

Low density residential interface with Plenty River environs. Refer to Figure 3.5

Remnant River Red Gums should be protected through appropriate subdivision design. Trees may be incorporated into large lots, roadside nature strips or pocket parks. Refer to Figure 3.15 for design requirements in environmentally sensitive areas.

Note:

This plan presents the expected land-use and design patterns for Precinct 1 at the time of publication. Precinct 1 is affected by an existing Local Structure Plan and Outline Development Plan, which remain in operation. This *Precinct Plan* is provided for information purposes only.

Opportunity for residential frontage to the Plenty River Corridor using a Boulevard Road treatment. Refer to Figure 3.5

Hilltop area to be retained as open space to preserve visual amenity, protect existing vegetation and to provide habitat link to Brennan's Forest.

The Highland Farm to be retained and adapted for public use within open space.

Refer to Figure 3.7. For design requirements within visually sensitive areas.

Hilltop areas to be included in open space to enhance visual amenity and protect remnant vegetation. Farm buildings with local character value to be preserved for possible community uses. Stables to be incorporated into a thematic development.

Cypress windbreak to be retained in local open space network and Laurimar trail system.

Visual connection to vegetated hilltop is enhanced by extending open space along the ridge. Exotic gardens surrounding hilltop farm to be preserved.

Thematic entrance treatment that responds to local rural character. To feature locally sourced materials and indigenous vegetation.

Low density residential interface with rural land-uses on the eastern side of Yan Yean Road. Lots to be accessed internally with buffer planting along Yan Yean Road. Refer to Figure 3.4.

Remnant indigenous vegetation and mature exotic trees protected in open space.

Linear open space alongside drainage reserves permits walkers and cyclists to move freely between precincts. Major activity nodes are integrated with the open space network.

Precinct activity centre comprising retail, business/commercial and community land-uses to be integrated with school site and open space and supported by medium-density housing.



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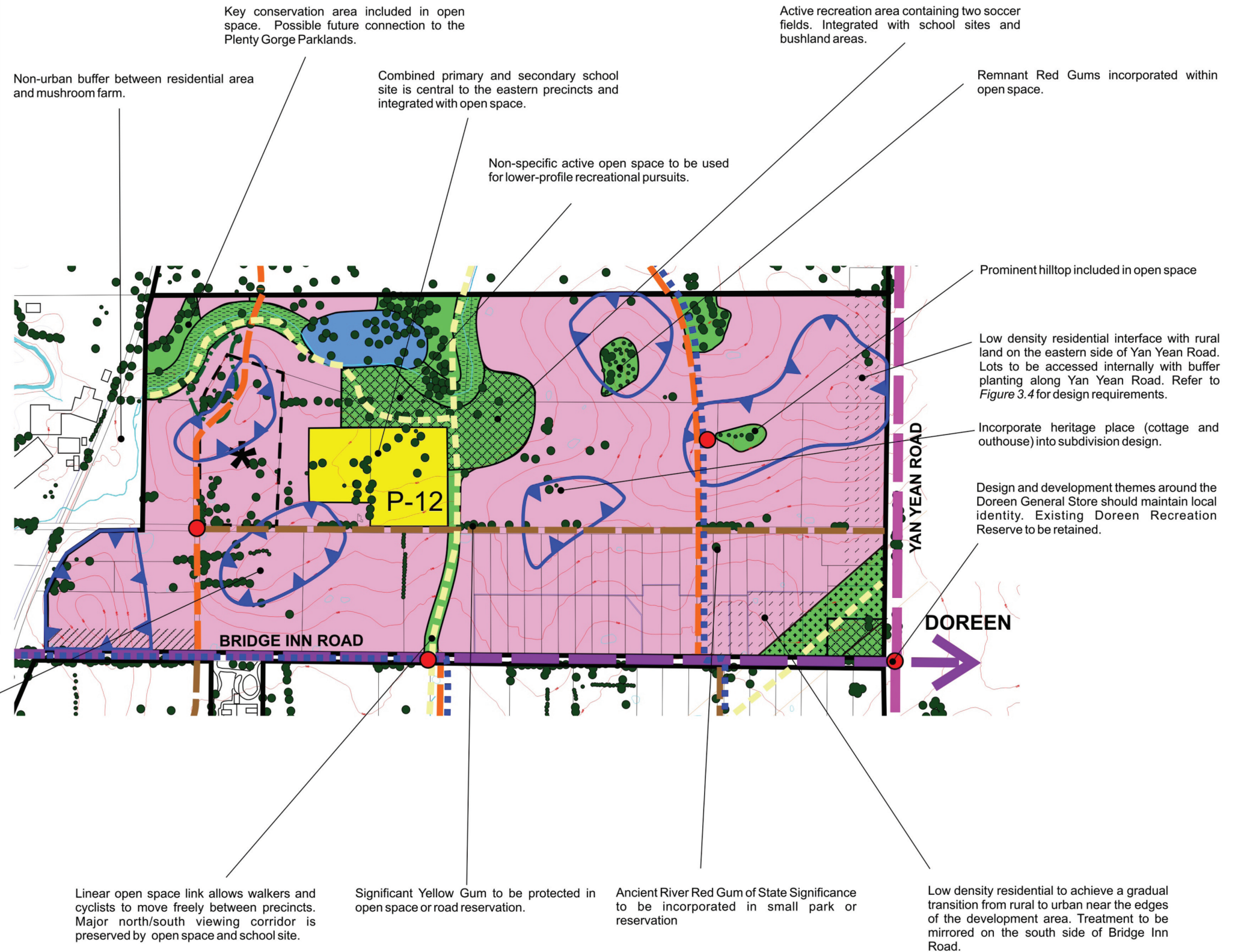
MERENDA STRATEGY PLAN

City of Whittlesea

Plan 3.3

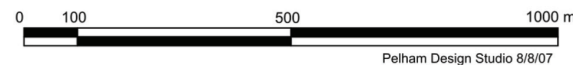
Precinct 2A Plan

- PRECINCT BOUNDARY
- LOCAL CONVENIENCE CENTRE
- SCHOOL: GOVERNMENT P-12
- POSSIBLE DENOMINATIONAL SCHOOL SITE
- RESIDENTIAL:**
- LOW DENSITY
- STANDARD DENSITY (LOT SIZE: 450-700 SQ.M.)
- MEDIUM DENSITY (LOT SIZE: 200-450 SQ.M.)
- PRIMARY BUS ROUTE
- ROADS:**
- PRIMARY ARTERIAL
- SECONDARY ARTERIAL
- SUB-ARTERIAL
- COLLECTOR
- BICYCLE / PEDESTRIAN TRAILS:**
- OFF-ROAD
- VISUALLY SENSITIVE DESIGN AREA
- ENVIRONMENTALLY SENSITIVE DESIGN AREA
- OPEN SPACE:**
- PASSIVE / CONSERVATION BUSHLAND
- ACTIVE RECREATION
- DRAINAGE RESERVE
- TRANSMISSION LINE EASEMENT
- RETARDING BASIN / WETLAND APPROXIMATE AREAS ONLY - DETAILS TO BE CONFIRMED WITH MELBOURNE WATER



Note:

The land-use and design concepts provided on this plan should be read in conjunction with the key objectives and strategic responses detailed in the Mernda Strategy Plan document. Refinement of Precinct Plans may occur in the preparation of detailed development plans.



Pelham Design Studio 8/8/07



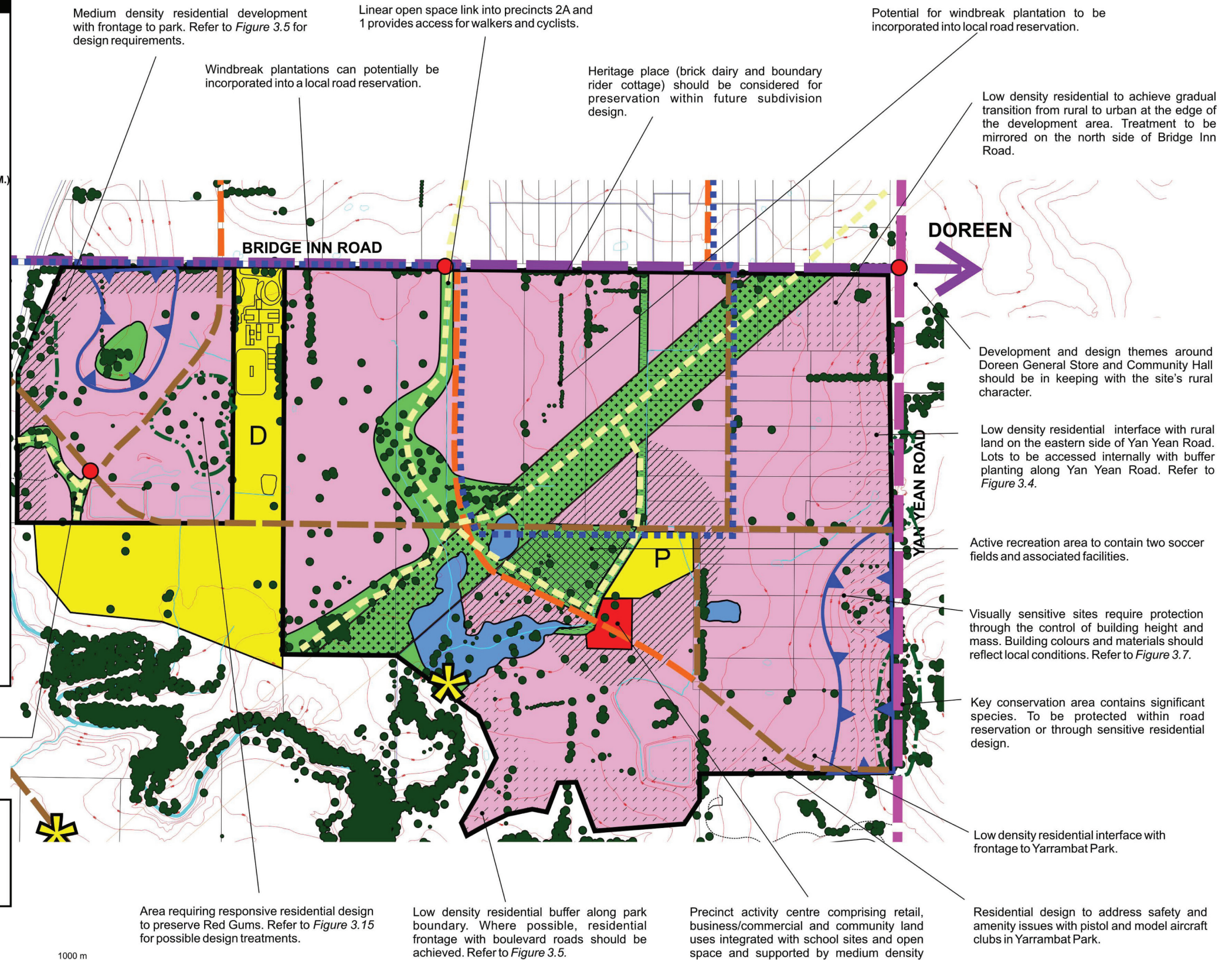
MERNDA STRATEGY PLAN

City of Whittlesea

Plan 3.4

Precinct 2B Plan

- PRECINCT BOUNDARY
- PRECINCT ACTIVITY CENTRE
- LOCAL CONVENIENCE CENTRE
- SCHOOLS: GOVERNMENT PRIMARY (P)
- RESIDENTIAL:
 - LOW DENSITY
 - STANDARD DENSITY (LOT SIZE: 450-700 SQ.M.)
 - MEDIUM DENSITY (LOT SIZE: 200-450 SQ.M.)
- PRIMARY BUS ROUTE
- ROADS
 - PRIMARY ARTERIAL
 - SECONDARY ARTERIAL
 - SUB-ARTERIAL
 - COLLECTOR
- BICYCLE / PEDESTRIAN TRAILS:
 - OFF-ROAD
 - WITHIN ROAD RESERVATION (FOOTPATH WIDENED TO 2.0M MINIMUM)
- VISUALLY SENSITIVE DESIGN AREA
- ENVIRONMENTALLY SENSITIVE DESIGN AREA
- OPEN SPACE:
 - PASSIVE / CONSERVATION BUSHLAND
 - ACTIVE RECREATION
 - DRAINAGE RESERVE
 - TRANSMISSION LINE EASEMENT
 - RETARDING BASIN / WETLAND APPROXIMATE AREAS ONLY - DETAILS TO BE CONFIRMED WITH MELBOURNE WATER
- SEWERAGE FLOW CONTROL FACILITY



Note:

The land-use and design concepts provided on this plan should be read in conjunction with the key objectives and strategic responses detailed in the Mernda Strategy Plan document. Refinement of Precinct Plans may occur in the preparation of detailed development plans.



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MERNDA STRATEGY PLAN

City of Whittlesea

Plan 3.5 Precinct 3 Plan

- PRECINCT BOUNDARY
- MERNDA TOWN CENTRE COMPREHENSIVE DEVELOPMENT ZONE
- RETAIL/MIXED USE
- PRECINCT ACTIVITY CENTRE
- LOCAL CONVENIENCE CENTRE
- SCHOOL: GOVERNMENT PRIMARY
- RESIDENTIAL:**
 - LOW DENSITY
 - STANDARD DENSITY (LOT SIZE: 450-700 SQ.M.)
 - MEDIUM DENSITY (LOT SIZE: 200-450 SQ.M.)
- PRIMARY BUS ROUTE
- ROADS:**
 - PRIMARY ARTERIAL
 - SUB-ARTERIAL ROAD
 - COLLECTOR ROAD
- BICYCLE / PEDESTRIAN TRAILS:**
 - OFF-ROAD
 - WITHIN ROAD RESERVATION (FOOTPATH WIDENED TO 2.0M MINIMUM)
- VISUALLY SENSITIVE DESIGN AREA
- ENVIRONMENTALLY SENSITIVE DESIGN AREA
- OPEN SPACE:**
 - PASSIVE / CONSERVATION BUSHLAND
 - ACTIVE RECREATION
 - DRAINAGE RESERVE
 - RETARDING BASIN / WETLAND APPROXIMATE AREAS ONLY - DETAILS TO BE CONFIRMED WITH MELBOURNE WATER

Note:
The land-use and design concepts provided on this plan should be read in conjunction with the key objectives and strategic responses detailed in the *Mernda Strategy Plan* document. Refinement of *Precinct Plans* may occur in the preparation of detailed development plans.

Low density residential lots to create an open character near the edge of the plan area. Mirrored by corresponding development on the south side of Bridge Inn Road.

Low density residential interface to provide a visual transition to surrounding rural land. These lots should have internal access as shown in *Figure 3.4*.

Low density residential buffer along Masons Lane to achieve subtle transition from rural to urban.

Key conservation area. Trees not included in open space should be protected through sensitive residential design. Refer to *Figure 3.15* for possible design solutions.

High amenity gateway treatment at the northern entrance to the Mernda growth area. Design should be responsive to local environmental and rural character.

Open Space connection to Grassy Red Gum Woodland north of Masons Lane.

Key conservation area protected in passive open space.

Regional recreational node. Accessible and close to Mernda town centre. Will contain high-grade football/cricket ovals, soccer fields, tennis complex, bowling greens and sites for an aquatic centre and multi-purpose stadium. Strongly integrated with medium density housing areas and passive open space.

Historic bluestone house "Preston Hall" to be retained and incorporated into active recreation precinct.

Heritage places such as Graff's farmhouse and St Josephs Church to be protected within medium density housing area.

Development in proximity to the Mernda town centre to contain higher residential densities to support retail and community land uses and public transport. Key heritage items such as the Mechanics Institute should be incorporated into designs to maintain connections with the area's rural history.

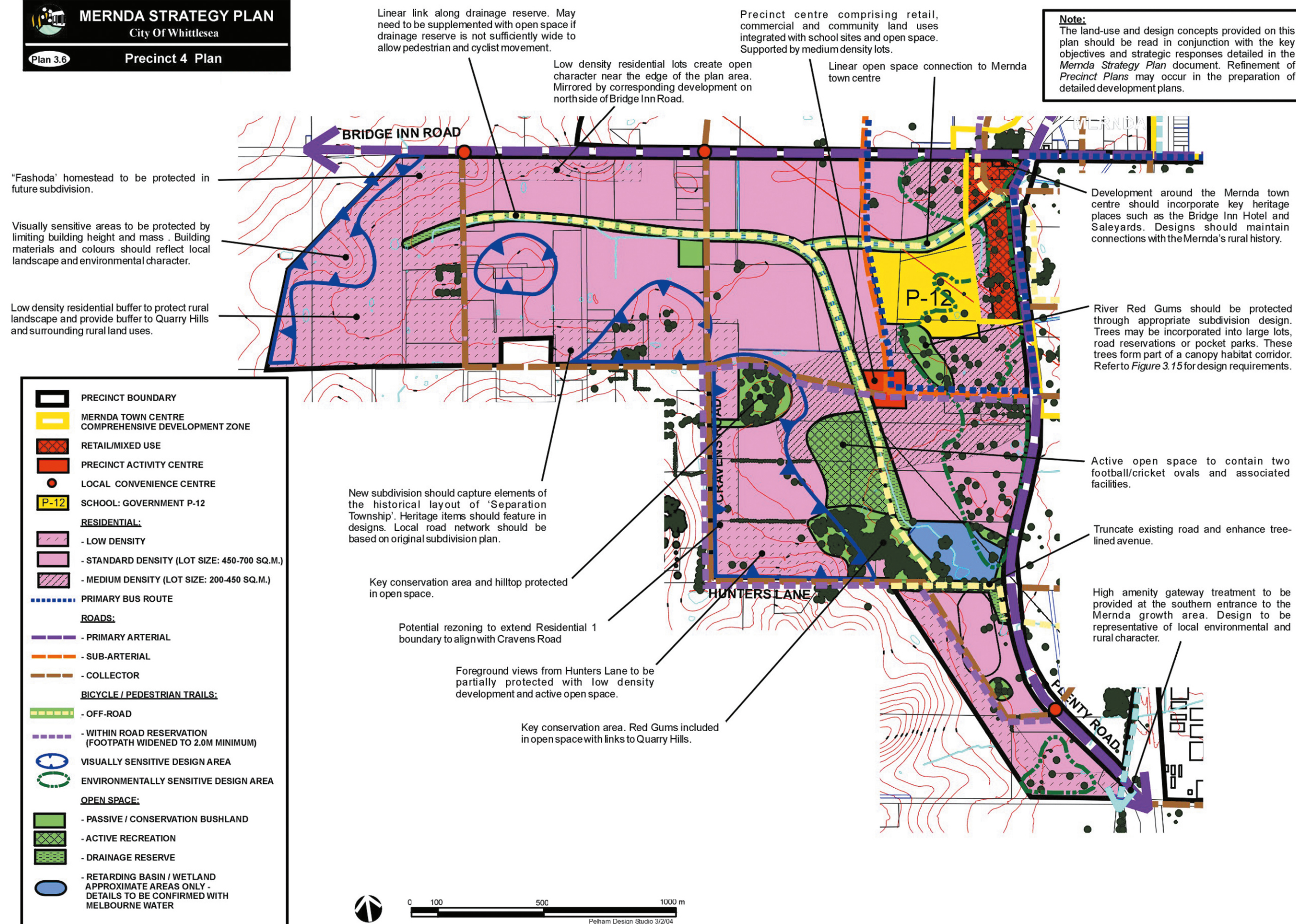
Sites for retail and business/commercial land-uses requiring arterial road frontage.

Refer to *Figure 3.7* for recommended design treatments in visually sensitive areas

Precinct activity centre comprising retail, business/commercial and community land uses integrated with school sites and open space and supported by medium-density lots.



Pelham Design Studio 3/2/04



MERNDA STRATEGY PLAN

City of Whittlesea

Plan 3.7 Precinct 5 Plan

- PRECINCT BOUNDARY
- MERNDA TOWN CENTRE COMPREHENSIVE DEVELOPMENT ZONE
- RETAIL/MIXED USE
- LOCAL CONVENIENCE CENTRE
- SCHOOLS: GOVERNMENT PRIMARY
- RESIDENTIAL:**
 - LOW DENSITY
 - STANDARD DENSITY (LOT SIZE: 450-700 SQ.M.)
 - MEDIUM DENSITY (LOT SIZE: 200-450 SQ.M.)
- RAIL STATION / MODAL INTERCHANGE
- RAIL RESERVE
- PRIMARY BUS ROUTE
- ROADS:**
 - PRIMARY ARTERIAL
 - SUB-ARTERIAL
 - COLLECTOR
- BICYCLE / PEDESTRIAN TRAILS:**
 - OFF-ROAD
 - WITHIN ROAD RESERVATION (FOOTPATH WIDENED TO 2.0M MINIMUM)
 - REGIONAL
- OPEN SPACE:**
 - PASSIVE / CONSERVATION BUSHLAND
 - ACTIVE RECREATION
 - DRAINAGE RESERVE
 - RETARDING BASIN / WETLAND APPROXIMATE AREAS ONLY - DETAILS TO BE CONFIRMED WITH MELBOURNE WATER
 - SEWERAGE FLOW CONTROL FACILITY

Mayfield Farm heritage area is to be protected as a cultural focal point within the Mernda town centre

Berry Lane is to be preserved and reestablished as a pedestrian/bicycle link between Plenty Road and the Thomas Mill and bluestone flume in the Plenty Gorge Parklands.

Designated site for possible railway station and modal interchange. The design of the town centre will be supportive of this transport node.

Mernda town centre - approximately 50 hectares in area (including land in Precinct 3&4). At full development the centre could support up to 27,500 m² (GFA) of retail and 77,450 m² (GFA) of business/commercial. Land has also been set aside for possible one-off uses such as a tertiary education campus. Refer to detailed development plan.

Low density interface to Plenty Gorge Parklands. Boulevard Road to allow residential frontage and long distance views into the park. Refer to Figure 3.5.

Yan Yean Pipe Track reservation to provide possible bicycle trail link between Yan Yean Reservoir and established urban areas. Local streets should allow residential frontage on at least one side of the reservation.

Bicycle/Pedestrian Trail to link in with the proposed trail system in the Plenty Gorge Parklands.

Informal play area to meet local active recreation needs.

Low density interface with Plenty Gorge Parklands.

Low density interface to nationally significant Morang Wetlands on the south side of Wilton Vale Road.

Key conservation area to be protected in open space

Note:

The land-use and design concepts provided on this plan should be read in conjunction with the key objectives and strategic responses detailed in the Mernda Strategy Plan document. Refinement of Precinct Plans may occur in the preparation of detailed development plans.



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Pelham Design Studio 3/2/04

Refer to Figure 3.22 for design treatments on land adjacent to transmission line easements

3.2 The Transportation System

Key Objective:

To put in place an efficient, equitable and environmentally sustainable transportation system that reduces car dependence, encourages walking and cycling for local trips, and supports local economic activity.

Strategic Actions:

3.2.1 The Road Network

- The MSP area will be served by an integrated road network comprising:
 - Primary Arterial Roads
 - Secondary Arterial Roads
 - Sub Arterial Roads
 - Collector Roads
 - Local Streets and Laneways
- Plan 3.8 – Road and Public Transport System shows the proposed network of arterial and major collector roads. A description of each road type is given in Table 3.2 and typical cross sections are provided in Figure 3.8. Table 4.1 gives further information on road infrastructure requirements.
- The road network should be designed to integrate transport and land-use. Land-uses that generate a high number of vehicle trips, such as employment nodes, should be located on roads that can efficiently carry these traffic loads. Land-uses such as schools and community facilities, which attract significant numbers of pedestrians and cyclists, should be situated to be accessible by these transport modes.

a) Arterial and Collector Roads

- Arterial and collector roads will form the skeleton of the Mernda growth area. They should have the following characteristics:

- provide the most convenient routes for long-distance travel to external destinations and other arterial roads such as the Metropolitan Ring Road
- have direct development frontage through the use of service lanes
- be integrated with lower-order roads in the network
- provide access to activity centres without becoming barriers to pedestrian movement and social activity
- incorporate water sensitive urban design treatments

b) Local Streets and Laneways

- The local street and laneway system will be designed as part of the Development Plan process. These streets should have the following characteristics:
 - connect residential precincts and activity centres
 - be based on a modified-grid layout that is responsive to landform
 - allow development to front streets and open space
 - not attract large volumes of traffic destined for arterial roads
 - offer multiple routes to internal destinations in order to evenly distribute traffic and provide better environments for cyclists and pedestrians
 - incorporate water sensitive urban design treatments

Refer to Figure 3.9

Figure 3.9 Small local parks should be provided at the termination of culs-de-sac to allow pedestrian and bicycle access and permit future road connections if required.
Source: W.A. Planning Commission (1997)

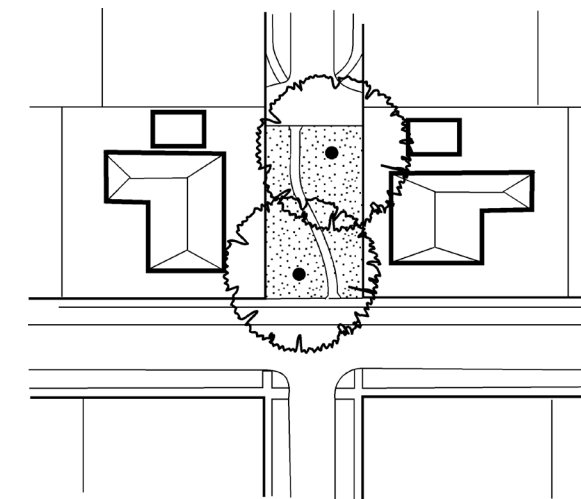


Figure 3.11 Water sensitive road layout.
Source: Melbourne Water (1999)

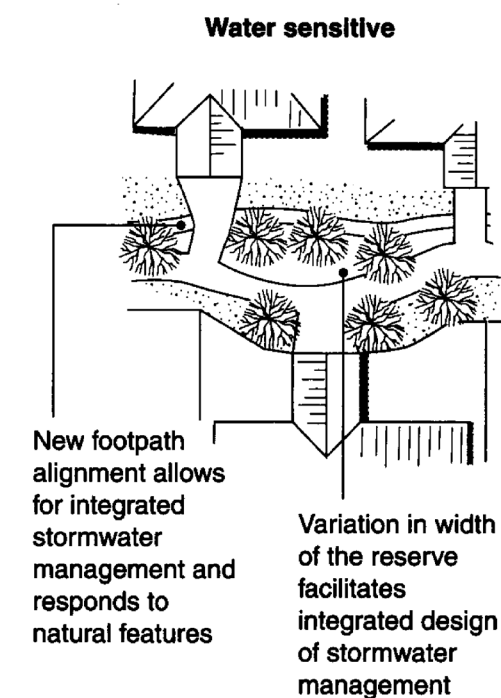


Figure 3.10 Water sensitive cross-section of road.
(Source Melbourne Water, 1999)

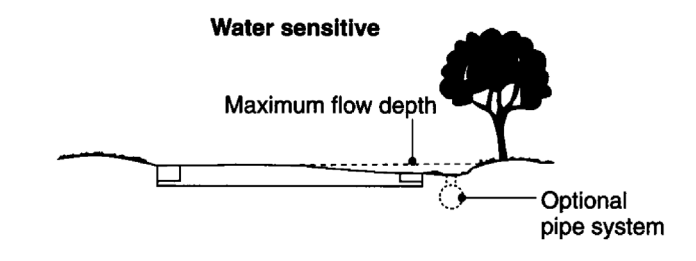
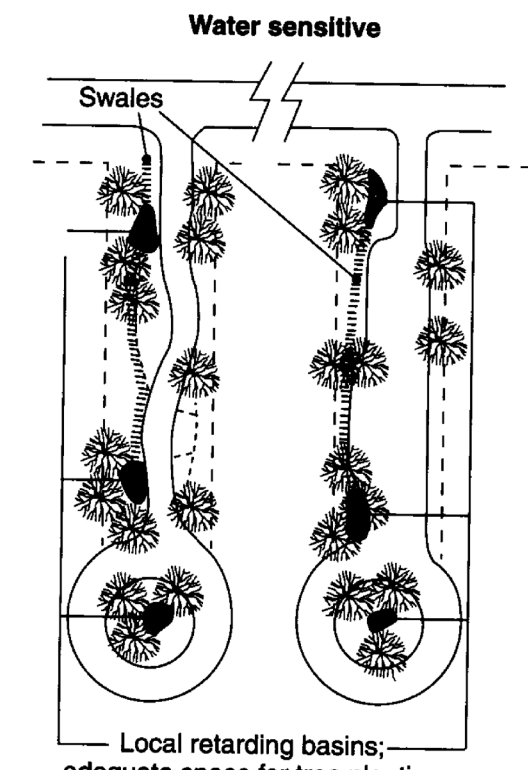


Figure 3.12 Water sensitive road verge design and management
Source: Melbourne Water (1999)



3.2.2 Streetscape Themes

- All roads should be designed to make a positive contribution to the urban landscape. The arterial and collector roads in Mernda should appear as parkways that link key destinations. Road reservations should accommodate mature canopy trees and plantings should extend into adjoining developments.
- Local streets should have planting themes that are appropriate to the prevailing site conditions. For example, streets near “key

- conservation areas”, as identified on the Precinct Plans, should be planted with indigenous species. All local streets should appear to be an extension of the open space system. They should be thought of as public spaces that play a wider role than merely enabling traffic movement. Existing trees should be protected in road reservations wherever possible.
- Streetscapes should be designed to meet stormwater management requirements as well as vehicular and pedestrian needs. This may involve reduced lot frontage widths, the use

of roads for stormwater storage or diversion, and the landscaping that compliments WSUD principles.

3.2.3 Walking

- Walking should be encouraged by concentrating attractions in highly accessible activity centres. Attention to urban design and the treatment of roads as “public spaces” will make walking an attractive transport option.
- Footpaths should generally be provided on both sides of all streets and roads. Where development occurs on only one side of the street, or where traffic volumes are particularly low (<100 vpd), a footpath on one side of the street may be appropriate. On these roads a grass swale may be provided on the other side of the road. Footpaths should generally be 1.5 metres wide and at least 2 metres wide near schools and activity centres. The design of footpaths should have regard for the needs of disabled and elderly people. Consistent construction materials and adequate lighting should be provided.
- Pedestrian routes should have surveillance from buildings and roads wherever possible. Pathways through car spaces and other unsupervised spaces should be avoided.
- Walking for recreation and health purposes will be encouraged through the provision of off-road trails throughout the open space network. These are shown on Plan 3.9 – Bicycle and Pedestrian Trail Network.

dedicated off-pavement cycle land should be provided. On sub-arterial and collector roads carrying in excess of 3,000 vehicles per day, marked on-pavement cycle lanes with widened car parking spaces should be provided. Details about cycle lanes on various road types is provided in Table 3.2.

- The local streets should be designed to provide low-speed, on-pavement cycle routes that can be used as an alternative to arterial or collector roads.
- Widened dual-use footpaths (minimum width of 2 metres) that cater for cyclists and pedestrians should be provided on key routes near activity centres and schools. Where sub-arterial or collector roads form an important link in the cycle trail system, widened footpaths will also be required. These roads are identified on Plan 3.9.
- Cycle storage facilities should be provided at public transport nodes to encourage multi-purpose trips.

3.2.5 Public Transport

- The extension of a heavy rail service to Mernda is central to the overall transport strategy. It is envisaged that the Epping line will be extended initially to South Morang and ultimately to a transport interchange in the Mernda Town Centre. Parking space should be provided near the station to encouraging park-and-ride commuting from the wider catchment.
- The timely introduction of rail-based public transport should be promoted by ensuring that development in the Mernda Town Centre is physically supportive of these services. Built form around transport nodes should have the following characteristics:

3.2.4 Cycling

- Arterial roads must be designed to provide safe conditions for both commuter and recreational cyclists. On Plenty Road, Bridge Inn Road, the E6, and Yan Yean Road a

Figure 3.13 Water sensitive building/street interface.
Source: Melbourne Water (1999)

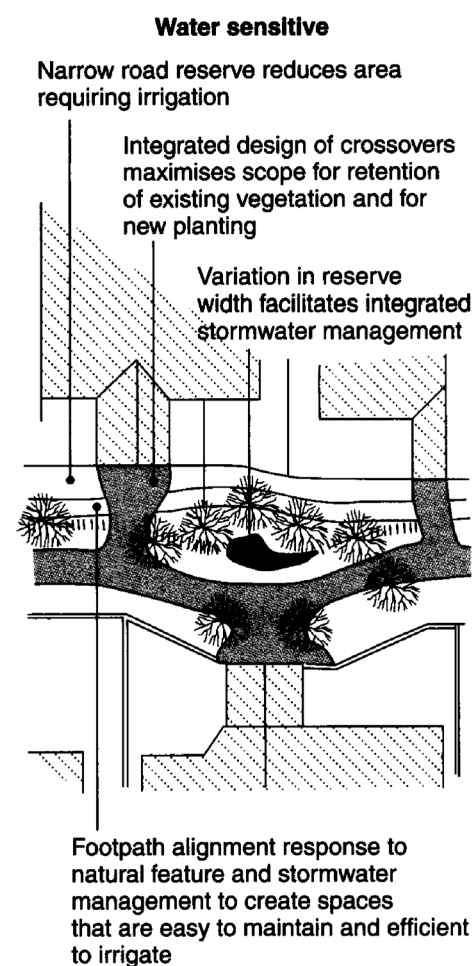


Figure 3.14 Water sensitive Cul-de-sac streetscape
Source: Melbourne Water (1999)

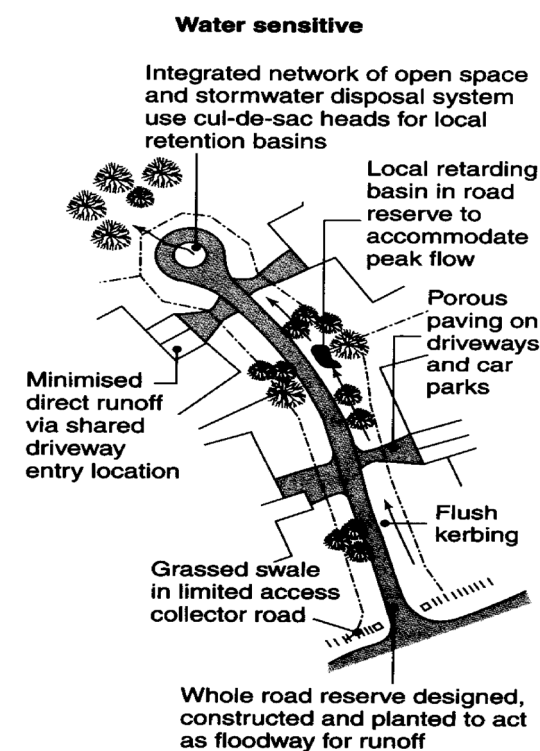
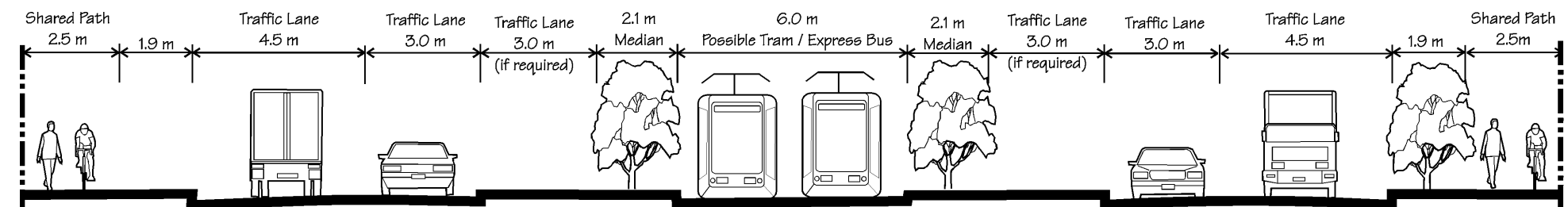


Figure 3.8(a) Typical cross sections for Primary Arterial Roads

- higher than average residential densities
- a diversity of land-uses to generate activity over a 24-hour period
- convenience and safety for public transport users
- Bus routes should follow arterial and collector roads and link key destinations such as activity centres, schools and the regional recreation reserve in Precinct 3. An indicative bus route is shown on Plan 3.8 – Roads and Public Transport.
- The option of providing a fixed-route express bus or light-rail service along Plenty Road and Bridge Inn Road should be preserved by providing a central reservation in the road cross-section.



PRIMARY ARTERIAL ROAD - PLENTY ROAD (Hunters Lane to Bridge Inn Road)

40 m Road Reserve
6 Lane Divided Carriageway
Central Median Lane for Tram or Express Bus
Off-pavement Bicycle Lanes



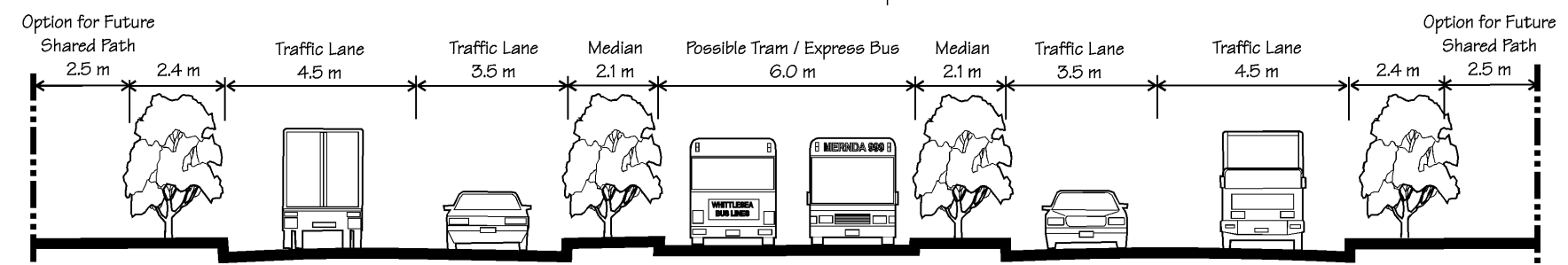
PLENTY ROAD (Bridge Inn Road to Masons Road)

40 m Road Reserve
4 Lane Divided Carriageway
Central Median Lane for Tram or Express Bus
Off-pavement Bicycle Lanes



BRIDGE INN ROAD (Western Boundary of Strategy Plan to Yan Yean Road)

36 m Road Reserve
4 Lane Divided Carriageway
Central Median Lane for Tram or Express Bus



BRIDGE INN ROAD (E6 Roadway to Western Boundary of Strategy Plan to Yan Yean Road) & E6 ROADWAY (Bridge Inn Road to Findon Road)

36 m Road Reserve
4 Lane Divided Carriageway
Central Median Lane for Tram or Express Bus