

**LUDDENHAM MANAGEMENT Pty Ltd**

**Building Siting & Design Code**

September, 2004

**Twin Creeks**  
acreage golf living



**at: Luddenham Road Luddenham**

**L.G.A.: City of Penrith**

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# BUILDING SITING AND DESIGN CODE

Lots 1 & 2 DP227140, Lot 5 DP229770, Lot 25 DP258144, Lot 1 DP309802 and Lot 1 DP60530.  
Proposed Rural Residential and Golf Estate at LUDDENHAM

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## 1. Introduction

This Building Siting and Design Code (BSDC) has been prepared in response to requirements set out in Penrith City Council Luddenham Equestrian Estate Penrith Development Control Plan 2001 (DCP).

### 1.1 Area covered by the Code

The BSDC applies to land within the limits of the DCP being lots 1 & 2 DP227140, lot 1 DP60530, lot 1 DP309802, lot 5 DP229770 and lot 25 DP258414.

### 1.2 Objectives of the Code

- To ensure that the design, location and character of housing and other buildings on the site integrate with the landscape and present a contemporary rural image.
- To ensure that the development presents a contemporary rural character when viewed from surrounding main roads and public places.
- To ensure adequate consideration is given to building form, materials, colour, siting, visual impact, private amenity and energy efficiency.

### 1.3 Application of the Code

The BSDC is to be applied at the design stage to residential dwellings and outbuildings to be constructed on the lots within the area covered by the code.

Development applications submitted to Penrith City Council shall demonstrate that they comply with both the objectives and development standards set out in this code.

## 2 Development standards

Residential development shall be limited to 1 dwelling per lot.

### 2.1 Scale

All 2 storey dwellings shall be restricted to a 1<sup>st</sup> floor area no greater than 70% of the ground floor area (this excludes the floor area of garages, verandahs, etc).

The maximum size of any shed footprint shall be 100 square metres with a ground to eave height of 3.6 metres. The maximum external wall height is 6.5 metres with the maximum permitted overall height above natural ground level of 10.0 metres.

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### **2.2 Setback**

All structures except those exempt from requiring development application approval shall be located within the building envelope defined below.

- Building envelopes shall avoid significant vegetation and fauna habitat, ridges and other prominent features, which will result in development being exposed to the skyline. Tree clearing is to be minimised.
- Building envelopes shall be located above the 1 in 100 year flood level and should avoid gullies and depressions that carry overland flow during heavy rainfall.
- Building envelopes shall have a minimum front setback of 15 metres.
- Building envelopes shall have a minimum side setback of 5 metres.
- Building envelopes shall have a minimum rear setback of 10 metres.
- For corner lots the building envelope setback on the front street shall be 15 metres and on the side street the setback can be reduced to 5 metres.

### **2.3 Design**

Dwelling houses and out buildings shall be designed to give an external appearance that compliments the semi rural surroundings.

Consideration shall be given to the appearance of each dwelling in relation to the streetscape. The appearance shall compliment the surrounding dwellings within the estate.

Dwelling houses to be constructed on corner lots shall be designed to provide elevations that address both street frontages.

#### **2.3.1 Building Form**

Roofs shall be of a pitch that is not considered excessively flat or steep to avoid the appearance of unconventional roof styles.

Large roof expanses and large gables are to be avoided. The use of verandah elements and second storey sections, are encouraged to break up roof lines.

Consideration shall be given to the use of verandahs in keeping with a contemporary rural theme.

The use of large glazed areas or reflective surfaces visible from areas external to the lot shall be avoided.

The external walls of sheds and out buildings shall be constructed of a material compatible with the dwelling.

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### **2.3.2 External Colours and Finishes**

Building materials and colours shall complement the semi rural character of the locality.

The use of earthy or natural colour tones is encouraged whilst the use of bright or pastel colour tones on external walls, roofs or gables shall be avoided.

Metal roofing material shall be pre coated with a colour compatible with the surrounding semi rural area. Galvanized metal roofs shall not be permitted

Details of external colours and finishes are to be submitted with the development application for approval by Council.

### **2.3.3 Cut and Fill**

Where possible cut operations shall be avoided to prevent interference with the natural ground water flows and the water table.

Cut and fill operations are to be restricted to a maximum of 0.5 metre cut and 1 metre fill.

The lowest floor level of any building shall be no higher than 1.2 metres above natural ground level.

## **2.4 Height**

The height of the proposed dwelling should reflect the topography of the site and minimise cut and fill required to the site.

The maximum permitted wall height is 6.5 metres

## **2.5 Privacy**

Dwellings should be designed to ensure maximum protection of privacy. This shall be achieved by screening opposing windows, balconies and yards with appropriate landscaping.

## **2.6 Solar Access**

Dwellings are to maximise solar access by placing windows in all exterior walls that are exposed to the northern sun.

The siting and design of dwellings should aim to ensure that the proposed development provides a minimum of 3 hours sunlight between 9am and 3pm on 21<sup>st</sup> June to living zones of each dwelling.

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### **2.7 Landscaping**

The design and positioning of buildings shall give consideration of existing vegetation by minimising disturbance.

Adequate landscaping shall be placed in the front of and to the side of dwellings to reduce the visual impact of development on adjoining dwellings.

Landscaping should incorporate species indigenous to the area and those which will not spread into adjoining bushland areas. A schedule of some recommended species is located in annexure A.

Consideration shall be given to the positioning and species used to avoid damage to adjacent buildings and paving.

### **2.8 Drainage Control**

Stormwater from paved and roof areas should be gravity drained to the existing drainage system.

The habitable floor areas of dwellings are to be constructed a minimum of 0.5 metres above the adjacent 1 in 100 year ARI flood level.

### **2.9 Soil and Water Management**

Best management practices are to be implemented to control runoff and soil erosion and to trap sediment in order to maintain satisfactory water quality in downstream areas.

Sediment filter fence is to be installed downstream of construction areas.

Site entry and exit shall be limited to one point and stabilized with course gravel.

### **2.10 Flora and Fauna Protection**

Significant flora and fauna habitats should be preserved by not disturbing clearing or under scrubbing areas of natural bushland on the lots.

The areas within the drip line of trees or riparian zones of watercourses shall be fenced off from livestock.

Free roaming of domestic pets shall be limited to within the property boundaries.

### **2.11 Vehicle Access and Parking**

Dwellings set back more than 20 metres from the roadway shall make provision for a turning area to allow the forward ingress and egress of vehicles.

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Dwellings shall provide for a minimum of two garaged car spaces paved driveway from the street to the garage.

Driveways, parking and turning areas shall be paved in paving bricks, blocks or stone or finished in coloured or stenciled concrete.

### **2.12 Acoustics**

Any dwelling to be located within the 20-25 Australian noise exposure limit from the possible future Badgerys Creek Airport site shall have consideration given to the possibility that noise attenuation measures may be required.

An existing private air field operates on lot 2 DP629326 and lots 1 & 2 DP258439 on the western side of Luddenham Road. The design of dwellings shall have consideration given to the possibility that noise attenuation measures may be required.

### **2.13 Fencing**

All fencing other than specified below, associated with residential development shall be of a style in keeping with a rural theme. Fencing shall be no taller than 1.4 metres and be of see through construction.

Fencing or walls of solid construction are permitted for use in entry statements.

Screen fencing up to 1.8 metres high, consisting of solid, metal panel, timber or brush fencing shall be permitted around private open space areas only. Such screen fencing shall not be constructed as a boundary fence between the front alignment of the dwelling and the street or the rear alignment of the dwelling and the rear boundary.

As far as practical fences shall deviate around trees taller than 5 metres in height. Clearing shall be limited to the minimum area required for fence construction.

### **2.14 Fire Hazard**

The gateway/entrance to each lot shall be constructed so as not to impede the ingress or egress of heavy fire fighting vehicles. Each lot shall provide a 'Y' shape hard stand turn around area adjacent to the dwelling. Access shall be provided to the rear of the lots.

Australian Standard AS3959 'Construction in Fire Prone Areas' in accordance with Part 3.7.4 of the 'Building Code of Australia' shall be applied to the design and construction of dwellings.

Dwellings constructed adjacent to or opposite bushland areas shall have leaf proofing installed to roof valleys and gutters.

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### 2.15 Energy Efficiency

Development applications for all dwellings, alterations and additions shall be accompanied by a NatHERS certificate indicating a minimum of 3.5 star energy rating. The certificate is to be prepared by an accredited NatHERS assessor.

All hot water systems are to have a minimum rating of 3.5 stars (refer to Penrith Energy Smart Homes policy attached to Penrith Residential Control Plan 2000)

The following matters are to be taken into consideration to contribute to a satisfactory energy rating:

- Appropriate thermal mass by ground floor slab-on-ground and masonry internal walls to ground floor are desirable.
- Effective insulation by providing sarking and bats with a combined rating of R3 to roofs and top floor ceilings. Walls are to be insulated with sarking and bats with a minimum combined rating of R1.5.
- Appropriate orientation for rooms and windows with living areas facing within 30 degrees of solar north, at least 50% of glazing facing solar north, Unprotected glazing facing east/west or south shall be avoided. For every habitable room windows in two external walls are desirable.
- Effective shading shall be utilized by means of overhanging eaves at least 450mm wide, external movable screening for windows and skylights and installation of pergolas over courtyards.
- Effective glazing shall be utilized on large south facing windows by means of high performance glass such as double glazing in thermal break frames. All windows and doors shall include weather strips.



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### Annexure 1

### Recommended Tree Species

The various woodland communities present on the site and the native species present within these communities are detailed below. These species listed would be most appropriate for use on the site.

#### Cumberland Plain Woodland

**Canopy species:**

Eucalyptus moluccana	Grey Box
Eucalyptus tereticornis	Forest Red Gum
Eucalyptus crebra	Narrow-Leafed Ironbark
Eucalyptus eugenioides	Thin-Leafed Stringybark
Eucalyptus maculata	

#### Sydney Coastal River Flat Forest

**Canopy species:**

Angophera floribunda	Rough-Barked Apple
Angophera subvelutina	Broad-Leafed Apple
Eucalyptus amplifolia	Cabbage Gum
Eucalyptus baueriana	
Eucalyptus elata	
Eucalyptus tereticornis	Forest Red Gum

#### Ironbark Woodland

**Canopy species:**

Eucalyptus fibrosa	broad-Leafed Ironbark
Eucalyptus eugenioides	Thin-Leafed Stringybark

**Shrub species:**

Melaleuca decora	
Allocasuarina litoralis	Black She Oak

#### Red Gum Woodland

**Canopy species:**

Eucalyptus tereticornis	Forest red Gum
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**Shrub species:**

Grevillea juniperina	
Leptospermum poygalifolium	Yellow Tea Tree
Melaleuca decora	

#### Riverine Woodland

**Canopy species:**

Eucalyptus tereticornis	Forest red Gum
Casuarina glauca	Swamp Oak
Angophera subventutina	Board-leafed Apple
Melaleuca styphelioides	Prickly-leafed Tea Tree

**Shrub species:**

Acacia parramattensis	Sydney Green Wattle
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Other species of trees and shrubs suggested for planting on the site include those listed below:

### Shade Trees

Pepper Tree	Schinus areira
Oak	Various species
Jacaranda	Jacaranda mimosifolia
Kurrajong	Brachychiton populneus
Pine	Various species
Gum	Various species
Chinese Elm	Ulmus parvifolia

### Autumn Colour Trees

Ash Tree	Various species
Liquidamber	Liquidamber styraciflua
Pistachio	Pistacia chinensis
Maple	Various species
Chinese Tallow Tree	Sapium sebiferum

### Shrub Species

Cherry	Various prunus species
Crabapple	Malus species and cultivars
Gordonia	Gordonia axillaris
Holly	Ilex species
Judas tree	Cercis silquastrum
Pear	Pyrus species
Paperbark	various species
Bottlebrush	various species

### Hedges

Hazel	Corylus avellana
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