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## 1 INTRODUCTION

1. The Woonona (Edgewood Estate) Precinct Plan is included in Part D of the DCP. Part A of the DCP contains the Introduction. Part B in the DCP provides land use based controls for residential subdivision, residential development and development upon lands situated within the Illawarra Escarpment. Part C of the DCP provides city wide controls for specific land uses. Part E of the DCP contains city wide planning / environmental assessment control chapters which may apply to certain lands in this precinct.
2. In the event that the provisions contained in this precinct plan are inconsistent with the provisions of any other part of the DCP, the provisions of this precinct plan shall prevail to the extent of the inconsistency.

## 2 LAND TO WHICH THIS PLAN APPLIES

1. This precinct plan applies to the Edgewood Estate (i.e. former “Boral Brickworks Site”), Princes Highway, Woonona.

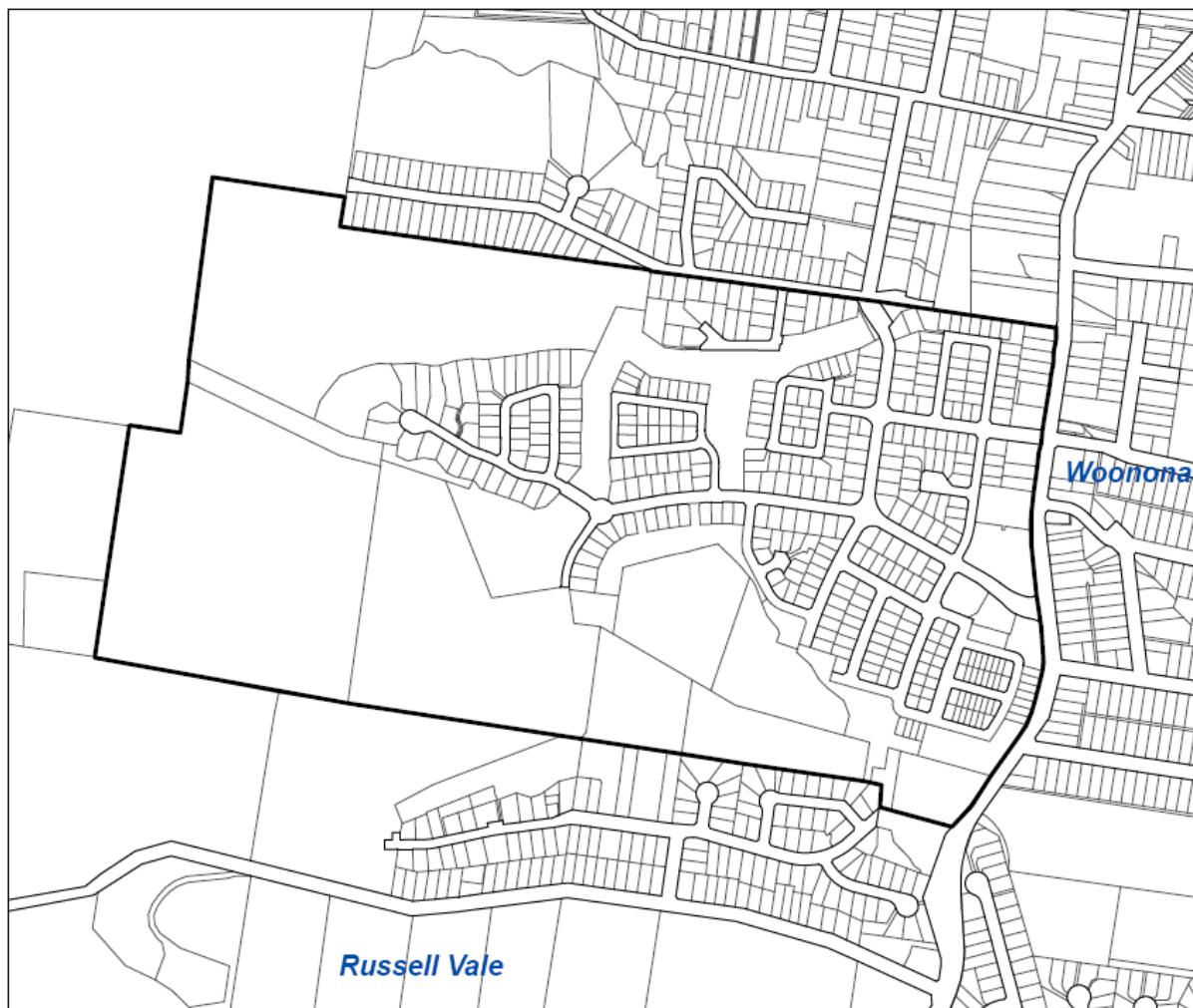


Figure 1: Land to which this plan applies

### 3 AIMS AND OBJECTIVES

1. The general objective of these controls is to encourage an environmentally sustainable rehabilitation of the site with a comprehensive residential development which achieves a strong sense of identity and provides the setting for attractive living with high levels of landscape and environmental amenity.
2. The aim of the controls is to provide guidelines for subdivision to achieve this objective and to promote appropriate urban design to:
  - (a) Create a finished landform that is geotechnically stable and environmentally suitable for residential habitation;
  - (b) Encourage a range of housing opportunities within a high quality residential environment;
  - (c) Develop a clear and safe hierarchy of roads and pedestrian ways to integrate the site with the Woonona Community;
  - (d) Provide public places which capitalise upon the positive natural features of the site and which create a high quality environment for recreation and conservation;
  - (e) Establish an acceptable interface between residential development within the site and the sensitive flora/fauna habitats associated with the Illawarra Escarpment foothills adjoining the site to the west;
  - (f) Ensure that the development does not result in an increase in stormwater run-off so as to cause an adverse flood impact both within the site and downstream;
  - (g) Achieve a built environment that is sympathetic to climate comfort and energy saving and promotes a high level of social comfort and privacy;
  - (h) To maintain employment opportunities within the site; and
  - (i) To adopt appropriate measures against bushfire hazard.

### 4 DEVELOPMENT CONTROLS

#### 4.1 Development Concept

1. The site is to be developed generally in accordance with the Master Plan which seeks to achieve a strong sense of identity and the provision of a setting for living areas with high levels of landscape and environmental amenity.
2. The principle features incorporated in the Master Plan include:
  - (a) A total of 520 dwelling units within a range of housing types;
  - (b) The retention of land within the site's south-eastern corner for employment generating activities;
  - (c) The protection of Collins Creek;
  - (d) The improvement of Hollymount Creek together with a water feature and the development of associated recreation areas;

- (e) The inclusion of stormwater management controls to address local drainage; and
  - (f) The linkage of this site to the existing Woonona community by the adoption of appropriate movement systems for traffic, bicycles and pedestrians.
3. The development is to be undertaken in stages generally in the direction from north to south and this staged development will require reasonable amelioration measures to ensure that the impact of construction will not:
  4. Be unacceptable to the existing residents both within and adjoining the site, particularly with regard to noise, traffic management and air borne contaminants; and
  5. Put at risk the important natural features within and adjacent to the site that must be conserved (ie. flora/fauna habitats, riparian corridors etc.).

## 4.2 Design and Siting Guidelines

### 4.2.1 Traffic Management

- (a) Traffic control and circulation is a primary consideration to ensure the best entry and exit locations for the residential development and to provide connectivity with the surrounding Woonona community. The indicative Masterplan provides for:
- (b) An intersection of the Princes Highway and Gray Street and the signalisation of this intersection;
- (c) An access between the intersection of Hale Street and Alfred Street to provide a second central convenient entry; and
- (d) The extension of High Street into the site and the connection of this extension directly to the Princes Highway via the proposed signalised intersection at Gray Street.
- (e) Each road within the site will serve a particular function and will be constructed in accordance with the requirements of this function. The road hierarchy is shown in Figure 3 and 4 and includes:
  - (i) Type A: 17 metre wide road reserve (4.5 metres – 8.0 metres – 4.5 metres) to distribute the traffic throughout the site and to provide opportunities for public transport. Pedestrian pathways are to be provided on both road verges.
  - (ii) Type B: 16.2 metres wide road reserve (4.5 metres – 7.2 metres – 4.5 metres) to distribute the traffic throughout the site. A pedestrian pathway is to be provided within one road verge.
  - (iii) Type C: 13 metres wide road reserve (3.5 metres – 6.0 metres – 3.5 metres) to act as access roads to a range of housing types and designed to encourage vehicle speeds of 40kph or less (without designated street parking bays). A pedestrian pathway is to be provided within one road verge along selected roads as determined by Council.
- (f) Where roads abut public open space, footpath widths adjacent to the open space will be 1 metre.
- (g) A pedestrian pathway system must be integrated within the site to provide safe and convenient access:
- (h) Within the confines of the site; and

- (i) To external community nodes such as public schools, recreation facilities and the like.

#### **4.2.2 Urban Design**

- (a) A variety of building styles is to be encouraged for the purpose of creating a vibrant urban setting. All dwellings are to be thoughtfully located and recognise the siting of dwellings on adjoining properties to encourage optimal visual and functional amenity within the neighbourhoods. In particular, all buildings and their siting should:
  - (b) Make a positive and harmonious contribution to the general appearance of the neighbourhood;
  - (c) Make efficient use of the site without adversely impacting on the neighbours; and
  - (d) Encourage good solar-passive siting solutions that will result in energy efficient dwellings and living zones.

##### ***1. Building Controls for Residential Buildings***

- a) Except where approved by Council for corner duplexes and townhouses, only one (1) dwelling shall be permitted on each allotment.
- b) The maximum permissible height is three (3) storeys above average finished ground level.
- c) The maximum site coverage on allotments is fifty per cent (50%). Site coverage is defined as the area of site covered by buildings but excludes roof overhangs and verandahs. Pergolas and leisure and recreational purpose areas that are either wholly or partly open to the elements, such as shade structures, translucent roofs and the like may be approved by Council exclusive of the 50% coverage.
- d) All dwellings must be designed to ensure adequate privacy and solar amenity. In particular, two (2) and three (3) storey dwellings shall be designed to minimise overlooking and overshadowing of adjoining dwellings and their major landscaped open spaces.

##### ***2. Vehicular Access and Car Parking***

- (a) A minimum of two (2) off-street parking spaces are to be provided for each lot with at least one (1) space being accommodated within an enclosed garage.
- (b) Garages and carports should be designed as an integral part of the house by incorporation under the dwelling roofline.
- (c) Where garages present a side wall to the street, that wall shall be relieved with a window(s) or glass blocks with a minimum area of 2.0m<sup>2</sup>.
- (d) All structures for off-street parking for standard residential allotments should be behind the street building alignment and 0.5 metres behind the face of the entry porch or habitable rooms facing the street unless it can be demonstrated that the structure meets the Urban Design principles established.
- (e) All structures for off-street parking for non-standard residential allotments should be behind the street building alignment and no greater than 2.5 metres in front of the entry porch or habitable rooms facing the street unless it can be demonstrated that the structure meets the Urban Design principles established.

### 3. Boundary Setbacks

- (a) Front setbacks from boundary to building line must generally be a minimum of three (3) metres. A 600mm roof overhang is permitted within this space.
- (b) The garage setback to front boundary on allotments greater than 550 square metres is equal to or greater than 5 metres.
- (c) Except where otherwise specified herein, side and rear boundary clearances must accord with the siting requirements of the Building Code of Australia (BCA) unless the requirements of a ‘built to boundary’ wall are fulfilled (ie. zero lot line).
- (d) ‘Built to boundary’ walls do not contain windows or openings and are limited to:
  - i. One side boundary;
  - ii. An average height of 3 metres;
  - iii. A maximum height of 5.3 metres unless they abut a higher existing or simultaneously constructed wall; and
  - iv. A total length of 15 metres.

Note: These provisions do not apply to a carport where it does not include a solid wall located along the boundary.

- (e) For lots having a common boundary with public open space, the building setback to the common boundary must be a minimum of three (3) metres.

### 4. Private Open Space Requirements

- (a) All private open space is to be designed to ensure maximum useability, eg as entry courts, outdoor living spaces, or for service use as appropriate.
- (b) One main open space of no less than 24m<sup>2</sup> is required with an average dimension of 4 metres. This space is not to include clothes drying facilities. Where it occurs on street frontages, it is to be partly screened by a court wall complementary to the building and/or mature landscape planting.

### 5. Boundary Fencing

- (a) No fencing is permitted between the building alignment and street frontage, other than courtyard walls to provide private open space.
- (b) Where courtyards are contained by the building against the zero lot line boundary, a 1.8 metre high masonry courtyard fence is required which must be complementary to the building.
- (c) For all allotments having a common boundary with public open space, black powder coated woven wire or tubular ‘swimming pool’ fencing, of maximum height 1.5 metres, must be erected (unbroken length) from a side boundary for a minimum of 50% of the boundary width. If solid fencing is erected along the balance of this common boundary, it must be a multiple of 3 metres in length and as specified in Figure 5.
- (d) For all allotments having a common boundary with the Deferred Area or the Final Area Landscaped Buffer (see Figures 6 and 7) black powder coated woven wire or tubular ‘swimming pool’ fencing of maximum height 1.5 metres must be erected in an unbroken length between side boundaries.

## 6. Ancillary Structures

- (a) No aboveground structures including clothes lines and garden sheds are permitted between the main building and a boundary facing public open space. Structures such as pergolas and decks that are integrated with the building. Their structures must not be within the 3 metres building setback to public open space.
- (b) To maintain an attractive overall streetscape, caravans, boats or trailers are not permitted to be parked on lots in front of the building line.

## 7. Architectural and Landscaping Design

- (a) Architectural and landscape design should achieve a high degree of privacy, design for climate effects, soil conditions and overall harmony and coherence.
- (b) All dwellings must be predominantly pitched roof of a minimum of 15 degree pitch. Roofing must be non-reflective material and unpainted iron roofing is not acceptable.
- (c) All plumbing and wired services, satellite disks, air conditioning, hot water storage tanks and garbage receptacles must be concealed or screened from general view.
- (d) Dwellings are to be designed and positioned so that driveways generally are not immediately adjacent to one another. In all situations they must have a minimum separation width of 600mm between adjacent driveways.
- (e) Driveways and pathways are to be compatible with architectural design and streetscape and must be constructed of pavers or concrete with exposed aggregates or stamped and coloured – plain concrete is not permitted.
- (f) Where the allotment has a common boundary with public open space, the elevation is to present an attractive built form to the public open space and include not less than 4.0m<sup>2</sup> of window(s).
- (g) Landscape planting is to be provided wherever practical to soften the appearance and give scale to dwellings and fences.
- (h) Lots adjoining a E2 Environmental Conservation zoning, riparian corridor or along Gahans Lane are required to plant only native tree species.

Due to the estates close proximity to the E2 Environmental Conservation land and riparian corridors, it is recommended that the following native tree species be used within the residential allotments:

Botanic Name	Common Name
<i>Syzygium smithii</i> rhyolitic form	Lilly Pilly
<i>Elaeocarpus reticulatus</i>	Blueberry Ash
<i>Glochidion ferdinandi</i>	Cheese Tree
<i>Backhousia myrtifolia</i>	Lemon Scented Myrtle
<i>Syzygium australe</i> and <i>S. oleosum</i>	Riberry
<i>Tristaniopsis laurina</i>	Water Gum

## 8. Multiple Dwellings

- (a) Development for multiple dwellings must comply with the provisions of Wollongong Local Environmental Plan 2009 and the multi-dwelling housing and / or integrated housing sections in the Residential Development chapter in Part B of the DCP.

## Bushfire Management

- (b) Refer to the requirements of the Bush Fire Management chapter in Part E of the DCP.

## Drainage

- (c) Stormwater drainage for both subdivision works and housing construction must be provided in accordance with Council's Drainage Design Code. In this regard, there is to be no net increase in stormwater run-off as a result of residential development within the site.
- (d) Flood modelling, and its associated assumptions, are required to incorporate the in-stream treatments as required in Section 6.7 Riparian Management Issues.
- (e) Natural watercourses must not be modified without Council consent.
- (f) The diversion to Hollymount Creek must be rehabilitated to provide a practical natural watercourse setting.
- (g) All creek treatments where required must provide for stable embankments by using visually pleasing engineering solutions.

## Public Open Space

- (h) Public open space is to be designed and constructed to:
- Provide an aesthetically pleasing environment comprising wetlands and passive open space areas;
  - Develop and promote a permanently sustainable flora and fauna habitat; and
  - Minimise maintenance costs.
- (i) This public open space is to be provided simultaneously with contiguous residential development where practical.
- (j) Playground equipment must be installed to Australian Standards.

## Riparian Management Issues

- (k) Riparian Corridors are to be protected by the provision of a minimum 40 metre wide (plus width of channel or creek bed) riparian buffer zone. The minimum buffer width from the top of creek bank to residential development is 15 metres.
- (l) The principles to be utilised for the treatment of Collins Creek and Hollymount Creek and their respective riparian corridors in terms of their ongoing development is consistent with ecologically sustainable design principles and will include:
- Minimising Risk – consider community safety and minimise risk to life.
  - Interdependence – consider the catchment as a unit of a larger system.

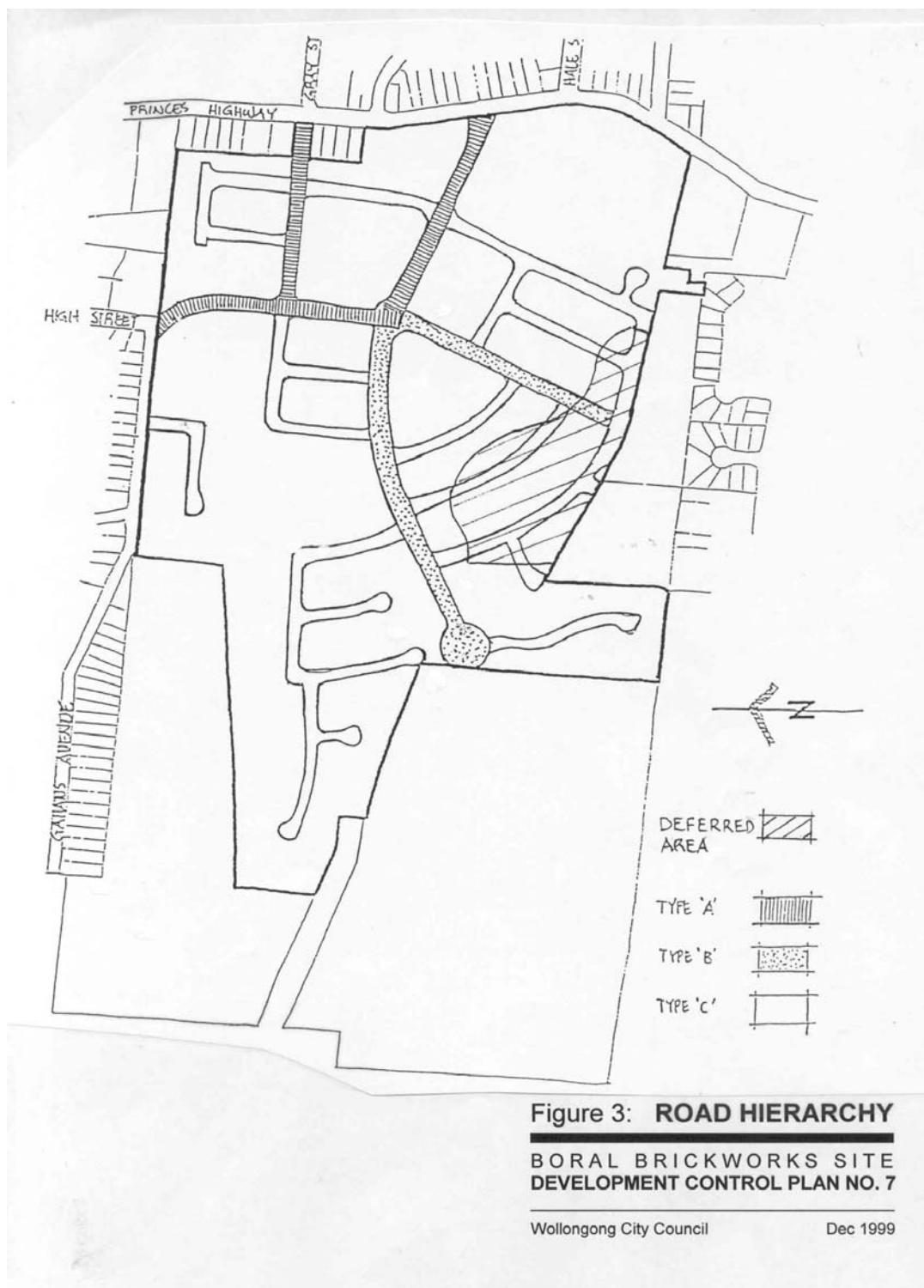
- (iii) Individuality – recognise the individual features of each catchment.
  - (iv) Continuity – recognise the need for continuous corridors to permit natural processes to occur.
  - (v) Existing Habitat Values – maintain and enhance existing habitat.
  - (vi) Natural Stream Processes – “natural” design approach.
  - (vii) Multi-disciplined Approach – incorporate expertise in a broad range of appropriate disciplines.
  - (viii) Maintenance and Construction – production of a self sustaining ecosystem.
- (m) These principles and guidelines are further detailed in the document "Principles for Urban Stream Management" (November 1997) produced by the Illawarra Integrated Approvals Team and is seen as an important guide for this project.
- (n) Detailed Riparian Management Plans will be prepared for each of the creeks, as shown in Figure 8, to address the environmental requirements of State and Local Government agencies as part of the development approval process. A typical plan and sections of the Riparian Management Plans are shown in Figures 9 and 10.
- (o) Implementation of Water Quality requirements of Wollongong City Council will further enhance the environmental outcomes of this Riparian Management Plan.

### Deferred Area

- (p) The Deferred Area shown on the Master Plan in Figure 2 and contour plan in Figure 6 is for the protection of a possible Green and Golden Bell Frog habitat. A Final Area to be reserved for the habitat is subject to:
- i. The preparation of an Environmental Management Plan (EMP) for the Deferred Area and proposed Final Area, and
  - ii. Demonstration to the satisfaction of Wollongong City Council and the National Parks and Wildlife Service that the Final Area provides the breeding, foraging and sheltering functions of viable frog habitat for a significant period of time and addresses the following habitat requirements:
    - Water quality objectives that maintain a supply of high quality water;
    - Wetlands and emergent vegetation that provides breeding habitat;
    - Habitat for over-wintering;
    - Vegetation that provides foraging and refuge habitat; and
    - Habitat corridors that allow for the migration of adults between breeding sites, forage and refuge areas, and provide for dispersing juveniles.
- (q) Subject to the above criteria being satisfied, the Final Area is to be appropriately zoned for the primary purpose of habitat protection.
- (r) The objectives of the EMP are to be prepared to the satisfaction of Wollongong City Council with advice from the National Parks and Wildlife Service.

- (s) A Landscaped Buffer is to be provided between the final boundary and the remainder of the residential estate. This is shown in Figure 7.
- (t) No works can take place within the deferred area or the buffer area without approval from Wollongong City Council and the National Parks & Wildlife Service. It is preferred that the works within these areas be constructed in one stage if possible.
- (u) Development works and final housing sites are not permitted to discharge any stormwater run-off into the Landscaped Buffer or the Deferred Area of the Final Area. Stormwater run-off from the Landscape Buffer can discharge into the Deferred or Final Areas.

## 5. Figures



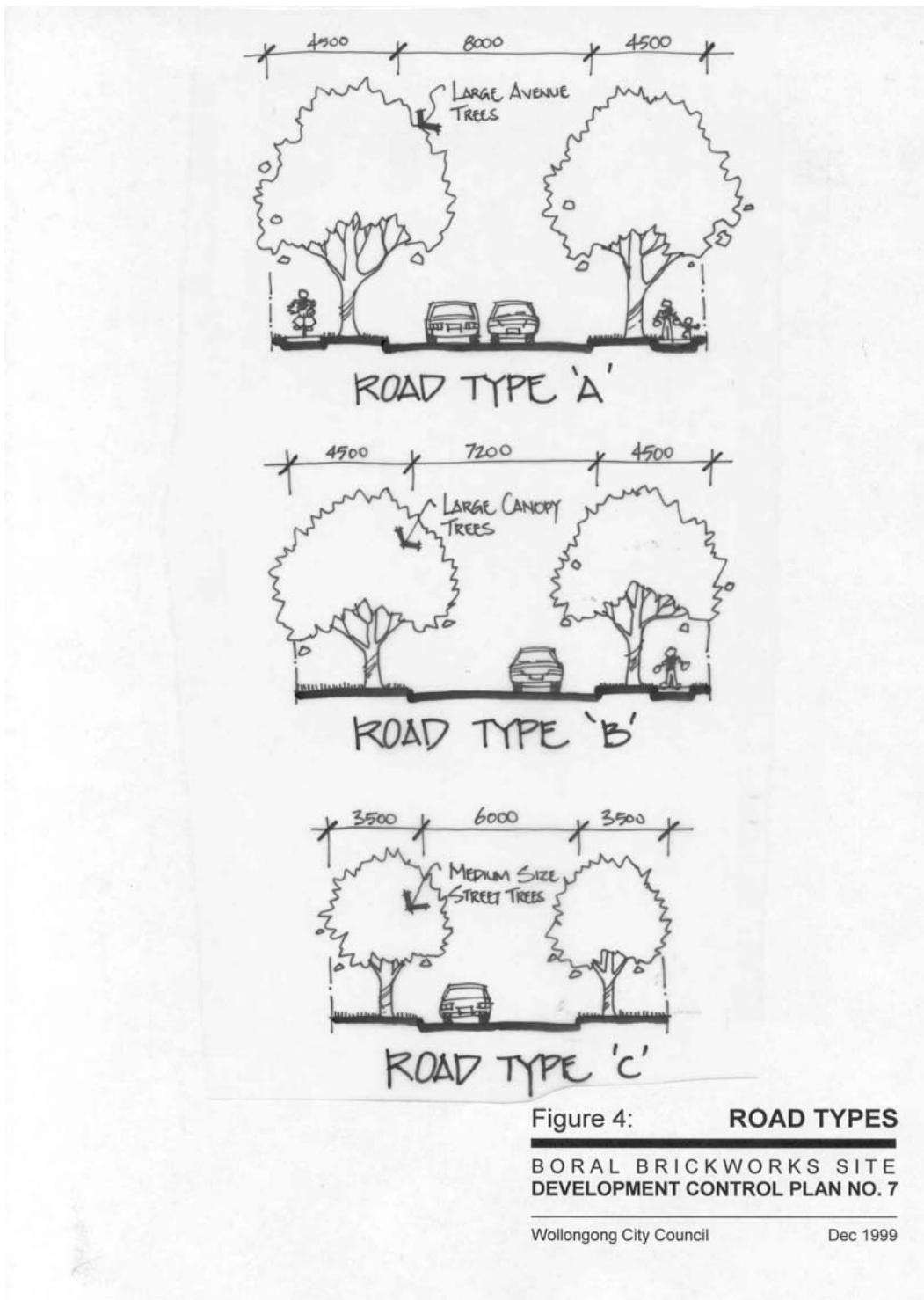
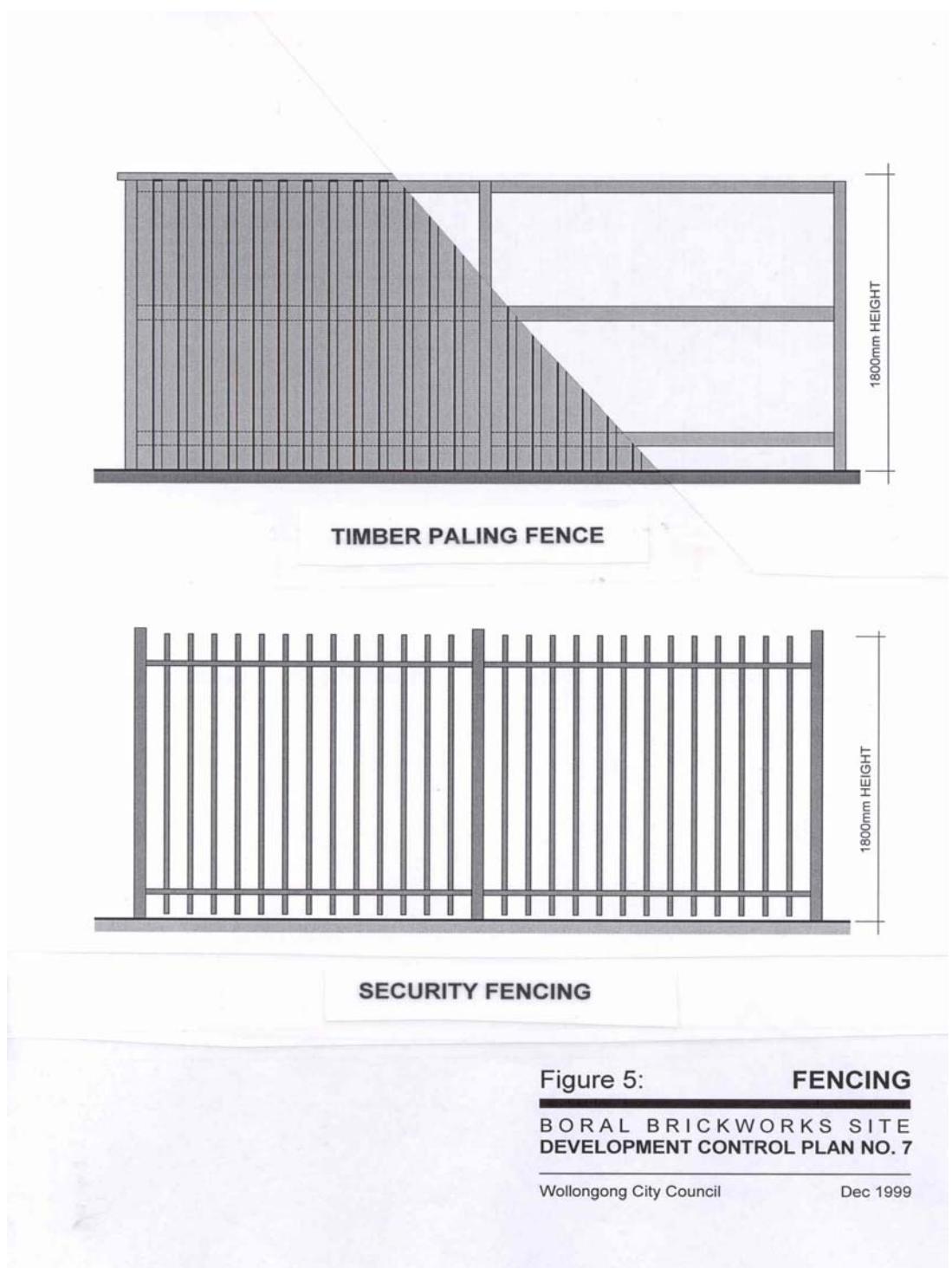


Figure 4: **ROAD TYPES**

BORAL BRICKWORKS SITE  
DEVELOPMENT CONTROL PLAN NO. 7

Wollongong City Council

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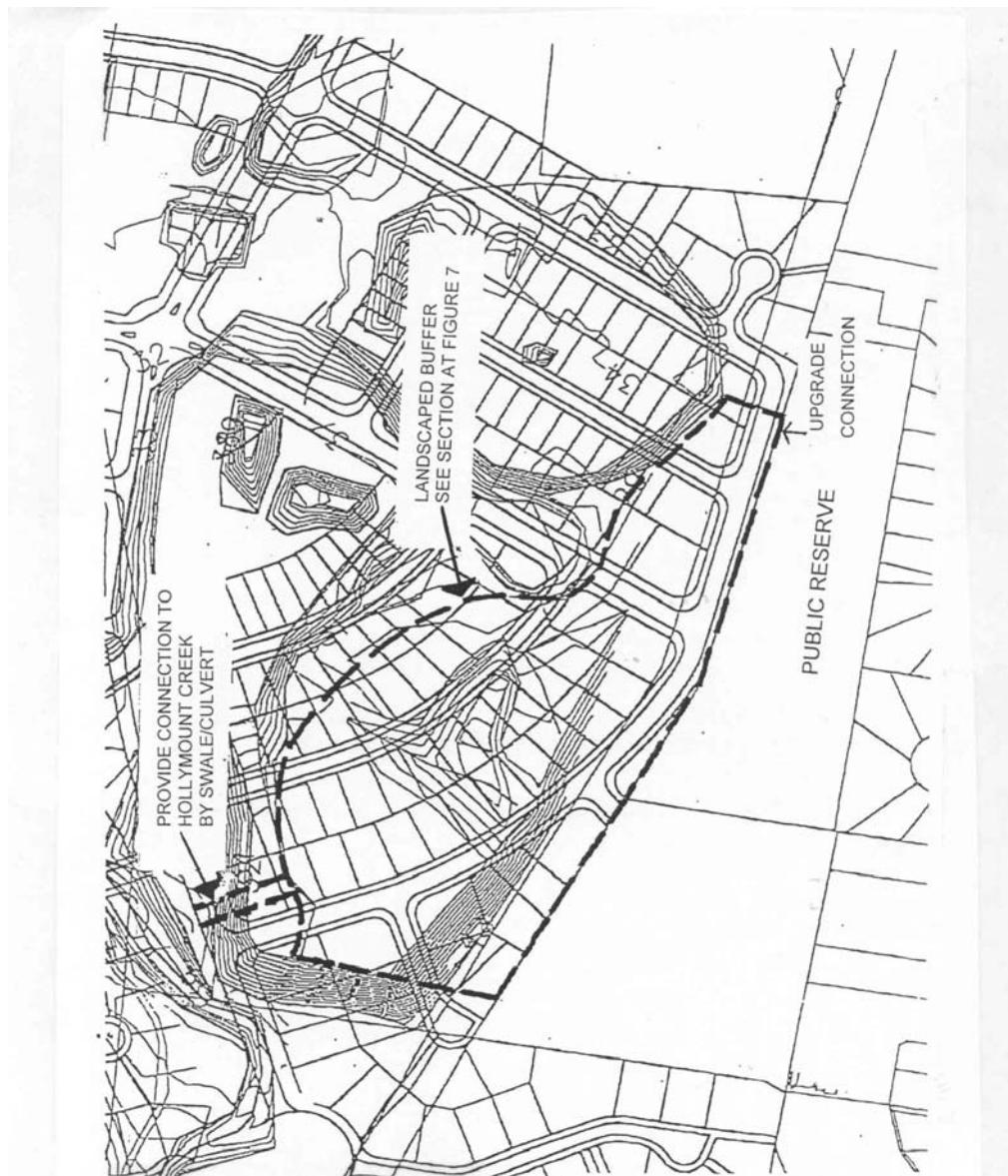
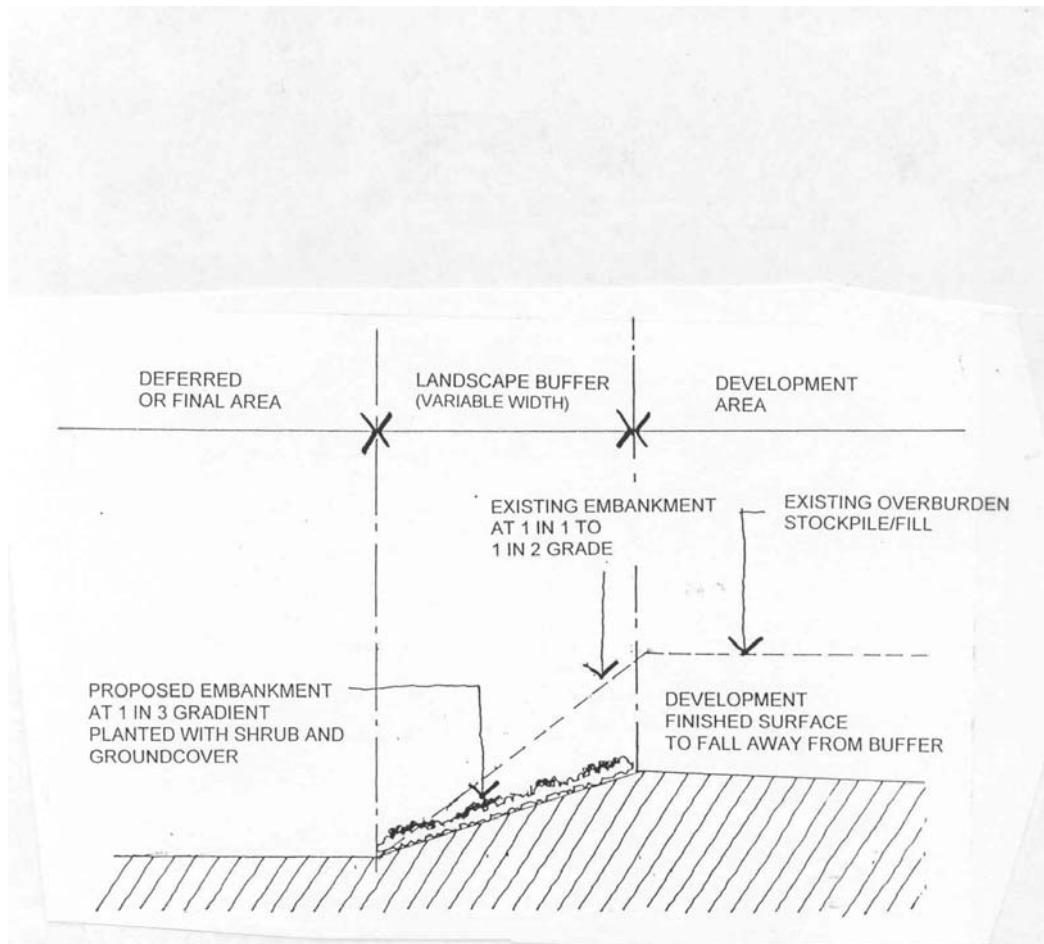


Figure 6: DEFERRED AREA

BORAL BRICKWORKS SITE  
DEVELOPMENT CONTROL PLAN NO. 7

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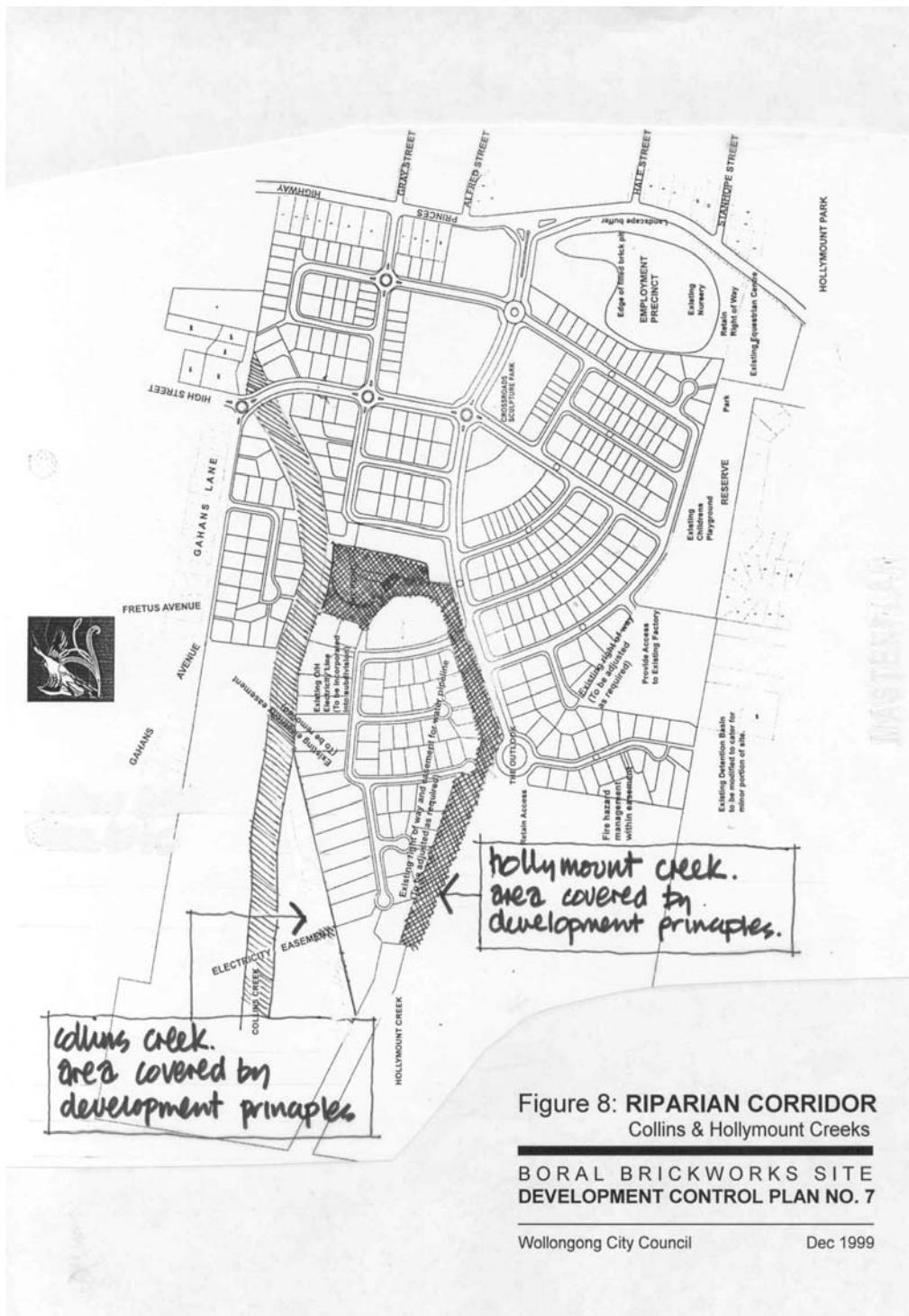


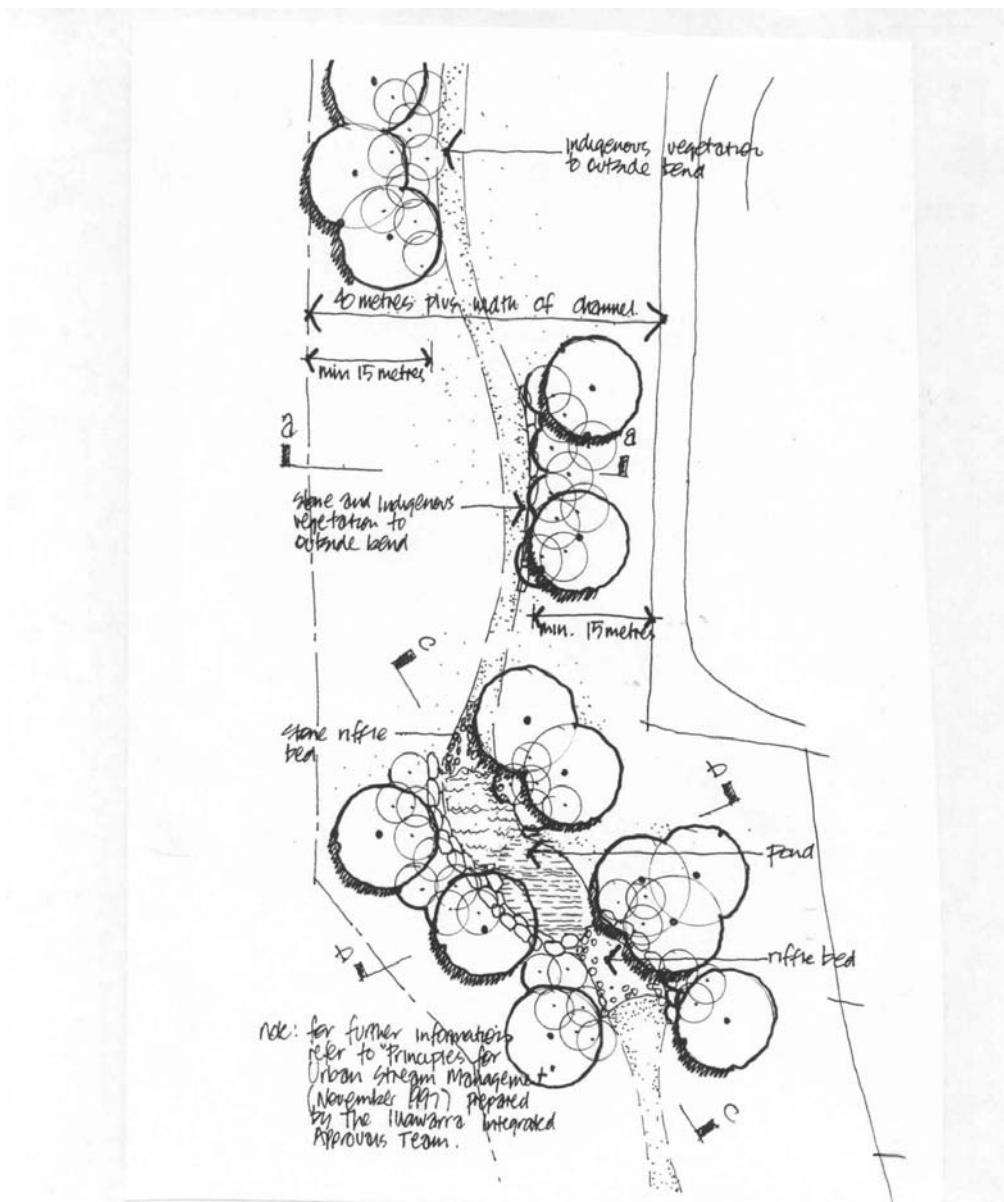
**Figure 7: TYPICAL SECTION**  
Boundary of Deferred Area

**BORAL BRICKWORKS SITE  
DEVELOPMENT CONTROL PLAN NO. 7**

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**Figure 9: RIPARIAN CORRIDOR**  
Typical Plan View

**BORAL BRICKWORKS SITE**  
**DEVELOPMENT CONTROL PLAN NO. 7**

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