SC6.19 Planning scheme policy for Palmview Structure Plan

SC6.19.1 Preliminary

Purpose

(1) The purpose of this planning scheme policy is to:-

(a) state standards identified in the **Palmview structure plan area code**;

(b) provide guidelines and advice about satisfying assessment benchmarks for assessable development and requirements for accepted development in the **Palmview Structure Plan**; and

(c) state the additional information which the Council may request in respect of a development application.

Application

(2) This planning scheme policy applies to a development application for a variation approval or a development application for assessable development in the Master Planned Area.

(3) The provisions of the **Planning scheme policy for Palmview Structure Plan** prevail over the provisions of any other planning scheme policy to the extent of any inconsistency.

Relationship to Palmview Structure Plan

(4) This planning scheme policy is to be read in conjunction with the **Palmview Structure Plan**.

Interpretation

(5) Terms used in this planning scheme policy that are also used in the **Palmview Structure Plan** have the meaning given in the **Palmview Structure Plan**.

SC6.19.2 Ecological and landscape protection outcomes

Preliminary

(1) This section applies to the following ecological and landscape protection outcomes:-

(a) the ecological and landscape protection outcomes in Performance Outcomes PO4 to PO15 in **Section 10.3.4.3 (Performance Outcomes and Acceptable Outcomes for the whole of the Master Planned Area)** of the **Palmview structure plan area code**; and

(b) the non-urban open space infrastructure network outcomes in Performance Outcomes PO40 to PO44 in **Section 10.3.4.21 (Performance Outcomes and Acceptable Outcomes for the Development of Infrastructure and Services)** of the **Palmview structure plan area code**.

General advice for ecological and landscape protection outcomes

(2) The following is general advice about satisfying the ecological and landscape protection outcomes:-

(a) The ecological and landscape protection outcomes seek to ensure that the development of the Master Planned Area occurs in a manner that:-

(i) appropriately recognises and responds to physical constraints;
(ii) provides for the protection and rehabilitation of a significant part of the Master Planned Area for environmental and landscape protection purposes; and
(iii) otherwise exhibits best practice approaches to ecological and landscape protection.

(b) The ecological and landscape protection outcomes are primarily intended to be satisfied by the following:-

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(i) avoiding development for urban purposes, other than the limited infrastructure specified on the structure plan maps, occurring:-
  (A) on flood prone land identified as being unsuitable to be filled for urban purposes; and
  (B) in an Ecologically important area;

(ii) achieving a minimum of 483.4 hectares of land for ecological protection and rehabilitation purposes to improve the extent and capability of natural systems to absorb the impacts associated with large scale urban development and increasing population pressure through the following:-
  (A) the establishment of the non-urban open space infrastructure network specifically identified on **Other Plans Map OPM P12 (Palmview master planned area non-urban open space infrastructure network)** in **Schedule 2 (Mapping)**;
  (B) the implementation of **Appendix SC6.19A (Palmview master planned area ecological and landscape protection and rehabilitation plan)**;
  (C) the implementation of a Local Ecological and Landscape Protection and Rehabilitation Plan which:-
    1. outlines how **Appendix SC6.19A (Palmview master planned area ecological and landscape protection and rehabilitation plan)** is to be achieved;
    2. is to be assessed against the requirements which may include the matters in **Section 10 (Requirements for local ecological protection and rehabilitation plan)** of **Appendix SC6.19A (Palmview master planned area ecological and landscape protection and rehabilitation plan)** specified in a variation approval or another applicable development approval; and
    3. has been approved by the Council;
  (D) where the provision of infrastructure required to service development in the Master Planned Area adversely impacts on an Ecologically important area, the implementation of a Environmental Offset Plan which:-
    1. outlines how the ecological and landscape protection outcomes for environmental offsets are to be achieved;
    2. is to be assessed against the requirements specified in a variaiton approval or another applicable development approval which may include the matters in **Table SC6.19H (Assessment requirements for documents)**; and
    3. has been approved by the Council.

Editor's note–A variation approval or an applicable development application approved under the Act may include a development condition requiring the approval of a document.

Editor's note–Under section 319 (Compliance assessment of documents or works) of the Act compliance assessment of a document under chapter 6, part 10 of the SP Act continues to apply where a variation approval (being a preliminary approval to which the SP Act, section 242 applied) or another applicable development approval under the SP Act requires compliance assessment of the documents.

Guidelines and advice for the ecological and landscape protection outcomes

(3) The **Palmview master planned area ecological and landscape protection and rehabilitation plan (Appendix SC6.19A)** provides for the following:-

(a) guidelines about satisfying the ecological and landscape protection outcomes; and

(b) advice about the requirements for Local Ecological and Landscape Protection and Rehabilitation Plans to be required in a variation approval or another applicable development approval.

Advice for environmental offset outcomes

(4) For the purposes of Performance Outcome PO6 in **Section 10.3.4.3 (Performance Outcomes and Acceptable Outcomes for the whole of the Master Planned Area)** of the **Palmview structure plan area code**, the following is advice about satisfying the assessment benchmarks in the code for the environmental offset outcomes:-

(a) the Structure Plan Maps identify which infrastructure corridors cross Ecologically important areas and the approximate location of the crossings;

(b) a environmental offset is required to be provided under the **Palmview structure plan area code** in circumstances where infrastructure required to service the Master Planned Area adversely impacts upon:-

(i) an Ecologically important area (either within the Master Planned Area or external to the Master Planned Area); or
(ii) the ability to achieve a minimum of 483.4 hectares of land for ecological protection and rehabilitation purposes;

(c) infrastructure is to be considered to adversely impact upon an Ecologically important area where one or more of the following occurs or is likely to occur:-

(i) the clearing of native remnant or regrowth vegetation or habitat;
(ii) the restriction of fauna movement or other impact upon a habitat corridor;
(iii) water quality or a natural hydrological condition is affected; and
(iv) the functioning of the Ecologically important area is otherwise impacted upon.

Advice for Environmental transition area outcomes

(5) For the purposes of Performance Outcome PO9 in **Section 10.3.4.3 (Performance Outcomes and Acceptable Outcomes for the whole of the Master Planned Area)** of the **Palmview structure plan area code**, the following is advice about satisfying the standards in the code for the Environmental transition area outcomes:-

(a) the ecological and landscape protection outcomes provide for limited low impact activities and embellishments to occur within the Environmental transition area where they can be demonstrated to be compatible with the primary ecological function of the area;

(b) a environmental offset is not required in respect of development of the environmental transition area where the development satisfies the standards in the code for the environmental transition area outcomes;

(c) further guidance in respect to stormwater infrastructure is specified in the **Planning scheme policy for development works**; and

(d) further guidance in respect to recreation parks is specified in **Section SC6.19.9 (Urban Open Space Infrastructure Network Outcomes)**.

Standards and advice for the Scenic amenity and highway acoustic buffer outcomes

(6) For the purposes of Performance Outcome PO10(f) in **Section 10.3.4.3 (Performance Outcomes and Acceptable Outcomes for the whole of the Master Planned Area)** of the **Palmview structure plan area code**, the following are the standards in the code for the Scenic amenity and highway acoustic buffer outcomes:-

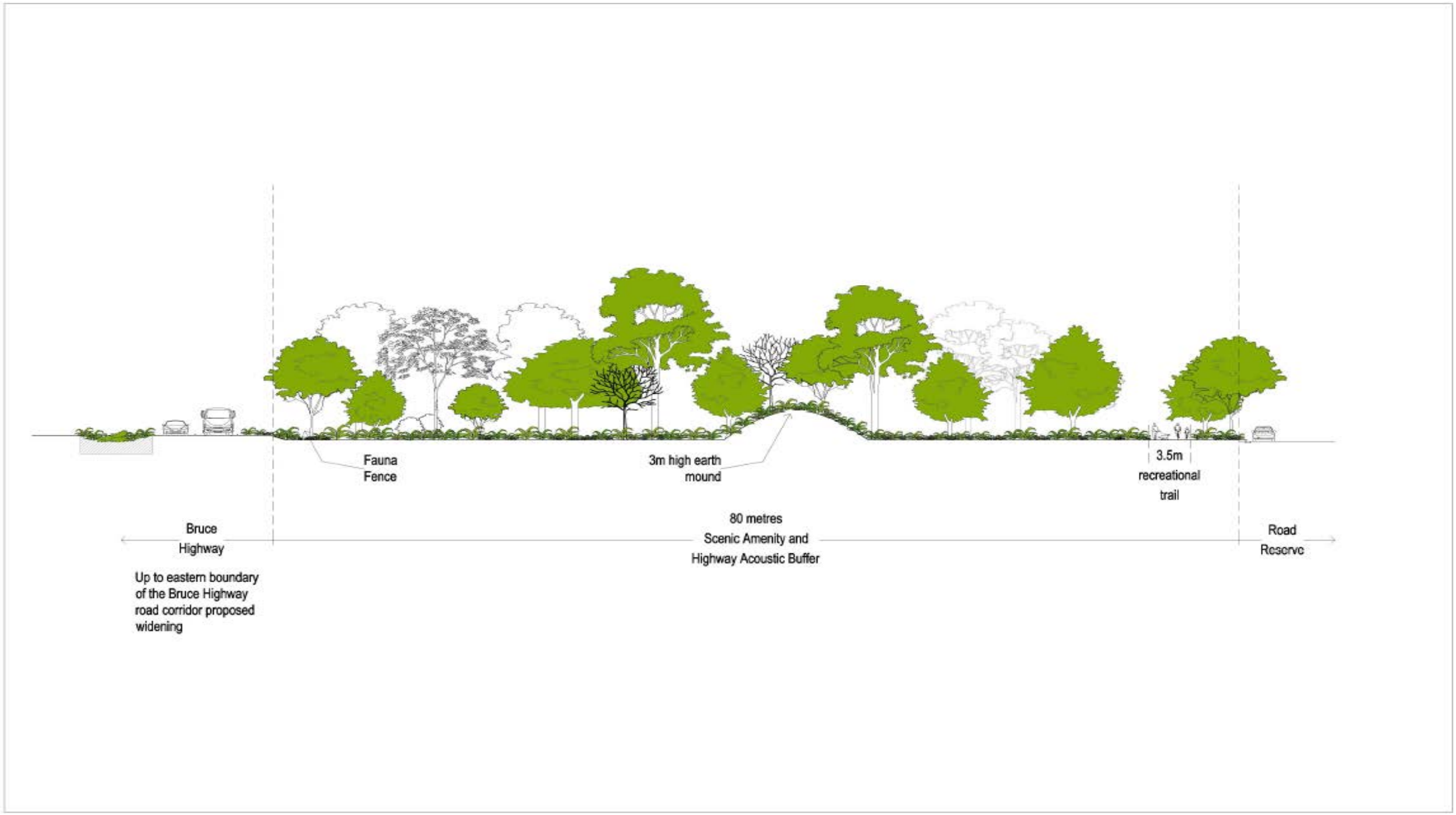
(a) the Scenic amenity and highway acoustic buffer is developed in accordance with the typical cross section specified in **Figure SC6.19A (Scenic amenity and highway acoustic buffer typical cross section)**.

(7) For the purposes of Performance Outcome PO10 in **Section 10.3.4.3 (Performance Outcomes and Acceptable Outcomes for the whole of the Master Planned Area)** of the **Palmview structure plan area code**, the following is advice about satisfying the assessment benchmarks in the code for the Scenic amenity and highway acoustic buffer outcomes:-

(a) the Palmview Master Planned Area forms an important part of the distinctive green space or intra-urban break between Caloundra and Maroochydore and is visually significant in relation to views of the Mooloolah River floodplain landscape from the Bruce Highway; and

(b) the **Palmview Structure Plan** provides for an 80 metre wide semi-vegetated buffer (measured from the eastern boundary of the Bruce Highway Road Corridor proposed widening) to be established along the full length of the Palmview Master Planned Area boundary to the Bruce Highway.

Figure SC6.19A Scenic amenity and highway acoustic buffer typical cross section



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SC6.19.3 Neighbourhood design, housing and density outcomes

Preliminary

(1) This section applies to the neighbourhood design, housing and density outcomes in Performance Outcomes PO26 to PO33 in **Section 10.3.4.3 (Performance Outcomes and Acceptable Outcomes for the whole of the Master Planned Area)** of the **Palmview structure plan area code** (neighbourhood design, housing and density outcomes).

General advice for neighbourhood design, housing and density outcomes

(2) The following is general advice about satisfying the neighbourhood design, housing and density outcomes:-

(a) the urban structure and land use pattern of the Palmview Master Planned Area is based on the establishment of a number of neighbourhoods which:-

(i) aggregate to comprise the broader Palmview community and support the function of the Palmview District Activity Centre; and
(ii) are generally defined by a walkable catchment being a five minute walk (400 metres) from an activity centre.

(b) the neighbourhood design, housing and density outcomes of the **Palmview structure plan area code** seek to ensure that development within the Palmview Master Planned Area creates a number of neighbourhoods that:-

(i) support sustainable urban development through maximising land efficiency;
(ii) encourage alternative travel options to car based travel by promoting the attractiveness of walking, cycling and public transport and providing maximum choice for the end user;
(iii) promote good access and connectivity between new neighbourhoods while providing clear connection to surrounding development;
(iv) establish main street activity centres that promote walkable neighbourhoods and provision of employment;
(v) achieve lot and dwelling diversity particularly around activity centres and public transport;
(vi) protect areas of environmental value and incorporate cultural, environmental and key landscape features;
(vii) promote community health through the provision of a variety of public open spaces and the promotion of active transport modes;
(viii) promote perimeter block development that establishes an active interface between building frontage and streets to improve personal safety through increased surveillance and activity;
(ix) foster a sense of community and strengthen local identity and sense of place while catering to a range of differing lifestyles;
(x) promote environmentally sustainable urban water management; and
(xi) are complete integrated communities rather than a series of housing estates.

(c) the neighbourhood design, housing and density outcomes are primarily intended to be satisfied through the application of best practice neighbourhood design implemented through a variation approval or the approval of another applicable development application;

(d) development should be designed through an integrated design approach that iteratively considers each component or network of a neighbourhood;

(e) development should provide neighbourhoods that are arranged to take account of the following:-

(i) elements of the major movement networks (i.e. spacing of sub-arterial roads and trunk collector roads);
(ii) the District Activity Centre;
(iii) precinct boundaries or transitions;
(iv) school sites;
(v) elements that are shared by more than one neighbourhood (i.e. schools and district parks); and
(vi) adjoining master plan boundaries.

(f) development should comply with the design outcomes for neighbourhood design specified in **Table SC6.19A (Neighbourhood design outcomes**).

Table SC6.19A Neighbourhood design outcomes

Column 1 Neighbourhood Element	Column 2 Design Outcomes
Neighbourhood Area	• Each neighbourhood is generally defined by a five minute walk (400 metres) from the neighbourhood centre. • Each neighbourhood has individual points of difference to strengthen identity. • A robust urban and neighbourhood structure is established that can accommodate a range of uses and which is flexible enough to change over time.
Movement Networks	• Street environments prioritise and encourage pedestrian and cycle movement throughout a connected walkable neighbourhood. • A highly permeable and integrated grid-based movement network of streets, pedestrian and cycle paths that maximise access to public transport is established. • The street network is focussed on the Local Activity Centres whilst providing for strong links between the Local Activity Centres and the District Activity Centre. • The layout of streets enables development to front all streets and public spaces. • Culs-de-sac are not provided, or where provided, no more than 10% of dwellings have frontage to a cul-de-sac. • There are efficient external connections, specifically for bicycles and pedestrians.
Activity Centres	• An activity centre is provided as a community focus for each neighbourhood. • Activity centres are located central to the walkable neighbourhood catchments, adjacent to principal movement arteries served by public transport. • Activity centres include a mix of compatible uses that provide for a variety of daily needs, community facilities and urban open space, such as a small square that reinforces a sense of community identity. • Transition between centre uses and residential uses occurs at mid-block property boundaries rather than at a street frontage so that similar forms of development front each other across a street. • All streets are fronted by development or public spaces to maintain street activity. • All off street vehicle parking areas are located to the rear of sites and do not have direct street frontage.
Residential Density	• A range of densities and variety of housing types are provided. • The concentration of housing density increases with proximity to activity centres. • The diversity and density of housing provided supports public transport use. • A wide range of lot sizes and building forms allow greater housing and lifestyle choice. • Residential developments involving gated communities, such as a retirement facility, are designed to ensure that the connectivity of road, public transport, bicycle and pedestrian networks are not compromised and that perimeter fences do not prevent surveillance of and integration with adjoining urban and non-urban open spaces and other public spaces. • Perimeter block development is provided in the District Activity Centre and adjacent to Local Activity Centres to promote a sense of enclosure and active streetscape while providing for casual surveillance.
Community Facilities	• Community uses and facilities are located in or adjacent to Activity Centre or major urban open space areas at locations that are highly accessible and easily identifiable. • Community uses and facilities are designed to have versatility and adaptability for a variety of functions over time. • Land for community uses and facilities may be located adjacent to open space where joint use of the facility with the space is envisaged.
Schools	• Strong, direct connections are provided from schools to the walking and cycling network in the surrounding neighbourhood areas. • The transport infrastructure in neighbourhoods around schools is to have sufficient capacity to service anticipated trip generation and to avoid any

Column 1 Neighbourhood Element	Column 2 Design Outcomes
	adverse impacts on surrounding land uses, the external transport network and public safety.
Employment Areas	• Employment areas are generally located in walking distance to public transport stops and an activity centre. • Open space areas for workers and visitors to the area are provided.
Block Sizes, Site Areas and Lot Orientation	• A range of block and lot sizes are provided that allow for a diversity in form and density of residential uses and for other uses to be accommodated in the area. • The layout of streets and lots provide for perimeter blocks of buildings fronting streets and create a relatively continuous street frontage. • Lots are oriented to front all streets, major roads, parkland and natural areas to provide good streetscape amenity and surveillance and to contribute to security and deterrence of crime. • Smaller lots are to predominate near activity centres and near public transport stops, to allow for pedestrian connectivity.
Public Open Spaces	• A wide range and diversity of public open spaces is provided. • At least one local park is provided per neighbourhood. • Most dwellings are within 500 metres of a park. • Regional wide and district parks are located on the edge of neighbourhoods to enable sharing amongst two or three neighbourhoods. • Parks are overlooked by development rather than backed onto by development to maximise casual surveillance of the park.

SC6.19.4 Sub-tropical and sustainable design outcomes

Preliminary

(1) This section applies to the sub-tropical and sustainable design outcomes in Performance Outcomes PO34 to PO35 in **Section 10.3.4.3 (Performance outcomes and acceptable outcomes for the whole of the Master Planned Area)** of the **Palmview structure plan area code** (sub-tropical and sustainable design outcomes).

General advice for sub-tropical and sustainable design outcomes

(2) The following is general advice about satisfying the sub-tropical and sustainable design outcomes:-

(a) the sub-tropical and sustainable design outcomes seek to ensure that neighbourhoods within the Palmview Master Planned Area:-

(i) have a distinctive relationship to site and landscape;
(ii) are characterised by parks and open spaces;
(iii) have sub-tropical streetscapes;
(iv) create sites for subtropical buildings;
(v) have a sub-tropical landscape; and
(vi) have walkable journeys that are comfortable;

(b) the sub-tropical and sustainable design outcomes also seek to ensure that development within the Master Planned Area is designed and operated to minimise the production of greenhouse gas emissions; and

(c) the sub-tropical and sustainable design outcomes are primarily intended to be satisfied by the application of best practice sub-tropical and sustainable design at all levels of the development approval process.

Advice for sub-tropical design outcomes

(3) The following is advice about satisfying Performance Outcome PO34(c) in **Section 10.3.4.3 (Performance outcomes and acceptable outcomes for the whole of the Master Planned Area)** of the **Palmview structure plan area code**:-

(a) development should comply with the design outcomes for sub-tropical design specified in **Table SC6.19B (Sub-tropical design outcomes)**.

Table SC6.19B Sub-tropical design outcomes

Column 1 Design principle	Column 2 Design outcomes
Ensuring a strong presence of nature and water	• Preserve and enhance the sub-tropical character of the region by designing developments in response to the climate while integrating and connecting to the surrounding landscape and other natural elements. • Incorporate significant native vegetation and large shade trees in private and public spaces, along pedestrian and cycle routes and in transport corridors. • Promote public access to any natural or artificial waterways by incorporating their existence into the design for pedestrian and cycle connectivity and recreational activity.
Creating an open and permeable built environment	• Promote an outdoor lifestyle with strong connection between indoor and outdoor living. • Promote an outdoor lifestyle for medium density development and to encourage outdoor recreation oriented lifestyles, development should ensure a diversity of open space is integrated into the urban fabric, connected through the pedestrian and cycle network. • Reflect proximity of the surrounding natural vegetation and open space by creating permeable urban environments and built form that promotes green access and constant engagement with the natural environment. • Support a sub-tropical lifestyle by promoting an open and permeable built form with a climate based outcome by using passive solar design principles such as orientation and solar access, window and awning size and orientation, materials and finishes, ventilation, insulation, thermal mass, natural light, awnings and pedestrian cover.
Incorporating local interpretations of sub-tropical architecture and landscape design	• Promote integration with the natural environment through shaded outdoor dining, entertainment and recreation, for both private and public locations, by incorporating appropriately sized balconies, decks, patios, colonnades, awnings, active streets, open space and green streets into the built form and urban fabric. • Provide for a seamless transition between internal and external areas including integration with street activity through appropriate street planting and integration of vegetation with the built form. • Incorporate deep soil planting within town centre locations to reflect the densely landscaped panorama and fauna habitation of the Sunshine Coast. • Incorporate the harvesting of rain water to support surrounding vegetation and building inhabitants. • Consider local character and design and recognise how contemporary design and appropriate building materials contribute to the sub-tropical environment's character and diversity. The built form should utilise appropriate materials and colours that diminish detrimental impact of heat gain and reflection and promote durability and serviceability for the subtropical climate.

SC6.19.5 Particular precinct outcomes

Preliminary

(1) This section applies to the performance outcomes in the following:-

(a) **Section 10.3.4.9 (Performance outcomes and acceptable outcomes for the District Activity Centre Precinct)** of the **Palmview structure plan area code**; and

(b) **Section 10.3.4.13 (Performance outcomes and acceptable outcomes for the Local Employment Area Precinct)** of the **Palmview structure plan area code**.

General advice for particular precinct outcomes

(2) The precinct-based outcomes of the **Palmview Structure Plan** seek to ensure that the Master Planned Area is developed with an appropriate land use pattern that is functionally efficient, effectively integrated with transport and other infrastructure networks and provides for the creation of interesting, attractive, sustainable and desirable places to live, work and recreate.

(3) The precinct-based outcomes provide a land use and development intent for each precinct and identify specific built form criteria.

(4) Whilst these criteria are generally self-explanatory and do not require further guidance, it is recognised that in respect to certain performance outcomes for the District Activity Centre Precinct and the Local Employment Area Precinct some additional detail is warranted.

Advice for district activity centre precinct outcomes (main street)

(5) The following is general advice about satisfying Performance Outcome PO8 in **Section 10.3.4.9 (Performance outcomes and acceptable outcomes for the District Activity Centre Precinct)** of the **Palmview structure plan area code**:-

(a) development provides for the main street in the District Activity Centre to:-

(i) be shared between pedestrians, cyclists, public transport and private vehicles; and
(ii) comply with the design objectives specified in **Table SC6.19C (Design outcomes for the main street)**.

Table SC6.19C Design outcomes for the main street

Design principle	Design outcomes	Potential treatments/features to achieve outcome
Create a safe environment for users	Lower traffic speed	• Provide pedestrian priority crossing at entry point intersections. • Create a gateway feature on entry to the main street. • Provide clear signage indicating entry into the main street. • Use pavement surface materials and colour which clearly distinguish the main street from regular road surface. • Use multiple materials rather than a large expanse of one material. • Incorporate traffic calming devices. • Restrict vehicle volumes. • Plant street trees. • Incorporate lighting sufficient to ensure the safety of pedestrians and cyclists and motor vehicles.
	Minimise the physical and visual impact of cars on people and the environment and design for equal priority amongst street users	• Use coloured and textural surface contrasts. • Bring active frontage such as pavement dining to road edge in appropriate locations.
	Enhance amenity	• Provide clear entry and exit statements to reinforce the main street and enhance visual amenity of street environment. • Use alternative pavement surface texture to delineate the main street and enhance street amenity.
	Reduce linear territory ownership created by street cross-sectional elements to promote the main street and equality of all end users	• Use landscaping, parking bays, seating areas and bollards to define the vehicular path without creating significant barriers to pedestrian movement or restricting driver visibility of pedestrian activity.
	Reduce proliferation of signs and posts	• Provide for pavement marking to delineate parking bays – remove standard signage to reduce visual clutter. • No basement access or driveway cross-over to occur along the main street. • Rear lane access only for sites fronting the main street to reduce pedestrian conflict and need for signage.
Incorporate environmental infrastructure	Implement sustainable best practice measures to deal with stormwater runoff and WSUD	• Design fall of carriage way and footpath to direct water runoff for collection at grates and / or pits visually integrated into street design. • Reduce potential for pooling of water at

Design principle	Design outcomes	Potential treatments/features to achieve outcome
		collection points and velocity of flow to ensure pedestrian and vehicular movement is not unduly affected. • Select hard and soft landscapes that will not be unduly affected by the water quantity and movement and to assist with water control and dispersement. • Consider the special needs of cyclists and disabled access with respect to material selection and gradients when designing street environment in response to stormwater and WSUD.
Create a high quality of visual and physical amenity to the main street	Provide shaded pedestrian friendly street environment	• Create an attractive streetscape that contributes to the local sense of place, community safety and security. • Extend the town centre park into the main street environment. • Maximise landscaping along both sides of the street. • Retain existing vegetation wherever possible. • Space trees at maximum 8m centres to ensure mature canopies establish to provide shade and enclose the street and ensure the trees are staggered with street lighting. • Provide landscaping which reinforces the local context and street orientation. • Enhance the character and amenity of the town centre and main street with attractive, practical and hardy landscaping which retains significant vegetation. • Maximise tree cover along footpaths, streets and in public areas and evoke the landscape character of the Sunshine Coast.
	Create a lively community street and memorable town centre that is fully inclusive of all and safe to play, socialise and travel in	• Design space to encourage intended end user activities. • Include social interaction opportunities that aren't reliant of retail / commercial function. • Contribute to overall pedestrian connectivity by creating a series of connected community spaces. • Use the main street landscaped environment to contribute to the creation of a vibrant public space. • Maximise pedestrian activity through reduction in restrictions of conventional street environments such as kerbs, signage and high speed traffic. • Design the street and adjacent spaces as a lively community place that attracts high volumes of pedestrian activity. • Provide active frontages[1] to built form promoting high interaction with pedestrians and street activity.

Advice for local employment area precinct outcomes

(6) For the purposes of Performance Outcome PO1(b) in **Section 10.3.4.13 (Performance outcomes and acceptable outcomes for the Local Employment Area Precinct)** of the **Palmview structure plan area code**, the following development may be considered to be low impact industry uses and complementary business and commercial uses in the Local Employment Area Precinct:-

[1] **'Active frontage'** means a part of a building which forms a close relationship with the street and contains a visually permeable facade such as a shopfront, retail store, cafe, outdoor dining, personal service and other high pedestrian generating use at street level.

(a) development for small to medium size service trades outlets and domestic services outlets, including hire outlets, servicing both business and households;

(b) development for business and commercial equipment repairs and services outlets (covering computers, office machines, communications equipment, office furniture and fittings, shop fittings);

(c) development for small scale manufacturing establishments; and

(d) development for incubator business opportunities that contribute to a start-up economy on the Sunshine Coast.

SC6.19.6 Road transport infrastructure network outcomes

Preliminary

(1) This section applies to the road transport infrastructure network outcomes in Performance Outcomes PO11 to PO13 in **Section 10.3.4.21 (Performance outcomes and acceptable outcomes for the Development of Infrastructure and Services)** of the **Palmview structure plan area code**.

General advice for road transport infrastructure network outcomes

(2) The following is general advice about satisfying the road transport infrastructure network outcomes:-

(a) the road transport infrastructure network outcomes seek to ensure that the Master Planned Area is developed with a highly interconnected and permeable road network that:-

(i) supports high levels of bicycle and pedestrian use and prioritises these modes;
(ii) supports high levels of access to public transport; and
(iii) effectively services the area;

(b) **Other Plans Map OPM P8 (Palmview Master Planned Area road transport infrastructure network)** in **Schedule 2 (Mapping)** identifies conceptually the higher order elements of the road transport infrastructure network planned for the Master Planned Area;

(c) **Figure SC6.19B (Specification of transport infrastructure)** identifies the location and extent of the types of sub-arterial road and district collector street servicing the Master Planned Area);

(d) **Other Plans Map OPM P7 (Palmview Master Planned Area development and transport infrastructure network sequencing)** in **Schedule 2 (Mapping)**, **Figure SC6.19B (Specification of transport infrastructure)** and the applicable infrastructure agreement specifically identify the sequence of the higher order elements of the road transport infrastructure network planned for the Master Planned Area;

(e) road transport infrastructure is required to be provided throughout the Master Planned Area in accordance with **Other Plans Map OPM P7 (Palmview Master Planned Area development and transport infrastructure network sequencing)**, **Other Plans Map OPM P8 (Palmview Master Planned Area road transport infrastructure network)** and the requirements of the applicable infrastructure agreement;

(f) the road transport infrastructure network is a key structural element that provides a framework for the following:-

(i) the pattern of land use;
(ii) the arrangement of neighbourhoods; and
(iii) the configuration and alignment of local streets and other infrastructure networks;

(g) the road transport infrastructure network outcomes are primarily intended to be satisfied by the following:-
(i) development providing the major road transport infrastructure in accordance with the applicable infrastructure agreement;
(ii) development ensuring that the road transport infrastructure to be provided is in accordance with the road transport infrastructure network and the standards for the road transport infrastructure network as specified in the **Palmview structure plan area code**; and

(iii) the detailed design and construction of the road transport infrastructure network incorporating appropriate urban design, landscape and environmental features and treatments.

Standards for road transport infrastructure network outcomes

(3) For the purposes of Performance Outcome PO11(b) in **Section 10.3.4.21 (Performance outcomes and acceptable outcomes for the Development of Infrastructure and Services)** of the **Palmview structure plan area code**, the following are the standards identified in the code for the road transport infrastructure network:-

(a) development accords with the development and transport infrastructure network sequencing specified on **Other Plans Map OPM P7 (Palmview Master Planned Area development and transport infrastructure network sequencing)** in particular the specified triggers for vehicle trips and Equivalent Dwellings, which is to be worked out as follows:

Equivalent dwelling or ED means the measure of the demand for the number of vehicle trips equivalent to that generated by a Dwelling calculated for the relevant development type in **Table SC6.19D (Applicable uses under the Structure Plan)** using the demand generation rates specified in **Table SC6.19E (Demand generation rate for development types)**.

(b) development provides for major roads which comply with the design characteristics specified in **Table SC6.19F (Road transport infrastructure network - summary of design characteristics)**;

(c) development provides for roads which comply with the typical cross sections for each road type specified in **Figures SC6.19C** to **SC6.19J**;

(d) development provides for roads which comply with the following:-

(i) cross sections and reserve widths vary to suit intersections, public transport priority treatments, turning lanes, bus stops, pedestrian crossing treatments, sewer pit requirements, lighting and other requirements;
(ii) verge areas are paved and landscaped in accordance with the typical cross sections in **Figures SC6.19C** to **SC6.19J**;
(iii) where medians are provided, street lighting is accommodated within the median;
(iv) where provided, on road cycle lanes are incorporated into the road carriageway and continued through intersections with right turn cycle lanes provided along with advance storage boxes at controlled intersections;
(v) where parking lanes are incorporated, the kerb is built out into the parking lanes to create landscaped kerb build-outs at regular intervals without impinging on cycle lanes;
(vi) channelised intersections (signalised where required) are provided where possible with the use of roundabouts minimised on higher order roads;
(vii) legible directional and informational signage is to be supplied as necessary;
(viii) landscaping and stormwater treatment on verge areas and medians does not inhibit direct pedestrian access to on street parking or pedestrian movement across streets;
(ix) landscaping includes appropriate root barrier protection to kerbs and adjacent services;
(x) medians contain pedestrian refuge areas;
(xi) stormwater treatments (i.e. median swales) where applicable, are not to impact on the location or functioning of pedestrian refuge areas; and
(xii) additional landscaping is provided consistent with the sub-tropical landscape character desired for the Master Planned Area;

(e) development provides for an infrastructure element within a major road corridor to comply with **Table SC6.19G (Minimum widths of infrastructure elements within road corridors)**; and

(f) development provides for a road to be designed and constructed in accordance with the **Planning scheme policy for the transport and parking code** and the **Planning scheme policy for development works**.

Table SC6.19D Applicable uses under the Structure Plan

Column 1 Development category	Column 2 Development type	Column 3 Uses under Structure Plan
Residential development	Attached dwelling	• Dual occupancy • Dwelling unit • Multiple dwelling • Residential care • Short term accommodation • Rooming accommodation • Caretakers accommodation • Community residence
	Detached dwelling	• Dwelling house
	Retirement dwelling	• Retirement facility
	Other uses	• Other uses not listed will be determined at the time of the Application
Non-residential development	Commercial	• Office • Health care service • Car wash • Sales office • Veterinary services
	Community purpose	• Community use • Place of worship • Educational establishment • Child care centre • Emergency services • Community care centre • Outdoor sport and recreation
	Industry	• Low impact industry • Service industry • Bulk landscape supplies • Research and technology industry • Warehouse • Utility installation
	Retail and entertainment	• Food and drink outlet • Nightclub entertainment facility • Shop • Shopping centre • Showroom • Hotel • Theatre • Club • Indoor sport and recreation • Garden centre • Function facility • Adult store • Service station • Hardware and trade supplies • Market
	Other uses	• Other uses not listed will be determined at the time of the Application

Table SC6.19E Demand generation rate for development types

Column 1 Development category	Column 2 Development type	Column 3 Unit of measure	Column 4 Trips per unit of measure	Column 5 Equivalent Dwelling per unit of measure
Residential development	Detached dwellings	Per dwelling	9	1
	Attached dwellings	Per dwelling	6	0.67
	Retirement dwellings	Per dwelling	5	0.56
Non-residential development	Commercial	100m^2 GFA	10	1.11
	Community purpose other than an Educational Establishment	100m^2 GFA	10	1.11
	Community purpose for an Educational Establishment	Per student and staff	1.46	0.16
	Industry	100m^2 GFA	5	0.56
	Retail and entertainment	100m^2 GFA	121	13.44

Table SC6.19F Road transport infrastructure network – summary of design characteristics

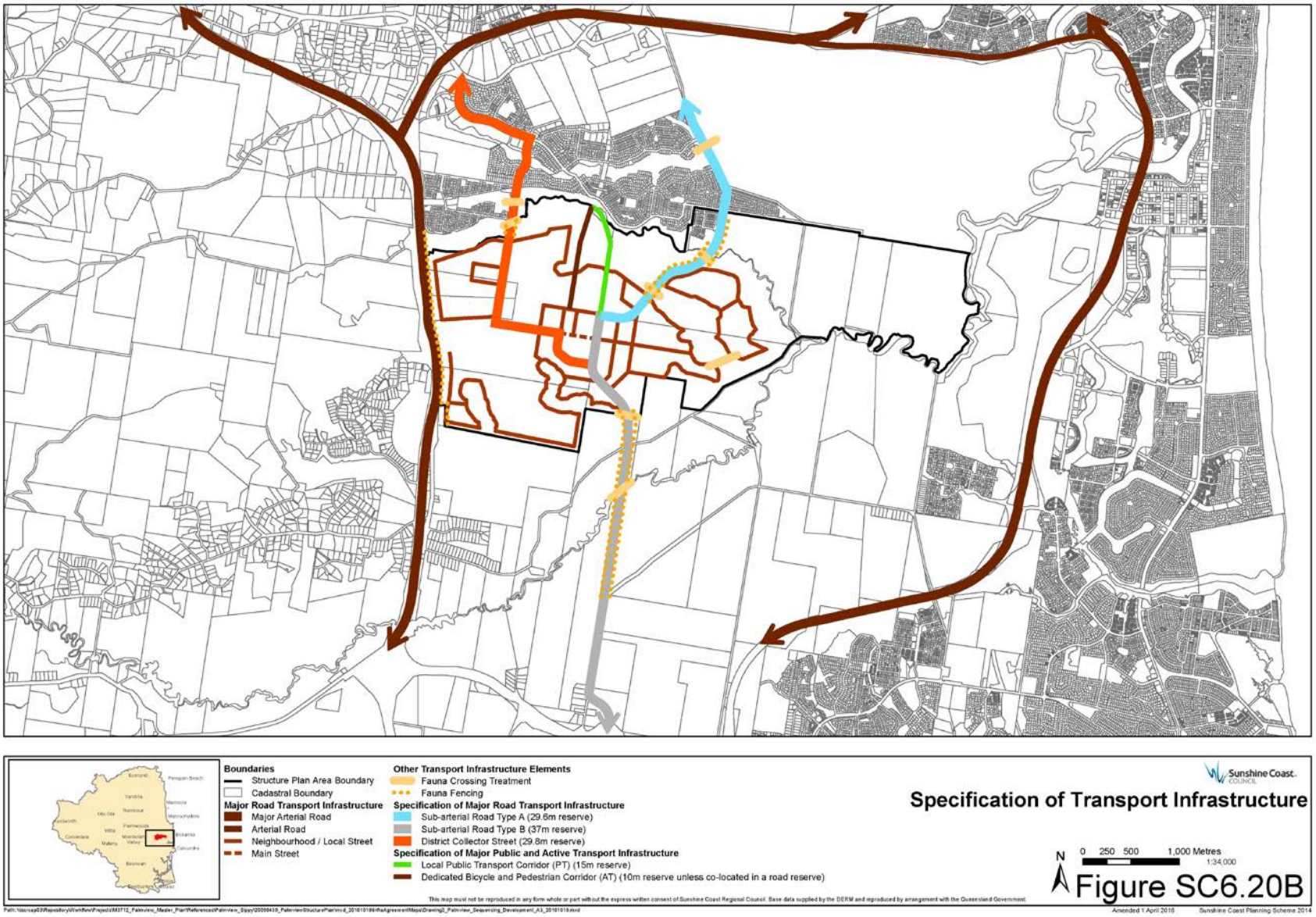
Road type	Minimum road reserve width	Typical features and treatments	Cross-section reference
Sub-arterial Road "Type A"	29.6 metres	• Two general movement lanes (one in each direction). • On-road dedicated cycle lane each side. • Landscaped median (where required by the applicable infrastructure agreement). • Indented bus bays. • Dual use path (3.0m minimum width) in each verge. • Direct property access to major development only. • Intersection spacing to be 300m minimum. • No on-road car parking generally, but if provided to be in indented parking bays with corresponding increase in minimum road reserve width. • Fauna fencing, crossings, and other structural/non-structural treatments as required.	**Figure SC6.19C, SC20.D and SC6.19E (Sub-arterial road type A typical cross section)**
Sub-arterial Road "Type B" (Note: this road is proposed to be constructed in two stages, as shown on the referenced cross-sections)	37.0 metres	• Four general movement lanes (two in each direction). • On-road dedicated cycle lane each side. • Landscaped median. • Dual use path (3.0m minimum width):- o in each verge for the section of road within the Palmview Structure Plan area boundary; and o in one verge only for the section of road outside the Palmview Structure Plan Area boundary; • Direct property access to major development only. • Intersection spacing to be 300m minimum. • No on-road car parking generally, but if provided to be in indented parking bays with corresponding increase in minimum road reserve width.	**Figure SC6.19F, SC6.19G and SC6.H (Sub-arterial road type B typical cross section)**

Road type	Minimum road reserve width	Typical features and treatments	Cross-section reference
		• Fauna fencing, crossings, and other structural/non-structural treatments as required.	
District Collector Street	29.6 metres	• Two general movement lanes (one in each direction). • On-street dedicated cycle lane each side. • Landscaped median. • Indented bus bays. • Dual use path (3.0m minimum width) in one verge and footpath (2.0m minimum width) in other verge. • Direct property access to major development only, or alternatively restricted to "left in/left out". • Intersection spacing to be 100m minimum. • Indented parking bays. • Fauna fencing, crossings, and other structural/non-structural treatments as required.	**Figure SC6.19I and SC6.19J (District Collector Street typical cross section)**

Table SC6.19G Minimum widths of infrastructure elements within road corridors

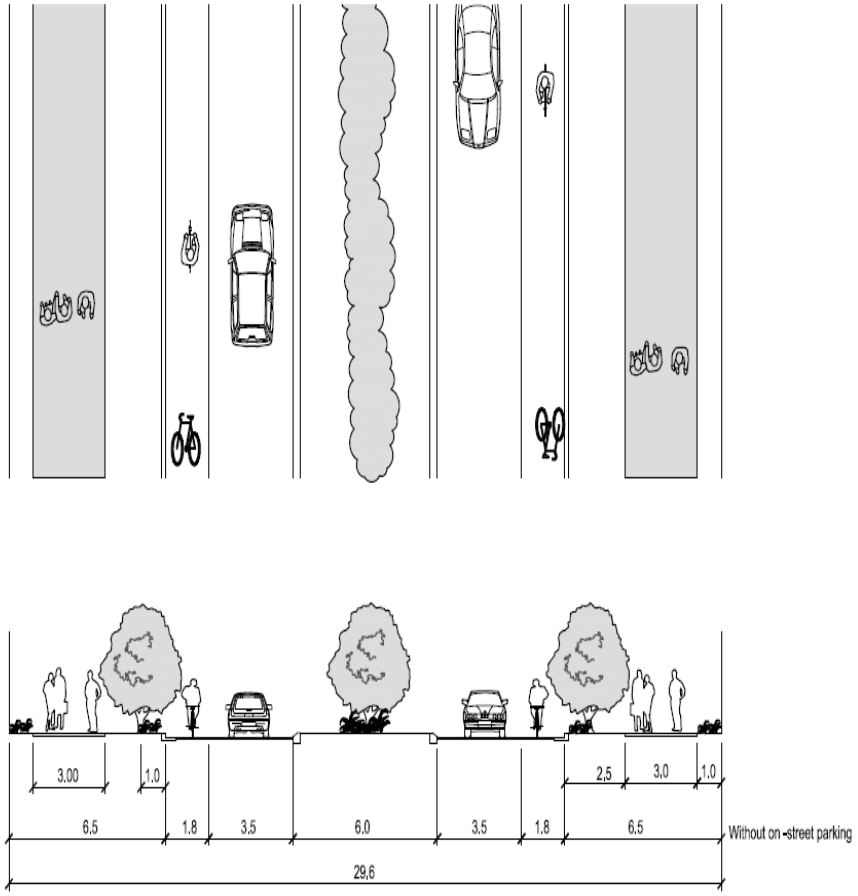
Infrastructure element	Minimum width
Roads (general traffic lanes)	3.5 metres on sub-arterial roads 3.3 metres on district collector streets
Parking lanes	2.3 metres
Dual use paths	3.0 metres
Footpaths	2.0 metres
Recreation paths	3.0 metres
Cycle lanes	1.8 metres on district collector streets 2.0 metres on sub-arterial roads
Median	6.0 metres on sub-arterial roads 3.0 metres on district collector streets
Verge	6.5 metres on sub-arterial roads 5.5 metres on district collector streets

Figure SC6.19B Specification of transport infrastructure



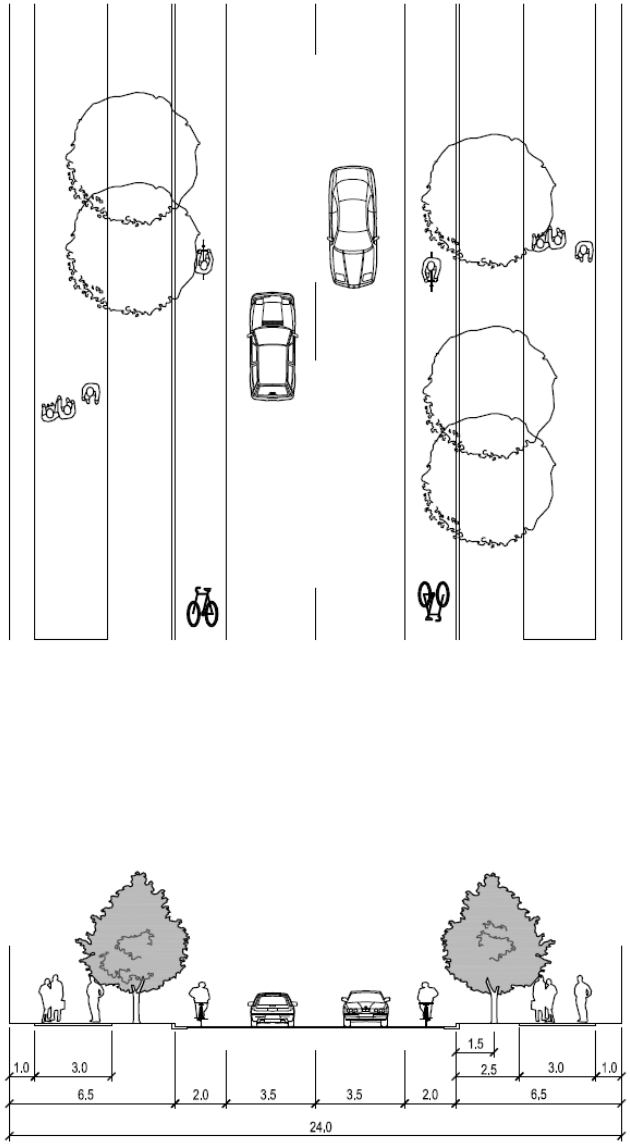
Schedule 6

Figure SC6.19C Sub-arterial Road Type A with centre median



Claymore Road Link

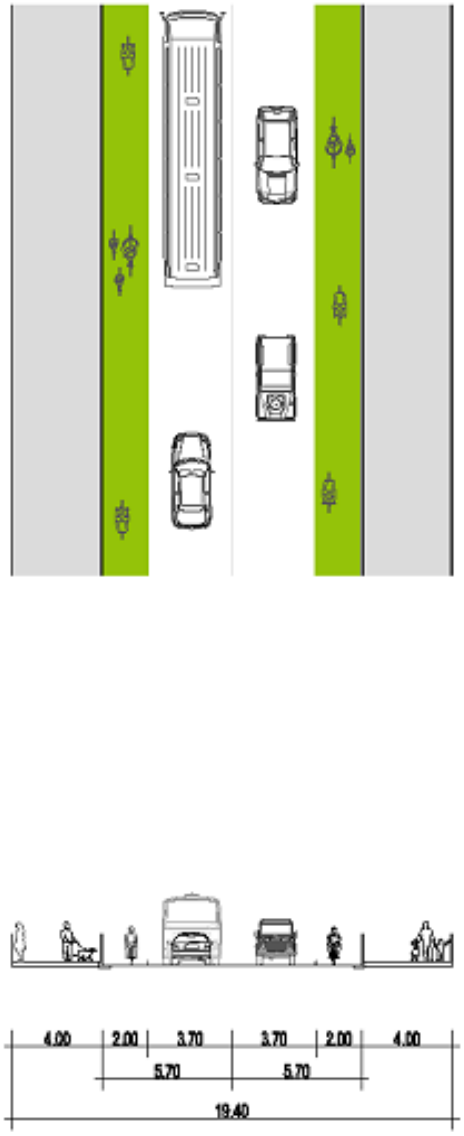
Figure SC6.19D Sub-arterial Road Type A with no centre median



Claymore Road Link

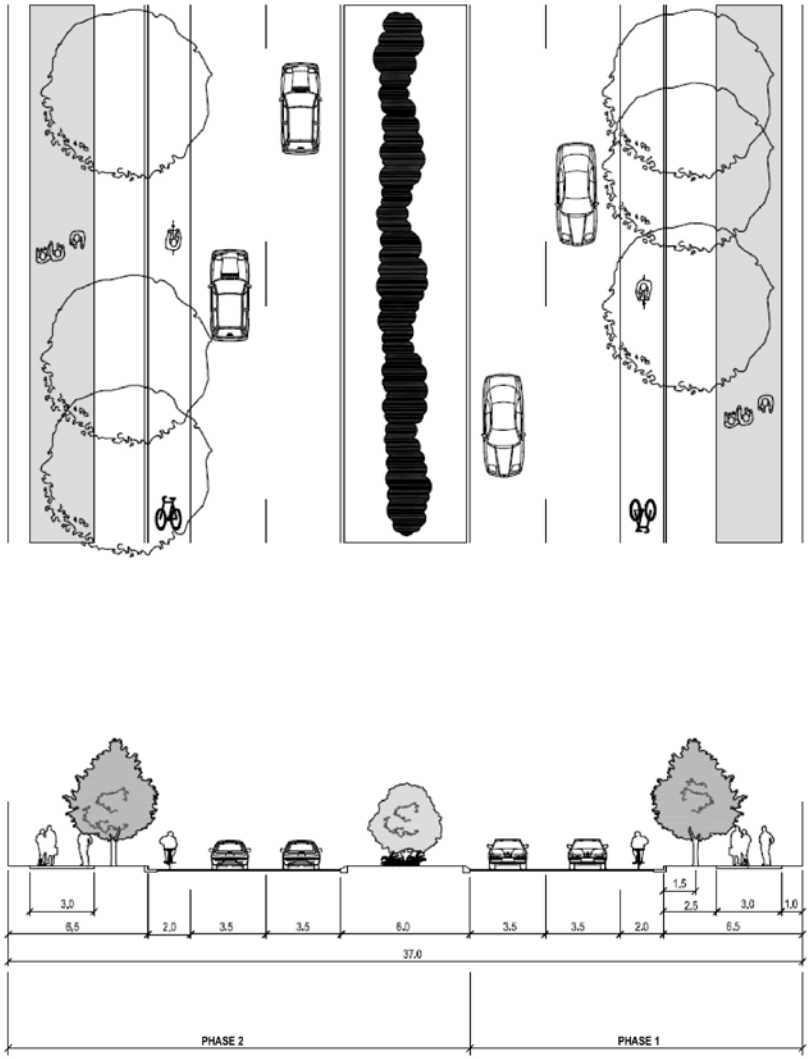
Schedule 6

Figure SC6.19E Sub-arterial Road Type A bridge



Claymore Road Bridge

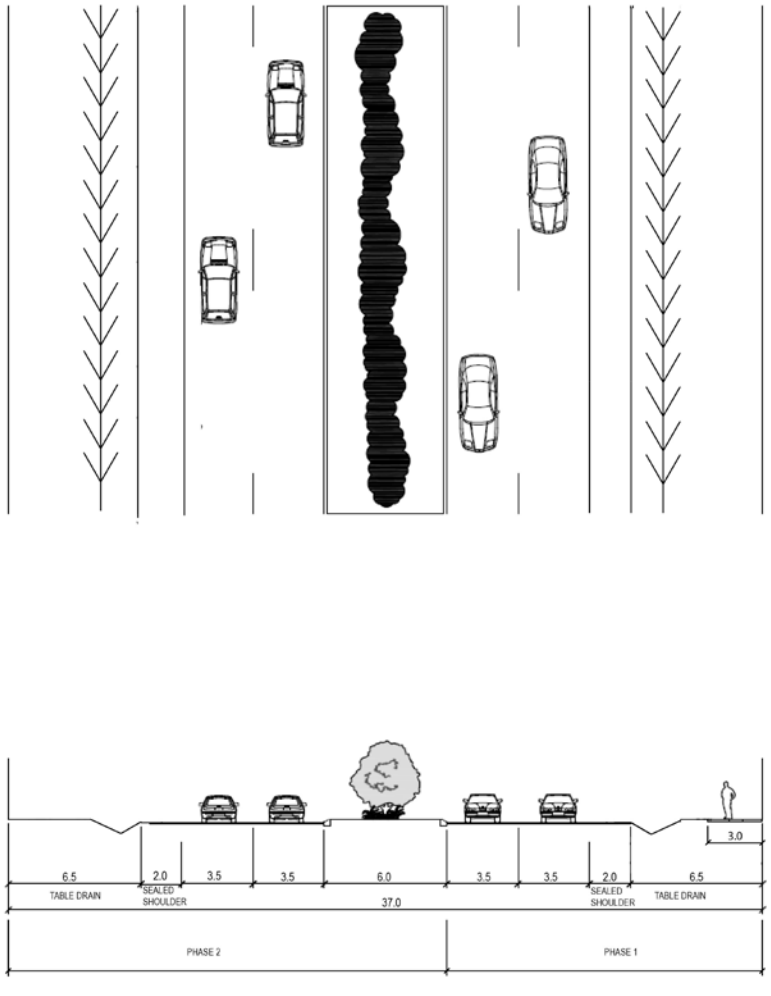
Figure SC6.19F Sub-arterial Road Type B with kerb and channel



Southern Road Link

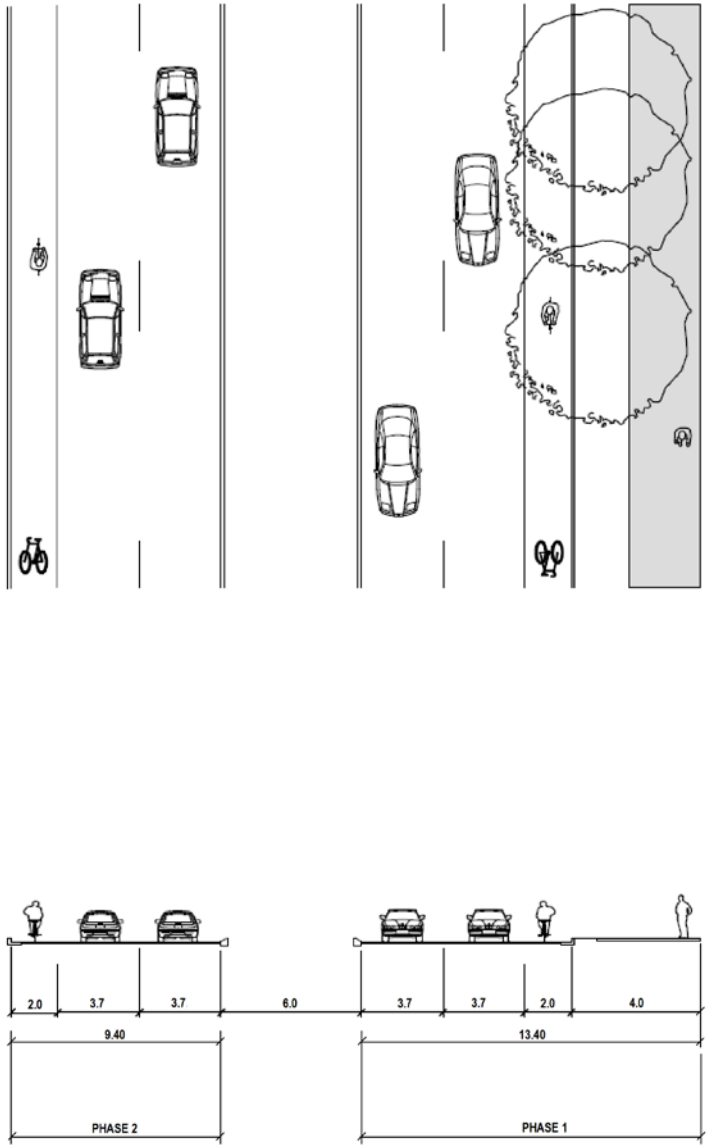
Schedule 6

Figure SC6.19G Sub-arterial Road Type B with table drains



Southern Road Link

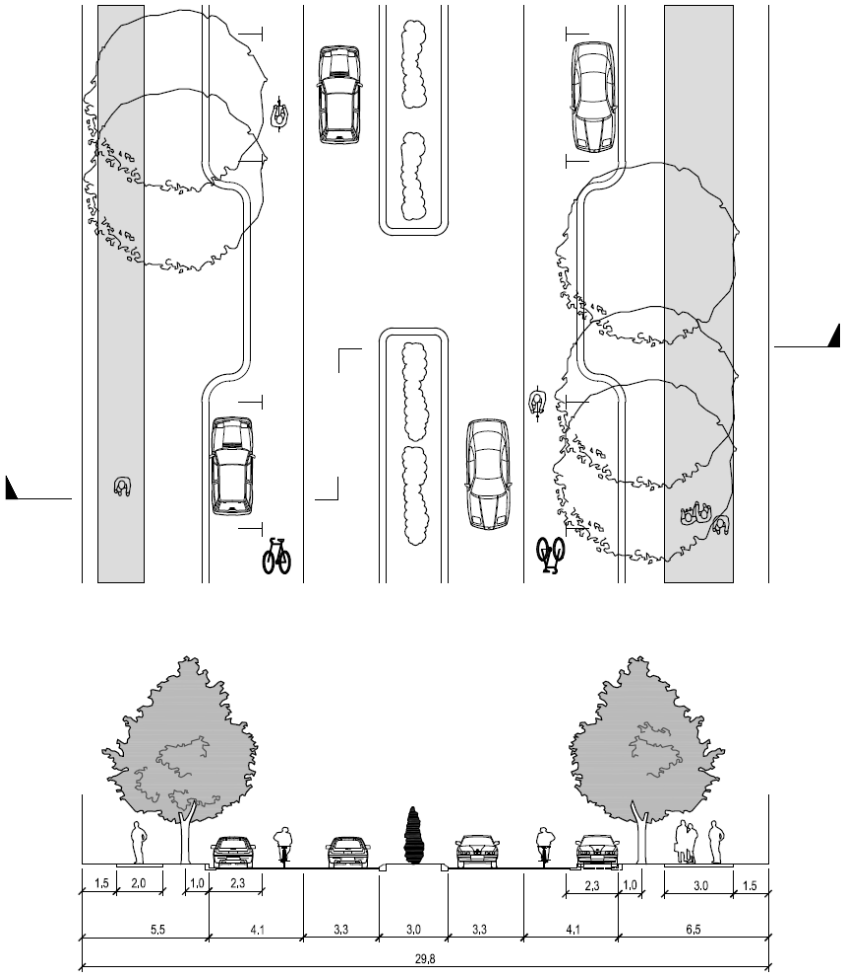
Figure SC6.19H Sub-arterial Road Type B bridge



Southern Road Link Bridge

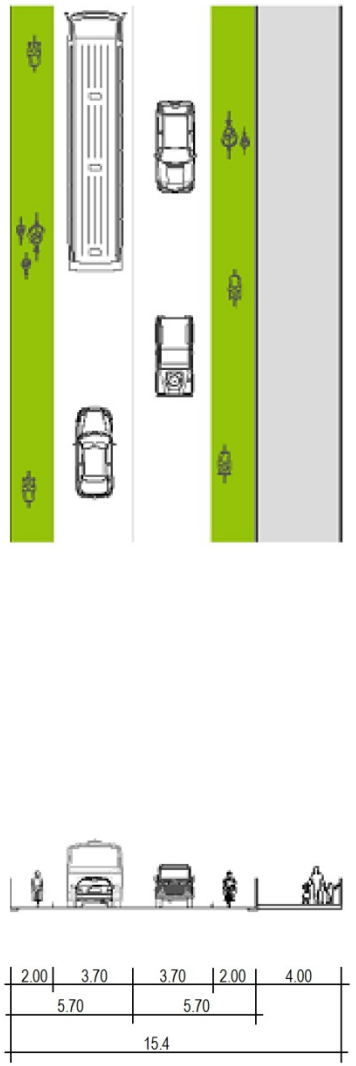
Schedule 6

Figure SC6.19I District Collector Street



District Collector Street

Figure SC6.19J District Collector Street Bridge



Springhill Drive Bridge

Schedule 6

Standards, guidelines and advice for fauna movement outcomes

(4) For the purposes of Performance Outcome PO11(b) in **Section 10.3.4.21 (Performance outcomes and acceptable outcomes for the Development of Infrastructure and Services)** of the **Palmview structure plan area code**, the following are the standards identified in the code for the fauna movement outcomes incorporated as part of the road transport infrastructure network:-

(a) development provides the fauna fencing in association with the road and public transport corridors in accordance with the specifications in **Figure SC6.19K (Typical fauna fence design)**; and

(b) development provides for the other fauna movement measures specified in **Table SC6.19H (Other fauna movement measures)**.

(5) For the purposes of Performance Outcome PO11(b) in **Section 10.3.4.21 (Performance outcomes and acceptable outcomes for the Development of Infrastructure and Services)** of the **Palmview structure plan area code**, the following are guidelines about satisfying the standards in the code for the fauna movement outcomes:-

(a) *Fauna Sensitive Road Design – Volume 1 - Past and Existing Practices* (Queensland Department of Main Roads, 2000);

(b) *Fauna Sensitive Road Design Manual – Volume 2– Preferred Practices* (Queensland Department of Transport and Main Roads, 2010);

(c) *Fish Passage in Streams – Guidelines for Design of Stream Crossings* (Queensland Department of Primary Industries and Fisheries, 1998); and

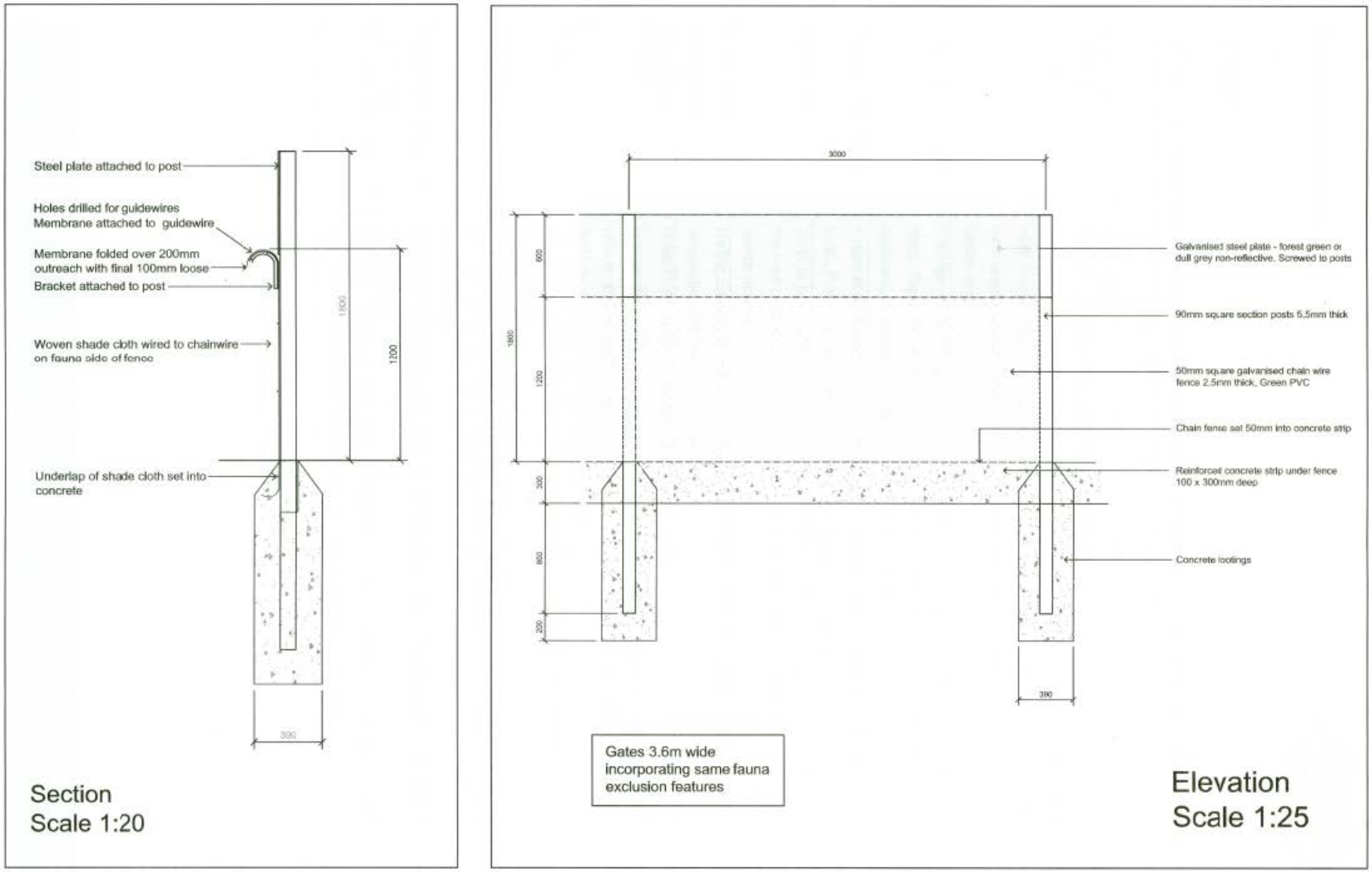
(d) *Breaking the Barriers – Engineering Solutions to Ecological Problems (Symposium)* (Environment Institute of Australia and New Zealand, 2009).

(6) For the purposes of Performance Outcome PO11(b) in **Section 10.3.4.21 (Performance outcomes and acceptable outcomes for the Development of Infrastructure and Services)** of the **Palmview structure plan area code**, the following is advice about satisfying the standards in the code for the fauna movement outcomes:-

(a) the design of fauna protection measures should reflect landscape context, site conditions and the species being targeted; and

(b) an applicant should consult with the Council to determine the most appropriate measures to be implemented.

Figure SC6.19K Typical fauna fence design



Schedule 6

Table SC6.19H Other fauna movement measures

Measure	Descriptions
OVERPASS	PERMITS PASSAGE OF ANIMALS ABOVE THE ROAD
Land Bridge	Also known as a green bridge, eco-duct or wildlife bridge. Typically a 30 metre wide bridge that spans across the road. The bridge has soil over it, and is planted with vegetation and landscaped with habitat features (e.g. logs, rocks, small water bodies etc.).
Overpass (small roads)	A bridge above a major road, likely to allow human/stock access across the road. Typically of a narrow design and not hour-glass shape. An overpass is commonly a minor road, possibly unsealed or single lane configuration.
Canopy/Rope Bridge	A rope or pole suspended above traffic, either from vertical poles or roadside trees. Primarily established for arboreal and scansorial species.
Glider Pole	Vertical poles positioned in the centre median, on the road verge, or traversing the land bridge. They provide species that glide intermediary landing pads and launch opportunities.
Local Traffic Management	Traffic calming to reduce the speed or volume of traffic via signage, crosswalks, chicanes, road closures etc.
UNDERPASS	PERMITS PASSAGE OF ANIMALS BELOW THE ROAD
Culvert	Frequently square, rectangular or semi-circle in shape. Usually pre-cast concrete cells or arches made of steel. They may specifically be built for wildlife passage or stormwater or flood conveyance purposes or a combination of both.
Tunnel	Also known as eco-pipe. Commonly round pipes of reasonably small diameter (i.e. less than 1.5 metres)
Bridge	A structure that raises traffic above surrounding land or maintains the grade of the road. Often facilitating water underneath, movement of local traffic or assisting wildlife passage.
NON-STRUCTURAL MITIGATION	INCORPORATES MORE SENSITIVE ROAD DESIGN THAT ASSISTS 'NATURAL' PERMEABILITY
Corridor Plantings	Strips of vegetation, comprising of similar species either side of the road. Often crossing the road providing corridor movements for animals.

SC6.19.7 Public transport infrastructure network outcomes

Preliminary

(1) This section applies to the public transport infrastructure network outcomes in Performance Outcomes PO14 to PO18 in **Section 10.3.4.21 (Performance outcomes and acceptable outcomes for the Development of Infrastructure and Services)** of the **Palmview structure plan area code**.

General advice for public transport infrastructure network outcomes

(2) The following is general advice about satisfying the public transport infrastructure network outcomes:-

(a) the public transport infrastructure network outcomes seek to ensure that the Palmview Master Planned Area is able to be provided with a high quality public transport service connecting major employment, retail, business, education, recreation, sporting, cultural and health facilities;

(b) **Other Plans Map OPM P9 (Palmview Master Planned Area public transport infrastructure network)** in **Schedule 2 (Mapping)** conceptually identifies the principal elements of the public transport infrastructure network, including the following:-

(i) the local public transport corridor;
(ii) local bus services; and
(iii) bus stops and transit stations;

(c) increasing the proportion of public transport trips both within the Master Planned Area and to locations outside of the Master Planned Area will not only serve to improve the sustainability of the Palmview community but will also contribute to a healthier community;

(d) public transport services are intended to be bus-based and form part of Translink's Sunshine Coast Network Plan. The higher order road network has been carefully designed to support the efficient circulation of buses and to provide for priority movement along identified key routes;

(e) there is also a high level of functional integration between the public transport and bicycle and pedestrian infrastructure networks (including end of trip facilities) and it is intended that these networks be developed in unison to support the development of the Master Planned Area as a transit oriented community;

(f) the requirements for public transport infrastructure are to be complemented with a broader strategy for the provision and use of public transport services and are to deliver a 'seed' program for public transport during the first phases of development has provided for in the applicable infrastructure agreement; and

(g) the public transport infrastructure network outcomes are primarily intended to be satisfied by the following:-

(i) development providing public transport infrastructure in accordance with the applicable infrastructure agreement;
(ii) development ensuring that the public transport infrastructure to be provided, and in particular the local public transport corridor, is in accordance with the public transport infrastructure network and the standards for the public transport infrastructure network as specified in the **Palmview structure plan area code**; and
(iii) the detailed design and construction of the public transport infrastructure network incorporating appropriate urban design, landscape and environmental features and treatments.

SC6.19.8 Bicycle and pedestrian infrastructure network outcomes

Preliminary

(1) This section applies to the bicycle and pedestrian infrastructure network outcomes in Performance Outcomes PO19 to PO23 in **Section 10.3.4.21 (Performance outcomes and acceptable outcomes for the Development of Infrastructure and Services)** of the **Palmview structure plan area code** (bicycle and pedestrian infrastructure network outcomes).

General advice for bicycle and pedestrian infrastructure network outcomes

(2) The following is general advice about satisfying the bicycle and pedestrian infrastructure network outcomes:-

(a) the bicycle and pedestrian infrastructure network outcomes seek to create an urban environment that supports and promotes walking and cycling and those using mobility aids, and thereby reduce demand for private vehicle trips;

(b) **Other Plans Map OPM P10 (Palmview Master planned area bicycle and pedestrian infrastructure network)** in **Schedule 2 (Mapping)** identifies conceptually the higher order elements of the bicycle and pedestrian infrastructure network including transit lanes, on-road dedicated bicycle lanes, on-road shared bicycle/parking lanes, off-road shared pedestrian/bicycle paths and off-road dedicated bicycle paths, bridge structures and timber boardwalks;

(c) increasing the proportion of 'active' transport trips will not only serve to improve the sustainability of the Palmview urban community but will also contribute to a healthier community in the long term;

(d) the Master Planned Area is well suited to walking and cycling because of its relatively flat topography, its relatively compact urban form and its reasonably high level of access to major facilities such as the University of the Sunshine Coast and the Sunshine Coast University Hospital. There is also a high level of functional integration between the various infrastructure networks for the Palmview Master Planned Area that underpins and takes maximum advantage of these active transport modes;

(e) the environmental and landscape context at Palmview also provides excellent opportunities for recreation trails, with easy access to significant planned recreation trails along the Mooloolah River and Sippy Creek, providing opportunities to use these trails as key links within the active transport network;

(f) the bicycle and pedestrian infrastructure network is extensive and is intended to be treated as the priority movement network in the Master Planned Area; and

(g) the bicycle and pedestrian infrastructure network outcomes are primarily intended to be satisfied by the following:-

(i) development providing bicycle and pedestrian infrastructure in accordance with the applicable infrastructure agreement; and
(ii) development ensuring that the bicycle and pedestrian infrastructure to be provided is in accordance with the bicycle and pedestrian infrastructure network and the standards for the bicycle and pedestrian infrastructure network as specified in the **Palmview structure plan area code**.

Standards and guidelines for bicycle and pedestrian infrastructure network outcomes

(3) For the purposes of Performance Outcome PO19(b) in **Section 10.3.4.21 (Performance outcomes and acceptable outcomes for the Development of Infrastructure and Services)** of the **Palmview structure plan area code**, the following are the standards identified in the code for the bicycle and pedestrian infrastructure network:-

(a) development provides for bicycle and pedestrian infrastructure in road transport infrastructure and public transport infrastructure to be in accordance with the typical road cross sections contained in **Section SC6.19.6 (Road transport infrastructure network outcomes)**and the **Planning scheme policy for transport and parking.**

SC6.19.9 Urban open space infrastructure network outcomes

Preliminary

(1) This section applies to the urban open space infrastructure network outcomes in Performance Outcomes PO31 to PO39 in **Section 10.3.4.21 (Performance outcomes and acceptable outcomes for the Development of Infrastructure and Services)** of the **Palmview structure plan area code** (urban open space infrastructure network outcomes).

General Advice for Urban Open Space Infrastructure Network Outcomes

(2) The following is general advice about satisfying the urban open space infrastructure network outcomes:-

(a) the urban open space outcomes seek to ensure that the Master Planned Area is provided with an appropriate range of local, district and regional urban open space areas;

(b) urban open space plays an important role in supporting the development of social capital and creating a healthy community and is particularly important in new and emerging communities in terms of strengthening social interaction and encouraging a sense of place, providing for recreation activities and contributing to the amenity of their urban form;

(c) the urban open space outcomes also seek to ensure the establishment of a legible, accessible, connected open space network while creating public open spaces that respond to each individual neighbourhood;

(d) **Other Plans Map OPM P11 (Palmview master planned area urban open space infrastructure network)** in **Schedule 2 (Mapping)** identifies conceptually the higher order elements of the urban open space infrastructure network planned for the **Palmview structure plan area code**;

(e) local recreation park components of the urban open space infrastructure network are intended to be located so as to ensure all residents and workers of the Master Planned Area are within 500 metre walking distance of a local recreation park; and

(f) the urban open space infrastructure network outcomes are primarily intended to be satisfied by the following:-

(i) development providing the urban open space infrastructure in accordance with the applicable infrastructure agreement; and
(ii) ensuring that detailed design and construction of urban open space has regard to the following:-
(A) functional characteristics, user needs (social and recreational), lifecycle costs and incorporates high quality urban and landscape design which complies with CPTED principles; and

(B) the standards identified for the non-urban open space infrastructure network in **Appendix SC6.19A (Palmview Master Planned Area ecological and landscape protection and rehabilitation plan)**.

Standards for the urban open space infrastructure network outcomes

(3) For the purposes of Performance Outcome PO31(b) in **Section 10.3.4.21 (Performance Outcomes and Acceptable Outcomes for the Development of Infrastructure and Services)** of the **Palmview structure plan area code**, the following are the standards identified in the code for the urban open space infrastructure network:-

(a) development provides for land for urban open space to be provided in one contiguous parcel which is regular in shape and fit-for-purpose;

(b) development provides for land for urban open space to be provided to the Council in freehold tenure;

(c) development ensures that urban open space is above the Q20 flood levels;

(d) development ensures that urban open space is free of hazards and constraints, including the following:-

(i) land listed on the Contaminated Land Register or Environmental Management Register;
(ii) land known or suspected as being contaminated;
(iii) land required for buffer or esplanade;
(iv) land required for or contains an above ground utility installation such as a sewerage pump station, transformer or high voltage power lines or lies within 50 metres of an easement;
(v) land required as an easement over sewerage/water lines or other underground utilities or services;
(vi) land required principally for drainage purposes;
(vii) land is required for stormwater treatment or detention;
(viii) land within a road reserve or subject to future proposed transport corridors;

(e) development ensures that local, district and regional level urban open space has direct access from a public road along one side for at least 50% of its perimeter; and

(f) development ensures that urban open space infrastructure is provided in accordance with the desired standards of service as stated in the following:-

(i) **Table SC6.19I (Provision of urban open space infrastructure network)** which states the provision rate of the urban open space infrastructure network; and
(ii) **Table SC6.19J (Urban open space infrastructure network attributes)** which states the attributes of the urban open space infrastructure network).

Table SC6.19I Provision of urban open space infrastructure network

Park type		Park characteristics		Park catchment	
Category	**Catchment**	**Minimum area**	**Minimum width**	**Catchment**	**Park provision**
Recreation parks	Local	1 ha	50m	500m (within 5 min. walk)	1 ha per 1,000 people
	District	5 ha	50m	5 km (within 30 min. walk, 20 min. cycle and 10 min. drive)	1.3 ha per 1,000 people
	Regional	20 ha	100m	30 km (public transport routes and cycleway and within 30 min. drive)	0.7 ha per 1,000 people
Sports parks	District	10 ha	150m	10 km (30 min. cycle, 10 min. drive)	1.5 ha per 1,000 people

Schedule 6

Table SC6.19J Urban open space infrastructure network attributes

Recreation park – Local

Description:

Primarily used by the community for informal recreation, social, cultural and leisure activities and which may provide for other complementary values (e.g. landscape amenity or biodiversity conservation). In community hubs they are visually and physically connected with the community and commercial activities to help activate the locality.

Size and topography

- Minimum of 1.0 ha.
- Where the topography is such that additional land is required to achieve the required facilities and setting, land area can be increased to accommodate these facilities.
- Minimum width 50m.
- Regular shape.

Access and location

- A short 5-10 minute walk or less than 500 metres from most residences.
- At least two sides or approximately 50% of perimeter to have road frontage.
- Key use areas meet disability access requirements.

Linkages

- Linked by quality recreation trail network or a pedestrian and bicycle network.
- Pathways networks located within open space not to conflict with primary park use.

Landscape and character

- Character reflective of local identity and heritage values/space.
- Retain existing trees at strategic locations. Plant new trees to contribute to broader amenity of the area.
- Where a park has been located to provide views, key viewpoints need to be protected.

Natural assets (vegetation)

- Planting to provide diversity of layers and qualities for wildlife needs – food sources, connection, protection and breeding.
- Planting style allowing for kick about cleared area.
- Protect and sustain Ecologically important areas / support local biodiversity consistent with primary function.

Safety and security

- The use of Crime Prevention through Environmental Design (CPTED) principles relevant to level of risk and nature of setting.
- Play spaces are located in safe areas (good surveillance).
- Safe access for pedestrians - lighting.
- Emergency vehicle access.

User benefits

- Open grassed area for passive recreation with shaded spaces for social interaction and provide visual amenity for external users.

Flood immunity

- Above Q20 (defined WSUD/flood event).
- Buildings are to be above Q100.
- Kick about and social spaces are well drained.

Activities

- Land use.
- Community Hubs.
- To meet the Desired Standards of Service of Social Infrastructure Strategy.

Recreation park – Town Park

Description

Primarily used by the community for informal recreation, social, cultural and leisure activities. Located in a community hub. A location for events, celebrations and community gatherings of a civic/ community nature.

Size and topography

- Minimum of 3 ha.
- Minimum width 100m.

Access and location

- At least one side or approximately 50% of perimeter to have road frontage.
- Key use areas meet disability access requirements.
- Co-located with retail/commercial spaces, community facilities, and/or schools to help activate the locality.

Safety and security

- The use of Crime Prevention through Environmental Design (CPTED) principles relevant to level of risk.
- Safe access.
- Emergency vehicle access.

User benefits

- Community meeting spaces for social, cultural and leisure activities and which may provide for other complementary values (e.g. Landscape amenity).
- Civic meeting and gathering space.

Linkages • Linked to quality recreation trail network or a pedestrian and bicycle network. • Central to key civic and community facilities. **Landscape and character** • Character reflective of local identity and heritage values/space. Designed and managed to support community and social adjoin activities.	**Flood immunity** • Land to be above Q20 (defined flood event). • Buildings are to be above Q100. • Grassed spaces are well drained. **Activities** • Provision of space for civic events/celebration. • Skate/youth facility. • Diverse range of recreational and social spaces. • Space for cultural and community events.
Recreation park – district	
Description Primarily used by the community for recreation, social, cultural and leisure activities and may provide for other complementary values (e.g. landscape amenity or biodiversity conservation). District recreation parks provide more diverse opportunities for recreation experiences and may support nature- based recreational experiences.	
Size and topography • 5 ha. • Where the topography is such that additional land is required to achieve the required facilities and setting, land area can be increased to accommodate these facilities. • Minimum width 50m. **Access and location** • 5 km from most residences. • Generally located in urban areas or areas of special interest and may adjoin other community facilities. • On or close to a distributor or arterial road and within walking distance to regular public transport. • At least one side or approximately 50% of perimeter to have road frontage. • Provision of off street car parking. **Linkages** • Located on a recreation trail or on a pedestrian and bicycle network. • May provide a trail head for urban and non-urban trails. • Pathways networks located within open space not to conflict with primary park uses. **Landscape and character** • Character reflective of local identity and heritage values. • Retain existing trees at strategic location and planting new trees to contribute to broader amenity of the area. • Kick about spaces to be retained for passive recreation opportunities and spaces to accommodate events. • Consider use of durable materials and more permanent features (e.g. walls). • Where a park has been located to provide views, key viewpoints need to be identified and planted with lower vegetation where replanting occurs.	**Natural assets (vegetation)** • 'Bushland' planting style while allowing for kick about cleared area, play spaces, event spaces and community garden areas. • Planting to provide diversity of layers and qualities for wildlife needs – food sources connection, protection and breeding. • Protect and sustain ecologically important areas/ support local biodiversity consistent with primary function. **Safety and security** • The use of Crime Prevention through Environmental Design (CPTED) principles relevant to level of risk and nature of setting. • Play spaces are located in safe areas. • Emergency vehicle access. • Pedestrian pathways to be lit. **User benefits** • District recreation parks provide a more diverse range of passive, social, cultural and recreational experiences through supporting land and infrastructure. **Flood immunity** • Land (minimum of 70%) to be above Q20 (defined flood event). • Buildings are to be above Q100. • Kick about and social spaces are well drained. • WSUD.

Recreation park – regional

Description

Primarily used by the community for informal recreation, social, cultural and leisure activities and which may provide for other complementary values (e.g. landscape amenity or conservation). Sunshine Coast wide recreation parks provide a wider range of experiences and opportunities that encourage longer stays for a diverse range of users.
Botanic Gardens are contained in this category.

Size and topography

- 20 ha.
- Minimum width 100m.

Access and location

- In urban areas <30 km most residences.
- On or close to arterial road with regular public transport to the site.
- At least two sides or approximately 50% of perimeter to have road frontage.
- Provision of dispersed onsite car parking essential to reduce visual impact.
- Located on a recreation trail.

Linkages

- Located on a recreation trail or on a pedestrian and bicycle network.
- Provides a trail head for urban and non-urban trails.
- Pathway networks located within open space not to conflict with primary park uses.
- Pedestrian pathways link activity areas.

Landscape and character

- Character reflective of local identity and heritage values.
- Retain existing trees at strategic locations and plant new trees to contribute to broader amenity of the area.
- Larger open spaces (e.g. kick about space) to be retained for passive recreation and social opportunities (e.g. major events).
- Consider use of durable materials and more permanent features (e.g. walls).
- Where a park has been located to provide views, key viewpoints need to be identified and planted with lower vegetation where replanting occurs.

Natural assets (vegetation)

- 'Bushland' planting style while allowing for kick about cleared area.
- Planting to provide diversity of layers and qualities for wildlife needs – food sources connection, protection and breeding.
- Protect and sustain ecologically important areas/ support local biodiversity consistent with primary function.

Safety and security

- The use of Crime Prevention through Environmental Design (CPTED) principles relevant to level of risk and nature of setting.
- Play spaces are located in safe areas.
- Emergency vehicle access.
- Safe light areas for night time use and pedestrian linkage.

User benefits

- Provides for a large range of outdoor and passive recreational experiences including play spaces, open space and informal kick about area, landscape and amenity and provides BBQ, shelters and major gathering spaces and opportunities for festivals and celebration.

Flood immunity

- Land to be above Q20 (defined flood event).
- Buildings are to be above Q100.
- Kick about and social spaces are well drained.

Recreational trails

Description

Recreation trails are provided for the primary purpose of recreational activities such as walking, horse riding and mountain biking. Recreation trails often traverse through a range of land tenures. These places have a different intent to the pedestrian and bicycle networks co-located with roads infrastructure, which exist primarily to expedite modes of movement.

Size and topography

- 12m wide corridor incorporating a 1.5 – 3m wide pathway.
- A variety of distances and circuits to be provided.
- Natural contours are to be followed to ensure even trail grades.
- Ensure local drainage is maintained along

Landscape and character

- Where space allows, without compromising the lands core function, the trail gently meanders to take advantage of natural and constructed features and provide an element of discovery.
- Desirable for 60% of trail to have access to shade from vegetation.
- Trails are to be interesting and routed through

water courses. • Poorly drained areas and areas with high erosion to be avoided. **Access and location** • Trails to connect to recreation parks, sports grounds, and traverse drainage reserves, appropriate environment reserves, Conservation/national parks to activate the open space network and create a sense of connection to and immersion in open space. • Trails to be located close to edges of parks to reduce impacts on park users. • Trail location to give consideration to the user and service vehicle access requirements for maintenance. **Provision** • Consider access for residents to be <500m from a recreation trail. **Linkages** • Trails are linked to community hubs (cafes, community facilities) parks, reserves and sports grounds, active transport networks and the non-urban trail networks.	different vegetation and landform. • Where determined, environmental and cultural features are outlined in interpretive information. • Recycled/sustainable construction materials preferred. Where not possible materials that are durable or can be reused are required. **Natural assets (vegetation)** • Taller trees for shading. • Planting to provide diversity of layers and qualities for wildlife needs – food sources connection, protection and breeding. • Trails constructed to so as not to impact on existing trees and reduce need for constant pruning. • Porous materials to be considered in suitable areas to improve water penetration and reduce sheet flow. **Safety and security** • The use of Crime Prevention through Environmental Design (CPTED) principles relevant to level of risk and nature of setting. • Trails are located a minimum of 5m from the constructed road. • Safety signage and fencing where necessary. **User benefits** • At planning stage determine what users (e.g. walking, cycling and equestrian) and level of accessibility. **Flood immunity** • The provision of appropriate drainage must be considered in the trail planning, design and construction process.
Sport grounds – district	
Description Facilities for formal sporting and active recreation activities including ovals, courts and circuits. They may also provide local recreation park facilities outside of formal sporting hours as well as recreation facilities for families attending sporting events. Contribute to amenity and local biodiversity by appropriate vegetation planting on boundaries.	
Size and topography • 10 ha. A number of sports may co-locate or adjoin district recreation parks creating a larger open space. • Principally a flat site with 5% gradient or less. • Minimum width 150m. **Access and location** • In urban areas <10 km. • Close to a collector road with on-site car parking provided. • At least two sides or approximately 50% of perimeter to have road frontage. • In higher density areas co-locate with community infrastructure where possible. • Located on public transport routes and stops.	**Natural assets (vegetation)** • Boundary area and corners of site substantially planted with locally native tree/shrub species. **Safety and security** • The use of Crime Prevention through Environmental Design (CPTED) principles relevant to level of risk and nature of setting. • Play spaces are located in safe areas. • Emergency vehicle access. • Perimeter fencing for safety of users. **User benefits** • District sports grounds provide community access to a variety of active formal sporting, cultural and recreation facilities. • Multi use and multi-function configuration

Linkages • Located on a recreation trail or on a pedestrian and bicycle network. • Connected to residential and school/community facilities. **Landscape and character** • Designed to reduce impact of flood lighting on adjacent areas. • Use of appropriate design and management principles (e.g. on-site water storage and treatment) to reduce nutrient flow and weed invasion from the site. • Designed to positively contribute to the amenity of surrounding areas. • Shade trees dividing fields, shaded car parking.	preferred. **Flood immunity** • Buildings and fenced areas above Q100. • Playing fields above Q20. • Wetland treatment areas above Q10. • Playing surfaces are well drained. **Activities** • Assessment of existing facilities within the district to inform preferred layout.

Standards for embellishments associated with urban open space infrastructure network

(4) For the purposes of Performance Outcome PO31(b) in **Section 10.3.4.21 (Performance outcomes and acceptable outcomes for the Development of Infrastructure and Services)** of the **Palmview structure plan area code**, the standards identified in the code for the desired level of embellishments for each type of urban open space area are specified in **Table SC6.19K (Embellishment standards for urban open space infrastructure)**.

Table SC6.19K Embellishment standards for urban open space infrastructure

Embellishments	Local Recreation	District Recreation	Regional Recreation	District Sport	Town park
Earthworks (grading, levelling and grassing)	✓	✓	✓	✓	✓
Weed free	✓	✓	✓	✓	✓
Tree planting	✓	✓	✓	✓	✓
Signage (name / info)	✓	✓	✓	✓	✓
Interpretive signage		✓	✓		✓
Road access (external)		✓	✓	✓	✓
Vehicle access / road (internal / fire management)		✓	✓	✓	✓
Vehicle access (emergency vehicles)	✓	✓	✓	✓	✓
Public art			✓		✓
Car parking (on-site) - (10 formal spaces per ha plus additional on-street parking)		✓	✓	✓	
Vehicle barriers/ bollards	✓	✓	✓	✓	✓
Bicycle racks	✓	✓	✓	✓	✓
Footpath / bikeway (internal)		✓	✓	✓	✓
Footpath / bikeway (external linkage)		✓	✓	✓	✓
Flat, well drained play area	✓	✓	✓	✓	✓
Shade structures / shade sails	✓	✓	✓	✓	✓
Bench seating – 3 seats per ha	✓	✓	✓	✓	✓
Picnic table / shelters	✓	✓	✓	✓	✓
Barbecues		✓ (max 2 double BBQs)	✓ (max 4 double BBQs)		
Drinking fountains	✓	✓	✓	✓	✓
Toilet block - 8 stall unisex (including disabled)		✓ (1 block)	✓ (2 blocks)	✓ (1 block with change rooms)	✓ (1 block)
Skate park					✓
Play space / youth / fitness equipment with softfall and shade over equipment areas	✓	✓	✓	✓	✓
Lighting / security lighting pathways	✓	✓	✓	✓	✓

Embellishments	Local Recreation	District Recreation	Regional Recreation	District Sport	Town park
Plaza – hard stand area					✓
Sports field lighting and 3 phase power				✓	✓
Fenced dog park		✓	✓		
Landscaping / gardens	✓	✓	✓	✓	✓
Multi-purpose fields				✓	
Multi-purpose courts				✓	
Storage sheds				✓	
Clubhouse / change rooms				✓	
Kiosk				✓	✓
Spectator seating				✓	
Bus set down			✓	✓	✓
Rubbish bins	✓	✓	✓	✓	✓
Drainage	✓	✓	✓	✓	✓
Fencing	✓	✓	✓	✓	
Design	✓	✓	✓	✓	✓
Suitable building sites		✓	✓	✓	
Serviced site with water, sewer, stormwater and electricity	✓	✓	✓	✓	✓

Guidelines for minimising ongoing lifecycle and management costs of the urban open space infrastructure network

(5) For the purposes of Performance Outcome PO39 in **Section 10.3.4.21 (Performance outcomes and acceptable outcomes for the Development of Infrastructure and Services)** of the **Palmview structure plan area code**, the following are guidelines about satisfying the standards in the code for the minimising ongoing lifecycle and management costs of the urban open space infrastructure network:-

(a) development provides for the use of landscape features such as mounding and stone walls rather than the provision of generic play equipment in the urban open space infrastructure network;

(b) development provides for the use of native endemic species in landscaping and the reduction of areas of manicured lawns in the urban open space infrastructure network;

(c) development provides for the inclusion of solar lighting in the urban open space infrastructure network; and

(d) development provides for the use of recycled water in the urban open space infrastructure network.

SC6.19.10 Community facilities infrastructure network outcomes

Preliminary

(1) This section applies to the community facilities infrastructure network outcomes in Performance Outcomes PO45 to PO47 in **Section 10.3.4.21 (Performance outcomes and acceptable outcomes for the Development of Infrastructure and Services)** of the **Palmview structure plan area code**.

General advice for community facilities infrastructure network outcomes

(2) The following is general advice about satisfying the community facilities infrastructure network outcomes:-

(a) the community facilities infrastructure network outcomes seek to ensure that the Master Planned Area is provided with an appropriate range of community facilities;

(b) community facilities and services, and access to those, play an important role in supporting the development of social capital and are particularly important in new and emerging communities that need to establish local connections and a sense of place;

(c) **Other Plans Map OPM P13 (Palmview Master Planned Area community facilities infrastructure network)** of the **Palmview Structure Plan** identifies conceptually the higher

order elements of the community facilities infrastructure network planned for the Master Planned Area;

(d) the community facilities infrastructure outcomes are primarily intended to be satisfied by:-

(i) development providing community facilities infrastructure in accordance with the applicable infrastructure agreement and **Table SC6.19L (Attributes of community facilities infrastructure)**; and

(ii) ensuring that the detailed design and construction of community facilities has regard to functional characteristics, user needs, whole of lifecycle costs and incorporates high quality urban and landscape design; and

(e) developers are encouraged to complement requirements for community facilities infrastructure with a broader strategy for developing social capital and work in partnership with the Council to deliver a tailored community development program.

Table SC6.19L Attributes of community facilities infrastructure

<table>
<tr><th colspan="2">Community Facilities – District</th></tr>
<tr><td colspan="2">Description
General community use facility providing meeting spaces for social, educational and recreational activities, health/ support services and information</td></tr>
<tr><td>Size
• 1 ha land.
• 1,500m^2 GFA.

Access and location
• At least one side or approximately 25% of perimeter to have road frontage.
• Access, site and buildings meet disability access requirements.
• Co-located with retail/commercial spaces, other community facilities, open space and/or schools to help activate the locality and create a vibrant civic gathering space.

Linkages
• Linked to public transport and pedestrian/bicycle networks.

Landscape and character
• Location and design responds to the surrounding natural and built environment and respect and celebrate local identity, character and heritage.
• Where a facility has been located to provide views, key viewpoints need to be protected.</td><td>Safety and security
• Crime Prevention through Environmental Design (CPTED) principles address access, site and building design.
• Setting, site and building design maximises casual surveillance.
• Emergency vehicle access.

User benefits
• Multi-function, flexible spaces that responds to the diverse and changing needs of the community and encourages participation, creativity, healthy lifestyles and community wellbeing.
• Encourages community networks and activity, pride and ownership.

Flood immunity
• Buildings are to be above Q100.</td></tr>
<tr><th colspan="2">Community Facilities – Local/meeting space</th></tr>
<tr><td colspan="2">Description
General community use facility providing meeting spaces for social, educational and recreational activities, health/ support services and information</td></tr>
<tr><td>Size
• 3,000m^2 land.
• 300-800m^2 GFA.

Access and location
• At least one side or approximately 25% of perimeter to have road frontage.
• Access, site and buildings meet disability access requirements.</td><td>Safety and security
• Crime Prevention through Environmental Design (CPTED) principles address access, site and building design.
• Setting, site and building design maximises casual surveillance.
• Emergency vehicle access.

User benefits</td></tr>
</table>

• Co-located with retail/commercial spaces, other community facilities, open space and/or schools to help activate the locality and create a vibrant civic gathering space. **Linkages** • Linked to public transport and pedestrian/bicycle networks. **Landscape and character** • Location and design responds to the surrounding natural and built environment and respect and celebrate local identity, character and heritage. • Where a facility has been located to provide views, key viewpoints need to be protected.	• Multi-function, flexible spaces that responds to the diverse and changing needs of the community and encourages participation, creativity, healthy lifestyles and community wellbeing. • Encourages community networks and activity, pride and ownership. **Flood immunity** • Buildings are to be above Q100.
Aquatic Facility – District (minor)	
Description An aquatic centre consisting of lap swimming, water play and other ancillary infrastructure to cater for the district.	
Size and topography • Minimum 10,000m² usable unconstrained area which includes: o requirements for car parking o emergency vehicle access o pedestrian pathways within the complex o equitable access designs o Landscape buffers o space for sustainable initiatives i.e. solar, backwash water recycling. o Waterspace approx. 500m^2 **Access and location** • Co-location with compatible uses such as other community infrastructure such as libraries, youth spaces, neighbourhood centres, active recreation facilities, skate parks, business centres, schools and shopping centres. **Linkages** • Linked to public transport and pedestrian/bicycle networks. **Amenity impact** • Aquatic facilities can create a level of noise that could be considered excessive in relation to adjoining sensitive land uses. Consideration needs to be given to the land uses sharing a boundary with a potential site and if the facility is likely to cause impacts that will not be able to be mitigated. **Landscape and character** • Location and design responds to the surrounding natural and built environment and respects local identity, character and heritage.	**Safety and security** • Crime Prevention through Environmental Design (CPTED) principles address access, site and building design. • Emergency vehicle access. **User benefits** • Facility caters for a wide range of compatible experiences and uses and contributes to a physically active and healthy community. **Flood immunity** • Site is above Q100**.**

Skate/youth facility – District	
Description Facilities for skate, bicycle and youth activity to cater for a range of skill and levels to encourage physical activities and social engagement. May include a variety of element s- plaza, bowl, half pipe and street.	
Size • 500-1,000m^2 active space. • Located within the Town park. **Access and location** • On or close to a distributor or arterial road within walking distance to regular public transport. • Linked to a pedestrian and cycle network. • Co-located with compatible community purposes/facilities. • At least 2 sides – 50% road frontage. • High level of visual surveillance (24 hours). **User benefit** • Variety of challenge and skill levels provided for. • An activity vibrant, physically and healthy.	**Safety and security** • The use of CPTED principles. • Emergency access to the site. • Well-designed facility. • Safe access to public toilets, seating and shade. **Flood immunity** • Site to be above Q20 and well drained. **Amenity impact** • Excessive noise levels require compatible adjoining land uses. • At least 80m from residential land. • Character and identity of park to be considered.

SC6.19.11 Energy infrastructure network outcomes

Preliminary

(1) This section applies to the energy infrastructure network outcomes in Performance Outcomes PO48 to PO49 in **Section 10.3.4.21 (Performance outcomes and acceptable outcomes for the Development of Infrastructure and Services)** of the **Palmview structure plan area code.**

General advice for energy infrastructure network outcomes

(2) The following is general advice about satisfying the energy infrastructure network outcomes:-

(a) the energy infrastructure outcomes of the **Palmview structure plan area code** seek to ensure that the Master Planned Area is provided with reliable sources of energy and that opportunities for sustainable energy generation are incorporated into new development so as to reduce reliance on the predominantly coal fired power grid;

(b) it is anticipated that an emphasis on energy conservation and the use of alternative sources of energy will result in the Master Planned Area achieving a significant reduction in carbon emissions compared with the efficiency of urban development in 2009;

(c) **Other Plans Map OPM P14 (Palmview Master Planned Area Electricity Infrastructure Network)** in **Schedule 2 (Mapping)** identifies conceptually the higher order elements of the electricity infrastructure network for the Master Planned Area;

(d) the energy infrastructure network outcomes are primarily intended to be satisfied by development providing electricity infrastructure in accordance with an applicable infrastructure agreement and the requirements of the relevant Electricity Supply Authority; and

(e) additional advice regarding the implementation of design measures to minimise energy use in new development is specified in **Section SC6.19.4 (Sub-tropical and sustainable design outcomes)**.

SC6.19.12 Information requirements

(1) **Table SC6.19M (Assessment requirements for documents)** specifies the documents which a variation approval or another applicable development approval may require to be prepared and submitted for approval by the Council.

(2) **Table SC6.19M (Assessment requirements for documents)** also specifies the anticipated timing for the approval of the documents.

(3) The Council may also require other supporting information in addition to that specified in **Table SC6.19M (Assessment requirements for documents)** depending on the nature of the variation approval or another applicable development application and the technical issues involved.

(4) Supporting information and documents should be prepared by a competent person with a disciplinary background relevant to the area of interest.

Editor's note–A variation approval or an applicable development application approved under the Act may include a development condition requiring the approval of a document.

Editor's note–Under section 319 (Compliance assessment of documents or works) of the Act compliance assessment of a document under chapter 6, part 10 of the SP Act continues to apply where a variation approval (being a preliminary approval to which the SP Act, section 242 applied) or another applicable development approval under the SP Act requires compliance assessment of the documents.

Table SC6.19M Assessment requirements for documents

Column 1 Description of the document	Column 2 Anticipated timing of approval	Column 2 Purpose of document	Column 3 Matters against which the document is to be assessed
Local Ecological and Landscape Protection and Rehabilitation Plan	Subsequent to the approval of a variation approval and prior to the lodgement of another applicable development application.	To demonstrate that development in the applicable area will provide for the protection and rehabilitation of ecologically important areas and landscape protection areas in accordance with the provisions of the **Palmview Structure Plan**, this planning scheme policy and **Appendix SC6.19A (Palmview Master Planned Area ecological protection and rehabilitation plan)**.	Refer to **Section 10 (Requirements for Local Ecological and Landscape Protection and Rehabilitation Plans)** in **Appendix SC6.19A (Palmview Master Planned Area Ecological and Landscape Protection and Rehabilitation Plan)**
Biodiversity Offset Plan	Subsequent to the approval of a variation approval and prior to the lodgement of another applicable development application.	To demonstrate how that the adverse impacts on ecologically important areas associated with providing infrastructure for the Master Planned Area are to be offset.	<u>Project and site description</u> • Provide a detailed description of the project including project proponent, proposed works schedule, including any temporary works, and timing. • Identify the potential environmental impacts of the project, including any temporary impacts, including impacts arising from vegetation clearing, changes in hydrology, destruction of habitat, impacts on fauna connectivity and movement. • Identify proposed mitigation measures to minimise the environmental impacts of the project. • Clearly identify the area the subject of the Biodiversity Offset Plan and calculate the total land area affected by the project. • Provide a description of the land affected by the project in terms of existing and potential environmental values, including but not limited to existing and potential values identified in the **Palmview Structure Plan** and/or the Palmview Master Planned Area Ecological and Landscape Protection Plan, in relation to vegetation communities, fauna, rehabilitation potential and habitat and faunal corridors. <u>Environmental offsets proposal</u>

Column 1 Description of the document	Column 2 Anticipated timing of approval	Column 2 Purpose of document	Column 3 Matters against which the document is to be assessed
			• Provide a detailed description of the proposed environmental offset package including a description of the proposed offset area, rationale for choosing environmental offsets, proposed timing and staging. • Describe how the environmental offset package meets the principles and requirements for environmental offsets detailed in this policy, in particular the requirement to achieve a 'net environmental benefit'. • Justify the selection of the proposed environmental offset site in terms of achieving "like for like or better" with respect to environmental values, vegetation, habitat, species, ecosystem, landscape, hydrology and physical area compared to the impact area. • Outline the relationship between the proposed offset area and the Master Planned Area. • Outline any proposed rehabilitation works to be undertaken as part of the proposal. • Identify the specific roles and responsibilities of all entities involved in the implementation of the Biodiversity Offset Plan. • Outline proposed short and long term tenure arrangements and demonstrate how long term security of tenure will be achieved under the Environmental Offset Plan. <u>Ongoing maintenance</u> • Provide details of the ongoing management and maintenance measures to be adopted as part of the Biodiversity Offset Plan. Ongoing maintenance measures are to address such issues as signage, fencing, access arrangements, site clean-up and waste removal, fire management, pest control, fauna management, replanting failure, erosion repair and watering. • Identify any potential risks to the long term viability of the environmental offset site such as bushfire and drought and how these risks are proposed to be addressed. <u>Monitoring and reporting</u> • Specify the indicators for monitoring the success of the environmental offset consistent with the objectives of this policy. • Identify how monitoring is to be reported to Council and the remedial action to be taken where failures are identified. <u>Additional requirements and conditions</u> • A financial bond may be required by Council as assurance for proposed offset activities.

Appendix SC6.19A Palmview master planned area ecological and landscape protection and rehabilitation plan

1. Short Title

This document may be cited as the Palmview Master Planned Area Ecological and Landscape Protection and Rehabilitation Plan (Plan).

2. Purpose

The purpose of the Plan is to provide for the following:-

(a) the guidelines about satisfying the ecological and landscape protection outcomes (Section 5-9); and

(b) the requirements for Local Ecological and Landscape Protections and Rehabilitation Plans to be required in a variation approval or other applicable development approval (Section 10).

3. Application

(1) The Plan applies to the non-urban open space infrastructure network specifically identified on **Other Plans Map OPMP12 (Palmview Master Planned Area Non-urban Open Space Infrastructure Network)** which includes Environmental protection areas, Environmental enhancement areas Types A and B, Environmental transition areas and the Scenic amenity and highway acoustic buffer.

(2) The non-urban open space infrastructure network comprises the landscape units identified on **Other Plans Map OPMP12 (Palmview Master Planned Area Non-urban Open Space Infrastructure Network)** which are based on the following:-

  (a) ecological functions and values;

  (b) existing condition;

  (c) short and long term land use; and

  (d) the rehabilitation outcomes for the areas in the non-urban open space infrastructure network.

(3) An application for a variation approval or another applicable development application should demonstrate compliance with the Plan.

(4) The Council may also require in a variation approval or another applicable development approval the preparation of a Local Ecological and Landscape Protection and Rehabilitation Plan for a particular area or landscape unit which is consistent with the Plan.

4. Interpretation

In this Plan:-

Resilience-based condition assessment means a vegetation condition assessment tool:-

(a) which measures the inherent ability of the components of a degraded ecosystem to recover and produces condition maps that inform the development of rehabilitation strategies;

(b) which comprises the following components:-

  (i) details of the assessment unit;
  (ii) a suite of vegetation condition attributes that act as surrogates or indicators of biodiversity values;
  (iii) benchmarks for each of the attributes for each regional ecosystem;
  (iv) an assessment methodology; and
  (v) a scoring system which provides a final condition score such as from 0 being no degradation and excellent resilience to 6 being extreme symptoms and nil resilience; and

(c) such as that outlined in *BioCondition, A Terrestrial Vegetation Condition Assessment Tool for Biodiversity in Queensland, Field Assessment Manual, Version 1.6* (T.J. Eyre, Al. Kelly, V. J Neldner. Prepared for the Queensland Government, Environmental Protection Agency, Queensland Parks and Wildlife Service, 2008).

Vegetation means native grasslands, sedgelands, heathlands, woodlands, forest and wetlands. It includes existing stands of vegetation and areas undergoing natural regeneration, a community of vegetation and a singular plant, shrub or tree.

5. Guidelines for the ecological and landscape protection outcomes

The ecological protection and rehabilitation outcomes of the **Palmview Structure Plan** are intended to achieve the following end result for the non-urban open space infrastructure network:-

(a) the retention and enhancement of all of the existing biodiversity;

(b) the improvement of the healthy functioning and resilience of ecosystems;

(c) the maintenance and enhancement of ecosystem services;

(d) the recreation of wildlife habitat and corridor linkages;

(e) the improvement of recovery of threatened communities and species;

(f) the improvement of condition of riparian vegetation and aquatic habitat;

(g) the improvement of soil conditioning and land and stream bank stability;

(h) the management of threatening processes including impacts from development, climate change, invasive species and edge effects; and

(i) the provision of a diverse range of environmental areas and environmental recreation opportunities and outdoor experiences for the community.

6. Guidelines for areas and landscape units of the non-urban open space infrastructure network

(1) Development should provide for the use of the area in the non-urban open space infrastructure network in accordance with **Table 10.3.4.3A (Outcomes for Non-urban Open Space Infrastructure Area)** in the **Palmview Structure Plan**.

(2) Development should achieve the ecological protection and rehabilitation outcomes and associated management requirements for the landscape units are identified in **Table 10.3.4.3B (Palmview ecological and landscape protection and rehabilitation landscape units)** in the **Palmview structure plan**.

7. Guidelines for environmental protection areas and environmental enhancement areas

(1) A disturbed or degraded area should be revegetated or regenerated using appropriate indigenous plant species specific to the vegetation community to return it to a representative and largely self sustainable condition.

(2) Regeneration is the staged removal of weeds and the management of impacts in a natural area to facilitate natural recruitment of indigenous species with minimal planting at the speed of natural processes. Where regeneration will return the area to a representative and largely self sustainable condition within the agreed maintenance period it is the preferred option.

(3) Only site specific to the specific vegetation community indigenous plant species should be used in a natural area. No hybrid or select plant should be used. Where possible local provenance stock should be used.

(4) The successful rehabilitation of an Environmental protection area occurs where:-

(a) all areas are clear of non-indigenous species and demonstrate multi-aged recruitment of indigenous species (to vegetation community species); and

(b) any random 1 metre square monitoring area demonstrates indigenous vegetation or multi-aged recruitment occupying at least 95% of the entire area, with bare areas less than 5%.

(5) The successful rehabilitation of an environmental enhancement area occurs where at the end of 5 years, any random 1 metre square monitoring area demonstrates the following:-

(a) 40 % ground coverage;

(b) 85 % projected foliage coverage in canopy;

(c) < 5% failure rate; and

(d) no environmental or declared weeds.

8. General guidelines

Fauna and flora translocation

(1) Any work involving the translocation of flora and fauna should be approved by the Council prior to the commencement of the works.

(2) All Federal and State government permits and approvals for the translocation of flora and fauna should be obtained and given to the Council prior to the commencement of the works.

(3) An accredited wildlife spotter should examine the site for presence of fauna and to supervise operations, where required.

Creating or improving movement pathways for native animals

(4) Site development should complement the management of a non-urban open space area and address the safe movement of native animals through the development site and direct native animals away from those parts of uses and development that potentially cause harm to them. Threats may arise from a variety of sources including machinery, swimming pools, deep sided drains, domestic animals, security fencing, road traffic, lighting and noise.

(5) Specific consideration should be given to fauna exclusion fencing, fauna "funnelling" fences or structures, underpasses, overpasses, culvert design, fish passage and other fauna sensitive design features, as appropriate.

Controlling domestic pets and stock

(6) Development should ensure that domestic pets, especially dogs and cats, and stock do not enter a non-urban open space area. Critical boundaries between wildlife habitat and movement corridors and residential, commercial or industrial areas should be identified and managed appropriately.

Controlling pest plants and animals

(7) Development should prevent the introduction or spread or distribution of pest animals on the site and integrate any management requirements for pest animals on the site with other natural resource management activities.

(8) No equipment or materials (including mulch, soil, etc.) should be brought into a non-urban open space areas unless reasonably believed to be weed seed free.

(9) All declared plants (Land Protection (Pest and Stock Route Management) Act 2002 (QLD), and Environmental Weeds as identified in **Section SC6.14.7.5 (Management of weeds)** of the **Planning scheme policy for development works** should be removed in a manner that prevents the regrowth of the declared and weed species, prevents damage to non-target species and retains indigenous vegetation and community and conservation values.

(10) No declared plants (*Land Protection (Pest and Stock Route Management) Act 2002 (QLD)* or Environmental Weeds as identified in **Section SC6.14.7.5 (Management of weeds)** of the **Planning scheme policy for development works** should be planted.

(11) No native vegetation should be removed or disturbed from a non-urban open space area without the prior approval of the Council;

Site clean up and waste management

(12) Hazards and wastes should be removed from the site, with particular attention paid to the future public access and open space areas. This includes any wastes as defined in the *Environmental Protection Act 1994*, machinery, fencing, and equipment left over from past land uses and items of rubbish and litter.

Machinery and access

(13) No machinery, equipment, materials or personnel should enter a non-urban open space area unless directly and currently undertaking works that are required to meet the conditions of a development approval.

(14) Trees should be protected from any damage from development.

(15) No overburden or spoil should be pushed or deposited into a non-urban open space area.

(16) Vehicle barriers and access gates should be installed on the boundaries of a non-urban open space area, where appropriate to prevent unauthorised vehicle access. The purpose of the fencing is to protect a non-urban open space area against possible unauthorised vehicle damage and prevent unauthorised vehicular access to walking or management tracks via public entrances.

Tree hazard assessment

(17) A qualified arborist should conduct a tree hazard assessment of all trees within a 10 metre distance or within striking distance of a potential or existing residential lot, infrastructure including a retained or constructed footpath or road and the edge of open space and any trees where any disturbance of the earth, drainage or storage of materials has occurred during development.

(18) The qualified arborist should provide a written report of assessments and resultant hazard mitigation work to make safe for a period of 5 years to the satisfaction of the Council.

Fire management plan

(19) Development should comply with a Fire Management Plan required in a variation approval or another applicable development approval which:-

(a) satisfies the following requirements:-

(i) address the whole of the proposed development site;
(ii) give consideration to the site's context within the broader area, particularly in relation to potential off-site sources of increased fire hazard;
(iii) identify the location and severity of potential bushfire hazard by means site-based assessment based on:-
(A) detailed data collected at the local level;
(B) factors such as vegetation type, slope, aspect, and fire history (if available);
(C) address on-and-off site hazard implications of the development, including those posed by any nearby bushland; and
(D) future land uses and ecosystem rehabilitation objectives;
(iv) recommend remedial measures such as specific features of the development design such as land use type, vehicular access, lot layout and house site location, proposed fire-fighting infrastructure such as water supply and fire maintenance trails, recommended standard of building construction, clearing and landscaping and advice to new residents;
(v) clearly state any impact of the chosen mitigation measures on the environmental values of the site and the measures taken to avoid or minimise this impact; and
(vi) consider the anticipated future bushfire hazard for the site that might arise as part of revegetation objectives, by allowing for the provision for future assessment in accordance with paragraph (iii); and

(b) has been approved by the Council.

Editor's note–A variation approval or an applicable development application approved under the Act may include a development condition requiring the approval of a document.

Editor's note–Under section 319 (Compliance assessment of documents or works) of the Act compliance assessment of a document under chapter 6, part 10 of the SP Act continues to apply where a variation approval (being a preliminary approval to which the SP Act, section 242 applied) or another applicable development approval under the SP Act requires compliance assessment of the documents.

9. Guidelines for management

(1) Development should ensure that an environmental protection area and environmental enhancement area is provided in a tenure that complies with a plan required in a variation approval or another applicable development approval and approved by the Council identifying the following:-

(a) the long-term security of tenure such as conservation estate, conservation covenant, nature refuge; and

(b) administrative and financial arrangements.

(2) Development should ensure that any third party contract arrangements relevant to the schedule of works in a Local Ecological and Landscape Protection and Rehabilitation Plan required in a variation approval or another applicable development approval are approved by the Council.

(3) Development should ensure that a non-urban open space infrastructure area is maintained in a manner that at least maintains and preferably enhances the condition of the ecological areas for a period of 12 months after the Council has determined that the non-urban open space area has been developed in accordance with the approved Local Ecological and Landscape Protection and Rehabilitation Plan (Conditions Met Inspection).

(4) Development should ensure that an Ecological Protection and Rehabilitation bond is to be provided to the Council to ensure completion of the approved Local Ecological and Landscape Protection and Rehabilitation Plan and the repair of a non-urban open space area if an activities resulting from construction and development were to impact on the identified non-urban open space areas.

10. Requirements for local ecological and landscape protection and rehabilitation plan

(1) A Local Ecological and Landscape Protection and Rehabilitation Plan should be prepared for a landscape unit identified on **Other Plans Map OPMP12 (Palmview Master Planned Area Non-Urban Open Space Infrastructure Network)**.

(2) A Local Ecological and Landscape Protection and Rehabilitation Plan should be prepared prior to the commencement of any ecological or landscape protection or rehabilitation work and in accordance with the timing in a variation approval or another applicable development application.

(3) A Local Ecological and Landscape Protection and Rehabilitation Plan should be prepared by a competent person.

(4) A Local Ecological and Landscape Protection and Rehabilitation Plan should be consistent with:-

(a) the ecological protection and rehabilitation outcomes and management requirements for the landscape units identified in **Table 10.3.4.3B (Palmview ecological and landscape protection and rehabilitation landscape units)** of the **Palmview Structure Plan**; and

(b) any approved Local Ecological and Landscape Protection and Rehabilitation Plan for a surrounding area.

(5) A Local Ecological and Landscape Protection and Rehabilitation Plan should incorporate the following:-

(a) site description details, and in particular:-

(i) a definition of the site boundaries of the ecological area by reference to a plan showing the land subject to the Local Ecological and Landscape Protection and Rehabilitation Plan;
(ii) a description of the site, including geology, soils, acid sulphate soils, topography and drainage (including surface and groundwater), vegetation communities, significant wildlife habitat and corridor factors; and
(iii) a description of land use including the following:-
(A) past land use and management and any implications for proposed ecological protection and rehabilitation activities; and
(B) any current and future aspects of adjacent land that are likely to impact on the long term sustainability of the land and proposed ecological protection and rehabilitation activities.

(b) a resilience based condition assessment of the land the subject of the Local Ecological and Landscape Protection and Rehabilitation Plan, including an established and well documented photo-monitoring program;

(c) the proposed rehabilitation technique to be utilised within each non-urban open space area and any resultant secondary management zones with reference to the specific ecological protection and rehabilitation outcomes in **Table 10.3.4.3B (Palmview ecological and landscape protection and rehabilitation landscape units)** of the **Palmview Structure Plan**, including the following:-

(i) soil management – the measures proposed to ensure an adequate quantity of topsoil is obtained for rehabilitation which should entail procedures for stripping and stockpiling (if suitable material is on site), soil amendment and fertiliser requirements and management of noxious plant seed material (if soil is infected);
(ii) drainage, erosion and sediment control – the requirements for managing drainage, erosion (in particular active erosion) and sediment during rehabilitation consistent with the overall drainage, erosion and sediment control plan for the site from development to construction and post-occupancy;
(iii) waterways and wetlands – requirements for the enhancement of waterways and wetlands including improving bed and bank stability, aquatic habitat, riparian habitat, restoring natural water flows and watercourse processes and restoring natural flushing action to waterways having regard to the hydraulic effect of planting densities with reference to Manning's roughness coefficient;
(iv) site preparation techniques – the procedures for preparing the rehabilitation of each non-urban open space area and subsequent secondary management zone to demonstrate that suitable measures are to be undertaken to ensure that the seed bed and planting soil is in a condition which is able to support the rehabilitation and that soil moisture preparation, aeration, weed removal and mulching is adequate;
(v) slashing regime – the frequency and timing of slashing to achieve ecological and water quality outcomes;
(vi) species selection and planting – the procedures for sourcing and selecting species for revegetation, identification of suitable suppliers, quantity and timing of plant deliveries, types of plant stock to be used, planting procedures and drawings and protection measures from fauna and human activities and the like;
(vii) creation of fauna habitat and corridors – the procedures for enhancement of wildlife habitat and corridors including any requirements for the retainment of existing habitat features, creating or improving existing movement pathways for native animals, the use of fauna friendly fences or fauna "funnelling" techniques and fauna translocation; and
(viii) threatened species - where threatened species are present, background information on the species describing the current conservation status, demonstrating how the rehabilitation techniques selected will protect, manage and enhance the species and its habitat on the land (including individuals on the land) and including management actions that are in keeping with species recovery plans or conservation plans;

(d) a schedule of works including project duration, timing, stages and key milestones which is to be revised at each stage of development with reasons given for any delay in the schedule;

(e) the organisational structure, roles and responsibilities and reporting requirements for the schedule of works, including any third party contract arrangements;

(f) the materials and resources required, including equipment, supplies, plant material and other materials and estimate labour days required to carry out works for each stage as identified in the schedule of works;

(g) the on-going maintenance measures to ensure non-urban open space areas are properly maintained over the establishment phase and in the long-term having regard to the long term ownership and in particular the measures relating to the following matters:-

(i) signage;
(ii) fencing;
(iii) access management;
(iv) site clean-up, removal and management of rubbish, wastes and pollutants;
(v) fire management, including firebreaks and fire management access tracks;
(vi) pest animal and weed control;
(vii) fauna management;
(viii) the slashing regime, including slashing frequency and timing;
(ix) replanting failure;
(x) erosion repair;
(xi) watering; and

(xii) any other relevant maintenance requirement;

(h) details of all approvals necessary to carry out the work outlined in the Local Ecological and Landscape Protection and Rehabilitation Plan;

(i) indicators for monitoring the success of the ecological protection and rehabilitation in terms of the outcomes in **Table 10.3.4.3B (Palmview ecological and landscape protection and rehabilitation landscape units)** of the **Palmview Structure Plan** and in the resilience based condition assessment;

(j) reporting arrangements including details of the process for identifying and rectifying failures;

(k) the requirement for a progress report to be provided to the Council at the completion of each stage of works as identified in the schedule of works detailing the following:-

(i) the areas worked, rehabilitation methodologies undertaken, on-going maintenance requirements and estimated costs;
(ii) how outcomes have been met; and
(iii) as constructed plans of non-urban open space areas including accurate master plans, rehabilitation treatments, above and below ground land improvements, irrigation and any other infrastructure;

(l) mapping where necessary to complement or support the Local Ecological and Landscape Protection and Rehabilitation Plan which:-

(i) is accurate;
(ii) is easy to read and understandable,
(iii) is appropriately scaled;
(iv) provides an appropriate level of detail for site-specific assessment and management; and
(v) shows the direction of north and includes a scale, legend and title.