

Relocation of the Cedric Street Wetland — Extension of time limit

City of Stirling

**Section 46 Report and recommendations
of the Environmental Protection Authority**

**Environmental Protection Authority
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Assessment No 1209

Summary and recommendations

The City of Stirling (the proponent) wishes to extend the time limit of environmental approval for the proposed Relocation of the Cedric Street Wetland (BSD, 1992). This report provides the Environmental Protection Authority's (EPA's) advice and recommendations to the Minister for the Environment on the environmental factors, conditions and procedures relevant to an extension of the time limit.

Section 46 of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment on whether or not the proposed changes to conditions and procedures should be allowed. In addition, the EPA may make recommendations as it sees fit.

Relevant environmental factors

The EPA's assessment of the relevant environmental factors considered in its previous (1992) assessment of the proposal has not changed as a result of the proponent's request to extend the time limit of environmental approval. Therefore, it is the EPA's opinion that the following are the environmental issues relevant to the request, which require evaluation in the report:

- a) extension to the time limit of approval; and
- b) changes to other environmental conditions.

Conclusion

The EPA has considered the request by the proponents to extend the time limit of environmental approval for the proposed Relocation of the Cedric Street Wetland and has concluded that a three year extension should be allowed.

The EPA believes that the period since the proposal for the Relocation of the Cedric Street Wetland was originally assessed has not given rise to any changes that would cause the EPA to reconsider its previous assessment of the project or its previous recommendation as to the environmental acceptability of the project.

In addition to reporting on an extension to the time limit, the EPA considers that conditions attached to the environmental approval should be updated. Accordingly, it has also reported on the updating of conditions.

Recommendations

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

1. That the Minister notes that this report is pursuant to Section 46 of the *Environmental Protection Act 1986* and thus is limited to consideration of proposed changes to the original proposal or environmental conditions.
2. That the Minister notes that the proposed change is an extension of time for implementation.
3. That the Minister notes that the EPA has concluded that:
 - the extension of time limit of approval for another three years is acceptable; and
 - the Environmental Conditions of approval should be updated to reflect current practice.
4. That the Minister imposes the conditions and procedures set out in Appendix 4 of this report.

Conditions

The EPA recommends that the following conditions, which are set out in detail in Appendix 4, be imposed if the proposed time limit extension for the Relocation of the Cedric Street Wetland is approved:

1. the existing Environmental Conditions applied to the project (Ministerial Statement 314 dated 19 April 1993), be subject to modifications necessary to:
 - extend the time limit of environmental approval;
 - update the statement into the current format; and
 - ensure compatibility with current environmental protection requirements.

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1. Introduction and background

The City of Stirling (the proponent) wishes to extend the time limit of environmental approval for the Relocation of the Cedric Street Wetland for a further three years.

The proposal was assessed by the Environmental Protection Authority (EPA) in 1992 at the level of Consultative Environmental Review. The original proponents of the development included the City of Stirling, the then Department of Planning and Urban Development (now Ministry for Planning) and a small number of affected landowners. Since the 1992 assessment, Town Planning Scheme (TPS) No 38 has been ratified by Western Australian Planning Commission, and the City of Stirling has advised that, as the primary executors of the TPS, they will be the sole proponent for the proposed development.

The Minister for the Environment gave environmental approval for the project, subject to conditions, on 19 April 1993. Condition 9 of the Minister's statement of approval (Appendix 3) set a time limit of five years for commencing the project. After this period, any extension to that time limit would have to occur via a request to change the condition under Section 46 of the *Environmental Protection Act 1986*.

In accordance with Condition 9, the City of Stirling has requested that the time limit of approval be extended for a further three years via a Section 46 change to conditions. This request was made on 23 February 1998, prior to the expiration date referred to in Condition 9.

Further details of the proposal and request are presented in Section 2 of this report. Section 3 discusses environmental factors relevant to the proposal. Conditions and procedures to which it should be subject if the Minister determines that it may be implemented are set out in Section 4. Section 5 presents the EPA's conclusions and Section 6 the EPA's recommendations.

2. The proposal

Approved proposal

In December 1990, the Government of Western Australia released Metroplan, in which the development of eight Regional Centres was proposed. The Stirling Regional Centre was one of the Centres identified for redevelopment, extending from Scarborough Beach Road in the south to the Stirling Rail Station and the City of Stirling municipal offices in the north.

The proponents indicated that the site of the Cedric Street Wetland was the preferred location of the 'core precinct' of the Stirling Regional Centre. A replacement of the ecological, hydrological and social functions of the wetland to a site located within the boundaries of the Stirling Regional Centre was proposed by the proponents.

At the time of assessment, the EPA recommended the following:

- the proponents ensure the replacement lake complies with the Environmental Protection (Swan Coastal Plain Lakes) Policy 1992 selection criteria and, upon construction, the replacement lake be nominated for inclusion in the Policy;
- a survey of the Cedric Street Wetland be conducted to determine the occurrence and distribution of rare sedges; and
- the preparation of an Environmental Management Plan comprising a Lake Relocation Plan and a Lake Monitoring Plan.

A more detailed description of the original proposal is contained in the EPA's assessment of the proposal (EPA 1992) and in the Consultative Environmental Review (BSD 1992). The environmental conditions imposed on the proposal in 1993 are contained in Appendix 3.

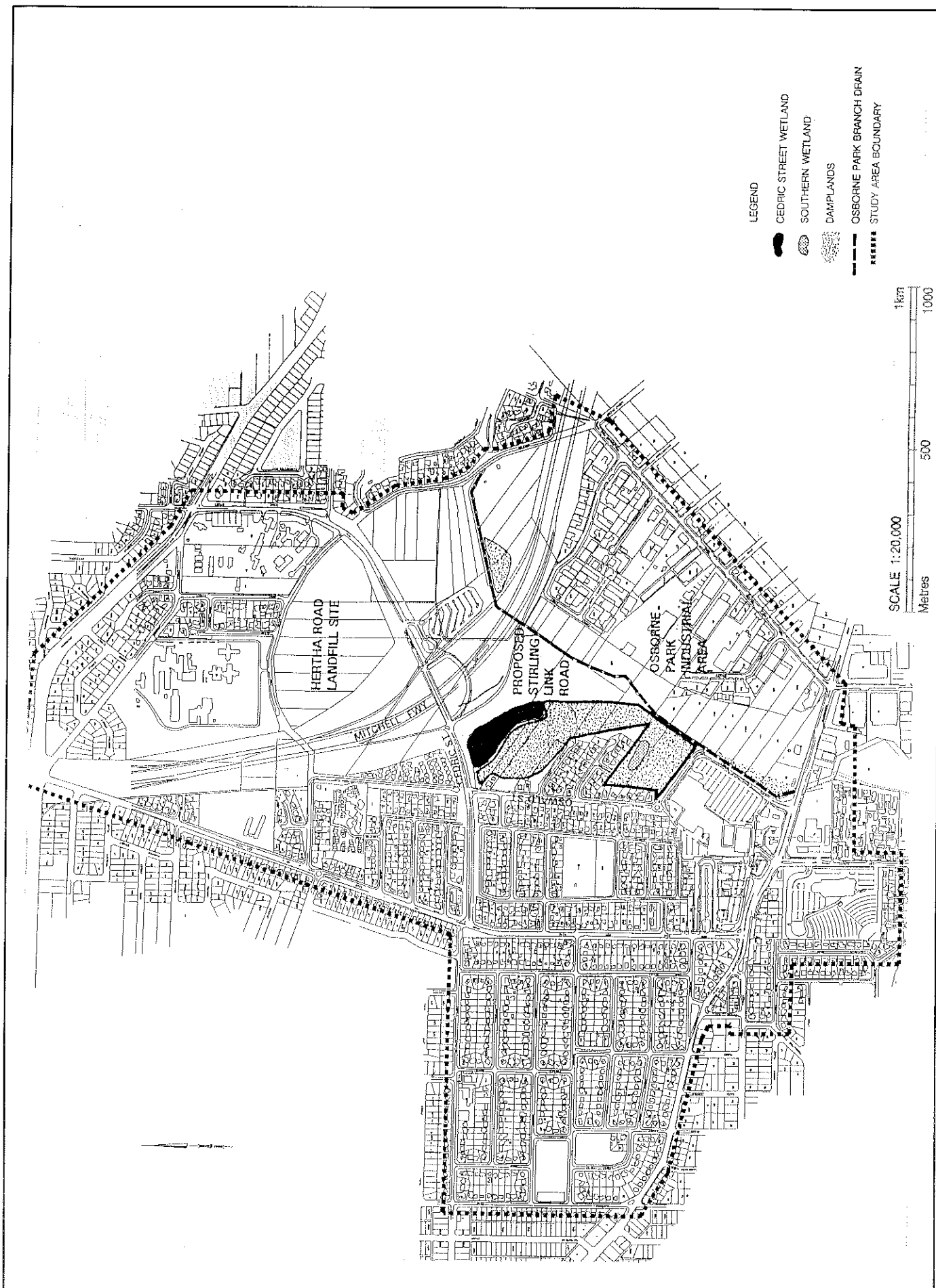


Figure 1. Location of the Cedric Street Wetland (Source: See reference Appendix 2. BSD Consultant).

Proposed changes to environmental conditions

The proponent wishes to extend the time limit of environmental approval for this proposal by three years. The project has not yet commenced, as the City of Stirling has been awaiting final approval for the Stirling Regional Centre Town Planning Scheme (TPS) No 38 by the Western Australian Planning Commission.

Promulgation of TPS No 38 on 18 July 1997 has allowed the City of Stirling to begin implementing the requirements of the Scheme, including the acquisition of the replacement wetland site. Lot Pt 21 Hertha Road Stirling has been identified by the proponent as a suitable replacement site, adjacent to the Mitchell Freeway and adjoining the City of Stirling's Botanic Park.

Table 1. Summary of key proposal characteristics

Element	Description
Objective	Re-creation of a series of wetlands within the boundaries of the Stirling Regional Centre and incorporating the existing Osborne Park Branch Drain which will replace and, in most cases, greatly improve upon the ecological, hydrological and social functions currently associated with the Cedric Street wetland and the dampland to the south of the wetland.
Conceptual design	To be achieved by the creation of six or seven wetlands which will all be capable of sustaining a viable wetland ecosystem. The water surface area expressed by each wetland will be at least 1,000 m ² as at the first week of summer of any year. This is consistent with wetland criteria proposed in the EPA's Draft Environmental Protection (Swan Coastal Plain Lakes) Policy 1992.
Functions	<p>The proposed replacement wetlands to have the potential for the following natural and human use benefits:</p> <ul style="list-style-type: none"> a) a greater diversity of wetland types; b) providing a variety of waterbird habitats (open water roosting, feeding, breeding and loafing sites); c) creating landscape features which can be utilised for public enjoyment; d) nutrient stripping sites which will improve the water quality of the Osborne Park Branch drain.
Management	Commitment to Environmental Management Plan incorporating environmental objectives, monitoring, specific construction details of replacement wetland and management responsibilities.
Time limit	Proposal to be substantially commenced by 19 April 2001

3. Environmental factors

3.1 Relevant environmental factors

Section 46 of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment on whether or not the proposed changes to conditions or procedures should be allowed. In addition, the EPA may make recommendations as it sees fit.

The relevant environmental factors considered by the EPA in its previous (1992) assessment of the proposal were:

- protection and conservation of the existing lake;

- protection of rare sedge species reported to occur in the area;
- the generally degraded nature and lack of management of the Cedric Street Wetland;
- the intended values and ongoing management of the replacement lake;
- protection of downstream water quality (particularly Herdsman Lake); and
- provisions for the long-term management of the lake.

The EPA's assessment of these factors has not changed as a result of the proponent's request to extend the time limit of environmental approval. The EPA's assessment of the proposal has therefore not given rise to any changes which would cause the EPA to reconsider its previous assessment of the project and, in particular, its previous recommendation as to the environmental acceptability of the project.

It is the EPA's opinion that its inquiry into the proposed time limit extension should address the following issues:

- a) whether the requested extension to the time limit should be approved; and
- b) what other changes to the existing environmental conditions might be required should an extension be granted.

These issues are discussed in Sections 3.2 and 3.3 of this report.

3.2 Extension of the time limit of approval

Description

Approval for this project was initially limited to five years recognising that over time the predicted environmental impacts and their considered significance may change. Over five years, knowledge of the receiving environment may increase as a result of further studies, and the anticipated impacts on this environment may change as a result of increased understanding of interaction between the environment and the proposal. In addition, environmental regulations, standards, guidelines and accepted practices may also change.

There have been no changes in the understanding of the receiving environment or revisions to the predicted impacts from those originally presented by the proponent and assessed by the EPA in 1992.

Assessment

Environmental standards have changed over the past five years, however no change in environmental standards has occurred which significantly affects the proposal as described in the 1992 CER document.

Having particular regard to:

- the fact that the predicted environmental impacts of the proposal have not changed,

it is the EPA's opinion that the requested extension of the time limit of environmental approval should be allowed.

3.3 Changes to other environmental conditions

Description

Assessment of this proposal under Section 46 of the *Environmental Protection Act 1986* allows the EPA the opportunity to amend other environmental conditions in addition to the time limit condition (Condition 9, Appendix 3). The environmental conditions currently applicable to the relocation of the Cedric Street Wetland are contained in Appendix 3.

Assessment

The EPA has taken the opportunity to review the environmental conditions set on this proposal with a view to:

- (a) updating the statement into the current format; and
- (b) ensuring compatibility with current environmental protection requirements.

The EPA's proposed changes to the existing conditions are set out in greater detail in Table 2. This table should be examined in conjunction with the original environmental conditions in Appendix 3 and the recommended draft conditions in Appendix 4. The proponent's revised commitments are contained in Appendix 4.

The recommended draft conditions provide for adequate protection of the environment and for efficient and effective environmental auditing of compliance. The EPA recognises that the modified proponent commitments identified in Appendix 4 reflect the proponent's intent to manage the impacts of its proposal in a responsible manner.

4. Conditions

Section 46 of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment on whether or not the proposed changes to conditions or procedures should be allowed. 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 EPA acknowledges the proponent's intent behind the commitments, however the recommended draft conditions in this case supersede the requirement for additional commitments.

The EPA recommends that the following conditions, which are set out in formal detail in Appendix 4, be imposed if the proposed time limit extension for the Relocation of the Cedric Street Wetland is approved:

1. The existing Environmental Conditions applied to the project (Ministerial Statement 314, 19 April 1993), be subject to modifications necessary to:
 - extend the time limit of environmental approval;
 - update the statement into the current format; and
 - ensure compatibility with current environmental protection regulations.

5. Conclusions

The EPA has considered the request by the City of Stirling to extend the time limit of environmental approval for the relocation of the Cedric Street Wetland and has concluded that a three year extension should be allowed.

The EPA believes that the period since the relocation of the Cedric Street Wetland was originally assessed has not given rise to any changes that would cause the EPA to reconsider its previous assessment of the project or its previous recommendation as to the environmental acceptability of the project.

In addition to reporting on an extension to the time limit, the EPA considers that the conditions of the environmental approval should be updated, and accordingly has also reported on the additional changes required.

6. Recommendations

Section 46 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.

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

1. That the Minister notes that this report is pursuant to Section 46 of the *Environmental Protection Act 1986* and thus is limited to consideration of proposed changes to the original proposal.
2. That the Minister notes that the proposed change is an extension of time for implementation.
3. That the Minister notes that the EPA has concluded that:
 - the extension of the time limit of approval is acceptable; and
 - the Ministerial Conditions for approval should be updated to reflect current practice.
4. The Minister imposes the conditions and procedures recommended in Appendix 4 of this report.

Table 2. Summary of proposed changes to environmental conditions.

Orig. cond.	Requirements (summarised)	Evaluation	New condition
1	Fulfil commitments	Wording changed to contemporary format	<p>2 Proponent Commitments</p> <p>2-1 The proponent shall implement the consolidated environmental management commitments documented in schedule 2 of this statement.</p> <p>2-2 The proponent shall implement subsequent environmental management commitments which the proponent makes or has made as part of the fulfilment of conditions and procedures in this statement issued for this proposal.</p>
2	Implement the proposal as described	Wording changed to contemporary format	<p>2 Implementation</p> <p>1-1 Subject to these conditions and procedures, the proponent shall implement the proposal as documented in schedule 1 of this statement.</p> <p>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 determines, on advice of the Environmental Protection Authority, is substantial, the proponent shall refer the matter to the Environmental Protection Authority.</p> <p>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, those changes may be effected.</p>
3	Replacement lake to comply with Environmental Protection Policy (Swan Coastal Plain Lakes) criteria		<p>3 Lakes Environmental Protection Policy</p> <p>3-1 The proponent shall ensure that each lake created under the Lake Relocation Plan (see condition 6) complies with the Environmental Protection (Swan Coastal Plain Lakes) Policy 1992 selection criteria.</p> <p>3-2 The proponent shall design and construct each lake created under the Lake Relocation Plan so that it has a surface water area of not less than 1000 square metres on the first day of December each year, except under exceptional drought conditions.</p> <p>3-3 Within one month of the completion of the construction phase of the Lake Relocation Plan, the proponent shall nominate for inclusion in and protection under the Environmental Protection (Swan Coastal Plain Lakes) Policy 1992 each lake created under that Plan.</p>

4	Survey for Rare flora		<p>4 Rare Flora</p> <p>4-1 At a seasonally appropriate time prior to the commencement of any construction which may impact on the Cedric Street Wetland or its fringing vegetation, the proponent shall conduct a survey to determine the occurrence and distribution of rare sedges, to the requirements of the Environmental Protection Authority on advice of the Department of Conservation and Land Management.</p>
5	Environmental Management Program detailing how ecological, hydrological and social values of existing wetland are to be replaced		<p>5 Environmental Management Programme</p> <p>5-1 Prior to the commencement of any construction which may impact on the Cedric Street Wetland or its fringing vegetation, the proponent shall prepare, with the benefit of community input, an Environmental Management Programme which indicates how the existing ecological, hydrological and social values of the Cedric Street Wetland are to be incorporated into any lake to be constructed within the Stirling Regional Centre to the requirements of the Environmental Protection Authority on advice of the Department of Conservation and Land Management, the Department of Environmental Protection and the Water and Rivers Commission.</p> <p>5-2 The proponent shall include in the Environmental Management Programme required by condition 5-1 the Lake Relocation Plan and the Lake Management Plan required by conditions 6 and 7, respectively.</p> <p>5-3 The proponent shall implement the Environmental Management Programme required by condition 5-1.</p>
6	Prepare plan to address logistics of Lake Relocation Plan		<p>6 Lake Relocation Plan</p> <p>6-1 Prior to the commencement of any construction which may impact on the Cedric Street Wetland or its fringing vegetation, the proponent shall prepare a Lake Relocation Plan to the requirements of the Environmental Protection Authority on advice of the Department of Conservation and Land Management, the Department of Environmental Protection and the Water and Rivers Commission.</p> <p>This plan shall include the following:</p> <ol style="list-style-type: none"> 1. location, morphology and visual impact of replacement lake(s); 2. the ecological, hydrological and human use objectives of the replacement lake(s), and how these objectives are to be met through design and management; 3. detailed design plans, including habitat maps; 4. detailed biological specifications, including flora and fauna selections and landscape design; 5. timing of transference of biological material from the Cedric Street Wetland; 6. likely seasonal water level regimes; and 7. the distribution of rare plant and animal species occurring within the Cedric Street Wetland and details of their relocation. <p>6-2 The proponent shall implement the Lake Relocation Plan required by condition 6-1.</p>

7	Proponent to prepare a Lake Management and Monitoring Plan	7 Lake Management and Monitoring Plan 7-1 Prior to the commencement of any construction which may impact on the Cedric Street Welland or its fringing vegetation, the proponent shall prepare a Lake Management Plan to the requirements of the Environment Protection Authority on advice of the Department of Conservation and Land Management, the Department of Environmental Protection and the Water and Rivers Commission. This plan shall include the following: 1. vegetation monitoring; 2. fauna monitoring; 3. habitat monitoring; 4. lake water level monitoring; 5. human use monitoring; 6. water quality monitoring (including inflows and outflows); 7. lake management strategies (including scope for mid-course corrections in response to unforeseen circumstances); 8. weed, pest and rubbish control; and 9. future reporting of results. 7-2 The proponent shall implement the Lake Management Plan required by condition 7-1.
8	No change of proponent without approval of Minister for the Environment.	8 Proponent 8-1 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 in respect of the proposal. 8-2 Any request for the exercise of that power of the Minister referred to in condition 8-1 shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the proposal in accordance with the conditions and procedures set out in the statement. 8-3 The proponent shall notify the Department of Environmental Protection of any change of proponent contact name and address within 30 days of such change.

9	Project to be commenced within five years or the approval shall lapse and be void.	Requested time limit extension granted. Project to be commenced within three years.	<p>9 Commencement</p> <p>9-1 The proponent shall provide evidence to the Minister for the Environment within three years of the date of this statement that the proposal has been substantially commenced.</p> <p>9-2 Where the proposal has not been substantially commenced within three years of the date of this statement, the approval to implement the proposal as granted in statement no. 314 (19 April 1993) shall lapse and be void. The Minister for the Environment will determine any question as to whether the proposal has been substantially commenced.</p> <p>9-3 The proponent shall make application to the Minister for the Environment for any extension of approval for the substantial commencement of the proposal beyond three years from the date of this statement, at least six months prior to the expiration of the three year period commencing on the date of this statement.</p> <p>9-4 Where the proponent demonstrates to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority that the environmental parameters of the proposal have not changed significantly, then the Minister may grant an extension not exceeding three years for the substantial commencement of the proposal.</p>
10	Compliance auditing	New condition reflects current expectation that the development should undergo periodic audits	<p>10 Compliance Auditing</p> <p>10-1 The proponent shall submit periodic Performance and Compliance Reports, in accordance with an audit program prepared in consultation between the proponent and the Department of Environmental Protection.</p> <p>10-2 Unless otherwise specified, the Chief Executive Officer of the Department of Environmental Protection is responsible for assessing compliance with the conditions, procedures and commitments contained in this statement and for issuing formal, written advice that the requirements have been met.</p> <p>10-3 Where compliance with any condition, procedure or commitment is in dispute, the matter will be determined by the Minister for the Environment.</p>

Appendix 1

List of organisations and individuals who made submissions

Organisations

Conservation Council of Western Australia Inc

Members of the Public

Mr O Mueller

Appendix 2

References

BSD Consultants (1992) *Relocation of the Cedric Street Wetland*. Consultative Environmental Review

Environmental Protection Authority (1992) *Relocation of the Cedric Street Wetland: Report and Recommendations of the Environmental Protection Authority*. Environmental Protection Authority Bulletin 658, November 1992.

Appendix 3

Statement of Environmental Conditions of Approval (19 April 1993)

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

RELOCATION OF THE CEDRIC STREET WETLAND, CITY OF STIRLING (729)

DEPARTMENT OF PLANNING & URBAN DEVELOPMENT
CITY OF STIRLING
WESTPOINT PROPERTIES
JK GENEFF NOMINEES
P BALTOVICH
FABRAY PTY LTD
MR FURFARO

This proposal may be implemented subject to the following conditions:

1 Proponent Commitments

The proponent has made a number of environmental management commitments in order to protect the environment.

- 1-1 In implementing the proposal, the proponent shall fulfil the commitments (which are not inconsistent with the conditions or procedures contained in this statement) made in the Consultative Environmental Review and in response to issues raised following public submissions. These commitments appear in Appendices 1 and 3 of Environmental Protection Authority Bulletin 658. (A copy of the commitments made in Appendices 1 and 3 (consolidated) is attached.)

2 Implementation

Changes to the proposal which are not substantial may be carried out with the approval of the Minister for the Environment.

- 2-1 Subject to these conditions, the manner of detailed implementation of the proposal shall conform in substance with that set out in any designs, specifications, plans or other technical material submitted by the proponent to the Environmental Protection Authority with the proposal. Where, in the course of that detailed implementation, the proponent seeks to change those designs, specifications, plans or other technical material in any way that the Minister for the Environment determines on the advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

3 Lakes Environmental Protection Policy

- 3-1 The proponent shall ensure that each lake created under the Lake Relocation Plan (see condition 6) complies with the Environmental Protection (Swan Coastal Plain Lakes) Policy 1992 selection criteria.
- 3-2 The proponent shall design and construct each lake created under the Lake Relocation Plan so that it has a surface water area of not less than 1000 square metres on the first day of December each year, except under exceptional drought conditions.
- 3-3 Within one month of the completion of the construction phase of the Lake Relocation Plan, the proponent shall nominate for inclusion in and protection under the Environmental Protection (Swan Coastal Plain Lakes) Policy 1992 each lake created under that Plan.

4 Rare Flora

- 4-1 At a seasonally appropriate time prior to the commencement of any construction which may impact on the Cedric Street Wetland or its fringing vegetation, the proponent shall conduct a survey to determine the occurrence and distribution of rare sedges to the requirements of the Minister for the Environment on advice of the Department of Conservation and Land Management.

5 Environmental Management Programme

- 5-1 Prior to the commencement of any construction which may impact on the Cedric Street Wetland or its fringing vegetation, the proponent shall prepare, with the benefit of community input, an Environmental Management Plan which indicates how the existing ecological, hydrological and social values of the Cedric Street Wetland are to be incorporated into any lake to be constructed within the Stirling Regional Centre to the requirements of the Minister for the Environment.
- 5-2 The proponent shall include in the Environmental Management Plan required by condition 5-1 the Lake Relocation Plan and the Lake Management and Monitoring Plan required by conditions 6 and 7, respectively.

6 Lake Relocation Plan

- 6-1 The proponent shall prepare a Lake Relocation Plan which addresses, but is not limited to the following:
1. location, morphology and visual impact of replacement lake(s);
 2. the ecological, hydrological and human use objectives of the replacement lake(s), and how these objectives are to be met through design and management;
 3. detailed design plans, including habitat maps;
 4. detailed biological specifications, including flora and fauna selections and landscape design;
 5. timing of transference of biological material from the Cedric Street Wetland;
 6. likely seasonal water level regimes; and
 7. the distribution of rare plant and animal species occurring within the Cedric Street Wetland and details of their relocation.

7 Lake Management and Monitoring Plan

Monitoring is to be conducted by the proponent in order to assess the effectiveness of the Lake Relocation Plan and to support any proposed changes in management of the lake(s).

- 7-1 Prior to the commencement of any construction which may impact on the Cedric Street Wetland or its fringing vegetation, the proponent shall prepare a Lake Management and Monitoring Plan to the requirements of the Minister for the Environment on advice of the Department of Conservation and Land Management. This plan shall include but not be limited to the following:
1. vegetation monitoring;
 2. fauna monitoring;
 3. habitat monitoring;
 4. lake water level monitoring;
 5. human use monitoring;
 6. water quality monitoring (including inflows and outflows);
 7. lake management strategies (including scope for mid-course corrections in response to unforeseen circumstances);
 8. weed, pest and rubbish control; and
 9. future reporting of results.

7-2 The proponent shall prepare annual reports of the results of monitoring required by condition 7-1.

8 Proponent

These conditions legally apply to the nominated proponent.

8-1 No transfer of ownership, control or management of the project which would give rise to a need for the replacement of a proponent shall take place until the Minister for the Environment has advised the proponent that approval has been given for the nomination of a replacement proponent. Any request for the exercise of that power of the Minister shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the project in accordance with the conditions and procedures set out in the statement.

9 Time Limit on Approval

The environmental approval for the proposal is valid for a period of five years.

9-1 If the proponent has not substantially commenced the project within five years of the date of this statement, then the approval to implement the proposal as granted in this statement shall lapse and be void. The Minister for the Environment shall determine any question as to whether the project has been substantially commenced. Any application to extend the period of five years referred to in this condition shall be made before the expiration of that period, to the Minister for the Environment by way of a request for a change in the condition under Section 46 of the Environmental Protection Act. (On expiration of the five year period, further consideration of the proposal can only occur following a new referral to the Environmental Protection Authority.)

10 Compliance Auditing

In order to ensure that environmental conditions and commitments are met, an audit system is required.

10-1 The proponent shall prepare periodic "Progress and Compliance Reports", to help verify the environmental performance of this project, in consultation with the Environmental Protection Authority.

Procedure

The Environmental Protection Authority is responsible for verifying compliance with the conditions contained in this statement, with the exception of conditions stating that the proponent shall meet the requirements of either the Minister for the Environment or any other government agency.

If the Environmental Protection Authority, other government agency or proponent is in dispute concerning compliance with the conditions contained in this statement, that dispute will be determined by the Minister for the Environment.

Monitoring and reporting requirements under condition 7 may be reviewed by the Environmental Protection Authority after submission of the sixth annual monitoring report.

Appendix 4

Recommended Environmental Conditions

**STATEMENT TO AMEND CONDITIONS APPLYING TO A PROPOSAL
(PURSUANT TO THE PROVISIONS OF SECTION 46 OF THE
ENVIRONMENTAL PROTECTION ACT 1986)**

RELOCATION OF THE CEDRIC STREET WETLAND, CITY OF STIRLING (729)

- Proposal:** To create a series of interconnected wetlands within the boundaries of the Stirling Regional Centre and incorporating the existing Osborne Park Branch Drain which will relace the ecological, hydrological and social functions of the Cedric Street wetland and the dampland to the south of the wetland.
- Proponent:** CITY OF STIRLING
- Proponent Address:** 12 Smith Street, PERTH WA 6000
- Assessment Number:** 1209
- Previous Assessment Number(s):** 729
- Previous Statement Number(s):** Statement No. 314 published on 19 April 1993
- Report of the Environmental Protection Authority:** Bulletin 935
- Previous Report(s) of the Environmental Protection Authority:** Bulletin 658

The implementation of the proposal to which the above reports of the Environmental Protection Authority relate is now subject to the following conditions and procedures which replace all previous conditions and procedures:

1 Implementation

- 1-1 Subject to these conditions and procedures, the proponent shall implement the proposal as documented in schedule 1 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 determines, 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, those changes may be effected.

2 Proponent Commitments

- 2-1 The proponent shall implement the consolidated environmental management commitments documented in schedule 2 of this statement.

- 2-2 The proponent shall implement subsequent environmental management commitments which the proponent makes or has made as part of the fulfilment of conditions and procedures in this statement issued for this proposal.

3 Lakes Environmental Protection Policy

- 3-1 The proponent shall ensure that each lake created under the Lake Relocation Plan (see condition 6) complies with the Environmental Protection (Swan Coastal Plain Lakes) Policy 1992 selection criteria.
- 3-2 The proponent shall design and construct each lake created under the Lake Relocation Plan so that it has a surface water area of not less than 1000 square metres on the first day of December each year, except under exceptional drought conditions.
- 3-3 Within one month following the completion of the construction phase of the Lake Relocation Plan, the proponent shall nominate for inclusion in and protection under the Environmental Protection (Swan Coastal Plain Lakes) Policy 1992 each lake created under that Plan.

4 Rare Flora

- 4-1 At a seasonally appropriate time prior to the commencement of any construction which may impact on the Cedric Street Wetland or its fringing vegetation, the proponent shall conduct a survey to determine the occurrence and distribution of rare sedges, to the requirements of the Environmental Protection Authority on advice of the Department of Conservation and Land Management.

5 Environmental Management Programme

- 5-1 Prior to the commencement of any construction which may impact on the Cedric Street Wetland or its fringing vegetation, the proponent shall prepare, with the benefit of community input, an Environmental Management Programme which indicates how the existing ecological, hydrological and social values of the Cedric Street Wetland are to be incorporated into any lake to be constructed within the Stirling Regional Centre to the requirements of the Environment Protection Authority on advice of the Department of Conservation and Land Management, the Department of Environmental Protection and the Water and Rivers Commission.
- 5-2 The proponent shall include in the Environmental Management Programme required by condition 5-1 the Lake Relocation Plan and the Lake Management Plan required by conditions 6 and 7, respectively.
- 5-3 The proponent shall implement the Environmental Management Programme required by condition 5-1.

6 Lake Relocation Plan

- 6-1 Prior to the commencement of any construction which may impact on the Cedric Street Wetland or its fringing vegetation, the proponent shall prepare a Lake Relocation Plan to the requirements of the Environment Protection Authority on advice of the Department of Conservation and Land Management, the Department of Environmental Protection and the Water and Rivers Commission.

This plan shall include the following:

1. location, morphology and visual impact of replacement lake(s);
2. the ecological, hydrological and human use objectives of the replacement lake(s), and how these objectives are to be met through design and management;
3. detailed design plans, including habitat maps;
4. detailed biological specifications, including flora and fauna selections and landscape design;
5. timing of transference of biological material from the Cedric Street Wetland;
6. likely seasonal water level regimes; and
7. the distribution of rare plant and animal species occurring within the Cedric Street Wetland and details of their relocation.

6-2 The proponent shall implement the Lake Relocation Plan required by condition 6-1.

7 Lake Management Plan

7-1 Prior to the commencement of any construction which may impact on the Cedric Street Wetland or its fringing vegetation, the proponent shall prepare a Lake Management Plan to the requirements of the Environment Protection Authority on advice of the Department of Conservation and Land Management, the Department of Environmental Protection and the Water and Rivers Commission.

This plan shall include the following:

1. vegetation monitoring;
2. fauna monitoring;
3. habitat monitoring;
4. lake water level monitoring;
5. human use monitoring;
6. water quality monitoring (including inflows and outflows);
7. lake management strategies (including scope for mid-course corrections in response to unforeseen circumstances);
8. weed, pest and rubbish control; and
9. future reporting of results.

7-2 The proponent shall implement the Lake Management Plan required by condition 7-1.

8 Proponent

8-1 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 in respect of the proposal.

8-2 Any request for the exercise of that power of the Minister referred to in condition 8-1 shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the proposal in accordance with the conditions and procedures set out in the statement.

8-3 The proponent shall notify the Department of Environmental Protection of any change of proponent contact name and address within 30 days of such change.

9 Commencement

- 9-1 The proponent shall provide evidence to the Minister for the Environment within three years of the date of this statement that the proposal has been substantially commenced.
- 9-2 Where the proposal has not been substantially commenced within three years of the date of this statement, the approval to implement the proposal as granted in statement no. 314 (19 April 1993) shall lapse and be void. The Minister for the Environment will determine any question as to whether the proposal has been substantially commenced.
- 9-3 The proponent shall make application to the Minister for the Environment for any extension of approval for the substantial commencement of the proposal beyond three years from the date of this statement, at least six months prior to the expiration of the three year period commencing on the date of this statement.
- 9-4 Where the proponent demonstrates to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority that the environmental parameters of the proposal have not changed significantly, then the Minister may grant an extension not exceeding three years for the substantial commencement of the proposal.

10 Compliance Auditing

- 10-1 The proponent shall submit periodic Performance and Compliance Reports, in accordance with an audit program prepared in consultation between the proponent and the Department of Environmental Protection.
- 10-2 Unless otherwise specified, the Chief Executive Officer of the Department of Environmental Protection is responsible for assessing compliance with the conditions, procedures and commitments contained in this statement and for issuing formal, written advice that the requirements have been met.
- 10-3 Where compliance with any condition, procedure or commitment is in dispute, the matter will be determined by the Minister for the Environment.

Note

- 1 Monitoring and reporting requirements under condition 7 may be reviewed by the Environmental Protection Authority after submission of the sixth annual monitoring report.

Key Characteristics Table

Element	Description
Objective	Re-creation of a series of wetlands within the boundaries of the Stirling Regional Centre and incorporating the existing Osborne Park Branch Drain which will replace and, in most cases, greatly improve upon the ecological, hydrological and social functions currently associated with the Cedric Street wetland and the dampland to the south of the wetland.
Conceptual design	To be achieved by the creation of six or seven wetlands which will all be capable of sustaining a viable wetland ecosystem. The water surface area expressed by each wetland will be at least 1,000 m ² as at the first week of summer of any year. This is consistent with wetland criteria proposed in the EPA's Draft Environmental Protection (Swan Coastal Plain Lakes) Policy 1992.
Functions	<p>The proposed replacement wetlands to have the potential for the following natural and human use benefits:</p> <ul style="list-style-type: none"> a) a greater diversity of wetland types; b) providing a variety of waterbird habitats (open water roosting, feeding, breeding and loafing sites); c) creating landscape features which can be utilised for public enjoyment; d) nutrient stripping sites which will improve the water quality of the Osborne Park Branch drain.
Management	Commitment to Environmental Management Plan incorporating environmental objectives, monitoring, specific construction details of replacement wetland and management responsibilities.
Time limit	Proposal to be substantially commenced by 19 April 2001

Schedule 1

The Proposal

The objective of the proposal is the recreation of a series of wetlands to be incorporated into the existing Osborne Park Branch Drain. It is considered that the wetland series will replace and, in most cases, greatly improve upon the ecological, hydrological and social functions currently associated with the Cedric Street wetland.

Conceptually this will be achieved by the creation of six or seven wetlands which will all be capable of sustaining a viable wetland ecosystem. The water surface area expressed by each wetland will be at least 1,000 m² as at the first week of summer of any year. This is consistent with wetland criteria proposed in the EPA's Draft Environmental Protection (Swan Coastal Plain Lakes) Policy 1992.

The proposed replacement wetlands have the potential to possess the following natural and human use benefits:

- a) a greater diversity of wetland types;
- b) providing a variety of waterbird habitats (open water roosting, feeding, breeding and loafing sites);
- c) creating landscape features which can be utilised for public enjoyment;
- d) nutrient stripping sites which will improve the water quality of the Osborne Park Branch drain.

Proponent's Environmental Management Commitments

30 April 1999

RELOCATION OF THE CEDRIC STREET WETLAND, CITY OF STIRLING (729)

CITY OF STIRLING

Table 1. Pre-operational Management Commitments for Relocation of the Cedric Street Wetland

No	Topic	Commitment	Objective	Action	Timing	Advising Agency	Measurement/ Compliance Criteria
1	General	Develop an Environmental Management Plan (EMP).	To manage environmental issues identified in the Relocation of the Cedric Street Wetland Report.	Document management policy including an EMP to include: <ul style="list-style-type: none"> • Wetland design; • Precise location of wetlands; • Performance criteria; • Performance monitoring; • Management and maintenance of replacement wetlands; and • Corrections/contingency plans. 	Prior to relocation of remnant wetland	DEP	Submission of EMP documents to DEP.
2	General	Implement the EMP.	To manage environmental issues identified in the Relocation of the Cedric Street Wetland Report.	Implement the requirements of the EMP.	Ongoing	DEP	Annual reports to DEP
3	Water Resources	Investigate groundwater and hydraulic requirements of scheme	To assess groundwater and hydraulic levels.	Conduct detailed engineering surveys.	Prior to relocation of remnant wetland	DEP, WRC	Submission of hydrological and hydraulic investigations report to DEP.
4	Water Resources	Undertake detailed analysis of water levels downstream.	To anticipate the water levels which are expected to vary according to final land use proposed upstream.	Assessment of flow rates and water levels of the Osborne Park Branch Drain.	Prior to relocation of remnant wetland	DEP, WRC	Submission of hydrological and hydraulic investigations report to DEP.
5	Terrestrial	Undertake investigations to fully identify native mammals in the area.	To ensure the preservation of native mammals utilising the wetland environment.	A detailed survey and trapping exercise will be undertaken in order to determine the possibility of the Southern Brown Bandicoot or other native mammals in the area.	Prior to relocation of remnant wetland	DEP	Submission of survey report to DEP.
6	Biophysical	Develop landscaping plans.	To design an appropriate replacement wetland environment.	Landscape Plans will be formulated and incorporated into the EMP to obtain satisfactory approval by the EPA.	Prior to relocation of remnant wetland	DEP	Submission of survey report and plans to DEP.
7	Biophysical	Implement landscaping plans.	To design an appropriate replacement wetland environment.	Implement requirements of landscaping plans.	On going	DEP	Annual reports to DEP

Table 1. Pre-operational Management Commitments for Relocation of the Cedric Street Wetland (Cont\)

No	Topic	Commitment	Objective	Action	Timing	Advising Agency	Measurement/ Compliance Criteria
8	Biophysical	Undertake relocation of vegetation species.	To ensure the preservation of vegetation in the wetland environment.	Identification of vegetation species that needs to be relocated from Cedric Street Wetland. Investigations into feasible transplanting methods.	Prior to relocation of remnant wetland	DEP	Submission of relocation plan, as part of EMP, to DEP.
9	Biophysical	Undertake appropriate analysis of peat reserves.	To estimate the adequacy of peat reserves necessary for wetland to be created.	Quantitative analysis of the peat reserves.	Prior to relocation of remnant wetland	DEP	Report to be detailed as part of EMP, and submit to the DEP.
10	Biophysical	Stipulate optimal period for regrowth of wetland macrophytes.	To ensure the most beneficial timing of earthworks and vegetation relocation/establishment as part of the wetland replacement proposal.	Precise determination of most beneficial timing of earthworks and vegetation relocation establishment as part of the wetland replacement proposal.	Prior to relocation of remnant wetland	DEP	Reporting in EMP for presentation to DEP.
11	Hydrological	Provide detailed plans of proposed development.	To ensure that wetland relocation is done concisely and efficiently.	Clear definition of the number, location, area and other aspects of wetland design.	Prior to relocation of remnant wetland	DEP, WRC	Reporting in EMP for presentation to DEP.
12	Hydrological	Provide detailed plans of proposed development.	To minimise potential impacts on remnant vegetation types.	Utilise cleared, low lying sites which possess minimal potential impacts on remnant vegetation types.	Prior to relocation of remnant wetland	DEP, City of Stirling, WRC	Liaison with DEP officers and City of Stirling Staff.
13	Hydrological	Negotiate replacement of wetlands within the Stirling Regional Centre.	To minimise any environmental losses incurred.	Consultation with relevant authorities to negotiate the location of the replacement wetlands.	Prior to relocation of remnant wetland	DEP, WRC, City of Stirling	Liaison with DEP officers and City of Stirling Staff.
14	Hydrological	Implement a water sensitive design approach to the scheme.	To maximise environmental opportunities of the proposal.	Adopt principles as per WRC guidelines.	Prior to relocation of remnant wetland	DEP, WRC	Inclusion of report in EMP for presentation to DEP.

Table 1. Pre-operational Management Commitments for Relocation of the Cedric Street Wetland (Cont)

No	Topic	Commitment	Objective	Action	Timing	Advising Agency	Measurement/ Compliance Criteria
15	Hydrological	Develop a management and maintenance system for the wetlands.	To ensure smooth running of the wetland system.	Provide management and maintenance of the proposed wetland series during the construction phase and for a further two years after practical completion of the wetland project. After this period, the City of Stirling will undertake the role of long term managers of the wetland system.	Prior to relocation of remnant wetland	DEP, WRC	Submission of EMP to DEP.
16	Hydrological	Implement the management and maintenance system for the wetlands.	To ensure smooth running of the wetland system.	Implement requirements of the management and maintenance system for the wetlands for a further two years after practical completion of the wetland project. After this period, the City of Stirling will undertake the role of long term managers of the wetland system.	After relocation of remnant wetland	DEP, WRC	Annual reports to DEP.
17	Community awareness	Establish an appropriate system to allow awareness of environmental goals and objectives.	To achieve a uniform and consistent understanding of the objectives outlined in the CER amongst all parties.	Educate prospective companies, contractors and subcontractors involved in the construction and establishment of wetlands on the environmental goals and objectives of the proposal as outlined in the CER.	Prior to relocation of remnant wetland	DEP	Positive feedback from community members in regard to the project.

Table 2. Operational Management Commitments for Relocation of the Cedric Street Wetland

Topic	Commitment	Objective	Action	Timing	Advising Agency	Measurement/ Compliance Criteria
18 General	Develop an effective EMP for the operations phase.	To develop and build on the existing EMP.	Incorporate a set of criteria for further development of ecosystem performance.	During construction of recreated wetland habitat	DEP	Submission of revised feedback to DEP officers.
19 General	Implement the EMP for the operations phase.	To develop and build on the existing EMP.	Implement requirements of the EMP.	During operation of recreated wetland habitat	DEP	Annual reports to DEP.
20 Terrestrial	Design an intensive procedure to encourage native vegetation growth.	To maximise the establishment of native vegetation and minimise areas of open ground where Typha are likely to invade.	Adopt an intensive transplanting/planting/ seeding operation for each wetland.	During construction of recreated wetland habitat	DEP	Success of indigenous plant growth and effectiveness of weed control techniques.
21 Terrestrial	Implement the intensive procedure to encourage native vegetation growth.	To maximise the establishment of native vegetation and minimise areas of open ground where Typha are likely to invade.	Implement the intensive transplanting/planting/ seeding operation for each wetland.	During operation of recreated wetland habitat	DEP	Annual reports to DEP.
22 Hydrological	Design necessary drainage systems for wetland waterbody.	To settle out any particulates/sediments associated with stormwater drainage prior to entry into the wetland waterbody.	Sediment basins will be constructed alongside replacement wetlands.	During construction and operation of recreated wetland habitat	DEP, WRC	Periodic monitoring of sedimentation basin to establish effective functioning.
23 Hydrological	Monitor earthworks, drainage provisions and wetland storage capacities.	To ensure the Osborne Park Branch Drain will not be adversely affected by the proposal.	Identify limit of construction by line-pegging. Provide adequate storage within the basin to allow for a minimum of 1 in 10 ARI event.	During construction and operation of recreated wetland habitat	DEP, WRC	Approval and implementation of adequate monitoring program by DEP.
24 Hydrological	Segregate wetland excavation activities from the water course of the Osborne Park Branch Drain.	To mitigate water quality impacts such as increased turbidity and siltation of main drainage channel.	Identify limits of construction and erect barriers/screens to prevent dust and soil from entering the drain.	During construction and operation of recreated wetland habitat	DEP, WRC	Provision of adequate management strategy to DEP.
25 Hydrological	Restrict access to newly created wetlands.	To encourage successful establishment of wetlands.	Provide fencing on a permanent basis where appropriate, providing it does not impede upon the various functional objectives contained in the CER.	During construction and operation of recreated wetland habitat	DEP, WRC	Erection of fencing.

Table 2. Operational Management Commitments for Relocation of the Cedric Street Wetland (Cont)

Topic	Commitment	Objective	Action	Timing	Advising Agency	Measurement/ Compliance Criteria
2 6 Hydrological	Monitor the water quality of the Osborne Park Branch drain in the proximity of the outfall.	To assist in the effectiveness of nutrient/pollutant stripping functions of wetlands.	Establish sampling stations 100 metres upstream and 20 metres downstream of wetland outflow. Undertake baseline monitoring (2 intervals) prior to construction, followed by post construction monitoring up and downstream of outfall on a bimonthly basis for one year. Further monitoring requirements to be established at the end of this period.	During construction and operation of recreated wetland habitat	DEP, WRC	Submission of water quality monitoring reports for inspection to either City of Stirling or DEP.
2 7 Community awareness	Actively involve the City of Stirling in the initial stages of wetland creation	To ensure that the long term managers of the wetland system (City of Stirling) are well informed on the environmental goals of the wetlands.	Liaise with City of Stirling and Wetlands Advisory Committee during design phase.	During construction and operation of recreated wetland habitat	DEP, City of Stirling	Establishment of relations with custodians of the new wetland.
2 8 Community awareness	Conduct an education campaign and help community groups and schools become involved.	To increase public involvement in the wetland project.	Promotional talks by key City of Stirling staff to school groups. Display material around replacement wetland.	During construction and operation of recreated wetland habitat	DEP, City of Stirling	Development of community awareness programs.

Table 3. Post-operational Management Commitments for Relocation of the Cedric Street Wetland

Topic	Commitment	Objective	Action	Timing	Advising Agency	Measurement/ Compliance Criteria
2 9 Community Liaison	Educate the managers of the wetlands (City of Stirling) and local community groups on land management practices.	To ensure the long term sustainability of the wetland environment.	Establishment of wetland working groups or equivalent.	Post construction of recreated wetland environments	DEP	A documented record of a series of wetland management meetings.
3 0 Hydrological	Control the proliferation of undesirable vegetation types (ie. the manual removal of Typha, Castor Oil plants, pampas grass, blackberry, etc.) in the relocated wetland.	To maintain a balance of native vegetation types.	Removal of existing weed species and planting of native vegetation to aid macrophyte establishment.	Post construction of recreated wetland environments	DEP, WRC	Submission of maintenance and monitoring plan as part of EMP to both City of Stirling and DEP.
3 1 Hydrological	Establish habitat types consistent with the range of waterbird activities.	To encourage the use of native fauna, particularly waterbirds.	Introduce hollow logs, nesting boxes and effective screening.	Post construction of recreated wetland environments	DEP, WRC	Monitoring of fauna use on a periodic basis.
3 2 Hydrological	Periodic maintenance of the proposed sediment basins.	To ensure maintenance of the drainage system.	Bimonthly inspection of sediment traps. Cleaning out as appropriate.	Post construction of recreated wetland environments	DEP, City of Stirling, WRC	Establishment and documentation of regular maintenance and monitoring schedule for associated sediment basins.
3 3 Hydrological	Use of street sweepers on wetland surface catchment roads	Reduce sediments prior to the first flush of winter rains (eg. March - April).	Advise appropriate department of schedule required for street cleaning operations.	Post construction of recreated wetland environments	DEP, City of Stirling, WRC	Incorporation of cleaning schedule in council's street cleaning program.