

**FIRE
MANAGEMENT
PLAN**

**LOT 2
TOODYAY ROAD
RED HILL**

Prepared by
FIREPLAN WA
March 2004

CITY of SWAN

APPROVED
BUSHFIRE MANAGEMENT PLAN

PLAN No: P226520

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FIRE SERVICES

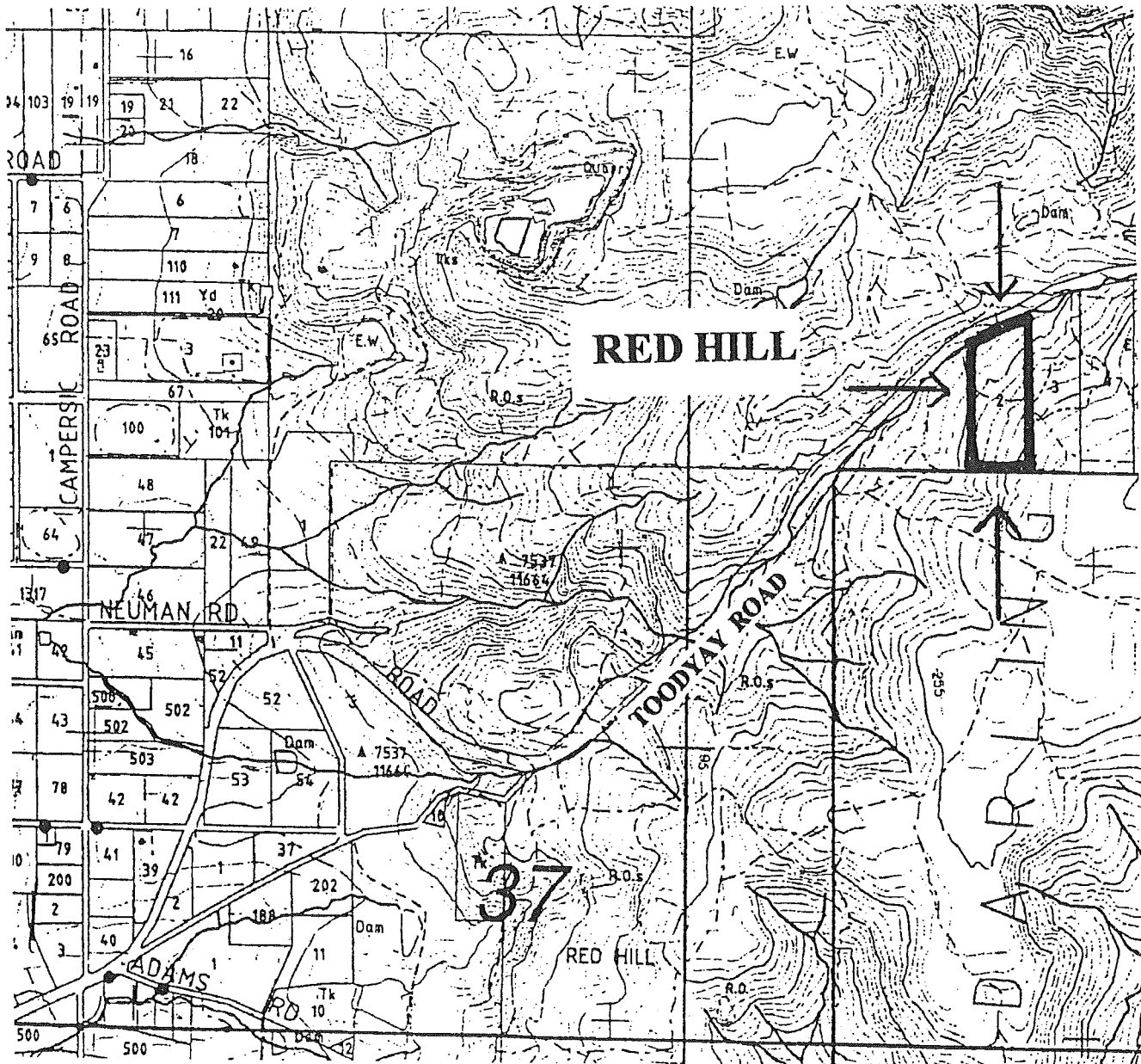
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1.0 INTRODUCTION AND SITE LOCATION

The subject land is approximately (6) kilometres east of Midland along Toodyay Road. Opposite Pioneer quarry, the total area is approximately 10 hectares. The land is zoned as resource.

Site Location



2.0 SITE DETAILS

The lot is a long narrow block and is undulating. The land primarily slopes in a Northwest direction down towards Toodyay Road. John Forest National Park bounds the property to the south, pioneer quarry to the north and vacant bushland owned by Midland Brick on the west and east.

There is a small tributary running along the front of the property, which runs from east to the west into the Strelley Brook.

Western Power has power lines running through the property from the eastern boundary through to the northern boundary.

The vegetation, consists of *Sheoak*, *Marri*, *Banksia*, *parrotbush*. The remainder of the vegetation comprises of low scrub.

3.0 STATUTORY CONDITIONS

A Development Application was submitted to the City of Swan for assessment, and was advised of the need to prepare a Bushfire Management Plan for the proposed development.

This document has been prepared to satisfy that requirement.

4.0 FIRE RISK

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

1. Topography
2. Vegetation
3. Climate

Topography and slopes



All the subject land is undulating. The land primarily slopes down hill in a Northwest direction towards Toodyay Road into a tributary that runs east west. Fire fighting equipment will have no problems accessing this property in the event of fire whether it would be bush fire, car fire or structural fire.

Vegetation



For the most part, the vegetation is relatively sparse and is characterised by a number of different species; these species are Marri Sheoak, banksia, and parrot bush the remainder of the block is covered by scrub.

Some vegetation will be cleared to make way for the car park and stage area, however there will be extensive revegetation taking place along Eastern, Southern and Western boundaries.

The Bush Fire Hazard Assessment for this and adjoining properties is extreme.

Climate

Red Hill is subject to an average summer fire season from approximately October to April. The season is characterised with strong Easterly winds in the mornings and South Westerly winds in the afternoons.

The combination of prevailing winds and dry vegetation poses a fire risk in the area, therefore bushfire control is considered essential for the protection of life and property.

5.0 FIRE MANAGEMENT PLAN

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

The site has been developed to incorporate fire management methods. Plan 1 shows;

- Sealed main access roads
- Standard fire breaks
- Alternative fire breaks
- Areas of remnant vegetation and landscape protection
- Location of water sources and storage (fire fighting)
- Car parking area
- Stage area
- Gates and locks

6.0 LAYOUT AND ROAD PATTERN

The main access roads within the site will be graded and sealed, to be constructed by the developer prior to the issue of final approvals of the development by the Ministry for Planning. The roads will be aligned so as to conform to the topography of the site as well as preserve what vegetation exists on the site.

6.1 Access and Egress.

The following access and egress has been identified as part of the emergency management plan and is to be incorporated into this fire management plan.

- The access into the venue is increased to a minimum of three lanes allowing for two (2) as egress and one (1) lane for incoming emergency service crews. Total driveway width of 9 metres with 6 metres paved.
- The existing strategic firebreak is to be maintained from the southeast corner of the proposal, west with access onto Toodyay Rd. This firebreak is to be maintained to 6 metres wide trafficable surface and unlimited vertical clearance suitable for two wheel drive cars to be used in case of an emergency evacuation.

- That the access to the rear of the stage is widened and extended across the rear and northern edge of the auditorium/amenities, food and drink area and onto the access road. This will allow for one lane off traffic to exit from the main entrance to the car park and another lane to exit behind the auditorium. It may be necessary to make sufficient room for vehicles in bringing lighting and stage equipment to the site, to park behind the stage, this can be incorporated into the widening of the access road.
- Signs are to be erected clearly showing access and exit points walkways, assembly points, first aid posts and emergency exits.

7.0 ALTERNATIVE FIREBREAKS

The developer shall install the alternate firebreaks as per the approved plan and shall install 4 metre field gates on fence lines that cross alternate firebreaks within the plan.

The property owners will be responsible for maintaining alternate firebreaks on their property. These firebreaks must be installed or maintained by the 2 November and maintained until the 31 March of each year. The property owner shall not plant any trees within 3m of the firebreak or allow them to overhang the firebreak below a height of 6 metres. It is the responsibility of the landowner to maintain adequate vegetation pruning.

7.1 Standard Firebreak

A standard firebreak is to be installed on the western boundary of the property from the end of the egress road behind the auditorium northwards along the fenceline to meet up with the alternative firebreak along the south side of the creek meeting up with the main entrance/egress road. This will enable fire fighters to travel around the boundary of the property. The firebreak on the western boundary could be incorporated into sedimentary and drainage lines to the satisfaction of the City of Swan

Specification for Alternate and Standard firebreaks are as detailed in the City of Swan Firebreak Notice.

8.0 STRUCTURE CONSTRUCTION

Individual structures on lots shall be designed and built to conform with:

- Bush Fire Survival Manual Guidelines
- The Shire of Swan Specifications and Requirements
- Australian Standards AS3959-1991 (Recommendations)

Copies of the Bush Fire Survival Manual or other suitable documentation will be issued to the property owner.

8.1 Building Protection Zone.

The following building protection standards are to be implemented by the developer.

- A low fuel zone of up to 30m width (comprising low fuel buffers and areas free of bush fire hazards) shall be maintained by the property owner around the developed area in accordance with the Bush Fire Survival Manual Guidelines and to the satisfaction of the Local Government.

- The ground vegetation and grass in the “Tree and Shrub Preservation and Regeneration areas” is to be slashed and or maintained to a height of less than 100 mm. accumulated leaf litter and grass fuels are to be removed to maintain this as a low fuel zone (less than 4 tonnes/ha).
- Trees within the “Tree and shrub preservation and regeneration areas” may remain except those trees and shrubs within 20 metres of a building or structure.
- An area of 5 metres must be clear of flammable material at all times around the stage area and facilities whether permanent or temporary and other portable facilities and equipment (e.g. caravans, tents toilet blocks trailers).
- The developer of Lot 2 has negotiated with the owners of Lots 1 and 3 to maintain bush fuels to a maximum of 6-8 tonnes/ha. The local bush fire brigade can assist in carrying out the hazard reduction burning.

9.0 FIRE FIGHTING FACILITIES

9.1 Water Supply

If Water Corporation reticulated water is not available then the following will apply:

Tank

The developer will construct a 50,000lt tank connected to a hydrant in a location specified by the City of Swan and shall deliver 450lt per minute at 2-metre head. The hydrant shall be of Water Corporation standards. The tank is to be replenished from the dam or alternative sources by the developer.

This tank will also be fire fighting purposes only.

9.2 Use of Water Supplies for Fire Fighting

A dam is to be constructed as part of sediment control and water runoff control from the complex. This water supply will be a secondary fire fighting water supply. This dam will be replenished with water from a Midland Brick Dam from a property to the east of the development site. This water supply will be used for reticulation of landscaped Areas.

9.3 Amenities and Food Preparation.

All building that are preparing food, storing and selling food prepared off site must comply with Local Government health regulations and have suitable fire fighting equipment as detailed by the Local Government or statutory requirement.

10.0 SUMMARY

10.1 Overall Fire Threat

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

10.2 Developer / Property Owner's Responsibility

The Developer / Property owners will be responsible for:

- Maintaining Standard and/or Alternate Firebreaks on their property by the dates shown on the City of Swan Firebreak Notice, (currently 2 November) and maintain them clear of flammable material until the (currently 31 March) the following year.
- Construction of internal alternative firebreak as described in Section 7.
- Upgrading of existing firebreak which is on the southern boundary running east west See Section 7.
- Install and maintain access and egress as detailed in Section 6.1.
- Install two four-metre field gates on southern boundary if property is going to be fenced this will allow through traffic for fire fighting equipment in the event of a bushfire.
- Install and maintain water supply as detailed in Section 9.1 & 9.2.
- Install and maintain Building protection zone as detailed in Section 8.1
- Ensure that food preparation areas comply with Local Government fire requirement as detailed in Section 9.3.
- Ensuring that all structures are designed and constructed in full compliance with the requirements of the City of Swan. It is recommended that property owners familiarise themselves with the advice given in the Standards Australia publication "Building in Bush Fire Prone Areas – Information and Advice", and the Bush Fire Survival Manual or equivalent, available at the City of Swan fire service.
- Complying with other aspects of the City of Swan firebreak Notice.
- Reading, understanding and putting into effect the recommendations of the Bush Fires Survival Manual Guidelines.
- To do hazard reduction on the west and north sides of stage area.
- Reading and understanding this Fire Management Plan.

10.3 City of Swan Responsibility

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 City of Swan.

The City of Swan 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.
- Maintaining a supply of G1-3 locks to be made available at cost to relevant landowners on request.

Appendix 1 Firebreaks, Access and Emergency Egress

