

DELIVERING OUR TRANSPORT FUTURE NOW

South Road Superway

north-south corridor • Regency Road to Port River Expressway



Project Impact Report • Executive Summary

Environment • Social • Economic



Australian Government

Nation Building Program



Government of South Australia

Department for Transport,
Energy and Infrastructure

South Road Superway

Executive Summary



The South Australian Government has a strategic vision to deliver to the Adelaide metropolitan area a non-stop north-south corridor for freight and passenger vehicles between the Port River Expressway and the Southern Expressway. South Road is the only continuous transport link between these areas and is crucial for the community, businesses and industry.

The proposed South Road Superway will deliver a non-stop corridor approximately 4.8 kilometres in length largely consisting of an elevated roadway, with multiple lanes in each direction above the existing alignment, between Regency Road and Port River Expressway.

The project has been developed as part of the solution to address a lack of efficiency of the South Road transport corridor and increasing urban congestion. This congestion, if allowed to worsen, would result in more traffic delays, higher crash rates, reduced amenity as well as reduced business and community access.

An elevated roadway, is considered the optimum design solution, and when constructed will be the first in South Australia, creating a landmark gateway to metropolitan Adelaide from the north.

The Superway will extend over the major intersections of South Terrace, Wingfield rail line, Cormack Road, Grand Junction Road and Days Road and bypass traffic signals. The Superway will minimise the need for property and businesses to be acquired and will enable regional and local east-west links across South Road to be maintained and enhanced.

This project has been carefully designed to minimise adverse social and environmental effects on the business and broader community. It will support the strategically important northwest industrial precincts of Outer Harbor, Port Adelaide, Wingfield and Regency Park as well as the rapidly expanding industrial and employment hubs within metropolitan Adelaide and across South Australia.



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1. What is the South Road Superway?



The South Road Superway is considered the optimum design and whole of life solution, and when constructed will be the first in South Australia, creating a landmark gateway to metropolitan Adelaide from the north.

The South Australian Government has a strategic vision to deliver to the Adelaide metropolitan area a non-stop north–south corridor to provide for the movement of people and goods between the Port River Expressway and Southern Expressway. South Road is the only continuous transport link between these areas and is crucial for community, businesses and industry.

The north–south movement of people and goods between Wingfield and Darlington is one of the most important components of the road transport system in metropolitan Adelaide. It connects the major inter-modal transport hubs of Adelaide airport, the Port of Adelaide, Outer Harbor and Islington Rail Terminal as well as providing access to Adelaide’s industrial hub in the north-west sector.

The proposed South Road Superway Project, between Regency Road to Port River Expressway, aims to address three transport challenges for South Australia (in particular the ‘Nation Building’ Adelaide Urban Corridor):

- › lack of an efficient north–south transport corridor across the Adelaide metropolitan area for interstate freight routes to key destinations
- › increasing urban congestion across the Adelaide metropolitan areas
- › rail crossing delays and safety of key freight routes.

The project will significantly upgrade South Road between Regency Road to Port River Expressway to expressway standard.

This significant transport initiative will meet arterial road network demands for freight and passenger vehicles. It will create a non-stop corridor approximately 4.8 kilometres in length using an elevated

roadway, of approximately 2.8 kilometres in length, including multiple lanes in each direction above the existing South Road alignment.

The South Road Superway will extend over the major intersections of South Terrace, Wingfield rail line, Cormack Road, Grand Junction Road and Days Road. The Superway’s non-stop corridor will enable significant improvement to property access through service roads, the use of the existing South Road and/or additional road links for business, industry and the travelling public between Regency Road and Port River Expressway.

The South Road Superway will have three lanes in each direction north of Grand Junction Road and two lanes in each direction south of Grand Junction Road. Generally there will be a 9 metre clearance over local roads. The Superway will be accessed by the Port River Expressway–Salisbury Highway interchange, ramps at Grand Junction Road and ramps located south of Days Road.

Service roads under and parallel with the Superway will provide access to properties and local roads along the existing South Road alignment. Pedestrians and cycling will be accommodated on the service roads and local roads.

The local road network will be upgraded to enhance local access. The changes will include new road links along Rafferty Street, Naweena Road, Gallipoli Grove and Davis Street.

Figure 1 shows the location and extent of the South Road Superway, proposed service roads and local road network improvements.

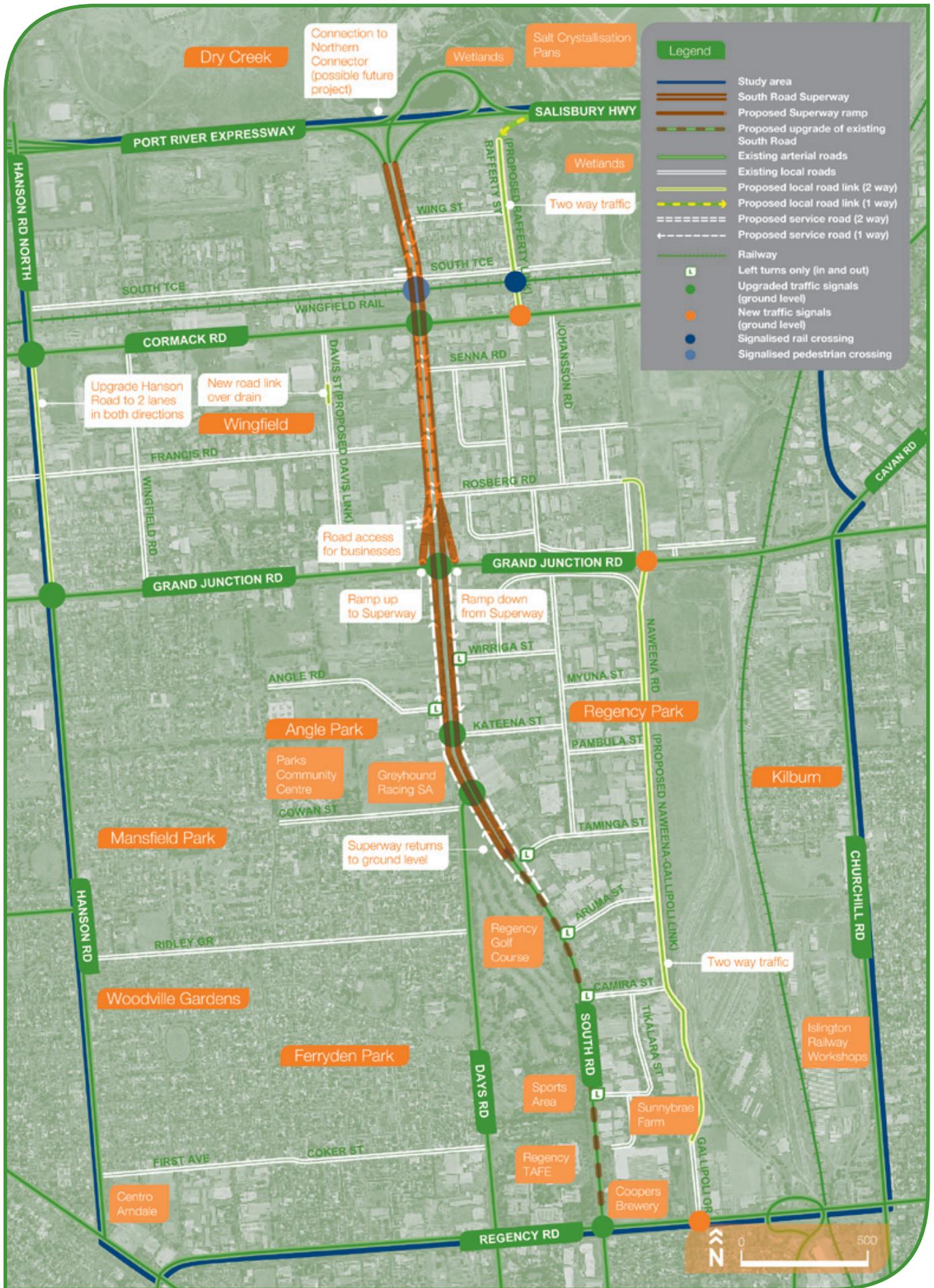


Figure 1: Concept Plan

2. The environmental impact assessment process



The South Road Superway Project is being assessed using DTEI's environmental impact assessment process, which is similar to processes for Major Projects under the Development Act 1993.

The Project Impact Report, prepared by an integrated team of staff from Aurecon, QED, GHD and GTP, evaluates the effects of the proposed project. Decisions about the project will then be made taking these effects into account and will include appropriate mitigation and management measures. The report also details the project and enables the community to provide feedback on aspects of the project.

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.

The Project Impact Report is being publicly displayed for a period of **20 business days**, during which time, submissions are invited commenting on any issues associated with the project. Formal comment is also requested from government agencies during this public display period.

The report is available on compact disc and on the project website: www.infrastructure.sa.gov.au

Hard copies are on display at a number of locations throughout the study area, see website for display locations. This Executive Summary of the report is also available.

A Supplement document will address the submissions received from the public and government agencies. It will also outline the findings of further investigations since the Project Impact Report was prepared.

The Supplement, together with the Project Impact Report, will be considered before the proposed project is finalised for approval by the Australian and South Australian Governments (Figure 2).

The Project Impact Report and this Executive Summary have been written for interested groups, individuals, businesses, government agencies and local government to help explain the project and its effects.

South Road Superway Indicative Project Timeline

2008 - April 2009

Investigation of possible options and preliminary environmental, social and economic investigations

Mar - Sept 2009

Stakeholder engagement

April 2009

Design options assessment workshops held with key stakeholders, industry representatives and government agencies

April - Sept 2009

Preliminary concept planning of proposed project

April - Sept 2009

Environmental, social and economic investigations. Ongoing consideration of stakeholder feedback

Oct - Nov 2009

We are here

Public consultation on Project Impact Report

February 2010

Supplementary document to Project Impact Report

Early 2010

Australian and South Australian Government approval of proposed project

2010 - 2011

Land acquisition and detailed design. Early works packages.

2010 - 2013

Construction

Figure 2: Indicative Project Timeline.

3. Community and Stakeholder Engagement



»» Business and Landholders

- › broad support for the project but further information and design options were sought
- › heavy vehicle access to businesses must be retained and/or enhanced in the study area
- › reduced congestion and enhanced access in local roads for heavy vehicles are key benefits
- › financial viability of businesses
- › property values should not be affected
- › land acquisition is a significant concern

»» Utility Providers

- › numerous underground services are likely to be affected by construction, including high voltage electricity, gas, water, sewerage and fibre-optic
- › services affected to be relocated in collaboration with utility providers
- › community consultation on potential service relocations is required
- › construction and relocation works should be timed to avoid peak usage periods
- › some service relocation will be technically challenging and expensive

»» Members of Parliament

- › MPs in the study area, are supportive of the project and the vision for the north-south transport corridor
- › they have offered to assist with community consultation and engagement activities
- › they have sought further information on the project to enable informed responses to their electorate

The key issues of concern raised during the early stakeholder engagement have been collated below by key stakeholder group.



State Government Agencies

- › agencies support the project and Government's broader vision for a north-south transport corridor
- › linkages are required with other projects north and south of this section of South Road
- › need to ensure integration with other Government strategies, including the 30-year Plan for Greater Adelaide
- › opportunities for increased public transport and cycling should be provided
- › environmental and economic issues associated with the project should be considered in a broader metropolitan context

Port Adelaide Enfield Council

- › councillors and staff support the project and its broader long term aims
- › key priorities are reduced congestion and improved safety in the local road network
- › east-west connectivity across the study area should be enhanced if possible
- › Regency Park Reserve and Regency Park Golf Course are of regional significance and high value to the local community
- › upgrading of major stormwater drains in the study area to a 1 in 20 year standard is a key opportunity

Following public announcement of the project by the Australian and South Australian governments on 19 February 2009, the community and stakeholders – businesses, residents, government and non-government organisations in the study area – were engaged to obtain a baseline level of information and seek initial feedback on the project. The project team used this input to inform the preparation of concept design options and the Project Impact Report.

Also consulted were Port Adelaide Enfield Council, interest groups such as the RAA, SA Freight Council and SA Road Transport Association, utility providers, and Members of Parliament whose electorates are in the study area.

The early stakeholder engagement process included targeted survey interviews with key businesses on or adjacent to South Road, meetings, telephone calls and emails, as well as a project letter mailed to more than 10,000 residents, businesses and other organisations located in the study area.

The early stakeholder engagement process (Stage 1) has generated a substantial amount of core information from stakeholders, including businesses, residents, interest groups, government agencies and non-government organisations.

The Stage 2 Stakeholder and Broader Community Engagement process will begin in late 2009. Stakeholders, affected landholders and the broader community can make submissions commenting on the Project Impact Report. Project open days and meetings are planned in late 2009.

Details will be provided on the project website www.infrastructure.sa.gov.au

4. Need for the project



The state and regional benefits of the proposed South Road Superway Project will come from the improved access through and within metropolitan Adelaide for freight transport. South Road is one of two key north–south movements for freight transport, the other being Hampstead Road – Portrush Road (Figure 3).

South Road connects with the key major freight corridors:

- › Port River Expressway
- › Salisbury Highway
- › Grand Junction Road
- › Sir Donald Bradman Drive
- › Southern Expressway

The northern end of South Road is part of the significant northwest industrial precinct which extends from Outer Harbor, Osborne, Port Adelaide, Wingfield, Dry Creek and Regency Park, forming one of metropolitan Adelaide's most important industrial and employment hubs.

The proposed South Road Superway Project will provide a high standard link with the Port River Expressway, Salisbury Highway and Northern Expressway (currently under construction). It will enhance freight movement, ease congestion and improve safety for all road users.

The strategic need for this project was highlighted at the state level through the Strategic Infrastructure Plan. It will contribute to South Australia's Strategic Plan strategic infrastructure target. The Strategic Infrastructure Plan identifies the need

to upgrade the existing South Road to provide an improved north–south corridor for metropolitan Adelaide.

South Australia's Strategic Plan Target 1.16 identifies the need to invest in strategic infrastructure such as transport, to achieve other targets within the plan. The efficient movement of freight and effective access to key air and sea ports in Adelaide is fundamental to achieving this target, and contributing, in particular, to targets 1.5 (economic growth) and 1.12 (exports).

As the only continuous transport link between the northern and southern suburbs, South Road is a crucial freight route for business and industry. South Road also forms the spine of connections to the major inter-modal transport hubs of Adelaide, which are highly reliant on an efficient north–south road corridor.

Given its key role, South Road should be a high standard road suitable for use by large volumes of traffic. It would advance the National Network objectives of improving safety, reliability and efficiency for the movement of people and goods interstate, as well as linking major regional centres, major import and export facilities and population centres within the state.

A continuous north–south link would reduce traffic congestion and travel time delays at major intersections or rail corridors via grade separation (above ground level). Upgrades along South Road would also:

- › improve traffic flow attributes to reduce the potential and incidence of crashes (particularly rear ends and those involving pedestrians) at various locations
- › provide safer property access
- › provide safer local road access
- › reduce at-grade rail crossings
- › upgrade pavement, drainage and road lighting
- › enhance the environment along the road where achievable, through additional tree planting and landscaping
- › cater, where feasible, for the needs of the local community affected by the upgrading works
- › cater for all road users including pedestrians, people with disabilities, public transport and cyclists
- › minimise costs consistent with the other objectives
- › deliver a 'value for money' transport solution consistent with the *Strategic Infrastructure Plan*: a non stop, free flowing north–south corridor.

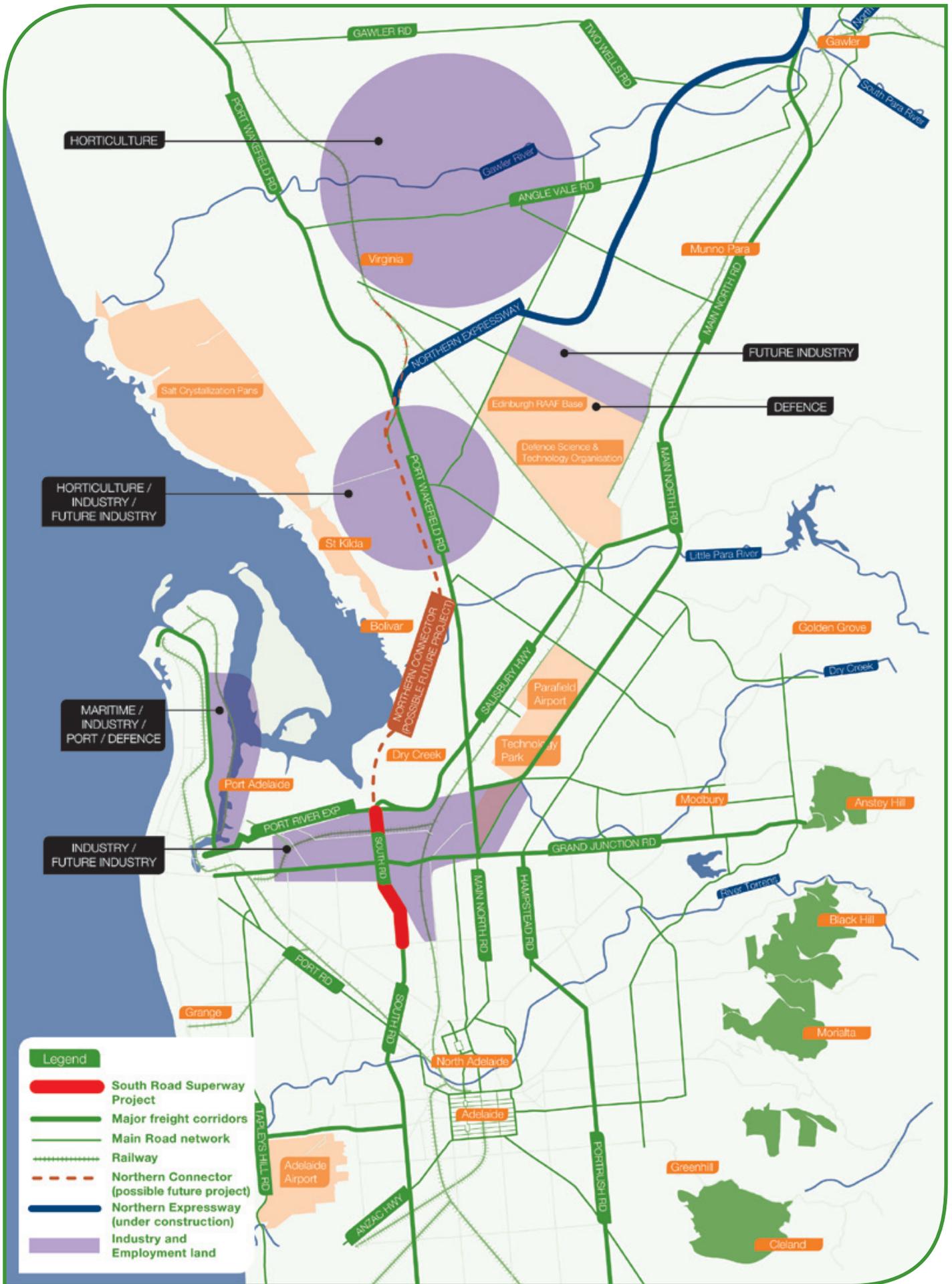


Figure 3: Project Location

5. Alternative concepts considered



The Superway was selected, in a comprehensive and rigorous process, as the most practical and feasible course of action for upgrading South Road between Regency Road and Port River Expressway.

Maintaining status quo

Should the status quo on South Road remain until 2031, the road network will be significantly congested. It is also expected that more traffic will be passing through residential and industrial areas, having a negative impact on amenity. There will also be issues of accessibility to businesses and increased risk of crashes.

Concept options considered

The design options were formulated after extensive consultation, which DTEI facilitated with key stakeholders, businesses and industry groups. The Australian Rail Track Corporation (ARTC) and Port Adelaide Enfield Council were also regularly consulted throughout the process. The information collected on business needs, access routes, the number and nature of vehicle movements, along with suggestions for improvements to the local road network has informed the concepts.

An underpass option was considered but not pursued further due to numerous issues identified by DTEI including groundwater, soil contamination and impact on major services.

A rigorous investigation process developed four feasible design options, being:

- › N1 – at grade with overpasses at Cormack Road/South Terrace and Grand Junction Road
- › N2 – at grade with overpasses at Cormack Road/South Terrace and Grand Junction Road and with a narrower road corridor than N1 to reduce land acquisition effects
- › N3 – short elevated roadway extending from Port River Expressway to just south of Grand Junction Road
- › N4 – longer elevated roadway extending from Port River Expressway to just south of Days Road.

The elevated roadway options were identified as an alternative solution as they reduce the impact of land acquisition on abutting businesses by providing service roads and ramp connections under the elevated roadway.





Preferred concept selection process

A design options assessment workshop, in April 2009, brought together staff from DTEI, the specialised consultancy project team and representatives from Port Adelaide Enfield Council and ARTC to review and assess the four concept designs.

A comprehensive review and assessment of each of the four design options used a pre-determined multi-criteria monetary and non-monetary matrix with defined weightings for each criterion. The criteria adopted for the assessment process were derived from the project objectives covering social, environmental and land use aspects. Each main criterion was then assigned a weighting to reflect its perceived relative importance to key stakeholders. A sensitivity test on the assessment also ensured the best design option, delivering the best outcomes and minimising effects.

Preferred concept

Option N4 allows greater length of free-flowing South Road to be established (4.8 kilometres) compared to any other option (N1, N2 or N3).

The longer elevated roadway option (N4) is considered the optimum design solution. It will improve traffic efficiency and management; minimise construction effects such as property acquisition and timeframes; enhance road safety and local accessibility; optimise east–west accessibility for commuters and freight; and provide a longer design life, and lower whole of life costs.

The longer elevated roadway option will also help achieve the Government’s broader economic, social and environmental priorities.

The South Road Superway Project creates the necessary ‘system wide’ accessibility improvements to support major economic activity in the northern and western regions and also create greater certainty and be a catalyst for new investment in this state. It closes the travel time gap between the north and south to the benefit to the wider Adelaide community, by reducing household travel costs and transport disadvantage.



6. Economic assessment



The Government of South Australia recently released its draft 30-year Plan for Greater Adelaide, reflecting stronger population growth, demographic change, land development and employment increases over the next 30 years.

A key rationale for the directions and targets in the new plan primarily relates to the economy and jobs creation. A key objective of the plan is to create an environment that promotes stronger economic performance through more efficient and effective land use arrangements to support the growth of new industries.

Future drivers of economic development in the broader Northern Region of Adelaide and the Barossa Region are expected to come from key industries already in the area and those that contribute to the state's export industries. The broader region's industrial base is strong and diverse with automotive, defence, electronics and agricultural cultivation and production. The state maintains an automotive manufacturing component clustered around the General Motors Holden assembly plant at Elizabeth. New specialisations for the state are reflected in the expansion of the Edinburgh Defence Cluster anchored by the Australian Government's Defence, Science and Technology Organisation.

The region's northern extremity also has significant horticultural activities as well as viticulture, which will benefit from an efficient transport network to deliver exportable goods to South Australia's transport hubs such as the Adelaide Airport, Islington Rail Terminal, the Port of Adelaide and Outer Harbor.

Within the study area, there are two significant industrial areas at Wingfield and Regency Park. Both contain a significant number of metal-based manufacturers, as well as a range of manufacturers producing chemical, petroleum, coal, rubber and plastic products.

Other significant land uses include the AMCOR recycling site and cast metals precinct at Wingfield. 'Industry clusters' in the study area allow for the cost effective provision of infrastructure, shared facilities, an adequate buffer and appropriate location of heavy industry.

Also in the study area are freight terminals, warehousing, storage and commercial uses that take advantage of frontage to South Road. Food and beverage production is also present in the study area, a prime example being Coopers Brewery to the south.

The South Road Superway Project will generate substantial jobs and supporting activities over the course of its construction. The economic impacts from the construction phase are substantial, but its main impact will be felt once it is completed when 'flow on' social and economic benefits will be significant. The project will build on a number of pre-existing drivers and opportunities that have created the pre-conditions for this investment to be fully realised in social and economic terms.

The draft 30-year Plan for Greater Adelaide aims to create (through land use, key infrastructure and other policies) an additional 79,000 jobs in the Northern Adelaide Region with 2,440 hectares of employment lands to become operational within the next 30 years. Further north, the Barossa Region is expected to accommodate a further 38,500 jobs and 810 hectares of regional employment lands. The Western Region of Metropolitan Adelaide may see the creation of 46,500 jobs and 930 hectares of employment land coming on line.



The key targets supported by the north–south corridor include:

- › 52,000 additional manufacturing jobs in Greater Adelaide
- › 9,100 additional defence jobs
- › 25,000 transport/logistics and warehousing jobs.

It is clear that major infrastructure projects can reshape metropolitan regions, especially in terms of industrial land demand.

This has been evident in Melbourne with the opening of the Western Ring Road in conjunction with Citylink, the more recent delivery of Eastlink, and in Sydney with the opening of the Westlink M7.



7. Description of the project



The South Road Superway Project begins at the Port River Expressway and Salisbury Highway interchange and extends to Regency Road approximately 4.8 kilometres to the south (Figure 1).

Project overview

The key objectives for the project are to:

- › reduce traffic congestion and travel time delays
- › improve safety
- › support the needs of industries and businesses within the study area
- › minimise effects on individual landholdings in terms of land acquisition and business disruption
- › maintain and enhance east–west connectivity within the study area
- › avoid effects on existing services, particularly large trunk mains
- › eliminate at-grade rail crossings where possible and minimise effects on the operation of the Wingfield rail line
- › minimise effects on the Barker Inlet Wetlands
- › minimise loss of open space
- › minimise noise and vibration effects
- › create improved landscape and urban design outcomes
- › minimise effects on businesses, residents, motorists and the community during construction.

The South Road Superway follows the existing alignment of South Road and passes through the suburbs of Wingfield, Angle Park and Regency Park which have significant industrial and business activity; and the suburbs of Ferryden Park (now Westwood) and Angle Park where residential development is the predominant land use.

The elevated roadway structure will provide South Road with three lanes in each direction north of Grand Junction Road and two lanes in each direction south of Grand Junction Road. The Superway will be a divided carriageway elevated roadway that will overpass South Terrace, the Wingfield rail line (allowing the double stacking of containers on trains), Cormack Road, Grand Junction Road and Days Road before returning to an at grade carriageway in the vicinity of Taminga Street. Refer to Figure 4.

The Superway will generally have a 9 metre clearance over local roads. Access to and from the Superway will be provided by the Port River Expressway–Salisbury Highway interchange, by ramps at Grand Junction Road and ramps located south of Days Road.

Service roads under and parallel with the Superway will provide access to properties and local roads along the existing South Road alignment.

The proposed height of the structure is required to:

- › ensure safety during construction
- › allow traffic flow under the structure during construction
- › allow for double stacked containers to be transported by rail
- › create an elegant and striking structure that allows some sunlight to penetrate below.



Figure 4: Artist's impression of South Terrace, Wingfield Rail Line with Superway above

The existing South Road and Grand Junction Road intersection will be replaced with an intersection that incorporates Grand Junction Road, the South Road service roads and the on and off ramps for the South Road Superway (Figure 5).



Figure 5: Artist's impression of South Road Service Road/Grand Junction Road intersection with Superway above



Figure 6: Artist's impression of Cormack Road T-junction with South Road service roads with Superway above



Along South Road between Regency Road and the Port River Expressway, most intersections will be altered by this project. Traffic signals will be maintained under the Superway at Cormack Road, Kateena Street, Days Road and Regency Road. Alterations to the signalised intersections in the network include:

- › South Road to connect to Cormack Road with a T-junction (Figure 6)
- › Kateena Street to have left turn in/out and right turn out (detailed design will determine if the right turn can be maintained)

The project will also include a number of local road improvements in the wider study area:

- › extending Naweena Road and Rosberg Road to Grand Junction Road and providing traffic signals at the resultant intersection
- › extending Naweena Road to Regency Road (via Gallipoli Grove) and providing traffic signals at Regency Road
- › converting Davis Street, between Cormack Road and Francis Road, to a through road
- › providing a connection from Salisbury Highway into Rafferty Street, extending Rafferty Street to Cormack Road and provide traffic signals at the resultant intersection
- › upgrading Hanson Road to two lanes in each direction between Grand Junction Road and Cormack Road.

Design principles for the project are:

- › designed and built to Australian Standards, DTEI Standards and guidelines, Queensland Department of Main Roads guidelines, Austroads guidelines
- › no direct property access to the Superway
- › facilities for pedestrians and cyclists at ground level
- › roadway lighting for the Superway, ramps and along service roads
- › posted speed of the elevated roadway: 90 km/h
- › posted speed of South Road between Aruma Street and Regency Road: 70 km/h
- › posted speed of the ramps: 60 km/h
- › posted speed for the service roads: 60 km/h
- › posted speed for local roads: 50 km/h.

Urban design framework

The Urban Design Framework developed for the South Road Superway Project establishes a set of design objectives and principles to guide development of the engineering, urban and landscape design elements of the project. Its main features are:

- › providing visual relief to motorists and the community
- › ameliorating the visual intrusion effects of large infrastructure elements
- › increasing biodiversity within the area through the use of native plantings where possible

- › creating a landscape of suitable scale and drama to complement the surrounding built form and infrastructure
- › creating urban design elements that add value to the study area.

The concept design for the South Road Superway has aimed to create a light, elegant and striking design. The curved form structure has light and dark grey concrete tree-like columns that separate the Superway to allow some sunlight penetration to the area beneath. Curved light poles and noise barriers will soften and enhance the iconic structure. The concept design is shown in Figure 7. This design is yet to be subject to detailed design, which may alter the final South Road Superway shape and supporting structure design.

The introduction of new footpaths, street trees, and verge and median planting will improve the visual character of the project and help to break up the visual dominance of the roadway. The typical landscape treatments shown use a palette of native species, planted in a horizontal banding pattern. Street trees are a prominent feature of the landscape treatments. They will create a strong linear visual element in the landscape, provide a softer vertical element in contrast to the Superway structure and help reduce the visual scale of the infrastructure.

Noise barriers may be required at some locations within the study area. Final locations, design and construction materials will be determined during the detailed design phase of the project. Noise barriers would be designed to incorporate a combination of patterning, colour, lighting and screen planting.

The project proposes several changes to the local road network to improve movement of local traffic through the area. The changes will not have significant visual effects but do offer the potential to improve streetscape quality by introducing quality road infrastructure with associated footpaths and street trees.

Medians allow urban design and landscape improvements. A banded pattern of low planting is proposed. Vertical sculptural elements within the median may be explored, potentially in partnership with artists.

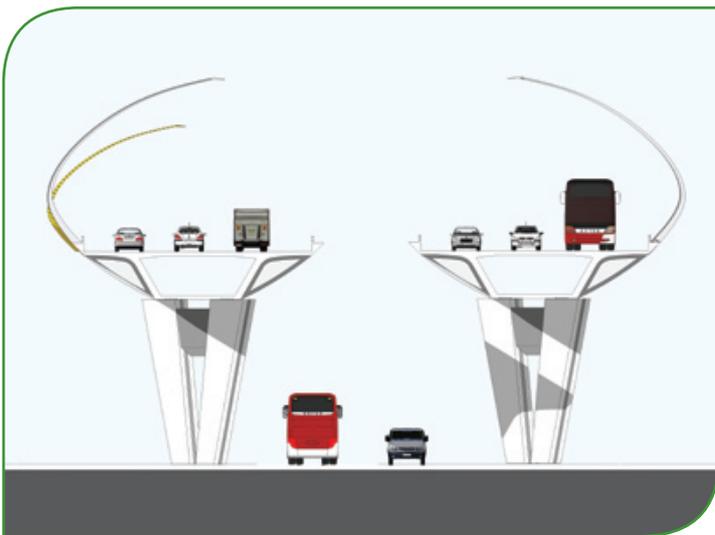
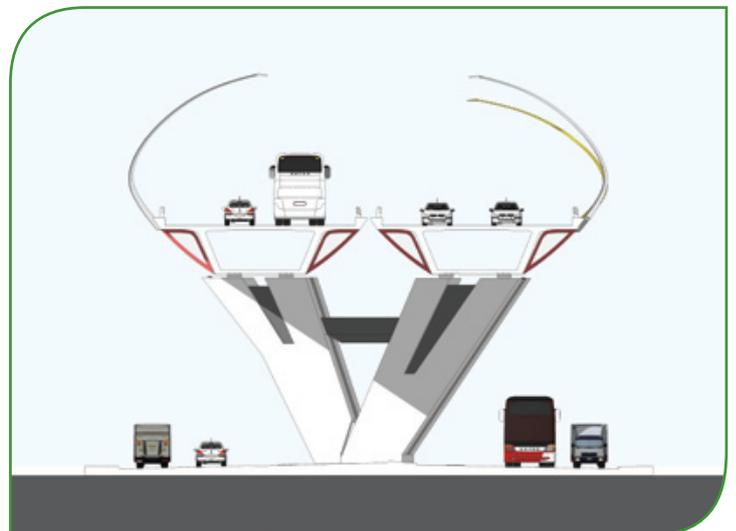


Figure 7: Artist's impression of Superway design and typical cross sections

Dual pier (above) - proposed north of Grand Junction Road

Single pier (right) - proposed south of Grand Junction Road

Note: These cross sections are conceptual only and final structure design will be subject to detailed design requirements.



8. Effects of the South Road Superway



The South Road Superway Project will improve access for businesses to the South Australian industrial transport hubs.

The project will have an effect on traffic patterns to South Road and the local road network, and visual exposure of business along South Road. It will allow future growth opportunities for businesses.

Business and community profile

The study area provides significant employment. Many employees are technicians, trade workers, labourers, machinery operators and drivers.

Key access roads within the study area most commonly used by business stakeholders are South Road, Grand Junction Road and Cormack Road.

The proposed South Road Superway will enable direct access to service roads for businesses abutting South Road. This will allow improved east-west connectivity across South Road at key locations, providing for the continued operation of businesses that trade within the study area. Key east-west movements under the Superway are proposed at:

- › South Terrace
- › Cormack Road
- › Senna Road
- › Francis Road
- › Rosberg Road
- › Grand Junction Road
- › Kateena Street
- › Days Road

Community services and recreation facilities within the study area are generally located on the western side of South Road. Residents will continue to have convenient access to residential areas, community services and recreation facilities.

The South Road Superway Project will improve access to metropolitan Adelaide and the Port River Expressway. Motorists will experience a more efficient journey, avoiding delays on major arterial roads and

connecting through to key transport hubs to the north and south of the study area. The overall improved transportation efficiency will promote further development of the industrial hubs located at Wingfield, Angle Park and Regency Park.

Land use and zoning

Six precincts identified within the study area generally show industry congregated north of Grand Junction Road in Precincts 1–4, and in the southeastern section in Precinct 6. Precinct 5, in the south-western section of the study area is predominantly residential.

Precincts 1 and 2

The land uses between Cormack Road and the Port River Expressway include a significant industry hub and open space.

Precincts 3 and 4

The land uses between Grand Junction Road and Cormack Road, on both sides of South Road, are almost entirely industrial and commercial with some pockets of vacant residential land existing towards the extremities of the study area boundaries.

Precinct 5

Land uses between Regency Road and Grand Junction Road (west) have a high degree of residential concentration and include a mixture of recreation, education and light industry.

Precinct 6

Land uses between Regency Road and Grand Junction Road (east) are dominated by industrial and commercial uses. There are also warehousing and recreation uses in this precinct.

The effective and ongoing operation of businesses along and near South Road is of significant importance to the region's future viability as an industrial and employment hub.

Access, convenience and commercial exposure are potential effects for businesses fronting South Road and their patrons.

Business operation along South Road may be affected by the potential loss of access directly onto South Road and reduced patterns of movement across South Road. New service roads are proposed to help maintain business presence along South Road and accessibility to premises. The extension of the local road network will also help to assist in further connecting businesses within the study area and provide alternative routes for business travel patterns.

Existing land use and zoning will not, in general, be significantly altered as a direct result of the project. The visual exposure for businesses that use South Road as a frontage, will be reduced but proposed service roads and improvements to the local road network will help with a practical level of business presence.

Property

Property acquisition concerns were a predominant theme identified through community engagement activities, particularly for owners and occupiers of directly affected properties.

The majority of land to be acquired to enable construction of the project is in private ownership; some land is publicly owned. The scale of the effect of acquisition on any individual property will depend on the current property size, the amount of land proposed to be acquired and the owner's current and intended use for that property. Where possible, land acquisition has been limited to within the road widening plan for South Road.

Construction of the project will require full or partial acquisition of a number of properties. Along South Road it is anticipated that 19 properties will be fully or partially acquired. Eight (8) of these properties are owned by the Crown, and 11 are in private ownership. To enable local road upgrades, it is anticipated that 11 properties will be fully or partially acquired. Six (6) of these properties are owned by the Crown or Local Council, and 5 are in private ownership.

Businesses along South Road are also expected to be indirectly affected by changes to South Road access and through alterations to the local road network. A number of properties beyond South Road would also be indirectly effected by the South Road Superway Project through changes to local access and visual amenity.

Any land that is acquired will be in accordance with the provisions of the *Land Acquisition Act 1969*. In addition to compensation at market value, which is determined on the basis of value without taking into account the effect of the project, the owner is also entitled to other costs incurred on sale or purchase of a replacement property, general disturbance and reimbursement of reasonable professional fees. In the case of partial acquisitions, injurious affection and severance may also be payable.

Compulsory acquisition is a statutory process under the *Land Acquisition Act 1969*, which enables DTEI to acquire the land necessary to provide an efficient road system. It also has the legal means for reaching agreement about the amount of compensation payable if an agreement cannot otherwise be negotiated. If affected parties object to the proposed acquisition or wish to vary the amount of land to be acquired, a certain legal process must be followed.



Minimising the number of properties directly affected by acquisition by careful concept planning and design was a key principle for this project. The alignment minimises the need for property acquisition by locating the Superway close to existing property boundaries where feasible, and avoiding dense residential areas.

During the concept design phase, the project team met with property owners and occupiers to gain an understanding of their needs and the way their properties are currently being used. The meetings led to minor modifications to further minimise the effects of acquisition.

The proposed South Road Superway will require less land acquisition than a ground level solution and will therefore reduce the economic impact to businesses and the project itself. Continued business viability in this industrial hub is critical.

It is envisaged that the South Road Superway Project would not have any adverse effect on property values across the region. Similar road projects undertaken both locally and interstate show substantial positive demand for properties in proximity to new transport corridors.

Non-Aboriginal heritage

The study area, now incorporated within the Port Adelaide Enfield Council area, was first surveyed in 1837, and development followed in the late 1840–50s.

The land surrounding Enfield was predominantly a farming area consisting of pastures and open land. The land to the west of South Road was developed with post-war housing in the 1950s, much of it owned by the South Australian Housing Trust. These suburbs are now marketed under the development name of 'Westwood'.

Regency Park was originally established as the village of Tam O'Shanter, with a school and hotel constructed between 1850 and 1860. The village was a semi-rural area, which mainly produced vegetables and dairy products. The land was acquired by the City of Adelaide in 1879, and a sewage farm operated on the land between 1881 and 1966. Sunnybrae Farm buildings, the former residence of the manager of the Islington Sewage Farm, are still present on the site.

In 1952, a large area at Wingfield was developed as a landfill dump. Around this land use, a range of industrial developments have been established and are still dominant.

A review of heritage surveys identified nine state and local heritage listed places in the South Road Superway study area. Of these, eight State Heritage listed sites are all located in the southeastern region of the study area. It is likely that the project will have an effect on one of the State Heritage listed places, the Sunnybrae Farm complex.

The South Road Superway Project involves an upgrade of the local road network and will extend Gallipoli Grove to provide access through to Naweena Road. Construction of the Naweena–Gallipoli link will not require land acquisition from the Sunnybrae Farm complex. However, the new road would run within 15 metres of the eastern boundary of complex. The local road upgrade is likely to require an adjustment of the access driveway into the property. Any effect on character and amenity will be managed appropriately.

If required, a heritage management plan will be prepared for the Sunnybrae Farm complex with the key consideration of maintaining its heritage integrity.



Aboriginal cultural heritage and native title

The proposed South Road Superway Project is located within the traditional lands of the Kurna Aboriginal people. In pre-colonial times, more than 20 Kurna local clans lived on the plains from Crystal Brook in the north to Cape Jervis in the South. There were large scale summer gathering and ceremonial progressions along the coastline, fishing, meeting and trading with visitors from other tribes, and following and celebrating the journeys of creation of Ancestors of the Dreaming such as Tjilbruki. During the winter months, the Kurna moved inland to more sheltered locations in the Mount Lofty Ranges foothills and in villages along the coastal streams.

The project is part of a highly built-up urban environment with very little evidence remaining of the original topography, vegetation or geology. Both the eastern and western verges of South Road have been extensively modified and are heavily built up with industrial buildings.

Native title relates to the rights and interests of the Aboriginal people and land and waters, according to their traditional laws and customs, where they have maintained a continuous connection with their land or waters. Native title rights may include the possession, use and occupation of traditional country. Native title may exist in areas where it has not been removed (extinguished) by an Act of government.



The study area is within the claimed native title lands of the Kurna Native Title Claim (SAD 6001/00). Under the *Native Title Act 1993*, consultation must occur between DTEI and the Kurna Native Title Claim representatives if any land subject to Native Title is to be affected. The claim, lodged with the National Native Title Tribunal in 2000, extends from the Fleurieu Peninsula to the Southern Flinders Ranges.

There have been a number of previously recorded/registered Aboriginal heritage sites in close proximity to the current study area. These consist of burials, artefact scatters and isolated artefacts. However, no registered sites lie within the study area. Given the close proximity of registered sites to the north of the study area, there is some chance for archaeologically significant sites to be uncovered by construction work in the area.

DTEI will seek legal advice from the Crown Solicitor's Office as to whether native title has been extinguished on lands to be acquired for the project. Native title is likely to have been extinguished on freehold land and road reserves.

Consultation and liaison with Kurna community representatives will aim to develop a cultural heritage management plan to manage any artefacts or Aboriginal sites that may be discovered during construction.

If a possible site is discovered, the advice of an archaeologist will be sought and the Aboriginal Affairs and Reconciliation Division, Department of the Premier and Cabinet advised. Aboriginal cultural heritage management requirements for the project will be included in the Project Environmental Management Plan (PEMP).

Visual assessment

Visual assessment explores the visual impact on the area surrounding the South Road Superway Project, taking into account the existing environment and surrounds.

The catchment area is generally flat with localised mounding and is heavily built up. Views out of the catchment are often limited to along road corridors. Long distance views to the Mount Lofty Ranges are possible from several locations within the visual catchment, most prominently through large tracts of vacant land.

Foreground views in the catchment are limited to landscaping of private properties and public open space. Large eucalypts are the dominant form of vegetation in the visual catchment area, particularly around the campus settings of TAFE SA, Regency Campus and the Parks Community Centre. The Regency Park Golf Course is the largest area of open space in the visual catchment and is well vegetated between fairways.

Sunnybrae Farm is a landmark site in the catchment due to its heritage value and regular use as a function centre. Other key sites in the catchment have a community focus and include Parks Community Centre, TAFE SA Regency Campus, and Regency Park Golf Course and sports reserve. Immediately north of the Salisbury Highway interchange, the Cheetham Salt Limited salt fields provide interesting visual character; the wetlands are an important area of bird habitat and a landscape feature.

The project will pass through an industrial precinct greatly trafficked by heavy vehicles but there are also residential areas and open space. These land uses are conflicting in nature and the interface between them is an important consideration.

The visual effects of the project on the surrounding environment are potentially significant. The height and scale of the Superway will dominate the landscape character of the surrounding land. More specifically, the exit and entry ramps may block east–west views.

Viewers in closest permanent proximity to the Superway will be affected to the greatest degree, particularly those people living or working nearest to the structure.

Reducing the impact of such a large structure requires urban design interventions on the ground level and for the structure itself. Treatment at ground level will use wide footpaths and median strips and provide mass planting to contrast the structural elements of the Superway.

Architectural input into the design of the elevated roadway structure will consider the pier design and aim to minimise the visual interruption of east–west views. Architectural treatments will also focus on breaking down the scale of the Superway to create a visually pleasing structure that sits well in the mixed use environment. East–west visual linkages will be emphasised at ground level to reinforce the connection between the two sides of the road.

Underneath the elevated roadway, effort will be made to introduce planting and smaller scale vertical elements, such as bollards, to break down the scale of the structure. Trees and planting along footpaths will be used to provide a 'human scale' to areas where there is pedestrian movement and in particular adjacent to the residential areas of Westwood.

Noise barriers and reinforced earth retaining walls at entry ramps will be designed to incorporate artwork patterning and colour to reduce their visual intrusion. This philosophy will be applied for the whole project but extra attention will be given to structures fronting onto Regency Park Golf Course and Westwood residential area.

The project provides the opportunity to revitalise urban areas adjacent to the South Road Superway through a number of urban design improvements including upgrading pedestrian areas such as footpaths and median landscaping, creating gateway statements to create a sense of arrival at key destination points, and upgrading or rehabilitating adjacent public open space. The structure will also open up views across Adelaide for people travelling along the Superway.





Native flora and fauna habitat in the project footprint has been highly altered since the Adelaide metropolitan area began expansion in 1855.

Flora and fauna

Early maps of South Australia show extensive freshwater swamps and lagoons stretching from the Port River in the north to the Patawalonga Creek and Grovone (now part of Glenelg East) in the south. Included were the areas that now comprise the Barker Inlet Wetlands.

Only a few areas of planted vegetation habitat remain:

- › Regency Park Golf Course
- › Barker Inlet Wetland
- › road verges
- › drainage swales.

Remnant flora and fauna habitat in the Port Adelaide Enfield region has been progressively cleared since 1855 when Port Adelaide was first declared a corporate town. The study area therefore comprises virtually no remnant native vegetation. However, the Barker Inlet Wetland system and planted native trees within the Regency Park Golf Course and roadside verges do provide habitat for common native flora and fauna species.

A search of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) Protected Matters Search Tool was completed to identify if species of national conservation significance have potential to occur in the project footprint. The EPBC Act is the primary Commonwealth legislation protecting the environment on Commonwealth land and controlling significant impacts on matters of national environmental significance.

No flora species listed under the EPBC Act were identified as potentially occurring in the project footprint; one ecological community was identified as potentially occurring in the project footprint. The search also identified ten fauna species, two threatened species and ten migratory or marine protected species as potentially occurring within the study area; none of them were identified as occurring in the project footprint during the recent fauna survey.

Due to the small amount of vegetation required to be removed as well as the altered nature of the vegetation in the study area, it is unlikely that any native species including those of conservation significance will be significantly impacted by the project. In addition, management measures are being developed, which when implemented, will mitigate or minimise any effects of the construction and/or operation of the road on native flora and fauna.

Surface water and groundwater

Water resources, whether surface or subsurface, are a vital resource and any effects on their quality are important for the sustainability of the area, as well as the environment in general.

The three catchments in the study area are:

- › South Road, North Arm West (NAW)
- › Dunstan Road, North Arm West (NAW5)
- › Hindmarsh Enfield Prospect (HEP).

Stormwater in the NAW trunk is conveyed by a series of large box culverts and unlined open channels. Between Grand Junction Road and Port River Expressway the conduit takes the form of an open unlined channel.

The NAW5 catchment is small area of 233 ha. Stormwater is conveyed by an open channel from Grand Junction Road to Cormack Road where the drain discharges into Barker Inlet Wetlands. A significant proportion of the 1,311 ha HEP catchment is residential upstream of Regency Road and predominantly industrial, including rail yards, downstream.

Barker Inlet Wetlands, located immediately north of the Port River Expressway, are managed by Port Adelaide Enfield Council and were originally constructed for flood alleviation. They also have an added water treatment function.

The drainage design has minimised the use of box culvert drains as much as possible to maximise the capacity of the drain adjacent to South Road to receive overland flows. The drainage design proposes additional water sensitive urban design treatments under the pier structures of the Superway to ensure that the quality of water discharged by the system is at least equivalent to current conditions.

Port Adelaide Enfield Council may in the future augment the drainage channel under the pier structures of the Superway to achieve the ultimate design capacity of the drain. This will require consideration of constraints such as Superway piers/columns, maintenance track, cycle lanes, services, and clearance requirements.

During construction, a monitoring program will be set up to observe any influence the project may have on the existing regional soil or groundwater conditions through direct or indirect contamination.

Potential impacts will be minimised and managed by implementing mitigation measures incorporated in a Construction Environmental Management Plan (CEMP) and an Operational Environment Management Plan (OEMP).





The study area's existing transport network currently operates at capacity during peak periods. The predicted rise in traffic volumes on the current network will significantly increase delays and congestion, particularly along South Road and Grand Junction Road if no action is taken.

Transport

South Road currently forms part of the Sydney–Adelaide corridor, Melbourne–Adelaide corridor and Adelaide–Perth corridor. South Road links into Salisbury Highway and Port Wakefield Road to provide one of the main connections to the Mid-North and Riverland areas of South Australia, as well as to northern Victoria and New South Wales via the Sturt Highway. Grand Junction Road links into Hampstead Road, Main North Road and Port Wakefield Road and provides connections to the South Eastern Freeway (Figure 3).

The primary freight roads within the study area are Cormack Road, Francis Road, South Terrace, Johansson Road, Rosberg Road, Hanson Road, Kateena Road, Wirriga Street, Taminga Street, Aruma Street, Birralee Road and Naweena Road. Approved freight routes will be maintained but access within the study area will be changed.

Existing traffic volumes on South Road range from 29,100 vehicles per day immediately south of the Port River Expressway–Salisbury Highway Interchange to 49,000 vehicles per day immediately south of Grand Junction Road. Daily volumes on Grand Junction Road vary between 42,700 vehicles per day immediately west of Churchill Road and 27,000 vehicles per day 500 metres west of South Road. The existing traffic volumes along Regency Road vary from 22,300 vehicles per day west of South Road to 29,600 vehicles per day east of South Road. The traffic volumes on South Road and Grand Junction Road are similar to volumes on Port Road and Main North Road.

Commercial vehicle volumes are as high as 16% on South Road and Grand Junction Road with a significant proportion (up to 35%) of the commercial traffic being heavy vehicles (semi-trailers, B-double and A-double).

Between 2003 and 2007 there were 637 crashes on South Road between the Port River Expressway interchange and Regency Road (Regency Road intersection included). Of these, 465 resulted in property damage; there were 170 casualties and two fatalities. It is predicted that the project will reduce this high number of crashes along South Road and Grand Junction Road.

The project will have an effect on regional and local traffic movements within the study area. It will change the access arrangements for a number of roads and some traffic will be redirected to alternative roads (Figure 1).

Naweena Road and Rosberg Road will be extended to Grand Junction Road and traffic signals installed at the resultant intersection. The southern end of Naweena Road will be extended to Regency Road (via Gallipoli Grove) and traffic signals installed. Elsewhere Davis Street, between Cormack Road and Francis Road, will be converted to a through road and Salisbury Highway will be connected to Cormack Road via Rafferty Street; traffic signals will be installed at the intersection with Cormack Road. On the edge of the study area Hanson Road will be upgraded to two lanes in each direction between Grand Junction Road and Cormack Road

The predicted daily traffic volume on South Road for the year 2031 (provided by DTEI) ranges from 128,000 to 136,000 vehicles per day. This large increase is based on the predicted growth of employment and population as well as residential developments contained in the 30-year Plan for Greater Adelaide. The project aims to expand the capacity of South Road to satisfy the traffic volumes predicted to use South Road and other roads within the study area in 2031.

It is expected that the local road improvements as well as Churchill, Cavan and Hanson roads will provide alternative routes during construction. In addition, access to businesses fronting South Road will still be maintained during normal operating hours.

The project will aim to minimise effects on the community, commuters, and businesses through the staging of works to minimise traffic disruption, and traffic will be monitored during and after construction.

Noise and vibration

Noise is a key issue for the South Road Superway Project. The study area experiences high traffic volumes and high percentages of heavy vehicles on South Road, Grand Junction Road, Regency Road and Days Road.

Much of the study area consists of industrial and commercial land uses and therefore there are limited sensitive locations within 500 metres of the main alignment. Noise logging at nine locations in the study area (26 March 2009–16 April 2009) determined existing noise levels along the proposed alignment.

The noise sensitive locations surrounding the proposed South Road Superway were assessed to determine potential noise and vibration effects. The residences at the northern portion of Days Road and TAFE SA Regency Campus were identified as areas likely to experience road traffic noise increases during both the day and night periods as a result of the project. The DTEI Road Traffic Noise Guidelines set criteria which are applicable to noise sensitive land uses. The following locations have been identified as sensitive locations within 500 metres of the main alignment:

- › Days Road residences
- › Angle Road residences
- › Regency Park School on Days Road
- › Regency Green Multicultural Aged Care Facility on Days Road
- › TAFE SA Regency Campus on Regency Road.

Current traffic noise level adjacent to TAFE SA Regency Campus is predicted to increase by 2031 as traffic volumes increase. Until the ultimate design solution for the South Road–Regency Road junction is determined it is not possible to determine noise effects and whether treatment is required at TAFE SA Regency Campus.

Noise generating activities will occur during construction, with elevated roadway and ramp construction through piling expected to be the noisiest. A concrete casting yard will be established within close proximity of South Road. It is likely that noisy activities will be carried out within the casting yard. Construction noise and vibration may affect residential properties in proximity to the proposed road but mitigation measures would be provided to ameliorate effects.

Noise barriers are proposed to mitigate the potential traffic noise effects for residences west of Days Road. Work practices will be implemented during construction to minimise noise effects from approved works outside of normal hours.

A construction noise and vibration management plan will be prepared which includes monitoring and consultation requirements.



To determine the existing background air quality conditions through the proposed route for the South Road Superway, ambient air quality monitoring was undertaken within the study area.

Air quality

Currently the cumulative air quality impacts measured at the most sensitive receptors (largely through the southern portion of the study area) are compliant with the stipulated National Environmental Protection (Ambient Air Quality) Measure.

Air quality monitoring was conducted over a three-week period approximately 460 metres from the edge of South Road, a distance allowing for representation of the background level of air quality in the study area.

An air quality impact assessment for the study area found that cumulative ground level concentrations through the expected traffic volumes to 2031 will comply with air quality guideline limits.

The analysis also gives some indication that traffic is expected to make a smaller contribution to air quality impacts into the future with improved fuel quality and technical advancements in combustion and emission control systems in motor vehicles into the future. Further, the

advancement of non-fossil fuel driven motor vehicles will reduce particulate matter and noxious air emissions.

The nature of the elevated structure design also allows for greater levels of air dispersion and a significantly reduced impact than if the emissions were exhausted at ground level.

A key air quality issue in the construction phase of the project will be management of dust. A Construction Environmental Management Plan will be prepared to ensure that dust impacts are minimised.

In the long term, the project will have significant improvements upon atmospheric air quality through the region by providing a road that enables free flowing traffic.



Greenhouse gases

The purpose of the South Road Superway Project is to improve traffic flows in the area and should therefore, in principle, result in a lower rate of emissions for the existing traffic volume.

Road design can reduce emissions associated with its use by using a smooth surface to reduce the rolling resistance of tyres (while maintaining wet weather performance), by minimising the curvature and gradient of the roads, interchanges and ramps, by minimising the requirement for stopping and starting, and by providing a direct route between major hubs in the metropolitan region.

The embodied materials emissions and construction fuel emissions associated with the construction of the road will be approximately 153,500 tonnes of CO₂ equivalent. Total emission savings over a 30-year period associated with the South Road Superway project based on construction, maintenance and operation have been estimated to be 68,500 kilotonnes of CO₂ equivalent.

Emissions associated with the construction and maintenance phase of the Superway will be offset by savings in emissions in the operation of the new project. This fact emphasises the importance of the design in order to improve traffic flow and enable traffic to maintain a constant speed where possible.





Geology, soils and contamination

The South Road Superway Project extends over two main physical environments, and two main geological and soil profiles. North of Grand Junction Road, the coastal plain is characterised by low lying land underlain by marine and estuarine soils. The soils comprise mixtures of clays, silts, sands, shell beds and organic zones. The subsurface profile is generally of low strength and high compressibility, and is expected to contain shallow, saline groundwater and coastal acid sulfate soils.

South of Grand Junction Road the lower alluvial plain is characterised by land that is slightly more elevated than the land to the south, and is underlain by alluvial soils representing outwash fan deposits from the major stream lines. These soils comprise sandy clays and clayey sands, with some sandy lenses representing buried stream lines. This subsurface profile is generally of moderate strength and compressibility. Groundwater is typically deeper (except where perched water is present in sandy lenses) and less saline than for the land to the south, and coastal acid sulfate soils are not generally expected to be present.

Fill generally overlies the natural soil profile within the study area, especially for the part of the project north of Grand Junction Road. It has been used to alter the natural low lying topography for the purposes of industrial development and storm-water drainage.

As the proposed South Road Superway will follow the alignment of the existing South Road, wind and erosion by surface water runoff is unlikely to be a major issue because most of the ground surface is sealed with road pavement and the site is flat and has well defined channelised drainage lines.

Previous desktop assessment reports have reviewed historical aerial photographs, land use zoning and kerbside inspections noting current use, visible evidence of chemical storage and contamination and development status. Buried waste has also been identified. There is also the potential that fill from contaminated sites has been brought in over time and due to the low-lying nature of the land north of Grand Junction Road there is potential for soil and ground-water contamination.

Acid sulfate soils are saline soils which, in their natural state, are saturated and contain pyrite (iron sulfide). Upon exposure of the soil to air by soil drainage or excavation, the pyrite becomes oxidised and sulfuric acid is produced. Acid sulfate soils are widespread in the coastal areas of South Australia.

Around North Arm Creek, potential acid sulfate soils are present (not actual acid sulfate soils). Potential acid sulfate soils are also expected to be present between North Arm Creek and Grand Junction Road. From Grand Junction Road southwards, the absence of estuarine soils would suggest that acid sulfate soils are unlikely to be present, though the CSIRO mapping did not cover the land south of North Arm Creek.

Before construction, the project will have to undertake contamination (soil and groundwater) investigations particularly where the risk of contamination is considered higher.

The construction of the project could have acid sulfate soil impacts as a result of activities such as:

- › excavation of soil from below the groundwater table (for example of spoil from the construction of pile footings for the Superway piers)
- › dewatering of the groundwater table to facilitate construction work for the pile footings below the Superway piers.

Any such acid sulfate soil impacts would be expected to be confined to the part of the study area north of Grand Junction Roads.

The Construction Environmental Management Plan will document environmental controls and measures to be implemented during the construction phase of the project, for issues such as:

- › topsoil management
- › soil erosion management
- › contaminated land management
- › hazardous materials management
- › acid sulfate soil management.

A comprehensive geotechnical investigation will be undertaken before construction along the length of the project, which will allow for a better understanding of the effects of the project on the site soils and ground-water.

Sustainability

Sustainability is a key objective of the project. It has been incorporated during the concept planning and project design phases, and will continue to be incorporated in the project during construction and operation including the development and implementation of a sustainability management plan.

A number of sustainability principles have been defined for the project, which has a 100-year design life.

The following project specific principles have guided development of the concept design, and will continue to guide development throughout the design, construction and operation phases of the project:

- › A principle of precaution was applied in selecting the preferred route and any potential environmental effects such as noise, visual amenity and community usefulness were key considerations. The route selected has the greatest benefits for society and the lowest effect on the environment, and is value for money.
- › The integrity of the study area for the enjoyment and use of current and future generations is a consideration. Sustainability considerations that may potentially be associated with the use of the new roadway include changes in fuel consumption, greenhouse gases and waste. Further considerations are the economic benefits of decreased travel times and improved road safety. The development and implementation of the Construction Environmental Management Plan and Operational Environmental Management Plan will mitigate negative impacts. A more effective road network that can be used by future generations instills positive intergenerational equity into the project.
- › The conservation of flora and fauna within the study area is a key consideration. The current condition of the native flora and fauna is of limited ecological value but some native habitat does remain and provides ecological

value and biological diversity. The Construction Environmental Management Plan and Operational Environmental Management Plan will aid in minimising the effects on areas of ecological value through the management of mitigation measures.

In addressing the principles of sustainability a sustainability management plan will be prepared with objectives and actions that will relate to:

- › water quality and conservation
- › minimisation of energy consumption and use of renewable energy sources
- › minimisation of contribution to greenhouse gas emissions
- › minimisation of air emissions' waste
- › minimisation and use of recycled materials
- › protection of terrestrial and aquatic biodiversity
- › management of land degradation and contamination
- › reduction in transport noise impacts
- › support and encouragement of social and community involvement and consultation
- › minimisation of social impacts of projects and infrastructure
- › contribution to the concepts of urban design/regeneration
- › enhancement of visual amenity
- › preservation of cultural heritage
- › growing prosperity by contributing to competitive freight transport logistics and networks.

9. Environmental management



The project will have effects on both the community and the environment. The assessments being undertaken as part of the Project Impact Report have identified a number of environmental management and monitoring measures to help achieve the environmental objectives and to ensure that DTEI is meeting its legislative responsibilities.

The Project Environmental Management Plan will detail the environmental protection requirements to mitigate and minimise environmental effects. The Project Environmental Management Plan's primary purpose is to ensure that the environmental requirements and commitments associated with the project are carried forward into the construction and post-construction phases of the project and are effectively managed.

The Project Environmental Management Plan will form part of the construction contract, and be the basis for the construction contractor to develop and document how the environmental management requirements will be implemented on site through the production of the Construction Environmental Management Plan.

Environmental audits during the construction phase will identify if the environmental objectives are being met. The audits will also identify non-conformances with relevant environmental legislation, the Project Environmental Management Plan, the Construction Environmental Management Plan and the requirements of the construction contract.

DTEI will be responsible for ongoing maintenance and the environmental performance of the South Road Superway.



10. Have your say



Interested parties are invited to submit written comments on the Project Impact Report.

All submissions received will be considered by DTEI and a response to relevant submissions will be provided in a Supplement Report.

Viewing the Project Impact Report

The Project Impact Report has been prepared to describe the South Road Superway and to evaluate its potential social, environmental and economic effects.

The Project Impact and Supplement reports will be considered prior to finalising the project for approval by the Australian and South Australian Governments.

The Project Impact Report can be viewed online from the **23 October 2009** at www.infrastructure.sa.gov.au

The Project Impact Report can be viewed from **2 November 2009** until **19 November 2009** at the following locations:

- › The Parks Library - Council Office
2-46 Cowan Street, Angle Park
- › Port Adelaide Enfield Council Office
163 St Vincent Street, Port Adelaide

For a complimentary copy of the Executive Summary and CD containing the Project Impact Report, please call **1300 638 789** or email **dtei.southroadsuperway@sa.gov.au**

Make a submission

You can comment on any aspect of the South Road Superway Project, but it must be in writing. You may include:

- › the nature of your interest in the proposal
- › your opinions on the proposal
- › any suggestions about improvements to the proposal
- › any additional measures you consider important
- › any errors or omissions in the Project Impact Report
- › any additional factual information you have, and its source
- › any other aspects relevant to the proposal.

To assist our recording of your submission:

- › include your name, address and date
- › list your points by issue
- › refer to the appropriate section of the Project Impact Report
- › ensure that hand-written submissions are legible.

All submissions will be public documents unless confidentiality is requested. DTEI may be challenged about this confidentiality through the *Freedom of Information Act 1991*.

Where to send your submission

Mark your submission as a Public Submission on the South Road Superway Project and forward by letter, fax or email on or before 5pm on **19 November 2009** to:

Project Director
South Road Superway
Department for Transport, Energy and Infrastructure
Reply Paid 1
WALKERVILLE SA 5081

Fax: (08) 8343 2005

Email: dtei.southroadsuperway@sa.gov.au

Open days

You are encouraged to attend Open Days, where project staff will be available to discuss the project and answer questions. The Open Days will be held on:

Monday 2nd November 2009, 11am to 7pm
Sunnybrae Farm, Tikalara Street, Regency Park

Tuesday 10th November 2009, 11am to 7pm
Angle Park Greyhound Racing Club, Lot 55 Cardigan St, Angle Park



For more information



Visit the project website:

www.infrastructure.sa.gov.au

Contact the project team:

Information line: 1300 638 789

Fax: (08) 8343 2005

Interpreter information: 1300 638 789

Email: dtei.southroadssuperway@sa.gov.au

Για περισσότερες πληροφορίες γι' αυτό το πρόγραμμα οδοποιίας τηλεφωνήστε στο **1300 638 789**. Διαθέτουμε και διερμηνείς.

Se desiderate altre informazioni su questo progetto stradale telefonate al **1300 638 789**. Ci sono interpreti a disposizione.

Để có thêm thông tin về công trình đường bộ này xin hãy gọi điện thoại số **1300 638 789**. Sẽ có phiên dịch viên.

បើចង់ទទួលបានព័ត៌មានបន្ថែមទៀតអំពីគម្រោងផ្លូវថ្នល់នេះ សូមទូរស័ព្ទមកលេខ **1300 638 789** មានអ្នកបកប្រែភាសាជួន។

