



**MINISTER FOR THE ENVIRONMENT;
EMPLOYMENT AND TRAINING**

Statement No.

000485

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

ELLENBROOK SEWER PRESSURE MAIN, SHIRE OF SWAN

Proposal: This proposal consists of the construction and operation of two major components:

- 1 a sewage pump station on land at the south-western corner of the intersection of Lord Street and Gnangara Road to convey domestic sewage from the Ellenbrook development to the sewage management system for Perth; and
- 2 a 400 mm to 500 mm diameter pressure sewer main contained within the road reserve extending south from the pump station on the east side of Lord Street for about 7 km, west along Marshall Road for about 9 km, and south along Alexander Drive for about 1 km to an existing pressure main in Australis Way,

as documented in schedule 1 of this statement.

Proponent: Water Corporation

Proponent Address: 629 Newcastle Street, Leederville WA 6007

Assessment Number: 1115

Report of the Environmental Protection Authority: Bulletin 897

The proposal to which the above report of the Environmental Protection Authority relates may be implemented subject to the following 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, in the course of implementing the proposal, 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.

Published on

21 AUG 1998

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 as part of the fulfilment of conditions and procedures in this statement.

3 Environmental Management System

- 3-1 In order to manage the environmental impacts of the project, and to fulfil the requirements of the conditions and procedures in this statement, prior to construction, the proponent shall demonstrate to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection that there is in place an environmental management system which includes the following elements:
 - 1 environmental policy and commitment;
 - 2 planning of environmental requirements;
 - 3 implementation and operation of environmental requirements;
 - 4 measurement and evaluation of environmental performance; and
 - 5 review and improvement of environmental outcomes.
- 3-2 The proponent shall implement the environmental management system referred to in condition 3-1.

4 Decommissioning Management Plan

- 4-1 At least six months prior to decommissioning, the proponent shall prepare a Decommissioning Management Plan to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

This Plan shall address:

 - 1 removal or, if appropriate, disposal on-site of plant and infrastructure;
 - 2 rehabilitation of all disturbed areas to agreed final land use(s); and
 - 3 identification of contaminated areas, including provision of evidence of notification to relevant statutory authorities.
- 4-2 The proponent shall implement the Decommissioning Management Plan required by condition 4-1.
- 4-3 The proponent shall make the Decommissioning Management Plan required by condition 4-1 publicly available, to the requirements of the Environmental Protection Authority.

5 Performance Review

5-1 Each six years following the commencement of construction, the proponent shall submit a Performance Review to evaluate the environmental performance relevant to:

- 1 environmental objectives reported on in Environmental Protection Authority Bulletin 897;
- 2 proponent's consolidated environmental management commitments documented in schedule 2 of this statement and those arising from the fulfilment of conditions and procedures in this statement;
- 3 environmental management system environmental management targets;
- 4 environmental management programs and plans; and
- 5 environmental performance indicators;

to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

Note: The Environmental Protection Authority may recommend changes and actions to the Minister for the Environment following consideration of the Performance Review.

6 Proponent

6-1 The proponent for the time being nominated by the Minister for the Environment under section 38(6) or (7) of the Environmental Protection Act 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.

6-2 Any request for the exercise of that power of the Minister referred to in condition 6-1 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.

6-3 The proponent shall notify the Minister for the Environment of any change of proponent contact name and address within 30 days of such change.

7 Commencement

7-1 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.

7-2 Where the proposal has not been substantially commenced within five years of the date of this statement, the approval to implement the proposal as granted in this statement shall lapse and be void. The Minister for the Environment will determine any question as to whether the proposal has been substantially commenced.

7-3 The proponent shall make application to the Minister for the Environment for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement.

7-4 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 five years for the substantial commencement of the proposal.

8 Compliance Auditing

8-1 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.

8-2 Unless otherwise specified, the Department of Environmental Protection is responsible for assessing compliance with the conditions and procedures contained in this statement and for issuing formal clearance of conditions.

8-3 Where compliance with any condition is in dispute, the matter will be determined by the Minister for the Environment.

Note

1 The proponent is required to apply for a Works Approval and Licence for this project under the provisions of Part V of the Environmental Protection Act.


CHERYL EDWARDES (Mrs) MLA
MINISTER FOR THE ENVIRONMENT

18 AUG 1998

Schedule 1

The Proposal

This proposal consists of the construction and operation of two major components:

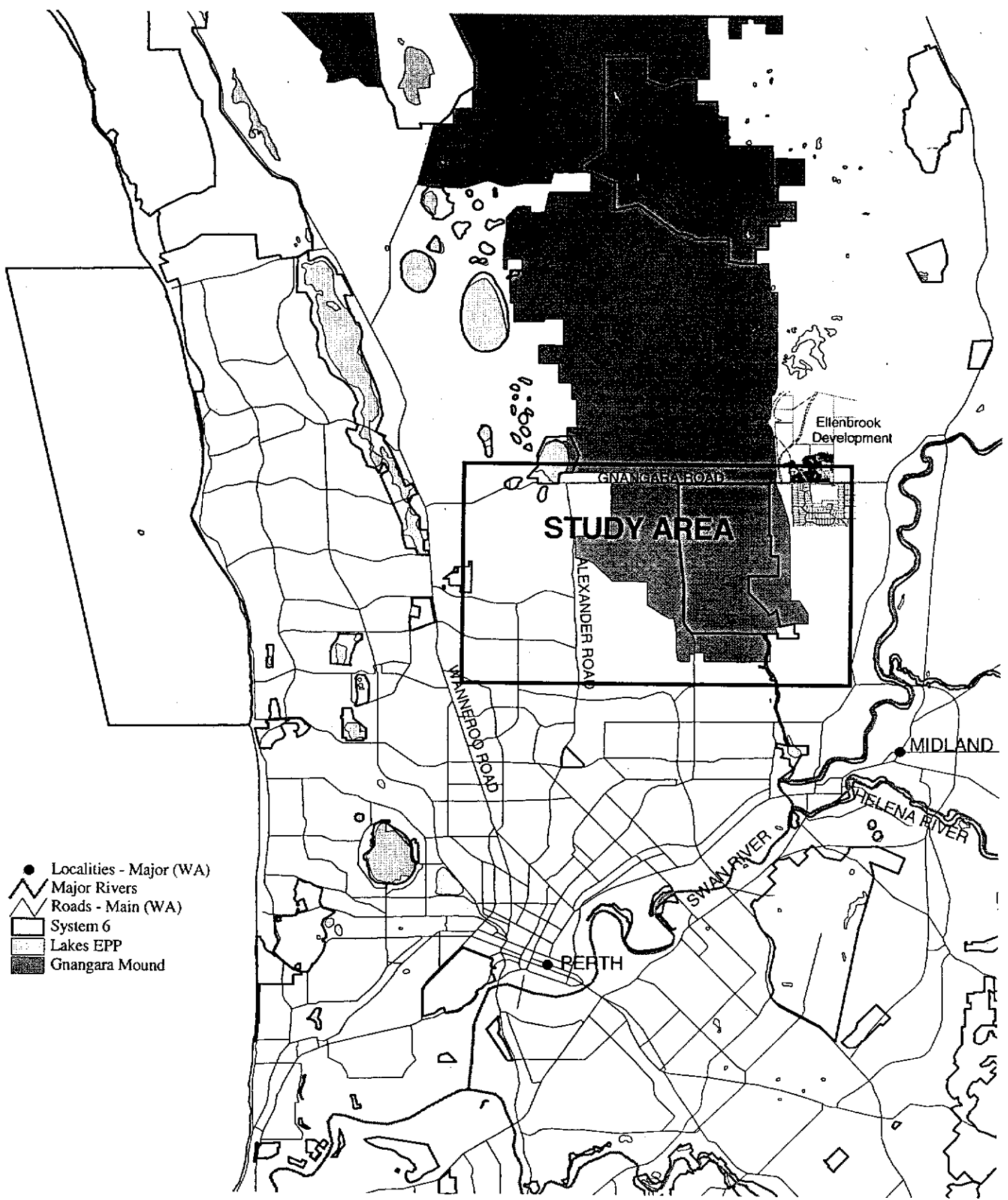
1. a sewage pump station on land at the south-western corner of the intersection of Lord Street and Gnangara Road to convey domestic sewage from the Ellenbrook development to the sewage management system for Perth; and
2. a pressure sewer main contained within the road reserve extending south from the pump station on the east side of Lord Street for about 7 km, west along Marshall Road for about 9 km, and south along Alexander Drive for about 1 km to an existing pressure main in Australis Way, as shown in Figures 1 and 2.

Key Proposal Characteristics

Feature	Location	Description
Pump Station	south west corner of Lord Street and Gnangara Road intersection within Priority 2 Underground Water Pollution Control Area (UWPCA) external to well head protection zones	<ul style="list-style-type: none"> • below ground 'wet well' construction 8 m deep • two pumps (one as backup) operated according to the sewage level in the wet well • initial delivery rate of 140 L/s • ultimate delivery rate of 240 L/s • 8 hours of below ground storage at maximum delivery rate • alternate on-site power supply
Pressure Sewer Main	within the road reserve south from the pump station site on the east side of Lord Street for about 7 km (1.9 km in Priority 2 UWPCA, 1.8 km in Priority 3 UWPCA, and a section within the well head protection zone of proposed bore M380), west along Marshall Road for about 9 km (2 km in Priority 3 UWPCA), and south in Alexander Drive for about 1 km (mostly within Priority 3, and passing within the well head protection zone of one bore M34) to an existing pressure main in Australis Way	<ul style="list-style-type: none"> • about 17 km of pipeline consisting of 12 m sections of 400 mm to 500 mm internal diameter mild steel internal cement lined sewer pipe • rubber ring joined • buried to a depth of between 1 m and 3 m • 50 m to each side of air valves to have polythene internal lining • approx 1 air value and 1 scour valve within P2, and 3 air values, 3 scour valves, and 1 scour/section valve within P3
Wastewater Characteristics		<ul style="list-style-type: none"> • domestic sewage only, however with an industrial area mooted for south of Bullsbrook there is a possibility that industrial waste will also be carried at some time in the future

Note: Priority 2 and Priority 3 refer to the level of protection afforded areas within the Gnangara Underground Water Pollution Control Area (UWPCA).

Figure 1 - Location Map



- Localities - Major (WA)
- ~ Major Rivers
- Roads - Main (WA)
- System 6
- ▨ Lakes EPP
- Gnangara Mound

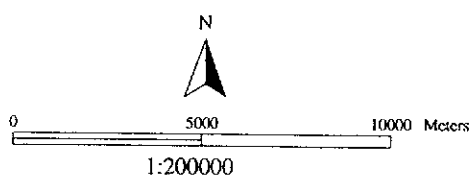
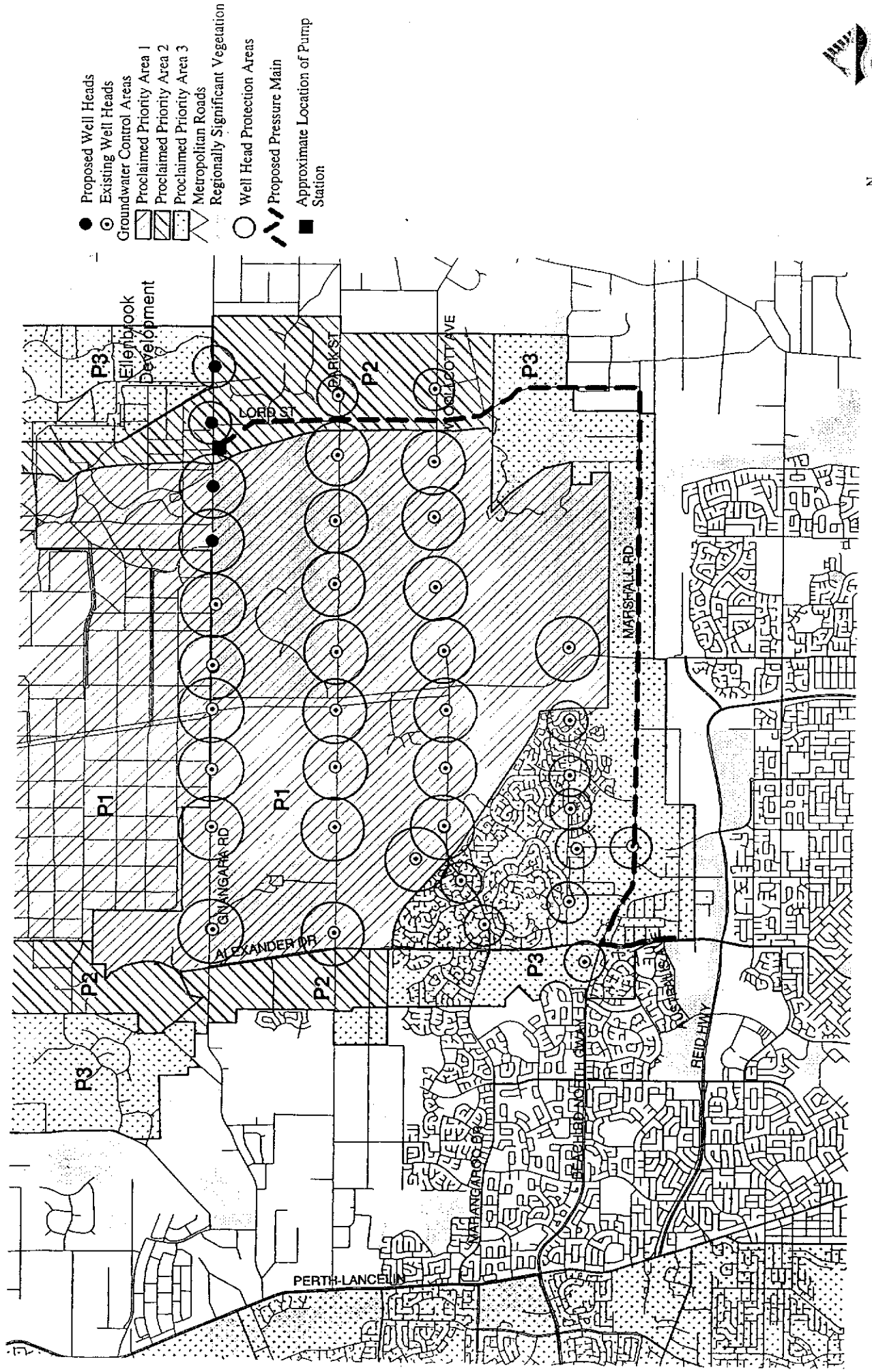


Figure 2 - Water Corporation proposed sewer main and pump station



0 2000 4000 Meters
1:80000

Proponent's Consolidated Environmental Management Commitments

19 March 1998

ELLENBROOK SEWER PRESSURE MAIN SHIRE OF SWAN

Water Corporation

The proponent commits to the following:

1 Vegetation Communities - impacts during construction

- 1.1 Where there are likely to be impacts on vegetation listed under System 6, or draft Perth's Bushplan, further assessment of vegetation likely to be impacted during construction will be undertaken prior to the finalisation of a detailed route for the pressure main. These studies will identify direct and indirect impacts in terms of construction impacts, and seek to minimise the loss of vegetation to the requirements of Department of Environmental Protection (DEP), Water and Rivers Commission (WRC), and Conservation and Land Management (CALM).
- 1.2 The detailed route of the pressure main will be to the requirements of the DEP on the advice of WRC and CALM.
- 1.3 Prior to construction, a Rehabilitation Plan will be prepared which includes both dry and wet land environments encountered by the pressure main and pump station, to the requirements of DEP on the advice of the Shire of Swan, WRC, and CALM.
- 1.4 The approved Rehabilitation Plan will be implemented following construction.

2 Declared Rare and Priority Flora - impacts during construction

- 2.1 Prior to finalisation of the route for the pressure main a comprehensive Declared Rare and Priority flora survey will be conducted and clearances obtained and/or modifications to the route made, to the requirements of the DEP on the advice of CALM.

3 Wetlands - impacts due to dewatering

- 3.1 Prior to construction, a Dewatering Management Plan will be prepared the requirements of DEP on the advice of WRC, to ensure receiving wetlands, groundwater dependant vegetation, and streams are not degraded.
- 3.2 The approved Dewatering Management Plan will be implemented during construction, to the requirements of DEP on the advice of WRC.

4 Groundwater Quality - contamination due to leakage of sewage

- 4.1 The complete pump station site will not be located within any existing or proposed well head protection zones.
- 4.2 The use of tankers as backup to minimise the risk of discharging sewage into the groundwater and the local river system from the pump station in the event of a break down will be included in the Emergency Response plan. (See commitment 4.10)

- 4.3 Prior to operation of the pump station, a Hazardous Materials Storage Plan (pump station) will be prepared and implemented to ensure fuels and oils associated with the emergency power supply are appropriately managed to prevent spills or leaks entering sensitive receiving environments, to the requirements of the Department of Minerals and Energy (DME) and WRC.
- 4.4 Where the pressure main passes within a well head protection zone a shallow monitoring bore will be installed adjacent to the production bore. The monitoring program for this bore will be to the requirements of WRC.
- 4.5 Acoustic and pressure testing of the pressure main will be offset by three months and conducted on a 6 month cycle where the maximum time between either of the form of test for any section of the pressure main within Priority 2 or 3 Underground Water Pollution Control Areas (UWPCA) is three months.
- 4.6 The Water and Rivers Commission will be the primary contact for leaks within the UWPCA as this is a legal requirement under the by-laws of the Metropolitan Water Supply, Sewerage and Drainage Act 1909.
- 4.7 To minimise the risk of sewage overflow, the pump station will be equipped with dedicated diesel generator to guarantee continued operation during grid power failures to the requirements of WRC.
- 4.8 To minimise the risk of sewage overflow, the pumps in the pump station will be set up as 'duty/standby' to ensure continued operation where duty pump fails to the requirements of WRC.
- 4.9 For the life of the pressure main there will be no less than eight hours of storage time (under worst case conditions) at the Lord Street pump station.
- 4.10 Prior to operation of the pressure main or pump station, an Emergency Response Plan will be prepared and implemented to minimise the extent and impact of any leak from the pressure main or pump station to the requirements of DEP and WRC.
- 4.11 Annual reports will be provided to the requirements of WRC and DEP on the operation of five Leak Detection Systems which consist of:
 - 4.11.1 pressure sensors on pumps for shut down on pressure loss;
 - 4.11.2 differential flow metering;
 - 4.11.3 periodic pressure testing on sections of the pipe;
 - 4.11.4 periodic acoustic leak surveys; and
 - 4.11.5 periodic visual inspections;to maximise the possibility of detecting any leak from the pressure main.
- 4.12 Commence repairs of known leaks within 24 hours to minimise the effect of leaks on the environment through coordinated procedures as part of Emergency Response Plan to the requirements of DEP and WRC.
- 4.13 Where a spillage or leak pollutes groundwater in a Priority area:
 - 4.13.1 pumping will be undertaken to remediate the groundwater quality until pre-spill levels are achieved;
 - 4.13.2 groundwater will be monitored for at least 30 days after spill; and
 - 4.13.3 if soil is contaminated it will be remediated to pre-spill conditions;to the requirements of the DEP and WRC.
- 4.14 Prior to construction, a Hazardous Materials Storage Plan (Construction) will be prepared, to the requirements of DME and WRC, to ensure hazardous materials are appropriately managed to prevent spills or leaks entering sensitive receiving environments during construction of the pressure main and pump station.

4.15 The approved Hazardous Materials Storage Plan (Construction) will be implemented during construction to the requirements of DME and WRC.

5 Dust - impacts on adjacent residents

5.1 Prior to construction, a Dust Management Plan will be prepared to retain visual amenity and prevent dust pollution during construction to the requirements of the Shire of Swan.

5.2 The approved Dust Management Plan will be implemented during construction to the requirements of the Shire of Swan.

6 Dieback - introduction into uninfected areas

6.1 Prior to construction, all dieback-free areas within System 6 or draft Perth's Bushplan areas that may be influenced by the pressure main and pump station will be clearly identified by a dieback survey, to the requirements of CALM.

6.2 Prior to construction, a Dieback Management Plan will be prepared to minimise the spread of Dieback in dieback free areas of regionally significant vegetation to the requirements of CALM.

6.3 The approved Dieback Management Plan will be implemented during construction, to the requirements of CALM.

7 Aboriginal Culture and Heritage - impact on areas of cultural significance

7.1 Prior to construction of the pump station and pressure main, an archaeological survey will be carried out along the route to ensure construction does not damage or destroy important archaeological sites to the requirements of the Aboriginal Affairs Department (AAD).

7.2 Where the pressure main is proposed to cross Bennett Brook, the Water Corporation will consult with indigenous stakeholders and AAD to address the cultural significance of Bennett Brook. This will be to the requirements of AAD.

8 Noise - impact on adjacent residents

8.1 All construction work will occur between the hours of 6:00 am and 6:00 pm, Monday to Sunday, and plant and machinery will be fitted with appropriate noise control equipment to the requirements of the Shire of Swan.

9 Odour - impact on adjacent residents

9.1 Vents will be located as far as practical from residential areas.

9.2 Prior to operation of the pump station and pressure main, Operational Procedures will be developed to minimise the risk of offensive odours impacting on adjacent residents to the requirements of the Shire of Swan.

9.3 The Operational Procedures will be implemented to the requirements of the Shire of Swan.