; and
P2	The design and siting of community buildings and associated operational works must complement the character of nearby development.	A2.1	Where a development site is adjoining or opposite residential areas, a 5m wide buffer along the interface boundary of the site is landscaped in accordance with the *Landscaping Code*; and
		A2.2	A minimum 3m wide landscaped area is provided along side and rear boundaries adjoining land in the Residential A or Residential B Precinct in accordance with the *Landscaping Code*; and
		A2.3	The main entrance to the building is visible from, and directly accessible from the street; and
		A2.4	Building setbacks are 6m from the main street boundaries and 3m from other boundaries; and
		A2.5	Signage is developed in accordance with the *Signs Code*.
P3	Hours of operation must be appropriate for the area in which the use is operated.	A3.1	With the exception of emergency services and hospitals, Community Activities being undertaken in, adjoining or opposite a Residential A or Residential B Precinct are confined within the hours of 6:00 am to 10:00pm.
P4	Emissions from the use must be within acceptable limits.	A4.1	External lighting is provided in accordance with Australian Standard AS 2560; and
		A4.2	Illuminated signs are in accordance with the requirements of the *Signs Code*; and
		A4.3	Any noise produced by the use does not exceed the background noise level plus 5dB(A) (6am-6pm) or background noise level plus 3dB(A) (6pm-10pm) or background noise level (10pm-6am) (measured as the adjusted maximum sound pressure level at any noise sensitive place).
P5	Sufficient carparking and vehicle access must be provided.	A5.1	On-site carparking and vehicle access is provided in accordance with the *Vehicle Parking and Access Code*.

4.2.8 Rural Activity Code

PURPOSE OF THE CODE

To ensure that agriculture and grazing off-site impacts are minimised and to ensure that intensive rural uses do not create unacceptable off-site impacts

PERFORMANCE CRITERIA AND ACCEPTABLE/PROBABLE SOLUTIONS

PERFORMANCE CRITERIA		SOLUTIONS	
The purpose of the Code will be achieved if the following criteria are satisfied.		**SELF-ASSESSMENT - Acceptable Solutions** *(illustrate how compliance with the Performance Criteria **is to** be achieved)* **CODE ASSESSMENT – Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*	
P1	Agriculture must not adversely affect the amenity of nearby areas or water quality	A1.1	A vegetated buffer of minimum width of 40m is provided between agriculture and any of the following where pre-existing; residential uses (other than on the subject land); child-care centre; other educational institutions, medical centre or hospital; and A1.2 The vegetated buffer includes access strips on either side of at least 10m width which are kept clear of vegetation and other flammable material; and A1.3 Vegetation contains random plantings of a variety of tree and shrub species of differing growth habits, at spacings of 4 – 5m for a minimum width of 20m; and A1.4 Any noise produced by the use does not exceed the background noise level plus 10db(A) (6am-10pm) or background noise level plus 3db(A) (10pm-6am) (measured as the adjusted maximum sound pressure level at any noise sensitive place); and A1.5 A vegetated buffer of a minimum of 50m between agriculture and the high bank of the Burnett River and 20m between agriculture and the bank of any creek is provided.
P2	Animal husbandry uses must not adversely affect the amenity of nearby areas due to noise or other aspects of the operation.	A2.1	Stables do not generate noise greater than 3 dB(A) above average background noise levels at the boundary of the site; or Kennels comply with the following requirements: a. All animals are housed within the kennels between the hours of 7.00pm and 7.00am. b. Noise levels do not exceed background noise level between the hours of 7.00pm and 7.00am when measured at the boundary of the site. c. The owner or his/her representative is resident on the property. d. All animals are exercised only within the property boundaries.

PERFORMANCE CRITERIA		SOLUTIONS	
P3	Animal husbandry uses must provide adequate separation (including by use of appropriate building materials and siting of buildings) so as to prevent adverse impacts on the amenity of nearby areas.	A3.1	Buildings (other than for residential and administrative purposes), pens, and other structures are setback in accordance with Table 4.2; and
		A3.2	Kennels comply with the following requirements: a. The animals are at all times kept in an enclosure located not less than 15m from any residential building on the site, except for veterinary facilities provided in connection with a kennel. b. The kennels are constructed of brick, masonry, concrete or other similar soundproof materials and include a fenced enclosure to effectively lessen noise and to form a visual barrier; and c. The minimum size of an allotment upon which kennels are constructed is three hectares. OR
		A3.3	Stables comply with the following requirements: a. the area of the allotment or parcel of land on which the stable can be erected is not less than one hectare; b. buildings or other structures are located not less than 15m from any boundary of the site; c. buildings or other structures are located not less than 10m from any residential building on the site; OR
		A3.4	Feedlots are established in accordance with *The Reference Manual for the Establishment and Operation of Beef Cattle Feedlots in Qld* (Department of Primary Industries (Skerman), 2001); or
		A3.5	Piggeries are established in accordance with *The Separation Guidelines for Queensland Piggeries* (Department of Primary Industries, 2001)
P4	Animal husbandry uses must not adversely affect the amenity of nearby areas due to escaping animals or inadequate waste disposal.	A4.1	Fencing is provided and maintained to prevent the escape of animals; and
		A4.2	All wastes are disposed of into an approved waste disposal facility.
P5	Aquaculture uses do not reduce the agricultural capacity of the City's agricultural land.	P5.1	Aquaculture facilities are not located on areas identified as Good Quality Agricultural Land (GQAL).

Table 4.2
Minimum Setback Distances

Setback	Stockyard, Kennel or Cattery	Aquaculture
Road Frontage	50m	50m
Side or Rear Boundary	30m	30m
Any Dwelling on surrounding land	400m	100m
Land in Residential Precinct	800m	200m
Freshwater Wetlands or Watercourses	100m including a vegetated buffer of a minimum 50m from the high bank of the Burnett River and 20m from the bank of any creek.	100m including a vegetated buffer of a minimum 50m from the high bank of the Burnett River and 20m from the bank of any creek.
Marine Wetland Areas	100m	100m

4.3 General Codes

4.3.1 Infrastructure Services Code

PURPOSE OF THE CODE

To ensure that infrastructure services provided with land use activities adequately service those activities in a manner that protects the infrastructure, the access thereto and the surrounding environment.

PERFORMANCE CRITERIA AND ACCEPTABLE/PROBABLE SOLUTIONS

PERFORMANCE CRITERIA		SOLUTIONS	
The purpose of the code may be achieved if the following criteria are satisfied.		**SELF-ASSESSMENT - Acceptable Solutions** *(illustrate how compliance with the Performance Criteria **is to** be achieved)* **CODE ASSESSMENT – Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*	
P1	Development must include adequate provision for water supply, waste water disposal, solid waste collection, electricity, gas and telecommunications services	A1.1	Connection is provided to reticulated water supply, reticulated sewerage, electricity, gas (where available in the street) and telecommunications services, including provision of easements, and
		A1.2	The water supply property service is sized in accordance with the recommendations of a hydraulic consultant; and
		A1.3	Manoeuvring areas for the collection of solid waste are provided in accordance with *Austroads – Design Vehicles and Turning Templates* to accommodate the Design Single Unit Truck/Bus (12.5m) for turning speed up to 5km/h.
P2	Infrastructure available adjacent to the frontage of the site (including infrastructure for vehicle and pedestrian movement and services conduits) must be acceptable for the proposed development, and must not be disrupted by the construction or operation of the development.	A2.1	Electricity, telecommunications and street-lighting is available adjacent to the frontage of the site or is provided at the developer's expense; and
		A2.2	The following infrastructure is available adjacent to the frontage of the site or is provided at the developer's expense in accordance with Table 4.3; and
		A2.3	Where any disturbance to existing infrastructure is caused by a development, the developer rectifies that disturbance.
P3	Adequate protection is provided against damage to existing underground infrastructure services, and access is available for future maintenance of the services.	A3.1	Excavation and piling near sewers, stormwater drains and water mains is conducted in accordance with Queensland Development Code – Part 5.

PERFORMANCE CRITERIA	SOLUTIONS
P4 Stormwater drainage must not result in unacceptable water quality, increased flooding or erosion impacts.	A4.1 Design storm criteria in all situations shall be: Major System Design ARI (years) 100 Minor System Design ARI (years) Commercial 10 Community 10 Industrial 10 Recreation Indoor 10 Special Use 10 Utilities 10 Recreation Outdoor 5 Residential 5 Park 1 AND A4.2 Stormwater drainage infrastructure is provided in accordance with the *Queensland Urban Drainage Manual*, and A4.3 Detention basins are provided in accordance with the *Queensland Urban Drainage Manual - Section 6*, and A4.4 Stormwater quality, sediment and erosion control measures are provided in accordance with the *Queensland Urban Drainage Manual - Section 9*.

Table 4.3
Infrastructure Requirements

Infrastructure	Standard Requirement
Vehicle crossovers, including inverts	- For one-way traffic, a minimum width of 3.6m - For two-way traffic, a minimum width of 6.0m Constructed in accordance with the Institute of Public Works Engineers of Australia (Qld Division) (IPWEAQ) Drawing no. R-0051.
Sealed footpath	- When located in Local Area 5, full width - When located outside Local Area 5, width is in accordance with Table 4.3.1, centrally located within the footpath. Constructed in accordance with Bundaberg City Council Drawing No 13977.
Kerb and channelling	Constructed in accordance with Table 4.3.1 and IPWEAQ Drawing No R-0080
Road widening	Constructed from the kerb and channelling to the existing full-depth gravel pavement with - 200mm CBR60 gravel base; and - sealing to match the existing main carriageway

Table 4.3.1
Construction Specifics

Road Type	Kerb and Channel Profile	Minimum Footpath Width
Access Place	Mountable Kerb – M1	N/A
Access Street	Mountable Kerb – M1	1.5 m
Collector Street	Mountable Kerb – M1	2.0 m
Trunk Collector Road	Barrier Kerb – B1	2.0 m
Arterial Road	As required by the responsible State Government Department or Council	
Industrial Road	Barrier Kerb – B1	1.5 m
4 Lane Industrial road	Barrier Kerb – B1	1.5 m
Rural Road	N/A	N/A

4.3.2 Filling and Excavation Code

PURPOSE OF THE CODE

To ensure that filling or excavation is carried out in a manner that does not:

- Adversely impact on visual amenity or privacy;
- Result in any contamination of land;
- Cause an increase in flooding or drainage problems;
- Adversely affect environmental values in receiving waterways or wetlands;
- Cause any land instability;
- Adversely impact on any utility services (eg sewer or stormwater pipes).
- Result in adverse traffic impacts;
- Cause unacceptable air emissions;
- Cause unacceptable noise emissions;

PERFORMANCE CRITERIA AND ACCEPTABLE/PROBABLE SOLUTIONS

PERFORMANCE CRITERIA		SOLUTIONS	
The purpose of the code may be achieved if the following criteria are satisfied.		**SELF-ASSESSMENT - Acceptable Solutions** *(illustrate how compliance with the Performance Criteria **is to** be achieved)* **CODE ASSESSMENT – Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*	
P1	Filling or excavation must not reduce visual amenity or privacy for nearby areas.	A1.1	Filling or excavation covers less than 20% of the site area or 250 m^2 (whichever is the lesser); and
		A1.2	Filling or excavation depth is 300 mm or less above the natural surface level over any period of time.
P2	Filling or excavation must not increase land contamination.	A2.1	No materials excluded from material fill as noted below are used as fill; and
		A2.2	No contaminated material is excavated, or contaminants disturbed.
P3	Filling or excavation must not cause land instability of adjoining land.	A3.1	The site is not located in a known unstable area; and
		A3.2	The slope of the site is less than 1 (Vertical) in 10 (Horizontal); and
		A3.3	Filling or excavation does not occur within 2m of any site boundary; and
		A3.4	All structural fill shall be placed and compacted to the minimum relative compaction noted on Table 4.4.
P4	Filling or excavation must not: • cause any increase in the flood levels either upstream or downstream of the site; • cause unacceptable changes to runoff characteristics (hydrograph volume, peak and time to peak) for storm events up to at least the 1 in 100 year design storm;	A4.1	There is no change to hydrographic volume peak and time to peak for storm events up to the 1 in 100 year design storm; and
		A4.2	a. No filling or excavation is located in any area subject to the DFE or in any overland flow path.

PERFORMANCE CRITERIA		SOLUTIONS	
	• adversely affect the flow of water in any overland flow path; or cause ponding on the site or any adjoining land.		
P5	Filling or excavation must ensure that the environmental values of receiving waters are protected.	A5.1	The quantity of fill or excavated material on any site does not exceed 100m^3 over any period of time; and
		A5.2	Any filling or excavation is located more than 150m from any waterway or wetland; and
		A5.3	Any excavation does not intercept a groundwater resource; and
		A5.4	Erosion and sediment control is provided in accordance with the *Queensland Urban Drainage Manual - Section 9*; and
		A5.5	All Batter Slopes are not greater than 1(v):6(H).
P6	Filling or excavation must not cause any adverse impacts on utility services.	A6.1	The area of filling or excavation does not contain any utility services.
P7	The impacts of trucks carrying material to or from the site must be within acceptable limits.	A7.1	Truck size is limited to 8 tonne with no more than three movements per day for no more than five days in total; and
		A7.2	Hours of truck operation are limited to 8am to 5pm, Monday to Saturday; and
		A7.3	The truck haul route follows the most direct route to the main road system.
P8	The impact of noise emissions associated with filling or excavation must be within acceptable limits.	A8.1	Hours of operation are limited to 7am to 5pm Monday to Saturday.

Glossary of terms

The following technical words are used in this code and have the meanings set out below:

Contaminated material means filling or excavation material for which the levels of contaminants as defined in the Environmental Protection Act 1994 exceed the Investigation Thresholds in the Contaminated Land Management Guidebook (Contaminated Land Unit, Brisbane City Council), or the Allowable Leaching Contaminant Levels in the Liquid Industrial Waste Policy and Management Plans (Brisbane Water, 1995) and relevant Environmental Protection Authority Publications.

Fill is any material placed on the original or existing land surface to a depth of 200 mm or more. Landscaping mounds are not considered to be fill, nor is fill to support structures, which is building work.

Fill material shall not contain:

- Organic soils or other organic material such as trees, roots or timber;

- Regulated Waste, or materials contaminated or possibly contaminated with toxic substances or soluble compounds harmful to the environment;
- Acid sulfate soil;
- Silts or other materials that have the deleterious properties of silt;
- Metal, plastics, or builder's debris; and
- Other materials with properties that are unsuitable for the forming of structural fill.

Overland Flow Path means:

- where a piped drainage system exists, the path along which flood waters exceeding the capacity of the underground drainage system would flow; or
- where no piped drainage system or other form of defined watercourse exists, the path taken by surface runoff from higher parts of the catchment.

Structural Fill is any fill that may be required to support structures or pavements.

Table 4.4
Minimum Relative Compaction

Item	Development	Minimum Relative Compaction Percentage	
		Minimum Dry Density Ratio	Minimum Density Index
1	Residential - Lot Fill	95	65
2	Commercial - fills to support minor loadings including floor loadings of up to 20kPA and isolated pad or strip footings to 100 kPA.	98	70

NOTES:

1. Relative compaction for cohesive soils shall be determined in accordance with AS 1289E5.1. Density Index for cohesion-less soils shall be determined in accordance with AS 1289E5.1.
2. Acceptance of tests shall be on a "not one to fail" basis.
3. Testing shall be carried out by a NATA Registered Geotechnical testing authority.
4. Testing of course granular material for which the above density tests do not apply, may be tested by proof rolling accordance with AS3798-1996.
5. Testing frequency shall be as per Table 8.1 - Section 8 of AS3798-1996.

National Health and Medical Research (NHMRC) – Australian Water Resources Council (AWRC) Guidelines.

4.3.3 Lot Reconfiguration Code

PURPOSE OF THE CODE

To facilitate the creation of a variety of serviced flood-free allotments that meet the diverse needs of the community while ensuring that adverse off-site impacts are limited, that the sub-divisional design is capable of integration with likely future development and that adequate open space is provided. In particular, residential lot reconfiguration provides for;

- Protection and enhancement of residential amenity and sense of place;
- Promotion of walking and cycling;
- Protection of the safe operation of the City's transport network;
- A lower level of non-renewable energy consumption; and
- The protection of natural environmental values of the area.
- The protection of arterial roads

PERFORMANCE CRITERIA AND PROBABLE SOLUTIONS

PERFORMANCE CRITERIA		PROBABLE SOLUTIONS	
The purpose of the code may be achieved if the following criteria are satisfied.		**CODE ASSESSMENT - Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*	
P1	Allotments must be of sufficient size and dimensions to enable the establishment of buildings and the provision of open space around buildings for sufficient access, car movement and parking.	A1.1	Allotments comply with Table 4.7 below, with regard to minimum allotment size and dimensions for the particular precinct;
		A1.2	Hatchet shaped allotments in the Residential A precinct, the minimum area of both front and rear allotments is 600m^2 (excluding the area of the access strip);
		A1.3	Hatchet shaped allotments or allotments reliant on access strips/easements are not located within Residential B Precincts.
P2	Allotments are provided with the necessary infrastructure to cater for the proposed development.	A2.1	Infrastructure is provided in accordance with the *Infrastructure Services Code*.
P3	Sufficient open space is provided to meet the needs of the likely occupiers of the proposed allotments.	A3.1	Proposals to create additional allotments include provision of 10% of the area to be subdivided to be dedicated for parkland that satisfies the criteria set out in the *Open Space and Recreation Planning Scheme Policy*; and
		A3.2	Parklands are not located on land that is: • below the 20% AEP localised flood level; or • contaminated; or • encumbered by electricity supply easements; or • smaller than 4,000m^2, excluding when adjoining an existing park; or • of a gradient/slope in excess of 1 (vertical) in 10 horizontal); or • less than 40m in width. and
		A3.3	Parklands are provided with road frontage equal to 50% of the perimeter distance ; and
		A3.4	90% of residential allotments are located within 400m safe walking distance from parkland; and

PERFORMANCE CRITERIA		PROBABLE SOLUTIONS	
		A3.5	The necessary works are carried out to the parkland to render it useable for its intended purpose.
P4	The creation of allotments must not result in increased risk to life or property as a result of flooding, or riverbank instability.	A4.1	No new residential allotments are created in natural hazard areas eg within the DFE area.
P5	New residential allotments must be located so as to be adequately buffered from any adjacent incompatible land uses and any adjacent arterial roads.	A5.1	A minimum of 60m is provided between any allotment included in a Residential A or Residential B Precinct and land included in the Industry Precinct; or
		A5.2	A buffer is provided between any new residential allotments and agricultural uses in accordance with the *Planning Guidelines: Separating Agricultural and Residential Land Uses (Department of Natural Resources)*.
P6	Access easements must be of adequate width and constructed to a standard appropriate to the situation and must not result in unreasonable detriment or nuisance to neighbours.	A6.1	Access strips are provided in accordance with the requirements of the *Lot Reconfiguration Planning Scheme Policy*.
P7	Where practicable, safe, secure and convenient pedestrian and bicycle access must be provided from residential allotments to local primary schools, recreation facilities and shops.	A7.1	Pedestrian and bicycle connections are provided from residential allotments to local primary schools, recreation facilities and shops in accordance with *Queensland Streets–Design Guidelines for Subdivisional Streetworks, Austroads – Guide to Traffic Engineering Practice - Bicycles* and CPTED principles; and
		A7.2	Pedestrian and bicycle paths are located properties along the footpath or on on-road exclusive bicycle lanes.
P8	Subdivisional design provides an acceptable level of vehicle access to all allotments and maintains the safety and efficiency of the City's road network.	A8.1	The proposed road layout is in accordance with the hierarchy and dimensions outlined in Tables 4.5 and 4.6 and Map 4.1 or the provisions of *Queensland Streets-Design Guidelines for Subdivisional Streetworks*.
P9	For residential development, allotments must be oriented where practicable, to enable climatic extremes (eg temperature, or humidity) to be moderated using energy conservation principles.	A9.1	No solution prescribed.
P10	Lot reconfiguration must not result in unacceptable impacts on natural processes (eg water quality).	A10.1	Erosion and sediment control is provided in accordance with the *Bundaberg City Engineering Design Planning Scheme Policy*, and
		A10.2	Erosion and sediment control measures remain in effective operation until 80% of all areas disturbed by the works are covered with grass or other appropriate vegetation.

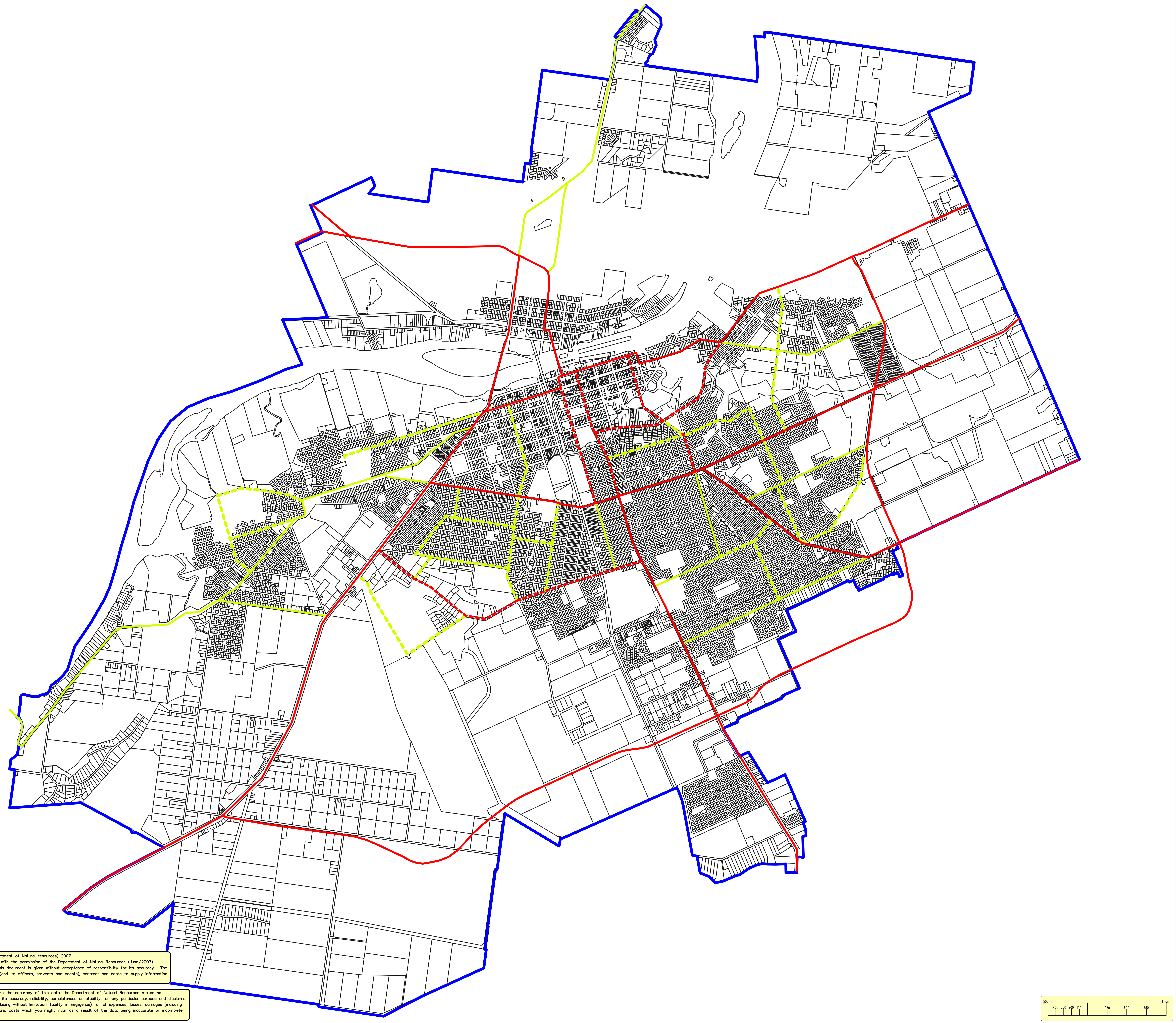
PERFORMANCE CRITERIA	SOLUTIONS
P11 The sub-division must be designed to enable integration with likely future development.	A11.1 Proposals involving more than 30 new allotments provide more than one entry/exit point for the subdivision. A11.2 Sub-division layouts have the capacity for the connection of internal roads to the existing or future road network or adjoining subdivisions.

Table 4.5
Road Layout Hierarchy

Road Type	Character & Function	Maximum Number of Dwellings Served	Design Speed (km/h)
Local Residential Street- Access Place	A minor road providing local residential access with shared traffic, pedestrian and recreation use	30*	30
Local Residential Street– Access Street	A road providing local residential access with shared traffic, pedestrian and recreation use with local traffic priority.	75	40
Collector Street	A road providing local residential access and local traffic movement.	300	60
Trunk Collector Road	A road which carries both local and through-traffic.	1,000	60/70
Arterial Road	A road with through-traffic priority.	As required by the responsible State Government Department or Council.	
Industrial Road	A road which has the primary function of providing access to industrial properties.	N.A.	60
Rural Road	A road which has the primary function of providing access to rural or rural residential properties.	Site specific conditions apply.	
* On-street car-parking spaces shall be provided at a rate of one space per four allotments where an Access Place services more than 10 allotments.			

Table 4.6
Road Dimensions

Road Type	Reserve Width	Kerb and Channel Profile	Minimum Pavement Width	Mimimum Footpath Width
Access Place	15 m	Mountable Kerb – M1	5.5 m	N/A
Access Street	15m	Mountable Kerb – M1	7.0 m	1.5 m
Collector Street	20 m	Mountable Kerb – M1	8.5 m	2.0 m
Trunk Collector Road	30 m	Barrier Kerb – B1	11.1 m	2.0 m
Arterial Road	As required by the responsible State Government Department or Council			
Industrial Road	20 m	Barrier Kerb – B1	11.1 m	1.5 m
4 Lane Industrial Road	30 m	Barrier Kerb – B1	13.1 m	1.5 m
Rural Road	20 m	N/A	7.0 m	N/A



Planning Scheme for the City of Bundaberg

Road Hierarchy

Legend

- City Boundary
- Arterial
- Sub Arterial
- Trunk Collector
- Collector

Map 4.1

BUNDABERG CITY COUNCIL
Planning and Development

Produced by Bundaberg City Council
GIS Section on Fri Jun 29 2007
GIS Ref:- MPA: plananddev, File: IPA-ROADDF

Table 4.7
Minimum Allotment Dimensions.

Precinct	Minimum Area	Minimum Frontage
Residential A	600m^2	15m
Residential B	800m^2	20m
Residential C	1000m^2	20m
Industry (General Industry, Low Impact Industry, Special Industry, Food Park, Industrial/Transition and Waterfront Industry Precincts)	1000m^2	20m
Commercial (including Commercial Central Activity Area, Commercial Riverfront Area, Commercial City Frame Area)	300m^2	10m
Community	600m^2	20m
Non Urban	40ha	400m

4.3.4 Signs Code

PURPOSE OF THE CODE

- To provide guidance with regard to displaying signs or advertising devices;
- To ensure that signs or advertising devices are constructed and maintained to complement the natural and built environment in which they are exhibited;
- To provide an environment which ensures an orderly display of signs or advertising devices and to achieve the removal of visual clutter;
- To preserve pedestrian and vehicular safety; and
- To ensure access to utility services is not inhibited or restricted.

PERFORMANCE CRITERIA AND ACCEPTABLE SOLUTIONS

PERFORMANCE CRITERIA	SOLUTIONS
The purpose of the code may be achieved if the following criteria are satisfied.	**SELF-ASSESSMENT - Acceptable Solutions** *(illustrate how compliance with the Performance Criteria **is to** be achieved)* **CODE ASSESSMENT - Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*
Public Safety	
P1 Advertisements must be designed, sited and maintained to ensure no significant visual or physical obstruction of, or distraction to, vehicular or pedestrian traffic.	A1.1 Advertisements located within a road are sited and illuminated in accordance with Part 1, Section 1 of the *Queensland Transport - Manual for Uniform Traffic Control Devices (MUTCD)*; and A1.2 Advertisements are not displayed on or attached in any way to a roadside tree, pole, statutory guide or traffic sign; and A1.3 Advertisements provide a minimum of 2.4m height clearance to public footway pavements; and A1.4 Advertisements do not extend over a roadway.
P2 Where advertising and associated structures are developed over or adjoining public utilities, satisfactory provision must be made to protect the infrastructure from physical damage and to allow ongoing necessary access.	A2.1 Advertisements and associated structures are erected to provide a minimum clearance of 1.5m from any existing or proposed public utilities; or A2.2 Where advertisements or associated structures are proposed within 1.5m of existing public utilities, the proponent is responsible for the cost of relocating such utilities to provide a minimum clearance of 1.5m.
P3 Internally or externally illuminated advertisements must not cause unreasonable disturbance to any person, activity or fauna because of glare or other overspill light emissions.	A3.1 The illumination resulting from direct, reflected or other incidental light emanating from the advertisement does not exceed one (1) lux when measured; • at any point 1.5m outside of the subject boundary or at any point within a residential dwelling if the sign is located within private property; or • at any point 1.5m from the advertisement if the sign is located on public land.

PERFORMANCE CRITERIA	SOLUTIONS
Visual Amenity and Character	
P4 Advertisements must: • be complementary to the architecture of buildings and proportional to the building or structure on which they are placed; • comply with the desired characteristics of the precinct, having regard to the; (a) location and siting, (b) size and height, (c) layout and colour, (d) selection of sign type, and (e) Principal Tourist routes. • not obstruct existing views or vistas; • not create or contribute to visual clutter; • maintain the proportions and alignment of advertising on adjoining buildings; • complement existing architecture and urban design; and • preserve the amenity of residential localities by minimising their visual impact.	A4.1 Advertisements in Local Centres, commercial and retail areas are: • not located on walls facing adjoining residential allotments; and • to align with signs on adjoining premises; and • not to project above parapet or facade lines AND A4.2 Advertisements in industrial precincts in a multiple tenancy building or allotment; • have a maximum of one (1) freestanding pylon sign per parent allotment; and • where attached, do not exceed 2.5m^2 in area. AND A4.3 Advertisements in Residential Precincts are to; • be located on buildings or structures which do not face adjoining residences; and • have a maximum of one advertisement per allotment; AND A4.4 In Non Urban and Community Precincts, advertisements are to: • only be a Business name plate; or • where freestanding, have a maximum area of 2.5m^2 and a height of 4.0m above ground level
P5 Advertising adjoining or located on a place of cultural heritage significance, must be designed and sited so as to: (a) complement the cultural heritage significance of the heritage place and not detrimentally impact its values or its setting; (b) not obscure the appearance or prominence of the place when viewed from adjacent public or semi-public streets or open spaces, nor intrude into that place.	A5.1 Advertising on or adjoining a place or item: • on the Queensland Heritage Register; and/or • on the Register of the National Estate; incorporates design, scale, siting, finishes, colours and materials of the heritage place; and A5.2 Advertising does not exceed the height of any adjoining building or structure identified in this planning scheme as being of heritage significance.

PERFORMANCE CRITERIA		SOLUTIONS	
Identification Signs			
P6	Portable Identification Signs must; • not impede safe pedestrian and vehicle movement; and • be designed for and directed at pedestrian traffic only; and • be professionally made and have a design theme that is compatible with street furniture and the desired character of the relevant planning area.	A6.1	Portable Identification signs: • are associated with a Commercial use; and • have a maximum of two faces; and • are limited to 1 sign for each facility or business, and • be secured to prevent danger to pedestrians and traffic outside the site in high wind situations. AND Portable Identification signs located on public land; • are located directly in front of the facility or business to which the sign relates and extend no further than 750mm onto a footpath or be no closer than 500mm to the kerb, and • maintain an unobstructed pedestrian corridor of at least 2.4m wide; and • do not exceed 1.5m in height; and • have a total sign face area of 1m^2 or less.
		A6.2	
P7	Business Name Plates must not create or contribute to visual clutter.	A7.1	Business name plate signs; • are limited to one sign per premises; • are non-illuminated in Residential, Non Urban and Community Precincts; and • have a total sign face area of 0.3m^2 or less.
P8	Home Occupation Signs must ensure that visual amenity is consistent with residential development.	A8.1	Home occupations signs: • are limited to one sign per premises; and • have a total sign face area of 0.5m^2 or less.
P9	Flush Wall Signs must not create or contribute to visual clutter.	A9.1	Other than for buildings exceeding two storeys, a maximum of four (4) or less flush wall signs and/or awning signs are provided per site; and
		A9.2	Flush wall signs and/or awning signs occupy no more than 30% of the building or structure's elevation/wall face that is visible from a street, road or other public place; and
		A9.3	Flush wall signs are: • not to project above the roofline or beyond the wall of the building or structure; and • not to cover an architectural feature or extend over a window (unless a window sign); AND
		A9.4	Newsagent Signs are to be: • associated with a Newsagency; and • not greater than 0.5m^2 per sign; and • fixed against the wall of the building; AND
		A9.5	Signs for buildings exceeding two storeys in height: • are provided at a maximum of (1) sign per building face; and • do not project above the roofline or beyond the wall of the building or structure; and • are to have a sign face area of no more than 1m^2 for every metre of building height.

<table>
<tr><th colspan="2">PERFORMANCE CRITERIA</th><th colspan="5">SOLUTIONS</th></tr>
<tr><td>P10</td><td><u>Window Signs</u> must enable casual surveillance of public spaces and streets from ithin the premises.</td><td>A10.1</td><td colspan="4">Window signs do not cover more than 50% of the glazed window area.</td></tr>
<tr><td>P11</td><td><u>Freestanding Identification Signs</u> must ensure that visual amenity is consistent with the desired character of the precinct.</td><td>A11.1</td><td colspan="4">One (1) freestanding identification sign per site (including multiple occupancy buildings); and

A11.2 Free standing identification signs, other than estate entry or ground signs, do not exceed the heights and widths provided for the relevant Precincts as follows:</td></tr>
<tr><td></td><td></td><td colspan="5"><table><tr><th>Precinct</th><th>Maximum Height</th><th>Maximum Width</th><th>Maximum sign face</th></tr><tr><td>Commercial and Industrial</td><td>7.0m</td><td>2.4m</td><td>6.0m^2</td></tr><tr><td>Residential B</td><td>3.6m</td><td>2.4m</td><td>4.5m^2</td></tr><tr><td>Residential A</td><td>1.2m</td><td>1.0m</td><td>0.5m^2</td></tr><tr><td>Non Urban and Community</td><td>4.0m</td><td>2.4m</td><td>2.5m^2</td></tr></table></td></tr>
<tr><td></td><td></td><td colspan="5">AND</td></tr>
<tr><td></td><td></td><td>A11.3</td><td colspan="4">One (1) estate entry or ground sign per site, which;
• is integrated within a landscaped environment in accordance with the <u>Landscaping Code</u>; and
• is setback at least 2m from side or rear boundaries; and
• does not exceed 1.2m in height, and
• has a total sign face area of 10m^2 of less.</td></tr>
<tr><td>P12</td><td><u>Projecting Wall Signs</u> must complement the character of the building upon which they are attached and adjoining premises.</td><td>A12.1</td><td colspan="4">Projecting Wall Signs are;
• to be a minimum of 6m apart if greater than 0.3m^2 in area, or a minimum of 3m apart if less than 0.3m^2 in area, and
• to be setback 3m from a side or rear boundary, and
• not to exceed 2.4m in height; and
• not to exceed 1.5m in width; and
• not to exceed 2.5m^2 in sign face area.</td></tr>
<tr><td>P13</td><td><u>Awning Signs</u> must not create or contribute to visual clutter.</td><td>A13.1</td><td colspan="4">A combination of four (4) or less awning facia signs and/or flush wall signs per site; and

A13.2 Sign face areas of awning facia signs and/or flush wall signs occupy 30% or less of the building or structure's elevation/wall face that is visible from a street, road or other public place; and

A13.3 Awning facia signs are located within the outline of the facia and at a maximum thickness of 200 mm; and</td></tr>
</table>

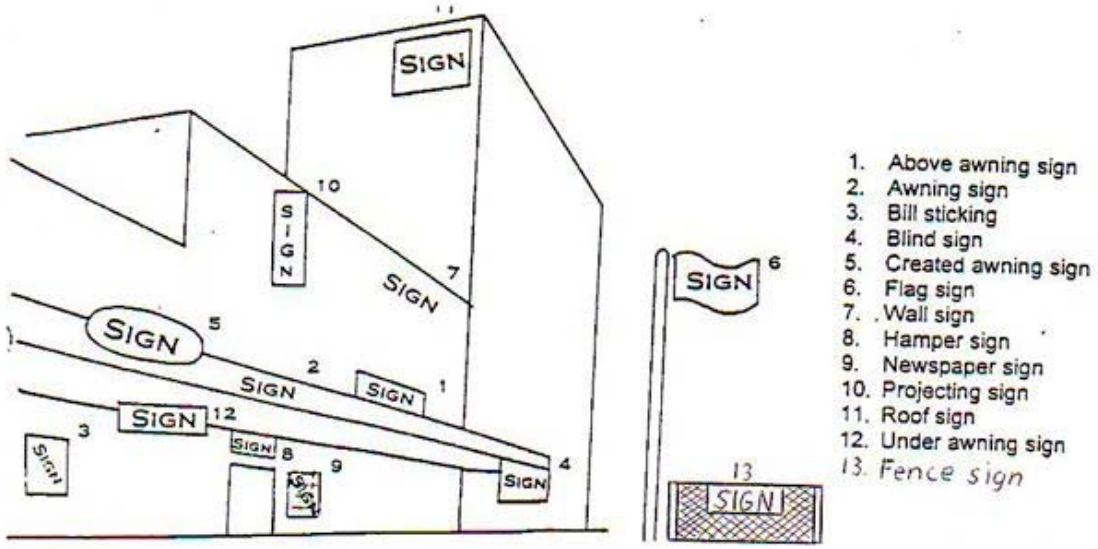
PERFORMANCE CRITERIA	SOLUTIONS
	A13.4 Created awning line signs; • have a created sign face area no more than 30% of the existing awning face area; and • have a maximum total height of double the existing awning face height; and • have a total sign face area not more than the area of the existing awning face; and • have a maximum thickness of 200 mm; AND A13.5 Under-awning facia signs are: • limited to one (1) per tenancy; and • orientated at right angles to the road alignment; and • not located or project within 300mm of the perimeter of an awning; and • setback at least 1.5m from a side boundary; and • no longer than 2.4m; and • less than 600mm in height. AND A13.6 Blind or canopy signs are limited to one face of the blind or canopy and have a maximum sign face area of 2.5m^2.
P14 <u>Above Awning Signs</u> must; • be cohesive with the building on which it is placed having regard to; (a) scale and proportion, (b) layout and colour, and (c) architectural design of a building façade. • not create or contribute to visual clutter; • will not unreasonably obstruct existing views or vistas.	A14.1 Only one (1) Above Awning Sign is provided per building; and A14.2 Above Awning Signs are located: • within the maximum Building height for the relevant Precinct; or • a maximum height of 0.5m above the awning surface; whichever is the lesser height above ground level.

PERFORMANCE CRITERIA	SOLUTIONS
P15 Roof Signs are only utilised where other opportunities to identify the predominant use of a site are not practical and must; • be cohesive with the building on which it is placed having regard to; (a) location, size and height, (b) scale and proportion, (c) layout and colour, and (d) architectural design of a building façade. • not unreasonably obstruct existing views or vistas; • not create or contribute to visual clutter	A15.1 Only one (1) roof sign is provided per site; and Roof signs are located: • within the Maximum Building Height for the relevant Precinct; or • a maximum height of 2.4m above the roof surface; whichever is the lesser height above ground level.
Signs on Public Land	
P16 Directional Signs must not create a traffic hazard or create or contribute to visual clutter.	A16.1 Directional signs are provided in accordance with Part 6 of the *Queensland Transport – Manual for Uniform Traffic Control Devices (MUTCD)*; and A16.2 Community facility name signs are: • located at a single location on the nearest Major Collector Road or greater; or • placed on a side street name post so that no more than 4 signs (including the street name sign(s)) are erected on the one post. AND A16.3 Tourist and commercial directional signs do not exceed the heights, widths and sign face areas provided for the relevant location as follows:

Location	**Max. height** Finger sign	**Max. width** Finger sign	**Max. area** MUTCD
Bed & Breakfast Accommodation Accommodation units and Motels	1.8m (above GL)	1m	$1.6m^2$ (1 x 1.6)
Resorts, Hotels and Major Tourist Destinations	3.6m (above GL)	2.4m	$3.6m^2$ (1.5 x 2.4)

PERFORMANCE CRITERIA		SOLUTIONS	
Other signs			
P17	Illuminated Signs must not create an unreasonable impact on the amenity of residential areas	A17.1	Illuminated signs are not located in a Residential A Precinct; and
		A17.2	Illuminated signs in Residential B, Commercial, Industrial and Community Precincts, are limited to any two of the following four locations; • an under-awning sign; • an above door head/display window transom; • a projecting wall sign; or • a freestanding sign
P18	Moving Signs must not create or contribute to visual clutter .	A18.1	Moving signs are $6m^2$ or less in sign face area.
P19	3D Replica Signs, Objects or Shapes must not create an unreasonable impact on visual amenity and must not pose a hazard to aircraft operation.	A19.1	3D replica signs, objects or shapes are contained in an envelope of $14m^3$ calculated by multiplying the height, width and depth of the broadest dimensions of the sign; and
		A19.2	Inflatable 3D replica signs, objects or shapes are; • tethered directly above the special event associated with the sign; • to comply with the Obstacle Limitation Surface Height Limits contained in the *Bundaberg Airport Code*.

EXAMPLES OF SPECIFIC SIGNS



DEFINITIONS FOR SIGNS

In order to provide interpretations of this code, the following definitions apply. A sign may be defined as more than one sign type (eg; a Moving Sign located on Public Land) – in such cases the provisions for both sign types will be applicable. Definitions are categorised under the following sections:

1. Type 1 Identification Signs;
2. Type 2 Identification Signs;
3. Signs on public land;
4. Other signs

"IDENTIFICATION SIGN" **IS AN ADVERTISEMENT DISPLAYING THE NAME AND/OR SERVICE/OCCUPATION OF THE BUSINESS, FACILITY OR ORGANISATION CONDUCTED ON THE PREMISE AND/OR SITE ON WHICH THE ADVERTISEMENT IS LOCATED.**

Type 1 Identification Signs	
(a)	"**Portable Identification Sign**" is an identification sign, which is portable and self-supporting and includes: • *A frame sign* • *Sandwich board* • *T frame sign*
(b)	"**Business Name Plate**" is an attached or freestanding identification sign displaying the name, service/occupation and relevant information of the business conducted on the premises or site on which the advertisement is located
(c)	"**Home Occupation Sign**" is an identification sign displaying the name, occupation/profession and contact details of the home occupation conducted at the residence on which the advertisement is located.

(d) "**Flush Wall Sign**" which is an identification sign attached or applied to the wall of a building and not projecting more than 100mm from the wall and includes:

- *Blackboard signs*
- *Hamper sign* - An advertisement attached to or painted on the transom (area above the head) of a doorway or display window and below the awning height or verandah of a building
- *Window sign* - An advertisement displayed on the glass of a window and including devices which are suspended from the window frame
- *Newsagent sign* - An advertisement which allows for the insertion / attachment of temporary posters relating to the sale of newspapers, magazines, etc and typically below a shop window
- *Stallboard sign* - An advertisement painted on or otherwise affixed on the base of a shop front below a shop window

Type 2 Identification Signs

(a) "**Freestanding Identification Sign**" is an identification sign which is independent of a building and mounted on one or more vertical supports, and includes:

- *Pylon sign* - a freestanding identification sign, higher than it is wide
- *Estate entry sign* - an identification sign displaying the name of a residential, commercial or industrial estate at the estate entry
- *Ground sign* - an identification sign integrated into a wall-like structure which sits on or rises out of the ground
- *Solid or flexible banner signs*
- *Flag sign* (other than civic flags)
- *Fence Sign*

(b) "**Attached Identification Sign**" is an identification sign, which is attached, painted on and/or supported on a building or structure, and includes:

(i) Flush Wall Sign
(ii) Projecting Wall Sign
(iii) Awning Sign
(iv) Roof Sign

(i)"**Flush Wall Sign**" which is an identification sign attached or applied to the wall of a building and not projecting more than 300mm from the wall and includes:

- *Facade sign* - A sign painted on or attached to the wall of a building other than the transom of a doorway or display window
- *Signwritten building or structure sign* - A sign or mural painted on to the wall of a building or structure
- *High rise building sign* - An advertisement painted or otherwise affixed to a building and higher than 12m above the ground level

(ii)"**Projecting Wall Signs**" is an identification sign attached to the wall of a building (other than the transom of a doorway or display window) and projecting horizontally more than 300mm and including;

- *Vertical banner signs*
- *Projecting Flag sign*

(iii)"**Awning Sign**" is an identification sign painted or attached to a building awning or verandah over private or public property, and including:

- *Awning facia signs* - a sign painted or attached to the front or return face
- of an awning
- *Under awning sign* - a sign attached to the underside of an awning
- *Above awning sign* - a sign attached to the upper side of an awning (other than the fascia or return end)

- *Created awning sign* - any manufactured sign positioned on the face or aligned with the face of an awning where the shape interrupts the natural horizontal line of the awning. The device creates another awning line with its shape
- *Blind or canopy sign* - a sign painted or affixed to a solid or flexible material suspended from an awning, verandah or wall

(iv)"**Roof Sign**" is a sign erected on or above the roof or parapet of a building including;

- Attached roof signs - A sign which is an independent structure and fitted to the roof
- Sign written roof sign - A sign which is painted or otherwise affixed flush to the roof cladding of a building or structure

"SIGNS IN PUBLIC LAND" **ARE ADVERTISEMENTS OR SIGNS LOCATED ON PUBLIC LAND INCLUDING ROAD AND RAIL RESERVES AND PUBLIC OPEN SPACE.**

Signs in Public Land

(a) "**Directional Sign**" is an advertisement or sign that provides information, direction or guidance to pedestrians or vehicular traffic and includes

- *Tourist Directional Signs* - advertising panels displayed for the purpose of directing visitors to the City's tourist facilities and attractions
- *Community Facility Directional Signs* - Advertising panels displayed for the purpose of directing the public to community facilities including Council offices, halls, depots, waste disposal sites, Police, Hospitals, Post Offices, Airports, railway and bus stations, education institutions, Sporting and recreational grounds and facilities, Churches/religious institutions and shopping centres.

(b) "**Signs on Street Furniture**" are signs erected on street furniture such as telephone booths, lamp posts, seating, bus shelters and the like

"OTHER SIGNS" **ARE ADVERTISING SIGNS NOT DEFINED ELSEWHERE IN THIS CODE**

Other Signs

(a) "**Illuminated Sign**" is a sign illuminated by an external or internal light source and including

- *Flashing sign*
- *Lantern signs*

(b) "**Moving Sign**" is a sign that is freestanding or attached to a building or structure and capable of movement by any source of energy (whether or not included in any other class of signage.

(c) **"3D Replica Signs, Object or Shape**" is a free standing or attached advertisement designed to replicate or copy a "real world" object or shape.

(d) "**Inflatable Sign**" - An advertisement on a captive aerial device, eg. balloon, blimp, or kite

4.3.5 Landscaping Code

PURPOSE OF THE CODE

To achieve an acceptable standard of landscaping through species selection, location and maintenance in order to:

- mitigate the visual impacts of development;
- provide adequate privacy and screening;
- delineate and enhance pedestrian and vehicle routes;
- enhance the safety and security of pedestrians, vehicles and the transport network; and
- promote water conservation practices.

PERFORMANCE CRITERIA AND ACCEPTABLE/PROBABLE SOLUTIONS

<table>
<tr><th colspan="2">PERFORMANCE CRITERIA</th><th colspan="2">SOLUTIONS</th></tr>
<tr><td colspan="2">The purpose of the code may be achieved if the following criteria are satisfied.</td><td colspan="2">SELF-ASSESSMENT - Acceptable Solutions (illustrate how compliance with the Performance Criteria is to be achieved)
CODE ASSESSMENT – Probable Solutions (illustrate how compliance with the Performance Criteria may be achieved)</td></tr>
<tr><td>P1</td><td>Planting and other landscape treatment must be provided to enhance the appearance of the development.</td><td>A1.1</td><td>A landscaped area is provided to the main street frontage of the site to the following depths:

Development | Landscaped Area
Residential (other than a residential single unit) | 6m
Commercial (other than in Local Area 5) | 2m
Industrial (other than a service station) | 6m
Service station | 3m
Recreation | 6m

AND

A1.2 A landscaped area is provided to other street frontages, at half the dimensions prescribed in A1.1.</td></tr>
<tr><td>P2</td><td>Landscaping must be provided to protect the privacy of any existing residential areas in the vicinity of the site.</td><td>A2.1</td><td>For development other than residential, where on a site opposite to or adjoining residential areas, a 5m wide buffer along the interface boundary of the site is planted to create an effective screen.</td></tr>
<tr><td>P3</td><td>Landscaping must be installed to delineate and enhance pedestrian and vehicle routes within and adjacent to the site.</td><td>A3.1</td><td>Landscaping complying with the performance criterion is provided.</td></tr>
<tr><td>P4</td><td>Planting and other landscape treatments must not decrease the safety or security of pedestrians.</td><td>A4.1</td><td>Landscaping which includes recognised Crime Prevention Through Environmental Design (CPTED) principles is provided.</td></tr>
<tr><td>P5</td><td>Landscaping must be designed and implemented to conserve water usage.</td><td>A5.1</td><td>Landscaping includes species recognised for their low water requirements; and

A5.2 Landscaping is provided with a controlled underground or drip irrigation system. Any such system is to be fitted with an approved backflow prevention device.</td></tr>
</table>

	PERFORMANCE CRITERIA		SOLUTIONS
P6	Landscaping must incorporate appropriate species in appropriate locations.	A6.1	Landscaping uses species indigenous to the area (the Plant Species List contained within Council's *Landscaping Planning Scheme Policy* is a guide to species selection).
P7	Landscaping on land adjoining a State-controlled road corridor is to be provided to enhance the visual amenity along the corridor, whilst maintaining traffic safety and efficiency.	A7.1	Landscaping complies with the requirements of the Department of Main Roads - Road Landscape Manual.
P8	Landscaping must be established and maintained so as to continue to fulfil its intended function.	A8.1	Landscaping is to be completed prior to the premises being occupied and is to be maintained while ever the use of the premises for the purpose necessitating the landscaping continues.

NOTE:

The Landscaping Planning Scheme Policy is a guide to the provision of landscaping required by this Code and the preparation of a landscaping plan.

4.3.6 Vehicle Parking and Access Code

PURPOSE OF THE CODE

To ensure that vehicle parking and access areas, passenger setdown/pickup areas and goods loading/unloading facilities are provided in a safe and efficient manner, and that the off-site impacts of these activities are within acceptable limits.

PERFORMANCE CRITERIA AND ACCEPTABLE/PROBABLE SOLUTIONS

PERFORMANCE CRITERIA		SOLUTIONS	
The purpose of the code may be achieved if the following criteria are satisfied.		**SELF-ASSESSMENT - Acceptable Solutions** *(illustrate how compliance with the Performance Criteria **is to** be achieved)* **CODE ASSESSMENT – Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*	
P1	Off-site impacts of lighting and noise in vehicle access and parking areas must be within acceptable limits.	A1.1	Illumination levels at a distance of 1.5m outside the site do not exceed 8 lux; and
		A1.2	Vehicle access or parking does not produce noise exceeding background noise level plus 5db(A) (where the site adjoins a commercial premises), or background noise level plus 3db(A) (where the site adjoins a noise sensitive place); and
		A1.3	A screen fence with no gaps is provided between carpark areas and residential uses.
P2	Vehicle access from the external traffic network to the site to on-site vehicle parking, passenger setdown/pickup areas and goods loading/unloading areas must be provided in a manner which does not disrupt the safe and efficient functioning of the external traffic network.	A2.1	Vehicle access to the site is provided in accordance with Australian Standard AS2890; and
		A2.2	Vehicle manoeuvring space is provided on the site to enable vehicles to enter and leave the site in forward gear;
		A2.3	Vehicles are able to exit parking spaces at all times
P3	Sufficient parking spaces must be provided for the number and type of vehicles likely to be associated with the development.	A3.1	The number of parking spaces set out in Table 4.7 is provided exclusively for parking on the site in accordance with Australian Standard AS2890; and
		A3.2	Vehicle parking areas are signposted as visitor or customer parking.
P4	On-site vehicle parking and access areas must provide safe and efficient circulation of vehicles and pedestrians.	A4.1	The design, construction and operation of vehicle parking and access areas is in accordance with Australian Standard AS2890; and
		A4.2	Car parking and access thereto is to be constructed with asphalt, bituminous seal, concrete or pavers and line marked into parking bays.
P5	On-site vehicle parking areas must be landscaped in a manner that enhances the character of the locality.	A5.1	A landscaped strip 1m wide is provided along all side boundaries between vehicle parking areas and any buildings or structures. A landscaped strip 2m wide is provided along all road frontages. This landscaping is provided in accordance with the *Landscaping Code*; and

PERFORMANCE CRITERIA	SOLUTIONS
	A5.2 Shade trees are provided for surface carparks at the rate of 1 tree for each 6 parking spaces.
P6 All vehicle loading and unloading activities must be carried out in a safe and efficient manner.	A6.1 The design and operation of vehicle loading and unloading areas is in accordance with Australian Standard AS2890; and A6.2 Manoeuvring areas for the collection of solid waste are provided in accordance with *Austroads – Design Vehicles and Turning Templates* to accommodate the Design Single Unit Truck/Bus (12.5m) for turning speed up to 5km/h.
P7 The road providing access to the site must be of an appropriate standard to service the proposed site use.	A7.1 Development traffic is within the function of the street to which vehicle access is proposed, as defined in Tables 4.5 and 4.6 of the *Lot Reconfiguration Code.*

Table 4.8
Car Parking Requirements

Purpose	Minimum Number of Parking Spaces
Agriculture	As determined by the Assessment Manager
Animal Husbandry	As determined by the Assessment Manager
Caretaker's Residence	One covered space
Commercial Activity A	
Professional Office	One space per 30m^2 of total use area
Medical or Dental Centre	One space per 20m^2 of total use area or four spaces per medical practitioner whichever is the greater, plus 1 emergency vehicle space
Veterinary Clinic	One space per 30m^2 of total use area
Other	As determined by the Assessment Manager
Commercial Activity B	
Café, Fast Food Outlet, Kiosk & Restaurant	One space per 15m^2 of total use area
Retail Plant Nursery	One space per 200m^2 of total use area with a minimum of six spaces
Shop	One space per 15m^2 of total use area
Snack Bar	One space per 15m^2 of total use area
Video Store	One space per 15m^2 of total use area
Other	As determined by the Assessment Manager
Commercial Activity C	
Bulky Goods Retail	One space per 45m^2 of total use area
Convention Centre	One space per five seats or places
Department Store	One space per 15m^2 of total use area
Hotel	One space per guest bedroom plus one space per 5m^2 total use area of lounge bar, public bar, and beer garden area
Major Shopping Complex	One space per 15m^2 of total use area
Sales or Hire Premises	One space per 45m^2 of total use area
Shop	One space per 15m^2 of total use area
Showroom	One space per 45m^2 of total use area
Supermarket	One space per 15m^2 of total use area
Tourist Attraction – without	One space per 15m^2 of total use area

Purpose	Minimum Number of Parking Spaces
accommodation	
Warehouse	One space per 2.5 employees or one space per 100m^2 of total use area whichever is the greater
Other	As determined by the Assessment Manager
Community Activity	
Child-Care Centre	One space per two employees plus four additional spaces for each space so provided (to be used for setting down and picking up of children)
Community-Care Services	One space per 15m^2 of total use area
Community Hall	One space per five seats or places or one space per 20m^2 of total use area, whichever is greater
Cultural or Religious Purposes	One space per five seats or places or one space per 20m^2 of total use area, whichever is greater
Educational	Primary: One spaces per staff member plus a sealed pick up/set down area for buses at a minimum rate of 1 bus space per 100 students and pick up/set down area for a minimum of 10 cars; Secondary: As above plus 1 space per 20 students; Tertiary: As for a primary school plus one space per 10 students
Unlicensed Club	As determined by the Assessment Manager
Youth Centre	As determined by the Assessment Manager
Other	As determined by the Assessment Manager
Community Infrastructure	
Hospital	One space per three beds plus one space per two employees (Including staff doctors), plus 1 emergency vehicle space
Other	As determined by the Assessment Manager
Industry	
Industry – Light & General	One space per 50m^2 of total use area
Industry – Service	Minimum of four spaces
Showroom	One space per 45m^2 of total use area
Warehouse/Storage Sheds	One space per 2.5 employees or one space per 100m^2 of total use area whichever is the greater
Other	As determined by the Assessment Manager
Recreation Indoor	
Amusement Centre	One space per 20m^2 of total use area
Cinema, Theatre	One space per five seats or places
Gymnasium	One space per 20m^2 of total use area
Indoor Sports Centre	Four spaces per court; plus one space per five seats or places
Licensed Club, Night Club	One space per 10m^2 of total use area
Skating Rink	One space per 20m^2 of total use area
Tenpin Bowling Centre	One space per 20m^2 of total use area
Other	As determined by the Assessment Manager
Recreation Outdoor	As determined by the Assessment Manager
Residential Single Unit	
Detached House	One covered space
Home Occupation	Two spaces
Relatives Unit	One covered space
Dual Occupancy	Two covered spaces plus 2 separate visitor spaces
Display Home	Two spaces

Purpose	Minimum Number of Parking Spaces
Residential Multi Unit	
Accommodation Unit	One covered space per dwelling unit plus one separate visitor space per two units
Backpackers Hostel	One space per eight beds with a minimum of six spaces
Bed & Breakfast	One space per guest room
Group Housing	One covered space per dwelling unit plus one separate visitor space per two units
Motel	One space per guest bedroom plus one space per 5m^2 total use area of lounge bar, public bar, and beer garden area
Other	As determined by the Assessment Manager
Residential Special	
Caravan Park	One space per unit site, plus one separate visitor space per ten unit sites with a minimum of six visitor spaces
Tourism Facility	As determined by the Assessment Manager
Other	As determined by the Assessment Manager
Special Use	As determined by the Assessment Manager
Utilities	As determined by the Assessment Manager
Other	As determined by the Assessment Manager

4.3.7 Ecology Protection Code

PURPOSE OF THE CODE

To protect and enhance the City's natural diversity of fauna and flora together with the environmental conditions necessary for their survival.

PERFORMANCE CRITERIA AND PROBABLE SOLUTIONS

PERFORMANCE CRITERIA		PROBABLE SOLUTIONS	
The purpose of the Code may be achieved if the following criteria are satisfied.		**CODE ASSESSMENT – Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*	
P1	Habitat areas important for flora and fauna species, vegetation communities and other wildlife must be retained and protected.	A1.1	No contaminated material is excavated, or contaminants disturbed during the development process; and
P2	Design must ensure that the functional value of any ecological corridor in or adjoining the development site is maintained and protected.	A2.1	Corridors of a minimum width of 100m are provided between natural habitats on-site and adjacent environmental corridors and habitats to facilitate fauna movements.
P3	Habitat in and around the site must be protected from edge effects of the development.	A3.1	With the exception of ecological corridors, habitat is retained on site in a compact form, eg. roughly circular or square; and
		A3.2	A buffer of 50m width is maintained between the development and the habitat area/s.
P4	Design must avoid fragmentation of habitat for flora and fauna species, vegetation communities and other wildlife in and around the development site.	A4.1	Fencelines are located outside habitat areas; and.
		A4.2	Roads and driveways, buildings, structures, dams, sewer lines, park facilities and other infrastructure are located outside habitat areas.
P5	Landscaping, in and around areas of habitat for vegetation communities and other wildlife, must complement and enhance that habitat.	A5.1	Landscaping includes the following: a. species of local origin, including known food and habitat trees and shrubs; b. adjacent healthy remnant habitats, including understorey vegetation, are replicated as closely as possible; c. new plantings are located to create and/ or enhance links between existing habitats; d. plants that will not displace native flora species or degrade fauna habitat are used. The Plant Species List contained within Council's *Landscaping Planning Scheme Policy* provides a guide to species selection.
P6	Stormwater discharge must not add pollutants nor cause erosion damage to ecology corridors	A6.1	Development within ecology corridors is to include appropriate measures such as scour protection and / or anti-pollutant devices.

NOTES:

The Information Requests Planning Scheme Policy is a guide to the information required by Council to assess development applications in relation to the Ecology Protection Code.

ENVIRONMENTAL/ECOLOGICAL CORRIDORS

- Environmental Corridors retain bands of native vegetation in substantially undeveloped natural condition at the following minimum widths, to provide effective corridors for faunal movement and to preserve viable samples of representative on-site native vegetation. Some of this band width could be rehabilitated vegetation.
  - Primary Environmental Corridors 60m
  - Secondary Environmental Corridors 40m
- For further guidance on ecological corridor design, refer to the Department of Environment and Heritage's *Suggested Conservation Criteria for Development Assessment 1998.*

4.3.8 Flood Management Code

PURPOSE OF THE CODE

To ensure that development generates no adverse alteration of the storage and flow characteristics of floodwaters and that people, property, essential services and community infrastructure are protected from specified flood events.

PERFORMANCE CRITERIA AND PROBABLE SOLUTIONS

PERFORMANCE CRITERIA		PROBABLE SOLUTIONS	
The purpose of the Code may be achieved if the following criteria are satisfied.		**CODE ASSESSMENT – Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*	
P1	The proposed development must not: • adversely impact on the downstream properties by maintaining the pre-development flow peaks, inundation time and flood levels up to and including the DFE. • increase the flood levels upstream and downstream for storm events up to and including the DFE.	A1.1	The design and construction of all major and minor stormwater runoff management measures for the proposed development is in accordance with the *Bundaberg City Engineering Design Planning Scheme Policy*.
P2	Any changes to runoff characteristics (hydrograph volume, peak and time to peak) for a range of storm events up to and including the DFE must be minimised, consistent with the maintenance of the environmental values of waterways.	A2.1	Any changes to runoff characteristics are in accordance with the *Bundaberg City Engineering Design Planning Scheme Policy*.
P3	Bridges and culverts for flood immunity minimise traffic disruption, provide for public safety and bike ways, allow for fauna habitat and movements and maintain necessary hydraulic performance.	A2.1	The design parameters are in accordance with the *Bundaberg City Engineering Design Planning Scheme Policy*.
P4	Land surface and road access thereto of land used for residential purposes must provide safe egress during the DFE.	A4.1 A4.2	On all allotments in the Residential A and Residential B Precinct existing at the date the planning scheme commences, no solution is prescribed; or On all other allotments, the land surface and road access thereto of all land used for residential purposes is above the DFE level for the site.
P5	The occupants and chattels of habitable rooms must be safeguarded against illness, injury and damage caused by the DFE.	A5.1	The floor level of a habitable room is at least 300mm above the DFE.

	PERFORMANCE CRITERIA		PROBABLE SOLUTIONS
P6	Land surface and road access thereto of land used for commercial, business or industrial purposes shall provide for safe egress during the DFE.	A6.1	Land surface and road access thereto of land used for commercial business or industrial purposes is above the DFE level for the site.
P7	The occupants and chattels of commercial, business or industrial premises shall be safeguarded against injury or damage caused by the DFE.	A7.1	The floor level of premises used for commercial, business or industrial uses is above the DFE level for the site; and
		A7.2	The premises are located in an area where there is sufficient flood warning time to enable safe evacuation.
P8	Public safety and the environment are not adversely affected by the detrimental impacts of floodwater on hazardous, toxic or noxious materials manufactured or stored in bulk.	A8.1	The manufacture or storage in bulk of hazardous, toxic or noxious materials takes place above the DFE level; or
		A8.2	Structures used in the manufacture or storage in bulk of hazardous, toxic or noxious materials are designed to prevent intrusion from floodwaters.
P9	Essential services infrastructure (e.g. electricity, gas, water supply, sewerage and telecommunications) maintains its function during a DFE.	A9.1	Essential services infrastructure is located above the DFE level; or
		A9.2	Essential services infrastructure located below the DFE are designed and constructed to exclude floodwater intrusion/infiltration; and Essential services infrastructure is designed and constructed to resist hydrostatic and hydrodynamic forces as a result of inundation by the DFE.
P10	Community Infrastructure is able to function effectively during and immediately after a DFE.	A10.1	Community Infrastructure located below the Recommended Flood Level can function effectively during and after flood events; and
		A10.2	Essential Community Infrastructure has an emergency rescue area above the Recommended Flood Level

4.3.9 Built Heritage and Character Protection Code

PURPOSE OF THE CODE

To ensure that development in areas of established heritage building character protects, conserves and enhances the visual and cultural qualities of the area and that the retention of heritage character buildings in site re-development is promoted.

PERFORMANCE CRITERIA AND PROBABLE SOLUTIONS

PERFORMANCE CRITERIA		PROBABLE SOLUTIONS	
The purpose of the Code may be achieved if the following criteria are satisfied.		**CODE ASSESSMENT – Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*	
P1	The existing building's character contribution to its locality must be maintained.	A1.1	Modifications to the existing building and new development incorporate finishes, colours, materials and design features of the existing building.

Built Heritage & Character Protection Code

4.3.10 Acid Sulfate Soils Code (ASS)

PURPOSE OF THE CODE

To ensure that the generation or release of acid and metal contaminants from ASS or potential ASS does not have significant adverse effects on the natural and built environment (including infrastructure) and human health.

PERFORMANCE CRITERIA AND PROBABLE SOLUTIONS

PERFORMANCE CRITERIA	PROBABLE SOLUTIONS
The purpose of the Code may be achieved if the following criteria are satisfied.	**CODE ASSESSMENT – Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*
P1 Development does not disturb ASS or potential ASS or development is managed to avoid or minimise the release of acids and metal contaminants.	A1.1 The disturbance of ASS is avoided by: • not excavating or otherwise removing soil or sediment identified as ASS; • not permanently or temporarily extracting groundwater that results in the aeration of previously saturated ASS; • not undertaking filling that results in: - actual ASS being moved below the watertable; and - previously saturated ASS being aerated. OR A1.2 Any disturbance of ASS avoids the release of acid and metal contaminants by: • neutralising existing acidity and preventing the generation of acid and metal contaminants in accordance with the *SPP 2/02 Guideline: Planning and Managing Development involving Acid Sulfate Soils*; and • preventing the release of surface or groundwater flows containing acid and metal contaminants into the environment.

NOTE:

The Information Requests Planning Scheme Policy is a guide to the information required by Council to assess development application in relation to the Acid Sulfate Soils Code.

4.3.11 Indigenous and Non-European Cultural Heritage Code

PURPOSE OF THE CODE

To ensure the conservation and appropriate management of sites, items, places and values of indigenous cultural heritage significance or non-European cultural heritage significance.

PERFORMANCE CRITERIA AND PROBABLE SOLUTIONS

PERFORMANCE CRITERIA		SOLUTIONS	
The purpose of the Code may be achieved if the following criteria are satisfied.		**Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*	
P1	The significance of sites, places and areas of probable indigenous or non-European cultural heritage Is not impaired by proposed development.	A1.1	No solution is prescribed.
P2	Identified indigenous or non-European cultural heritage sites are managed so that the culturally significant attributes are conserved or enhanced.	A2.1	Education and site-specific training of development staff in the identification and significance of indigenous and non-European cultural heritage resources including stone artefacts, shell middens, traditional occupation sites and burial sites; and
		A2.2	All cultural heritage finds exposed or identified during construction are reported to the Environmental Protection Agency. Construction is carried out in a manner that protects all such finds from further disturbance until the matter has been adequately assessed.

NOTE:

The Information Requests Planning Scheme Policy is a guide to the information required by Council to assess development applications in relation to the Indigenous and Non-European Cultural Heritage Code.

4.3.12 On-Site Effluent Disposal Code

PURPOSE OF THE CODE

To ensure that the management of on-site effluent disposal generates no additional adverse impacts on the receiving environment, public health and water quality and that the sustainable disposal of domestic effluent is achieved.

PERFORMANCE CRITERIA AND ACCEPTABLE/PROBABLE SOLUTIONS

PERFORMANCE CRITERIA		SOLUTIONS	
The purpose of the Code may be achieved if the following criteria are satisfied.		**SELF-ASSESSMENT - Acceptable Solutions** *(illustrate how compliance with the Performance Criteria **is to** be achieved)* **CODE ASSESSMENT – Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*	
PI	The intensity and scale of the change of use of premises must not: • increase any adverse ecological impacts, particularly on any nearby sensitive receiving environments, as a result of the existing or proposed effluent disposal system or increasing the cumulative effect of effluent disposal systems in the locality; • increase any health risks during an effluent disposal system failure; • deteriorate the water quality of existing and/or proposed water supplies • limit the sustainable disposal of domestic effluent.	A1.1	The existing or any proposed effluent disposal system meets the criteria identified by the *On-Site Sewerage Code – July 2002* (Department of Natural Resources and Mines).
P2	The reconfiguration of lots must allow for the efficient disposal of effluent in a manner which: • Minimises any adverse ecological impacts, particularly on any nearby sensitive receiving environments; • Limits any health risks during a system failure;	A2.1	The minimum size of a lot is 2000m^2; and
		A2.2	The proposed on-site effluent disposal system is capable of being located on the allotment in accordance with the *On-Site Facilities Guidelines for Vertical and Horizontal Separation - June 2002* (Department of Natural Resources and Mines); and
		A2. 3	The proposed on-site effluent disposal system is capable of being located on land that: • Has less than 15% slope OR the land is terraced to receive the full disposal area; • Is situated above the DFE; • Is above the 5m AHD;

PERFORMANCE CRITERIA	SOLUTIONS	
• Ensures the water quality of existing and/or proposed water supplies remains unaffected; • Ensures the sustainable disposal of domestic effluent.		• Contains soils with permeabilities greater than 0.05m / day and less than 3.5m / day; • Is more than 0.6m above the seasonally high water table; • Is more than 1m above bedrock; AND
	A2. 4	The lot contains an area capable of supporting a land application area sized in accordance with the *On-Site Sewerage Code – July 2002* (Department of Natural Resources and Mines); and
	A2. 5	A reserve land application area of up to 100% of the design area is available on the lot; and
	A2. 6	The land application area is not separated from the house/ dwelling by features such as gullies, creeks, dams, roads, driveways etc.

Notes:

Existing subdivisions - Assessment for on-site disposal systems is carried out against the Sewerage and Water Supply Act and the 'On-Site Sewerage Code – July 2002' published by the Queensland Department of Natural Resources and Mines. These systems will still be required to meet the provisions of the Environmental Protection Policy (Water) 1997.

4.3.13 Bundaberg Airport Code

PURPOSE OF THE CODE

To ensure that development near Bundaberg Airport avoids adversely affecting the existing or future safety and efficiency of the Airport's operational airspace or the functioning of aviation facilities, avoids increasing risk to public safety near the ends of the airport runway and is compatible with forecast levels of aircraft noise.

PERFORMANCE CRITERIA AND PROBABLE SOLUTIONS

PERFORMANCE CRITERIA		PROBABLE SOLUTIONS	
The purpose of the code may be achieved if the following criteria are satisfied.		**CODE ASSESSMENT – Probable Solutions** *(illustrate how compliance with the Performance Criteria **may** be achieved)*	
P1	Development must be designed and located so as to minimise complaints about aircraft noise from occupants, both from existing operations and future operations under any approved Airport Master Plan.	A1.1	The development is in accordance with Tables 4.9 and 4.10 of this code.
P2	Development and use of premises must not compromise the safety of existing aircraft operations or future operations under any approved Airport Master Plan.	A2.1	Lighting within 6km of the airport complies with the guidelines in *Lighting in the Vicinity of Airports - Advice to Designers* (Civil Aviation Safety Authority) and does not exceed the maximum intensity of light sources shown on Map 4.2 or distract pilots; and
		A2.2	Creation of new roads or streets, parking/storage handling areas, container parks and sporting fields within 6km of the airport does not include configurations of lights in straight parallel lines 500m to 1000m long; and
		A2.3	Uses involving the disposal of putrescible wastes introduce site management practices designed to eliminate the attraction of flying vertebrates, ie birds and bats; and
		A2.4	Uses involving aquaculture, stock handling, fruit production, industrial food handling or processing, turf production, or unrestrained wildlife keeping/ protection are: - ▪ Not located within 3km of the runway, or ▪ If located within 8km of the runway; - Potential food/waste sources are covered and collected so that they are not accessible to wildlife; - Fruit and turf production incorporates wildlife deterrence measures (eg. Bird scarers, netting). AND

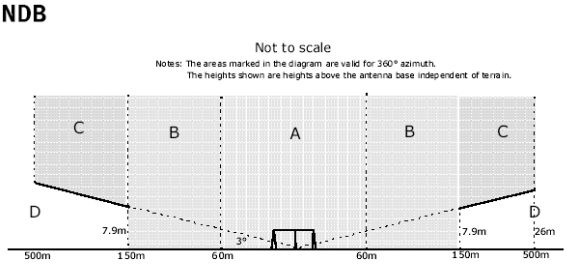
PERFORMANCE CRITERIA		PROBABLE SOLUTIONS	
		A2.5	Uses involving the keeping, handling or racing of horses, and uses involving outdoor dining, food handling or food consumption, where located within 3km of the runway, have potential food/waste sources covered and collected so that they are not accessible to wildlife; and
		A2.6	Sporting and recreational aviation activities (eg. parachuting, hot-air ballooning) are located and operated in a manner that prevents their intrusion into the airport's operational airspace.
P3	Development must be designed and located so as not to interfere with existing aircraft operations or future operations under any approved Airport Master Plan.	A3.1	Building works do not protrude into the Obstacle Limitation Surface for Bundaberg Airport (Refer to Map 4.3);and
		A3.2	Physical intrusions such as discharge plumes with velocities exceeding 4.3m per second with depleted oxygen content, or of high particulate concentration, should not pass through operational airspace; and
		A3.3	The following list of uses are not located within the Public Safety Area for the Airport (Refer to Map 4.4) - Residential uses; - Uses that attract a large number of people (eg. commercial, industrial, recreational and religious facilities); - Institutional uses (eg. educational facilities, hospitals, nursing homes and detention centres); - Uses involving the manufacture or storage of hazardous materials; - Transport terminals.
P4	Development does not impair the function of the non-directional beacon (NDB) at the airport	A4.1	Works or uses located within the sensitive area of the NDB site (see Map 4.4) are in accordance with the requirements of Figure 4.1 of this Code.

NOTE

The Information Requests Planning Scheme Policy is a guide to the information required by Council to assess development applications in relation to the Bundaberg Airport Code.

Figure 4.1 Development Constraints for the Non-Directional Beacon located at Bundaberg Airport as depicted on Map 4.4.

(Source: *SPP 1/02 Guideline - Development in the Vicinity of Certain Airports and Aviation Facilities*)



Development Constraints

A: All buildings, structures, trees, fences and any other physical obstructions are incompatible.
B: Only small non-metallic buildings less than 2.5m in any dimension may be compatible.
C: Steel masts and towers below 3° from the base of the NDB drop wire are compatible.
D: No constraints.

Table 4.9
Compatible and Incompatible land uses within ANEF contours.

Uses	ANEF Contour of Site		
	Compatible	Compatible subject to conditions	Incompatible
Residential (all forms including caravan parks)	Less than 20 ANEF	20 to 25 ANEF	Greater than 25 ANEF
Hotels, motels and hostels (short stay)	Less than 25 ANEF	25 to 30 ANEF	Greater than 30 ANEF
Schools and universities	Less than 20 ANEF	20 to 25 ANEF	Greater than 25 ANEF
Hospitals and Nursing Homes	Less than 20 ANEF	20 to 25 ANEF	Greater than 25 ANEF
Public buildings	Less than 20 ANEF	20 to 30 ANEF	Greater than 30 ANEF
Commercial buildings	Less than 25 ANEF	25 to 35 ANEF	Greater than 35 ANEF
Light industrial	Less than 30 ANEF	30 to 40 ANEF	Greater than 40 ANEF
Heavy industrial buildings	Acceptable in all ANEF zones		

Source: Derived from AS 2021

NOTE Table 4.9 excludes consideration of aircraft noise impacts on outdoor spaces specifically. However, the Table does reflect the extent/frequency of outdoor space use associated with particular uses.

Table 4.10
Desirable Indoor Design Sound Levels for Building Type and Activity

Building Type and Activity	Indoor Design Sound Level dB(A)
Houses, home units, flats and caravan parks	
Sleeping areas, dedicated lounges	50
Other habitable spaces	55
Bathrooms, toilets, laundries	60
Hotels, motels and hostels	
Relaxing, sleeping	55
Social activities	70
Service activities	75
Schools and universities	
Libraries, study areas	50
Teaching areas, assembly areas	55
Workshop, gymnasia	75
Hospitals and Nursing Homes	
Wards, theatres, treatment and consulting rooms	50
Laboratories	65
Service areas	75
Public buildings	
Churches, religious activities	50
Theatres, cinemas, recording studios	40
Court houses, libraries, galleries	50

Commercial buildings	
Private offices, conference rooms	55
Drafting, open offices	65
Typing, data processing	70
Shops, supermarkets, showrooms	75
Industrial	
Inspection, analysis, precision work	75
Light machinery, assembly, bench work	80
Heavy machinery, warehouse, maintenance	85

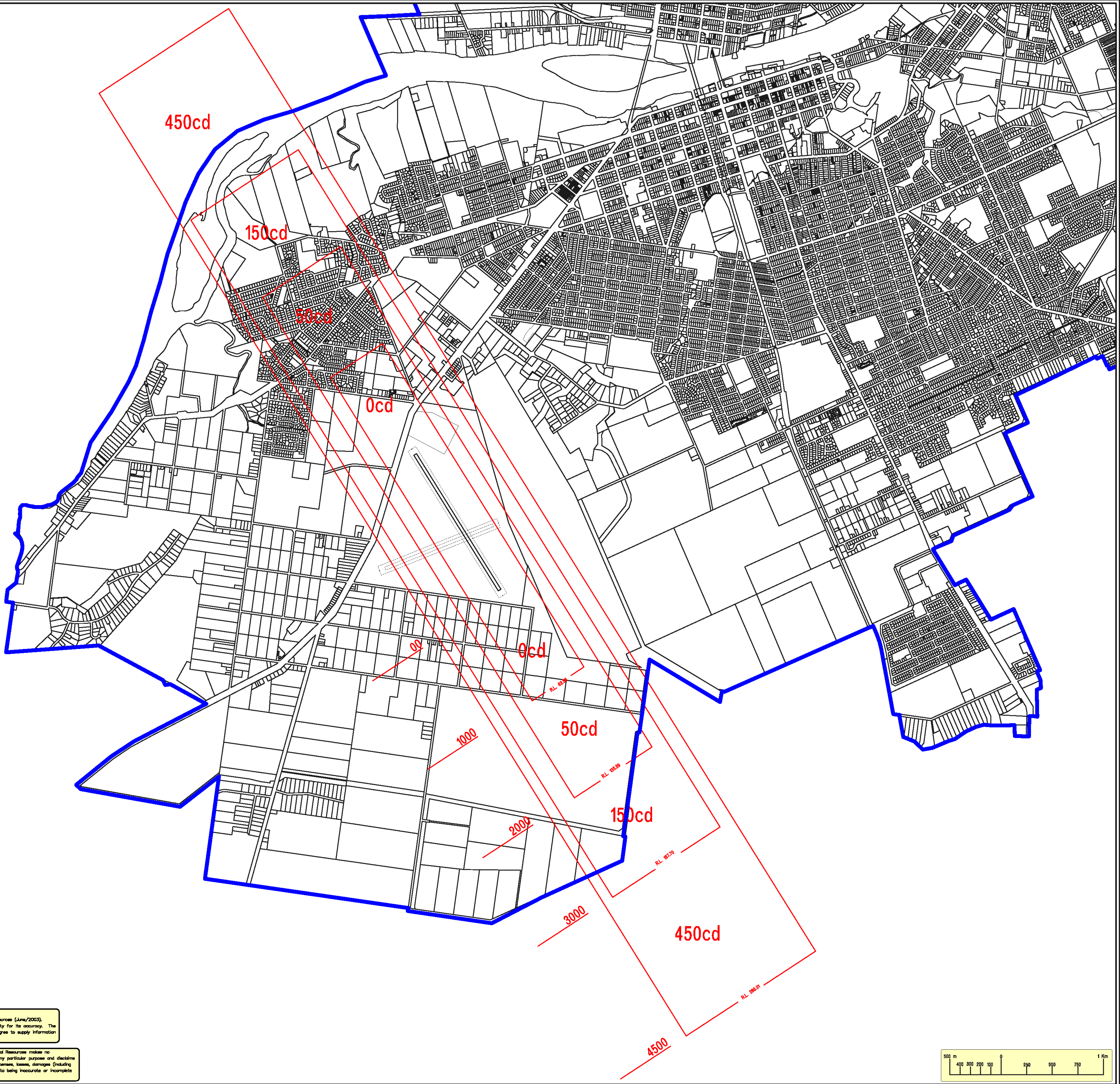
Source: Derived from AS 2021

NOTES

1. It is intended to prepare a Queensland specific code (or similar) addressing standards and requirements for attenuating aircraft noise in buildings and operating under the *Standard Building Regulation.* When prepared, that code should be used instead of Table 4.10.
2. AS 2021 should be referred to for advice and information about the indoor design sound levels in Table 4.10, including identifying the relevant scale of aircraft noise from the ANEF information.

Planning Scheme for the City of Bundaberg

Light Control Zones



Legend

- City Boundary
- Light Control Zones

Maximum intensity of light sources measured at 3d above the horizontal.

Map 4.2

BUNDABERG CITY COUNCIL
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GIS Section on Tue Jun 3 2003
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Planning Scheme for the City of Bundaberg

Obstacle Limitation Surface Layout

Legend

- City Boundary
- OLS Boundary
  Maximum height in meters of structure or components above Australian Height Datum.

Note: The maximum height restriction represented on the outermost OLS boundary extends as a horizontal OLS to the limits of the City boundary.

Map 4.3

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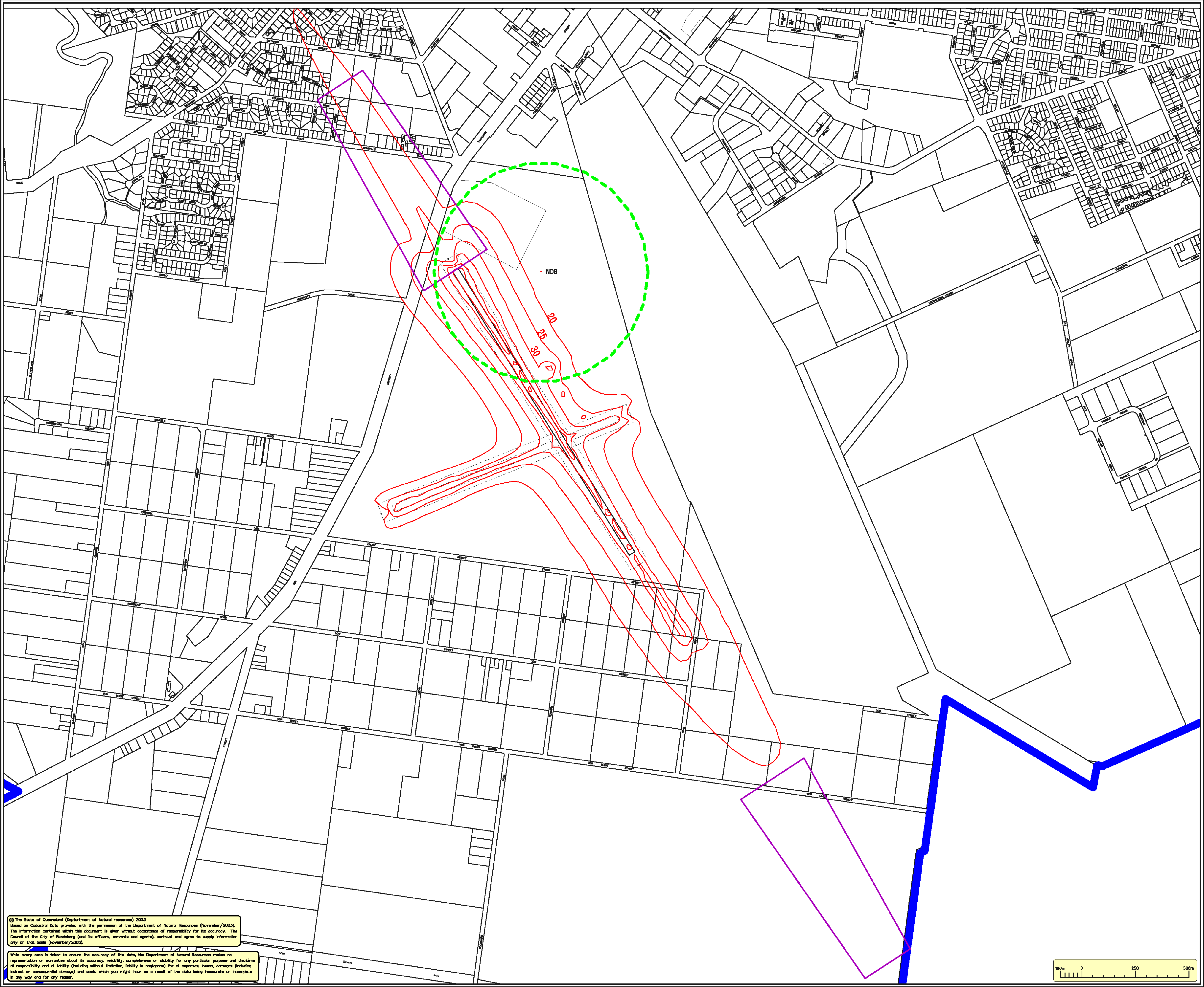
GIS Ref:- MPA: planoldev, File: CPA-OLS

900 m 400 300 200 100 0 250 500 750 1 Km

Planning Scheme for the City of Bundaberg

Restricted Areas



Legend

- City Boundary
- ANEF Contours
- Public Safety Boundary
- Aviation Facilities Buffer
- NDB 442

Map 4.4

BUNDABERG CITY COUNCIL
Planning and Development

Produced by Bundaberg City Council
GIS Section on Tue Nov 18 2003
GIS Ref:- MPA: plananddev, File: IPA-REST