Hepburn Avenue extension, between Mirrabooka Avenue and The Avenue, Landsdale

City of Wanneroo

Report and recommendations of the Environmental Protection Authority

Environmental Protection Authority Perth, Western Australia Bulletin 1144 August 2004

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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 the City of Wanneroo to construct an extension of Hepburn Avenue between Mirrabooka Avenue and The Avenue, in Landsdale.

The proposal was referred to the EPA on 13 July 2004 after it became apparent the area was likely to contain a threatened ecological community (SCP 20a 'Banksia attenuata woodland over species rich dense shrublands'). The EPA then sought expert advice from the WA Threatened Species and Communities Unit of the Department of Conservation and Land Management (CALM).

Based on the information provided in the referral document and advice from CALM the EPA considered that, while the proposal has the potential to affect the environment, it could be readily managed to meet the EPA's environmental objectives.

The proponent has submitted a referral document setting out the details of the proposal, potential environmental impacts and appropriate commitments to manage those impacts. The EPA considers that the proposal as described can be managed in an acceptable manner, subject to these commitments and the EPA's recommended conditions being made legally binding.

The EPA has therefore determined under Section 40(1) of the Environmental Protection Act that the level of assessment for the proposal is Assessment on Referral Information, and this report provides the EPA advice and recommendations in accordance with Section 44(1).

2. The proposal

The City of Wanneroo intends to construct an extension of Hepburn Avenue between Mirrabooka Avenue and The Avenue, in Landsdale. The major components of project include the:

- relocation of flora and fauna;
- collection of seeds;
- clearing of vegetation;
- mulching;
- stripping and stockpiling of topsoil;
- earthworks, including disposal of surplus spoil;
- re-spreading of topsoil;
- spreading of mulch;
- construction of the road; and
- management of adjacent land for conservation.

The main characteristics of the proposal are summarised in the table below.

 Table 1:
 Summary of key proposal characteristics

Element	Description		
Life of project	3 months for clearing and earthworks		
Size of Project	Clearing and Earthworks between		
	Mirrabooka Avenue to The Avenue –		
	1.2 kilometres for 60m wide road reserve		
Area of disturbance	• Clearing and earthworks – 55 500 m ²		
	• Mulch Spreading – 49 500 m ²		
Timings of work	Monday to Saturday (Excluding public		
	holidays) from 6.30am to 5.30pm		
Environmental offset area	Middleton Park (comprising Reserves		
	47420 & 45406, which are vested in the		
	City of Wanneroo)		
Disposal of materials	• Excess spoil from earthworks for this		
	project is intended to be stockpiled		
	within the adjoining road reserve for		
	future extension of Mirrabooka		
	Avenue north of Hepburn Avenue		
	• Whole of topsoil stripped from site		
	will be fully utilised within the site		
	Vegetation not suitable for mulching		
	will be disposed of at an approved		
	disposal site.		
Water	Water for dust control and road		
	construction will be utilised from water		
	stand pipes located in adjoining localities		
	of Alexander Heights, Landsdale and		
	Marangaroo		
Equipment storage	All plant and equipment will be stored		
	within the worksite and secured.		

The potential impacts of the proposal are discussed by the proponent in the referral documentation (City of Wanneroo 2004).

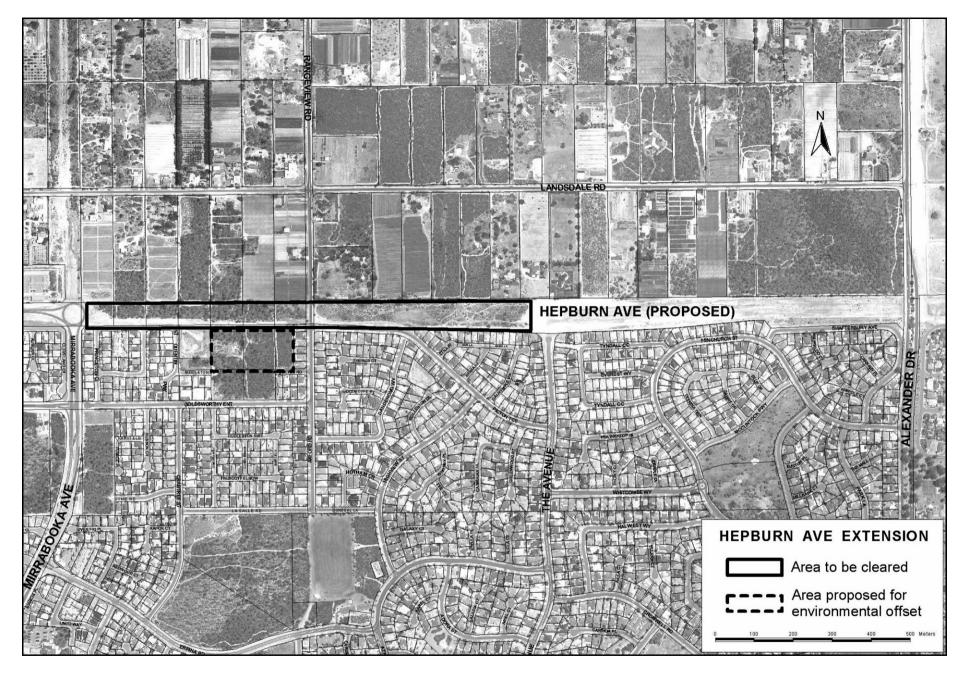


Figure 1: Proposal location and layout

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.

It is the EPA's opinion that the environmental factor relevant to the proposal and requiring evaluation in this report is "Threatened Ecological Community SCP 20a".

3.1 Threatened Ecological Community SCP 20a

Description

Construction of the extension of Hepburn Avenue would result in the clearing of approximately 2.3 hectares of the threatened ecological community, SCP 20a 'Banksia attenuata woodland over species rich dense shrublands'. This area is inferred from the advice of CALM and from the measurements made of the aerial photography of the site. The vegetation is in 'excellent' to 'good' condition.

The community SCP 20a is classed as endangered under CALM's list of threatened ecological communities. The criterion for this classification of community SCP 20a is that "...there are few occurrences [of the community], each of which is small and/or isolated and all of most occurrences are very vulnerable to known threatening processes." SCP 20a is not listed on the Commonwealth's list of threatened ecological communities.

All of the remnant vegetation in the area to be cleared that lies between Mirrabooka Avenue and Rangeview Road (refer to Figure 1) is inferred to be the community SCP 20a. By "inferred" it is meant that the detailed floristic study and analysis needed to conclusively categorize the area as community 20a has not been carried out, but that CALM experts familiar with this community have visited the site and confidently infer that this community type is present. This level of confidence is sufficient for the EPA's assessment since the area will be assumed (with a high level of confidence) to be community SCP 20a.

Due to existing development adjacent to the proposed route and the route's place within long-term planning for major transport infrastructure, there is no way to prevent the impact on community SCP 20a, if the proposal is to be implemented. In view of this the proponent has put forward an adjacent area of land as an environmental offset for this impact. This land (shown on Figure 1), which is to be called Middleton Park, has an area of approximately 2.0 hectares and is also inferred to be community SCP20a. The area is mainly in 'excellent' to 'very good' condition, with a small area that is 'completely degraded' (approximately 0.1 hectares). The proponent has committed to secure and manage this land for conservation, and to carry out restoration of the degraded portion using vegetation and seed salvaged from the area to be cleared.

Assessment

The EPAs's objective for this factor is to ensure conservation of the threatened ecological community SCP 20a.

Since the list of threatened ecological communities is a CALM initiative, the EPA has sought the advice of CALM on the proposal and the proposed offsets. CALM has advised that it would have no objection to the proposal provided the proposed offset area is secured and managed for conservation. The EPA considers that the proponent's commitments deliver the requirements of key recommendations. The EPA also notes that CALM considers that the "offsets" to "impacts" ratio should be improved through the provision of additional funds for the conservation of community SCP 20a elsewhere within the Shire. understands that the proponent is engaged in preparing a Local Biodiversity Strategy under the Perth Biodiversity Project and is using this mechanism to prioritize its conservation spending. Although this plan is not finalized, it is understood that particular areas have already been identified elsewhere as having high value and that these also contain community SCP 20a. The EPA accepts this as a reasonable way to assign priorities and therefore does not consider that extra funds need to be committed to community SCP 20a through this proposal.

The EPA therefore considers the proposal, including the offsets package, to be environmentally acceptable. The proposal will result in the loss of approximately 2.3 hectares of community SCP 20a, for the construction of major transport infrastructure. To offset this impact approximately 2.0 hectares of the same community will be secured for conservation and actively managed for this purpose by the proponent, thereby reducing the threatening processes for the community at this site.

Summary

Having particular regard to the:

- loss of approximately 2.3 hectares of threatened ecological community SCP 20a, for the construction of major transport infrastructure; and
- proponent's commitments to long-term conservation and active management of approximately 2.0 ha of vegetation on adjacent land, which will provide certainty for conservation and a reduction in the threatening processes for community SCP 20a at this site,

it is the EPA's opinion that the proposal can be managed to meet the EPA's environmental objective for this factor.

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 out in the Referral document and subsequently modified, as shown in Appendix 2, should be made enforceable.

5. Other Advice

The EPA observes that the remnant native vegetation of the proposed Middleton Park extends into two properties immediately to the south and that there is the potential to form a larger conservation area by incorporating these properties. The EPA considers that this is a desirable objective, subject to verification of the conservation values of these properties.

6. Conclusions

The EPA has considered the proposal by the City of Wanneroo to construct an extension of Hepburn Avenue between Mirrabooka Avenue and The Avenue, in Landsdale.

The EPA has considered the impact of this proposal on the threatened ecological community SCP 20a 'Banksia attenuata woodland over species rich dense shrublands' taking into account environmental offset put forward by the proponent to protect and manage an adjacent area of the community for conservation in the long term.

The EPA has concluded that the proposal is capable of being managed in an environmentally acceptable manner such that it is most unlikely that the EPA's objectives would be compromised, provided there is satisfactory implementation of the recommended conditions and proponent's commitments set out in Appendix 2.

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 the construction of an extension of Hepburn Avenue between Mirrabooka Avenue and The Avenue, in Landsdale:
- 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 would be compromised, provided there is satisfactory implementation by the proponent of the recommended conditions set out in Appendix 2, including the proponent's commitments.
- 4. That the Minister imposes the conditions and procedures recommended in Appendix 2 of this report.

Appendix 1

References

City of Wanneroo (2004). Proponent's referral documentation under Part IV of the *Environment Protection Act 1986*. (Reference No. 207817) Unpublished.

Appendix 2

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)

HEPBURN AVENUE EXTENSION, BETWEEN MIRRABOOKA AVENUE AND THE AVENUE, LANDSDALE, CITY OF WANNEROO

Proposal: The construction of an extension of Hepburn Avenue

between Mirrabooka Avenue and The Avenue, in Landsdale, City of Wanneroo as documented in schedule 1

of this statement.

Proponent: City of Wanneroo

Proponent Address: 23 Dundebar Road, Wanneroo WA 6065

Assessment Number: 1535

Report of the Environmental Protection Authority: Bulletin 1144

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

1 Implementation

1-1 The proponent shall implement the proposal as documented in schedule 1 of this statement subject to the conditions of this statement.

2 Proponent Commitments

2-1 The proponent shall implement the environmental management commitments documented in schedule 2 of 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 Environment 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 substantially commence the proposal within five years of the date of this statement 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 and Performance Review

- 5-1 The proponent shall prepare an audit program and submit compliance reports to the Department of Environment which address:
 - 1. the status of 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 Environment is empowered to

monitor 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.

- 5-2 The proponent shall submit a performance review report every five years after the start of operations, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, which addresses:
 - 1. the major environmental issues associated with the project; the targets for those issues; the methodologies used to achieve these; and the key indicators of environmental performance measured against those targets;
 - 2. the level of progress in the achievement of sound environmental performance, including industry benchmarking, and the use of best available technology where practicable;
 - 3. significant improvements gained in environmental management, including the use of external peer reviews;
 - 4. stakeholder and community consultation about environmental performance and the outcomes of that consultation, including a report of any on-going concerns being expressed; and
 - 5. the proposed environmental targets over the next five years, including improvements in technology and management processes.
- 5-3 The proponent may submit a report prepared by an auditor approved by the Department of Environment under the "Compliance Auditor Accreditation Scheme" to the Chief Executive Office of the Department of Environment on each condition/commitment of this statement which requires the preparation of a management plan, programme, strategy or system, stating that the requirements of each condition/commitment have been fulfilled within the timeframe stated within each condition/commitment.

Procedures

- Where a condition states "to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority", the Environmental Protection Authority will provide that advice to the Department of Environment for the preparation of written notice to the proponent.
- The Environmental Protection Authority may seek advice from other agencies or organisations, as required, in order to provide its advice to the Department of Environment.

Notes

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

The Proposal (Assessment No. 1535)

The proposal is to construct an extension of Hepburn Avenue between Mirrabooka Avenue and The Avenue, in Landsdale. The major components are:

- relocation of flora and fauna;
- collection of seeds;
- clearing of vegetation;
- mulching;
- stripping and stockpiling of topsoil;
- earthworks, including disposal of surplus spoil;
- re-spreading of topsoil;
- spreading of mulch;
- construction of the road;
- revegetation of road verge with local species; and
- management of adjacent land for conservation.

The main characteristics of the proposal are summarised in table 1 below.

Table 1: Key proposal characteristics

Element	Description
Life of project	3 months for clearing and earthworks
Size of Project	Clearing and Earthworks between
	Mirrabooka Avenue and The Avenue –
	1.2 kilometres for 60m wide road reserve
Area of disturbance	• Clearing and earthworks – 56 000 m ² approx.
	 Mulch Spreading – 50 000 m²approx.
Timings of work	Monday to Saturday (Excluding public
Timings of Work	holidays) from 6.30am to 5.30pm
Environmental offset area	Middleton Park (comprising Reserves
	47420 & 45406, which are vested in the
	City of Wanneroo)
Disposal of materials	 Excess spoil from earthworks will be stockpiled within the adjoining road reserve for future extension of Mirrabooka Avenue north of Hepburn Avenue All topsoil stripped from site will be utilised within the site Vegetation not suitable for mulching will be disposed of at an approved disposal site.
Water	Water for dust control and road construction will be taken from water stand pipes located in adjoining localities of Alexander Heights, Landsdale and Marangaroo
Equipment storage	All plant and equipment will be stored within the worksite.

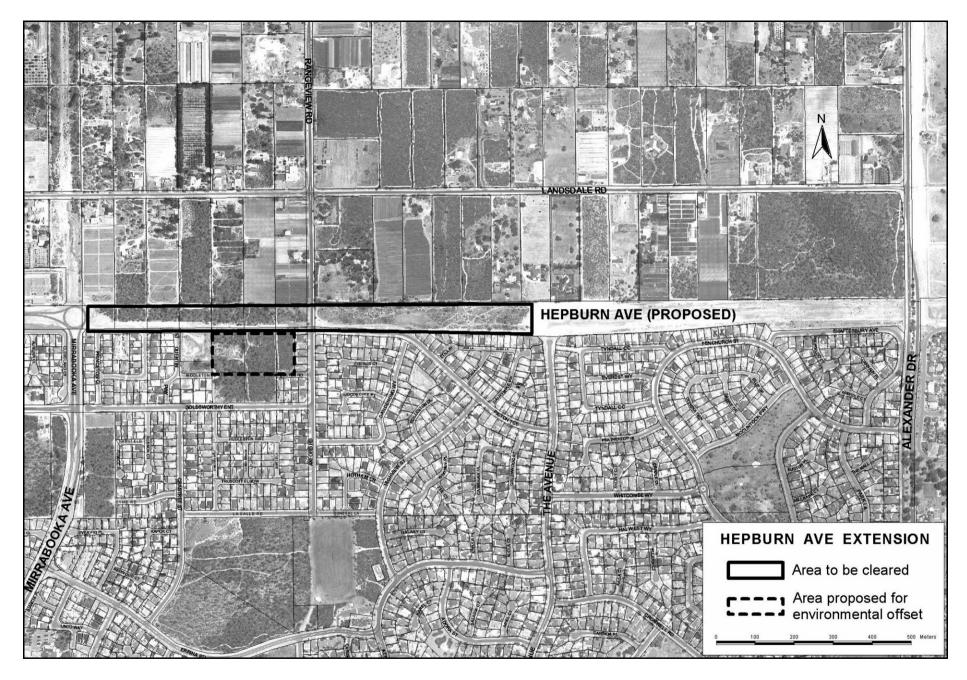


Figure 1: Proposal location and layout

Proponent's Environmental Management Commitments

August 2004

Hepburn Avenue extension, between Mirrabooka Avenue and The Avenue, Landsdale, City of Wanneroo

(Assessment No. 1535)

City of Wanneroo

Proponent's Environmental Management Commitments

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 Environment.

No.	Topic	Action	Objectives	Timing	Advice
					from
1.	Land offset	Change the purpose of Middleton	Conservation of native vegetation (in	Within 18 months	DLI
		Park (Reserves 47420 & 45406) from	particular, the TEC SCP 20a) through	of issuing the	
		'Parks & Recreation' to	long-term protection of Middleton	statement of	
		'Conservation & Recreation'.	Park.	approval	
2.	Land offset	Investigate the introduction of a	Conservation of reserves with high	Before	City of
		reservation category 'conservation &	biodiversity value (including those	31 December 2007	Wanneroo
		recreation' to the City of Wanneroo's	containing TECs) throughout the City	(Through the	
		Town Planning Scheme, which	of Wanneroo.	development of a	
		would then be applied to Middleton		Local Biodiversity	
		Park (Reserves 47420 & 45406).		Strategy [2004-	
				07])	
3.	Bush	Implement a bush regeneration	Restore bushland condition in	Within 3 years of	CALM
	regeneration	project to significantly improve the	identified degraded areas of Middleton	issuing the	
		condition of identified degraded	Park.	statement of	
		areas in Middleton Park, using the		approval	
		following techniques:			

No.	Topic	Action	Objectives	Timing	Advice from
4.	Conservation	 brushing/mulching bare areas using cleared material from Hepburn Avenue road reserve; planting/direct seeding bare areas using material of local provenance; and weed control. Prepare a management/action plan	Preservation of native vegetation, in	Before July 2006	CALM
	management	for Middleton Park which addresses the following issues: 1. weed control; 2. rubbish removal; 3. perimeter fencing; 4. fire management 5. track closure; and 6. interpretive & directional signage.	particular, the TEC SCP 20a.		
7.	Conservation management	Implement the approved management/action plan over a 10-year period.	Preservation of native vegetation, in particular, the TEC SCP 20a.	For ten years following the approval of the management/action plan required by Commitment 4	CALM

Abbreviations:

TEC

Threatened Ecological Community
Threatened Ecological Community SCP 20 'Banksia attenuata woodland over species rich dense shrublands' SCP 20a

Department of Conservation and Land Management CALM

Department of Land Information DLI