

# **ROAD MANAGEMENT PLAN**

**(SHORT TO MEDIUM TERM)**

## **RN5600 FOSTERS ROAD**

**(NORTH EAST ROAD TO GRAND JUNCTION ROAD)**

**MAY 2017**

**FINAL**



**Government of South Australia**

Department of Planning,  
Transport and Infrastructure

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## Glossary

<b>AADT</b>	Annual average daily traffic
<b>DPTI</b>	Department of Planning, Transport and Infrastructure
<b>Intersection</b>	Place where two or more roads cross
<b>Junction</b>	Where a terminating road and continuing road meet
<b>MARWP</b>	Metropolitan Adelaide Road Widening Plan
<b>PDO</b>	Property Damage Only
<b>RMP</b>	Road Management Plan
<b>PAC</b>	Pedestrian Actuated Crossing or pedestrian 'push button' crossing
<b>SIDRA</b>	Intersection analysis software, SIDRA Intersection 6.1
<b>DDA</b>	Disability Discrimination Act 1992
<b>SAPOL</b>	The South Australian Police
<b>Wombat Crossing</b>	Raised pedestrian crossing
<b>Koala Crossing</b>	Koala Crossing is a type of school crossing that has white road markings and twin alternating flashing yellow lights on red and white posts.

## Executive Summary

This Road Management Plan (RMP) provides both an overview of the existing traffic operational safety issues as well as recommendations for remedial improvements on Fosters Road between Grand Junction Road and North East Road, within the City of Port Adelaide Enfield.

One of the major reasons for the development of this RMP has been the number of safety issues raised by the community regarding pedestrian safety and the increase in traffic caused by the Lightsview residential development.

The current priorities for major road projects in the longer term in South Australia are detailed within the Strategic Infrastructure Plan for South Australia (which can be viewed at [http://www.infrastructure.sa.gov.au/strategic\\_infrastructure\\_plan](http://www.infrastructure.sa.gov.au/strategic_infrastructure_plan)).

This plan identifies the major projects and initiatives that will develop our transport system, and identifies road improvement priorities in both metropolitan and rural areas. These priorities are also to be assessed against the *Integrated Transport and Land Use Plan* for the promotion of the use of public transport, cycling and walking.

It must be emphasised that this RMP is not intended to address potential longer term and major road improvement needs resulting from future residential, tourist and industrial or commercial development. The RMP instead focuses on identifying potential short to medium term road projects, which aim to improve road safety and traffic operations along Fosters Road.

The process undertaken to identify existing traffic management issues included:

- research of historical transport investigation records
- site auditing and assessments
- analysis of recorded crash data and traffic flow statistics
- consultation with council officers.

By assessing an arterial road on a route basis, traffic management improvements can be developed to take into account a range of factors including:

- broader transport objectives
- role and function of the road
- the needs of all modes of transport including, freight and cars, buses, bicycles and pedestrians
- community and stakeholder needs and expectations
- ensuring that any treatments are consistent with known longer term plans for the road or area
- application of appropriate standards and guidelines to ensure safety, consistency and effectiveness of any proposed treatments.

Any recommendations identified as a part of this RMP are currently unfunded. Funding for any improvements needs to be considered against other statewide priorities in future financial years. This approach ensures that the funds available each year are allocated to projects where the greatest benefit can be provided to the community as a whole.

# Existing Road Environment

## General Description

This report focuses on the length of Fosters Road between North East Road and Grand Junction Road, which is an urban arterial road located in the north-eastern suburbs of Adelaide and runs exclusively through the City of Port Adelaide Enfield.

The majority of Fosters Road is a single-lane, two-way road with sections of painted and solid medians. Two Koala Crossings exist along Fosters Road to cater for the pedestrian traffic generated by the local schools. A number of pedestrian refuge areas are also installed near pedestrian preferred crossing points (and adjacent to an aged care facility). There are currently no signalised intersections on Fosters Road between North East Road and Grand Junction Road.

The length of Fosters Road investigated in this Road Management Plan is currently approved for Level 1A vehicles (vehicles up to 19.0 metres in length) under the Performance Based Standards national requirements.

For the purposes of this report, the road has been divided into four sections that correspond with the section used for measuring the annual average daily traffic (AADT) along Fosters Road. Figure 1 identifies each section within the study area.

Refer to the A1 Plan in Appendix C for further information regarding the existing conditions of the road environment.

Section 1: North East Road to Redward Avenue

Section 2: Redward Avenue to Folland Avenue

Section 3: Folland Avenue to The Promenade

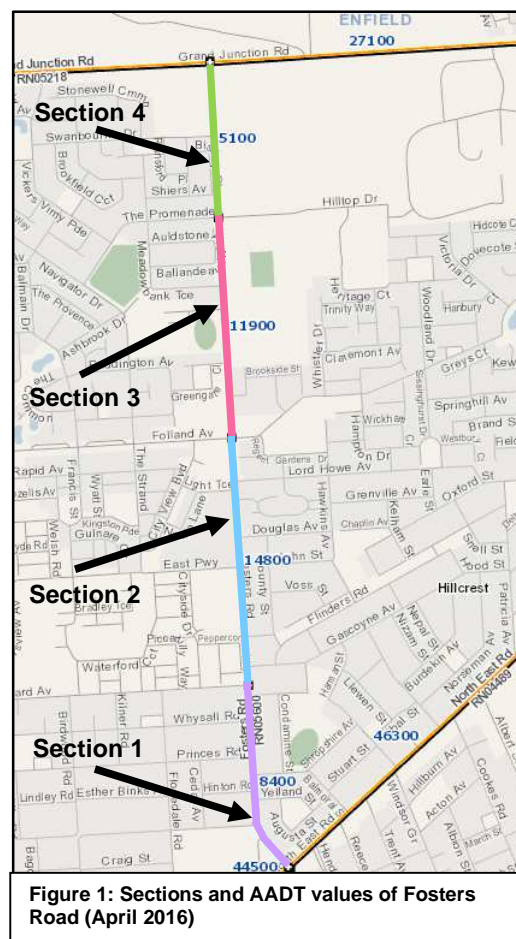
Section 4: The Promenade to Grand Junction Road

## Traffic Behaviour and Land Use

Traffic volumes vary greatly along the length of Fosters Road. Two-way AADT volumes range from 5100-14800 vehicles with the AADT for each section as shown in Figure 1.

Section 1 intersects with North East Road and continues up to Redward Avenue. This section is primarily residential in nature, with a public library and shopping centre located on the south western side of Fosters Road. The shopping centre can be accessed from Fosters Road via Rellum Road.

Section 2 is also primarily residential in nature and include aged care facilities on both sides of Fosters Road. The western side of Fosters Road, for the full length of the section, is a future Lightsview development site for residential properties. The only access directly from the development to Fosters Road is from Redward Avenue, East Parkway, Light Terrace and Folland Avenue.



Section 3 has a roundabout at Folland Avenue and The Promenade. This section is a mixed land use section that includes residential properties, a school, shopping centre, mental health facility, soccer grounds and a restaurant. The majority of the land uses in this section can be considered as pedestrian and vehicular traffic generators, which is likely to be a contributing factor to the increased AADT value within this section.

Section 4 is also a mixed land use section, with a section of residential properties as well as a mental health facility, large section of vacant land and a power station. The lowest AADT for Fosters Road was recorded in this section.

### **Parking Provisions**

Currently on-street parking is allowed along the majority of Fosters Road however a part time bike lane exists either side of the road and runs for the full length. As such parking restrictions are in place between 4:30 - 6:00pm Monday to Friday on the western carriageway and 7:30 - 9:00am Monday to Friday on the eastern carriageway.

A section of indented parking bays is located adjacent to the medical centre on the eastern carriageway and is approximately 35m in length. Another section of indented parking bays is located further north along Fosters Road adjacent to the residential properties between Brookside Street and the mental health facility.

A number of off-street parking facilities have access along Fosters Road and service local businesses and facilities within the study area.

## **Section One – North East Rd to Redward Ave**

Section one has been divided into smaller sections for the purpose of this report so a thorough analysis can be conducted.

### **Junction of Fosters Rd / North East Rd up to Rellum Rd**

#### **Site Description**

The junction of Fosters Road and North East Road is located on the southern end of the study area. It is an unsignalised intersection that caters for both left and right turn movements into Fosters Road and left and right turn movements onto North East Road.

The western carriageway just north of the junction merges from two lanes into one approximately 70m from the junction.

A left turn lane from Fosters Road onto North East Road provides a storage area of approximately 130m in length.

#### **Historical Issues**

The issue of increased traffic build up at the junction of North East Road and Fosters Road is a main concern raised on multiple occasions by a number of people. There have also been requests for the signalisation of the junction, however this option has previously been assessed to not be suitable due to the proximity of the signalised intersection of North East Road and Muller Road. This is further explained in Appendix E (Frequently Asked Questions – Item 3).

## Site Observations

- A high number of cars were observed parking within the left turn lane leading onto North East Road from Fosters Road, reducing the capacity of the lane.
- The existing merge lane in the western carriage way of Fosters Road ends quickly and close to the access point to the library, conflicting with the junction of Fosters Road (shopping centre access).
- The right turn from Fosters Road onto North East Road is not being utilised during peak periods due to the significant delays for this movement as a result of right turning motorists into Fosters Road and motorists continuing along North East Road.

## Crash History

**Table 1: Crash History of North East Road to Rellum Road (2011–2015)**

Location	Crash Type	PDO	Casualty	Total
Junction of North East Road / Fosters Road	Right Angle	16	5	21
	Right Turn	2	0	2
	Rear End	7	4	11
	Side Swipe	1	0	1
Fosters Road / Fosters Road (shopping centre access)	Right Angle	2	1	3

*Note: The analysis spans a 5-year period between 2011 and 2015. An explanation of the crash types used in this section can be found in Appendix A.*

Table 1 shows the number, type and severity of crashes for this part of the road for the past five-year period. This data indicates that there may be a potential issue contributing to the 'right angle' crashes occurring in this location. The second highest crash type was 'rear end' with a total of 11 crashes for the junction. A site visit was conducted to supplement this information and determine what is causing the safety issues in this location.

A site visit was conducted during the PM peak period which showed that the right turning lane from Fosters Road was underutilised. It has been concluded that this is due to the difficulty of crossing the peak hour traffic on North East Road and the conflicting right turn lane into Fosters Road.

A number of motorists initially attempted to turn right onto North East Road from Fosters Road however no motorists were observed completing the turn, and would either conduct a U-turn back onto Fosters Road or would turn left onto North East Road.

## Rellum Rd to Redward Ave

### Site Description

Fosters Road between Rellum Road and Redward Avenue is approximately 450m in length. A Koala Crossing is contained within this section between Princes Road and Whysall Road, which caters for the nearby Hillcrest Primary School, accessible from Fosters Road via Shropshire Avenue and Queensborough Avenue.

This section of road contains a single lane of traffic and a part time bike lane in each direction. There is currently a narrow painted median configuration between Queensborough Avenue which used to contain a standard pavement bar layout (line marking only).

Rellum Road forms a junction with Fosters Road and includes a solid median on Rellum Road. A protected right turn lane allows for vehicle storage while waiting to turn into Rellum Road and is approximately 60m in length.

### Historical Issues

An issue for this section of road has been raised previously regarding pedestrian safety at the existing Koala Crossing between Princes Road and Whysall Road, where a school and an aged care facility are located close by. There has been a previous request for the crossing to be upgraded to a signalised push button crossing. An investigation was conducted by DPTI that showed a low number of pedestrians used the current crossing facility and as such an upgraded signalised crossing was not supported at that time.

This section of road also had issues reported relating to congestion on Fosters Road caused by vehicles turning right into local roads due to no storage area to wait while turning. A number of crashes have been recorded that are associated with this movement.

### Site Observations

Minimal pedestrian activity was observed at the existing Koala Crossing during afternoon school peak period.

### Crash History

**Table 2: Crash History of Rellum Road to Redward Avenue (2011 – 2015)**

Location	Crash Type	PDO	Casualty	Total
Junction of Rellum Road / Fosters Road	Right Turn	1	0	1
Junction of Yelland Street / Fosters Road	Rear End	1	0	1
Junction of Hinton Road / Fosters Road	Side Swipe	0	1	1
Junction of Shropshire Avenue / Fosters Road	Right Turn	1	0	1
Junction of Whysall Road / Fosters Road	Rear End	0	1	1

*Note: The analysis spans a 5-year period between 2011 and 2015. An explanation of the crash types used in this section can be found in Appendix A.*

Table 2 shows the number, type and severity of crashes for this section of road over the past five years. This data does not indicate there are any significant underlying issues within this location. However, the crash data will still be considered when assessing the road for potential safety issues.

## Section Two – Redward Ave to Folland Ave

### Site Description

Fosters Road between Redward Avenue and Folland Avenue is approximately 800m in length and contains a single lane of traffic in either direction. Part time bike lanes are also located along the length of this section as well as an indented parking bay adjacent to the medical centre.



A single lane roundabout is located at the intersection of Folland Avenue / Sir Ross Smith Boulevard / Fosters Road. A solid median which contains a pedestrian refuge is located at the Light Terrace / Fosters Road junction which bans right turn movements into and out of Light Terrace. The length of the solid median is approximately 53m.

### Pedestrian Survey

A pedestrian survey was conducted in March 2016 for the crossing movements between the pedestrian refuge south of Light Terrace and Folland Avenue.

Within this section there were two locations identified as pedestrian desire lines. The first was at the existing pedestrian refuge and the second was adjacent to bus stops 25B on either side of Fosters Road. As such, the existing pedestrian facility should be upgraded to meet current standards. There is also the potential to install a second pedestrian refuge adjacent to the bus stops to cater for pedestrians exiting the bus at this location.

### Crash History

**Table 3: Crash History of Redward Avenue to Folland Avenue (2011 – 2015)**

Location	Crash Type	PDO	Casualty	Total
Junction of Gascoyne Avenue / Fosters Road	Right Angle	1	0	1
	Rear End	1	0	1
Junction of Gray Street / Fosters Road	Rear End	1	0	1
Junction of East Parkway / Fosters Road	Right Angle	1	1	2
	Rear End	1	1	2
	Hit Parked Vehicle	0	1	1
Junction of Douglas Avenue / Fosters Road	Hit Fixed Object	0	1	1
	Rear End	1	0	1
	Right Turn	1	0	1
Junction of Lord Howe Avenue / Fosters Road	Hit Fixed Object	0	1	1
	Right Angle	1	0	1

*Note: The analysis spans a 5-year period between 2011 and 2015. An explanation of the crash types used in this section can be found in Appendix A.*

Table 3 shows the number, type and severity of crashes for this part of the road for the past five-year period. This data does not indicate a significant road crash history within this location.

## Section Three – Folland Ave to the Promenade

Section Three has been divided into two sections due to a number of issues identified at the roundabout intersection of Folland Avenue / Sir Ross Smith Boulevard / Fosters Road.

## Sir Ross Smith Boulevard Roundabout

### Site Description

A roundabout is located at the intersection of Folland Avenue / Sir Ross Smith Boulevard / Fosters Road. Each leg of the intersection has a pedestrian refuge contained within a solid median.

The southern leg of the roundabout, Folland Avenue, provides access to the shopping centre located on the corner of Folland Avenue and Fosters Road. A local park and residential properties can be accessed from the eastern leg of the intersection via Sir Ross Smith Boulevard.

Folland Avenue and Sir Ross Smith Boulevard provide east/west access to and from Hampstead Road and Sudholz Road with no signals along this section.

### Historical Issues

One of the issues raised was a suggestion for the roundabout to be replaced by a signalised intersection to increase pedestrian safety and traffic management in this location. It has been proposed by the developers of Lightsview to install signals at the intersection of Folland Avenue / City View Boulevard and shopping centre access road. The installation of traffic signals at this location is not a priority for DPTI at this time.

Concerns have also been raised regarding difficulty for traffic to exit Sir Ross Smith Boulevard in peak hour periods.

### Site Observations

- Limited visibility of the roundabout location from the eastern and western approach.
- Debris on the road suggests sections of the roundabout are not being utilised.
- Relatively high vehicular speeds observed through the roundabout.

### Pedestrian Survey

A pedestrian survey was conducted in March 2016 to quantify the crossing movements at the roundabout of Sir Ross Smith Boulevard / Folland Avenue / Fosters Road. A number of pedestrians were observed crossing via the pedestrian facilities on the roundabout, with the main movements observed on the eastern and southern legs of the intersection.

### Crash History

**Table 4: Crash History of Sir Ross Smith Boulevard Roundabout (2011 – 2015)**

Location	Crash Type	PDO	Casualty	Total
Intersection of Fosters Road / Folland Avenue / Sir Ross Smith Boulevard	Right Angle	10	2	12
	Rear End	0	2	2
	Hit Pedestrian	0	1	1

*Note: The analysis spans a 5-year period between 2011 and 2015. An explanation of the crash types used in this section can be found in Appendix A.*

Fifteen crashes have been recorded at this location in the last five-year period with 33% of those crashes occurring at night.

## Folland Ave to The Promenade (excl. Sir Ross Smith Blvd. roundabout)

### Site Description

The section of road between Folland Avenue and The Promenade provides access to a shopping centre, a school, mental health facility, soccer grounds, a restaurant and a number of residential properties. A roundabout is located at the intersection of The Promenade / Hilltop Drive / Fosters Road as well as a combination of solid and painted medians throughout the length of the section.

An off-street car park is located within the mental health facility to accommodate for their own needs (and some overflow for school drop off / pick up). The school located on the western side of Fosters Road (Cedar College) contains a minimal amount of off-street parking spaces and has a small road network located within the property.

### Historical Issues

A common issue raised by the public was the need for indented parking bays, improved school zone signage and improved pedestrian facilities. A Koala Crossing was recently installed at this location to address some of the concerns raised.

The proposal for indented parking bays was forwarded to the City of Port Adelaide Enfield for comment/consideration.

### Site Observations

- Limited visibility of the school and new Koala Crossing from the southern approach particularly during night time conditions.
- Signs for the new Koala Crossing are obstructed by overhanging trees.
- A number of motorists were observed parking adjacent to Cedar College, resulting in passing motorists crossing onto the painted median.
- Unsafe vehicular movements occurred adjacent to the school including U-turns, and cars parked in the bus zone.
- The majority of vehicular and pedestrian movements during afternoon school peak hours occurred within the school property.

### Pedestrian Survey

A pedestrian survey was conducted in March 2016 for the area immediately surrounding Cedar College on Fosters Road. It was observed that the majority of pedestrians were crossing the road at the provided pedestrian refuge. A considerable number of pedestrians were observed crossing the road elsewhere however and it was noted that this was due to parents parking on the eastern side of Fosters Road and in the mental health facility's car park. A Koala Crossing has also been recently installed to address this issue.

### Crash History

**Table 5: Crash History Folland Avenue to The Promenade (2011 – 2015)**

Location	Crash Type	PDO	Casualty	Total
Junction of Brookside Street / Fosters Road	Right Angle	0	1	1

*Note: The analysis spans a 5-year period between 2011 and 2015. An explanation of the crash types used in this section can be found in Appendix A.*

Only one crash has been recorded for this section of road which occurred at the junction of Brookside Street / Fosters Road. This was a right angle crash that resulted in an injury and occurred during day time conditions.

This data suggests that there are no significant underlying issues contributing to the crash history in this location.

## Section Four – The Promenade to Grand Junction Road

### Site Description

This section of road is bounded by the Hilltop Drive roundabout and the junction of Grand Junction Road / Fosters Road. The Hilltop Drive roundabout is configured in a similar way to the Sir Ross Smith Boulevard roundabout. The northern and southern legs of Fosters Road have larger solid medians.

The junction of Grand Junction Road and Fosters Road is a signalised T-Junction with two right turn lanes exiting from Fosters Road and a left turn slip lane. There is also a right turn lane into Fosters Road from Grand Junction Road.

### Historical Issues

There has only been one issue raised that specifically reflects this section of Fosters Road. The issue was raised by a member of the public regarding the potential conflict associated with vehicles driving partly in the opposing carriageway to avoid vehicles parked on the side of the road.

### Site Observations

- No continuity line from the left turn slip lane into Fosters Road from Grand Junction Road.
- The pedestrian crossing facilities provided at these traffic signals appear to be rarely used and are in poor condition. No pedestrian ramps are located at any of the corner quadrants at this location and overall the pedestrian facilities are substandard throughout the junction.

### Crash History

**Table 6: Crash History of The Promenade to Grand Junction Road (2011 – 2015)**

Location	Crash Type	PDO	Casualty	Total
Roundabout at The Promenade / Hilltop Drive / Fosters Road	Right Angle	0	1	1
	Rear End	1	0	1
Junction of Grand Junction Road / Fosters Road	Rear End	6	1	7
	Right Angle	0	1	1

*Note: The analysis spans a 5-year period between 2011 and 2015. An explanation of the crash types used in this section can be found in Appendix A.*

There have been a total of eight crashes at the junction of Grand Junction Road / Fosters Road for the past five-year period with the majority of those crashes being rear end crashes.

A site visit was conducted during the PM peak period that confirmed the current pedestrian facilities at this junction do not meet current Australia Standards and there is minimal use of these facilities.

## Issues Summary

The following section details the issues identified during this investigation for each location by both key stakeholders and site inspections. The stakeholders are Port Adelaide Enfield Council, SAPOL and public enquiries received by DPTI.

### **General (applies to length of Fosters Road)**

This section identifies all issues that have been raised by both stakeholders and site inspections that apply for multiple locations throughout the length of Fosters Road.

#### **Stakeholder Raised Issues**

- No pedestrian actuated crossings currently exist throughout the entire length of Fosters Road. There are currently two Koala Crossings and pedestrian refuges.

#### **Site Inspection Observations**

- Poor lighting conditions observed throughout the length of road during night conditions. SA Power Networks infrastructure needs to be reviewed.
- Overgrown vegetation obstructing sight distance from side streets and signage.
- Minimal refuge locations throughout Fosters Road for staged pedestrian crossings.
- Limited visibility of solid medians when turning onto Fosters Road at night.
- No dedicated storage for right turning motorists along Fosters Road.

### **Section One – North East Rd to Redward Ave**

#### **Stakeholder Raised Issues**

- Increased traffic congestion at the junction of Fosters Road and North East Road due to the new developments in the local area.
- Potentially dangerous merge on Fosters Road just north of North East Road.
- Difficulty performing right turn manoeuvres onto North East Road from Fosters Road during peak periods.
- Existing Koala Crossing between Princes Road and Whysall Road may not be in the appropriate location, or sufficient for future needs.
- Limited visibility of the southernmost Koala Crossing.
- Council plan to install indented parking bays adjacent to the Library on the western carriageway (near North East Road).

#### **Site Inspection Raised Issues**

- Missing/damaged pavement bars leading up to the junction of North East Road.
- The number of motorists observed parking within the left turn lane onto North East Road from Fosters Road resulting in reduced road capacity for left turning motorists.

## **Section Two – Redward Ave to Folland Ave**

### **Site Observations**

- Limited number of pedestrian crossing facilities and wide open road with limited traffic management treatments.

## **Section Three – Folland Ave to The Promenade**

### **Stakeholder Raised Issues**

- Concerns raised for traffic management / pedestrian safety at the roundabout with a proposal to replace the roundabout with traffic signals.

Signalised intersection being considered at City View Boulevard / Fosters Road may affect traffic management at the existing roundabout. This is further explained in Appendix E (Frequently Asked Questions – Item 6 & 7)

- Concerns regarding traffic management / pedestrian safety and requests for indented parking bays, indented bus bays, pedestrian actuated crossing and improved school signs.
- No signage to indicate that right turn movements are not permitted from Brookside Street onto Fosters Road.
- Motorists currently driving over painted median to avoid parked cars adjacent to Cedar College.
- Potentially dangerous traffic movements occurring during school peak periods.

### **Site Observations**

- Limited visibility of the roundabout from the eastern and western approaches.
- High vehicular speeds observed through the roundabout.
- Large number of right angle crashes at the roundabout.
- Thirty-three percent of crashes at the roundabout occurred during night conditions.
- Signs for the new Koala Crossing are obstructed by poles and overgrown vegetation.

## **Section Four – The Promenade to Grand Junction Road**

### **Stakeholder Raised Issues**

- Motorists swerving partially into oncoming traffic to avoid parked cars.

### **Site Observations**

- High vehicular speeds observed at the Hilltop Drive roundabout.
- Reasonably high number of rear end crashes at the junction of Grand Junction Road and Fosters Road.
- No pedestrian (kerb) ramps at the junction of Grand Junction Road and Fosters Road.

A visual summary of these issues can be seen on an A1 Plan in Appendix C, which identifies the key issues found through the study and where these issues are occurring.

## Proposed Treatments

The following section provides comments on the issues previously raised and discusses a number of proposed treatments aimed at improving road safety and traffic management throughout the study area.

### General (applies to length of Fosters Road)

- ***No pedestrian actuated crossings throughout the entire length of Fosters Road.***

Pedestrian surveys have been conducted previously which indicated that the volume of pedestrians crossing Fosters Road is minimal and does not meet the requirements for a pedestrian actuated crossing. However, it is recommended that further pedestrian surveys are conducted following the completion of the Lightsview development to determine where and if further pedestrian crossing facilities are warranted.

- ***Poor lighting conditions observed throughout the length of road during night conditions.***

The current street lighting should be audited for compliance with AS 2890 as observation revealed inadequacies and damaged/faulty lights in some locations. A number of road crashes occurred during night time conditions at the Sir Ross Smith Boulevard roundabout which suggests an audit of this location should be a priority. It is recommended that a street lighting and infrastructure review be undertaken by SA Power Networks / DPTI and upgrades made accordingly.

- ***SA Power Networks infrastructure needs to be reviewed and upgraded where necessary***

Recommendation as above.

- ***Overgrown vegetation obstructing sight distance and signs.***

Vegetation is currently overgrown in many locations, which is limiting the visibility of pedestrians, motorists and cyclists. The vegetation is also obstructing a number of traffic signs. It is recommended that vegetation maintenance be conducted more frequently to ensure sight distances and signs are not obstructed.

- ***Minimal storage locations throughout Fosters Road for staged pedestrian crossings.***

This issue can be addressed through the creation of pedestrian crossing facilities at, and on approach to, junctions associated with protected right turn lane facilities recommended for right turn storage (discussed later in this report).

- ***Limited visibility of solid median when turning onto Fosters Road at night.***

Visibility of solid medians is limited during night time conditions for vehicles turning onto Fosters Road. It is recommended that the road lighting be reviewed and upgraded accordingly to improve visibility for turning motorists.

- ***No storage for right turning motorists along Fosters Road.***

Currently there are minimal locations throughout Fosters Road containing protected right turn lanes, causing a build-up of traffic during peak periods. A painted median scheme is recommended to address this issue as well as many other issues identified in this assessment. A typical cross-section of the proposed painted median scheme can be found in Appendix C.

This treatment will allow for right turning motorists to store safely without causing traffic congestion along Fosters Road. It will also enable pedestrians to conduct a two-staged crossing by storing on the painted median while waiting for motorists to pass. This treatment will require a full time bike lane on one side of Fosters Road to enable a painted median to be installed, which will stop motorists parking and obstructing traffic flow. The other side of Fosters Road will still permit parking at all times except during peak hour bike lane operation.

DPTI will undertake public consultation to determine the impact that such a scheme would have on local residents and the road configuration.

- ***Speed limits that match the environment***

Based on the feedbacks from the community regarding pedestrian safety, the department will consider reducing the speed limits from 60 to 50 km/hr. The department will consult with Council to seek their opinion on this.

### **Section One – North East Rd to Redward Ave**

- ***Increased traffic congestion due to the new development and recreational facility, 'Latitude', at the junction of Fosters Road and North East Road.***

A new indoor activity facility, 'Latitude,' has recently opened at the Council owned section of Fosters Road which has increased traffic volumes and parking requirements in the immediate area.

As the facility is still relatively new to the area it is suggested that the traffic and parking conditions be monitored and appropriate treatments installed if problems persist.

- ***Potentially dangerous merge onto Fosters Road from North East Road.***

The merge lane on the western carriageway at the southern end of Fosters Road ends approximately 20m south of the Council owned Fosters Road junction. As such motorists were observed having difficulty turning right onto Fosters Road and then immediately turning left onto the Council owned Fosters Road. It is recommended that the merge lane be shortened to allow for motorists to make the left turn into the council owned section of Fosters Road without the difficulty of trying to merge into the left lane first.

- ***Difficult to make right turn manoeuvres onto North East Road from Fosters Road during peak periods.***

During peak hour conditions it was observed that motorists were unable to make the right turn movement out of Fosters Road and onto North East Road. Vehicle turning movement counts were provided by DPTI, which showed that minimal motorists were turning right onto North East Road compared to all other movements. As such it is recommended that the right turn movement be banned in this location and the left turn lane be formalised to include uninterrupted storage capacity at all times. Kerbside parking will still be permitted as the lanes are reconfigured as shown in Appendix C. As the right turn movement is almost impossible to make during peak hour periods it is expected that motorists will continue to conduct a left turn followed by a U-Turn at Hender Avenue if the right turn movement is banned. This is further explained in Appendix E (Frequently Asked Questions – Item 1)

If the right turn movement cannot be banned in this location, then it is recommended that peak hour parking restrictions are put into place on the eastern carriageway within the existing left turn lane.



- ***Existing Koala Crossing between Princes Road and Whysall Road may not be sufficient for future needs or in the appropriate location.***

Concerns have been raised regarding the existing Koala Crossing between Princes Road and Whysall Road with respect to the Lightsview development. It is expected that the development will increase the number of pedestrians utilising this facility and as such it may not be sufficient for future needs.

It is recommended that this crossing be monitored and that pedestrian surveys be conducted upon completion of the Lightsview Development to determine the need for additional or upgraded crossing facilities.

It is also noted that DPTI is exploring the option of decommissioning this crossing and providing alternative pedestrian facility at a more suitable location. The department has recently conducted pedestrian surveys along this section of Fosters Road to determine the current usage of this crossing, and to use this information to discuss with Council and Hillcrest Primary School. This is also mentioned in Appendix E (Frequently Asked Questions – Item 16)

- ***Limited visibility of the Koala Crossing.***

Visibility of the existing Koala Crossing is limited for oncoming traffic. It is recommended that warning signs be installed as per the Australian Standards, and that vegetation maintenance occur regularly to ensure signs are effective at all times. Figure 2 depicts the visibility issues associated with the Koala Crossing.



**Figure 2: Visibility issues associated with the existing crossing**

- ***Missing/damaged pavement bars leading up to the junction of North East Road.***

The painted median along Fosters Road approaching the junction of North East Road contains a series of pavement bars that are damaged and/or missing throughout the majority of the median. It is recommended that the pavement bars be replaced or upgrade to a solid median to discourage the right turning movement into the petrol station as this movement conflicts with motorists turning into Fosters Road.

- ***Number of motorists observed parking within the left turn lane onto North East Road from Fosters Road resulting in a reduced capacity of left turn storage.***

Currently a large number of motorists have been observed parking within the left turn lane leading onto North East Road – this has effectively reduced the storage capacity from 135m to 35m. It is

recommended that peak hour parking restrictions are implemented throughout the length of the turning lane if no changes are made to the junction.

## **Section Two – Redward Ave to Folland Ave**

- ***A number of crashes have occurred within this section of road over the last 5-year period.***

A number of right angle and rear end crashes have been recorded within this section of road over the past 5-year period. This indicates that motorists turning right into local roads from Fosters Road have inadequate storage space resulting in both traffic congestion and crashes associated with turning motorists obstructing through traffic. It is recommended that a painted median scheme, as per Appendix C, be implemented to allow right turn storage for motorists turning into side streets as well as private properties. This type of treatment will require some parking restrictions and as well as public consultation.

## **Section Three – Folland Ave to The Promenade**

- ***Concerns raised for traffic management / pedestrian safety at the Folland Avenue / Sir Ross Smith Boulevard roundabout with a proposal for a signalised intersection.***

A number of right angle crashes have occurred at this location which suggests that the roundabout is currently not operating at a satisfactory level in terms of road safety. It is recommended that the pedestrian facilities at this roundabout be upgraded to be DDA compliant to further improve pedestrian safety. It is further recommended that the central island diameter be increased to slow down the speeds of motorists and to reinforce the give way function of the roundabout.

- ***Proposed signalised intersection at the City View Boulevard / Folland Avenue / Shopping centre access may affect traffic management at the existing roundabout.***

Lightsview developers have proposed a signalised intersection at this location to allow for residents entering/exiting from City View Boulevard to egress/access the shopping centre. DPTI have provided Council with in-principle support of the proposed traffic signals provided a queue management strategy is developed and installed in conjunction with the traffic signals.

However, at this stage it is recommended that vehicle movement surveys be conducted at this intersection to determine the appropriate treatment for this location and how it would affect the operation of the Fosters Road / Folland Avenue intersection.

- ***Concerns regarding traffic management / pedestrian safety and requests for indented parking bays, indented bus bays, pedestrian actuated crossing and improved school signage.***

This issue was addressed by the installation of a Koala Crossing with appropriate signage and parking bans. The Koala Crossing was installed in place of a pedestrian actuated crossing as the volumes of pedestrians crossing during peak periods was not high enough to warrant this type of crossing.

Indented parking bays and bus bays were given due consideration but could not be justified by Council. The site assessments verify that there is little demand for indented parking bays and bus bays. It is also recommended that full time bike lanes be installed (with full time no stopping restrictions) to accommodate for the limited road width adjacent to the Fosters Road median island.

- **No signage to indicate that right turn movements are not permitted from Brookside Street onto Fosters Road.**

It is recommended that a 'left turn only sign' be installed on the median in Brookside Street.

- **Motorists currently driving over painted median to avoid parked cars adjacent Cedar College.**

The painted median scheme will address this issue with the bike lane on the western carriageway to be made full time, which will effectively ban parking in this location at all times.

- **Potentially dangerous traffic movements occurring during school peak periods.**

The current road layout at this location is sufficient to inform drivers of safe travel paths. As such, it is recommended that increased patrols by SAPOL be undertaken during school peak periods.

- **Deficiency at roundabout**

There is a relatively high number of crashes at the roundabout and the pedestrian facilities are not DDA compliant. It is recommended that the roundabout be upgraded to achieve DDA compliance, and that the approaches be modified where possible to slow down vehicular movements.

- **Limited visibility of the roundabout from the eastern and western approach.**

To improve the visibility of the roundabout from the eastern and western approaches it is recommended that the appropriate roundabout warning signs be installed along Folland Avenue and Sir Ross Smith Boulevard.

- **Large number of right angle crashes at the roundabout.**

Issue covered in a previous recommendation.

- **Thirty-three per cent of crashes at the roundabout occurred during night conditions.**

As a number of the crashes occurred at night this suggests that there may be underlying issues at the roundabout relating to road lighting. It is recommended that this roundabout be included as part of the SA Power Networks lighting and infrastructure review.

- **Signs for the new Koala Crossing are obstructed by poles and overgrown vegetation.**

Currently the new signs for the Koala Crossing are obstructed by vegetation and existing signs. It is recommended that the vegetation be trimmed and the signs be relocated to a position where no other signs will obstruct the view of the Koala Crossing signs.

#### **Section Four – The Promenade to Grand Junction Road**

- **Motorists encroaching into oncoming traffic lane to avoid parked cars.**

This issue would be addressed by the painted median scheme which would ban parking on the western carriageway and allow for adequate space to park on the eastern carriageway (outside of the peak hours for the operation of the bike lane).

- **High vehicular speeds observed on the Hilltop Drive roundabout.**

To slow down vehicular speeds at the roundabout it is recommended that the central island diameter be increased.

- ***A number of rear end crashes at the junction of Grand Junction Road and Fosters Road.***

This junction should be monitored to determine if there is an underlying issue that may be contributing to these crash types. It is also recommended that a review of the signal phasing and capacity be undertaken and upgrades made where necessary.

- ***No pedestrian ramps at the junction of Grand Junction Road and Fosters Road.***

Currently there are no pedestrian ramps at this junction (see Figure 3), but there is a pedestrian actuated crossing facility. Upgrade of pedestrian facilities to be considered.



**Figure 3: Lack of pedestrian ramps**

## Treatment Summary

**Table 7: Treatment Summary for Fosters Road**

Road Section	Recommended Treatment
All sections	Audit the existing pedestrian crossing patterns (locations, number and special needs groups) to establish the demand and focal points for improved pedestrian facilities.
All sections	SA Power Networks / DPTI lighting and infrastructure review.
All sections	Conduct regular vegetation maintenance.
All sections	Paint existing solid median island kerbs opposite local road junctions to ensure visibility during night conditions.
All sections	Install painted median scheme including right turn storage lanes, a full time bike lane on the western carriageway and a peak-hour bike lane on the eastern carriageway.
All sections	Reduce speed limit on Fosters Road, from 60 to 50 km/h ( subject to discussion with Council )
<b>Section One – North East Road to Redward Avenue</b>	
North East Rd to Rellum Rd	Shorten length of merge lane on Fosters Road from North East Road.
North East Road / Fosters Road Junction	Remove right turn out of Fosters Road. Improve pedestrian facilities.
Koala Crossing, between Princes Road and Whysall Road	Installation of warning signs on both approaches leading up to the Koala Crossing.
North East Rd to Rellum Rd	Replace pavement bars in the painted median island.
<b>Section Three – Folland Avenue to The Promenade</b>	
Intersection of City View Blvd / Folland Ave / Shopping Centre Access	Traffic signals, subject to further planning and design, including a queue management strategy.
Fosters Road / Brookside St	Install an 'All traffic turn left' sign on the median in Brookside Street.
Folland Ave / Sir Ross Smith Blvd / Fosters Rd roundabout	Modify the northern and southern approaches to the roundabout to reduce vehicle speeds. Upgrade pedestrian facilities on all approaches.
North of the roundabout	Increase width of pedestrian walkthrough.
Adjacent Cedar College	Relocate associated Koala Crossing signs to a position where visibility will not be obstructed by street trees, or prune vegetation.

## Section Four – The Promenade to Grand Junction Road

The Promenade / Hilltop Dr / Fosters Rd roundabout	Modify the northern and southern approaches to the roundabout to reduce vehicle speeds. Upgrade pedestrian facilities on all approaches.
Junction of Grand Junction Rd / Fosters Rd	Modify left turn to create high entry angle from Fosters Road onto Grand Junction Road. Upgrade pedestrian facilities on all approaches. Extend bike lanes to the junction.

## Conclusion

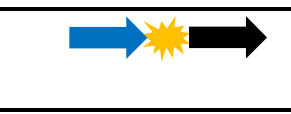
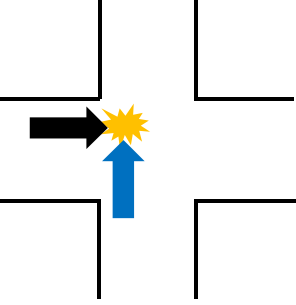
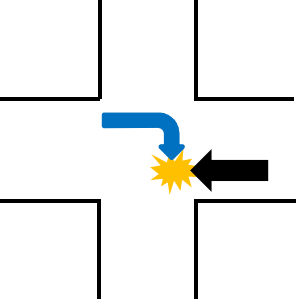
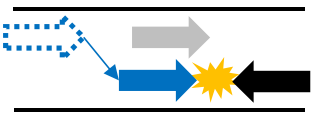

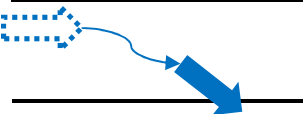
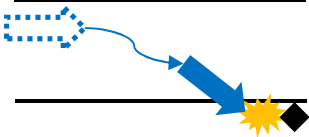






The Road Management Plan for Fosters Road has made a number of recommendations to improve road safety and achieve a safer and more efficient transport corridor.

All of the recommendations are conceptual only and are not funded. Further design development will include consultation with the relevant council and the community.

Importantly the RMP does not consider the exact costs associated with the recommendations and further planning work will be required in this area.

When a project proposed in the RMP becomes funded, community consultation will be included as part of the delivery of the project. Information may be provided in the form of letters to owners, tenants and key stakeholders, media releases, website and social media information and through advertising in the local newspaper. DPTI will evaluate each project in terms of the level of information or engagement required.

## **Appendix A – Crash Types Table**

Rear End	Right Angle	Right Turn	Head On
			
Side Swipe	Left Road – Out of Control	Hit Fixed Object	LEGEND
			<ul style="list-style-type: none"> <li> Vehicle A</li> <li> Vehicle B</li> <li> Previous position of vehicle</li> <li> Other vehicle not involved in crash</li> <li> Path taken by vehicle</li> <li> Fixed object (stobie pole, tree, fence etc.)</li> </ul>



## **Appendix B – Vehicle Turning Counts**

Intersection of: NORTH EAST ROAD / FOSTERS ROAD

Locality: HILLCREST

AMG Reference: TG840386

Date of Count: 16/03/2016

Day: Wednesday

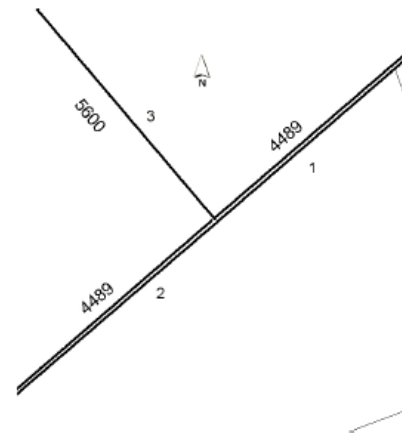
Weather: Dry

Control:

Survey Status:

Arm Road Number - Name

- 1 4489 - NORTH EAST ROAD
- 2 4489 - NORTH EAST ROAD
- 3 5600 - FOSTERS ROAD



	Arm Exit Arm	1		2		3	
		2	3 (R)	3 (L)	1	1 (L)	2 (R)
11 hour totals	Cars	16090	1248	2455	14890	1711	587
	CV	575	79	68	543	78	29
	Total	16665	1327	2523	15433	1789	616
AM Peak hour (07:15)	Cars	2338	64	139	917	109	86
	CV	71	8	11	56	9	4
	Total	2409	72	150	973	118	90
PM Peak hour (16:45)	Cars	1543	110	407	2224	186	15
	CV	23	2	6	19	2	0
	Total	1566	112	413	2243	188	15

		1		2		3	
One-way Flows	11 Hour Totals	(IN) 17992	(OUT) 17222	(IN) 17956	(OUT) 17281	(IN) 2405	(OUT) 3850
	AM Peak Hour	07:00 2566	11:45 1420	08:15 1435	07:00 2583	08:15 324	08:15 368
	PM Peak Hour	16:45 1678	16:45 2431	16:45 2656	16:45 1581	14:45 268	17:00 525
Two-way Flows	AM Peak Hour	07:15 3572	07:15 3622	08:15 692			
	PM Peak Hour	16:45 4109	16:45 4237	17:15 744			
All Vehicles	11 Hour Totals	35214	3.6% CV	35237	3.4% CV	6255	4.1% CV
	Estimated AADT	47200 SF( 1.00) ZF( 1.34)		47200 SF( 1.00) ZF( 1.34)		8400 SF( 1.00) ZF( 1.34)	

AADT - Annual Average Daily Traffic SF - Seasonal Factor ZF - Zone Factor CV - Commercial Vehicles

Intersection of: GRAND JUNCTION ROAD / FOSTERS ROAD

Locality: OAKDEN

AMG Reference: TG837412

Date of Count: 25/11/2014

Weather: Dry

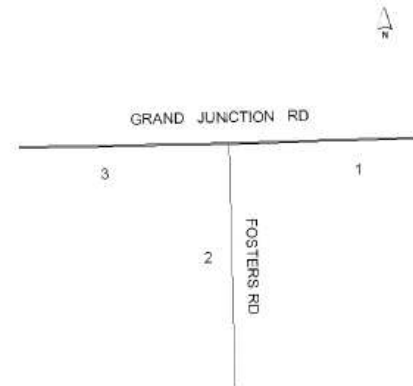
Survey Status:

Day: Tuesday

Control: SIGNALS

Arm	Road Number - Name
1	5218 - GRAND JUNCTION ROAD
2	5600 - FOSTERS ROAD
3	5218 - GRAND JUNCTION ROAD

Arm Exit Arm	1		2		3		
	2 (L)	3	3 (L)	1 (R)	1	2 (R)	
11 hour totals	Cars	2560	6914	1417	2369	6859	559
	CV	61	521	119	55	582	75
	Total	2621	7435	1536	2424	7441	634
AM Peak hour (08:00)	Cars	400	972	160	288	496	143
	CV	7	47	13	5	66	19
	Total	407	1019	173	293	562	162
PM Peak hour (16:45)	Cars	229	599	155	380	1293	113
	CV	2	19	2	3	29	2
	Total	231	618	157	383	1322	115



		1		2		3	
One-way Flows	11 Hour Totals	(IN) 10056	(OUT) 9865	(IN) 3960	(OUT) 3255	(IN) 8075	(OUT) 8971
	AM Peak Hour	07:30 1471	08:00 855	08:00 466	08:00 569	08:15 734	07:15 1334
	PM Peak Hour	14:45 962	16:45 1705	15:15 583	17:15 402	16:45 1437	15:30 822
Two-way Flows	AM Peak Hour	08:00 2281	08:00 1035	07:30 1957			
	PM Peak Hour	16:45 2554	17:00 932	16:45 2212			
All Vehicles	11 Hour Totals	19921	6.1% CV	7215	4.3% CV	17046	7.6% CV
	Estimated AADT	25900 SF( 1.00) ZF( 1.30)		9400 SF( 1.00) ZF( 1.30)		22200 SF( 1.00) ZF( 1.30)	








AADT - Annual Average Daily Traffic SF - Seasonal Factor ZF - Zone Factor CV - Commercial Vehicles

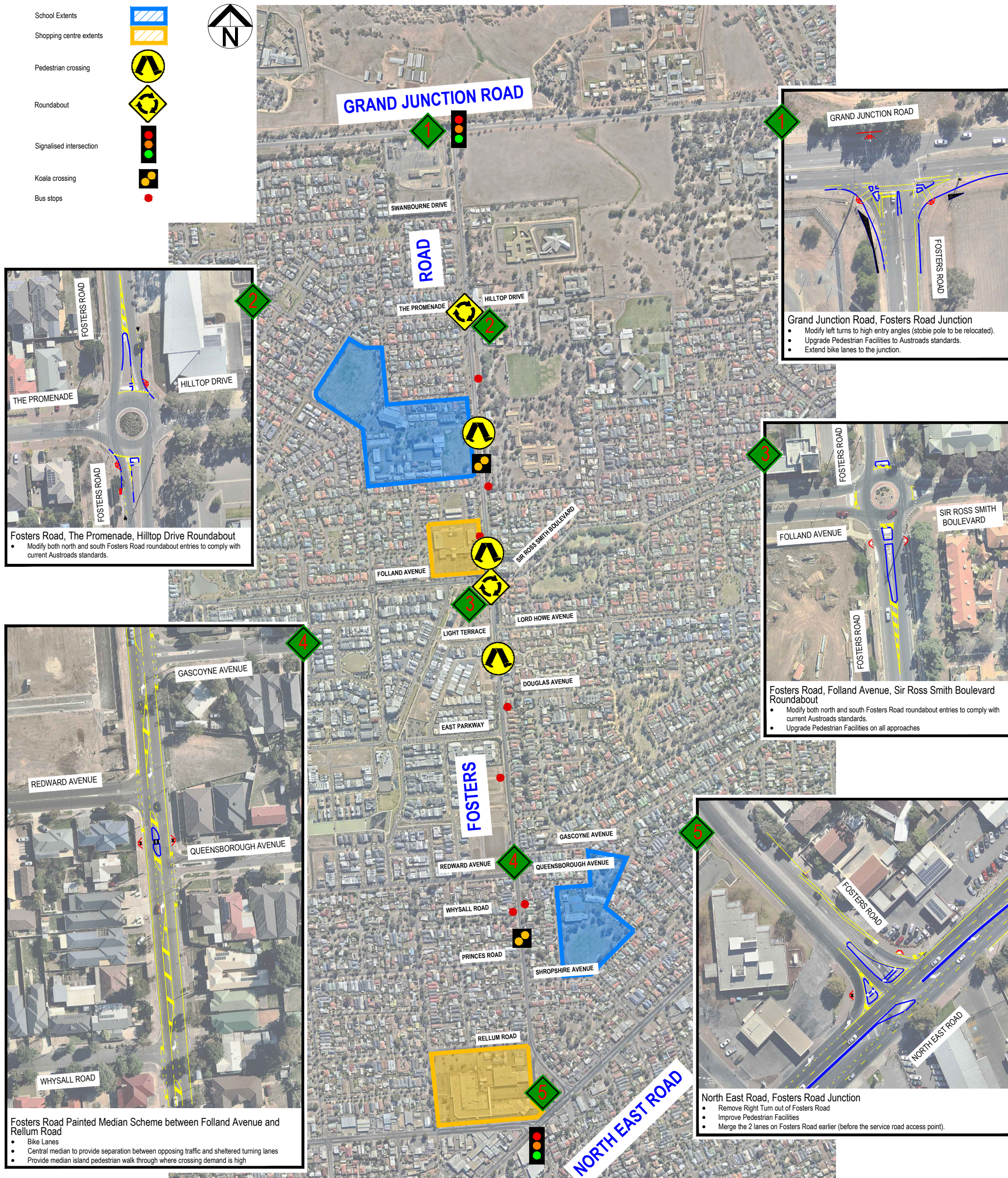
## **Appendix C – A1 Plan of Key Issues, Existing Conditions and Proposed Treatments**

# FOSTERS ROAD ROAD MANAGEMENT PLAN



## Legend

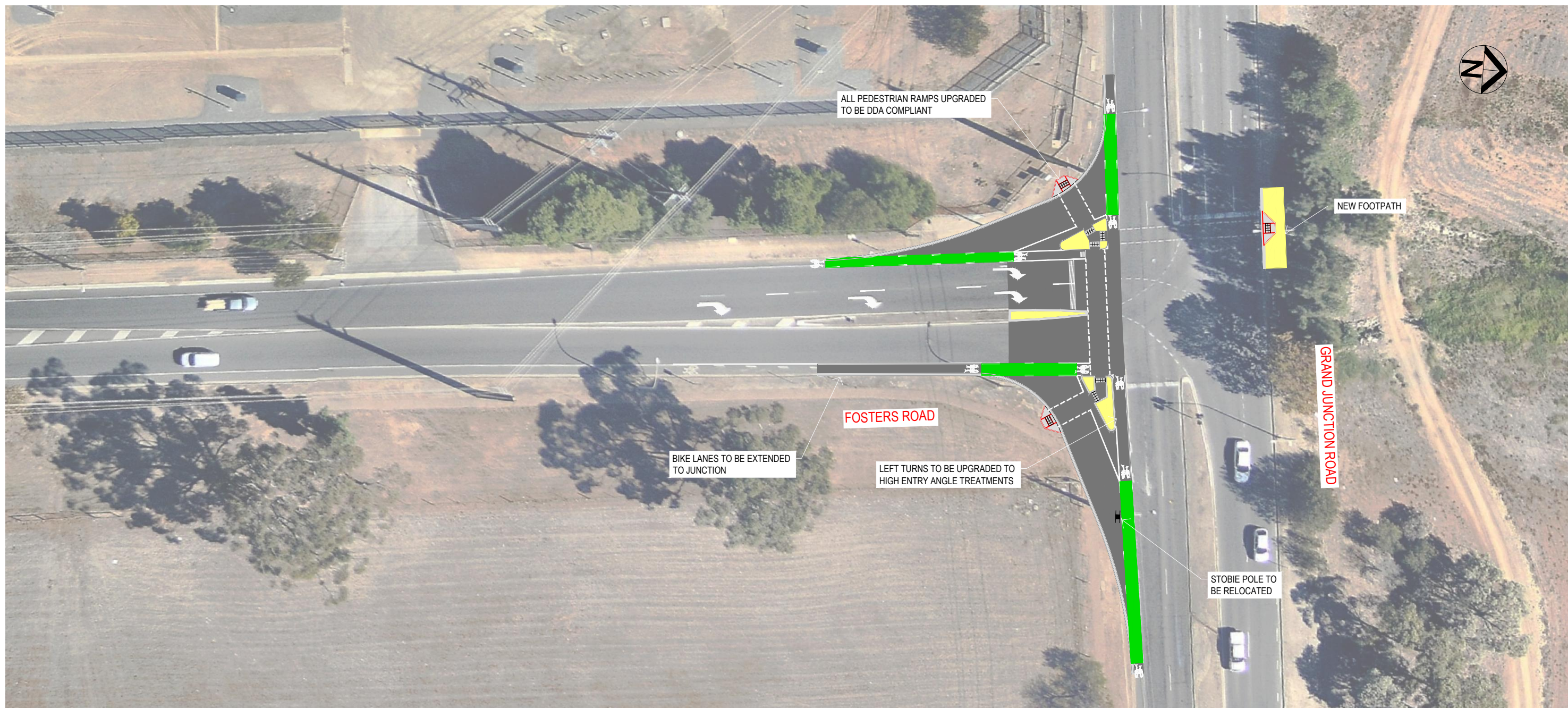
- School Extents 
- Shopping centre extents 
- Pedestrian crossing 
- Roundabout 
- Signalised intersection 
- Koala crossing 
- Bus stops 



## **Appendix D – A3 Concept Design Plans**

# GRAND JUNCTION ROAD AND FOSTERS ROAD PROPOSED TREATMENT

FOR ILLUSTRATION PURPOSES ONLY



Government of South Australia  
Department of Planning,  
Transport and Infrastructure

# FOSTERS ROAD, THE PROMENADE AND HILLTOP DRIVE PROPOSED TREATMENT

FOR ILLUSTRATION PURPOSES ONLY



Government of South Australia  
Department of Planning,  
Transport and Infrastructure



# FOSTERS ROAD, FOLLAND AVENUE AND SIR ROSS SMITH BOULEVARD PROPOSED TREATMENT

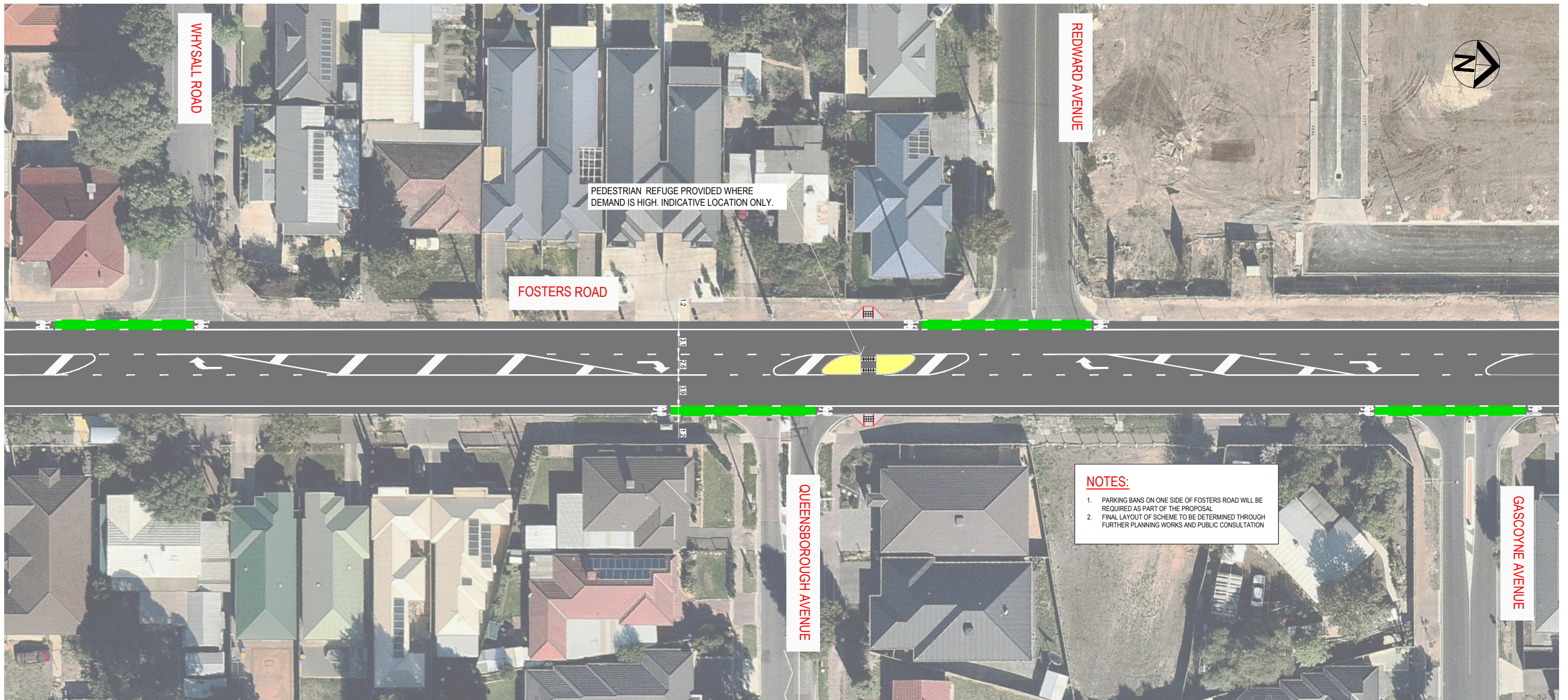
FOR ILLUSTRATION PURPOSES ONLY



Government of South Australia  
Department of Planning,  
Transport and Infrastructure

# FOSTERS ROAD, BETWEEN FOLLAND AVENUE AND RELUM ROAD TYPICAL LAYOUT FOR PAINTED MEDIAN SCHEME

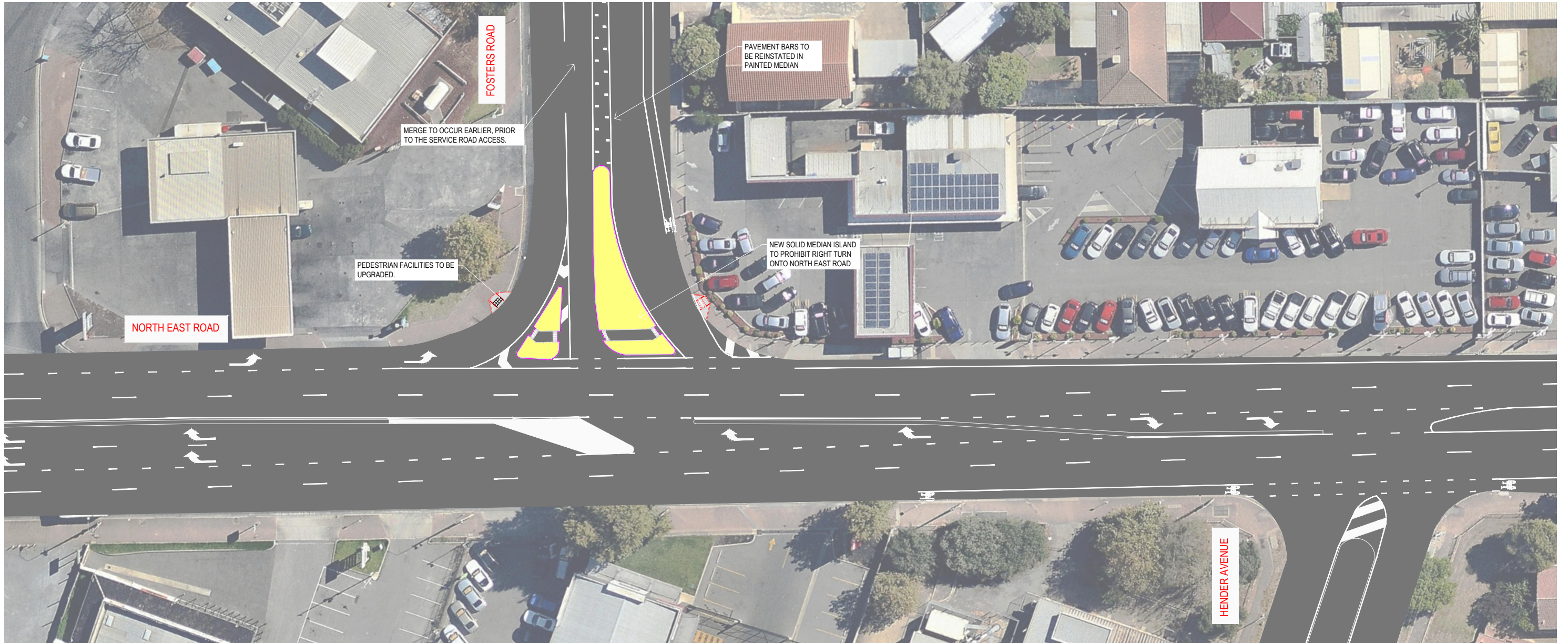
FOR ILLUSTRATION PURPOSES ONLY



Government of South Australia  
Department of Planning,  
Transport and Infrastructure

# NORTH EAST ROAD AND FOSTERS ROAD PROPOSED TREATMENT

FOR ILLUSTRATION PURPOSES ONLY



Government of South Australia  
Department of Planning,  
Transport and Infrastructure

## **Appendix E – Summary of Key Public Feedbacks**

**Based on the feedbacks received from the community regarding the draft Road Management Plan (RMP) for Fosters Road, the department has reviewed and summarised the key issues and comments raised by the community, and offers the following responses shown below.**

1.) Ban U-turns at the intersection of Hender Avenue and North East Road as it is unsafe

**DPTI Response** – U-turns are permitted at most unsignalised junctions/median openings unless signed otherwise. These locations would normally have a deceleration lane, clear view of any approaching traffic and wide enough so that vehicles are able to do so without reversing and causing obstruction to free movement of traffic.

The department considers the junction to be operating satisfactorily and has no plans to ban U-turns at this location.

Port Adelaide Enfield Council is also in discussion with DPTI with the intention to ban right turn out of Hender Avenue, which would further simplify the operation at this site.

2.) No right turn bans on Fosters Road onto North East Road.

**DPTI Response** – DPTI believes that the option to ban right turn out of Fosters Road onto North East road is an appropriate short to medium term solution, given that minimal motorists are turning right onto North East Road when compared to all other movements.

While the department acknowledge that the difficulty to turn right out onto North East Road from Fosters Road may have resulted in vehicles resorting to local roads, this proposal will not worsen the issues due to minimal number of displaced vehicles.

3.) Install traffic signals at Fosters Road / North East Road intersection

**DPTI Response** – DPTI have previously investigated the possibility of installing traffic signals at the North East Road / Fosters Road intersection, however the traffic modelling undertaken clearly showed that installing traffic signals at this site would have a significantly detrimental effect on North East Road traffic flows.

The nearby traffic signals at the North East Road / Muller Road / Thistle Avenue and North East Road / O.G Road / Poole Avenue intersections will result in longer queues and longer delays being created on North East Road, should traffic signals be installed at the Fosters Road / North East Road intersection. Given the high traffic volumes on North East Road and the important strategic role and function that this road performs for various modes of transport, these outcomes are not acceptable and traffic signals at this location are therefore not supported by DPTI.

4.) Install a roundabout at Fosters Road / North East Road intersection

**DPTI Response** – North East Road is a major traffic route, with an estimated Annual Average Daily Traffic (AADT) of 47200 vehicles per day. A roundabout at this location will change the priority of movements, requiring vehicles on North East Road (city bound) to give way to vehicles turning right from Fosters Road, which would significantly increase the traffic delay on North East Road. Fosters Road currently has an AADT of 6255 vehicles per day.

A roundabout at this location would also be problematic as it is likely to require land acquisitions and service relocations.

- 5.) Create a 5-way intersection with traffic lights – North East Road / Muller Road / Fosters Road / Thistle Avenue

**DPTI Response** – An option of this magnitude (land / building acquisitions, business relocations etc.) is outside the scope of this RMP. The RMP focuses on identifying potential short to medium term road projects, which aims to improve road safety and traffic operations along Fosters Road

- 6.) Install traffic signals at Fosters Road / Folland Avenue / Sir Ross Smith Boulevard intersection

**DPTI Response** – While some minor delay is experienced on the northern approach to the roundabout during the morning peak, the roundabout generally operates at a good level of service. As such, and in line with DPTI's Integrated Transport and Land Use Plan and broader strategic objectives, there are no plans to install traffic signals at this site.

The proposal in the RMP at this location will further improve the safety of motorists, with the central island diameter to be increased to slow down the speeds of motorists. It is also proposed to upgrade the pedestrian facilities at the roundabout to be DDA compliant to further improve pedestrian safety.

- 7.) The proposed traffic signals at Folland Avenue and City View Boulevard is unnecessary and may cause congestion and safety issues give the close proximity of the roundabout at Fosters Road

**DPTI Response** – Approval for the installation of the proposed traffic signals at the Folland Avenue/City View Boulevard /Northgate Shopping Centre Access intersection is the sole responsibility of the City of Port Adelaide Enfield.

The installation of traffic signals will include a queue management strategy to ensure that any potential queuing impact to the Folland Avenue/Fosters Road roundabout can be mitigated should it arise. In addition, the City of Port Adelaide Enfield has resolved to work with the Lightsview developer to facilitate the construction of the traffic signals and to include detector loops to provide a queue management strategy.

- 8.) Install a roundabout at Fosters Road/ Redward Avenue junction. There are issues with right turners into Redward Avenue that that blocks southbound traffic

**DPTI Response** – A deceleration lane has been included in the proposed painted median scheme at this location, which will safely allow a right turning vehicle to slow down and stop to wait for a safe gap, without holding up the through traffic.

- 9.) A wombat crossing on Fosters Road, north of Folland Avenue (adjacent to the shopping centre)

**DPTI Response** – A wombat crossing may be considered at a location if it meets the following requirements:

- i.) In two separate one hour periods of any day (including Saturday and Sunday):
  - a. 40 or more pedestrians per hour actually cross the road and could reasonably be expected to use the crossing; and
  - b. 200 or more vehicles per hour pass the site where pedestrians cross during the same two hours.
- ii.) The crossing shall only be installed on roads with a speed limit of 50km/h or less

The department will undertake further investigations, including a pedestrian survey, to determine the suitability of a wombat crossing at this location.

10.) Reducing the speed limit on Fosters Road from 60 to 50 km/h

**DPTI Response** – Given the level/type of development along Fosters Road and the function of the road itself, the department is open to the option of reducing the speed limit on Fosters Road from 60 to 50 km/h. The department will consult with Council to seek their opinion on the matter.

11.) Speeding issues along Fosters Road

**DPTI Response** – The issue of driver behaviour and speeding are matters for the South Australia Police (SAPOL). SAPOL encourages members of the community to report incidents of hoon driving, speeding and offending drivers by contacting Traffic Watch on 131 444.

12.) Install a Pedestrian Actuated Crossing (PAC) on Fosters Road near Cedar College

**DPTI Response** – A Koala Crossing was installed near Cedar College in March 2016 to further improve the safety of school children. A speed limit of 25km/h also applies when the crossing's lights are activated. The department believes the existing facility is fit for purpose and will continue to monitor the operation of the site.

13.) Install a left turn lane at the signalised intersection of Fosters Road / Grand Junction Road to reduce traffic delays for left turning vehicles onto Grand Junction Road

**DPTI Response** – The department acknowledge that left turning vehicles may occasionally be delayed on the Fosters Road approach. The department will continue to monitor the operation of the site.

14.) Duplication of traffic lanes on Fosters Road in anticipation of future population growth within the area

**DPTI's Response** – The RMP focuses on identifying potential short to medium term road projects, which aim to improve road safety and traffic operations along Fosters Road

15.) Replacing green arrows with filter turns at the signalised intersection of Fosters Road / Grand Junction Road during off peaks

**DPTI Response** - The decision on whether to have controlled right turns, filter turns (red arrow turned off), or a combination of the two is made after considering the speed environment, the vehicle and pedestrian volumes, the geometry of the site, visibility of oncoming traffic, analysis of any road crash data, and the sequence of the signals. Controlled turns where the red arrow remains on during the through vehicle phase are generally used where there is a history of right turn crashes, where visibility of oncoming traffic is less than required for safe gap selection, in speed zones of 80kph or more, and where the volume of right turn traffic and/or opposing through traffic are high.

At Fosters Road / Grand Junction Road intersection, due to the high speed environment and the high opposing through traffic, the right turn fully control was introduced to prevent the potential collision between through and right turn movements. After 2010, the speed limit on Grand Junction Road was reduced from 80 to 70km/hr, but the opposing through traffic remains high. DPTI does not intend to change the right turn control from fully control to filtering as the current operation complies with the recently released State Government's Road Safety Strategy 2020 Towards Zero Together.

For more information about the Road Safety Strategy, please visit:

[http://www.dpti.sa.gov.au/towardszerotogether/road\\_safety\\_strategies](http://www.dpti.sa.gov.au/towardszerotogether/road_safety_strategies)

- 16.) Retain/remove/upgrade/relocate the existing Koala Crossing between Princes Road and Whysall Road

**DPTI Response** – The department will work with Council and Hillcrest Primary School to determine if the existing Koala Crossing is still fit for purpose, or other form of pedestrian crossing facility at the same or different location should be considered.

- 17.) More pedestrian crossing facilities to be installed along Section 2 (Redward Avenue to Folland Avenue)

**DPTI Response** - The department may consider other form of pedestrian crossing facilities to be implemented such as pedestrian refuges. This will continue to be monitored as the Lightsview Development continues to increase in population.