San Remo DPO 23
Development Plan

Bass Coast Shire Council
February 2014
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1 INTRODUCTION

This development plan applies to the area bounded by Shetland Heights Road and Potters Hill Road at the eastern edge of San Remo as illustrated in Figure 1 below.

The site consists of 14 properties and a total area of approximately 15.4 hectares and includes the following lots: Lot 1 LP208362, Lot 15 LP208363, Lot 16 LP208363, Lot 25 LP200344, Lots 1-7 PS537158 and Lots 1-2 PS611770.

This Development Plan has been prepared in accordance with the provisions of Schedule 23 of the Development Plan Overlay. The Development Plan is intended to provide guidance on the urban structure required to support additional development and ensure appropriate connectivity within the development plan area, and to adjoining areas, whilst at the same time maximising opportunities for allowing individual landowners to develop independently of one another.

The Development Plan includes the following sections:
- Background: an overview of the statutory planning framework
- Context: the physical and policy context
- The Development plan, and
- Conclusion: a review of this document against DPO Schedule 23

Planning applications to subdivide or develop land must be prepared generally in accordance with this Development Plan.

FIGURE 1 DEVELOPMENT PLAN AREA

Source: Bass Coast Shire Council
San Remo has been identified in various state government policies and strategies, including the Victorian Coastal Strategy, and other Bass Coast Council strategic planning policies as being suitable for urban development. Development on the study site, referred to as San Remo Residential Growth Area, is in line with strategic objectives and policies in these documents and will result in orderly expansion of the San Remo Township.

The following commentary summarises the various planning scheme amendments relevant to this development plan.

2.1 Amendment C85

Amendment C85 was gazetted in August 2008. It made changes to the Local Policy Planning Framework of the Bass Coast Planning Scheme by proposing new Strategic Directions Framework Plan to clarify the role and capacity of each urban area within the Shire. The San Remo, Newhaven and Cape Woolamai Structure Plan was prepared, which applies to the study area, and adopted by Council in 2008. Planning Scheme Amendment (C90) was then prepared to formalise the recommendations of the structure plan.

2.2 Amendment C90

Planning Scheme Amendment (C90) sought to inset recommendations about settlement boundaries, future land use arrangements and implementation strategies of the San Remo, Newhaven and Cape Woolamai Structure Plan (Plan) into the Municipal Strategic Statement (MSS), and incorporate the Plan as a reference document in the MSS.

The Independent Panel did not support suggestion of the Structure Plan to extend the San Remo Township boundary eastwards beyond Potters Hill Road. However, as development of the subject site was supported, Amendment C105 proceeded to provide for rezoning of the land from Low Density Residential Zone to Residential 1 Zone.

2.3 Amendment C105

On 12 July 2012 Amendment C105 was gazetted rezoning the subject site from the Low Density Residential Zone to the Residential 1 Zone. The amendment also deleted the Significant Landscape Overlay and applied the Design and Development Overlay Schedule 1 and Development Plan Overlay Schedule 23. The amendment applies to Lot 1 LP208362, Lot 15 LP208363, Lot 16 LP208363, Lot 25 LP200344, Lots 1-7 PS537158 and Lots 1-2 PS610770.

The amendment was referred to an Independent Panel after Council received 32 submissions. Having considered all submissions and presentations, the Panel recommended:

- ‘Amendment C105 to the Bass Coast Planning Scheme be adopted as exhibited with the following changes:
  - In Schedule 23 to the proposed Development Plan Overlay:
    - Under ‘General’ add – Subdivision and road layouts that integrate with and facilitate access to the existing San Remo township to the west, future residential development to the north and the retention of existing dwellings where appropriate.
    - Under ‘Agreement... to the Planning and Environment Act 1987’ add – or a separate mechanism.’
  - Council prepare an Access Strategy to guide detailed development planning for Amendment C105 land and surrounding areas;
  - Council prepare an amendment to rezone the balance of the low density residential estate irrespective of landowner support.’
3 CONTEXT

3.1 Strategic planning context

This section provides an overview of relevant planning policies and strategies that will impact the Development Plan. These include:
- Bass Coast Planning Scheme;
- San Remo, Newhaven and Cape Woolamai Structure Plan;
- San Remo Access Strategy; and
- Victorian Coastal Strategy.

Bass Coast Planning Scheme

State Planning Policy Framework
The State Planning Policy Framework (SPPF) requires Bass Coast Shire Council (and other relevant planning authorities) to anticipate and respond to needs of existing and future communities through provision of zoned and serviced land. The San Remo Development Plan should respond to policy objectives set out in the following Clauses of the SPPF:

Cl 11.05 Regional Development, including Cl 11.05-5 Coastal settlement:
- ‘Plan for sustainable coastal development.’

Cl 12 Environmental and Landscape Values, including Cl 12.02-2 Appropriate development of coastal areas:
- ‘Ensure development conserves, protects and seeks to enhance coastal biodiversity and ecological values.’

Cl 13 Environmental Risks:
- ‘Best practice environmental management and risk management to avoid or minimise environmental degradation and hazards.’

Cl 14 Natural Resource Management:
- ‘Support environmental quality and sustainable development.’

Cl 15 Built Environment and Heritage, including Cl 15.01-3 Neighbourhood and subdivision design:
- ‘Ensure the design of subdivisions achieves attractive, liveable, walkable, cyclable, diverse and sustainable neighbourhoods.’

Cl 16 Housing:
- ‘Provide for housing diversity and ensure efficient provision of supporting infrastructure.’

Cl 19 Infrastructure, including Cl 19.03 Development Infrastructure:
- ‘Facilitate timely provision of planned infrastructure to communities through the preparation and implementation of development contribution plans;
- Plan for the provision of water supply, sewerage and drainage services that efficiently and effectively meet community needs.’

Local Planning Policy Framework

Municipal Strategic Statement (MSS) of the Bass Coast Planning Scheme states that Council applies an integrated approach to land use planning by taking into account sustainable economic, social and environmental objectives. These objectives and strategies which outline Council’s preferred outcomes for development are set out in the Planning Scheme under five key themes:
- Cl 21.05 Settlement;
- Cl 21.06 Land uses;
- Cl 21.07 Environment;
- Cl 21.08 Landscape and Built Form; and
- Cl 21.09 Infrastructure.
The Strategic Framework Plan (see Figure 2 below) for San Remo included in Clause 21.10-2 of the MSS confirms that the majority of future residential growth will be accommodated within the eastern development corridor to the east of San Remo, between Phillip Island Road, Shetland Heights Road and Potters Hill Road.

**FIGURE 2 SAN REMO STRATEGIC FRAMEWORK PLAN**

![Diagram of San Remo Strategic Framework Plan](image)

*Source: Bass Coast Planning Scheme, 2013*

**Design and Development Overlay – Schedule 1**
The Design and Development Overlay (DDO) identifies areas which are affected by specific requirements relating to design and built form of new development. Schedule 1 to the DDO applies to land in residential areas near the coast, which includes the San Remo Residential Growth Area. It sets out:

- Design objectives to be achieved for the area;
- Requirements for buildings and works; and
- Decision guidelines.

**Development Plan Overlay - Schedule 23**
Schedule 23 to the Development Plan Overlay (DPO) applies to land in the San Remo Residential Growth Area bound by Shetlands Heights Road (south), Potters Hill Road (east) and the existing residential land (west). It summarises the following:

- Requirements before a permit is granted;
- Requirements for a development plan;
- Requirements for planning permits; and
- Conditions for planning permits.

Compliance of the Development Plan with requirements stated in Schedule 23 have been summarised in Section 5.1 of this report.
San Remo, Newhaven, and Cape Woolamai Structure Plan

The Structure Plan for San Remo, Newhaven and Cape Woolamai was adopted by Bass Coast Shire Council in 2008. It provides a framework for future growth of these areas and sets out directions for growth. The Plan identifies land to the east of the existing San Remo township (which includes the study area) as suitable for future residential development.

The vision outlined in the structure plan is as follows:

- The Structure Plan directions have the aim that the townships of San Remo, Newhaven and Cape Woolamai will together form a sustainable community with:
  - Retention and development of the distinctive character of each town, making them desirable places to live, visit and work;
  - A reputation for providing a broad range of environmentally sensitive coastal and rural based tourist activities and accommodation, associated with the beach and wetlands, arts, food and wine;
  - A mix of housing choices for all residents which apply energy and water conservation principles;
  - A built form consistent with an attractive and unique coastal character;
  - Appropriate community and social services and infrastructure which meet community needs;
  - A coastal environment which is highly valued, accessible and managed in a manner which enhances and protects environmental, landscape and habitat values;
  - An interconnected environment with safe and attractive pedestrian/bicycle and open space linkages, attractive streetscapes and a functional road network serviced by a local public bus service.

The Structure Plan notes the following about growth in the San Remo Residential Growth Area:

- This growth area is to be comprehensively planned, employing sustainability practices and will need to accommodate:
  - A generous allocation of public open space to provide for recreation, an appropriate buffer and to provide opportunities for the establishment of wetlands to capture and treat stormwater as part of an integrated water sensitive urban design system;
  - A landscaped setback of appropriate width to Phillip Island Road associated with a residential subdivision, to create a visually attractive eastern entry to San Remo. The depth of the landscaped setback between future residential development and Phillip Island Road will be determined having regard to the provision of a visually attractive buffer and the environmental benefits associated with retaining stormwater associated with the residential development of the land within this setback;
  - Infrastructure, major roads and land set aside to accommodate a future neighbourhood centre and school;
  - Appropriate connections into the existing road network; and
  - The establishment of new recreational trails which are connected with the broader regional trail network, both existing and proposed.

Victorian Coastal Strategy

The Victorian Coastal Strategy has been prepared by the Victorian Coastal Council and adopted by the State Government in 2008. It provides a comprehensive integrated management framework for the coast of Victoria. Section 4.2 of the Coastal Strategy includes:

...policies and actions to ensure coastal settlements and growth are appropriately planned and managed to protect the natural environment, while maintaining a reasonable level of service delivery and infrastructure.

The Strategy recommends establishing a clear settlement boundary around coastal settlements to ensure growth in coastal areas is planned and coastal values are protected. Other policies seek to protect visually significant landscapes and views, ensure sustainable water supply and sewerage treatment for all developments, promote ecological and sustainable design techniques in developments, and target priorities for infrastructure and innovative solutions where options are limited. San Remo has been identified as having 'Moderate Growth Capacity' in the Coastal Settlement Framework (see Figure 2 below). The Strategy suggests San Remo has some growth potential beyond existing urban zoned land, but within defined settlement boundaries.
3.2 San Remo Access Strategy

Bass Coast Shire Council commissioned Aurecon to prepare an Access Strategy for San Remo. The study assesses existing access conditions in the area and recommends actions to achieve the transport vision for San Remo. The study area for the Access Strategy is illustrated in Figure 4 below. The Strategy considers the existing layout and focuses on sites identified for future development, also shown in Figure 4. These sites are commonly known as:

- Keams Land;
- Wallis Watson Abrahamson Land;
- Penniwell Estate; and
- DPO23 land.

**Figure 4 San Remo Access Strategy - Study Area and Future Development Areas**
Travel Desire Lines

The Strategy has identified the travel desire lines of both residents and visitors to San Remo. These are illustrated in Figure 5 below. Evidently, most attractors are located to the west of the township or 'existing' San Remo, and existing and proposed residential development is located in the east or 'new' San Remo. The result is a strong east-west desire line for residents. There are also strong desire lines between residential areas and Phillip Island Road due to the dependence of residents on services and employment outside the township.

The desire lines analysis suggests it is desirable to provide connectivity between the DPO 23 area and the existing San Remo in an east-west direction.

FIGURE 5 SAN REMO ACCESS STRATEGY - SAN REMO RESIDENT TRAVEL PATTERNS

Action Plan

The Action Plan section of the Strategy suggests responses to the findings of the analysis undertaken in the Strategy. Under the theme of ‘Growth and Demographics’ the following actions are recommended and are of relevance to the Development Plan for the DPO 23 area:

- Action 1-2: Ensure growth areas are designed to facilitate sustainable modes (medium priority)
- Action 1-3: Ensure growth areas are serviced by multiple access roads (medium priority)
- Action 1-4: Ensure there is adequate road capacity to support anticipated population growth (high priority)
- Action 1-5: Seal Shetland Heights Road and Potters Hill Road (high priority)

The specific details of each of these actions as discussed in the Strategy are expanded on below.
Action 1-2: Ensure growth areas are designed to facilitate sustainable modes
The Strategy recommends that council develops an active and sustainable transport guideline checklist that would be required, as part of the planning application process, for developers to adequately demonstrate how new residential areas will facilitate active and sustainable transport within, to and from developments.

The Strategy recommends specific ‘sustainable transport links’ in the locations (Figure 6) to connect to existing, proposed or recommended active transport routes in San Remo. Five such links are indicated at the edges of the DPO 23 area, to Bonwick Avenue, the Anderson Street Reserve, Small Court and two to Potters Hills Road.

FIGURE 6 SAN REMO ACCESS STRATEGY - INDICATIVE SUSTAINABLE TRANSPORT LINKS

Action 1-3: Ensure growth areas are serviced by multiple access roads
The Strategy suggests that Planning Guidelines for Emergency Vehicle Access (Guideline Number GL-27) state it is of utmost importance that emergency vehicles gain “access to properties in an efficient manner” and “if access to a property be restricted, then significant consequences could apply to both property damage and human life”. The Strategy recommends that, to maintain best practice, new residential or commercial developments are designed with multiple vehicle access points from the existing road network, in the form of local roads that are designed to accommodate emergency vehicles.

Action 1-4: Ensure there is adequate road capacity to support anticipated population growth
The Strategy suggests new residential developments will lead to an increase in traffic and that Council will need to ensure the road network can manage this increased demand. The Strategy specifically recommends:

1. Council to recognise primary vehicle routes used by residents and enable necessary upgrades to be implemented accordingly. Identified existing main vehicle routes can be seen in Map 2 (see Figure 7).
2. Council recognise the existing limitations and constraints for east west movements between ‘Existing’ and ‘New’ San Remo, particularly at times when Phillip Island Road carries heavy traffic.

Council will carry out a study to identify local roads that could be extended to link between existing and future development areas. We recommend that Council create multiple east-west routes through the town. These routes should consist of a local road network that is designed for low vehicle speeds and traffic volumes. This will ensure that the roads can accommodate the increased traffic from proposed developments without sacrificing the amenity of existing local roads.
A staggered approach to the design of the road network would ensure additional traffic is dispersed into multiple connecting routes through the town. We also recommend that no straight or direct road link be created between two identified collector roads (as per Map 2) (see Figure 7). We recommend against a single east-west thoroughfare between Potters Hill Road and Back Beach Road via Bonwick Avenue or any other local road.

In support of this, we recommend that Council investigate access into proposed development areas from:
- Anderson Street;
- Small Court;
- Bonwick Avenue;
- San Remo Parade
- Panorama Drive; and
- Back Beach Road

This recommendation suggests multiple and indirect east west road connections are desirable between Potters Hill Road and Panorama Drive, and between Panorama Drive and Back Beach Road.

**FIGURE 7 SAN REMO ACCESS STRATEGY - EXISTING AND POTENTIAL FUTURE VEHICLE LINKS**

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**Action 1-5: Seal Shetland Heights Road and Potters Hill Road**

The Strategy suggest Council investigate the sealing of unsealed sections of Shetland Heights and Potters Hill Roads to improve road safety and that further investigations are required to determine the standard required and the need for inclusion of pathways. Developer contributions are suggested as a possible funding mechanism for these works.
Connectivity
In the connectivity section of the Action Plan the Strategy suggests that there are a number of issues with the existing state of connectivity within San Remo. These include:
- Connectivity between ‘Existing’ and ‘New’ San Remo;
- Vehicular circulation within the commercial and activity areas;
- Poor connectivity within the active transport network; and
- Walking trail connectivity

The proposed action “improve vehicular circulation” is suggested as a response in order to provide “A well-connected and comprehensible transport network which allows for easy movement”.

Only one action is suggested under this theme: “Action 3-1: Improve vehicle circulation through ‘Existing’ San Remo and Marine Parade”. The Strategy does not provide any further specific recommendations as to how the issues of connectivity might be addressed. However, Actions 1.2 to 1.5 cited above would likely contribute in a significant way to the achievement of improved connectivity within San Remo.

Implications of the Access Strategy for the DPO 23 area
In summary the Access Strategy has the following implication for the Development Plan for the DPO 23 area:
- Sustainable transport links are provided to link to existing, proposed or recommended active transport routes in San Remo. Five such links are indicated.
- New developments are designed with multiple vehicle access points from the existing road network, in the form of local roads that are designed to accommodate emergency vehicles.
- Multiple and indirect east-west road connections are desirable between Potters Hills Road and Panorama Drive.

3.3 Local context
The DPO 23 area is located on the eastern edge of the San Remo Township. It is bounded by Potters Hill Road to the east, Shetland Heights Road to the south and another Greenfield precinct to the north which is covered by Development Plan Overlay (DPO) 22 of the Bass Coast Planning Scheme. The western edge of the precinct is bounded by the residential neighbourhood of Bonwick Avenue.

Island Views Estate
The Greenfield precinct covered by DPO 22 – also known as ‘Island Views Estate’ is bounded by Phillip Island Road to the north, Potters Hill Road to the east, the residential neighbourhood of Genista Street to the west, and the subject precinct covered in this development plan.

The proposed subdivision contains lots ranging in size from 700sqm to 770sqm. The future developed lots are likely to have views of French Island, Phillips Island and Westernport Bay.

It is the intention of this development plan to reinforce the connectivity between this estate and the DPO23 area. Future subdivision design would need to demonstrate compliance with this requirement.

Bonwick Avenue
Bonwick Avenue currently functions as a de facto court bowl as the road ends at number 1 Bonwick Avenue. Road links from 1 Bonwick Avenue to the east is not supported by the existing Development Plan Overlay Schedule 23.

Other
Lands to the south and east of the study area precinct are currently comprised of larger allotments. In the long term, these precincts may also develop. The implication here is that infrastructure – in particular road connectivity – will need to be planned for to ensure that the current development configurations do not adversely jeopardise the potential liveability of future development precincts.

The Anderson Street Reserve is located to the West of the DPO 23 area. Although this area of open space is relatively unembellished it has the potential to provide for both active and passive open space needs of the residents of both the DPO 23 area and for the existing residents in the eastern portion of San Remo.
It is the intent of this development plan that the public open space contribution derived from the development in DPO23 area would be directed to improve the Anderson Street Reserve.

3.4 Key precinct features

The land within the DPO 23 area contains a number of existing dwellings on lots of various sizes. It features undulating topography although generally the land within the study area slopes from the south to the north. For the purposes of this plan the area can be described as consisting for four sub-precincts. Each sub-precinct possesses its own unique features and issues.

**FIGURE 8 DPO 23 SUB-PRECINCTS**

**Sub-precinct A**
This sub-precinct contains a single parcel of land of approximately 2.6 hectares with an existing access point from Bonwick Avenue. DPO Schedule 23 prohibits vehicular connections from the other sub-precincts through sub-precinct A to Bonwick Avenue.

**Sub-precinct B**
This is the largest sub-precinct in this study area and consists of two separate land holdings, both are just under 3 hectares in area. Given the size and location of this sub-precinct it is a logical location for providing north-south connectivity between Small Court and the DPO 22 area.

**Sub-precinct C**
This area is effectively a ‘gated community’ governed by a Body Corporate. There are seven land owners and a common property road. Lots are typically 0.4 hectares in area. The pattern of subdivision and the ownership structure of this sub-precinct add a layer of complexity to its prospects for redevelopment.

**Sub-precinct D**
This sub-precinct consists of three properties located in the very east of the DPO 23 area. It consists of three allotments that range in size from just under one hectare to approximately 2.3 hectares. This sub-precinct is unique within the study area in that it has substantial frontage to an existing public road.
3.5 Key findings of landowner consultation

There are thirteen land parcels in the DPO 23 area. Fragmentation of land ownership is therefore a key consideration in the orderly redevelopment of the precinct. Landowner consultation revealed a few key issues regarding the intentions of the existing land owners.

Willingness to redevelop
Landowners in the DPO 23 area either have little or no interest in the subdivision and development of their land; or are keen to subdivide and develop their land.

Preferred form of development
Some landowners have given consideration to alternative forms of development to conventional suburban subdivision, such as medium density or cluster housing, but have generally dismissed those options and have expressed an intention to provide conventional suburban subdivision in this area. Landowners would generally prefer fewer roads, and where possible, the use of court bowls instead of through roads.

Sewer
Land owners of larger sites tend to have a preference to have their lands connected to existing sewerage systems. Landowners of smaller sites are more comfortable with the prospect of installing their own systems as they typically only need to service a small number of allotments.

3.6 Summary of key opportunities and constraints

The preceding review of existing policy and physical conditions can be summarised as a number of key opportunities and constraints for the redevelopment of the DPO 23 area.

Opportunities
- Current policies support the intensification of development on the subject land;
- View to the north over the bay area is a particular asset for this location;
- Potential to provide integration with the development of the DPO 22 area (Island Views Estate) to the north;
- Redevelopment can provide east-west connectivity that is called for in the San Remo Access Strategy;
- Potential to provide a range of housing forms, not only single detached suburban dwellings;
- Opportunities exist to connect to existing service infrastructure; and
- Existing open space adjoining the study area (Anderson Street Reserve).

Constraints
- No existing road network through the study area;
- Fragmented land ownership including complex land title in sub-precinct C;
- Irregular geometry of existing pattern of subdivision makes further subdivision challenging and less efficient;
- Existing services, retailing and employment opportunities are all located towards the western end of San Remo;
- Opposition from existing San Remo residents to the provision of direct road connections between the study area and the established street network in the eastern portion of the township;
- In terms of the natural environment, there is a small patch of swamp paper bark at the rear (western end) of property number 11 that may constrain development. If the redevelopment of this area requires the removal of these plants the provision of offsets may need to be considered.

Summary
The variety of interests of stakeholders in and around the study area, and the fragmented ownership pattern of land within the study area, present some challenges which will need to be overcome to achieve orderly and sustainable development in the study area.

In the first instance, the precinct’s spatial and infrastructure connections with the Island Views Estate and Bonwick Avenue will need to be resolved. Secondly, additional infrastructure is needed to accommodate new development. This includes road and utilities. And finally, future development will need to provide a safe and coherent urban structure, that connects the study area to the existing San Remo township, by both vehicles and active transport modes.
4 THE DEVELOPMENT PLAN

This Development Plan has been prepared in response to the unique opportunities and constraints of the study area, particularly those regarding the existing pattern of subdivision and the intention to provide land owners with the opportunity to develop their land independently of one another.

The approach employed in this Development Plan is not to set out a specific road or block layout. Rather, the plan sets out some specific outcomes that must be adhered to. Other than these outcomes, there is a degree of flexibility with regard to the design and layout of subdivisions and the specific development that is proposed within the study area.

The application of a more flexible approach to a development plan for the study area is expanded on below.

4.1 Guiding principles

This Development Plan has been informed by the following principles:

Independence and interdependence
- As much as is practical, the Development Plan provides the opportunity for the individual allotments in the development plan area to be developed independently of other allotments. However, to ensure an integrated and connected urban structure is achieved, the development of individual allotments will need to abide by some specific requirements. These are outlined in the 'specific outcomes' section below.

Flexibility and adaptability
- The Development Plan will have a long life span and it is possible that during the life of the plan housing preferences will change and evolve. It is therefore important that the development plan does not unnecessarily restrict development to a specific pattern of subdivision or specific type of housing. As much as is practical, the development plan should be flexible and adaptable to accommodate a range of building types and land uses, not just those that are in demand in the current market.

4.2 Specific outcomes

Applications to subdivide or develop land in the Development Plan area should contribute to the achievement of the following outcomes:

Connectivity
- The development of the area should provide broader connectivity to adjoining areas. This includes north-south and east-west connectivity for pedestrians, bikes and cars. (It is, however, noted that east-west connectivity for vehicles through Lot 1 LP 208362 is precluded by the provisions of DPO Schedule 23.)

Water sensitive urban design
- The development of the area should minimise additional run off from the site and make the most of the rain which falls on the land for domestic and landscape purposes, through the implementation of water sensitive urban design measures.

Integration with the landscape
- The development of the area should respond to the natural features of the site – it's topography, existing vegetation and views – through the design and layout of streets, and the design and form of the buildings.

Integration with adjoining land
- The development of the area should provide opportunities to integrate with land (that might be developed in the future) beyond the study area. This includes both existing urban areas (to the west of the study area) and those that might be developed in the future (to the north, east and south of the study area).
Infrastructure provision

- All necessary infrastructure will be provided and/or funded by the proponents of the development. To the extent that shared infrastructure may be required, the cost of these items will be shared in accordance with the approach set out in Table 1 below.

4.3 Requirement for each sub-precinct

For the purpose of identifying how the ‘specific outcomes’ listed above can be achieved, the plan area has been divided into four (4) sub-precincts. The extents of the four sub-precincts, and a diagrammatic representation of the principles listed below, are illustrated in Figure 9 below.

Table 1 below sets out these specific requirements by the sub-precinct and a diagrammatic representation is provided below. Planning applications to subdivide or develop land must be prepared generally in accordance with these requirements.

**Figure 9 DPO23 Development Plan**
<table>
<thead>
<tr>
<th><strong>TABLE 1. DPO23 DEVELOPMENT PLAN: REQUIREMENTS BY SUB-PRECINCT</strong></th>
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<tbody>
<tr>
<td><strong>Sub-precinct A</strong></td>
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</table>
| Connectivity | Development of this sub-precinct must provide pedestrian and cycle connections between the Anderson Street Reserve, Bonwick Avenue and sub-precinct B. | Development of this sub-precinct must provide:  
- Vehicle, pedestrian and cycle connections between Small Court and the ‘Island View Estate’ (DPO 22 area).  
- Pedestrian and cycle connections to sub-precinct A.  
- Pedestrian and cycle connections to sub-precinct C. | Development of this sub-precinct must provide for pedestrian and cycle connections between sub-precinct B and sub-precinct D.  
(Due to the complexity of body corporate arrangement, this sub-precinct may take longer to develop. Some subdivision could be incorporated in the sub-precinct prior to the body corporate resolving to develop the area). | Development of this sub-precinct must provide for vehicle, pedestrian and cycle connections across this sub-precinct to Potters Hill Road. The connection to sub-precinct C is only via pedestrian and cycle connection. |
| Water Sensitive Urban Design | All sub-precincts: In typical conditions, development must not result in a net increase in runoff or reduction in water quality from the existing situation. | | |
| Integration with future development areas | All sub-precincts: Development will provide opportunities for integration with future development of land adjoining the DPO 23 site as indicated on the attached development plan principles drawings. Integration might be achieved through the reservation of land at the edge of the study areas for the purposes of future road connections and/or future pedestrian and cycle connections. This will provide opportunities to integrate the study area with those areas adjacent, in the medium to longer term. | | |
| Landscape and public domain | All sub-precincts: A landscape and visual assessment will be required prior to the approval of any application to subdivide land. Development will result in a consistent and coherent public domain design across all sub-precincts. This will be achieved through a consistent approach to design of streets, verges, planting, lighting, street furniture and so on, that utilises common materials, colours and plant species. Providing a common public domain character is the key strategy that will tie together the various sub-precincts in a coherent way. An Open Space Contribution levy of $5% of the land value will apply to development in all sub-precincts in accordance with the provisions of the Subdivision Act (1988). | | |
| Infrastructure provision | All sub-precincts: For shared sewer infrastructure:  
A contribution of $X of the total cost of the shared sewer infrastructure will be levied on a development, where $X is the area of the land subject to development expressed as a proportion of total area of the land subject to DPO 23. Land owners must enter into a Section 173 Agreement (as per Clause 3 of DPO23 in the Bass Coast Planning Scheme) that makes provision for payment of this levy. Payment of the levy will be required before a Statement of Compliance will be issued. (The total cost of the shared sewer infrastructure has been estimated at $202,000.)  
For all other infrastructure required to service land (roads, public domain, utilities, etc.):  
Costs will be borne by the individual land owners. | | |
4.4 Location of new access way at the boundaries of sub-precinct

It is the intention of this Development Plan that there will be direct connectivity between the sub-precincts in an east-west direction. It therefore is a requirement of this plan that the proposed location of reservation for access way does not unduly limit the potential for the redevelopment of the other sub-precincts in the plan area.

4.5 Density, lot mix and medium density housing

For the purpose of assessing infrastructure needs, a notional pattern of subdivision that provided appropriately 170 lots distributed evenly across the DPO 23 plan area was utilised (see Appendix 1). Assuming one dwelling per allotment, this equates to a gross density across the plan area of 11 dwellings per hectare, or a net density of approximately 14 dwellings per hectare (assuming 20% of the site area for roads and/or open space). The latter equates to an average lot size of approximately 725 sqm per lot.

The Development Plan does not propose any restrictions of density, lot size and mix, or locations for medium density housing. However, if the development density exceeds that cited above an assessment of the need for additional infrastructure capacity may be required.

4.6 Infrastructure strategy

An assessment of infrastructure requirements for water, drainage, sewer and roads by Parsons Brinckerhoff has suggested that the independent development of the sub-precincts identified in this Development Plan is possible.

Based on the existing infrastructure provision, each sub-precinct has the ability to achieve water, drainage and road connections to existing infrastructure without the need for shared infrastructure.

For sewerage however, a shared internal sewer main along the length of the northern boundary of the plan area would be the most logical and cost effective way to provide reticulated sewer connection to the entire Development Plan area.

Given the desire to allow the independent development of the various sub-precincts in the plan area, it is recommended that Bass Coast Council be responsible for delivery of the shared infrastructure asset and recoup the costs of this item through Section 173 agreements with individual land owners (see Table 1 above).

Any proposal to provide additional development within any sub-precinct would be the trigger for the provision of the shared sewer. It is recommended that the entire length of the sewer for the DPO 23 study area be constructed when the first sub-precinct – regardless of its location – is developed. This approach would be more cost effective than delivering this infrastructure in an incremental fashion.

For more information of the infrastructure requirements refer to the Appendix: Infrastructure Assessment.
5 CONCLUSION

5.1 Consistency with DPO Schedule 23

The table below compares the content of DPO Schedule 23 to this plan.

<table>
<thead>
<tr>
<th>DEVELOPMENT PLAN OVERLAY SCHEDULE 23 REQUIREMENTS</th>
<th>RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General</strong></td>
<td></td>
</tr>
<tr>
<td>- A site description, detailing site’s condition and its topography;</td>
<td>Provided at section 3.4.</td>
</tr>
<tr>
<td>- Staging of the subdivision;</td>
<td>Given the complexity of ownership a detailed road layout, subdivision and staging strategy are not possible or desirable. Staging is not a critical determinant of the phasing of development in the study area.</td>
</tr>
<tr>
<td>- Subdivision and road layouts that integrate with and facilitate access to the existing San Remo township to the west, future residential development to the north and the retention of existing dwellings where appropriate.</td>
<td></td>
</tr>
</tbody>
</table>

| **Infrastructure**                                 |          |
| - Transport connections including main internal road layouts and connections to existing road networks; | The development plan provides guidance on internal road layout, connection to the external road network and pedestrian and cycle connections in section 4.3. |
| - Transport connections external to the site for future linkage opportunities; |          |
| - Provide a convenient and safe pedestrian network in accordance with the Bass Coast Shire adopted bicycle strategy; |          |
| - Provides a north-south pedestrian/bicycle link; |          |
| - Provides a direct pedestrian link to Bonwick Avenue; |          |
| - A conceptual drainage strategy that recognises the requirements of the entire area; |          |
| - Identification of servicing constraints and opportunities. |          |

| **Specific Implementation — Lot 1 LP20836**        |          |
| - A road layout for vehicles that precludes:       | The road layout in the Development Plan preclude road links to and access through the Anderson Street Reserve and road links to land to the north and east of Lot 1 LP20836. |
| - Road links to and access through the Anderson Street Reserve; |          |
| - Road links to land to the north and east of the subject site. |          |

| **Environment**                                    |          |
| - Identification of areas not suitable for development; | The location of remnant vegetation, known overland fo |
| - Identification of environmental issues, opportunities and constraints, (including native vegetation precincts); | paths and an existing dam has been identified in the Development Plan in section 4.3. |
| - Protection of significant vegetation.            |          |

| **Development**                                    |          |
| - Provides a sensitive residential interface with adjoining residential land; | Methods of integration with surrounding areas are outlined in section 4.3. |
| - Methods to be used to integrate the new development with surrounding areas; | Linkages are also identified at 4.3. |
| - Identification of any areas suitable for medium density housing; | The Development Plan adopts a sub-precinct approach that details the requirements of the various sub-precincts that comprise the DPO 23 area. |
| - Long term linkages and connections to existing and future residential areas; | The issue of interfaces will need to be addressed at the planning permit stage. |
| - The layout of the development, detailing the various precincts within the site. |          |
APPENDIX: INFRASTRUCTURE ASSESSMENT

(This assessment of infrastructure requirements was provided by Parsons Brinckerhoff.)

Existing conditions

The DPO 23 site is well placed in terms of existing infrastructure service locations. Existing services requests and consultation with the major utility providers in the area has revealed that sewer, water, electricity and Telstra services all run adjacent to the proposed development site. The site generally slopes south to north to Westernport Bay at favourable grades for minor storm events and potential underground piped drainage infrastructure, as well as being able to cater sufficiently for major storm events from an overland flow perspective.

Assumptions for infrastructure assessment

The assessments provided here are based on a notional pattern of subdivision that provides approximately 170 lots distributed evenly across the DPO 23 plan area. Assuming one dwelling per allotment, this number of lots equates to a gross density across the study area of 11 dwellings per hectare or a net density of approximately 14 dwellings per hectare (assuming 20% of the site area for roads and/or open space). The latter equates to an average lot size of approximately 725 sqm per lot.

Infrastructure provision

Potable water service

Westernport Water is the responsible authority for the provision of water supply to the region. Based on the proposed area of residential development and indicative number of service connections required, Westernport Water has provided advice to inform a servicing strategy including connection to existing mains. A 150mm diameter PVC watermain running along the eastern boundary of the site, in Potters Hill Road, will serve as the primary point of connection for an extension of the water reticulation network. Another existing 100mm diameter PVC watermain running into the site along Small Court from the South can also serve as another point of connection to close the loop of a future reticulation network.

Reticulation mains will need to be constructed internally within the proposed development, and a water supply service must be provided to all new lots/units created within the development.

Reticulated sewerage

Westernport Water is the responsible authority for the provision of sewer reticulation to the region. Westernport Water have advised that based on the fall of the land and the indicative number of future lots provided, connection to all future lots is to flow via a gravity system, connecting to the existing 225mm diameter Vitrified Clay pipe to the northwest of the site, running along Phillip Island Road. They have also advised that a pumping station currently servicing part of the site is temporary, leading to the assumption that the rising main within the development site will be abandoned when a gravity system is implemented to cater for the new development in its entirety.
Reticulation mains will ultimately need to be constructed as part of the proposed development to service new lots created. Based on our preliminary sketches on a potential lot configuration, it is anticipated that internal gravity sewer mains will predominantly run at the back of lots, with spacing between manholes to be no greater than 150 metres. Gravity sewer mains will be predominantly 100mm and 150mm in diameter, feeding into a 225mm diameter main which will run along the western boundary of Island View Estate to the proposed connection point. It is likely that this 225 diameter main will be constructed at cost shared with the developer of the Island Views Estate, subject to the sewer design layout of this development to the north.

Drainage

The future minor drainage strategy to serve the proposed development will consist of an underground piped system as per Bass Coast Shire Council standard requirements. This system will discharge into the underground drainage system designed as part of the Island View Estate to the north of the development. Due to the natural falls across the site, the vertical grading of an underground drainage system is not expected to present any significant issues.

Using the example of possible implementation of development plan across all precincts, we have been able to outline an indicative internal underground drainage network layout. It is anticipated that a network of underground piped drainage will flow via gravity into the drainage network in the Island View Estate via 3 to 4 connections along the northern boundary of the proposed development, with pipe sizes ranging in diameter from 225mm diameter upstream to a maximum of 600mm diameter at the outlets.

With regard to potential Water Sensitive Urban Design possibilities within the site, Beveridge Williams have advised that the design for the Island View Estate has only allowed for pre-developed flows for detention and treatment of runoff from the DPO 23 land. Due to the minimal area of open space proposed, the site is relatively constrained however there is scope to plan for sufficient WSUD measures. A potential option to incorporate WSUD into the plan is to introduce a wider road reserve width to allow for grassed swales or bioretention swales. The areas of open space along the northern boundary of the development would also serve as appropriate locations to incorporate bioretention systems into the drainage strategy, to treat runoff prior to discharge from the site. The locations of the share treatment will depend on the final contours, road layouts and the orientations of the lot layout.

The individual precincts could possibly develop their own storm water treatment infrastructure on their land. However, this will not be the most cost effective solution as some of the treatments are expensive to build and maintain. The other advantage of having shared treatment is to minimise the number of drainage connections to the adjacent estate. (See text box below: Water Sensitive Urban Design.)

Water Sensitive Urban Design (WSUD)

Key principles of WSUD

- Protect waterways within urban developments so that they can remain valuable community assets that enhance liveability and support the ecosystems that rely on them.

- Manage stormwater in the landscape rather than drain it all to waterways. This reduces the volume and frequency of stormwater drained and increases the quality before stormwater reaches waterways.

- Add multiple benefits while minimising development costs: Provide for a range of benefits such as alternate supply, improved amenity and safety. WSUD minimises the drainage infrastructure development costs by reducing pipe sizes and potentially replacing other large scale reticulated water systems with local solutions.

WSUD applications can include a range of applications, including:

- Grassed or landscaped swales;
- Infiltration trenches and bio-retention systems;
- Gross pollutant traps, wetlands and sediment ponds;
- Rainwater tanks – stormwater harvesting and reuse;
- Grey water harvesting and reuse;
- Rain gardens, rooftop greening and urban forests;
- Porous pavements; and
- Aquifer recharge and reuse.

Electricity

SP Ausnet is the responsible authority for the provision of electricity to proposed development within this area. Their distribution network in the area consists of electrical conductors to transport energy from one point to another and substations to convert electricity from one voltage level to another.

SP Ausnet has advised that in order to provide further advice on future servicing strategies, a formal application for supply must be made at a later stage when plan of subdivision, road construction plan face sheets, etc. are available. SP Ausnet offer a number of supply options, including full design and construction by SP Ausnet, and preparation of design only by SP Ausnet (developer to construct).

Telecommunications

Telstra is the responsible authority for the provision of telecommunication facilities in this area. Telstra states that regardless of the conditions of the development they are obliged under legislation to provide basic communication services. The developer is normally required to provide all civil works associated with Telstra cabling works. Telstra cables are able to be placed within the same trenches as electrical utilities which can significantly reduce costs of installation.

Gas

SP Ausnet has advised that there is currently no gas reticulation network within the development area. However, documentation received from other consultants has revealed that Westernport Water has previously provided an LPG bottled gas supply to parts of San Remo. Bottled gas is an effective method to enable consumers who live in areas where natural gas pipes can't reach, to utilise LPG heating, hot water and cooking appliances.

Infrastructure strategy

With regard to water, each precinct is expected to have its own connection to an existing water main. Likewise with drainage: based on data obtained we can assume that each precinct will be able to independently connect to the Island View Estate to the north.

We would also ultimately recommend design and construction of a bioretention system for each sub-precinct to enable runoff to be treated prior to discharge from the site, however it's not possible to provide an indicative cost for a bioretention system without undertaking a detailed design to calculate the required size or composition of the system.

With all the above in mind, we expect that the sequence of development of the precincts wouldn't be a major factor in terms of constructability.

Shared infrastructure

The infrastructure needs assessment identified the need for shared sewer infrastructure to service the DPO 23 area. The cost of this infrastructure, based on an assessment of the required specification and current construction cost, has been estimated at $202,000. (Cots have been obtained from Rawlinsons Australian Construction Handbook 2013, and validated in most cases with schedules of rates from previous Persons Brinckerhoff projects as well as a local contractor.)
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