

Development Plan

Lots 600 and 601 Muchea East Road, Lower Chittering

Document details:

File: 820

Revision 2

Date: July 2007

Author: SP/MT

Verified: MT

Approved: MT

Important Note:

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ENDORSEMENT PAGE

This structure plan is prepared under the provisions of the Shire of Chittering Town
Planning Scheme No. 6

IT IS CERTIFIED THAT THIS STRUCTURE PLAN WAS APPROVED BY RESOLUTION OF THE
WESTERN AUSTRALIAN PLANNING COMMISSION ON:

05 January 2010

In accordance with Schedule 2, Part 4, Clause 28 (2) and refer to Part 1, 2. (b) of the
Planning and Development (Local Planning Schemes) Regulations 2015.

Date of Expiry:

19 October 2025

Executive Summary

APPLICANT:	<i>Land Insights PO Box 429 MIDLAND WA 6936 Ph: 9274 1435 Fx: 9274 1440 Email: admin@landinsights.com.au</i>
OWNERS:	<i>Hilland Malloch Venn Elizabeth Marion Venn</i>
CERTIFICATE OF TITLE:	<i>Lot 600: 2515/419 Lot 601: 2515/420</i>
LOCAL GOVERNMENT:	<i>Shire of Chittering</i>
SITE AREA:	<i>91.6041 hectares</i>
PROPOSAL:	<i>Rezoning Lot 600 and 601 from Agricultural Resource to Rural Residential to facilitate subdivision into 19 lots of between approximately 4 and 7 hectares each</i>

Land Insights acts for the owner of Lot 600 and 601 Muchea East Road, Lower Chittering and lodge this Development Plan on their behalf.

It is proposed to eventually subdivide the site into a total of 19 lots in accordance with the provisions of the Shire of Chittering Town Planning Scheme No 6 and Local Planning Strategy.

This report presents a Development Plan that will form the basis of an amendment to the Shire of Chittering local scheme to rezone the land from *Agricultural Resource* to *Rural Residential*. A future subdivision application will be made to the Western Australian Planning Commission once the zoning has been amended. The Development Plan has been prepared to the standards required in the Shire's Local Scheme.

Approval of this Development Plan is sought as part of the scheme amendment process, following which a subdivision application can be lodged.

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1 Introduction

1.1 Background

Land Insights has been commissioned to prepare a *Development Plan* (DP) for Lots 600 and 601 Muchea East Road, Chittering (the site). The purpose of the DP is to facilitate the future subdivision of the site into 19 lots of approximately 4-7 hectares each.

This report will address current policies, servicing issues and environmental considerations, as well as providing a Development Plan for the site. The DP has been prepared in accordance with the Shire of Chittering *Local Planning Strategy* and *Town Planning Scheme No. 6*.

1.2 Site location

The site comprises an area of 91.6041 hectares, located on Muchea East Road. The site is described on the Certificates of Titles as follows:

- Lot 600: 2515/419
- Lot 601: 2515/420

A site location plan and copy of the Certificate of Title is provided at Appendix A and B respectively.

1.3 Current land use

The cleared portions of the site are currently being used for agricultural purposes with the main activity being sheep grazing. The number of sheep on the property is currently less previous.

Large portions of the site have steep topography and there are large areas of parkland cleared and remnant bushland remaining on the site.

Improvements on the site include a recently (last five years) constructed residence, several dams and several outbuildings in various states of repair.

1.4 Surrounding land uses

There is a large rural residential subdivision north of Muchea East Road. Lot sizes within this development are about two hectares.

East of the subject land lot sizes vary from between 12 and 60 hectares, with the average being about 20 hectares. There are some larger 40-80 hectare lots to the south and west of the subject land, and another 2 hectare average lot size rural residential development further to the south-west.

Many of the larger lots have been cleared of vegetation and are used for agricultural purposes such as grazing or orchards. There remain large areas of un-cleared bushland – these appear to be associated primarily with the broadly undulating land in the locality.

A site context plan is provided at Appendix A.

2 Policy and statutory framework

2.1 State Planning Strategy

The *State Planning Strategy*, released in December 1997, provides *principles, strategies and actions* in relation to the future planning for each of the regions within the state, and provides a framework for implementing policy through the various programs of government agencies.

The Strategy contains a number of strategies to provide for the ongoing development of the Wheatbelt Region, of which the Shire of Chittering is a part. Strategies of relevance to the subdivision and development of agricultural land in the Wheatbelt include:

- Ensure that agricultural land is managed sustainably
- Protect natural resources (especially water resources) and prime agricultural land from incompatible development
- Protect landscape and cultural heritage values
- Promote opportunities for economic development (including niche agricultural products)

The State Planning Strategy does not identify any *Agricultural Priority Management Areas* in the vicinity.

2.2 SPP2.5 – Agriculture and Rural Land Use Planning Policy

This policy establishes an approach to the identification of areas of agricultural significance and a framework for the protection and planning of agricultural land. As such, the policy provides guidelines for rural subdivision and rural living development. In particular the policy provides a mechanism for local government to protect land that has been identified as an *Agricultural Area of State/Regional Agricultural Significance*, *Agricultural Area of Local Significance* or a *General Agriculture* area. The Shire of Chittering Town Planning Scheme does not reflect the zones identified within the policy (*Priority Agriculture*, *General Agriculture*).

The policy identifies several mechanisms for implementation. In this instance the most appropriate method of implementation is whereby the Western Australian Planning Commission *determines applications for subdivision consistent with the objectives of this policy*. Consideration of how the application addresses the objectives of the policy area discussed in the following table.

Policy Objective	Discussion
<p>Protect agricultural land resources wherever possible by:</p> <ol style="list-style-type: none"> 1. discouraging land uses unrelated to agriculture from locating on agricultural land; 2. minimising the ad hoc fragmentation of rural land 3. improving resource and investment security for agricultural and allied industry production. 	<p>Land capability information provided by Department of Agriculture indicates that the land has marginal capability for most forms of agriculture. To date, the site has been used only for grazing of sheep.</p> <p>The proposal will not result in the ad-hoc fragmentation of rural land. It is clear that the LPS supports subdivision in this area for Rural Residential purposes. Following subdivision, the lot sizes will accord more closely with the rural residential land to the north and west of the site.</p>
<p>Plan and provide for rural settlement where it can:</p> <ol style="list-style-type: none"> 1. benefit and support existing communities 2. have access to appropriate community 3. services and infrastructure. 	<p>19 rural residential lots are being proposed. The proposal complements the surrounding rural residential development in the locality. Relevant services and infrastructure are available.</p>
<p>Minimise the potential for land use conflict by:</p> <ol style="list-style-type: none"> 1. providing adequate separation distance between potential conflicting land uses; 2. introducing management requirements that protect existing agricultural land uses; 3. identifying areas that are suitable and capable for intensive agricultural pursuits as agricultural priority areas; and 4. avoiding locating new rural settlements in areas that are likely to create conflict with established or proposed agricultural priority areas. 	<p>The large lots sizes proposed should provide adequate separation distance. The building envelopes established on site are at least 500 metres away from the poultry farm. This buffer is consistent with that shown by the Shire of Chittering in the LPS.</p> <p>The proposed subdivision should not impede on existing agricultural land uses.</p> <p>No agricultural priority areas have been established by the Shire of Chittering TPS or LPS.</p> <p>No new settlements are being proposed.</p>
<p>Carefully manage natural resources by:</p>	<p>The Shire of Chittering TPS6 requires the preparation of an ODP to support certain subdivision applications in rural areas.</p>

Policy Objective	Discussion
<ol style="list-style-type: none"> 1. discouraging development and/or subdivision that may result in land or environmental degradation; 2. integrating land, catchment and water resource management requirements with land use planning controls; 3. assisting in the wise use of resources including energy, minerals and basic raw materials; 4. preventing land and environmental degradation during the extraction of minerals and basic raw materials; and 5. incorporating land management standards and sequential land use change in the land use planning and development process. 	<p>The requirements of the ODP are specific to the area and address a range of natural resource management and environmental protection issues.</p> <p>These issues have been considered and addressed in response to the requirements of the TPS6 requirements for an ODP. Please refer to Section 4 of this document for details.</p>

2.3 Shire of Chittering LPS

The Shire of Chittering LPS Map refers to the site being within a *Rural Residential* area. The LPS text refers to these areas as *Rural Living* and provides the following aim in regards to the future use and development for this type of land use.

- To provide a safe and pleasant rural living environment in a cohesive development pattern;
- To provide for adequate community facilities;
- To require all lots to be provided with scheme water wherever possible;
- To provide for a range of lot sizes to match landform capabilities;
- To provide for biodiversity corridors in association with conservation of natural vegetation and watercourses;
- To facilitate the development of cohesive road pattern to serve the community needs;
- To ensure catchment management principals are applied to all development proposals;
- To provide for adequate road structures for convenience, fire management and escape, emergency vehicles, and community service traffic movement;

- To stage development in a coordinated manner to suit the servicing need of the communities.

The LPS does not identify any specific requirements for either *Rural Living* or *Rural Residential* land, however has identified 'Priority Areas'. These priority areas have been identified as areas where Council would like to see the development of Rural Residential land as a priority. The subject land falls within a 'Priority Area'.

2.4 Shire of Chittering TPS

The Shire of Chittering Town Planning Scheme (TPS) indicates that rezoning will be required prior to subdivision or development of rural residential land. The TPS goes on to list several issues that need to be addressed, including:

- The need for a Development Plan to support subdivision
- Building envelopes/setbacks
- Requirement for planning approval
- Fencing
- Non-potable water supply
- Land management
- Dams and watercourses
- Protection of Vegetation and Tree Cover
- Fire management
- Effluent disposal
- Livestock management
- Management of agricultural activities
- Responsibilities of the vendor

This Development Plan addresses those issues that are considered relevant for the scheme amendment/subdivision stage. A note will be provided on the plan regarding relevant issues

and the need to obtain planning approval and meet other Shire requirements in terms of future development on each lot.

3 Site characteristics

3.1 Topography

The subject land generally slopes up from the north-west in an easterly direction with steep 'breakaway' country located in the south-east corner. Some of the slopes are in excess of 15% gradient.

The elevation ranges from the highest at 210 metres AHD in the southern portion of the property to 125 metres AHD in the north-east corner of the site.

3.2 Vegetation

There are significant areas of remnant vegetation across the site. Most of the dense remnant vegetation lies along the eastern boundary from the north-eastern portion of the site to the south. Scattered or 'parkland cleared' vegetation exists along the western boundary and through the middle of the site. The north-western portion of the site, with the exception of the immediate fringing vegetation of Marbling Brook tributary, is largely cleared.

Protection of remnant vegetation

The proposed subdivision seeks to retain the existing vegetation located on the site and encourages further planting of endemic native species as part of the proposal, particularly within the highly saline area located to the mid-west of the site and along significant creek lines (i.e. Marbling Brook). The vegetation will be preserved and protected from development and agricultural activities. Memorials and/or covenants on titles could be used to achieve this.

The vegetation present near the tributary along the western boundary of the site will be protected by placing restrictive covenants on titles to avoid any adverse developmental impacts on the vegetation. This area is depicted on the Development Plan.

The land on the eastern half of the site is within a *Special Control Area*. Consequently, proposed lot sizes are larger, which will result in less impact on remaining vegetation..

Revegetation and remediation

Revegetation work during the early stages of development will be encouraged throughout the site, however will focus on areas of the site around the tributary. Prior to any revegetation, the soil should be ripped by a bulldozer and sprayed with herbicides for weed control purposes. Seedlings of all recommended plant species should be obtained and planted. Direct seeding of understorey and shrub species should also occur to increase the density of vegetation.

It is recommended that one in every three plants used for revegetation are understorey species (i.e. shrubs and small trees). To ensure greater success, planting and seeding should occur after the first rains in late autumn/early winter.

The following endemic plant species can be used for revegetation efforts along the tributary;

- *E. calophylla*
- *E. accedens*
- *E. wandoo*
- *A. pulchella*
- *Adenathos cygnorum*
- *C. phoeniceus*
- *Melaleuca trichophylla*
- *Viminaria juncea*
- *Juncus Kraussii*
- *J. pallidus*
- *Baumea articulata*

Where future landowners wish to re-vegetate other areas of the site, the following species would be encouraged:

- *Eucalyptus calophylla*
- *E. accedens*

- *E. wandoo*
- *Acacia pulchella*
- *Callistemon phoeniceus*
- *Hakea trifurcate*
- *Jacksonia furcellata*
- *J. sternbergiana*
- *Viminaria comptoniana*
- *Hypocalumma robustum*
- *Hypocalymma angustifolium*

An area of relatively high salinity levels exists in the mid west portion of the site. Revegetation of this area with salt-tolerant species is occurring. Species that could be used for this purpose include:

- *E. sargentii*
- *E. occidentalis*
- *E. camaldulensis*
- *E. rudis*
- *Casurina obesa*
- *M. cuticularis*
- *M. raphiophylla*
- *A. saligna*

Weed management

Weeds and exotic species will be managed during development on the site through the use of appropriate herbicides such as roundup or similar, preferably during August. However, owing to the destructive nature of herbicides in the environment, they will only be used where necessary (for example, if particularly potent weed species are present or an overwhelming quantity of weeds exists). Other methods of weed control, including mowing, manual removal

and top soil ripping, are recommended, but are generally less effective and efficient than the use of herbicides.

Weeds and exotic species are widespread throughout Australia. The development and implementation of a detailed weed management plan to completely eradicate weeds from the site would be impractical. It is likely that weeds will re-establish at a fast rate and the complete eradication of weeds will not have a great effect on the state of the environment owing to the relatively small size of the site. Therefore, while it is possible to implement measures to eradicate large quantities and particularly potent weeds, it is impractical to attempt to remove all weeds from the site.

3.3 Hydrology and Water Sensitive Design

The site contains a tributary of Marbling Brook and a number of smaller flow lines running within the property, particularly near the south-east.

The subdivision seeks to protect the Marbling Brook tributary and flow lines by establishing a vegetated buffer around these areas to ensure protection from all development and in particular any future agricultural activities, including protection from stock.

There are three dams located on the property that are considered to provide adequate water supplies for forms of future agricultural activity.

Graded banks are proposed to assist in limiting surface water erosion around drainage lines, and in particular the drainage line located in the far northern portion of the property.

Detailed road designs will be prepared in accordance with Shire requirements following subdivision approval. Appropriate mechanisms will be incorporated to ensure that drainage is appropriately attenuated and treated.

Protection of drainage lines

One major drainage line exists on the site, which extends from the northern boundary of the site, near Muchea East Road and extends along the western boundary of the property to the south-west corner. Consequently, this drainage line (the Marbling Brook tributary) will run through proposed lots on the western side of the site. Restrictive covenants will be placed on titles for these proposed lots which will prevent any disturbance to the tributary and the associated vegetation.

According to the *Land Administration Act 1997* (division 2, section 15, subsection 4), restrictive covenants can include *the requirement that land is to be built on in accordance with that covenant*. Therefore, placing a restrictive covenant on titles will help protect Marbling Brook and its surrounding vegetation by restricting development and disturbance to this area of the environment (indicated on the Development Plan in Appendix A).

3.4 Land capability

Land capability information in the area has been assessed as part of the *Chittering Land Resources Survey*, completed on behalf of the Department of Agriculture. A more detailed Land Capability Assessment of what was then Loc M1729 was also undertaken to support a previous application on the site in 1996. The soils and land capability information in this study would still remain current and an extract of the report is provided at Appendix C.

Major soil-landscape units on the site are summarised in the following table.

Soil-Landscape Unit	Description	Land capability considerations
Coolakin 1	Moderately steep to steep side-slopes Yellow duplex and gradational soils	Some limitations for house and road construction and effluent disposal
Coolakin 2	Gentle to moderately inclined side-slopes Gravelly yellow duplex soils and moderately deep gravelly sands	Some limitations for house and road construction and effluent disposal in areas
Coolakin 3	Gentle side-slopes with well drained moderately deep gravelly sands	High capability for house and road construction and effluent disposal,

		apart from areas of with ironstone outcrops.
Coolakin 4	Narrow drainage flows with imperfectly drained yellow or mottled yellow duplex	Some limitations for house and road construction and effluent disposal
Mogumber 3	Gently inclined ironstone.	Fair suitability for house and road construction; Limitations for effluent disposal.

Adapted from *Land Capability Assessment, Lot M1729 Muchea East Road, Department of Agriculture.*

3.5 Land Management

Salinity

Some areas of high salinity are present in the mid-west portion of the site, which has been contributed by adjoining properties to the north of Muchea East Road. Further re-vegetation in areas affected with salinity will be encouraged to assist in the management and remediation of this issue. Section 3.2 above provides further information on the salt-tolerant species that should be planted in these areas. Revegetation in these areas should help lower the groundwater table and eventually lead to a reduction in salinity levels.

Salinity has not been found throughout the remainder of the site. Therefore, the management of salinity across the entire site is unnecessary and should be concentrated on the small area where it has been identified.

Acid Sulphate Soils

The presence of acid sulphate soils was investigated by referring to the *Western Australian Planning Commission Planning Bulletin 64 Acid Sulphate Soils*. The site is located in an area where there is *no known risk of ASS occurring within 3m of natural soil surface* on the site or surrounding properties. Therefore, the management of acid sulphate soils is not an issue.

Acidic Water

No acidic water has been identified on the site. Furthermore, it is unlikely that acidic water will be found on the site at the present time or in the near future due to the soil characteristics and the absence of water in Marbling Brook for a large time of the year. Therefore, no

management actions are necessary at the present time to manage the presence of acidic water.

3.6 Fire management

The Shire's Fire Management Policy has been reviewed. A Fire Management Plan is currently being prepared for the site.

4 The proposal

4.1 Design philosophy

The Development Plan seeks to facilitate the sympathetic development of the site by minimising the impact of development on the existing landscape and recognising the significant physical characteristics of the site. Emphasis has been placed on minimising the removal of significant remnant vegetation on the site as well as maintaining the rural vistas from around and into the site, with larger lots being proposed in the area of high landscape value.

The design achieves this by strategically situating lot boundaries to minimise the removal of remnant vegetation and limit impact on existing surface drainage areas.

4.2 Lot sizes

Lot sizes will be between 4.0030 hectares and 6.9444 hectares. A total of 19 lots are proposed.

4.3 Building envelopes

An area of approximately 2 000m² has been set aside for building envelopes on each proposed lot. Building envelopes are used to protect sensitive environmental features and ensure development is located in the appropriate portion of each proposed lot. The criterion for determining the locations of the building envelopes is based on the need to protect particular environmental features or landscape elements of the site.

4.4 Roads and access

Access to the subdivision will be provided from both Morley Road and Muchea East Road. The internal access road has been designed as a circuit route to service all proposed lots. A 30-metre road reserve has been incorporated into the design to provide linkage to any future subdivision on the property to the south. Street lighting has been proposed at intersections to improve motorist safety.

An allowance for widening of both Morley Road and Muchea East Road has been made in accordance with Shire requirements for the ultimate width of these roads.

4.5 Servicing and infrastructure

There are existing telephone and power services to the site.

On-site effluent disposal and rainwater tanks will need to be installed. The soil types are considered to provide adequate drainage and nutrient retention and should be suited to conventional septic tank/leach drain systems. All effluent disposal systems will be located at least 100 metres away from any watercourse on the site.

4.6 Public Open Space

A Shire policy requires a minimum of 10% Public Open Space (POS) to be identified at the scheme amendment stage for future ceding to the Shire.

This requirement is considered both onerous and unnecessary in this instance for the following reasons:

- The large lot sizes proposed (4ha minimum) is unlikely to create a demand for separate POS areas within the proposed subdivision.
- An area of 9.1 hectares of Public Open Space will be significantly larger than any of the proposed lots on the site. It is unlikely that the Shire will provide any services or facilities to enable this area of Public Open Space to be utilised.
- The rationale of providing POS to ensure that suitable areas of land is available once the land is urbanised cannot be justified and is not justified in the Shire's LPP. The current planning scheme and LPS do not allow the urbanisation of this land and it is considered extremely unlikely that the Shire or WAPC will permit this land to be urbanised in the foreseeable future. In any event, there would be an opportunity upon further subdivision to provide POS areas to cater for urban development. Taking even

the smallest lot proposed in this instance, 4.5 hectares, a total of 4500m² of POS could be required as part of a future subdivision. Even in existing urban local governments, provision of POS of this area would constitute a regional facility.

- There will be serious implications for the Shire of Chittering as more of these POS areas are created. The end effect will be the Shire having numerous amounts of isolated, large and undeveloped POS areas. In the longer term this will create a huge financial burden on the Shire and its ratepayers to maintain.
- The provision of POS on an ad-hoc basis is not sound planning practice in a rural context. Should the Shire determine that POS in rural areas be required, then a guiding plan or POS framework should be prepared to identify where there will be a need for POS.
- The use of legal agreements to cede POS should not be required as there is no guarantee that either the WAPC or the Minister for Planning and Infrastructure will support the creation of POS or the rezoning itself. Any legal agreement should therefore be contingent upon support of these bodies.

The Shire policy also provides a mechanism whereby a *cash in lieu* payment can be made rather than the provision of actual land for POS purposes. It is suggested that this approach be entertained in this instance.

4.7 Rural Amenity

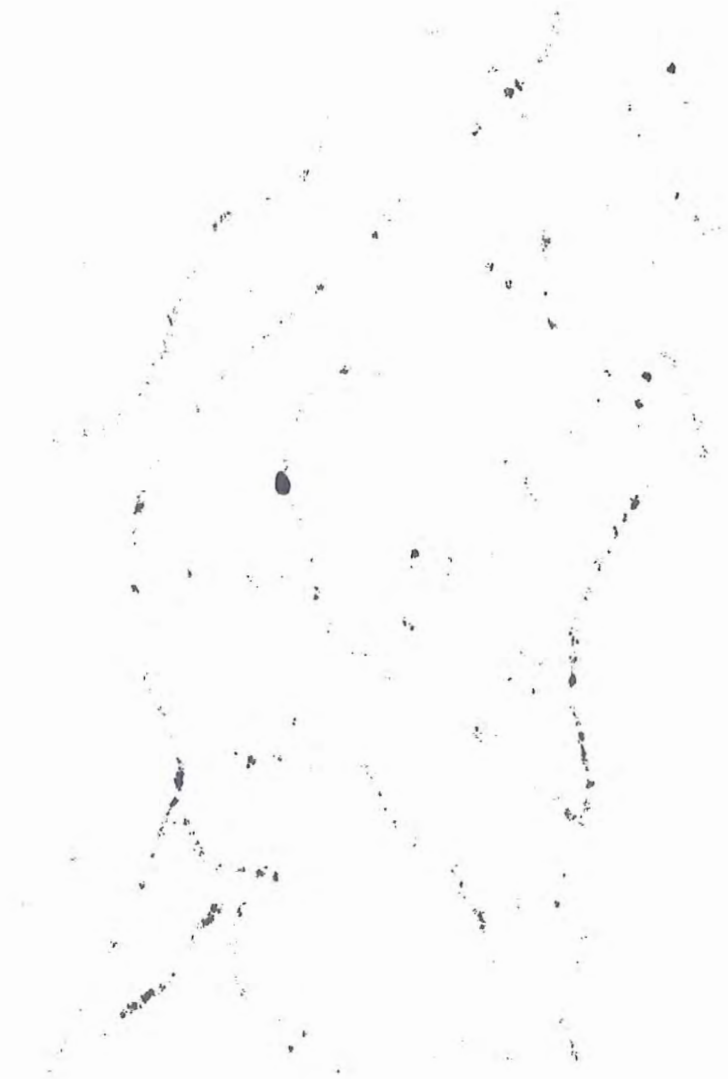
The subdivision of the site into lots of between four and seven hectares will not adversely affect the rural amenity of the area. Lots of this size and smaller are already present in the vicinity.

4.8 Heritage

There are no known European heritage sites on the site. A search of the Aboriginal Heritage database indicated that there are no known Aboriginal sites in the locality.

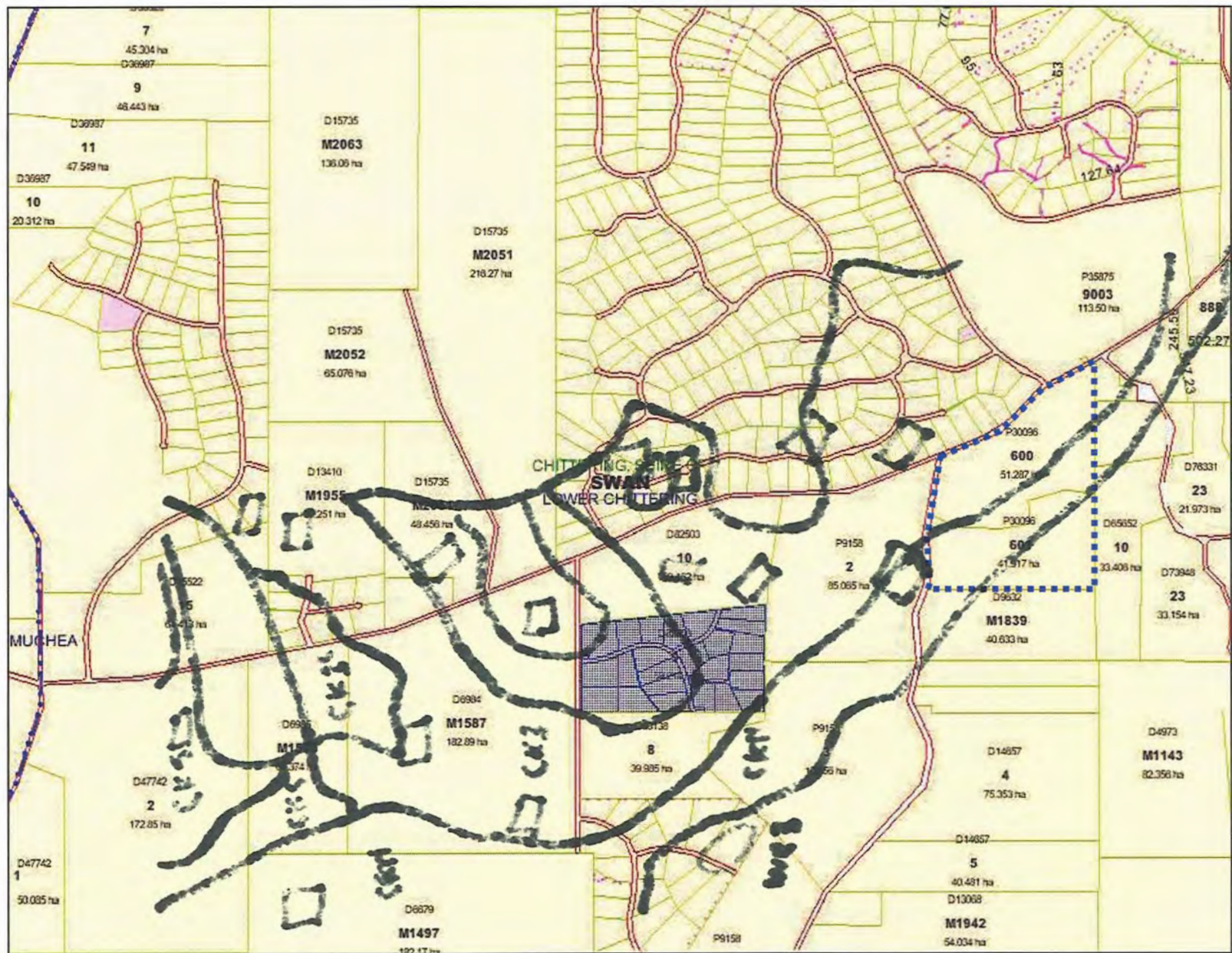
Appendix A

Plans



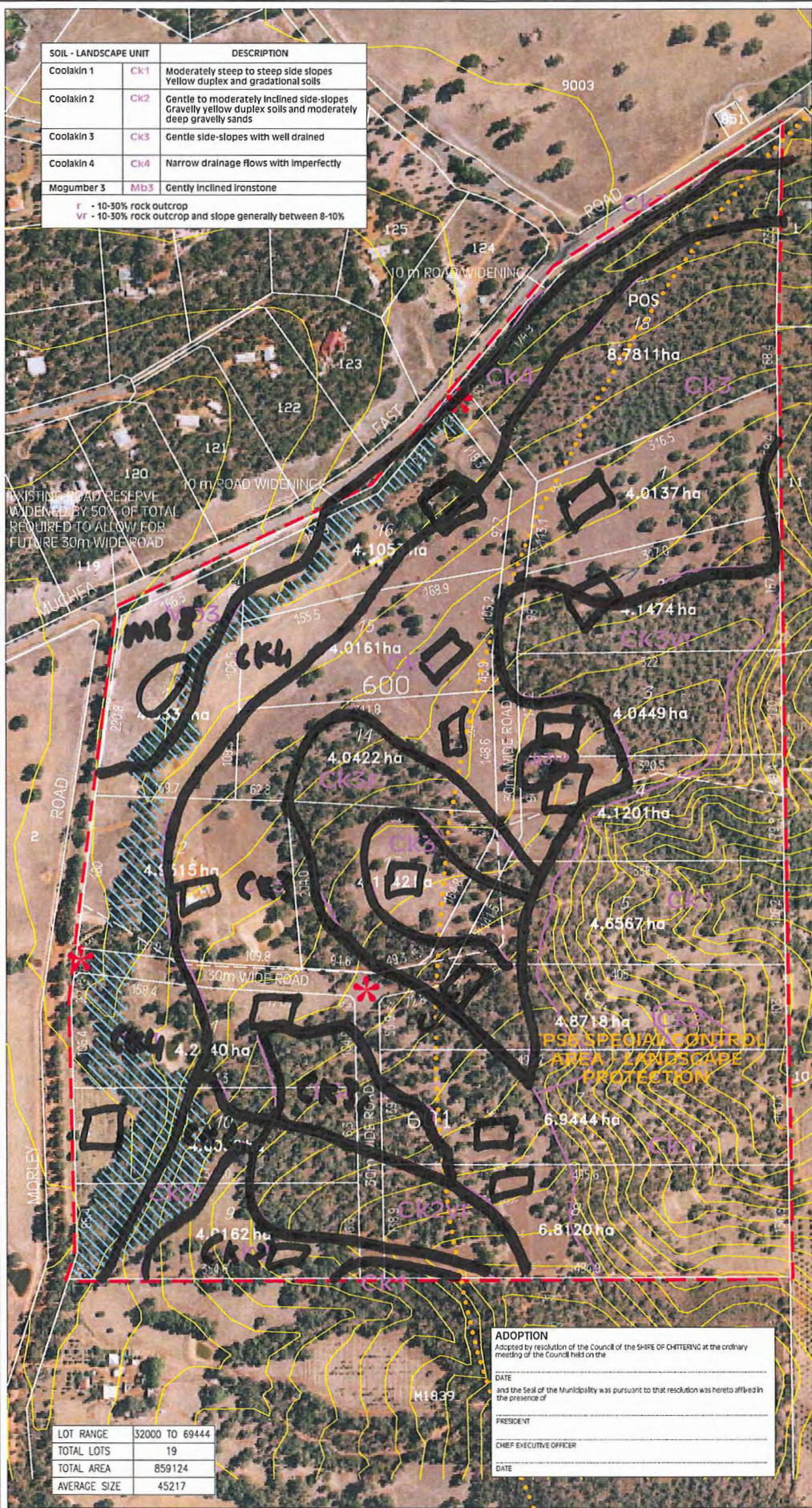
Site Location, Lots 600 & 601 Muchea East Road, Lower Chittering

Site



SOIL - LANDSCAPE UNIT	DESCRIPTION
Coolakin 1 CK1	Moderately steep to steep side slopes Yellow duplex and gradational soils
Coolakin 2 CK2	Gentle to moderately inclined side-slopes Gravelly yellow duplex soils and moderately deep gravelly sands
Coolakin 3 CK3	Gentle side-slopes with well drained
Coolakin 4 CK4	Narrow drainage flows with imperfectly
Mogumber 3 MB3	Gently inclined Ironstone

r - 10-30% rock outcrop
 vr - 10-30% rock outcrop and slope generally between 8-10%



DEVELOPMENT PROVISIONS RELATING TO THE ESTATE

- (a) Development Plan**
This plan has been approved by the Council and the Western Australian Planning Commission. Subdivision and development should generally be in accordance with this plan.
- (b) Development Requirements and Lot Sizes**
In considering development and subdivision of the land, the requirements of the Shire of Chittering Town Planning Scheme No.6 for the 'Rural Residential' zone apply.
- (c) Vegetation Preservation**
No clearing is permitted without Planning Consent, within areas of Vegetation Protection and Re-vegetation as depicted on the Development Plan - unless those trees are dead, diseased or present a danger to property.
- (d) Building Envelopes**
Buildings, water tanks and waste disposal are to be contained within an area not to exceed a maximum of 2000 square metres without the prior approval of Council. Buildings are to be set back from cadastral boundaries as follows:
Major road 50 metres
Other road 20 metres
Rear 20 metres
Side 15 metres
If the site is to have a sand pad for the proposed dwelling greater than 0.5 metres above natural ground level, then for every 0.5 metres of height above natural ground level, setback distances are to be increased by 2 metres.
- (e) Fencing**
In accordance with Local Planning Policy No.22 'Fences', within a lot the construction of a fence around the building envelope, any previously cleared area and adjoining an authorised fire break, is permitted. Elsewhere, no boundary fences are permitted in vegetation protection areas identified on the Development Plan, without planning consent of the Council.
- (f) Crossovers**
The construction of a crossover to each lot is to be in accordance with Council's specifications.
- (g) Potable Water**
Each dwelling is to have a water supply from roof catchment of a minimum of 120,000 litres, of which 10,000 litres is to be kept in reserve for fire fighting purposes and fitted with a standard 50mm male Camlock valve.
- (h) Land Management**
The maintenance of any drainage swales, easements, fire breaks and vegetation protection and re-vegetation areas is the responsibility of the owner / occupier.
- (i) Bores, Dams and Watercourses.**
The sinking of bores, construction of dams and extraction of surface water is not permitted without the approval of the Council and relevant State Government department.
- (j) Fire Control.**
Strategic Fire Breaks as shown on the Development Plan will be constructed by the developer and are to be maintained by the owner / occupier to the satisfaction of the Chief Executive Officer and the Fire and Emergency Services Authority, in accordance with Local Planning Policy No.21 'Fire Management Plans'.
- (k) Permitted Uses.**
A single house and associated outbuildings are the only permitted uses. Other uses specified in the Town Planning Scheme may be approved at the discretion of the Council. Approval is required for a home business but not for a home office. For any use that may result in degradation of land or water resources or nuisance to neighbours, a management plan may be required as a condition of development approval.
- (l) Stocking Restrictions.**
Crazing animals are to be restricted to avoid overgrazing in accordance with Local Planning Policy No.24 'Stocking Rates and Keeping of Animals'.
- (m) Domestic Pets.**
The keeping of domestic cats shall be prohibited.
- (n) Roofing Materials.**
All buildings shall be constructed with roofs of non-reflective materials.
- (o) Waste Disposal.**
Where indicated on the Development Plan alternative treatment units are required for effluent disposal.
- (p) Drainage.**
Landowners shall maintain natural drainage lines to prevent erosion and soil export to adjoining lots. There shall be no alteration to natural drainage lines.
- (q) Vendor Responsibility.**
The developer / vendor shall inform prospective purchasers of the lots, in writing, of the provisions of the Council's Town Planning Scheme relating to the management of the land, as specified in the Development Plan and Fire Management Plan.

ADOPTION
Adopted by resolution of the Council of the SHIRE OF CHITTERING at the ordinary meeting of the Council held on the

DATE _____
and the Seal of the Municipality was pursuant to that resolution was hereto affixed in the presence of

PRESIDENT _____
CHIEF EXECUTIVE OFFICER _____
DATE _____

LOT RANGE	32000 TO 69444
TOTAL LOTS	19
TOTAL AREA	859124
AVERAGE SIZE	45217

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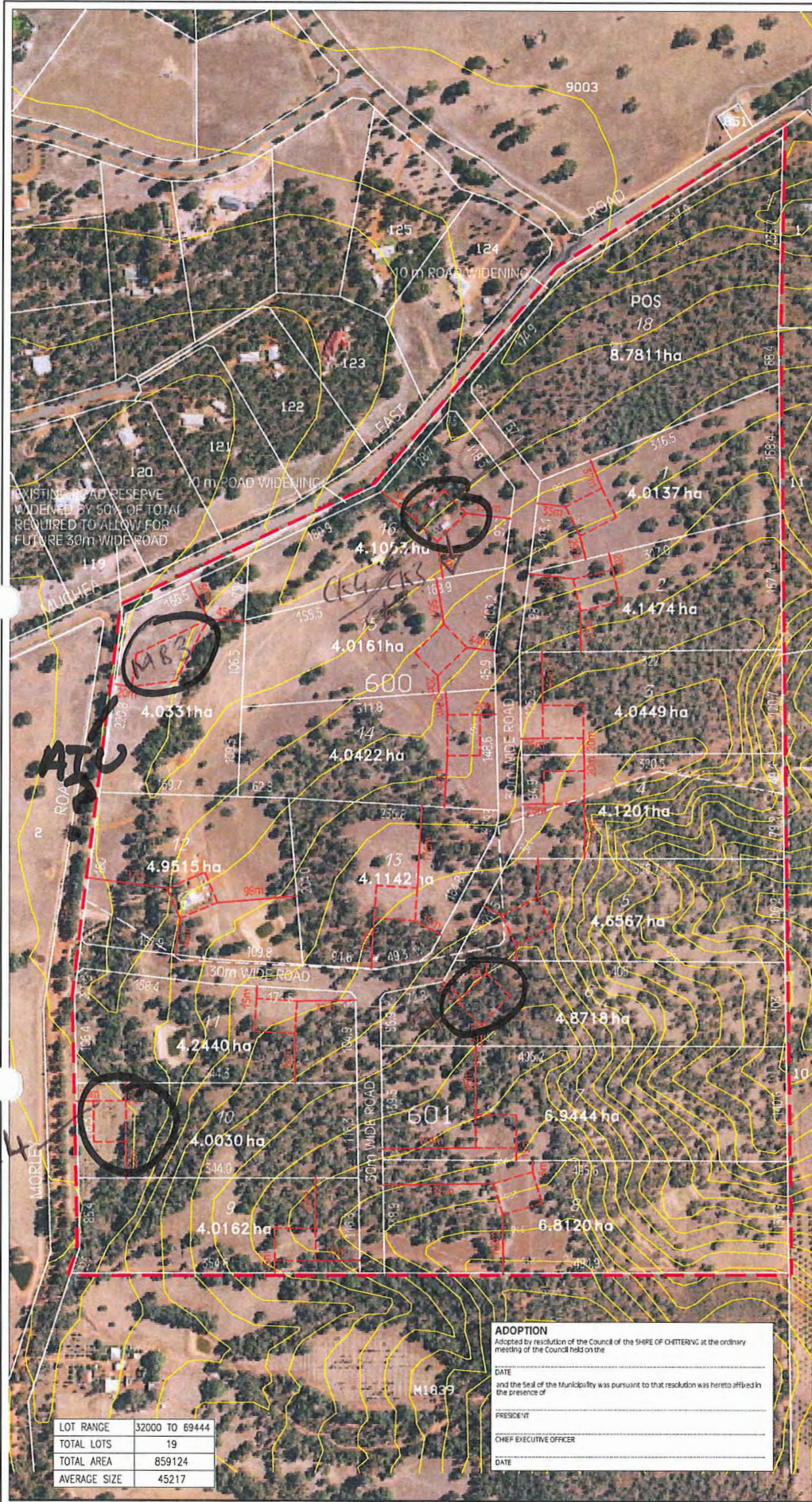
Building envelope - 50m x 40m
 Vegetation and drainage line to be protected by restrictive covenant to be placed on title.
 Intersection street lights

FILE NO.	820
DRAWN BY	EC
DATE	19 February 2008
VERIFIED BY	MT
APPROVED BY	MT
DRAWING NO.	06565_subdiv1B

0 100m
 SCALE 1:5000

DEVELOPMENT PLAN
LOTS 600 & 601 MUCHEA EAST ROAD
CHITTERING FOR H & L VENN

This plan was prepared as a subdivision plan and should not be used for any other purpose. The dimension, areas and number of lots shown hereon are subject to field survey and also to the requirements of the W.A.P.C. and any other authorities which may have requirements under any relevant legislation. In particular, no reliance should be placed on the information on this plan for any financial dealings involving the land. This note is an integral part of this plan.



DEVELOPMENT PROVISIONS RELATING TO THE ESTATE

(a) Development Plan

This plan has been approved by the Council and the Western Australian Planning Commission. Subdivision and development should generally be in accordance with this plan.

(b) Development Requirements and Lot Sizes

In considering development and subdivision of the land, the requirements of the Shire of Chittering Town Planning Scheme No.6 for the 'Rural Residential' zone apply.

(c) Vegetation Preservation

No clearing is permitted without Planning Consent, within areas of Vegetation Protection and Re-vegetation as depicted on the Development Plan - unless those trees are dead, diseased or present a danger to property.

(d) Building Envelopes

Buildings, water tanks and waste disposal are to be contained within an area not to exceed a maximum of 2000 square metres without the prior approval of Council. Buildings are to be set back from cadastral boundaries as follows:

- Major road 50 metres
- Other road 20 metres
- Rear 20 metres
- Side 15 metres

If the site is to have a sand pad for the proposed dwelling greater than 0.5 metres above natural ground level, then for every 0.5 metres of height above natural ground level, setback distances are to be increased by 2 metres.

(e) Fencing

In accordance with Local Planning Policy No.22 'Fences', within a lot the construction of a fence around the building envelope, any previously cleared area and adjoining an authorised fire break, is permitted. Elsewhere, no boundary fences are permitted in vegetation protection areas identified on the Development Plan, without planning consent of the Council.

(f) Crossovers

The construction of a crossover to each lot is to be in accordance with Council's specifications.

(g) Potable Water

Each dwelling is to have a water supply from roof catchment of a minimum of 120,000 litres, of which 10,000 litres is to be kept in reserve for fire fighting purposes and fitted with a standard 50mm male Camlock valve.

(h) Land Management

The maintenance of any drainage swales, easements, fire breaks and vegetation protection and re-vegetation areas is the responsibility of the owner / occupier.

(i) Bores, Dams and Watercourses

The sinking of bores, construction of dams and extraction of surface water is not permitted without the approval of the Council and relevant State Government department.

(j) Fire Control

Strategic Fire Breaks as shown on the Development Plan will be constructed by the developer and are to be maintained by the owner / occupier to the satisfaction of the Chief Executive Officer and the Fire and Emergency Services Authority, in accordance with Local Planning Policy No.21 'Fire Management Plans'.

(k) Permitted Uses

A single house and associated outbuildings are the only permitted uses. Other uses specified in the Town Planning Scheme may be approved at the discretion of the Council. Approval is required for a home business but not for a home office. For any use that may result in degradation of land or water resources or nuisance to neighbours, a management plan may be required as a condition of development approval.

(l) Stocking Restrictions

Crazing animals are to be restricted to avoid overgrazing in accordance with Local Planning Policy No.24 'Stocking Rates and Keeping of Animals'.

(m) Domestic Pets

The keeping of domestic cats shall be prohibited.

(n) Roofing Materials

All buildings shall be constructed with roofs of non-reflective materials.

(o) Waste Disposal

Where indicated on the Development Plan alternative treatment units are required for effluent disposal.

(p) Drainage

Landowners shall maintain natural drainage lines to prevent erosion and soil export to adjoining lots. There shall be no alteration to natural drainage lines.

(q) Vendor Responsibility

The developer / vendor shall inform prospective purchasers of the lots, in writing, of the provisions of the Council's Town Planning Scheme relating to the management of the land, as specified in the Development Plan and Fire Management Plan.

ADOPTION
 Adopted by resolution of the Council of the SHIRE OF CHITTERING at the ordinary meeting of the Council held on the _____

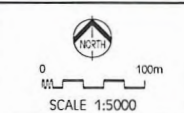
DATE _____
 and the Seal of the Municipality was pursuant to that resolution was hereto affixed in the presence of

PRESIDENT _____
 CHIEF EXECUTIVE OFFICER _____
 DATE _____

LAND InSights
 UNIT 7/27 OLD GREAT NORTHERN HIGHWAY
 MELB/D W.A. 6036
 POSTAL ADDRESS: PO BOX 429 MILDAND, W.A. 6396
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 EMAIL: admin@landinsights.com.au

- Building envelope - 50m x 40m
- Vegetation and drainage line to be protected by restrictive covenant to be placed on title.
- Intersection street lights

FILE NO.	820
DRAWN BY	EC
DATE	19 February 2008
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APPROVED BY	MT
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DEVELOPMENT PLAN
 LOTS 600 & 601 MUCHEA EAST ROAD
 CHITTERING FOR H & L VENN
LOCATION OF BUILDING ENVELOPES

This plan was prepared as a subdivision plan and should not be used for any other purpose. The dimension, areas and number of lots shown hereon are subject to field survey and also to the requirements of the WAPC and any other authorities which may have requirements under any relevant legislation. In particular, no reliance should be placed on the information on this plan for any financial dealings involving the land. This note is an integral part of this plan.

Appendix B

Certificate of Titles

11/11/11

WESTERN




AUSTRALIA

REGISTER NUMBER 600/DP30096	
DUPLICATE EDITION 2	DATE DUPLICATE ISSUED 21/3/2003

RECORD OF CERTIFICATE OF TITLE
UNDER THE TRANSFER OF LAND ACT 1893

VOLUME **2515** FOLIO **419**

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

RG Roberts
REGISTRAR OF TITLES 

LAND DESCRIPTION:

LOT 600 ON DEPOSITED PLAN 30096

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

HILLAND MALLOCH VENN
ELIZABETH MARION VENN
BOTH OF 3 EDWYNA STREET, MOSMAN PARK
AS JOINT TENANTS

(T I053291) REGISTERED 25 MARCH 2002

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

- EXCEPT AND RESERVING METALS, MINERALS, GEMS AND MINERAL OIL SPECIFIED IN TRANSFER 15912/1947.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.

* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP30096 [SHEET 1].
PREVIOUS TITLE: 1105-199.
PROPERTY STREET ADDRESS: 29 MORLEY RD, LOWER CHITTERING.
LOCAL GOVERNMENT AREA: SHIRE OF CHITTERING.

WESTERN




AUSTRALIA

REGISTER NUMBER 601/DP30096	
DUPLICATE EDITION 3	DATE DUPLICATE ISSUED 10/1/2005

RECORD OF CERTIFICATE OF TITLE
UNDER THE TRANSFER OF LAND ACT 1893

VOLUME **2515** FOLIO **420**

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

RG Roberts
REGISTRAR OF TITLES 

LAND DESCRIPTION:

LOT 601 ON DEPOSITED PLAN 30096

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

HILLAND MALLOCH VENN
ELIZABETH MARION VENN
BOTH OF 29 MORLEY ROAD, LOWER CHITTERING
AS JOINT TENANTS

(T J115293) REGISTERED 10 DECEMBER 2004

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. EXCEPT AND RESERVING METALS, MINERALS, GEMS AND MINERAL OIL SPECIFIED IN TRANSFER 15912/1947.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.

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SKETCH OF LAND: DP30096 [SHEET 1].
PREVIOUS TITLE: 1105-199.
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.
LOCAL GOVERNMENT AREA: SHIRE OF CHITTERING.

Appendix C

Land Capability Information

Land Capability Assessment

Lot M1729 Muchea East Road

Lower Chittering

WA

Reference 7696
August 1996

Henry Smolinski
Research Officer

AGWEST Land Management

AGRICULTURE
WESTERN AUSTRALIA

Landforms and Soils

The landforms and soils of the property have been identified in the Shire of Chittering Rural Strategy (Taylor and Burrell, 1995). Coolakin and Mogumber units occur within the property.

Method of Site Assessment

The block was inspected on 11-8-96 and 13-8-96.

To provide a detailed assessment of the properties capability for rural-residential development, 30 sites were examined with the aid of a auger drilling rig. Soils were described at each site. A soil/landform unit map was produced (see attached map) by defining areas of similar soils, slope and rock outcrop. These units are subdivisions of the Coolakin and Mogumber units that were identified in the Chittering Rural Strategy.

The soils have been described using terminology of McDonald et al (1990). Soil colours are described according to standard Munsell colour chart notation. Detailed soil profile descriptions of the dominant soil types are provided in Appendix A.

Soil/Landform Units

Nine soil/landform units have been identified. Slope rock outcrop and drainage are the major distinguishing factors. The average slope of each unit is indicated on the accompanying map.

The units are described as follows.

Ck1 Moderately steep to steep sideslopes with few to commonly occurring areas of rock outcrop. Slopes are in the range of 25-60% with the average slope being 30%. Areas of ironstone boulders occur along the upperslopes and common biotite schist and quartz rock outcrop are associated with several spurs.

Most of the unit is uncleared. The dominant species are wandoo (*Eucalyptus wandoo*), jarrah (*Euc. marginata*) and marri (*Euc. calophylla*) with an understorey of blackboy (*Xanthorrea preissii*). Part of the southern section has been parkland cleared and carries a scattered cover of tea tree (*Melaleuca fulgens*). The remnant understorey has been subject to heavy grazing pressure.

The unit is dissected by several flow lines. A dam has been constructed within the area and water quality is fresh.

Soils are predominantly yellow duplex and gradational soils. Minor associated soils are brown and red duplex soils. Topsoils are generally shallow very dark brown to dark red sandy loams overlying clay loam to medium clay.

Topsoil erosion is evident due to grazing pressure and stock traffic.

Capability and Limitations

- This unit has a high capability for rural residential development.
- High gravel content in the soils and gentle slopes reduce the risk of wind and water erosion.
- Soils are well drained to rapidly drained and have a moderate to high nutrient retention ability.
- Conventional septic systems can be utilised within this unit.
- Building envelopes should be positioned within these areas.
- The only areas to be avoided within the unit are the flow lines which are indicated on the accompanying map.

Ck3r This unit is similar to Ck3 except the abundance of ironstone outcrop is in the range of 10-30% and pale brown gravelly sands are common.

The unit is uncleared or parkland cleared and the lower understorey species have been heavily grazed. An area situated along the northeast boundary, which has been fenced off from stock, remains undisturbed.

Capability and Limitations

- This unit has a fair capability for residential development.
- The common occurrence of ironstone rock outcrop and stone is a moderate limitation to house and road development however areas of less common rock can be located within the unit.
- Where possible the remnant vegetation should be retained.

Ck3vr This unit is similar to Ck2vr except slopes are generally between 8-10%.

Capability and Limitations

- As Ck2vr, abundant ironstone rock outcrop is a major limitation to house and road construction.

Ck4 Narrow drainage floors with imperfectly drained yellow or mottled yellow duplex soils.

This unit represents the drainage channel and bordering lower slopes. Slopes are generally <5%.

Saline Area

An area of soil salinity and waterlogging is associated with a drainage line which is crossed by Morley Road (see map). The development of the road and size of the culvert has possibly contributed to development of the saline area within the property.

The culvert appears too small to handle peak flows from its catchment and silting within the drainage line has diverted flow along Morley road. Restricted surface and subsurface drainage results in the accumulation of salts.

It is recommended that larger culvert be installed.

Salt tolerant trees could be planted to increase water use within waterlogged areas.

Catchment Impact

Subdivision of M1729 is unlikely to have a adverse impact on the catchment. The main drainage line is presently brackish (Electroconductivity of 230-330 mS/m). There is no evidence of salinity within the property apart from the area mentioned earlier and this site is primarily influence by land use within neighbouring properties.

A large proportion of the property is under remnant vegetation and provided that minimal clearing is undertaken in the proposed development minimal environmental impact is likely to occur.

Recommendations

1. Where possible building envelopes and access roads should be positioned within cleared land.
2. Access roads and boundary fences should follow ridgelines
3. Drainage lines and flow lines should be avoided or adequate spur drains and culverts need to be installed.
4. Vegetation along the drainage channels should be preserved and streamlining should be encouraged.

Summary

Land Capability for Rural- Residential Development

Soil/landform unit	House and road construction	Effluent disposal (conventional)
Ck1	IVe,b	IVa
Ck2	IVb	IVp
Ck2r	IVb	IIIx
Ck2vr	IVx	IVx
Ck3	II	II
Ck3r	IIIx	IIIx
Ck3vr	IVx	IVx
Ck4	Vi	Vp
Mb3	III	IVp

Land Capability Classes.

Class	Suitability
I	Very high suitability for the proposed activity or use. Very few physical limitations present which are easily overcome. Risk of land degradation is negligible.
II	High suitability. Some physical limitations affecting either productive land use or risk of land degradation. Limitations overcome by careful planning.
III	Fair suitability. Moderate physical limitations significantly affecting productive land use or risk of land degradation, careful planning and conservation measures required
IV	Land having limitations which may be surmountable in time but which cannot be corrected with existing knowledge at currently acceptable cost.
V	Land having limitations which appear so severe as to preclude any possibilities of successful sustained use of the land in the proposed manner

- Capability subclasses:
- (a) soil absorption ability
 - (b) foundation soundness
 - (c) slope instability risk
 - (e) water erosion risk
 - (f) flood risk
 - (p) microbial purification ability
 - (x) ease of excavation

References and Bibliography

King, P.D. and Wells, M.R. (1990). Darling Range rural land capability study. Land Resource Series No. 3. Western Australian Department of Agriculture

Mathew, K. and Ho, G. (1993) Small scale treatment systems. In 'Urban waste water-A lost resource or an opportunity' Seminar Papers. Australian Institute of Urban Studies (WA) Inc.

McDonald *et al* (1990). Australian Soil and Land Survey Field Handbook. Inkata Press, Melbourne and Sydney.

Taylor R. and Burrell W. 1995. Shire of Chittering Rural Strategy. (unpublished)

Wells, M.R. and King, P.D. (1989). Land capability assessment methodology for rural-residential and associated agricultural land uses. Land Resource Series No. 1. Western Australian Department of Agriculture.

Wells, M.R. (1987). Assessment of land capability for on-site septic tank effluent disposal. Technical Report 63, Division of Resource Management. Western Australian Department of Agriculture.

Wilde, S.A. and Low, G.H. (1978) Perth, W.A, West.Australia Geol. Survey 1:250,000 Series Explan. Notes.

Appendix A: Dominant Soil Types

Map Unit: Ck1
Soil unit: Yellow Duplex
Landform: Upperslope 30%

Profile morphology

Horizon	Depth (cm)	Description
A1	0-15	Dark brown (7.5YR 3/2) humic sandy loam containing a few ironstone gravel and rock fragments; crumb structure; pH 6.5. Clear boundary to
B21	15-30	Strong brown (7.5YR5/6) light medium clay; fine polyhedral structure; pH 5.5. Gradual boundary to
B22	30-60	As above, medium heavy clay. Gradual boundary to
BC	60-150+	Yellowish brown (10YR5/8) and strong brown(7.5YR5/6) medium heavy clay containing few to common weathered rock fragments; moderate angular blocky structure; pH 5.0-5.5.

Map Unit: Ck2
Soil unit: Yellow Duplex
Landform: Crest-Upperslope 9-12%

Profile morphology

Horizon	Depth (cm)	Description
A11	0-10	Black (10YR 2/1) humic loamy sand, containing upto 50% ironstone gravel and rock fragments; weak crumb structure; pH 5.5. Clear boundary to
A12	10-30	Reddish yellow (7.5YR6/6) clayey sand containing upto 60% ironstone gravel; single grained, loose; pH 5.5. Clear boundary to
B2	30-100	Strong brown (7.5YR5/6) clay loam containing upto 30% ironstone gravel and rock fragments; weak angular blocky structure; pH 6.0 Gradual boundary to
BC	100-150	Brownish yellow (10YR6/8) and strong brown(7.5YR5/6) light clay containing few to common weathered rock fragments; pH 6.5.

Map Unit: Ck4
 Soil unit: Yellow Mottled Duplex with bleached A2 horizon
 Landform: Drainage Line 2-5%

Profile morphology

Horizon	Depth (cm)	Description
A1	0-10	Dark greyish brown (10YR 4/2) humic loamy sand; single grained, loose; pH 5.5. Clear boundary to
A2	10-30	Very pale brown (10YR7/3) loamy sand containing about 10% ironstone gravel; single grained, loose; pH 5.5. Clear boundary to
B1	30-60	Very pale brown(10YR8/4) and brownish yellow (10YR6/8) light sandy clay loam to sandy clay loam with upto 20% ironstone gravel; massive; pH 5.5. Clear boundary to
B2	60-100	Strong brown (7.5YR5/8) and brownish yellow (10YR6/8) sandy clay loam containing upto 20% ferruginous segregations; massive; pH 5.5.
BC	100-150	Strong brown (7.5YR5/8) clay loam; pH 5.5.

Comment: Subsoil can be saturated at 20-100cm.

Map Unit: Ck4
 Soil unit: Yellow Duplex
 Landform: Drainage bench and lower slopes 0-5%

Profile morphology

Horizon	Depth (cm)	Description
A11	0-10	Dark reddish brown (5YR 3/3) humic sandy loam; weak fine granular structure; pH 5.5. Clear boundary to
A12	10-30	Yellowish red (5YR4/6) sandy clay loam; weak fine polyhedral structure; pH 6.0. Clear boundary to
B2	30-60	Yellowish brown (10YR5/6) to light olive brown (2.5Y5/6) light clay; weak polyhedral structure; pH 6.0 Gradual boundary to
BC	60-100+	Light olive brown with light grey (10YR6/1) mottles light clay; pH 6.0- 6.5.

Comment: Watertable at 100 cm.

Map Unit: Ck2, Ck3, Ck2r
 Soil unit: Gravelly Yellow Duplex (moderately deep)
 Landform: Upperslope- midslope 7-12 %

Profile morphology

Horizon	Depth (cm)	Description
A11	0-10	Very dark brown (10YR 2/2) humic loamy sand , containing upto 50% ironstone gravel; single grained, loose; pH 5.5. Clear boundary to
A12	10-30	Yellowish brown (10YR5/6) loamy sand containing upto 60% ironstone gravel; single grained, loose; pH 6.0. Gradual boundary to
A2	30-70	Light yellowish brown (10YR6/4-6/5) loamy sand containing upto 50% ironstone gravel; single grained, loose; pH 6.0. Clear boundary to
BC	70-150	Reddish yellow (7.5YR6/6), brownish yellow (10YR6/8) and very pale brown (10YR8/3) light clay ; pH 6.0.

Map Unit: Ck3, Ck3r
 Soil unit: Gravelly Yellow Duplex (moderately deep)
 Landform: Upperslope- midslope 7-12 %

Profile morphology

Horizon	Depth (cm)	Description
A11	0-10	Very dark brown (10YR 2/2) humic loamy sand , containing upto 50% ironstone gravel; single grained, loose; pH 5.5. Clear boundary to
A12	10-40	Brownish yellow to yellowish brown (10YR6/6-5/6) loamy sand containing upto 60% ironstone gravel; single grained, loose; pH 6.0. Clear boundary to
B2	40-100	Brownish yellow (10YR6/8) clay loam containing upto 50% ironstone gravel; angular blocky structure; pH 6.0. Diffuse boundary to
B3	100-150	As above with very pale brown mottles (10YR8/3-8/4).

Map Unit: Mb3
Soil unit: Light grey sands over ironstone
Landform: Upperslope- lowerslope 5-10%

Profile morphology

Horizon	Depth (cm)	Description
A11	0-10	Dark greyish brown (10YR 4/2) humic sand; single grained, loose; pH 5.5. Clear boundary to
A2	10-50	Light grey (10YR7/1) sand; single grained, loose; pH 6.0.
R	50+	Ironstone boulders with a matrix of light grey to pale brown sand.

Note: Ironstone boulders were encountered between 40-80 cm.

APPENDIX D

Site Photos







APPENDIX E

Fire Management Plan

FIRE MANAGEMENT PLAN

Lots 600-601 Muchea East Road

Chittering

SHIRE OF CHITTERING

Prepared by: FirePlan WA

May 2008

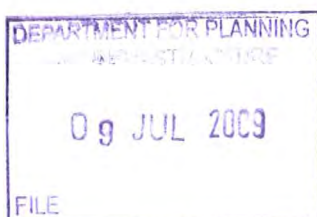


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The recognized underlying Principals applying to Bush Fire Protection:

In making these comments and recommendations in this Plan it should be understood that the focus of this document is to look into minimizing the impact and threat of an inevitable bush fire in a known bush fire prone area to the people residing or staying within this Rural Residential Development.

It must be concluded that bush fires will occur inevitably within this immediate locality. If there is not an immediate response with sufficient resources, the heavy fuel loading and climatic conditions prevailing at the time will in a short space of time, encourage high intensity fires to develop posing a risk to life and property. Any person living or staying within a bush fire prone area in Western Australia must take this established fact into account.

Disclaimer: The measures contained in this fire management plan are considered to be minimum standards and they do not guarantee that a building will not be damaged in a bush fire. All surveys, forecasts, projections and recommendations made in this report associated with the project are made in good faith on the basis of information available to FirePlan WA at the time; and achievement of the level of implementation of fire precautions will depend among other things on the actions of the landowners or occupiers over which FirePlan WA has no control. Notwithstanding anything contained therein, FirePlan WA will not, except as the law may require, be liable for any loss or other consequences (whether or not due to the negligence of the consultants, their servants or agents) arising out of the services rendered by the consultants.

1.0 PURPOSE OF THE MANAGEMENT PLAN

The purpose of this Bushfire Management Plan is to detail the Fire Management methods and requirements that will be implemented within the proposed subdivision. The aim of the Bushfire Management Plan is to reduce the threat to residents and fire fighters in the event of a fire within or near the subdivision.

2.0 SUBDIVISION LOCATION AND DETAILS

The subject land comprises Lots 600-601 Muchea East Road, Chittering in the Shire of Chittering and is to be developed into 18 rural residential Lots varying in size from 4ha – 8ha.

3.0 SITE DETAILS

Part of the site has been cleared, with slopes having remnant vegetation and some areas of vegetation having been used for stock grazing.

A tributary to Marbling Brook runs parallel to Morley Road and Muchea East Road. In some places crossing the creek is very difficult due to steep sides and narrow stream width.

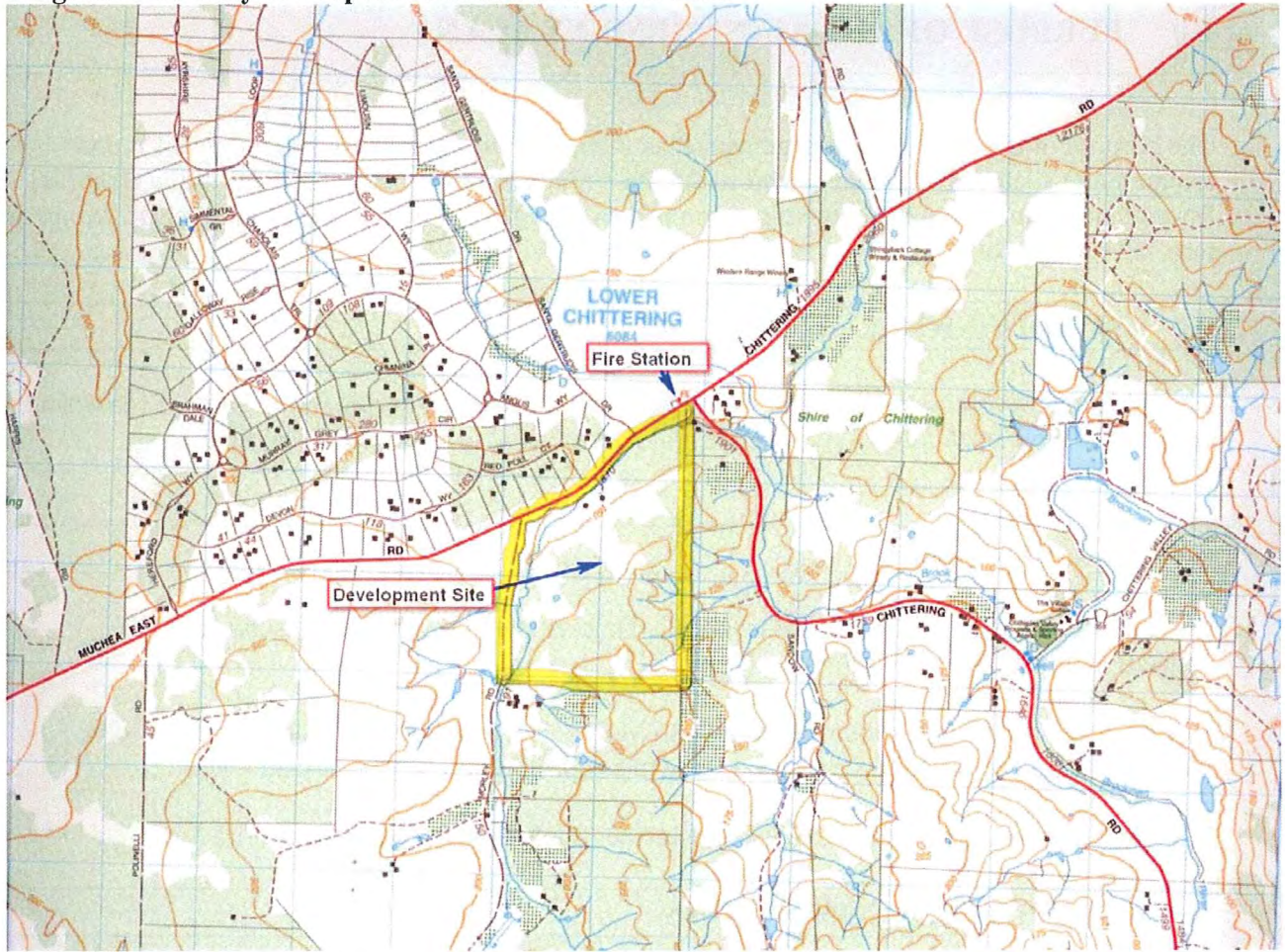
The north eastern corner of the site is opposite the Muchea Bush Fire Brigade Fire Station.

4.0 STATUTORY CONDITIONS

The Western Australian Planning Commission and Shire of Chittering require the preparation of a 'Bushfire Management Plan' for the proposed development as part of the development approval. This document has been prepared to satisfy that requirement.

As fire management strategies may require altering to meet changing climate, environment and land use needs, landowners/occupiers are advised that provisions of the Bush Fires Act 1954 may still be enforced in addition to this Fire Management Plan.

Diagram 1 Locality of Proposed Subdivision Not to Scale



5.0 BUSH FIRE HAZARD ASSESSMENT

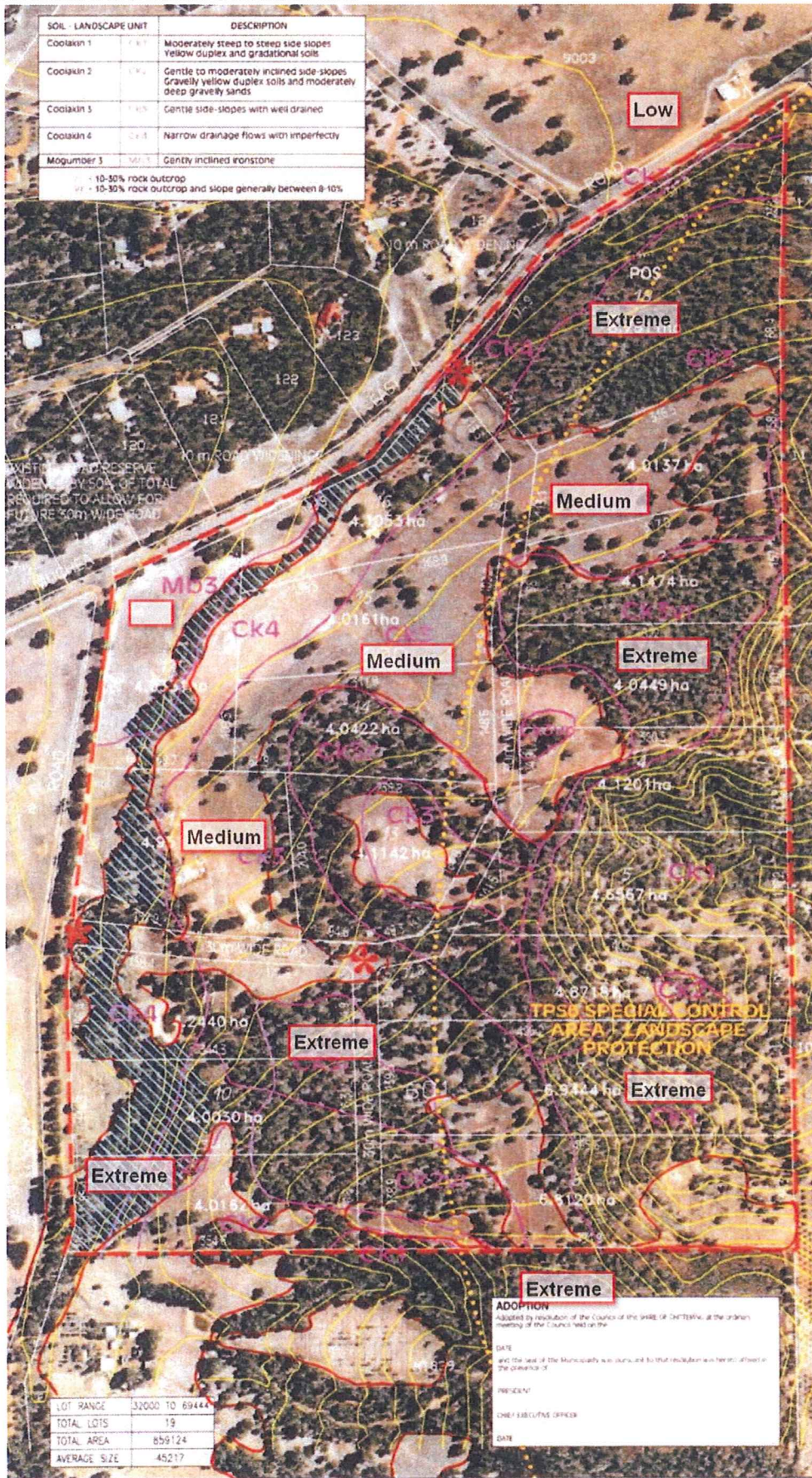
The assessment of fire risk takes into account existing site conditions which include:

- Topography with particular reference to ground slopes and accessibility;
- Vegetation cover – both remnant and likely revegetation;
- Relationship to surrounding development

The Bush Fire Hazard Assessment for the proposed Lots is Medium in cleared areas and Extreme in the remnant vegetation. The bush fire hazard assessment for the adjoining Lots is medium in cleared areas to extreme in uncleared areas. See Diagram 2

The Mediterranean climate experienced by this area is such that the majority of rain falls in late autumn through to early spring. This rainfall supports substantial vegetation growth which dries off in Summer/Autumn.

Diagram 2 Bush Fire Hazard Assessment



6.0 FIRE MANAGEMENT PLAN

The aim of the Fire Management Plan is to reduce the threat to residents and fire fighters in the event of bush fire within or near the site.

The Fire Management Plan has been developed to incorporate fire management methods.

- Road Systems
- Firebreaks systems;
- Dwelling Construction Standards
- Building Protection Zones;
- Hazard Separation Zones
- Hazard Reduction
- Driveway Standards
- Planting of trees

6.1 ROAD SYSTEM.

Access to the site will be off Morley Road and the Muchea East Road with a link provided to the southern boundary if and when Lot M 1839 is developed.

6.2 INTERNAL FIREBREAKS

Shire of Chittering Firebreak Notice requires that all lots over 2.2ha require a 3m firebreak on the lot boundary and will comply with the requirements of the Shire of Chittering Firebreak Notice as amended from time to time in addition to this fire management plan. A 3 metre firebreak is to be installed along the eastern side of the creek line in Lots 9-10 and on both sides of the creek/rehabilitation area in Lots 12, 16, 17.

6.3 DWELLING

6.3.1 Dwelling Standards

Individual dwellings on each lot shall be designed and built to conform with:

- The Shire of Chittering Specification and Requirements
- Australian Standards AS 3959 and Building Code Australia

As this site is classified as a Bush Fire Prone Area landowners are to be made aware of the additional safety measure if habitable dwelling comply with the Australian Standard AS 3959 "Construction of Buildings in Bush Fire Prone areas". All building habitable dwellings are to comply with AS 3959 Building Standards.

Copies of The Homeowners Bush Fire Survival Manual or other suitable documentation will be issued to each property owner by the developer on the sale of an allotment.

6.3.2 Building Setback

All habitable buildings are to be located 30 metres away from creek line buffers. All buildings are to be setback 30 metres from lot boundaries (other than where they adjoin a road) to enable the installation of the building protection zone.

6.4 BUILDING PROTECTION ZONE

The aim of the Building Protection Zones is to reduce bush fire intensity close to dwellings, and to minimise the likelihood of flame contact with buildings. The building protection zone is a low fuel area immediately surrounding a building.

Non flammable features such as driveways, vegetable patches, lawn, or landscaped gardens (including deciduous trees) should form part of building protection zones. Isolated trees and shrubs may be retained within building protection zones. A building protection zone of 20 metres is to be constructed around all buildings. It must fulfil the following conditions:

- Bush Fire fuels must be maintained below a height of 50mm in height.
- The first 5m around all building is to be cleared of all flammable material. Reticulated gardens may be located in this zone.

For the next 15 metres the spacing of trees should provide for a separation between crowns.

- Branches, must be removed at least 2 metres back from the eaves of all buildings.
- All leaves, tall grass, logs, branches and twigs must be removed from within the building protection zone.
- Grass is to be trimmed and maintained to no more than 50mm.
- It is recommended that Building Protection Zone and Hazard Separation Zones be constructed prior to commencement of new dwelling construction.

6.5 HAZARD SEPARATION ZONE

There must be physical separation between bush fire hazards and development. Hazard separation zones assist in reducing fire intensity when a bush fire impacts on buildings within a subdivision.

It is essential that owners maintain the building protection and hazard separation zones to have any degree of safety.

- Bush fire fuel loadings must be maintained within the Hazard Separation Zone to a maximum of 4-6tonnes/ha.
- The hazard separation zone should extend at least a further 30 metres beyond the building protection zone or to the Lot boundary.
- Grass fuels in cleared areas to be maintained to a maximum height of 50mm by grazing or mowing.

6.6 HAZARD REDUCTION

In remnant vegetation bush fuels outside hazard separation zones, must be maintained below 6-8 tonnes/ha. Shire of Chittering can provide advice on appropriate techniques to achieve this.

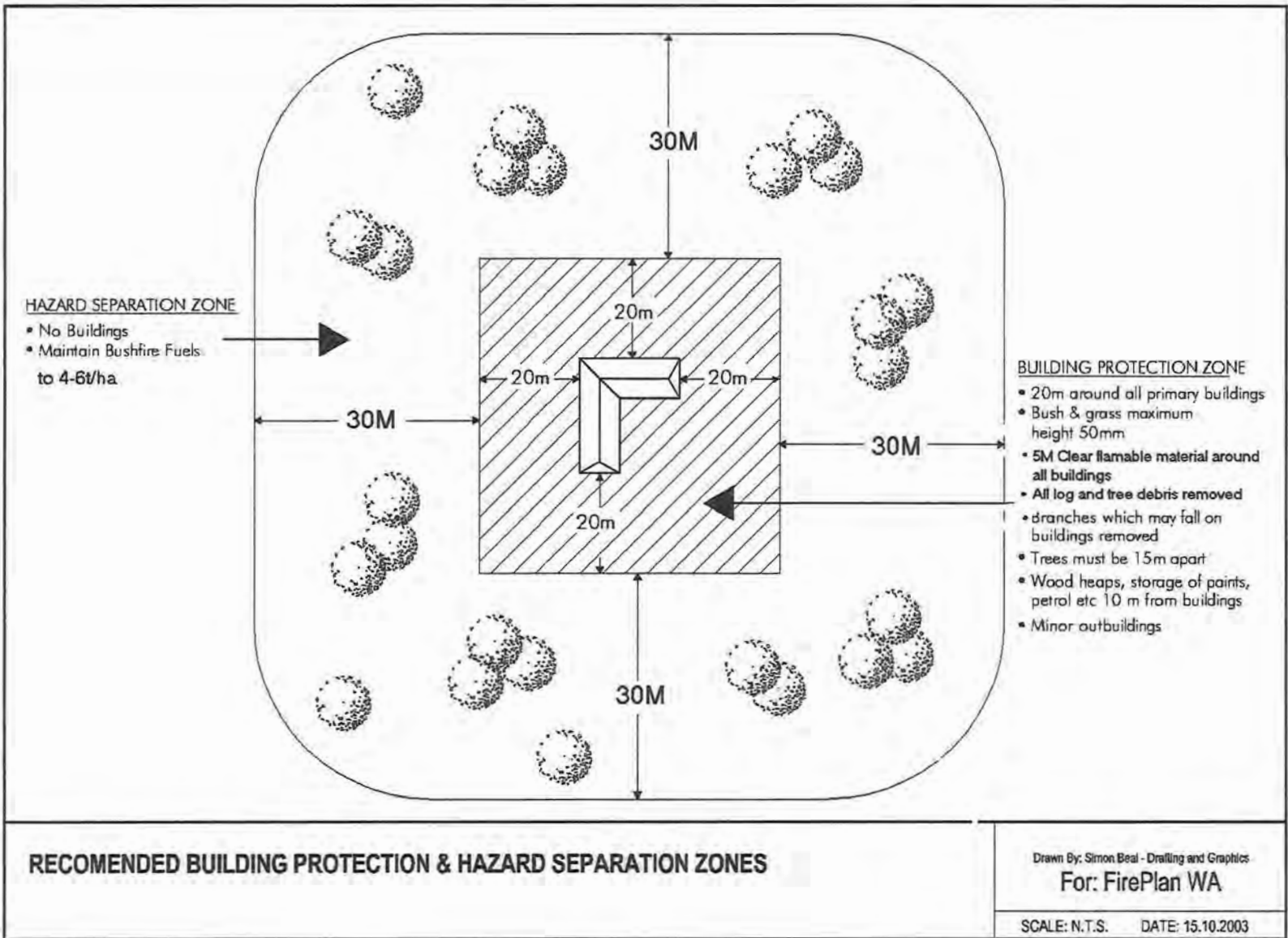
6.7 DRIVEWAYS

Driveways are to be cleared to 6metres wide have a 4metre trafficable surface and vertically cleared to a minimum of 4 metres.

6.8 PLANTING OF TREES

Planting of trees is not permitted within 6 metres of the centre of any firebreak. Trees planted within the building protection zone must comply with the standard outlined in Section 6.4.

Diagram 3 Sample Building Protection and Hazard Separation Zones.



7.0 FIRE FIGHTING FACILITIES

Mains water will not be supplied.

7.1 Water for Fire Fighting

One 50,000litre concrete water tank for fire fighting with a galvanized iron roof is to be provided by the developer. The tank is to be located in an expanded road reserve so that access around the rear of the tanks is at least 2 metres wide. An underground fire hydrant is to be placed downhill in the road reserve from the water tanks so that the water flow at the hydrant is a minimum of 600litres /min. Where the outlet is located a hardstand (compacted gravel drained) turnaround area is to be located in the road verge.

The final location of the water tanks, the type of outlet and other fittings is to be agreed to by the Developer and the Shire of Chittering. A possible site would be along the northern boundary of proposed Lot 11 or the western boundary Lot 6.

7.2 Use of Domestic Water Supplies for Fire Fighting

Property owners are required to supply their own domestic water (minimum 120,000 litre tank) or as determined by the Shire of Chittering, for potable and other uses. Residents are to be aware that fire appliances may use water from this private domestic water supply for emergency structural fire fighting purposes.

Each property shall at all times store a minimum of 10,000 litres of water for structural fire fighting purposes and each owner shall be responsible to replenish water used by fire fighters at the property owner's cost.

To enable standardisation of access to this supply, each private domestic vessel shall be fitted with a minimum 50 or 75mm Ball Valve and a 50mm male camlock fitting with a blanking cap or fittings required by the Shire of Chittering. This coupling and valve shall be installed and maintained in a correct operating condition at all times at the property owner's expense.

The domestic vessel shall be located in an area that will enable fire appliances to quickly access the water supply.

7.3 Fire Service.

Muchea Bush Fire Brigade is located on the Muchea East Road and adjoins this site in the north east corner.

8.0 SUMMARY

8.1 Overall Fire Threat

The design of this development and the facilities constructed at the time of development are such that with implementation of this Fire Management Plan, fire threat to persons and property within the subdivision is significantly reduced.

8.2 Property Owner's Responsibilities

To maintain the reduced level of risk and threat of fire, the owners/occupiers of lots created by this proposal will be responsible for undertaking, complying and implementing measures protecting their own assets from the threat and risk of bush fire.

- Maintain internal firebreaks clear of flammable material on their property by complying with the Shire of Chittering Firebreak Notice as detailed in Section 6.2
- Maintain in good order and condition all property fencing and gates ensuring that vegetation does not encroach over the firebreak;
- Ensure all domestic dwellings are designed and constructed in full compliance with the requirements of the Shire of Chittering and AS 3959 as detailed in Section 6.3;
- Implement and maintain Building Protection Zone as detailed in Section 6.4;
- Implement and maintain Hazard Separation Zone as detailed in Section 6.5.
- Implement Hazard reduction as detailed in Section 6.6;
- Install and maintain driveways as detailed in Section 6.7;
- Planting of trees is to be carried out as detailed in Section 6.8;
- Install domestic water supply as detailed in Section 7.2.

8.3 Developer's Responsibilities

Prior to subdivision being given Final approval by the W. A. Planning Commission the developer shall be required to carry out works as described below. Subsequent to Final Approval to subdivide, the developer shall have no further responsibilities to provision of fire fighting facilities on lots which pass from their ownership.

- Lodging a section 70A Notification on each Certificate of title proposed by this subdivision. The Notification shall alert purchasers of land and successors in Title of the responsibilities of this Fire Management Plan;
- Install water supply for fire fighting as detailed in Section 7.1;
- Supply a copy of this Fire Management Plan and The Homeowners Bush Fire Survival Manual to each property owner on sale of the allotment;
- The Developer is to inform prospective purchasers of a Lot that there is a fire management plan and new landowners must comply with, which may require the removal of vegetation for the installation of building protection and hazard separation zone around any proposed buildings and to comply with building standards as detailed in AS3959.

8.4 Shire of Chittering Responsibilities

The responsibility for compliance with the law rests with individual property owners and occupiers and the following conditions are not intended to unnecessarily transfer some to the responsibilities to the Shire of Chittering.

The Shire of Chittering shall be responsible for:

- Developing and maintaining District Fire Fighting Facilities.
- Maintaining in good order the condition of the district water tanks and the apparatus for fire fighting purposes.

Appendix A Development Layout – Not to Scale.



Western Australian Planning Commission resolved on 30 December 2009 to endorse the modified Development Plan for Lots 600-601 Morley Road, Chittering, as a guide for subdivision within the locality.

Signed for and on behalf of the Western Australian Planning Commission

S. Wood

an officer of the Commission duly authorised by the Commission pursuant to section 24 of the Planning and Development Act 2005 for that purpose in the presence of

[Signature] Witness

05 JAN 2010 Date

ADOPTION
Adopted by resolution of the Council of the SHIRE OF CHITTERING at the Ordinary Meeting of the Council held on the 19th day of March 2009 and the Seal of the Municipality was pursuant to that resolution hereto affixed in the presence of:

PRESIDENT

CHIEF EXECUTIVE OFFICER

DATE

[Signature]
[Signature]
18 DECEMBER 2009

DEVELOPMENT PROVISIONS RELATING TO THE ESTATE

- (a) **Development Plan**
This plan has been approved by the Council and the Western Australian Planning Commission. Subdivision and development should generally be in accordance with this plan.
- (b) **Development Requirements**
In considering development of the land, the requirements of the Shire of Chittering Town Planning Scheme No.6 for the 'Rural Residential' zone apply.
- (c) **Flora Survey**
A declared rare flora survey is to be undertaken in Spring, prior to the commencement of any onsite works. This requirement is to be enforced as a future condition of subdivision approval.
- (d) **Building Envelopes**
Buildings, water tanks and waste disposal are to be contained within an area not to exceed a maximum of 2000 square metres without the prior approval of Council. Buildings are to be set back from cadastral boundaries as follows:
Major road 50 metres
Other road 20 metres
Rear 20 metres
Side 15 metres
If the site is to have a sand pad for the proposed dwelling greater than 0.5 metres above natural ground level, then for every 0.5 metres of height above natural ground level, setback distances are to be increased by 2 metres. No buildings are to be constructed outside the designated building envelopes. Clearing outside the building envelopes should only occur if the trees are dead, diseased or present a danger to property.
- (e) **Fencing**
In accordance with Local Planning Policy No.22 'Fences', within a lot the construction of a fence around the building envelope, any previously cleared area and adjoining an authorised fire break, is permitted. Elsewhere, no boundary fences are permitted in vegetation protection areas identified on the Development Plan, without planning consent of the Council.
- (f) **Crossovers**
The construction of a crossover to each lot is to be in accordance with Council's specifications.
- (g) **Potable Water**
Each dwelling is to have a water supply from roof catchment of a minimum of 120,000 litres, of which 10,000 litres is to be kept in reserve for fire fighting purposes and fitted with a standard 50mm male Camlock valve.
- (h) **Land Management**
The maintenance of any drainage swales, easements, fire breaks and vegetation protection and re-vegetation areas is the responsibility of the owner / occupier.
- (i) **Bores, Dams and Watercourses**
The sinking of bores, construction of dams and extraction of surface water is not permitted without the approval of the Council and relevant State Government department.
- (j) **Fire Control**
Strategic Fire Breaks as shown on the Development Plan will be constructed by the developer and are to be maintained by the owner / occupier to the satisfaction of the Chief Executive Officer and the Fire and Emergency Services Authority, in accordance with Local Planning Policy No.21 'Fire Management Plans'.
- (k) **Permitted Uses**
A single house and associated outbuildings are the only permitted uses. Other uses specified in the Town Planning Scheme may be approved at the discretion of the Council. Approval is required for a home business but not for a home office. For any use that may result in degradation of land or water resources or nuisance to neighbours, a management plan may be required as a condition of development approval. All development within the defined Special Control Area requires planning consent in accordance with the requirements of Shire of Chittering Town Planning Scheme No.6
- (l) **Stocking Restrictions**
Grazing animals are to be restricted to avoid overgrazing in accordance with Local Planning Policy No.24 'Stocking Rates and Keeping of Animals'. There is to be no stock allowed in areas of remnant vegetation.
- (m) **Domestic Pets**
The keeping of domestic cats shall be prohibited.
- (n) **Roofing Materials**
All buildings shall be constructed with roofs of non-reflective materials.
- (o) **Waste Disposal**
Alternative Treatment Units for effluent disposal are required for Lots 9, 10, 11, 12, 16 and 17.
- (p) **Drainage**
landowners shall maintain natural drainage lines to prevent erosion and soil export to adjoining lots. There shall be no alteration to natural drainage lines.
- (q) **Vendor Responsibility**
The developer / vendor shall inform prospective purchasers of the lots, in writing, of the provisions of the Council's Town Planning Scheme relating to the management of the land, as specified in the Development Plan and Fire Management Plan.
- (r) **Tributary Buffer**
A vegetation buffer zone, excluding all development (with the exception of road reserves, driveways and strategic firebreaks) is to be established around the existing vegetation along the entire Marbling Brook Tributary.
- (s) **Revegetation**
The western cleared portion of Lot 10 is to be revegetated with local flora.

EXISTING ROAD RESERVE WIDENED 50% OF TOTAL REQUIRED TO ALLOW FOR FUTURE 30m WIDE ROAD



Legend

- Special Control Area—Existing Cadastre
- Building Envelope
- Strategic Firebreak
- Road
- Marbling Brook Tributary
- Vegetation Buffer
- Contours

LAND inSights
UNIT 1/1 ALVAN STREET, MT LAWLEY, WA, 6050
POSTAL ADDRESS: PO BOX 289, MT LAWLEY, WA, 6929
PHONE: (08) 9271 8506
FAX: (08) 6161 2597
EMAIL: admin@landinsights.com.au

Scale: 1:5,000
0 50 100 150 200 250 Metres

JOB NO:	820	DATE:	14 Dec 2009
PREPARED BY:	R Wood		
DRAWN BY:	A Brown		
APPROVED BY:	M Tayforth		
FILE NAME:	820 - Proposed Subdivision v9.mxd		

H & L VENN
LOTS 600 & 601 MUCHEA EAST ROAD
CHITTERING
23 DEC 2009
SPN/0036
AMENDED DEVELOPMENT PLAN