



ACT Planning &
Land Authority

Forde Concept Plan

Addendum for Concept Plans

This concept plan was originally adopted as a Guideline under the Territory Plan. These original content of the plans have not been amended since their adoption, but are included in the new Territory Plan and have statutory effect.

Under the *Planning and Development Act 2007*, a concept plan:

- applies the principles and policies in the structure plan, to future urban areas (formerly know as defined land); and
- is a precinct code in the Territory Plan.

A concept plan is used to guide the preparation and assessment of estate development plans (which are development applications), and can also be used to assist in the assessment of development when an area ceases to be a future urban area.

In this Concept Plan, any references to Land use Policies should be read as a reference to zones.

Consistent with the ACT Government's Affordable Housing Action Plan, the Concept Plan is amended to require that a minimum of 15% of all dwellings in the suburb be affordable housing product.

To provide diversity in affordable land and housing products to meet the Government's requirement, the controls for blocks up to 250m² have been incorporated into Residential Zones Development controls, which need to be considered during the subdivision design.

To give effect to the Government's Affordable Housing Action Plan, this Concept Plan is further amended to specify the following locational requirements for Compact Blocks:

- compact blocks must be located opposite high quality open space. If this is not possible, then located within the vicinity of 100m from high quality open space or parkland or alternatively adjacent to a wide verge with high quality landscaping and medium sized street trees;
- if the compact block is accessed from the front, the block should be located on an internal local road and not fronting a main collector road;
- if the compact block is accessed from the rear, the blocks can be located fronting a collector road;
- compact blocks may be suitable for corner blocks and section ends but may also facilitate a narrower section depth.
- compact blocks and the adjacent public realm are required to be integrated so that a high quality streetscape is provided for the residents, which includes on-street parking (as required), street trees, verge crossings, services, footpaths and garbage collection points.

Estate Development Plans prepared under this concept plan must have regard to these requirements. Any amendments to the concept plan other relevant codes within the Territory Plan in order to give effect to these requirements, will be undertaken in accordance with section 96 of the Planning and Development Act 2006. That section requires the Authority to vary the plan once and estate development plan is approved, to remove the Future Urban Area overlay and identify the zones to apply to the land consistent with the estate development plan. Section 96 also enables the Authority to incorporate any other element of the estate development plan that should be ongoing, such as the identification of compact blocks (if necessary).

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1.0 Introduction

2.4 Concept Plan Forde
Effective: 31 March 2008

NI2008-27

1. INTRODUCTION

This Report outlines the planning framework for the development of the new suburb of Forde (Stage 1). The Concept Plan incorporates the relevant policies and principles of the Territory Plan including the Variation to the Territory Plan No.130 (North Gungahlin Structure Plan).

This Concept Plan supersedes the original Concept Plan for Forde that was endorsed by ACTPLA on 7 July 2004. It will become a Planning Guideline incorporated under the Territory Plan.

The Concept Plan incorporates a number of key planning, urban design, engineering, landscape and environmental elements that have been identified in order to achieve a high quality sustainable design outcome for the new suburb.

This Report presents a Concept Plan with an indicative Subdivision Plan catering for approximately 1,100 dwellings for the portion of Forde being developed as a Joint Venture (Stage 1). It does not cover any further stage(s) to complete the development of Forde. The Concept Plan presents the overall development vision and framework by outlining the key planning principles through supporting drawings and figures.

The Forde Concept Plan has been developed through an iterative process, and the following Concept is the result of ongoing design development and refinement and incorporates requirements from the site investigations and reports regarding site characteristics, development opportunities and constraints and statutory context.

The Forde Concept Plan is accompanied by a more detailed Concept Plan Background Report, which provides further detail and information on the key planning principles and concepts of the Concept Plan. In particular, the Report describes high-level strategies and detail toward improving and developing the minimum planning requirements with regards to the planning and design of Forde. It expands on the Concept Plan Planning Principle Diagrams, with the Report providing detail on built form, streetscape, landscaping, sustainability, heritage and water management.

Below is a summary of the important planning requirements that apply to Forde. The summary of planning requirements is detailed in Figure 2. An overview of the constraints and opportunities of the suburb is illustrated in Figure 3.



2.0 Important Planning Principles

2.4 Concept Plan Forde
Effective: 31 March 2008

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2. IMPORTANT PLANNING PRINCIPLES

The following provides an overview of the Important Planning Principles that are demonstrated in the Concept Plan. The Important Planning Principles are established to achieve the urban design and planning objectives of the Territory Plan and ACT Government agencies requirements. The figures referenced demonstrate how these principles are achieved in the Concept Plan and are a guide for achieving the desired outcomes.

During the Estate Development Plan phase, further detailed planning and design undertaken is to have regard and be consistent with the following provisions, outlined on the attached figures and detailed within the Forde Concept Plan Background Report.

Whilst the figures are indicative and intended to be illustrative, the Important Planning Principles can only be amended with the approval of the ACT Planning and Land Authority (ACTPLA), with the support of other relevant ACT Government Agencies where appropriate. Any amendments to the Important Planning Principles may require public consultation, as determined by ACTPLA.

As development and design progresses, the response may be changed to reflect further information regarding site conditions, agency requirements and changing social and market influences.

These Important Planning Principles are identified below and are shown on the attached Figures.

2.1 Legible Road Network, Transport Network

The internal road network will be legible, permeable and have a clear hierarchy. The road network is required to minimise through traffic and reduce 'rat running' from Bonner and future suburbs to the Gungahlin Town Centre and areas south. The internal road network is to connect with Horse Park Drive and Bonner.

A public transport route is required.

2.2 Pedestrian and Cycle Network

An off-road pedestrian and cycle network shall be provided generally consistent with *Figure 4*. These networks will provide safe connections to all public open spaces, Mulligans Flat Nature Reserve, the trunk networks within Gungahlin, to the future school site in Bonner and to the existing underpass under Horse Park Drive to Amaroo.

An important additional connection to Gungahlin via a proposed pedestrian underpass to an existing bridge on Horse Park Drive will be investigated, with the provision dependent on meeting agency requirements.

2.3 Vehicular Access

Vehicular access to the suburb will be from two intersections with Horse Park Drive and one road connection to the future suburb of Bonner as shown in *Figure 5*.



2.4 Old Gundaroo Road Heritage Trail

Old Gundaroo Road has important heritage value, and will be closed to vehicular traffic and upgraded for permanent use as a pedestrian, cycle and equestrian trail, connected to the local off road pedestrian and cycle network. The existing trees adjacent to the road are of heritage significance and are to be retained as part of the trail and environs.

2.5 Mixed Use Local Centre and Community Centre

A Mixed Use Local Centre will be provided with commercial and community uses. The local centre is to have a retail/ commercial component of a minimum 150m² and a community facility site of at least 8,000m². The community facility site is to be provided within the suburb in the location identified in *Figure 6*.

2.6 Public Open Space Network

A public open space network is to be provided in accordance with *Figure 7*. The open space network will provide an extensive network of cycle, pedestrian and interpretive trails within the community and will also provide connections to the adjoining suburbs and Mulligans Flat.

The open space network will incorporate a range of functions including passive and active recreation, the retention and regeneration of riparian areas, green corridors, drainage lines and swales and historically and culturally important sites. The network of neighbourhood Parks and activity areas are to be provided in accordance with *Figure 7*.

Further strategies and details of the proposed Open Space Network and Landscape Master Plan are described in the Forde Concept Plan Background Report.

2.7 Mulligans Flat

Two public access points with associated car parking will be provided in the Forde Open Space network in two locations as identified in *Figure 8*. Restricted vehicular access to the nature reserve at these locations is to be provided.

Edge roads are required to be provided to Mulligans Flat and other public open space areas. Edge roads in the APZ are required to comply with the relevant emergency access requirements. Urban design and landscaping features enhance the interface between the residential and open space along edge roads are to be incorporated including consideration of lower grade streets, varied materials and plant types and WSUD elements.

2.8 Provision for Water Infrastructure

A water main 600m in diameter is to be provided from a point north of Horse Park Drive/ Gundaroo Drive intersection to a point adjacent to an access into Bonner as indicated on *Figure 9*. The timing of this main is to provide a connection point to service the future development of Bonner.



2.9 Bush Fire Risk Assessment

The development is to comply with the Planning Guideline – *Planning for Bushfire Risk Mitigation for New Development and Re development 2005* or subsequent versions.

A risk assessment has been undertaken in accordance with the guideline that has determined the indicative setbacks, separation distances and building standards for the Asset Protection Zones (APZ) and House Asset Protection Zone (HPZ), detailed on Figure 10. Houses within the House Asset Protection Zone will be required to be constructed to Level 1 standard of AS3959 (NSW addenda)

These setbacks and building requirements are to be finalised during the more detailed Estate Planning phase.

The risk assessment has recommended that interim bushfire risk mitigation measures be established along the northern boundary of Forde between Forde and Bonner and the future stages of Forde. These measures will depend on the relative timing of the development of that part of Forde compared to the development of Bonner and the future stages of Forde and will be confirmed at the Estate Development Plan Stage for those areas.

2.10 Housing Mix and Densities

A range of housing types and densities are to be provided to accommodate a broad range of people with varying lifestyles and housing needs. The following lot mix will be provided:

Block Type	Number	%
450m ² and greater	447	41%
300m ² – 449 m ²	412	37%
Under 300 m ² (Including Multi- Unit)	241	22
Total	1,100	100%

The relevant land use policies and planning controls shall be in accordance with the requirements of the Territory Plan. Indicative land use policies are shown in *Figure 6*.

The housing is to be of a high quality design to provide human comfort, visual interest and attractive streetscapes. Building and Siting Controls are to be developed to establish design parameters with regards to the form and character of the housing within the development.

Detailed Building and Siting controls are to be developed during the Estate Planning phase and further incorporated as guidelines in the Lease and Development Conditions.



2.11 Stormwater Management

A number of water sensitive urban design initiatives will be incorporated to achieve the water quality objectives of the ACT Government. These are detailed in *Figure 11*. The proposed measures include lakes for water quality control, swales and landscaping.

Post development stormwater flows at each sub catchment outlet are to be restricted to pre-development flow rates up to the 1 in 3 month ARI event. Measures to achieve this include on-site rainwater tanks for all dwellings and stormwater detention basins.

2.12 Road Network

An indicative road network for the suburb is indicated in *Figure 5*. The network will have a clearly identifiable road hierarchy that meets Territory requirements as well as the broad objectives of the Territory Plan.

The collector road network through the suburb will run between the Horse Park Drive / Gundaroo Drive and Bonner, as indicated in *Figure 5*. This collector road will also accommodate the main public transport route and provide connections to the future suburb of Bonner.

2.13 Public Transport

A public transport network is required to connect Forde with the broader Public Transport Network. The majority of dwellings will be within 400m of a stop (5 minute walk). The proposed route will be located on the collector road network. The indicative Public Transport Route and proposed stop locations have been shown on *Figure 12*.

2.14 Tree Survey and Assessment

A Tree Survey and Assessment has been undertaken and is shown in *Figure 13*. Individual tree assessments are to be undertaken during the Estate Development Plan stage and agreed with Environment ACT.

A Draft Tree Management Plan has been prepared and included within the Forde Concept Plan Background Report (2005) for the endorsement of the Conservator Environment ACT.

Trees to be retained should be located in open space and road reservations. Where this cannot be achieved, where possible, trees may be retained in blocks subject to appropriate management requirements such as appropriate setbacks and clearances from tree protection zones.

Where trees are to be removed, any tree damaging activity is required to be consistent with the requirements of the Tree Protection ACT(2005) and requires the support of Environment ACT.



2.15 Streetscape

Streetscape design and presentation is a significant element in the design of Forde. Street Tree planting and sustainable verge solutions will be incorporated into all streetscapes to provide:

- Visual definition and enhancement,
- Reinforcement of street hierarchy;
- Minimisation of risk to infrastructure and utilities
- Shade, habitat and amenity
- Clear lines of site for vehicles, pedestrians and cyclists.

A Landscape Master Plan is shown in *Figure 14* that details the design intent for street trees. The use of a variety of street trees will serve to define neighbourhood character areas, entry transition zones, and open space corridors.

The Master Plan follows a number of defined character zones. Street Trees in close proximity to Mulligans Flat are predominantly native to assist in enhancing the biodiversity links between open spaces. Consideration of APZ requirements will be required to be taken into consideration.

Tree species in residential areas including and in proximity to the village centre and along Horse Park Drive with reflect the heritage precinct and areas close to the Gungahlin Town Centre. These will be predominantly exotic trees.

The transition between these two zones will incorporate a mix of exotic and native. North – south street alignments will incorporate native trees and east-west alignments will provide exotic trees as to encourage solar access to residential blocks.

2.16 Staging

The Concept Plan is for the first stage of two stages for the overall development of Forde. Estate Development Planning for Stage 1 shall proceed in four substages as shown in *Figure 15*.



2.17 Interdependencies/ Capital Works

There are a number of works that are required to be associated with the development of the suburb and adjacent development of Bonner. These works are to be undertaken by the ACT Government.

- The Bonner Access Road and Floodway. The first stage of these works, comprising the intersection with Horse Park Drive at Bonner, a short section of the ultimate road formation, a rural standard road connection to the Old Gundaroo Road and the adjacent floodway is programmed to be constructed in 2005/06.
- Future stages of these works including the construction of the ultimate road formation up to the northern connection to Forde (including the collector road bridge over the floodway) will be required as the northern portion of Forde is developed.
- The construction of a 675mm dia watermain along Gundaroo Drive from the extant 750mm dia. main at Gundaroo Drive / Anthony Rolfe Avenue intersection to terminate to the east of Horse Park Drive. Design for this main is about to commence and construction should be completed by late 2006.
- Construction of the Elm Grove Reservoir together with associated reticulation is required to service a small area of development above RL640. ActewAGL have indicated that the construction of the reservoir is dependant on land release for the suburb of Bonner. The timing of water servicing will be a consideration in staging of the development.
- The duplication of Horse Park Drive is not required for the development of Forde nor is it envisaged to be undertaken within the timeframe of the development of Forde. Provision is made in the concept plan for the future duplication and detail designs will also accommodate for the future duplication where relevant.

No other Capital Works are envisaged or required at this stage.





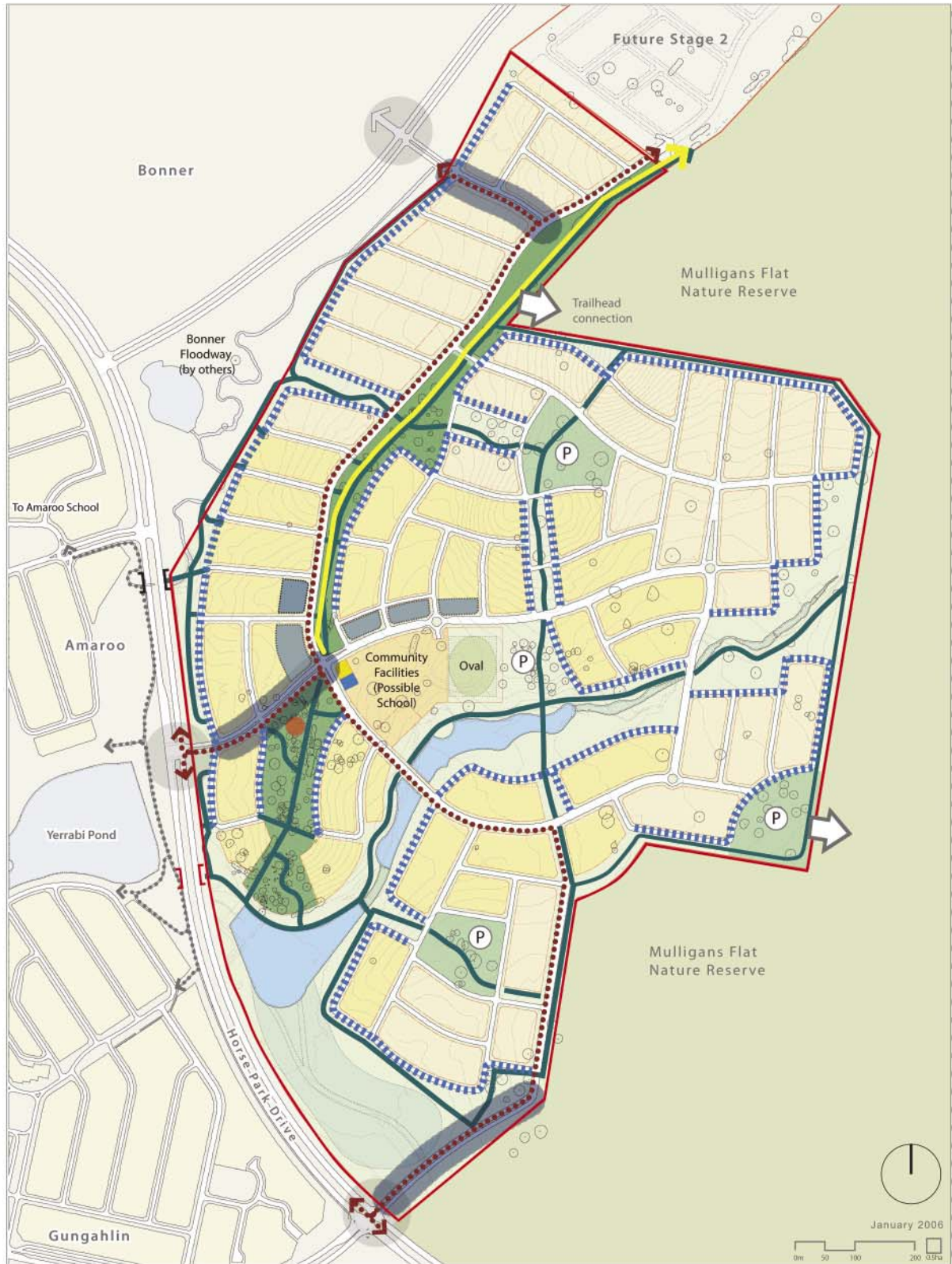
Forde Concept Plan

- | | | | | | |
|---|-----------------------|-----------------------------|---------------------------|------------------------|-----------------------------|
| 1 Entry Boulevards | 4 Neighbourhood Oval | 7 Forde Creek Riparian Zone | 10 Linear Heritage Park | 13 Collector Road | 16 Childcare |
| 2 Town Square | 5 Medium Density | 8 Wetland | 11 Multi Unit Development | 14 Water Quality Ponds | 17 Mulligans Flat Trailhead |
| 3 Community Facilities (possible school site) | 6 Neighbourhood Parks | 9 Heritage Park | 12 Bushfire Setback Zone | 15 Commercial | |

Figure 1 Forde Concept Plan

2.4 Concept Plan Forde
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Important Planning Requirements

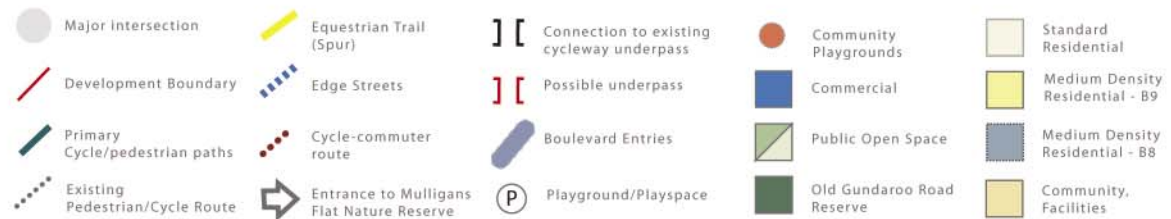
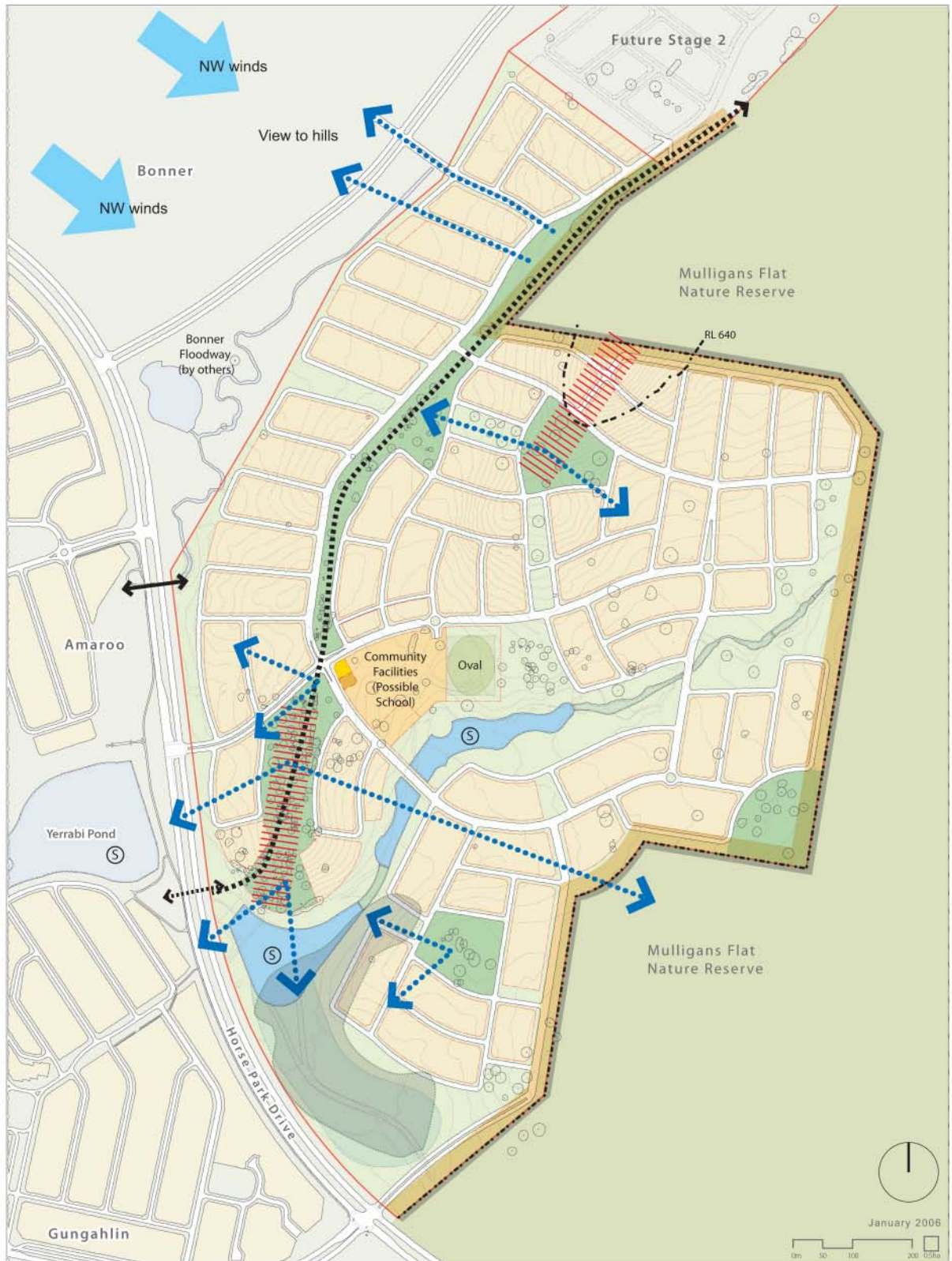


Figure 2 Important Planning Requirements



Existing Opportunities + Constraints


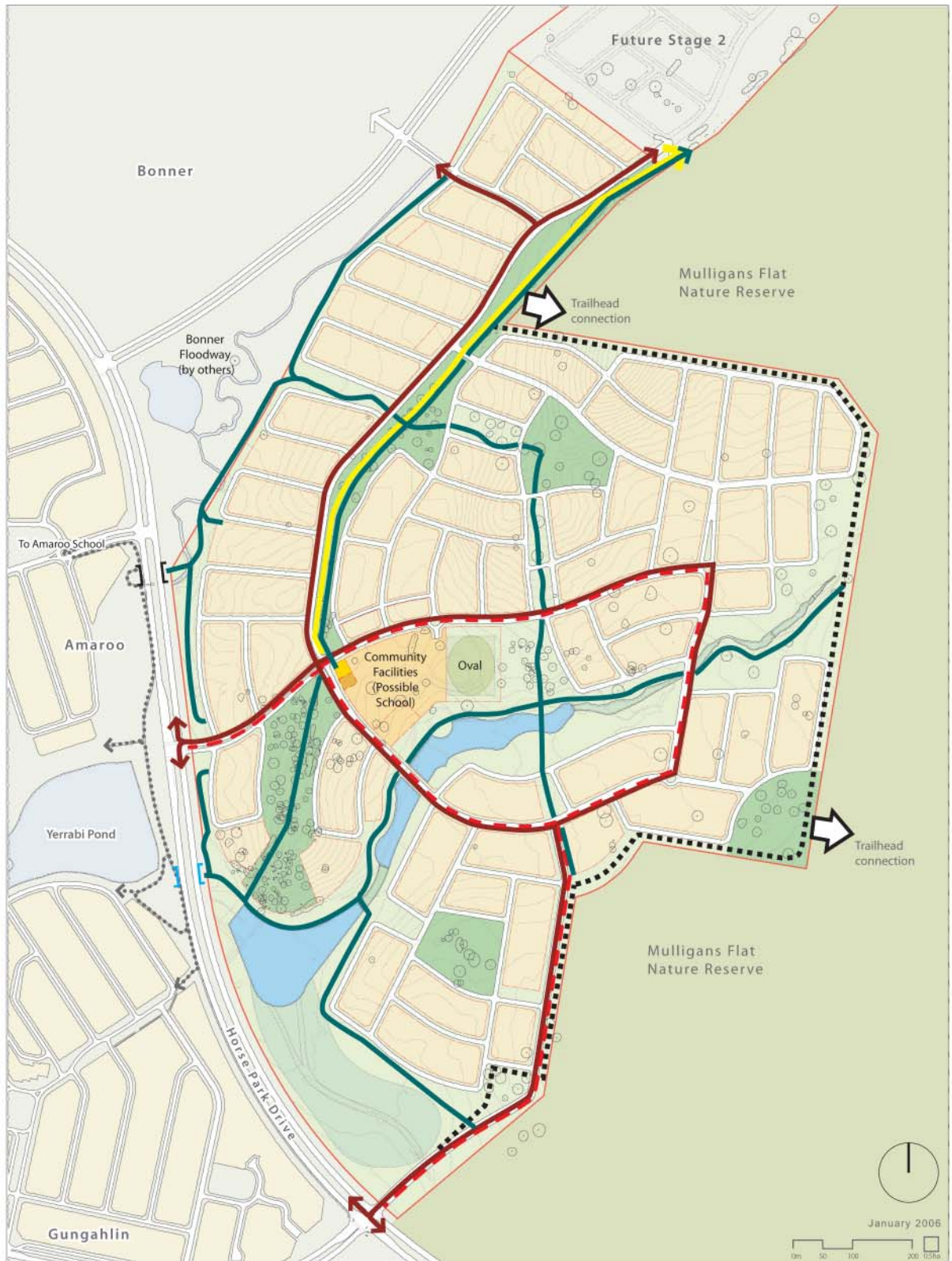
- | | | | | | |
|---|--------------------------------------|---|-----------------------------------|---|--|
|  | Existing Cycle Underpass |  | Old Gundaroo Road; |  | NW Winds |
|  | Possible Link under Horse Park Drive |  | Inner Asset Protection Zone (APZ) |  | Geotechnical Risk Area (to be confirmed) |
|  | Views |  | Outer Protection Zone |  | RL 640 Interim water supply limit |
|  | Existing ridge alignment |  | Boundary to Mulligans Flat |  | Stormwater Quality Control |

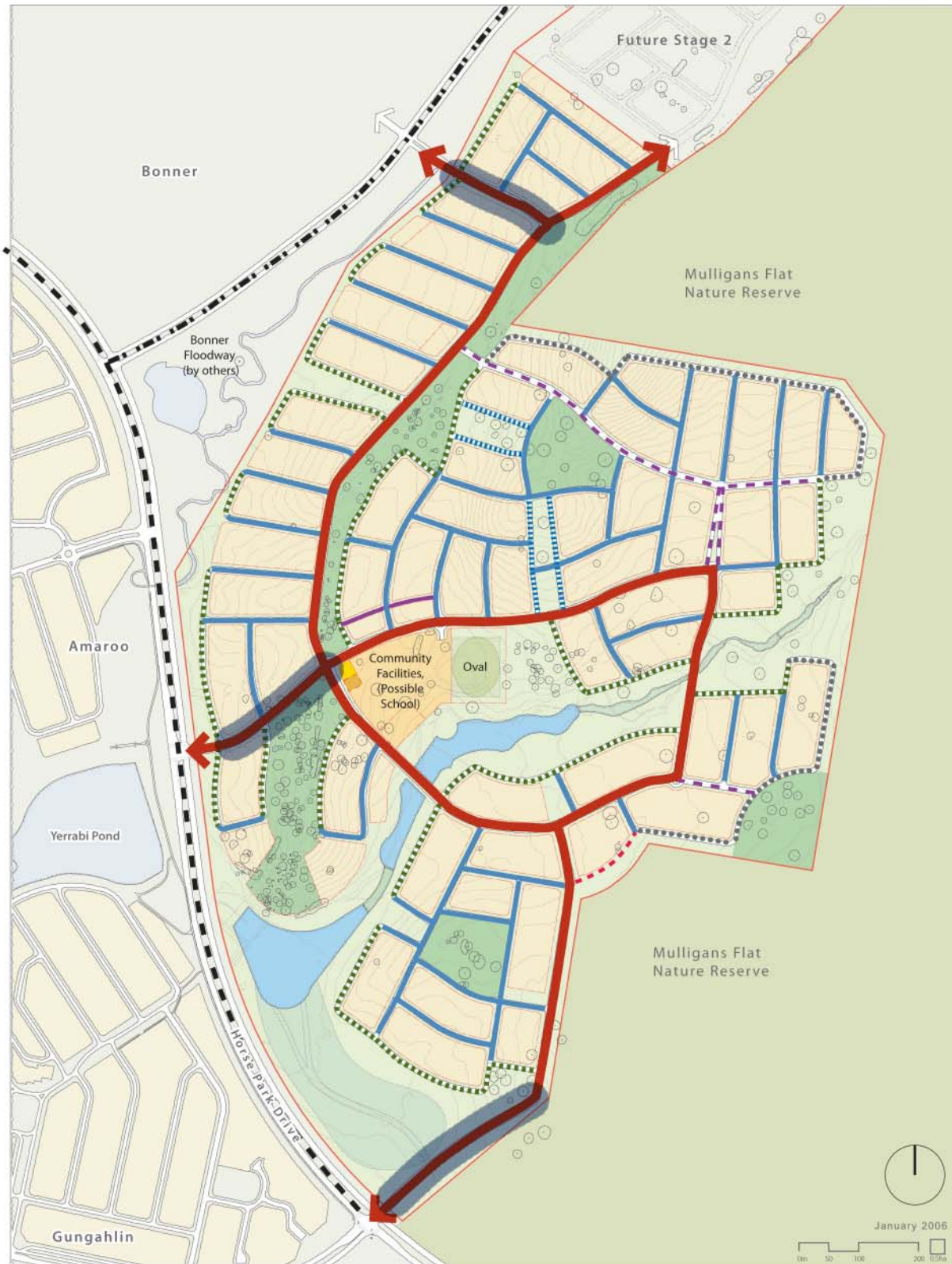
Figure 3 Existing Opportunities and Constraints



Pedestrian + Cycle Network

- | | | | | | |
|---|----------------------------------|---|------------------------------------|---|---|
|  | Primary pedestrian/cycle network |  | Recreational Path (Mulligans Flat) |  | Connection to existing pedestrian/cycle underpass |
|  | On road cycle/commuter route |  | Equestrian Trail (Spur) |  | Possible Underpass |
|  | Night Time Route |  | Existing pedestrian/cycle path | | |

Figure 4 Pedestrian and Cycle Network



Road Layout



Figure 5 Road Layout



Indicative Land Use








- | | | |
|--|--|--|
|  Residential |  Community Facilities |  Boundary to Mulligans Flat |
|  B8 Residential |  Urban Open Space | |
|  B9 Residential |  Commercial | |

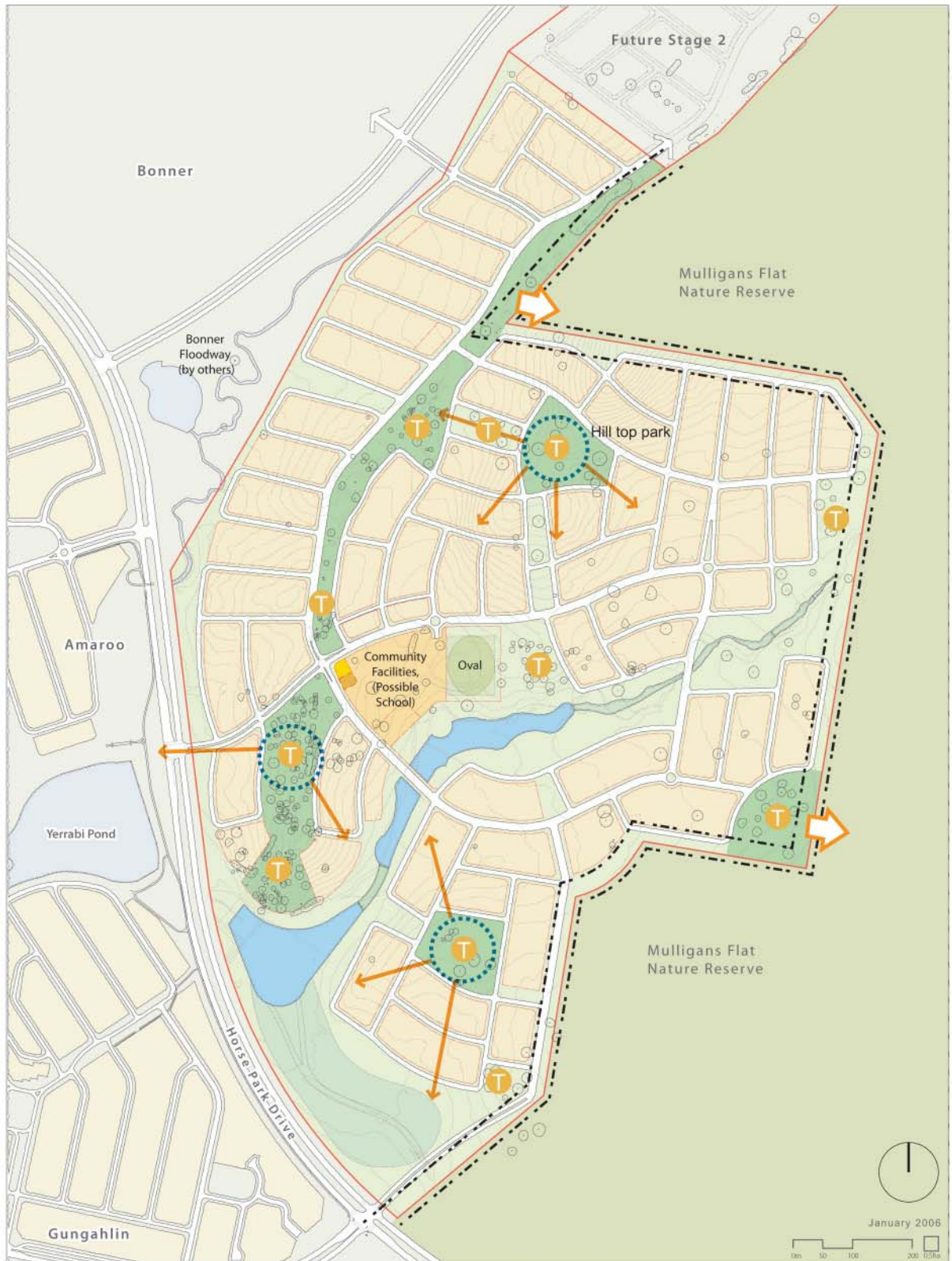
Figure 6 *Indicative Land Use*



Open Space Structure Plan

- | | | | |
|--------------------------|---|-------------------------------------|-----------------------|
| Heritage Park | Pedestrian Parklands | Town Square | Community Playgrounds |
| Neighbourhood Parks | Other | Water Quality Ponds | Playground/Playspace |
| Old Gundaroo Linear Park | Mulligans Flat Interface (incorporated into Bushfire Inner Asset Protection Zone) | Regenerated Riparian Creek Corridor | |

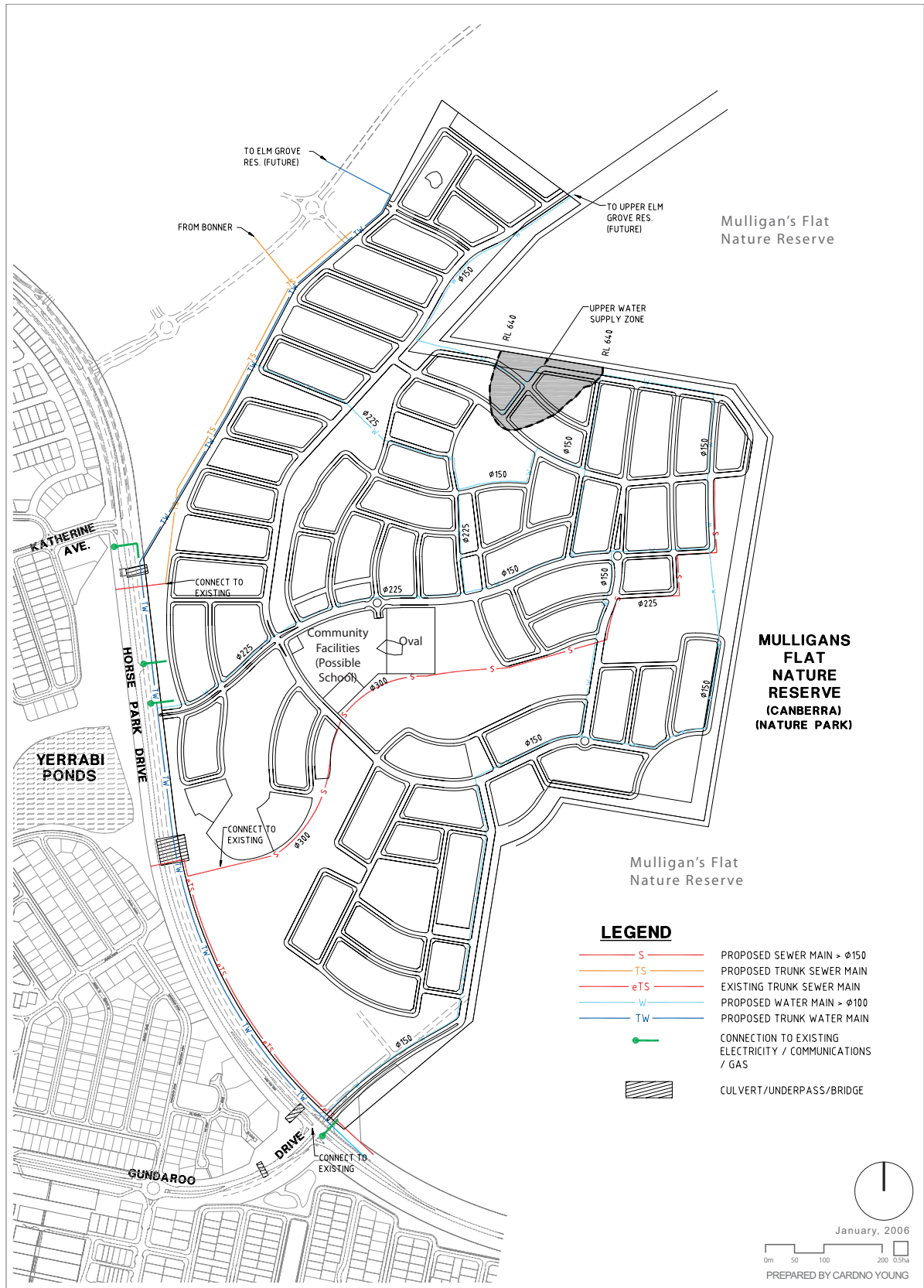
Figure 7 *Open Space Structure Plan*



Response to the Environment + Landform

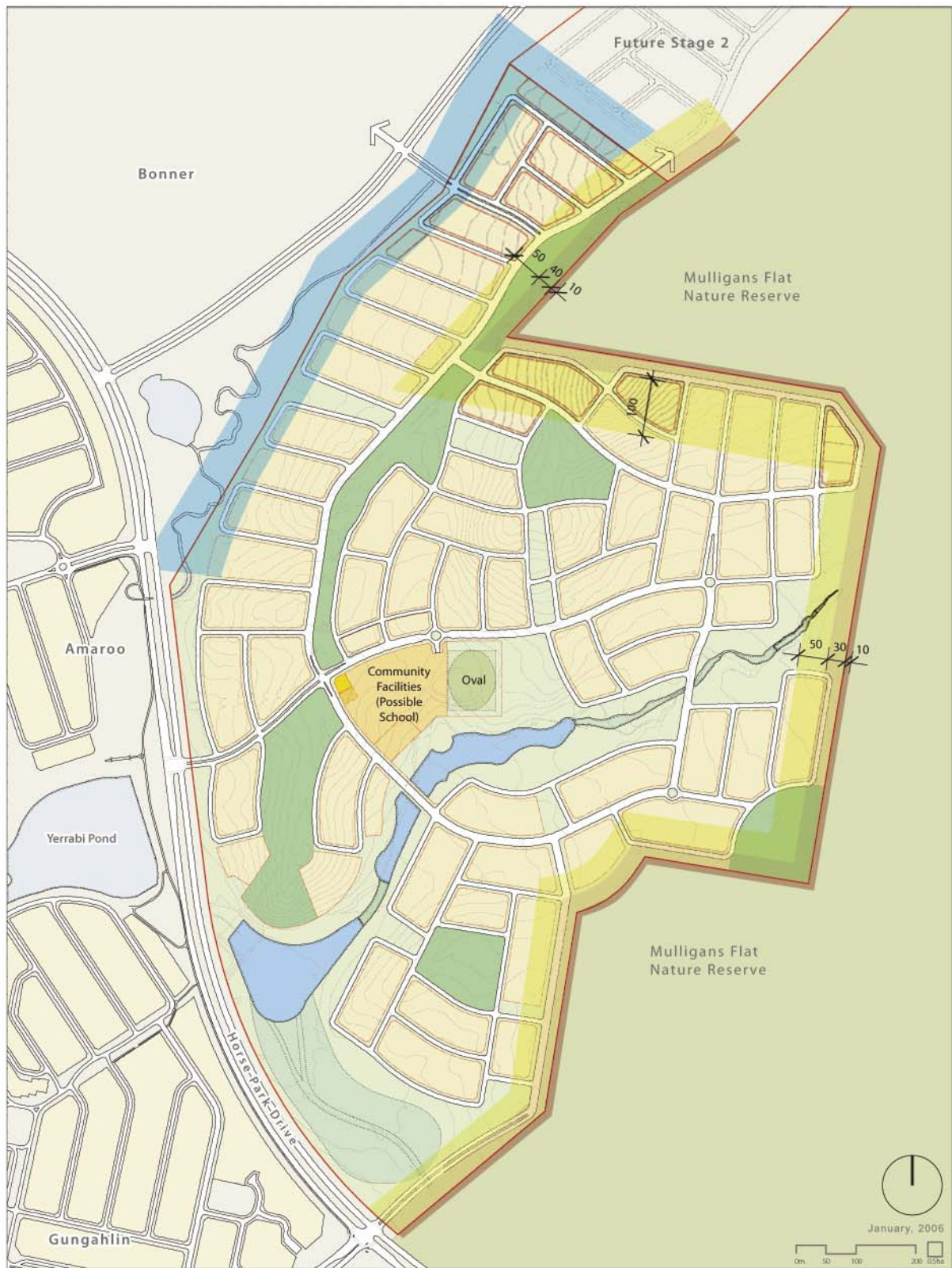
- T Significant Treed Areas
- Hill Top Parks
- Water Quality Ponds
- General Views from Hilltop Parks
- Inner + Outer Asset Protection Zones at Mulligans Flat interface
- Riparian Creek Corridor
- Trailhead - Entrance to Mulligans Flat Nature Reserve

Figure 8 Response to Environment and Landform



Indicative Infrastructure Requirements

Figure 9 Infrastructure Requirements



Bushfire Asset Protection Zones

- HAPZ** House Asset Protection Zone
Level 1 Construction to AS 3959
- IAPZ** Inner Asset Protection Zone
- OAPZ** Outer Asset Protection Zone
- Interim Mitigation Measures**

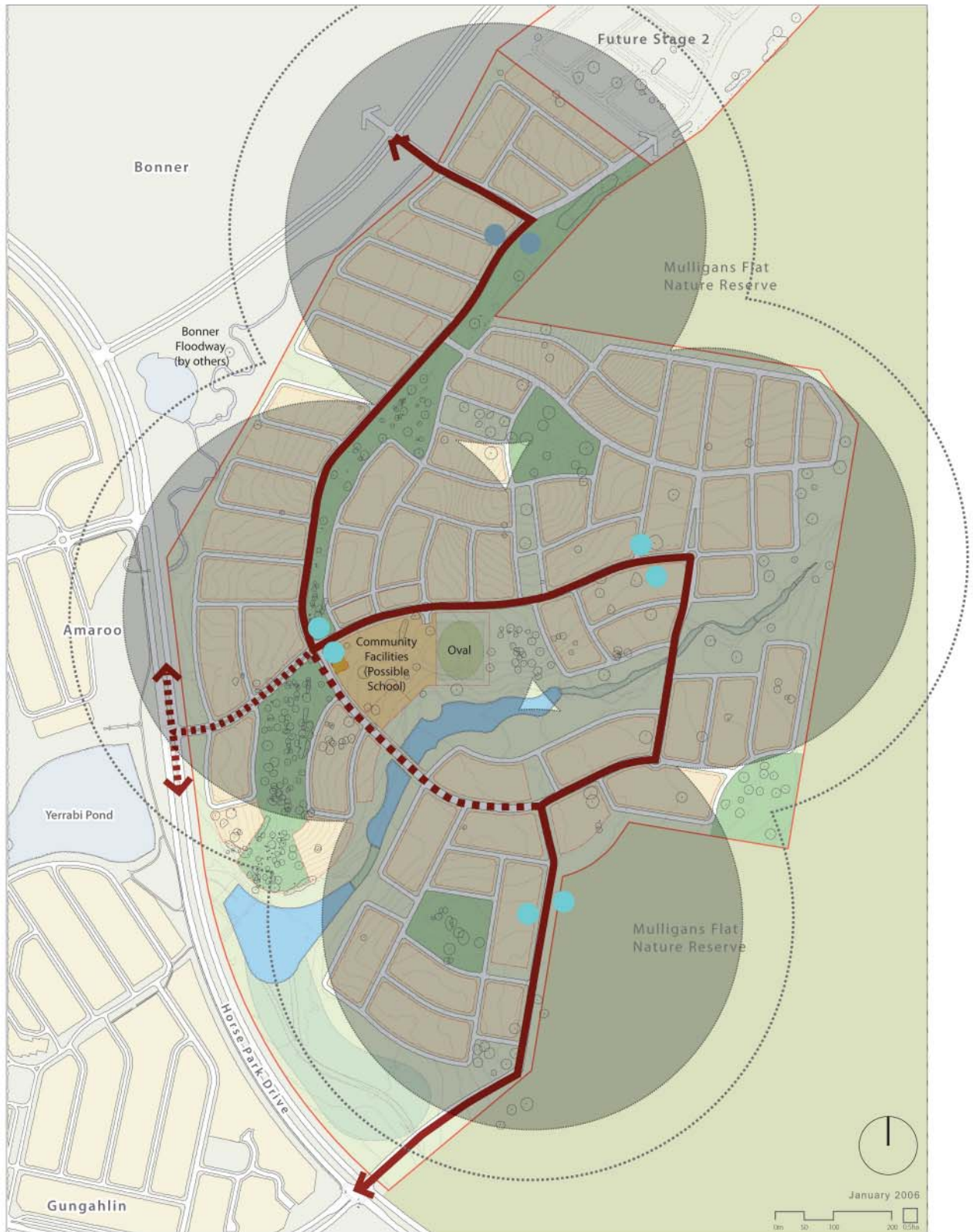
Figure 10 Bushfire Asset Protection Zones



Stormwater + Water Sensitive Urban Design (WSUD)

- Permeable kerb to allow stormwater to vegetated buffer strips and into swales for filtration.
- Collector Road with tree pit gardens
- Major Drainage Line
- Cut Off Drains
- Water Quality Control Ponds
- Regenerated Riparian Creek Corridor

Figure 11 Stormwater and Water Sensitive Urban Design (WSUD) 2.4 Concept Plan Forde Effective: 31 March 2008



Public Transport Network


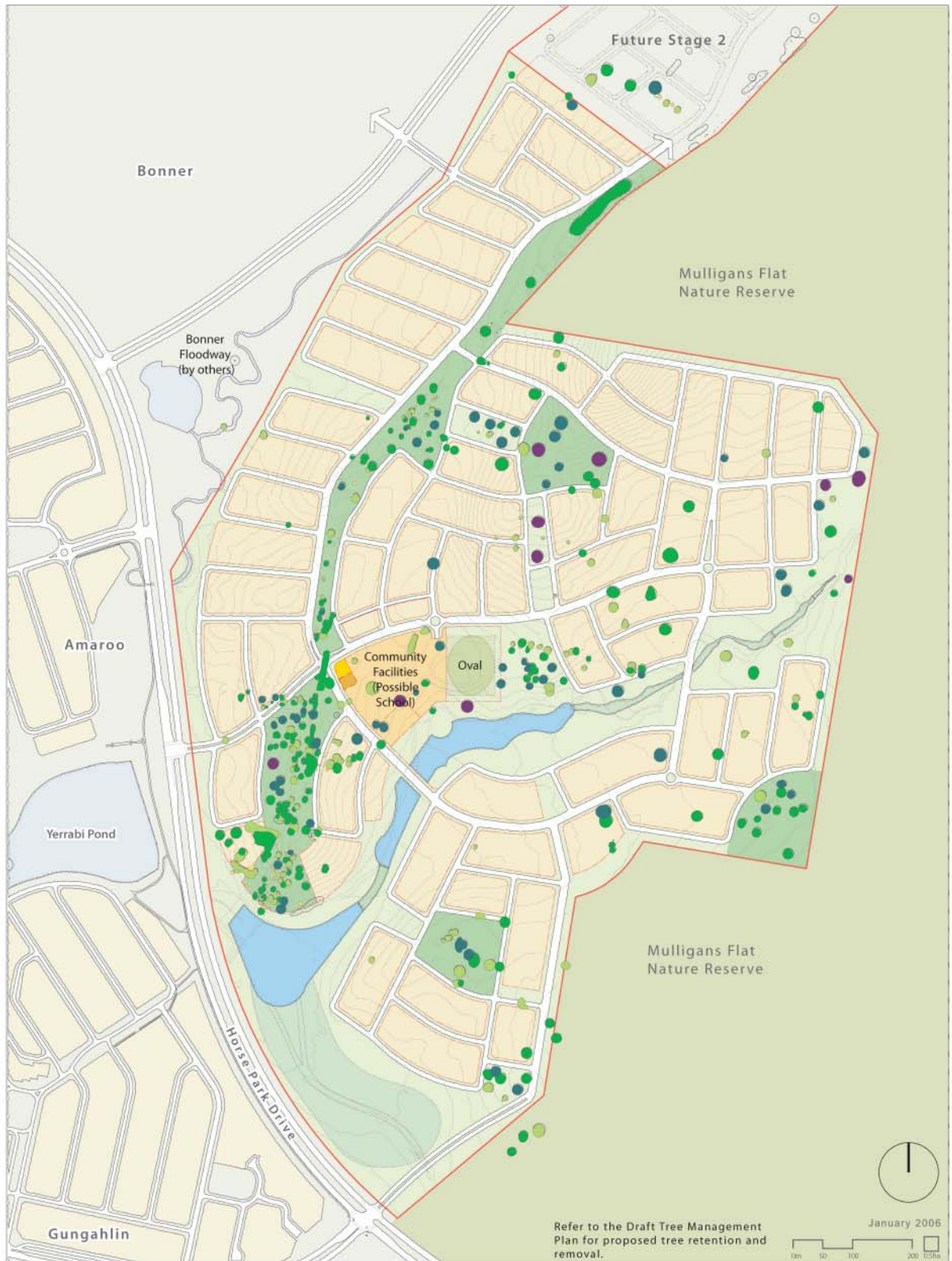
-  Public/School Bus Route
-  School Bus Route
-  Bus Stops
-  Action 500m Requirement
-  Five Minute Walk (400m)

Figure 12 Public Transport Network



Tree Survey and Assessment

Data from Environment ACT + Survey

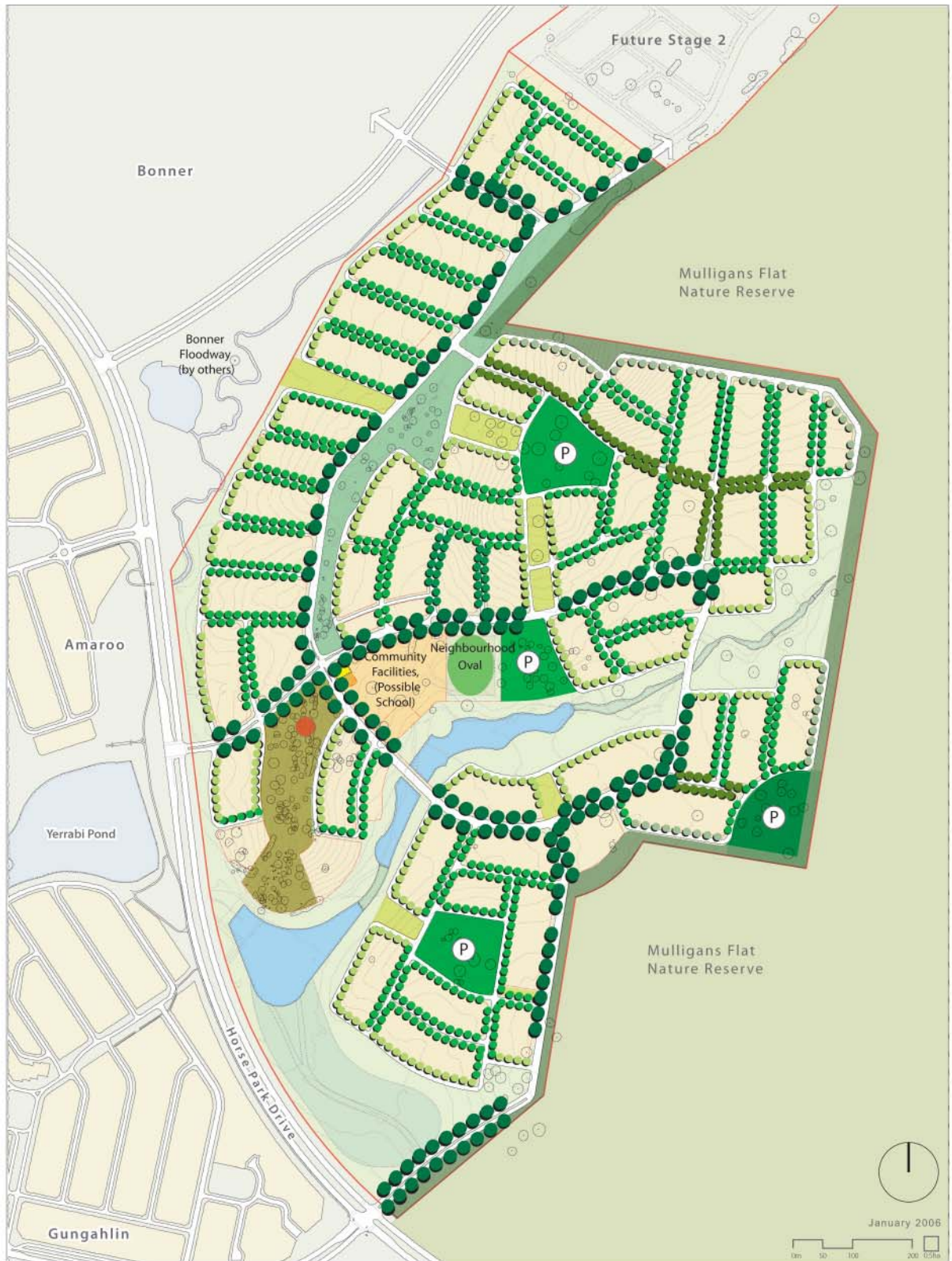
Trees significant under the Tree Protection Act

- Poor Quality - 116 trees
- High Quality - 58 trees
- Medium Quality - 188 trees
- Exceptional Quality - 12 trees

Trees not significant under the Tree Protection Act

- Low significance - 59 trees
Note: Many low significance trees are too small to distinguish on this plan

Figure 13 Tree Survey and Assessment



Landscape Master Plan

COLLECTOR ROADS

-
- Complementary foliage, texture + form.
- Contrast between native + exotic.
- Expansive canopies.
- Medium to Large Species

RESIDENTIAL STREETS

-
- Medium Species
- Natives/exotics

APZ EDGE ZONES

-
- Smaller species
- Natives
- Increased Spacing

LOCAL PRIORITY STREET

-
- Medium Species
- Natives

PARKLAND EDGE ZONE

-
- Medium Species
- Colour
- Natives/exotics

-
- Community Playgrounds

-
- Playground/ Playspace

-
- Heritage Park

-
- Neighbourhood Parks

-
- Old Gundaroo Linear Park

-
- Water Quality Ponds

-
- Pedestrian Parklands

-
- Other

-
- Mulligans Flat Interface (Incorporated into Bushfire Inner Asset Protection Zone)

-
- Regenerated Riparian Creek Corridor

January 2006



Figure 14 Landscape Master Plan



Staging Plan

Figure 15 *Staging Plan*