

2 The environmental assessment process

2.1 Overview of the environmental assessment process

The project is being assessed using an environmental assessment process (Figure 2.1). This is similar to the Major Projects' processes under the *Development Act 1993* and the process requirements under the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The purpose of an environmental assessment process is to adequately evaluate the effects of a proposed project so that decision making can take these into account and include appropriate mitigation or management measures.

The *Development Act 1993* (including the Major Projects' provisions) is automatically excluded when land is acquired under Section 20(5) of the *Highways Act 1926*. This environmental assessment process is therefore being conducted outside the Development Act, but will consider and assess issues as they would have been covered if the project was being assessed under the Development Act. In conjunction with the environmental assessment process, extensive community involvement has gathered and will continue to gather information to inform further detailed design development and the decision-making process.

Environmental, social and economic investigations by technical specialists have identified and described the effects of the project on the existing environment and community, and outlined proposed management measures. This Environmental Report outlines the project, summarises the investigations, and outlines the measures to avoid or minimise effects from the project.

The Environmental Report is being publicly displayed for a period of approximately four weeks. During the display period, submissions are invited commenting on any issues associated with the project. Formal comment is also requested from government agencies.

The Environmental Report is available on compact disc and on the project website:

www.northernexpressway.sa.gov.au Hard copies are on display at a number of locations throughout the study area and will also be available for purchase from Services SA during the formal consultation period. A separate Executive Summary provides a snapshot of the project and its effects.

A Supplement document will address the submissions received from the public and government agencies. It will also outline the findings of any further investigations undertaken since preparation of the Environmental Report.

The Supplement together with the Environmental Report will be considered prior to finalising the proposed route for approval by the South Australian Government.

2.2 Purpose and objectives of the Environmental Report

The Environmental Report has been written to provide interested groups, individuals, businesses, government agencies and local government with an understanding of the Northern Expressway Project. It describes the proposed route and for the existing environment within the study area, the effects that may occur when the road is built and the measures proposed to manage, minimise or avoid any undesirable effects. It provides a framework for considering the economic, social and environmental aspects of the project in the context of legislative and policy requirements to help decide how best the project should proceed.

The objectives of the Environmental Report are to:

- inform the community about the project and the alternatives that were considered
- describe the existing environment within the study area
- identify the environmental, social and economic effects and benefits of the project
- describe how any adverse effects will be avoided, minimised or managed.

2.3 The study area

The broad study area for investigations in the Environmental Report is shown in Figure 1.2. The extent of the study area varied depending on the issue being investigated. For example, most preliminary assessments were undertaken at a more regional scale (dotted orange line, in Figure 1.2) whereas more detailed assessment, for example, of vegetation, noise and air quality, focused on an area within 500 m of the proposed corridor.

The study area for the Northern Expressway broadly extends across the area of:

- Virginia, Angle Vale and Gawler to the north
- the existing Munno Para–Elizabeth–Salisbury urban development area to the east and Port Wakefield Road to the south-west.

Figure 2.2 provides aerial views of parts of the study area.

2.4 Content and structure of the Environmental Report

The Environmental Report has been structured to provide an easy-to-read document identifying the key issues common to all environmental assessment documents.

Each assessment generally followed the process of:

- describing the existing environment/community relevant to the issue
- assessing the effect of the Expressway on the existing environment/community
- developing measures to manage the effects of the project.

The structure and general content of the Environmental Report are outlined in Table 2.1.

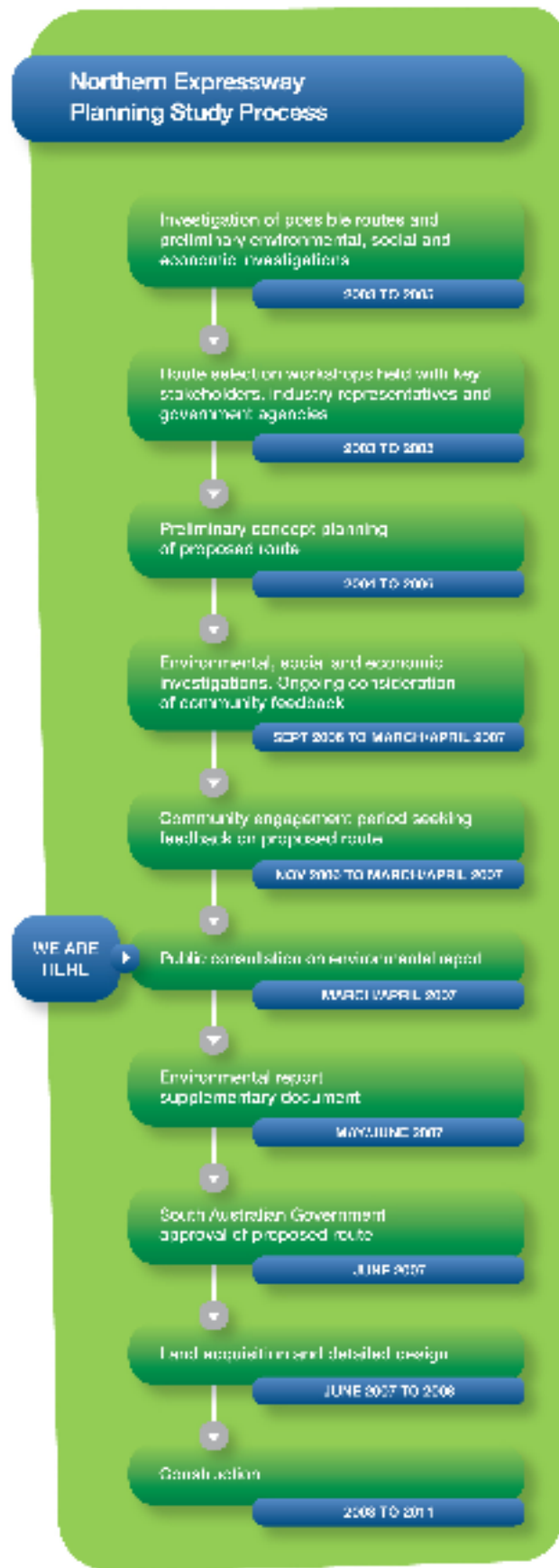


Figure 2.1 Environmental assessment process



Intersection of Port Wakefield Road and Taylors Road looking north-east



Gawler Bypass

Figure 2.2 Aerial views of sections within the study area

Table 2.1

Structure and content of the Environmental Report

Section	Description
VOLUME 1	
Executive Summary	Provides a summary of the Environmental Report
Part A Introduction and background	Provides an overview of the project, describes the environmental assessment process, explains how it fits with the AusLink Network and provides details of the community and stakeholder engagement process
Part B Need for the proposal and consideration of alternatives	Provides the justification for the project, a description of the alternative routes considered and a summary of the economic assessment undertaken
Part C Project description of the Northern Expressway Project	Provides a description of the proposed Northern Expressway and Port Wakefield Road Upgrade and information on how construction, operation and maintenance activities will occur
VOLUME 2	
Part D Effects of the Northern Expressway	Provides information on existing conditions, potential effects on the social, cultural, economic, physical and biological environment and measures to manage the effects
Part E Effects of the Port Wakefield Road Upgrade	Provides information on existing conditions, potential effects on the social, cultural, economic, physical and biological environment and measures to manage the effects
Part F Environmental management	Provides information on sustainability and environmental management and monitoring relating to the project
Abbreviations and Glossary	Provides a list of abbreviations and definition of terms used in the Environmental Report
References and Acknowledgements	Provides a list of documents referenced in the Environmental Report and acknowledges people involved in preparing the report

The key environmental, social and economic investigations undertaken (refer to Parts D and E of this Environmental Report) were:

- social and demographic assessment
- land use and zoning
- property
- transport
- noise and vibration
- cultural heritage (including Aboriginal and non-Aboriginal)
- visual analysis
- geology, soils and land contamination
- surface water and groundwater
- air quality
- greenhouse and sustainability
- flora and fauna.

2.5 Detailed investigations: Technical Papers

As part of the environmental investigations in support of the Environmental Report, a series of detailed specialist studies was undertaken and the studies documented as Technical Papers. This Environmental Report provides a summary of the technical information in these studies. The detailed Technical Papers documented prior to the release of this Environmental Report will be available on the website.

Technical assessments specifically for the Environmental Report began in mid-September 2006 and are based on the proposed route at that date. Where inconsistencies occur between the information provided in the Technical Papers and the Environmental Report, the Environmental Report takes precedence.

2.6 The Supplement document

Following public display of this Environmental Report, a Supplement to the Environmental Report will be prepared and released. It will include a summary of the public submissions received during the display period and the proponent's response to relevant issues raised.

The Supplement will include findings of additional investigations undertaken as a result of public submissions or carried out after the Environmental Report was compiled, for example, greenhouse gas assessment and further Aboriginal heritage fieldwork. Where minor route adjustments are made during the final concept design, further limited investigation may be necessary. The Supplement will include the final concept design of the proposed route, highlighting any changes or refinements made as a result of the public and agency consultation process.

2.7 Legislative approval processes

2.7.1 Commonwealth legislation

Environment Protection and Biodiversity Conservation Act 1999

The EPBC Act provides for the protection and conservation of matters of national environmental significance, and for the management of Australian Government-owned and controlled areas. Approval from the Australian Government Minister for the Environment and Water Resources is required for any action that will have a significant impact on a matter of national environmental significance.

Based on the detailed environmental investigations for the Northern Expressway Project and in accordance with the Australian Government's Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) Policy Statement 1.1, Significant Impact Guidelines (Department of the Environment and Heritage 2006) it has been determined that the project will not have a significant impact on any matter of national environmental significance and therefore no referral under the EPBC Act has been made.

2.7.2 State approvals

Under State legislation, a number of approvals, permits or licences may or will need to be obtained by DTEI and/or the construction contractor (Table 2.2). Further detail can be found under each environmental assessment in Parts D and E of this Environmental Report.

Table 2.2

South Australian legislative environmental approvals likely to be required for each phase of the project

Legislation	Approval required	Authority/approval body
<i>Aboriginal Heritage Act 1988</i>	Determination of an Aboriginal site (s.12) Authority to disturb an Aboriginal site or object (s.23)	Minister for Aboriginal Affairs and Reconciliation Department of the Premier and Cabinet, Aboriginal Affairs and Reconciliation Division
<i>Dangerous Substances Act 1979</i>	Licence to keep or transport a prescribed dangerous substance	Minister for Industrial Relations
<i>Development Act 1993</i>	Approval to: • remove a significant tree • affect a (State) heritage place or area • undertake marine or rail works • open a borrow pit	Minister for Urban Development and Planning Development Assessment Commission
<i>Environment Protection Act 1993</i>	Authorisation to undertake prescribed activity of environmental significance, including: • earthworks drainage licence • concrete batching licence • asphalt batching licence • extractive industries licence Authorisation for exemption from the Machine Noise Policy 1994 for roadworks undertaken at night	Minister for Environment and Conservation Environment Protection Authority (EPA)
<i>Highways Act 1926</i>	Approval to contract to remove materials (for borrow pit) (under s.20)	Minister for Transport Department for Transport, Energy and Infrastructure
<i>Mines and Works Inspection Act 1920</i>	Approval to open and operate a borrow pit	Minister for Mineral Resources Development Primary Industries and Resources SA (PIRSA)
<i>National Parks and Wildlife Act 1972</i>	Permit to collect or destroy native fauna and native seeds	Minister for Environment and Conservation Department for Environment and Heritage
<i>Native Title (South Australia) Act 1994</i>	Determine native title on land being acquired for construction	Attorney-General Department of the Premier and Cabinet, Aboriginal Affairs and Reconciliation Division
<i>Native Vegetation Act 1991</i>	Approval to destroy/remove native vegetation outside an urban area	Minister for Environment and Conservation Department of Water, Land and Biodiversity Conservation Native Vegetation Council
<i>Natural Resource Management Act 2004</i>	Permit for activities which affect water	Minister for Environment and Conservation Department of Water, Land and Biodiversity Conservation Adelaide and Mount Lofty Ranges Natural Resource Management Board