Outdoor Entertainment Venue Lots 1 and 2 Toodyay Road, Red Hill

Ace Nominees Pty Ltd

Report and recommendations of the Environmental Protection Authority

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Summary and recommendations

Ace Nominees Pty Ltd (ANPL) proposes to construct and operate an outdoor entertainment venue on Lot 2 Toodyay Road, Red Hill which is located adjacent to the northern boundary of the John Forrest National Park (JFNP). This report provides the Environmental Protection Authority's (EPA's) advice and recommendations to the Minister for the Environment on the environmental factors relevant to the proposal.

Section 44 of the *Environmental Protection Act 1986* (EP Act) requires the EPA to report to the Minister for the Environment on the environmental factors relevant to the proposal and on the conditions and procedures to which the proposal should be subject, if implemented. In addition, the EPA may make recommendations as it sees fit.

Relevant environmental factors

The EPA decided that the following environmental factors relevant to the proposal required detailed evaluation in the report:

- (a) Noise operations phase; and
- (b) Terrestrial flora and fauna loss of remnant vegetation and fauna habitat.

There were a number of other factors which were also relevant to the proposal, but the EPA is of the view that the information set out in Appendix 3 provides sufficient evaluation.

Conclusion

The EPA has considered the proposal by ANPL to construct and operate an outdoor entertainment venue on Lot 2 Toodyay Road, Red Hill.

Noise Impacts

Noise is likely to be an issue for surrounding noise sensitive residential areas for this proposal during highly amplified rock concerts, particularly when it coincides with westerly and southerly winds.

The Department of Environmental Protection (DEP) which has responsibility for the administration of the *Environmental Protection (Noise) Regulation 1997* (hereafter referred to as the Noise Regulations) considers that even with the best of measures, it is unlikely that it would be practicable for the proponent to ensure that noise emissions from the facility during highly amplified rock concerts would comply with the Noise Regulations, at all times. The DEP's advice notes that noise emissions from a worst–case amplified rock concert, at the predicted noise levels of up to 40 dB(A) under worst case down wind conditions, may be considered to be generally acceptable. For those events that are likely to exceed the Noise Regulations, it is expected that the exceedences would be for a short time, and would not be significant.

With respect to minimising noise emissions, the EPA notes that ANPL has modified the design of the stage layout during the course of the proposal's development to reduce noise emissions and also proposed various operational noise management measures to further reduce noise emissions. There are also considerable separation distances (about 2 kilometres) between the proposal and existing residences with relatively large buffers provided by the nearby extractive industries.

The EPA has concluded that the issue of noise is manageable however, in view of the DEP's advice the EPA has recommended a limit of up to 5 non-complying events a year should be imposed on the proponent and that noise limits should be designated at a reference point within the facility (the mixing desk) to ensure noise levels as a result of events at noise sensitive residences are minimised. Recommended condition 6 (Appendix 4) provides for the designation of noise limits at the mixing desk, limiting the number of non-complying events to be held per year to 5, the development and implementation of a Noise Management Plan and consultation with affected residents.

Loss of vegetation and fauna habitat

With regard to the proposal's impacts on vegetation and fauna habitat, the EPA notes ANPL has already made a number of modifications with regard to the site layout on an already constrained site. The proponent's layout of the proposal is now designed to retain an area of shallow soils and exposed granite which potentially supports a priority species, by locating the stage area and car park in the southern portion of Lot 2, as recommended by the proponent's botanical consultant.

The proposal lies adjacent to the John Forrest National Park, which has a much larger area of similar environmental habitat and values. Lot 2 does not contain any threatened ecological communities, Declared Rare Flora, fauna habitat or vegetation type of particular regional significance. The loss of 4.6 hectares of native vegetation is therefore not considered to be regionally significant.

The EPA notes however, that the vegetation on Lots 1 (location of initial proposal) and 2 has been described as locally significant as a result of the granite outcrops and its associated shallow soils, the presence of priority flora on Lot 1 and a potential priority flora on Lot 2, and the relatively undisturbed condition of the vegetation. Ongoing management measures should be put in place to minimise or avoid offsite impacts and ensure the 'footprint' of the proposal is adhered to. The protection of these areas and the management of offsite impacts to the National Park would be achieved by EPA recommended condition 7 which provides for the integration of the layout of the proposed facility with the protection of significant flora and granite outcrops on the northern portion of Lot 2 and managing the site to control access to the adjacent National Park.

The EPA has therefore concluded that it is unlikely that the EPA's objectives for noise and terrestrial flora and fauna would be compromised provided there is satisfactory implementation by the proponent of its commitments and the recommended conditions set out in Appendix 4 and summarised in Section 4.

Other Advice – Public Safety

Based on the advice provided by Department of Conservation and Land Management (CALM), the Fire and Emergency Services Authority of Western Australia (FESA), and the concerns expressed through public submissions on this proposal, it has become evident that bushfires from other areas and their potential impact on the patron's health and safety has become an issue that warrants further consideration by the proponent and decision making authorities.

The EPA has received legal advice that the matter of public safety arising from locating such a facility in an area which may be subject to high fire risk, is not an environmental factor under the *Environmental Protection Act 1986*, and therefore is not a factor that the EPA can consider in its assessment of this proposal. However, public safety is a matter that needs to be properly considered by the relevant decision making authorities in their approval process. The EPA has therefore provided other advice in Section 5 on this issue.

Recommendations

The EPA submits the following recommendations to the Minister for the Environment:

- 1. that the Minister notes that the proposal being assessed is for a proposal to construct and operate an outdoor entertainment venue on Lot 2 Toodyay Road;
- 2. that the Minister considers the report on the relevant environmental factors as set out in Section 3;
- 3. that the Minister notes that the EPA has concluded that it is unlikely that the EPA's objectives for noise and terrestrial flora and fauna would be compromised, provided there is satisfactory implementation by the proponent of the recommended conditions set out in Appendix 4, and summarised in Section 4.2, including the proponent's commitments;
- 4. that the Minister notes the EPA's advice in Section 5 regarding the issue of public health and safety, and specifically in regard to the uncertainty as to whether up to 5000 patrons of the facility can be completely evacuated in the event of a bushfire occurring in areas surrounding to the proposal; and
- 5. that the Minister imposes the conditions and procedures recommended in Appendix 4 of this report.

Conditions

Having considered the proponent's commitments and information provided in this report, the EPA has developed a set of conditions that the EPA recommends be imposed if the proposal by ANPL to construct and operate an outdoor entertainment venue is approved for implementation. These conditions are presented in Appendix 4. Matters addressed in the conditions include the following:

a) that the proponent shall fulfil the commitments in the Consolidated Commitments statement set out as an attachment to the recommended conditions in Appendix 4;

- b) that the proponent shall not hold more than 5 events per annum whose noise emissions, when received at noise-sensitive premises, exceed the prescribed standard in the *Environmental Protection (Noise) Regulations 1997*;
- that during an event in which noise levels received at noise-sensitive premises exceed the prescribed standard in the *Environmental Protection (Noise) Regulations 1997*, the proponent shall operate the facility to ensure that sound levels at the mixing desk position do not exceed an L_{Aeq}, 1 min level of 100 dB(A);
- d) that the proponent prepare and implement a Noise Management Plan to ensure that the amenity, health, welfare and comfort of residents, and those people recreating in the adjacent National Park are protected; and
- e) that the proponent prepare and implement a Vegetation and Landscape Features Protection Plan to limit the amount of clearing required for the proposal to 4.6 hectares and to integrate the protection of priority/significant flora, and granite outcrops on the northern portion of the facility with the proponent's design and layout of the proposal.

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1. Introduction and background

This report provides the advice and recommendations of the Environmental Protection Authority (EPA) to the Minister for the Environment on the environmental factors relevant to the proposal by Ace Nominees Pty Ltd (ANPL) to construct and operate an outdoor entertainment venue on Lot 2 Toodyay Road, Red Hill. The proposal is located approximately 25 kilometres east of the Perth Central Business District and 15 kilometres east of the suburb of Midland. It is also adjacent to the northern boundary of the John Forrest National Park (JFNP).

Lot 2 is situated on the edge of the Darling Scarp which is underlain by the Archaean 'granites' of the Darling Plateau and is surrounded by native vegetation. Figure 1 shows the location of the proposal and the location of nearby land uses. Lot 2 and the adjoining Lots (Lots 1 to 10) are owned by Midland Brick Company Pty Ltd and zoned 'Resource' under the City of Swan Town Planning Scheme, which permits extractive industries to operate. Clay resources are currently excavated from pits east of Lot 2. Pioneer Construction Material's Red Hill hard rock quarry and processing plant is located on the northern side of Toodyay Road, approximately 500 metres from the proposal. In addition, the proposed Perth – Adelaide Highway 'Orange Route' is planned to run along the northern edge of Lot 2.

The proponent indicated in its Public Environmental Review (PER) that prior to identifying the proposal currently before the EPA, it investigated several alternative locations (see sections 1.1 and 3.13 of the PER document (ANPL, 2001)).

ANPL then selected Lots 1 and 2 Toodyay Road as a suitable site for the development of an outdoor auditorium after dismissing other alternatives. ANPL has advised that Lots 1 and 2 Toodyay Road are available for purchase from Midland Brick to develop and operate an outdoor entertainment venue. The total area of Lots 1 and 2 is about 20 hectares. From a noise impact perspective the site was also chosen for the relatively large buffers provided by the nearby extractive industries.

Environmental field studies of both Lots 1 and 2 were undertaken to determine their environmental constraints. Given that the adjoining Lot 1 contains priority flora and a greater number of granite outcrops than Lot 2, Lot 1 was dismissed from further consideration by the proponent.

The proposal to construct and operate an outdoor entertainment venue was referred to the EPA on 8 September 1999 and a level of assessment was set at PER in order to ensure the proposal was appropriately designed, constructed and managed to meet the EPA's environmental objectives. The PER was released for public review from 10 December 2001 to 4 February 2002. The proponent's preliminary response to public submissions was submitted on May 2002. Since that time the proponent has consulted with the Department of Conservation and Land Management, the Fire and Emergency Services Authority of Western Australia and the Department of Environmental Protection and provided various ancillary documentation to address the issues of noise and public safety. A final version of the proponent's response to public submissions was submitted on July 2003.

Further details of the proposal are presented in Section 2 of this report. Section 3 discusses the environmental factors relevant to the proposal. The Conditions and Commitments to which the proposal should be subject, if the Minister determines that it may be implemented, are set out in Section 4.

Section 5 provides Other Advice by the EPA on the issue of public safety in a high fire risk area, Section 6 presents the EPA's conclusions and Section 7, the EPA's Recommendations.

References are cited in Appendix 1 and a list of submitters appears in Appendix 2. Appendix 3 identifies the relevant environmental factors and Appendix 4 contains the recommended environmental conditions and commitments. The compact disc attached to this report contains the proponent's responses to submissions. This information is included as a matter of information only and does not form part of the EPA's report and recommendations. Issues arising from this process and which have been taken into account by the EPA appear in the report itself.

2. The proposal

ANPL has proposed to develop an outdoor entertainment venue, which includes an enclosed stage facility, an open grassed area, drainage basins, access roads and a carpark to cater for 900 cars. No permanent formal seating is to be provided.

Portable facilities would be brought on site and erected for each event. The portable facilities include toilets, food and drink caravans, stage equipment, lighting, rubbish bins and change rooms. Refreshments would be sold on site, such as a broad range of food, soft drinks, coffee, water and liquor. The proponent has indicated that security personnel will be provided for each event to prevent disturbances from patrons and monitor people activities.

Access to the facility would be from Toodyay Road. The proponent has indicated that the design for the cross over and associated slip lanes have been assessed and approved by Main Road Western Australia (MRWA).

The outdoor entertainment venue and its associated facilities would provide for performing arts, children's events, film screenings, music and rock concerts. ANPL envisages that the proposed venue could cater for up to 100 events per year. Events are expected to run for 3 to 4 hours between the months of November and April. The majority of events are planned to have low amplification, with an average of one highly amplified event per week, such as a rock band. The significant noise sources of concern are expected to be from amplified rock concerts.

For each concert the proponent expects a substantial number of patrons to arrive by bus, with potential linkages with existing public transport services such as the suburban rail system at Midland Station.

In terms of the scale of the development, the constructed elements of the proposal will occupy approximately 4.6 hectares. By comparison, the area of Lot 2 is approximately 10 hectares and therefore the constructed elements of the proposal will occupy less than half of Lot 2.

The main characteristics of the proposal are summarised in Table 1 below. A detailed description of the proposal is provided in Section 1.2 of the PER (ANPL, 2001).

Table 1: Summary of key proposal characteristics

Characteristic	Description
Location	Lot 2 Toodyay Road, Red Hill
Area	(Lot size) approximately 10 hectares total.
	Area to be cleared for development, up to 4.6 hectares.
Capacity	Up to 5000 people.
Annual number of events	Up to 100 events per year, principally between the months of November and April.
Annual number of highly amplified music events/rock concerts	Up to 20 events per year.
Stage	A stage set up facing east surrounded by three concrete walls, approximately 5 metres in height.
	Sheet metal deck roof.
	All walls and roof to be internally lined with acoustic insulation.
	Noise out put from two banks of speakers each with a sound power level of 127 dB(A), representing a typical rock concert.
Permanent facilities	Stage area.
	Informal seating area.
	Car park.
	Bus turning circle.
	Access Road from Toodyay Road.
	Maintenance of emergency egress on the western side of Lot 2.
	Water tank with a capacity for 50000 litres.

Since release of the PER, a number of modifications to the proposal have been made by the proponent. These include:

- the relocation of the drainage basins further south towards the stage area. The proponent undertook to relocate the basins to reduce the impacts of the drainage basins on the northern portion of Lot 2; and
- the commitment to lodge a conservation covenant on the northern portion of Lot 2 to conserve the remaining locally significant vegetation.

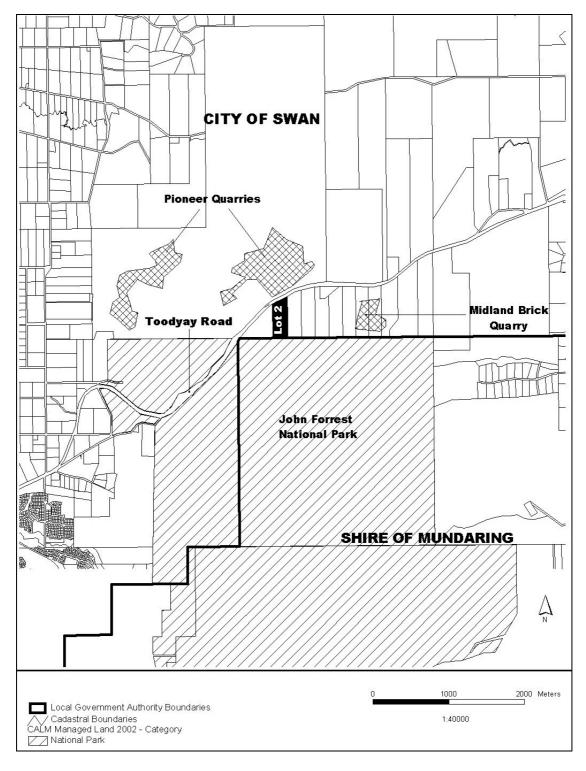


Figure 1: Location of Lot 2 Toodyay Road.

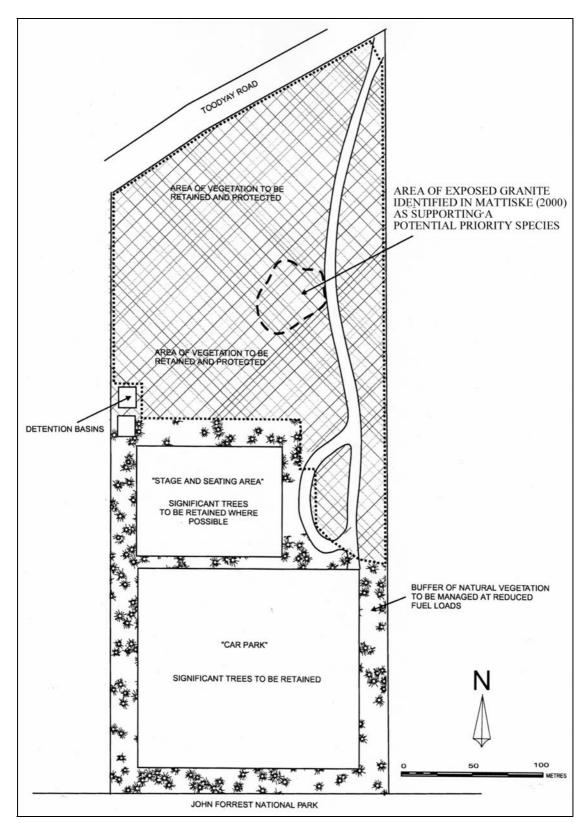


Figure 2: Layout of proposed venue.

3. Relevant environmental factors

Section 44 of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment on the environmental factors relevant to the proposal and the conditions and procedures, if any, to which the proposal should be subject. In addition, the EPA may make recommendations as it sees fit.

The identification process for the relevant factors selected for detailed evaluation in this report is summarised in Appendix 3. The reader is referred to Appendix 3 for the evaluation of factors not discussed below. A number of these factors, such as surface water quality, dieback and dust are relevant to the proposal, but the EPA is of the view that the information set out in Appendix 3 provides sufficient evaluation.

It is the EPA's opinion that the following environmental factors relevant to the proposal require detailed evaluation in this report:

- (a) Noise; and
- (b) Terrestrial flora and fauna loss of remnant vegetation and fauna habitat.

The above relevant factors were identified from the EPA's consideration and review of all environmental factors generated from the PER document and the submissions received, in conjunction with the proposal characteristics.

Details on the relevant environmental factors and their assessment are contained in Sections 3.1 - 3.2. The description of each factor shows why it is relevant to the proposal and how it will be affected by the proposal. The assessment of each factor is where the EPA decides whether or not a proposal meets the environmental objective set for that factor.

3.1 Noise

Description

The outdoor entertainment venue proposal will generate noise primarily during amplified entertainment events. ANPL has indicated that the majority of the events are planned to have low amplification and will meet the Noise Regulations. The most significant noise sources are those expected from highly amplified rock music concerts, where the prescribed standards in the Noise Regulations could be exceeded.

The proponent has indicated that the facility will operate between the summer months of November and April. ANPL envisages that up to 100 events will be held each year. Out of the expected 100 events a year, ANPL has indicated that up to 20 events will be highly amplified rock concerts or 1 rock concert a week, on average. Events are expected to run for 3 to 4 hours and be completed by approximately midnight.

Submissions

The key comments made in the public submissions focused on:

- potential exceedences to the Noise Regulations;
- the proponent's use of wind data in its assessment;
- impacts of noise emissions on the rural lifestyle of surrounding residences;
- the need for the proponent to consult with affected residences; and
- impacts of noise on recreational users of John Forrest National Park.

In its submission, the Department of Conservation and Land Management (CALM) raised the following comment:

• to ensure the visitors to the John Forrest National Park get the most out of their visit, CALM supports the proponent's commitment; "Liaison will be maintained with Park management in order to notify them of events to reduce any potential conflict between activities. Protocols between the Department and the proponent would need to be developed in this regard".

Assessment

The area considered for assessment of this factor is the surrounding and potentially affected residences, with emphasis on the existing and planned residences to the north and east of Lot 2 Toodyay Road.

The EPA's environmental objective for this factor is to protect the amenity, health, welfare and comfort of residents and those people recreating in surrounding areas from noise impacts resulting from activities associated with proposed events, particularly from highly amplified rock events.

Technical assessment

The proponent undertook preliminary acoustic modelling for an open stage set up during the initial design phase. The results of the preliminary modelling showed that noise levels at residences, primarily in Herne Hill, would substantially exceed the assigned night time noise levels in the Noise Regulations. There were also a number of other residences to the south west of the proposal where noise levels would be above those prescribed as acceptable.

Flowing on from the preliminary noise assessment, ANPL proposed modifications with respect to the stage set up which now forms the subject of this proposal. The proponent has now proposed to enclose the stage with three concrete walls and roof, internally line the stage with acoustic insulation and re-orientate the speakers to face east away from the closest residences to the west.

Further acoustic modelling was undertaken for the revised set up based on the following parameters:

- a stage set up facing east surrounded by three concrete walls 100 mm thick and approximately 5 metres in height;
- sheet metal deck roof:

- all walls and roof to be internally lined with acoustic insulation;
- various wind directions; and
- noise out put from two banks of speakers each with a sound power level of 127 dB(A), representing a typical rock concert.

The acoustic modelling has been undertaken consistent with the Draft EPA Guidance Statement No. 8 *Guidance for the Assessment of Environmental Factors* – 'Environmental Noise'. Further detail and methodology of the acoustical modelling is included in the technical appendices of the PER document.

Given that the majority of the potentially affected residences are located to the north and east of the proposed facility, the proponent's acoustical model of the revised stage set up considered a worst case scenario, where amplified rock concerts coincided with westerly and southerly winds of 3 metres per second.

The modelling results indicated that noise levels under these worst-case conditions are predicted to:

- not exceed a level of 40 dB(A) at any residence under worst case, down wind conditions;
- comply with the Noise Regulations for all residences if events were held during the day time and would substantially comply with the Noise Regulations up to 10 pm;
- exceed the Noise Regulations by up to 5 dB(A) during the night time period between 2200 and 0700; and
- exceed the Noise Regulations by up to 15 dB(A) during the night time period between 2200 and 0700, if the 10 dB(A) (non impulsive) penalty for music is applied.

Under the westerly winds scenario there are estimated to be 28 residences, and under southerly winds 14 residences, where the noise emissions may exceed the prescribed standard at night time. Plots of the noise contours for westerly and southerly winds are shown in Figures 11 to 15 of the PER document.

Local wind data was analysed by ANPL to determine the likely frequency of exceedences to the Noise Regulations. ANPL has advised that using a worst case scenario of 20 amplified rock concerts a year, the dwellings affected by southerly winds (up to 14 dwellings) may be able to hear an amplified rock concert 4 times in a summer and the dwellings affected by westerly winds (up to 28 dwellings) may be able to hear 2 events per summer.

In addition to the dwellings identified in the PER, the EPA notes the City of Swan's advice that the number of potentially affected dwellings will rise with increasing subdivision in the area. There is at least one subdivision area identified for future development which was not identified and included in the PER's noise assessment. This area includes a subdivision development at Hidden Valley Road, Parkerville,

approximately 2 kilometres to the east of the proposed facility. Further examination of the noise contours reveals that noise levels at the subdivision development in question are predicted to be between 35 dB(A) and 40 dB(A) during westerly winds. The noise levels to be experienced are slightly higher than other dwellings to the east and so noise management measures during westerly winds will be important when residential buildings are developed in this area. In its response to public submissions, the proponent indicated that it would undertake investigations of additional measures that can be implemented to reduce the transmissions of noise to future sensitive premises such as those planned for Hidden Valley, during the construction and testing phases and during the first concert.

However, the EPA remains concerned about the proponent's identification of future residential developments that may be affected by noise and consultation with affected residences. This matter is addressed below.

With respect to the ANPL's predictions, the DEP has advised the EPA that the following considerations are relevant to the assessment of noise impacts from the proposal:

- on some occasions, the noise emissions from concerts at levels greater than 35 dB(A) and less than 40 dB(A) may be masked by local noise such as from wind in the trees;
- noise from events would not be present at all times, and events should finish at a reasonable time in the evening; and
- the wind conditions causing the sound to propagate towards residences are not always present.

In general terms, the proponent's ability to achieve a noise level of no more than 40 dB(A) at noise sensitive premises, under worst case down wind conditions may be considered to be generally acceptable.

Potential noise management measures

The proponent has identified noise management measures that can be implemented to further reduce noise emissions under certain weather and concert conditions:

- modify sound mixing to reduce bass impulsiveness or volume if gentle westerly or southerly breezes are present;
- adjustments to the spectral output of the music that can reduce overall noise levels; and
- using delayed stacks of speakers along the edges of the audience. The proponent has indicated that the sound output of these speakers can be 10 dB(A) less than the 130 dB(A) figure which was the output used in the proponent's modelling. This is mainly because, delayed stacks of speakers are positioned closer to the patrons and the volume does not need to be set as high.

The proponent has indicated in its PER that adjustments to noise output could be achieved during individual events in response to changing wind conditions. The above measures would be particularly important during westerly and southerly wind conditions which may affect residences and areas with potential to contain residences in the future. However, it is considered that even with the implementation of the above measures, exceedences to the Noise Regulations may still occur under some conditions.

Proposed regulatory mechanism

There are various regulatory mechanisms that can be employed to manage and regulate noise for proposals of this type. The Noise Regulations provide for approval to exceed or vary from the prescribed standards set in the Noise Regulations depending upon circumstances (Regulation 17). Also, there is provision in the *Environmental Protection Act 1986* under which the premises may be exempt from any provision of the Act, including the Noise Regulations, with appropriate authorisation (Section 6 – Ministerial exemption). There are also amendments to the Noise Regulations that are currently being developed to permit recognised entertainment venues to hold a number of non-complying events without the need for individual noise approvals.

For this particular proposal, the proponent has not applied for a Regulation 17 or a Section 6 Ministerial exemption but has sought to hold a certain number of events a year which may exceed the Noise Regulations through Part IV of the *Environmental Protection Act 1986*.

The DEP has recommended that the proponent be required to have in place a Noise Management Plan which would designate sound levels to apply to the mixing desk during events and limit the number of events that exceed the Noise Regulations to five per annum. It is expected that the proposed regulation of the facility in this way would be an interim regulatory measure, given that the proposed amendments to the Noise Regulations may well apply to the proposed facility in the future.

Based on the ANPL's acoustical modelling, the DEP has determined that for the proposal to substantially comply with the prescribed standards at noise sensitive premises, events would have to run at $100~\mathrm{dB(A)}$ or lower at the mixing desk (a suitable reference point which may be between 20-30 metres from the front of the stage). The management of sound levels at the mixing desk in this way would ensure that noise levels at noise sensitive premises, particularly residential areas, are kept as low as reasonably possible.

Recommended conditions 6-1 and 6-2 (Appendix 4) would require the proponent to maintain sound power levels at the mixing desk to 100 dB(A) and limit the number of non-complying events to 5 a year. Recommended condition 6-3 would require the proponent to have in place a Noise Management Plan for events to ensure that the amenity, health, welfare and comfort of residents and those people recreating in surrounding areas are protected. Also, in response to the public submissions and due to the importance of consultation for proposals of this type, the EPA considers that in addition to the above requirements, the EPA has included a requirement in the Noise Management Plan which would require the proponent to consult with potentially affected residences, the City of Swan and the Shire of Mundaring as part of the

development of the Noise Management Plan and to identify future residential developments that may be affected by the proposal.

Impacts on users of the John Forrest National Park

The National Park is considered to be a noise sensitive premises and hence the assigned L_{A10} level of 60 dB(A) for the part of the premises that is greater than 15 metres from a building associated with the sensitive use, specified in the Noise Regulations, will apply. The predicted noise levels in the National Park suggest that the proposal would substantially comply with the prescribed standard for noise sensitive premises where there was no residence. Minor exceedences are predicted under northerly winds.

The proponent has also indicated that the northern part of the National Park is lightly used, and the likelihood of events at night coinciding with recreational activities in the northern part of the park will be low. Liaison with CALM to notify them of concerts will further reduce potential conflicts between activities.

Summary

The EPA notes that ANPL has modified the design of the stage layout during the course of the proposal's development to reduce noise emissions and also proposed various operational noise management measures to further reduce noise emissions. The EPA also notes the considerable separation distances (about 2 kilometres) between the proposal and existing sensitive residences and areas identified for future residential that are buffered by the nearby extractive industries.

The DEP has advised that even with the best of measures, it is unlikely that it would be practicable for the proponent to ensure that noise emissions from the facility during highly amplified rock concerts would comply with the Noise Regulations, at all times. The DEP's advice notes that noise emissions from a worst–case amplified rock concert, at the predicted noise levels of up to 40 dB(A) under worst case down wind conditions, may be considered to be generally acceptable. For those events that are likely to exceed the Noise Regulations, it is expected that the exceedences would be for a short time, and would not be significant.

The EPA has concluded that the issue of noise is manageable however, in view of the DEP's advice the EPA has recommended a limit of up to 5 non-complying events a year should be imposed on the proponent and that noise limits should be designated at a reference point within the facility (the mixing desk) to ensure noise levels as a result of events at noise sensitive residences are minimised. Recommended conditions 6-1, 6-2 and 6-3 (Appendix 4) provides for the designation of noise limits at the mixing desk, limiting the number of non-complying events to be held per year to 5, the development and implementation of a Noise Management Plan and consultation with affected residences.

3.2 Terrestrial flora and fauna - loss of remnant vegetation and fauna habitat

Description

Up to 4.6 hectares of the total 10 hectares of good quality remnant vegetation on Lot 2 could be cleared for the purpose of constructing the various elements of the proposal including the car park, stage area, informal seating area and the access roads. Additionally, approximately 1 hectare of vegetation contained within the 20 metre wide vegetated buffers surrounding the car park and stage area is proposed to be managed at a reduced fuel load for fire management purposes and to provide a buffer to patrons, facilities, cars and equipment in the event of a fire occurring in other areas.

It is likely that the fauna that inhabit the area would be affected through the destruction of areas of their preferred habitat and through increased activity in areas adjacent to their habitat. Lots 1 and 2 also forms part of a vegetation and habitat linkage between the National Park and areas of vegetation to the north of Toodyay Road.

Vegetation

A survey and assessment of the vegetation on Lots 1 (initial location of proposal) and 2 (preferred site) in June and November 2000 (Mattiske, 2000) indicates that Lots 1 and 2 are largely covered by vegetation rated as excellent condition. Only one weed species, *Watsonia sp.*, was recorded.

The predominant vegetation to be cleared on Lot 2 is described by the proponent's botanical consultant to be representative of the Dwellingup vegetation complex in medium to high rainfall as classified by Heddle (1980) and more recently Mattiske and Havel (2000). In terms of the site vegetation types defined by Havel (1975), Lot 2 comprises of the following:

Vegetation Type G – Mosaic of open woodland *of Eucalyptus marginata* – *Corymbia calophylla* and closed heath of Proteaceae – Myrtaceae species and lithic complex associated with granite.

Vegetation Type R – Open woodland of *Eucalyptus marginata* – *Corymbia calophylla* on the fringes of granite outcrops, with understorey including *Hibbertia hypericoides*, *Hakea undulata* and *Dryandra lindleyana*.

Vegetation Type C – Occasional pockets of *Eucalyptus rudis* over *Agonis linearifolia* and *Astartea fascicularis* with associated cyperaceae along the creekline.

Fauna

Based on a site visit and assessment of the habitats, Lots 1 and 2 could support a high diversity of vertebrate fauna. These may include a number of threatened or priority species including two reptiles of conservation significance, nine birds species of national conservation significance that are either mobile over fairly large areas or may seasonally or occasionally visit the site, and three mammal species of conservation significance. Of significance, is the potential occurrence of the Chuditch listed under

the *Wildlife Conservation Act 1950* as Schedule 1 – Fauna which is rare or likely to become extinct.

The fauna assessment highlights that the vegetation and fauna habitats on both lots are rated to be in very good condition and likely to have a rich assemblage of vertebrate fauna, with the majority of species dependent upon undisturbed or little disturbed native vegetation (Bamford, 2000). The assessment also highlights the importance of retaining the areas of exposed granite and heathlands over shallow soil, and minimising the clearing of vegetation required for the proposal (Bamford, 2000).

ANPL initially planned and designed the proposal on the southern portion of Lot 1. However, due to the presence of two priority flora, a higher number of granite outcrops and based on the recommendations of the botanical consultant, ANPL has excluded Lot 1 from further consideration. Hence, the proposal currently before the EPA is to develop Lot 2.

Submissions

The key comments made in the public submissions focused on:

- the use of local native species in rehabilitation;
- impacts of the proposal on priority flora;
- the need for the proponent to provide an environmental offset;
- the width of buffer areas;
- alternative sites and layouts of the proposal;
- standard of the proponent's flora and fauna surveys;
- ecological linkage role of Lots 1 and 2; and
- increase in risk of fire occurring during events.

In its submission on the PER document the Department of Conservation and Land Management (CALM) recommended:

- the proponent protect the granite outcrops and fringing vegetation with physical barrier around the vegetation and outcrops;
- the proponent needs to manage rubbish during and after events;
- the erection of fencing to CALM's standards;
- the retention of trees where possible, within the construction area;
- a setback from the boundary of the National Park of 50 metres;
- the use of local native species for rehabilitation of areas disturbed; and
- that it be given an opportunity to comment on the proponent's construction and operation management plans, as the land manager of the National Park adjacent to the site.

Assessment

The area considered for assessment of this factor is Lot 2 Toodyay Road and the adjacent JFNP.

The EPA's environmental objectives for this issue are to:

- 1) maintain the abundance, diversity, geographic distribution and productivity of vegetation communities, and to protect Declared Rare Flora and priority flora, consistent with the provisions of the *Wildlife Conservation Act 1950*; and
- 2) protect Threatened Fauna and Priority Fauna species and their habitats, consistent with the provisions of the *Wildlife Conservation Act 1950*.

Impacts on Vegetation

A survey of the vegetation and flora of Lot 2 was undertaken in June 2000 followed by a late spring flora survey in November 2000. No Declared Rare Flora (DRF) was identified on Lot 2. However, a potential priority 3 species was detected. This species is assumed to be *Verticordia huegelii* var. *decumbens* and is associated with the granite outcrops located on the northern portion of Lot 2. This species will be avoided because the proposed footprint of the proposal is on the southern portion of the lot.

Broad scale vegetation mapping associated with Heddle (1980) and more recently for the Regional Forest Agreement process indicates that the Dwellingup vegetation complex is well represented in relation to its original extent with well over 30 per cent of its original extent remaining. It is noted however, that less than 30 per cent of the Dwellingup complex occurs in secure conservation reserves. In relation to the site vegetation types, the predominant vegetation type to be impacted is Type R vegetation and to lesser extent Type G vegetation. ANPL's botanical consultant indicated that the site vegetation types to be impacted (predominantly Type R and a small amount of Type G) are represented within the adjacent John Forrest National Park, which itself occupies about 2670 hectares.

The vegetation on Lots 1 and 2 was not subject to the System Six recommendations (Department of Conservation and Environment, 1983) for being set aside for conservation. In addition, the ANPL's vegetation study also concluded that the vegetation on Lots 1 and 2 is not regionally significant (Mattiske, 2000). The loss of up to 4.6 hectares of native vegetation as part of the proposed facility on Lot 2 is therefore not expected to be regionally significant.

Notwithstanding the above, the proponent's botanical consultant has identified the vegetation on Lots 1 and 2 to be locally significant as a result of the following values:

- it supports pockets of *Nuytsia floribunda* on shallow eroded patches of granite;
- it supports priority species which are mainly on the granitic soils; and
- it supports vegetation which is relatively undisturbed, and it provides an area of undeveloped native bushland of high botanical value.

The EPA notes the local significance of the vegetation on Lots 1 and 2. Minimising the area to be disturbed of the proposal and the careful siting of the constructed elements of the development in the least sensitive portion will be important to maintain the remainder of the locally significant features.

To this end, the EPA acknowledges that ANPL has located the development in the southern portion of Lot 2 to avoid the majority of the granite outcrops and potential priority flora. Ongoing management measures will be required to control access and protect the locally significant features of Lot 2.

ANPL has committed to prepare a construction and operation management plan (Proponent commitments 1 and 2) to ensure the 'footprint' of the proposal is adhered to. This would be aimed at protection of the remaining vegetation including the remaining granite outcrops on the northern proportion of Lot 2 and preventing offsite impacts due to weeds, dieback and fire. As part of the plan, ANPL has indicated areas disturbed during construction would be rehabilitated using native species and landscaping of developed areas would consist of native flora. The EPA is of the view that all rehabilitation and landscaping should be undertaken using native flora endemic to the Darling Scarp region and that revegetation in the naturally vegetated areas should not be necessary as it is already in excellent condition. Also, large trees will be identified in the field and retained in the proposed car park and seating area to maintain the natural aesthetics of the area.

Following the public review of the PER, the proponent has committed to lodge a conservation covenant (Commitment 4) on the northern portion of Lot 2 to protect the remaining vegetation, in perpetuity.

Impacts on fauna

The proponent's fauna consultants have carried out a fauna assessment of Lots 1 and 2. The fauna assessment essentially concluded that the area within Lots 1 and 2 is likely to have a rich assemblage of vertebrate fauna, with the majority of species dependent on undisturbed or little disturbed native vegetation. The proponent's fauna assessment also concluded that the most sensitive habitat is associated with exposed granite outcrops and heathland over shallow soils associated with exposed granite. The stream zone to the north of the lot would also be important for the life cycles of several species of amphibians, and aquatic invertebrates. For the purpose of fauna conservation management, the proposed facility needs to protect and enhance the habitat diversity and linkage function of the site.

Of significance, is the potential occurrence of the Chuditch (*Dasyurus geoffroii*) listed under the *Wildlife Conservation Act 1950* as Schedule 1 – Fauna which is rare or likely to become extinct. The Chuditch has been recorded both within and in close proximity to the park (Ninox Wildlife Consulting, 1991).

The EPA notes the fauna assessment's conclusion that although the Chuditch is highly significant, the Red Hill site would only be part of the range of one or two animals that could be expected to extend through the National Park (Bamford, 2000). Noting the large home range of the Chuditch, it is unlikely that the clearing of 4.6 hectares will significantly affect the conservation status of the species.

Overall, the proponent has taken fauna impacts into account in developing its proposal and management commitments. In order to reduce the impact on fauna, the proponent:

- has located the constructed elements of the proposal to avoid Lot 1 and the northern portion of Lot 2. These areas contain the majority of the exposed granite which tend to have higher values for fauna, particularly for reptiles and mammals. Lot 1 also has more vegetation types and therefore greater habitat diversity than Lot 2;
- has committed to using bins with animal proof lids in line with CALM's advice and adequate waste management to discourage exotic fauna from the facility;
- has committed to erecting boundary fencing in consultation with CALM which could include kangaroo gates to allow movement of larger fauna;
- has committed to using native plants in its rehabilitation of disturbed areas and landscaping, and retaining significant trees in the car park and seating area; and
- will restrict public access to the remainder of Lot 2 and the National Park during events

The operational aspects of the above commitments are key aspects that the EPA expects would be included in the proponent's Operation Environmental Management Plan (Commitment 2).

With regard to the issue of the impacts of the proposal on ecological linkages, the EPA notes that the proposal will not lead to any significant isolation of any fauna habitats.

The EPA also notes that there will be areas of contiguous habitat on all sides of the proposal to maintain linkages of native vegetation. Apart from the potential effects of Toodyay Road on the migration and movement of fauna, the National Park will still be linked to areas of vegetation to the north of Toodyay Road. Therefore the linkage between the John Forrest National Park and other areas of vegetation to the north, including the Walyunga National Park, will not be significantly affected.

Impacts on John Forrest National Park

The EPA notes that the proposal is adjacent to a National Park and so the issue of active and ongoing environmental management to ensure disturbance and offsite impacts to the park are kept to a practicable minimum, is important.

There are two issues of particular importance in relation to impacts on the National Park. These include the impacts of increased visitation to the area during events and the increased risk of fire ignition occurring due to the influx of people in summer months, when fire risk is at a peak.

To address the issue of increased visitation and potential uncontrolled and unauthorised access to the National Park the proponent has indicated that security personnel will be hired for each event to control patrons and prevent unauthorised access. Suitable fencing can be erected on the southern boundary to assist in the control of patrons, however this needs to be reconciled with the need to allow the movement of fauna across the site.

The other key issue is fire management and control. CALM has indicated that the risk of fire ignition at the site itself is likely to increase as is expected with any increase in human activity. This would be associated with sources such as vehicles, cigarettes or from electricity.

ANPL has determined the need for and impact of associated fire protection measures in the event of a fire starting in the proposed venue. Accordingly, ANPL prepared a Fire Management Plan (included in the PER) which provides for a water tank of sufficient capacity, maintaining a fire break on the southern boundary for vehicle access and egress, provision of back packs and fire extinguishers during events, and training of security staff and liaison with the local fire brigade during events.

In its submission on the PER, CALM recommended that the development include a 50 metre setback from the National Park. The proponent has advised in its response to submissions, that the current proposed setback is 20 metres and that moving the facility further north could cause greater impact on the more sensitive vegetation associated with granite outcrops and would increase the visual impact from Toodyay Road. The proponent has also indicated that it will continue discussions with the City of Swan and CALM on a suitable setback given the environmental constraints on Lot 2. Accordingly, the EPA has included a requirement for the proponent to refine the layout of the facility to include adequate setbacks from John Forrest National Park in consultation with CALM during the preparation of the Vegetation and Flora Protection Plan required by recommended condition 7-2 (Appendix 4).

In relation to other impacts, the proponent has committed to ensuring that the impacts from weeds, disturbance and spread of rubbish on the adjacent park are managed in line with Construction and Operation Environmental Management Plans in consultation with CALM.

Summary

With regard to the proposal's impacts on vegetation and fauna habitat, the EPA notes ANPL has already made a number of modifications with regard to the site layout on an already constrained site. The proponent's layout of the proposal is now designed to retain an area of shallow soils and exposed granite, which potentially supports a priority species, by locating the stage area and car park in the southern portion of Lot 2 as recommended by the proponent's botanical consultant.

The proposal lies adjacent to the John Forrest National Park, which has a much larger area of similar environmental habitat and values. Lot 2 does not contain any threatened ecological communities, Declared Rare Flora, fauna habitat or vegetation type of particular regional significance. The loss of 4.6 hectares of native vegetation is therefore not considered to be regionally significant.

The EPA notes that the granite outcrops, its associated shallow soils and a population of potential priority flora on northern portion of Lot 2 are significant on local scale and that ongoing management measures need to be put in place to minimise or avoid offsite impacts and ensure the footprint of the proposal is adhered to. The protection of these areas would be achieved by EPA recommended condition 7 (Appendix 4).

Having particular regard to:

- (a) the vegetation and habitat types present in the proposal area are not unique or regionally significant, with similar vegetation and habitats located in the adjacent National Park;
- (b) the limited extent of vegetation clearing;
- (c) the avoidance of areas of supporting a potential priority species;
- (d) the proponent's commitment to lodge a conservation covenant over the northern portion of Lot 2 to protect the remaining area of vegetation;
- (e) the proponent's commitment to provide security personnel to manage unauthorised access to the adjacent National Park during events; and
- (f) the proponent's fire management plan which has been approved by the Shire of Swan,

it is the EPA's opinion that the proposal can be managed to meet the EPA's environmental objective for terrestrial flora and fauna provided that the proponent's environmental management commitments to have in place Construction and Operation Environmental Management Plans and Fire Management Plan (Commitments 1, 2 and 3) and EPA recommended condition 7 are satisfactorily implemented.

4. Conditions and Commitments

Section 44 of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment on the environmental factors relevant to the proposal and on the conditions and procedures to which the proposal should be subject, if implemented. In addition, the EPA may make recommendations as it sees fit.

In developing recommended conditions for each project, the EPA's preferred course of action is to have the proponent provide an array of commitments to ameliorate the impacts of the proposal on the environment. The commitments are considered by the EPA as part of its assessment of the proposal and, following discussion with the proponent, the EPA may seek additional commitments.

The EPA recognises that not all of the commitments are written in a form which makes them readily enforceable, but they do provide a clear statement of the action to be taken as part of the proponent's responsibility for, and commitment to, continuous improvement in environmental performance. The commitments, modified if necessary to ensure enforceability, then form part of the conditions to which the proposal should be subject, if it is to be implemented.

4.1 Proponent's commitments

The proponent's commitments as set in the PER and subsequently modified and reformatted, as shown in Appendix 4, should be made enforceable.

4.2 Recommended conditions

Having considered the proponent's commitments and the information provided in this report, the EPA has developed a set of conditions that the EPA recommends be imposed if the proposal by ANPL to construct and operate an outdoor entertainment venue, is approved for implementation.

These conditions are presented in Appendix 4. Matters addressed in the conditions include the following:

- (a) that the proponent shall fulfil the commitments in the Consolidated Commitments statement set out as an attachment to the recommended conditions in Appendix 4;
- (b) that the proponent shall not hold more than 5 events per annum whose noise emissions, when received at noise-sensitive premises, exceed the prescribed standard in the *Environmental Protection (Noise) Regulations 1997*;
- (c) that during an event in which noise levels received at noise-sensitive premises exceed the prescribed standard in the *Environmental Protection (Noise) Regulations 1997*, the proponent shall operate the facility to ensure that sound levels at the mixing desk position do not exceed an L_{Aeq}, 1 min level of 100 dB(A), where L_{Aeq}, 1min is an average value taken over one minute, whose level contains the same energy as the fluctuating noise during that period;
- (d) that the proponent prepare and implement a Noise Management Plan to ensure that the amenity, health, welfare and comfort of residents and those people recreating in the adjacent National Park are protected; and
- (e) that the proponent prepare and implement a Flora and Landscape Features Protection Plan to limit the amount of clearing required for the proposal to 4.6 hectares and to integrate the protection of priority/significant flora, and granite outcrops on the northern portion of the facility with the proponent's design and layout of the proposal.

It should be noted that other regulatory mechanisms relevant to the proposal are:

- the requirement for the proponent to obtain a development approval from the City of Swan;
- the requirement for the proponent to obtain the approval of the Commissioner for Soil and Land Conservation prior to clearing any more than one hectare of native vegetation.

5. Other Advice

Public Health and Safety

Based on the advice provided by CALM, the Fire and Emergency Services Authority of Western Australia (FESA), and the concerns expressed through public submissions on this proposal, it has become evident that bushfires from other areas and their potential impact on the patron's health and safety has become an issue that warrants further consideration by the proponent and decision making authorities. This issue is further amplified by the location of the proposal in a high fire risk area. CALM has

advised that fires which occur in open woodland and heath country can spread very rapidly and can be very hard to contain due to a combination of (any or all of) exposure to strong winds, access, steep terrain and flammable vegetation factors.

The EPA has received legal advice that the matter of public safety arising from locating such a facility in an area which may be subject to high fire risk, is not an environmental factor under the *Environmental Protection Act 1986*, and therefore is not a factor that EPA can consider in its assessment of this proposal.

Notwithstanding this, The EPA advised the proponent that the gathering of up to 5000 people at a location that is considered to be a high fire risk area required some level of 'up front' planning to determine whether the issue of public safety, particularly the movement of patrons in the event of fire, can be satisfactorily managed and whether the layout of the proposal will require modifications.

The proponent has attempted to address the public safety issue by proposing to upgrade and maintain an existing firebreak from the southeastern corner of Lot 2 to Toodyay Road to allow for evacuation and access to emergency vehicles. Also, a Conceptual Emergency Management Plan was prepared, which identifies additional operational measures to reduce risks to public safety. Further details, procedures and responsibilities for the plan are proposed to be developed prior to the first event being held.

Whilst the proponent has attempted to address the above concerns, there remains the uncertainty as to whether the safety requirements of the responsible agencies can be met and in particular whether up to 5000 patrons can indeed be completely evacuated in time during a bush fire in the area.

It should be noted that with regards to fuel levels in the adjacent National Park, CALM has not indicated its intentions to reduce fuel levels in the northern section of the Park by more frequent hazard reduction burning. CALM has advised more frequent burning in the park could favour some taxa over others and this could potentially degrade the nature conservation values of the park.

Given the above, public safety is a matter that needs to be properly considered by the relevant decision making authorities in their approval process.

In the event this proposal is approved for implementation, it is understood that the City of Swan will be required to consider a development application for this proposal pursuant to the provisions of the *Town Planning and Development Act*. It is expected that the City of Swan would consider the above advice during its approvals process which may require the preparation and implementation of an evacuation management plan at a level, which is commensurate with proposals of this type. It is expected that the advice of CALM as the designated Hazard Management Agency for fires originating in the National Park and FESA as the State's key fire control and emergency management body will be obtained in the preparation of the plan.

6. Conclusions

The EPA has considered the proposal by ANPL to construct and operate an outdoor entertainment venue on Lot 2 Toodyay Road, Red Hill.

Noise Impacts

Noise is likely to be an issue for surrounding noise sensitive residential areas for this proposal during highly amplified rock concerts, particularly when it coincides with westerly and southerly winds.

The DEP which has responsibility for the administration of the Noise Regulations considers that even with the best of measures, it is unlikely that it would be practicable for the proponent to ensure that noise emissions from the facility during highly amplified rock concerts would comply with the Noise Regulations, at all times. The DEP's advice notes that noise emissions from a worst–case amplified rock concert, at the predicted noise levels of up to 40 dB(A) under worst case down wind conditions, may be considered to be generally acceptable. For those events that are likely to exceed the Noise Regulations, it is expected that the exceedences would be for a short time, and would not be significant.

With respect to minimising noise emissions, the EPA notes that ANPL has modified the design of the stage layout during the course of the proposal's development to reduce noise emissions and also proposed various operational noise management measures to further reduce noise emissions. There are also considerable separation distances (about 2 kilometres) between the proposal and existing residences with relatively large buffers provided by the nearby extractive industries.

The EPA has concluded that the issue of noise is manageable however, in view of the DEP's advice the EPA has recommended a limit of up to 5 non-complying events a year should be imposed on the proponent and that noise limits should be designated at a reference point within the facility (the mixing desk) to ensure noise levels as a result of events at noise sensitive residences are minimised. Recommended condition 6 (Appendix 4) provides for the designation of noise limits at the mixing desk, limiting the number of non-complying events to be held per year to 5, the development and implementation of a Noise Management Plan and consultation with affected residences

Loss of vegetation and fauna habitat

With regard to the proposal's impacts on vegetation and fauna habitat, the EPA notes ANPL has already made a number of modifications with regard to the site layout on an already constrained site. The proponent's layout of the proposal is now designed to retain an area of shallow soils and exposed granite which potentially supports a priority species, by locating the stage area and car park in the southern portion of Lot 2, as recommended by the proponent's botanical consultant.

The proposal lies adjacent to the John Forrest National Park, which has a much larger area of similar environmental habitat and values. Lot 2 does not contain any threatened ecological communities, Declared Rare Flora, fauna habitat or vegetation

type of particular regional significance. The loss of 4.6 hectares of native vegetation is therefore not considered to be regionally significant.

The EPA notes however, that the vegetation on Lots 1 and 2 has been described as locally significant as a result of the granite outcrops and its associated shallow soils, the presence of priority flora on Lot 1 and a potential priority flora on Lot 2, and the relatively undisturbed condition of the vegetation. Ongoing management measures should be put in place to minimise or avoid offsite impacts and ensure the 'footprint' of the proposal is adhered to. The protection of these areas and the management of offsite impacts to the National Park would be achieved by EPA recommended condition 7 which provides for the integration of the layout of the proposed facility with the protection of significant flora and granite outcrops on the northern portion of Lot 2 and managing the site to control access to the adjacent National Park.

The EPA has therefore concluded that it is unlikely that the EPA's objectives for noise and terrestrial flora and fauna would be compromised provided there is satisfactory implementation by the proponent of its commitments and the recommended conditions set out in Appendix 4 and summarised in Section 4.

Other Advice – Public Safety

Based on the advice provided by Department of Conservation and Land Management (CALM), the Fire and Emergency Services Authority of Western Australia (FESA), and the concerns expressed through public submissions on this proposal, it has become evident that bushfires from other areas and their potential impact on the patron's health and safety has become an issue that warrants further consideration by the proponent and decision making authorities.

The EPA has received legal advice that the matter of public safety arising from locating such a facility in an area which may be subject to high fire risk, is not an environmental factor under the *Environmental Protection Act 1986*, and therefore is not a factor that EPA can consider in its assessment of this proposal. However, public safety is a matter that needs to be properly considered by the relevant decision making authorities in their approval process. The EPA has therefore provided other advice in Section 5 on this issue.

7. Recommendations

The EPA submits the following recommendations to the Minister for the Environment:

- 1. that the Minister notes that the proposal being assessed is for a proposal to construct and operate an outdoor entertainment venue on Lot 2 Toodyay Road;
- 2. that the Minister considers the report on the relevant environmental factors as set out in Section 3;
- 3. that the Minister notes that the EPA has concluded that it is unlikely that the EPA's objectives for noise and terrestrial flora and fauna would be compromised, provided there is satisfactory implementation by the proponent of the recommended conditions set out in Appendix 4, and summarised in Section 4.2, including the proponent's commitments;
- 4. that the Minister notes the EPA's other advice in Section 5 regarding the issue of public health and safety, and specifically in regard to the uncertainty as to whether up to 5000 patrons of the facility can be completely evacuated in the event of a bushfire occurring in area adjacent to the proposal; and
- 5. that the Minister imposes the conditions and procedures recommended in Appendix 4 of this report.

Appendix 1

List of submitters

Organisations:

Main Roads Western Australia
Department of Conservation and Land Management
Wooroloo Brook Land Conservation District Committee
Minister for Indigenous Affairs
City of Swan
Shire of Mundaring
Conservation Council of WA Inc
Gidgegannup Progress Association (Inc)

Individuals:

Ms Gail Lee Mr Don Burgess Hidden Valley (WA) Pty Ltd Ms Maureen Steele 2 Confidential submissions

Appendix 2

References

Ace Nominees Pty Ltd (November 2001). *Public Environmental Review – Outdoor Auditorium Lot 2 Toodyay Road, Red Hill*. Prepared by Landform Research for Ace Nominees, November 2001.

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Heddle, EM., Loneragan, O.W. and Havel, J.J. (1980). Vegetation Complexes of the Darling System, Western Australia. In: *Atlas of Natural Resources Darling System, Western Australia*. Department of Conservation and Environment, W.A.

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Western Infrastructure (March 2000). Outdoor Entertainment Venue Toodyay Road, Red Hill – Traffic Impact Assessment. Prepared for Main Roads Western Australia.

Appendix 3

Summary of identification of relevant environmental factors

Preliminary Environmental Factors	Proposal Characteristics	Main Government Agency and Public Comments	Identification of Relevant Environmental Factors
	The clearing of up to 4.6 hectares of vegetation for the purpose of constructing a car park, stage area, seating area, and access roads.	The clearing of 4.6 hectares of vegetation of locally significant vegetation that is in excellent condition is not supported. It is unclear whether the proposal will impact on the population of the <i>Verticordia huegelii</i> var. <i>decumbens</i> (priority flora) on the northern portion of Lot 2 because the population is poorly marked and Figure 6 in the PER is not to scale. The development will significantly degrade the wilderness value of this portion of the Darling Scarp. The proponent's claim that the size of the auditorium represents 45% of Lot 2 is a misleading indication of the total area of vegetation destruction associated with this proposal. A submitter has claimed that 80% of the vegetation on the property will be destroyed. The PER should have included mapping of vegetation communities, vegetation condition and corridor buffers and linkages. No statistics have been provided on the original areas of each vegetation type, nor have statistics been presented indicating the area of each vegetation type remaining relative to its original extent. There has been no attempt to develop an environmental offset for this proposal. The proposal has not discussed the relationship between the proposed vegetation destruction area and known Threatened Ecological	
		Communities that occur in the area. It is to be noted that Bush Forever Site 42 is within 2.5 kilometres of the proposal and there may be ecological linkages to be considered.	

Preliminary Environmental Factors	Proposal Characteristics	Main Government Agency and Public Comments	Identification of I Environmental Factors	Relevant
		Lot 2 provides a valuable linkage between John Forrest National Park and Bushland owned by Pioneer, that links with Walyunga National Park. What is the corridor linkage significance of Lot 2?		
		The construction management plan should be approved by the Shire of Swan prior to commencement of any works. Any vegetation to be retained should be clearly marked (blocks and individual trees) in the field and also on detailed maps to make sure no accidental clearing occurs.		
		Only local native species should be used in the rehabilitation and landscaping of the facility.		
		The vegetation study recommends that alternative sites be assessed yet the PER provides very little comparative argument for the adoption of the proposed site.		
		Lots 1 and 2 should be included in the National Park because of its recognised and excellent floristic condition.		
		It is considered that the flora survey was not conducted under appropriate seasonal conditions.		
Disease	Construction activities associated with clearing of up to 4.6 hectares of vegetation for the purpose of constructing a car park, stage area, seating area, and access roads.	Given that there are areas on Lot 2 that are dieback free, dieback management procedures will need to address movement of vehicles within the site as well as entry to the site. The proponent fails to reconcile advice from the dieback consultants which suggests that the area is dieback infested and the advice from the vegetation consultant indicating that the vegetation is in very good condition.	The proponent has advised 2 is mostly infected by with a small portion that interpreted as dieback fre southern portion of the The proponent has indicated dieback is present in communities adjoining	dieback has been ee in the property. ated that n plant
		Will the proposal for a grassed area and detention basins increase the	proposed venue which is down slope from the	s located

Preliminary Environmental Factors	Proposal Characteristics	Main Government Agency and Public Comments	Identification of Relevant Environmental Factors
		water retention of the site and therefore enhance the potential spread of dieback?	Park. To protect dieback free areas from dieback spread, the proponent has indicated that the recommendations of a dieback study will be implemented during construction and operations via the proponent's management plans. Measures include: all construction work on site will be conducted using dieback hygiene principles; all earth moving vehicles entering the site are to be washed down to ensure they are not carrying any soil or vegetation prior to entering the site and dieback free areas; vehicles during construction will be confined to the 'footprint'; all materials used for construction are to be dieback free.
			In view of the above, this factor does not require further EPA evaluation.

Preliminary Environmental Factors	Proposal Characteristics	Main Government Agency and Public Comments	Identification of Relevant Environmental Factors
Terrestrial Fauna	Direct fauna habitat disturbance associated with the clearing of up to 4.6 hectares of vegetation for the purpose of constructing a car park, stage area, seating area, access roads.	Have any studies been done to evaluate the potential effect of noise from the proposed venue on wildlife? This is a matter of concern as the site borders a National Park. The proposal will result in the loss of over 50% of the habitat present within the lot resulting in death and dislocation of fauna from the area, which is not supported. The ongoing operation of the proposal may also impact on the native fauna through noise, drainage, rubbish, dust and light spill.	The proposed loss of 4.6 hectares of vegetation and fauna habitat is considered to be a relevant environmental factor and addressed in section 3.2 of the EPA report.
		No details have been provided of the methodology used by Bamford (2000) during their site visit. It is most odd that their inspection could not determine if Quenda were present at the site. The PER notes that a 'small but significant population' of Quendas could occur. This comment suggest that an inadequate survey technique.	
		Should this proposal be allowed to proceed there is a risk that it will sterilise the northern section of John Forrest National Park from use by native animal. Wildlife ecologists have documented that noise is a major factor in making animals move from habitats. Migrations from noise disturbed habitats place further pressure on more secure habitats.	
		Wire fencing possibly poses a threat to animals such as kangaroos through entanglement rather than allowing them to pass across boundaries freely. CALM recommends the erection of fencing to CALM standards with kangaroo gates, as specified by the Department of Agriculture's Farm Note 71/90.	
		How will the proposal affect the kangaroos, which frequently inhabit the area?	
Specially Protected (Threatened) Fauna	Direct fauna habitat disturbance associated with the clearing of up to 4.6 hectares of vegetation	No submissions were received on threatened fauna.	The proposed loss of 4.6 hectares of vegetation and fauna habitat is considered to be a relevant

Preliminary Environmental Factors	Proposal Characteristics	Main Government Agency and Public Comments	Identification of Relevant Environmental Factors
	for the purpose of constructing a car park, stage area, seating area, access roads.		environmental factor and addressed in section 3.2 of the EPA report.
Land - Erosion	The clearing of up to 4.6 hectares of vegetation for the purpose of constructing a car park, stage area, seating area, access roads.	All cleared area on the site should be monitored on a regular basis to assess erosion and appropriate action should be initiated in response to problems detected.	The increased runoff from the newly created hard surfaces, the proponent commits to the installation of two detention basins with sediment traps large enough to retain a 1:10 year storm events. The proponent has advised that
			about half the volume of runoff will be recycled and used for irrigation and dust suppression.
			In view of the above, this factor does not require further EPA evaluation.
Wetlands – Water Courses	A small creek is located on the northern edge of Lot 2. A small crossing will be constructed to allow access into the proposed venue.	Water from disturbed areas should be contained on site to allow removal of sediments and turbidity allowing for a minimum 2 hour runoff storage from a 10 year return frequency event. The pits should be operated with an effective surface scum trapping system designed to prevent discharge of floating matter.	The proponent has indicated that there will be no effluent disposal on site. To protect the creek from increased runoff from the newly created hard surfaces, the proponent commits to the
		A drainage and nutrient management plan should be developed by the proponent to the satisfaction of the City of Swan and this should address site drainage characteristics, dominant hydrological processes, surface water management, quality control, nutrient and pollution control and stream management.	installation of two detention basins with sediment traps large enough to retain a 1:10 year storm events. The proponent has advised that about half the volume of runoff will be recorded and weed for
			will be recycled and used for irrigation and dust suppression.

Preliminary Environmental Factors	Proposal Characteristics	Main Government Agency and Public Comments	Identification of Relevant Environmental Factors
			Only a very limited amount of riparian vegetation will be removed for the construction of an access road.
			In view of the above, this factor does not require further EPA evaluation.
POLLUTION	T a d		
Odour	Odours are generated by the nearby Red Hill waste disposal facility about 1.5 kilometres east of the proposed venue.	What are the odour impacts from the Red Hill Waste Disposal Facility on the patrons of the proposed facility?	The Red Hill Landfill facility covers the waste daily at the end of operations. This the potential for odour generation is minimised.
			Easterly winds predominantly occur on summer mornings from midnight onwards at times when the facility is unlikely to be used.
			In view of the above, this factor does not require further EPA evaluation.
Dust	Dust lift-off are likely to be generated during construction	Will dust monitoring be undertaken during the construction phase?	The proponent has advised that the car park will be watered or treated
	and during operations from movement of vehicles on the gravel car park.	Will the car park be gravel or bitumised?	with a dust suppressant to minimise dust generation during events. A water tank will be constructed on site and used for dust management. Also, the access road will be bituminised prior to the first event.
			Standard dust suppression

Preliminary Environmental Factors	Proposal Characteristics	Main Government Agency and Public Comments	Identification of Relevant Environmental Factors
			measures will be used during the construction phase in line with the EPA Guidance for the Prevention of Air Quality Impacts from Land Development Sites. Visual monitoring will be undertaken during construction. In view of the above, this factor does not require further EPA evaluation.
Surface Water Quality	A small creek lies on the northern portion of Lot 2.	It is recommended that a drainage system suitable to prevent runoff greater than a one in ten year event is constructed, preferable one in twenty year storm event. The stream that runs through the property also runs through the National Park and increased nutrient loading and turbidity through inadequate drainage is undesirable. Monitoring of water quality leaving the detention basins is required and should be an audited and enforced condition of the development. Detention basins should be revegetated with rushes and sedges to strip nutrients and improve aesthetics.	To protect the creek from increased runoff from the newly created hard surfaces, the proponent commits to the installation of two detention basins with sediment traps large enough to retain a 1:10 year storm events. The proponent has advised that about half the volume of runoff will be recycled and used for irrigation and dust suppression. In view of the above, this factor does not require further EPA evaluation.
Pollutants-Nutrients and Pesticides	Some fertiliser may be required for the establishment of lawn in the informal seating area.	Artificial lawn or carpets should be used instead of natural lawn in order to reduce potential for impacts from nutrients Sufficient ablutions should be supplied to cater for each event and all liquid waste from the site will need to be disposed of off site.	The proponent has advised that nutrients will only be applied as determined by nutrient testing twice per year. Nutrient quantities will be consistent with the Water and Rivers Commission Guidelines

Preliminary Environmental Factors	Proposal Characteristics	Main Government Agency and Public Comments	Identification of Relevant Environmental Factors
		Power generators and associated fuel supply will need to be bunded.	for the establishment of turf. The proponent has also advised that the loamy soils of the project area has good phosphate retention characteristics.
			With regard to potential effluent disposal, the proponent has indicated that transportable units will be used for events and waste water will be removed following each event. Permanent toilets will be considered in the future in consultation with the City of Swan and the Department of Health. In view of the above, this factor does not require further EPA
Noise	Noise will be generated primarily during events.	The City of Swan and Shire of Mundaring should be provided with a copy of the Noise Management Plan for comment prior to approval. The plan should clearly state the number of annual rock concerts proposed at the venue and anticipated noise levels. It is noted that the wind speed and direction readings have been based on data taken from Pearce Airbase. This data should not be used, as the wind conditions at Pearce are very different to Red Hill. The proponent should be required to undertake site specific research on environmental factors that are likely to have a key role in determining the environmental acceptability of the proposal.	evaluation. The noise impacts of the proposal during events is considered to be a relevant environmental factor and addressed in section 3.1 of the EPA report.
		What are the noise impacts of the proposal on residents in Stratton, Jane Brook and Swan Valley?	

Preliminary Environmental Factors	Proposal Characteristics	Main Government Agency and Public Comments	Identification of Relevant Environmental Factors
		The number of dwellings potentially affected by noise may increase in the future with further subdivision in the area. Letter of concern have already been received in relation to these types of venues located in proximity to rural residential areas.	
		The proponent should set a limit on the number of events and the frequency within which they occur. These limits should be set in consultation with the local government, community and residents in terms of when and how often to expect and experience noisy events.	
Light overspill	Events which occur at night time will require lighting. Lights may be visible from Toodyay Road and the National Park.	All general lighting should have appropriate covers to focus light groundwards to prevent light overspill. The access road and car park should be characterised by low level and focused lighting.	Given the location of the site with respect to nearby residences, the commitment to limit light overspill by directing lights onto the stage during events and the retention of vegetation surrounding the proposed area, it is unlikely that light overspill will have a significant impact on surrounding land uses. In view of the above, this factor does not require further EPA evaluation.
SOCIAL SURROUNDIN	IGS		· · · · · · · · · · · · · · · · · · ·
Public health and safety	CALM has advised that the proposed facility occurs in a high fire risk area.	It is noted that the proponent intends on operating the facility from November to April. This time of year corresponds with the season of peak fire risk, in an area that is especially fire prone. While it could be a minimum requirement to make the venue a smoke free zone there would be an extremely high risk of fire caused by patrons smoking in bush outside of the venue.	The proponent has advised that it has prepared a Fire Management Plan to the satisfaction of the City of Swan to address the risk of fire ignition occurring at the proposed facility, during events.

Preliminary Environmental Factors	Proposal Characteristics	Main Government Agency and Public Comments	Identification of Relevant Environmental Factors
		The fire management plan should pay particular attention to the water tanks on site.	The issue of risk to the health and safety of patrons in the event of a bushfire occurring from
		There is already a significant amount of traffic on Toodyay Road and the proposal will add to exiting traffic and therefore the risk of accidents occurring during concerts. The perceived increased risk of car accidents occurring as a result of the proposal is considered unacceptable.	surrounding areas is discussed in 'Other Advice', Section 5 in the EPA's report.
Recreation	The proposed venue can potentially hold up to 100 events a summer with up to 5000 people.	CALM supports the commitment 'liaison will be maintained with Park Management in order to notify them of events to reduce any potential conflict between activities.' CALM recommends protocols between the CALM and the proponent would need to be developed in this regard.	The proponent has advised that security staff will be hired for each event to restrict unauthorised public access to the National Park and boundary fencing will be enhanced in consultation with CALM. Also, liaison will be maintained with CALM in order to notify them of events to reduce any potential conflict between activities. Given the distance between the main activity area in the National Park and the proposal, and the limited number of events proposed to be held each year, the proponent has concluded that the proposal is unlikely to have a significant impact on recreational activities. In view of the above, this factor does not require further EPA evaluation.

Preliminary Environmental Factors	Proposal Characteristics	Main Government Agency and Public Comments	Identification of Relevant Environmental Factors
Aboriginal culture and Heritage	The proposed clearing of up to 4.6 hectares of vegetation.	The proponent's report on Aboriginal Heritage sites is contradictory with respect to the presence of aboriginal sites in that it forecasts that the survey corridor exhibited a high potential for the likelihood of sites, but the conclusions section says that there is low likelihood of such sites being present. The PER implies an ethnographic survey was conducted but it appears that only one aboriginal person was consulted and other work was based on desktop analysis. Based on this it appears that further consultation may be required and the proponent should be required to carry this out.	The proponent has advised that much of the work on the ethnographic significance of Lot 2 was conducted for the proposed Perth-Adelaide Highway which runs along the northern edge of Lot 2. Based on the proponent's investigations of the area, the proponent has advised that there is no evidence of aboriginal archaeological material on Lot 2. In view of the above, this factor does not require further EPA evaluation.
European Heritage	The proposed clearing of up to 4.6 hectares of vegetation.	No submissions were received for this factor	The proponent has advised that there are no European Heritage sites on Lot 2. This factor does not require further EPA evaluation.
Landscape	The proposed clearing of up to 4.6 hectares of vegetation on the western edge of the Darling Scarp and on the northern boundary of the National Park.	No submissions were received for this factor.	The vegetation surrounding the proposed venue will be retained to maintain the natural setting and aesthetics of the area. Only a limited area of clearing is proposed. The proponent has advised that the facility will be constructed 180 metres from Toodyay Road, on

Preliminary Environmental Factors	Proposal Characteristics	Main Government Agency and Public Comments	Identification of Relevant Environmental Factors
			sloping ground with a buffer of scattered trees. The sloping nature of the site increases the aesthetic quality of the auditorium, but increases the potential visual impact from Toodyay Road. The proponent has committed to provide a screen of tall trees on the northern side of the stage area to address the visual impacts. Furthermore, the proposed venue will have no large intrusive permanent buildings. In view of the above, this factor
			does not require further EPA evaluation.
Road Transport	The proposed venue will require access to the facility from Toodyay Road. Slip lanes will be required to be constructed.	The location and layout of the access as described in the PER has been agreed in principle with Main Roads WA as a temporary access only to Toodyay Road. Alternative property access will be required from the rear of this lot, when the construction of the future Perth-Adelaide National Highway is required.	The proponent has advised that Main Roads WA has approved the design and location of the access road into the facility.
		The design and construction of the proposed access shall comply with Main Roads WA standards and guidelines. A detailed traffic management and safety plan will also need to be submitted as part of the approval.	The issue of traffic management is expected to be addressed in the proponent's Operations Management Plan.
			In view of the above, this factor does not require further EPA evaluation.

Appendix 4

Recommended Environmental Conditions and Proponent's Consolidated Commitments

RECOMMENDED CONDITIONS AND PROCEDURES

STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED (PURSUANT TO THE PROVISIONS OF THE ENVIRONMENTAL PROTECTION ACT 1986)

OUTDOOR ENTERTAINMENT VENUE, LOT 2 TOODYAY ROAD, RED HILL, CITY OF SWAN

Proposal: The construction and operation of an outdoor entertainment venue

on Lot 2 Toodyay Road, Red Hill. The venue will provide an outdoor facility for amplified music concerts, performing arts, children's events and film screenings. Permanent features of the venue include an enclosed stage facing east, open grassed area, drainage basins, access road and a car park, as documented in

schedule 1 of this statement.

Proponent: Ace Nominees Pty Ltd

Proponent Address:

Assessment Number: 1291

Report of the Environmental Protection Authority: Bulletin 1104

The proposal referred to above may be implemented by the proponent subject to the following conditions and procedures:

Procedural conditions

1 Implementation and Changes

- 1-1 The proponent shall implement the proposal as documented in schedule 1 of this statement subject to the conditions of this statement.
- 1-2 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment, on advice of the Environmental Protection Authority, is substantial, the proponent shall refer the matter to the Environmental Protection Authority.
- 1-3 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment determines, on advice of the Environmental Protection Authority, is not substantial, the proponent may implement those changes upon receipt of written advice.

2 Proponent Commitments

- 2-1 The proponent shall implement the environmental management commitments documented in schedule 2 of this statement.
- 2-2 The proponent shall implement subsequent environmental management commitments which the proponent makes as part of the fulfilment of the conditions in this statement.

3 Proponent Nomination and Contact Details

- 3-1 The proponent for the time being nominated by the Minister for the Environment under section 38(6) or (7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal until such time as the Minister for the Environment has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person as the proponent for the proposal.
- 3-2 If the proponent wishes to relinquish the nomination, the proponent shall apply for the transfer of proponent and provide a letter with a copy of this statement endorsed by the proposed replacement proponent that the proposal will be carried out in accordance with this statement. Contact details and appropriate documentation on the capability of the proposed replacement proponent to carry out the proposal shall also be provided.
- 3-3 The nominated proponent shall notify the Department of Environmental Protection of any change of contact name and address within 60 days of such change.

4 Commencement and Time Limit of Approval

4-1 The proponent shall provide evidence to the Minister for the Environment within five years of the date of this statement that the proposal has been substantially commenced or the approval granted in this statement shall lapse and be void.

Note: The Minister for the Environment will determine any dispute as to whether the proposal has been substantially commenced.

4-2 The proponent shall make application for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement to the Minister for the Environment, prior to the expiration of the five-year period referred to in condition 4-1

The application shall demonstrate that:

- 1. the environmental factors of the proposal have not changed significantly;
- 2. new, significant, environmental issues have not arisen; and
- 3. all relevant government authorities have been consulted.

Note: The Minister for the Environment may consider the grant of an extension of the time limit of approval not exceeding five years for the substantial commencement of the proposal.

5 Compliance Audit

- 5-1 The proponent shall prepare an audit program and submit compliance reports to the Department of Environmental Protection which address:
 - 1. the implementation of the proposal as defined in schedule 1 of this statement;
 - 2. evidence of compliance with the conditions and commitments; and
 - 3. the performance of the environmental management plans and programs.

Note: Under sections 48(1) and 47(2) of the *Environmental Protection Act 1986*, the Chief Executive Officer of the Department of Environmental Protection is empowered to audit the compliance of the proponent with the statement and should directly receive the compliance documentation, including environmental management plans, related to the conditions, procedures and commitments contained in this statement.

6 Noise Management

6-1 The proponent shall not hold more than five events per annum whose noise emissions, when received at noise-sensitive premises, exceed the prescribed standard in the *Environmental Protection (Noise) Regulations 1997*.

Notes

- 1. 'Noise-sensitive' premises has the same meaning as in the *Environmental Protection (Noise) Regulations 1997*.
- 2. An 'event' means a music, drama or dance performance, film or promotional event, or the like, that does not commence before 9:00 am and does not finish after 12:00 am midnight on any day, except New Year's Eve, when an event must finish before 2:00 am.
- 3. The level of noise emissions from the facility shall be determined in accordance with Part 3 of the *Environmental Protection (Noise) Regulations 1997*.
- 6-2 During an event in which noise levels received at noise-sensitive premises exceed the prescribed standard in the *Environmental Protection (Noise) Regulations 1997*, the proponent shall operate the facility to ensure that sound levels at the mixing desk position do not exceed an L_{Aeq, 1min} level of 100 dB(A), where L_{Aeq, 1min} is an average value taken over one minute, whose level contains the same energy as the fluctuating noise during that period.

Notes

- 1. This condition applies when the mixing desk is located at a distance of not less than 20 metres and not more than 30 metres from the front of the stage.
- 2. The level of noise emissions from the facility shall be determined in accordance with Part 3 of the *Environmental Protection (Noise) Regulations 1997*.
- 6-3 To facilitate meeting the requirements of conditions 6-1 and 6-2 and prior to using the facility for an event, the proponent shall prepare a Noise Management Plan to the

requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The objectives of the Plan are:

- to ensure that the amenity, health, welfare and comfort of residents and those people recreating in surrounding areas are protected;
- to ensure that noise emissions from the facility meet the requirements of condition 6-2; and
- to ensure that the proponent does not hold more than five events per annum whose noise emissions, when received at noise-sensitive premises, exceed the prescribed standard in the *Environmental Protection (Noise) Regulations* 1997.

This Plan shall:

- 1. allow for consultation to occur with potentially affected residents and the Department of Conservation and Land Management during the development of the plan and prior to events taking place;
- 2. show revised acoustic modelling contours based on latest topographic and cadastral information, and shall show existing and future residential areas;
- 3. identify noise control measures required to minimise and/or reduce noise emissions from the facility as far as practicable and reasonable;
- 4. set out noise management measures, including finishing times, applicable to the various classes of events likely to be held;
- 5. identify noise control measures to apply to amplified events, particularly when they coincide with westerly and southerly winds;
- 6. include details of the reference positions and procedures for the measurement and monitoring of noise levels;
- 7. allow for noise monitoring by a recognised independent acoustical consultant during highly amplified events;
- 8. allow for noise monitoring at noise-sensitive premises in the event of a complaint; and
- 9. allow for a noise complaints response procedure which shall include the following:
 - a) recording and reporting of non-complying events;
 - b) review and continual improvement of noise management;
 - c) adaptive noise management during events;
 - d) reporting and review of the Plan; and
 - e) consultation with the City of Swan and interested local groups.

Note: In the preparation of the above plan, the Environmental Protection Authority expects that the advice of the following agencies will be obtained:

- City of Swan; and
- Shire of Mundaring.
- 6-4 The proponent shall implement the Noise Management Plan required by condition 6-4 to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

7 Vegetation and Landscape Features Protection

- 7-1 The proponent shall not conduct construction activities (other than those associated with the construction of the access road) within the area where native vegetation will be retained and protected (as shaded and shown in Figure 2).
- 7-2 Prior to ground-disturbing activity, the proponent shall prepare a Vegetation and Landscape Features Protection Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The objectives of this Plan are to:

- integrate the protection of priority and significant flora, and granite outcrops on the northern portion of the facility with the proponent's design and layout of the proposal; and
- limit the amount of clearing required for the facility to 4.6 hectares.

This plan shall address the following:

- 1. the refinement of the proponent's layout of the facility to include adequate setbacks from the John Forrest National Park (in consultation with the Department of Conservation and Land Management);
- 2. limitation of the extent of vegetation clearing to less than 4.6 hectares;
- 3. clear delineation of the significant areas to be protected during the construction phase (by suitable temporary fencing, roping or a system of markers);
- 4. prevention of damage to or degradation of priority and significant flora, and granite outcrops due to earthworks and during the operation of the facility;
- 5. the erection of boundary fencing on the southern boundary (in consultation with the Department of Conservation and Land Management);
- 6. procedures to control the entry of patrons into the adjacent John Forrest National Park during and between entertainment events at the facility; and

7. contingency measures in the event that damage or degradation to priority, and/or significant flora, and granite outcrops appears likely to or has occurred.

Note: In the preparation of advice to the Minister for the Environment, the Environmental Protection Authority expects that the advice of the following agencies will be obtained:

- Department of Conservation and Land Management; and
- City of Swan.
- 7-3 The proponent shall implement the Vegetation and Landscape Features Protection Plan required by condition 6-2 to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

Procedures

- 1 Certain requirements of the noise conditions will cease to have effect at such time as the proponent has the approval to operate the facility in conformity with the amendments to the *Environmental Protection (Noise) Regulations 1997* pertaining to noise from outdoor entertainment venues.
- Where a condition states "to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority", the Chief Executive Officer of the Department of Environmental Protection will obtain that advice for the preparation of written advice to the proponent.
- 3 The Environmental Protection Authority may seek advice from other agencies, as required, in order to provide its advice to the Chief Executive Officer of the Department of Environmental Protection.

Notes

The Minister for the Environment will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environmental Protection over the fulfilment of the requirements of the conditions.

The Proposal (Assessment No. 1291)

The proposal is to construct and operate an outdoor entertainment venue on Lot 2 Toodyay Road, Red Hill, City of Swan. The facility will provide an outdoor venue for amplified music concerts, including rock concerts, performing arts, children's events and film screenings. Permanent features of the facility include an enclosed and roofed stage, open grassed area, drainage basins and a car park.

The location of the facility is shown in Figure 1 (attached). The layout of the facility showing the area of locally significant vegetation to be retained is shown in Figure 2.

The key characteristics of the proposal are summarised in Table 1 below.

Table 1: Key proposal characteristics

Characteristic	Description		
Location	Lot 2 Toodyay Road, Red Hill, City of Swan.		
Area	(Lot size) approximately 10 hectares total.		
	Area to be cleared for development, up to 4.6 hectares.		
Capacity	Up to 5000 people		
Annual number of events	Up to 100 events per year, principally between the months of November an April.		
Annual number of amplified music events/rock concerts	Up to 20 events per year.		
Stage	A stage set up facing east, surrounded by three concrete walls, approximately 5 metres in height.		
	Sheet metal deck roof.		
	All walls and roof to be internally lined with acoustic insulation.		
	Noise output from two banks of speakers each with a sound power level of 127 dB(A), representing a typical rock concert.		
Permanent facilities	Stage area.		
	Informal seating area.		
	Car park.		
	Bus turning circle.		
	Access Road from Toodyay Road.		
	Maintenance of emergency egress on the western side of Lot 2.		
	Water tank with a capacity of 50000 litres.		

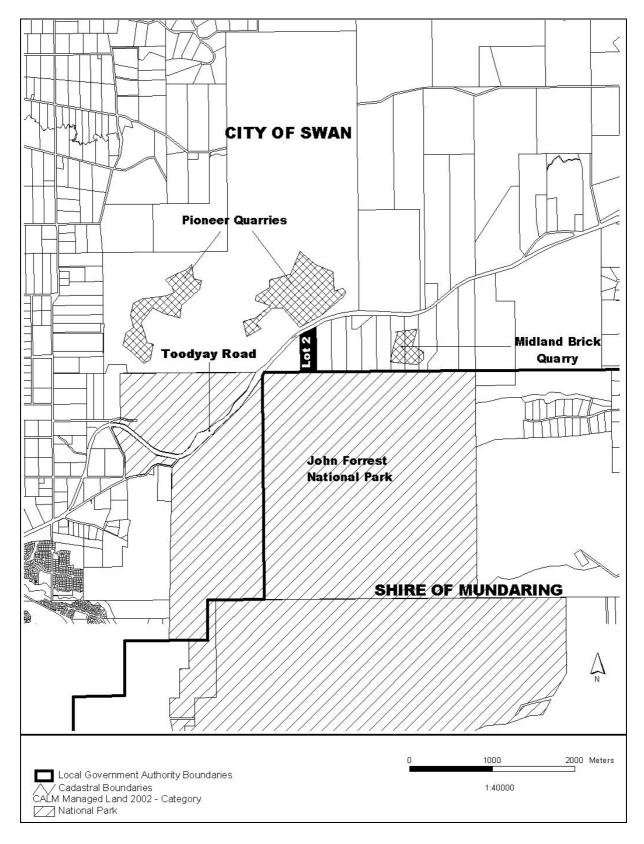


Figure 1: Location of Lot 2 Toodyay Road.

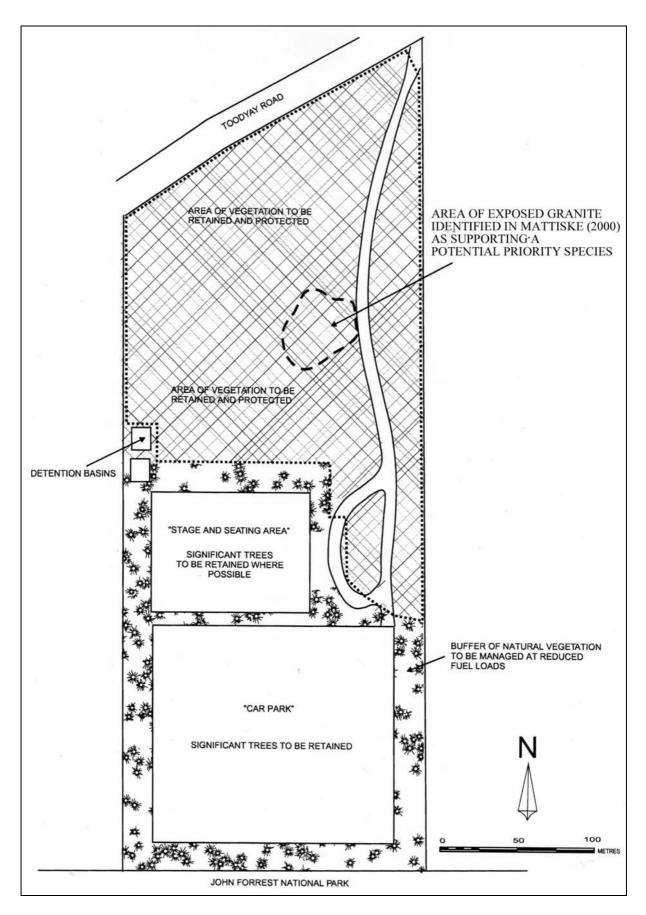


Figure 2: Layout of the venue.

Proponent's Environmental Management Commitments

28 July 2003

Outdoor Entertainment Venue, Lot 2 Toodyay Road, Red Hill, City of Swan

(Assessment No. 1291)

Ace Nominees Pty Ltd

Proponent's Environmental Management Commitments – Outdoor Entertainment Venue, Lot 2, Toodyay Road, Red Hill, City of Swan. (Assessment No. 1291)

Note: The term 'commitment' as used in this schedule includes the entire row of the table and its six separate parts as follows:

- a commitment number;
- a commitment topic;
- the "action" to be undertaken by the proponent;
- the objective of the commitment;
- the timing requirements of the commitment; and
- the body/agency to provide technical advice to the Department of Environmental Protection.

No	Topic	Action	Objective	Timing	Advice
1	Construction Environmental Management Plan	Have in place and make publicly available a Construction Environmental Management Plan which addresses the following:	To limit the offsite impacts due to	Prior to construction	City of Swan CALM
		 protection of flora and areas of highest conservation value; weed and dieback management; 	construction activities		
		 identifying areas to be disturbed and which will require rehabilitation; 			
		 procedures for the direct transfer of topsoil from cleared to rehabilitation areas; 			
		 using only local native flora in the rehabilitation of disturbed areas and in landscaping works; 			
		dust management;			
		surface run off management; and			
		protection of Aboriginal Heritage sites?.	T (6.1)	5 .	
2 Operati Plan	Operation Environmental Management Plan	Have in place and make publicly available Operation Environmental	impacts are	During construction and prior to the first	City of Swan
		Management Plan which includes the following:			CALM
		waste management including rubbish and litter;	managed during	event	
		 procedures for the management of patrons during events; 	events and between		
		 security to restrict public access to within the facility; 	events		
		 bins used on site to have animal proof lids; 			
		 ongoing weed control and management; and 			
		management of surface water runoff.			

3	Fire Management Plan	Have in place and make publicly available a Fire Management Plan which addresses at a minimum, the following: • provision of water tank; • provision of fuel reduced buffers; • provision of back packs and fire extinguishers during events; • liaison with local fire brigade; and • access for fire suppression vehicles.	To minimise and manage the risk of fire ignition occurring as a result of events	During construction and prior to the first event	CALM
4	Conservation Covenant	Lodge a conservation covenant on the northern portion of Lot 2.	To conserve the granite outcrops and habitats supporting potential priority flora on the northern portion of Lot 2 in perpetuity.	Following construction	