City of Charles Sturt

## Athol Park LATM

## Final Report

Principal Contacts

Paul Simons

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## Document History and Status

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## 1. Introduction

In March 2005 Council engaged Tonkin Consulting, in conjunction with Dorrestyn and $\mathrm{C}_{\mathrm{o}}$., to undertake a review of traffic and road safety conditions in each of the following five areas :

- Athol Park
bounded by Hanson Road, Ninth Avenue, Grand Junction Road and Glenroy Street
- Royal Park
bounded by West Lakes Boulevard, Frederick Road, Old Port Road and Tapleys Hill Road
- Croydon / West Croydon / Kilkenny bounded by David Terrace, Torrens Road, South Road and Port Road
- Woodville West
bounded by Findon Road, Trimmer Parade, and Alma Terrace
- Woodville South
bounded by Ledger Road, Port Road, Crittenden Road and Findon Road
This report specifically addresses the ATHOL PARK area. Separate reports have been prepared for each of the other areas.

The processes adopted in undertaking each of the reviews has been similar to ensure a consistency of approach and assessment within each precinct. The processes have varied through the involvement of the community in some areas (notably Athol Park and Woodville South).

This report presents the findings and recommendations for the Athol Park precinct based on the Draft Report for Consultation (endorsed by Council in February 2006), together with responses from the subsequent community feedback process.

This final report is submitted for Council approval to guide future traffic management within the Athol Park area.

## 2. Study Area

The Athol Park precinct subject to this review is shown below. Arterial roads (Grand Junction Road and Hanson Road) were excluded from the study which focused on traffic conditions within the local area. Notwithstanding, consideration has been given to traffic management along the arterial roads where safety or accessibility to the local streets is adversely influenced.


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Method

## 3. Method

### 3.1 Overview

A number of steps have been followed in order to qualify and quantify factors affecting the road networks within the study area, including public consultation, site reviews and assessment of available traffic and crash data. This generic approach to the LATM process was adopted in each of the five precincts reviewed.

- Community identification of issues
- Collection and review of traffic data
- Review of available collision data
- Review of background documentation
- Site inspections
- Development of concept plans
- Review by Council administration
- Review by Athol Park Residents Association
- Community feedback process


### 3.2 Call for Public Submissions

Leaflets were distributed to every letterbox in the area by hand during the period 20 25 June 2005. The leaflets invited submissions by residents in relation to traffic management and road safety issues in the respective local areas. They were drafted and formatted in accordance with Council's requirements for public consultation.

In each of the other four LATM precincts, a Registration of Interest was also sought for residents to represent the local community in each area. The purpose of the proposed Residents' Committees was to assist the consultant team in the process of identifying key issues, possible treatments and possible priorities. A copy of the community circular is included in Appendix A.

This Registration of Interest was not needed in Athol Park as a Residents Group already existed and a sub-committee was established directly from membership of the Group.

Method

### 3.3 Review of Traffic Data

Traffic classifier surveys were commissioned for locations identified by a review of resident responses, and through a knowledge of the traffic environment in certain streets. Surveys were carried out at 40 sites throughout the five LATM precincts. Mapinfo (GIS) was used to present the results graphically (refer Section 4).

To supplement these surveys, the results of intersection turning count surveys carried out previously by the Department of Energy \& Infrastructure (DTEI) were obtained and examined.

In a few instances, traffic surveys previously carried out by the Council were also considered.

### 3.4 Collision Data

Details of the road collision incidents reported to the SA Police during the period 1999-2004, were obtained from DTEI. The data was analysed to an extent to validate the site-specific concerns of residents. Sites were checked for 'blackspots' or areas with a consistently high number of crash occurrences.

### 3.5 Review of Background Documents

The draft Traffic Management Strategy prepared by QED provides weighted criteria for the prioritisation of the precincts for treatment, within the City of Charles Sturt.

The QED strategy provides a Classical Road Hierarchy and various intervention thresholds, based on traffic speeds, volumes, crash statistics, activity generators and others.

The directions set by the strategy have been taken into account in the preparation of our recommendations for the five areas.

The revised Austroads Part 10, Local Area Traffic Management, provides important theory and philosophy behind a range of traffic management devices, and the implications of their use. For example the use of a certain treatment in one street can lead to a displacement of traffic to another adjacent untreated street. Measures as simple as painted parking lanes can narrow the effective carriageway width of a street and hence slow traffic. Part 10 is useful as an overall guide to the effectiveness of traffic devices, and when and when not to use them.

Method

### 3.6 Site Investigations

The areas were thoroughly reviewed by vehicle. Some road widths have been checked with a pedometer to confirm that certain devices can be implemented should the consultation process lead Council to that stage.

The locations of existing traffic management devices have been documented, with a view to forming treatment recommendations which compliment existing devices such as roundabouts, indented parking and plateaux.

The site inspections, undertaken from the perspective of a motorist, are important in forming an overall 'feel' for each site, and where speeding is likely to occur.

The principles applicable to Network Road Safety Auditing were used to some extent at the sites, for example:

- Noting friction between parked vehicles / travelling vehicles in particular streets
- Noting the environments which are conducive to high speeds, for example, long straight streets with no interruptions to the forward sight distance
- The provisions for vulnerable road users such as cyclists and pedestrians
- The traffic mix
- A check on land use conflicts, for example abutting residential and industrial zones.


### 3.7 Development of Concept Options

Based on the information collated from the community consultation process and liaison with the Residents Association, a draft traffic management plan was developed through consultation with Council's administration. The draft plan was endorsed by Council for community review in February 2006.

### 3.8 Community Feedback

The Draft Plan was initially review by the Athol Park Residents Association. Overall, the plan was well received and the majority of responses were in favour of the recommendations contained within the report.

The Draft Plan was subsequently released for community feedback. All residents that responded to the initial community consultation phase (issues identification) received a copy of the draft recommendations and a pro forma response sheet. A public notice was also placed in the Messenger paper notifying the broader community of the Draft Plan, available at Council's office and on the Council Web site. A copy of the community questionnaire is also included in Appendix A.

Findings

## 4. Findings

### 4.1 Summary or Residents Concerns

Approximately 655 community circulars were distributed throughout Athol Park in June 2005. 38 comments were received, representing a response rate of 5.8\%

The following table summarises these responses. Locations that were identified by more than one resident have been highlighted.

### 4.1.1 Streets

Adermener Street
o Use of street by trucks
o Speed of vehicles

Annette Street
o Vehicle speeds

Athol Street
o Poor lighting near Glenroy
o Use of road by trucks (noise)
o Speed of cars and trucks

Bathurst Street
o Semi trailers parked near no. 3
o Burnouts
o No safe areas for cyclists

Clare Street
o Burn outs
o Speed of cars

## Ely Street

o Speed of cars (in the Crescent)
o Need for off street parking
o Child care centre - need for pedestrian crossing
o Condition of footpaths
o Cars drive over medium strip to Cambridge
o Poor lighting near park and basketball area

Findings

## Gateshead Street

o Trucks parking in street - danger to children
o Cars use median strip as cross-over (mud-heap/dust bowl)
o Vehicles use nature strip at corner with Ely for U-turns
o Speed of vehicles near Child Care Centre
o Cars taking short cuts in medium strip

Glenroy Street
o No footpath on west side of Glenroy
o No footpath on eastern side of Glenroy outside wrecking yard
o Speed of vehicles
o Noise from trucks at night (deliveries to auction yard after business hours)
o Poor driver behaviour (burn-outs)
o No bike lanes
o Garbage falls from trucks

Lavinia Street
o Use of road by trucks
o Speed of vehicles
o Gutter lifted by tree roots

Millicent Street
o Too many heavy vehicles
o Speed of vehicles
o Excessive traffic volumes
o Poor lighting
o Uneven footpaths

Wride Street
o Parking of commercial vehicles in street (especially nights and weekends)
o Difficulty access to / from property due to trucks parked either side of driveway

Findings

### 4.1.2 Intersections

Glenroy Street / Millicent Street
o Swept path of trucks turning right into Millicent and corner cutting by car drivers (also turning right into Millicent)

Glenroy Street / Audley Street
o Restricted sight distance due to car yard fence and shrubs

## Lavinia Street / Cooke Street

o Consider roundabout (to restrict truck use in Lavinia)

## Grand Junction Road / Adamena Street

o U-turns for access to the Fish Factory
o Broken gutter corners

Grand Junction Road / Wride Street
o Continue median strip in Grand Junction to prevent trucks turning into Wride to bypass Hanson Road signals

Hanson Road - Parking
o Between Lavinia Street and Athol Street (sight distances from side roads)
o Parking near Annette Street (sight restrictions)
o Parking near Hamilton Road (sight restrictions)

## Hanson Road / Athol Street

o Swept path for trucks turning
o Delays and queues turning from Athol onto Hanson Road due to queues in Hanson Road

Hanson Road / Gateshead Street
o Difficulty turning from Gateshead due to U-Turns in Hanson Road
o Queuing from signals through intersection

Hanson Road / Millicent Street
o Bus stop on corner limits visibility
Hanson Road / Wride Street
o Trees block view of traffic on inside lane

## Audley St / Glenroy Ave / Park Ave

## o Dangerous intersection

o Difficulty for turning drivers
Annette Street / Alicia Street
o Speed of vehicles through intersection (turning)
Wride Street / Athol Street
o Visibility restriction because of trees

### 4.1.3 General Comments

Lighting (lack of)
o Athol Street near Glenroy
o Berkshire Street
o Annette Street
o Millicent Street
o Ely Street
o Generally poor
Footpaths
o Yvonne Street (raised cracked due to trees)
o In front of 33 Clare Street
o No footpath on west side of Glenroy Street
o No footpath on eastern side of Glenroy Street outside wrecking yard
o Rising footpath (trip hazard) in front of \#2 Glenroy Street
o Cracked sections along Gateshead Street
o Athol Street
o Hanson Road
o Grand Junction Road
o Amy Street (one section)
o Corner of Amy Street and Lavinia Street
o Hamilton Road (at one end)
o Millicent Street
Community Bus
o Need for community bus servicing local shops and Arndale, Port Adelaide and West Lakes

Roundabouts throughout Ferryden Park
o Too many plants - block visibility
o Too narrow for buses and ambulances

Findings

Hanson Road
o Need for bike lane between Grand Junction Road and Torrens Road

### 4.2 Athol Park Residents Committee

The committee has met on three occasions. Primary concerns discussed by the committee reinforce those identified from the area as follows:

- Commercial traffic travelling through residential areas
- Lack of access out of the commercial area due to the previous closure of Glenroy Street / Grand Junction Road
- Speeds on Ely Street in the vicinity of a playgroup / childcare facility
- Speeds and commercial vehicle volumes in Athol Street, Lavinia Street and Millicent Street
- Safety at the intersection of Glenroy Street / Park Avenue.


### 4.3 Speed and Volume Data

Speed and volume data (grouped into vehicle types) was collected during September 2005 in the following streets to quantify the usage of the streets by different types of vehicles and to get a general appreciation of traffic patterns in the precinct.

- Athol Street - between Adermener Street and Hanson Road
- Lavinia Street - between William Street and Hanson Road
- Millicent Street - between Emma Street and Amy Street
- Ely Street - between Yvonne Street and Hanson Road
- Annette Street - between Alfred Street and Adele Street
- Ninth Avenue - between Owen Street and Tenth Avenue
- Glenroy Street - south of Millicent Street and between Athol Street and Grand Junction Road

A summary of the data is included in Appendix B.

### 4.4 Crash Data

Maps showing the location, type and severity of crashes in the precinct are included in Appendix C. The data presented is based on DTEI geo-coded crash information for the period 1999-2004.

Not surprisingly, the vast majority of crashes have occurred along the arterial roads of Grand Junction Road and Hanson Road. Locations with more than 3 reported collisions are:

- Glenroy Street / Park Avenue / Audley Street (2 junctions) - 11 collisions
- Audley Street / Ninth Avenue - 9 collisions
- Ninth Avenue / Owen Street - 5 collisions
- Park Avenue / Clare Street - 5 collisions

The following tables summarise the 84 collisions that have occurred within the Athol Park Area - excluding crashes that occurred on the either Hanson Road or Grand Junction Road. The collision cost rates used to calculate these overall costs were derived from average collision costs from what is regarded as the most authoritative reference [Bureau of Transport Econonics (BTE), Road Crash Costs in Australia' - Report 102 (2000), Commonweath Government of Australia.]. These average costs include an allowance for such aspects as property damage, hospitalisation, pain and suffering, and lost productivity in the case of serious or fatal injuries. However, they do not consider the nature of individual incidents and this can have a significant influence on costs.

| Severity | Count | Rate | Cost (\$) |
| :--- | :---: | :---: | ---: |
| Fatal | 1 | $\$ 1,700,000$ | $\$ 1,700,000$ |
| Severe Injury | 0 | $\$ 408,000$ |  |
| Minor Injury | 13 | $\$ 13,776$ | $\$ 179,088$ |
| Property Damage Only | 70 | $\$ 5,808$ | $\$ 406,560$ |
| TOTAL | $\mathbf{8 4}$ |  | $\mathbf{\$ 2 , 2 8 5}, 648$ |


| Accident Type | Count |
| :--- | :---: |
| Hit Pedestrian | 1 |
| Right Turn | 3 |
| Head On | 3 |
| Side Swipe | 6 |
| Hit Parked Vehicle | 10 |
| Rear End | 11 |
| Hit Fixed Object | 19 |
| Right Angle | 31 |


| Accident Type | Severity | Count |
| :--- | :--- | :---: |
| Head On | PDO | 3 |
| Hit Fixed Object | Fatal | 1 |
| Hit Fixed Object | PDO | 18 |
| Hit Parked Vehicle | Injury | 1 |
| Hit Parked Vehicle | PDO | 9 |
| Hit Pedestrian | Injury | 1 |
| Rear End | Injury | 1 |
| Rear End | PDO | 10 |
| Right Angle | Injury | 9 |
| Right Angle | PDO | 22 |
| Right Turn | Injury | 1 |
| Right Turn | PDO | 2 |
| Side Swipe | PDO | 6 |

The data and pattern of crashes is not dissimilar to that which could be found in other local street networks. The predominance of right angle crashes reflects the number of intersections throughout the area. Note that 30 of the total 84 collisions occurred at 4 separate locations (listed above).

The number of collisions that occur throughout the week is reasonably consistent with fewer crashes occurring on Sunday. Most collisions occurred during daylight hours with the peak number of crashes occurring between $4: 00$ 5:00pm.

| DAY | Count |
| :--- | :---: |
| Monday | 12 |
| Tuesday | 12 |
| Wednesday | 11 |
| Thursday | 16 |
| Friday | 13 |
| Saturday | 14 |
| Sunday | 6 |


| Accident <br> HOUR | Count |
| :--- | :---: |
| 0 | 1 |
| 2 | 2 |
| 5 | 2 |
| 6 | 2 |
| 7 | 5 |
| 8 | 3 |
| 9 | 8 |
| 10 | 2 |
| 11 | 4 |
| 12 | 7 |
| 13 | 4 |
| 14 | 4 |
| 15 | 9 |
| 16 | 13 |
| 17 | 4 |
| 18 | 2 |
| 19 | 4 |
| 20 | 2 |
| 21 | 1 |
| 22 | 2 |
| 23 | 3 |

Findings

### 4.5 Westwood Development

Of particular relevance to the Athol Park precinct is the proposed redevelopment of some of the area as part of the Westwood project, as shown below. We have discussed this project with a representative of Urban Pacific (developers associated with the Westwood Park project), and understand that :

- Approximately $40-50 \%$ of the housing stock in this area is currently owned by the Housing Trust and is subject to redevelopment
- Redevelopment of the area is likely to commence in the coming 18 months (notionally September 2007)
- While plans have yet to be developed or finalised, there may be some changes to the road infrastructure within the precinct, particularly along Ely Street and the intersections of Hanson Road / Ely Street / Gateshead Street.

The development of plans for the Westwood area might also affect the functional hierarchy of particular roads. From a traffic management perspective the development is likely to affect the density of residential properties, number of people living in the area, and socio / economic demographic characteristics, which will in turn influence vehicle ownership levels and traffic patterns and behaviour.

It will be important for the existing traffic and road safety issues identified by the community to be addressed in the development of the Westwood precinct.


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### 4.6 Summary of Key Issues

Numerous issues have been identified throughout Athol Park for further investigation. Key issues have been summarised below.

- The conflict between residential / commercial and industrial land uses
- The lack of access between Grand Junction Road and Glenroy Street and need for commercial traffic to deviate through the area using (mostly) Athol Street
- Speeds and road user behaviour throughout the area
- Use of many streets by commercial vehicles
- The poor condition of footpaths throughout the area


## 5. Discussion and Draft Recommendations

The following discussion and draft recommendations were prepared and released for community feedback.

### 5.1 Land Use Planning

Many of the traffic and road safety concerns with Athol Park stem from the legacy of poor land use planning in the area. The area has a varying mixture of residential properties interspersed with commercial and industrial properties. This is particularly relevant along Athol Street, Lavinia Street, Glenroy Street and to a lesser degree Millicent Street.

Many roads must serve conflicting requirements. Commercial vehicle access obviously demands wider roads with few traffic restrictions. However, such road environments are conducive to higher speeds, and this is evidenced by much of the traffic data.

The $85^{\text {th }}$ percentile speeds in most roads are in the order of $60 \mathrm{~km} / \mathrm{h}$, and between $37.8-79.5 \%$ of traffic is exceeding the prevailing $50 \mathrm{~km} / \mathrm{h}$ speed limit. The highest recorded speeds on most roads are also of concern - typically around $100 \mathrm{~km} / \mathrm{h}$, with particularly excessive speeds recorded in Millicent Street ( $110 \mathrm{~km} / \mathrm{h}$ ) and Glenroy Street ( $132 \mathrm{~km} / \mathrm{h}$ ).

Resolution of these fundamental conflicts will be difficult without substantive changes to the land uses, and the separation of land uses that have polarised needs in terms of amenity, accessibility and safety. Such changes are considered beyond the scope of this project. Nonetheless it is interesting to note the proposed redevelopment of part of the Athol Park precinct through the Westwood Park initiative.

## Recommendation

In the longer term, Council should consider opportunities to progressively change the land uses in this area to remove the existing conflicts between residential and commercial / industrial activities.

Discussion and Recommendations

### 5.2 Athol Street

Athol Street is an east-west connector that services numerous residential and commercial properties. It is an approved B-Double route. Traffic volumes are in the order of 2300 vehicles per day (vpd), which are not excessive for this type of route. However, around one quarter ( $25 \%$ ) of all traffic are commercial vehicles. This proportion of heavy vehicles will significantly reduce the amenity of the road for residents.

The road is relatively wide ( 9.9 metres) and unrestricted, to suit the commercial vehicle usage. Speeds are therefore higher than desirable (around 47\% of traffic exceeds the $50 \mathrm{~km} / \mathrm{h}$ speed limit). However, it is not practical to introduce traffic control measures to modify speeds without reducing accessibility for commercial vehicles.

It may be possible to lower traffic volumes and the proportion of commercial vehicles by improving accessibility at the junction of Glenroy Street and Grand Junction Road (refer below).

Residents also expressed concern over the turning path of heavy vehicles (particularly B-Doubles) at the junction of Hanson Road and Athol Street. We have modelled turning paths by B-Doubles at the intersection using Austroads 'Autoturn' (an industry recognised modelling tool), using aerial photographs as the basis for the assessment. Refer Appendix D.

Note that the Autoturn model is usually conservative and while the diagrams show that the left turn can not be made without crossing the kerb on the northwest corner, in practice the turns can be made, albeit with some difficulty. The assessment shows that :

- Left turning vehicles out of Athol Street will need both lanes in Hanson Road and the rear wheels may cut the north western corner
- Right turning vehicles into Athol Street will probably cross the centre line in Athol Street, which is a potential risk for any vehicle already queued in Athol Street waiting to turn right into Hanson Road.

Of greater concern, there appears to be no restriction on right turns out of Athol Street into Hanson Road by B-Doubles. However, as a general road safety principle, these vehicles should only be permitted to turn right onto and off arterial roads at signalised intersections.

## Recommendation

## See recommendation below for Glenroy Street.

### 5.3 Glenroy Street

Glenroy Street is the distributor road for the precinct and provides access to the industrial land uses in/around Ninth Avenue, Burleigh Street and Audley Street (notionally the Finsbury Park area). The road is relatively wide ( 9.7 m ) and unrestricted, particularly along the western side, which has no side roads north of Park Avenue.

Traffic is restricted at the intersection with Grand Junction Road to left in and left out movements. There is no access into Glenroy Street from the west, nor access to the east on Grand Junction Road from Glenroy Street. This restriction does not support accessibility between the distributor road and the arterial road, and forces traffic to use the adjacent precinct for access onto Grand Junction Road.

Traffic volumes on Glenroy Street were recorded in two locations :

- South of Grand Junction Road - 2085 vpd
- South of Millicent Street - 3012 vpd

There is $30 \%$ less traffic on Glenroy Street between Athol Street and Grand Junction Road than between Millicent Street and Park Avenue. While a small proportion of this traffic loss will be to/from adjacent properties, the great majority of this traffic is thought to "migrate" through the precinct - predominantly via Athol Street as well as Lavinia Street and Millicent Street.

If accessibility between Grand Junction Road and Glenroy Street could be improved, it should reduce traffic volumes in Athol Street, and to a lesser degree Lavinia Street and Millicent Street.

This treatment could improve access arrangements between Grand Junction Road and the other side roads between Glenroy Street and Hanson Road (i.e. White Avenue, Adermener Street and Wride Street). The median opening adjacent White Street is a shared opening with other properties on the northern side of Grand Junction Road. Storage within the painted median opening is limited, particularly for use by commercial vehicles.

## Recommendation

That Council initiate discussions with DTEI to investigate the practicality of installing traffic signals at the junction of Grand Junction Road and Glenroy Street, thereby providing full access to Glenroy Street.

As part of these investigations, $B$-Double access at the intersection of Hanson Road and Athol Street be reviewed given the limitations of larger vehicles turning at this location.

The community expressed concern over the speed of vehicles using the road. South of Millicent Street, the $85^{\text {th }}$ percentile speed was recorded as $63 \mathrm{~km} / \mathrm{h}$ and $80 \%$ of traffic was exceeding the $50 \mathrm{~km} / \mathrm{h}$ speed limit. The fastest speed recorded along the road was $132.6 \mathrm{~km} / \mathrm{h}$. The data therefore substantiates the community's concerns.

The installation of unduly restrictive traffic controls (e.g. road humps) can not be considered as the road is an approved B-Double route and provides accessibility to the surrounding commercial / industrial precincts.

The installation of roundabouts along the road would, in principle, offer a suitable level of speed control for the road and would also reduce approach speeds (from the north) to the bend and junctions at Park Avenue (refer below). However, it is not possible to design a roundabout for the side roads (i.e. Athol Street, Lavinia Street or Millicent Street), while maintaining B-Double access, within the confines of the existing road reserve. The installation of roundabouts at the side roads will require significant land acquisition from the properties on the western side of the road to maintain a suitable design to allow B-Double access, and is therefore not considered practicable.

The only immediate treatment that could be considered for Glenroy Street would be to mark the road with a formal parking lane on one side of the road (only) and restrict that actual lane widths in either direction. The low demand for parking along Glenroy Street is such that parking could be banned from one side of the street without too much inconvenience. This treatment will enable kerb protuberances to be installed at regular intervals along the road (within the parking lane) to provide a visual - albeit subtle - visual narrowing of the roadway.

Glenroy Street is identified in Council' Strategic Bicycle Plan as an important route for cycling. The Plan recommends that Exclusive Bike Lanes be marked on either side of the road. However, this can only be achieved in parking is banned on both sides of the road, and would not allow for the inclusion of kerb protuberances with landscaping.

An alternative would be construct a shared off-road path along the western side of the road. This would provide adequate cycling facilities to support the Strategic Bicycle Plan and would still allow a parking lane to be marked.

## Recommendation

Council formalise two traffic lanes and one parking lane on the eastern side of Glenroy Street as shown in Appendix E. Parking be prohibited on the western side of the road. Kerb protuberances and plantings be introduced at regular intervals along the road within the parking lane. A shared bicycle lane be established along the western side of the road.

Discussion and Recommendations

### 5.4 Glenroy Street / Park Avenue I Audley Street

Numerous residents expressed concern over safety at the staggered junctions of Glenroy Street, Park Avenue and Audley Street. Crash data has been reviewed for the junctions for the period since 2000 (refer Appendix F). Common types of collision include :

- Vehicles in Glenroy Street leaving the road and hitting a fence/tree
- Right angle collisions between northbound vehicles and drivers entering Audley Street from the western leg of Park Avenue (at the southern junction).

Conditions at this location are compounded by the potential for high approach speeds (particularly from the north), percentage of commercial vehicles, and proportion of turning traffic. Note that Park Avenue is a bus route and buses are required to execute a left-right manoeuvre between the two junctions.

Available sight distances at the junctions are already limited due to the curve and adjacent property boundaries/vegetation. Sight distances to the north from the western approach in Park Avenue are limited to approximately 65 metres which is less than desirable for the prevailing speed environment. Austroads Guide to Traffic Engineering Practice - Part 5 - nominates a minimum stopping sight distance of 89 metres at $50 \mathrm{~km} / \mathrm{h}$ and 113 metres at $60 \mathrm{~km} / \mathrm{h}$ (design speeds).

## Recommendation

Consideration could be given to establishing a shared right turn lane between the two junctions with Park Avenue as shown in Appendix G. Signposting of the curves also be improved as shown in the concept sketch. Vegetation be removed and the property fence line adjusted to improve sight lines between Park Avenue (west) and the northern leg in Glenroy Street.

### 5.5 Lavinia Street

Lavinia Street is similar to Athol Street in terms of its road environment and adjacent land uses. Community concerns included use of the road by trucks, the speed of vehicles and the gutter being lifted by tree roots.

The road is relatively wide ( 9.0 metres) and unrestricted, to suit the commercial vehicle usage. Speeds are therefore higher than desirable (around 38\% of traffic exceeds the $50 \mathrm{~km} / \mathrm{h}$ speed limit). It is not practicable to introduce significant traffic control measures to modify speeds without reducing accessibility for commercial vehicles.
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Discussion and Recommendations

## Recommendation

That Council investigate the feasibility of installing a roundabout at either the junctions of Cook Street or Amy Street (or both as a 'dog-bone' configuration), that reduces mid-block speeds yet maintains accessibility for commercial vehicles. However, this may be difficult as the roundabout will have to accommodate usage by semitrailers and other large commercial vehicles.

### 5.6 Millicent Street

The road environment of Millicent Street is not dissimilar to Athol and Lavinia Streets, although the adjacent land uses are predominantly residential in nature and there are fewer commercial premises. Existing traffic volumes (1122 vpd) are not considered excessive for a residential street. Notwithstanding, speeds are clearly a potential concern.

Community concerns included excessive traffic volumes, use of the road by commercial vehicles, traffic speeds and the poor condition of footpaths and lighting.

Consideration could be given to intermediate traffic control devices along the road (e.g. roundabouts or other traffic control devices) to discourage excessive speeds along the road length. Restrictive traffic controls (e.g. road humps) are not favoured as it will result in a diversion of some traffic volumes into Lavinia Street.

Ideally, 2-3 devices should be installed along the road to provide a sufficient control on speeds. A roundabout could be considered at the intersection of Emma Street, while "junction rearrangements" might be considered for side road T-Junctions such as William Street. Note, however, that Council does not have delegated authority to install junction rearrangements (as shown below) and must obtain approval from the Department of Transport Energy and Infrastructure.


Concept "Junction Rearrangement"

Note that Millicent Street is the boundary of the future Westwood Park development, and that the residential character of the road may change on the southern side of the road between Emma Street and Hanson Road.

## Recommendation

That Council investigates the feasibility of installing roundabouts at selected junctions along Millicent Street. An alternative would be the installation of "junction rearrangements" at selected side roads.

That Council discuss the appropriateness of these treatments in conjunction with the Westwood Park development.

### 5.7 Ely Street

Concerns have been raised over the speed of vehicles along Ely Street adjacent the reserve and child care centre. The $85^{\text {th }}$ percentile speed along the road ( $60 \mathrm{~km} / \mathrm{h}$ ) is considered too fast for a local residential street. Speed past child care centre were cited as a particular concern.

Recommendation
Various traffic control devices could be considered to address this problem, including roundabouts, road humps or plateaus and angled slow points. Subject to the implementation of the Westwood development, Council could install lower cost treatments (e.g. road humps) along Ely Street to achieve an immediate control on speeds.

Also in the short term, Council could consider the installation of a $25 \mathrm{~km} / \mathrm{h}$ School Zone (When Children Present) adjacent the centre, in both Ely Street and Gateshead Street. However, these zones are not typically used adjacent child care centres as the children are kept behind gates and only use the roads in the company of adult carers.

Consideration should be also given to addressing these concerns as part of the Westwood development.

Several respondents also noted that drivers cross over the plantation and park area between Ely Street, Cambridge Street and Gateshead Street. This problem has already been addressed by Council through the installation of posts along the edges of the reserve.

Discussion and Recommendations

### 5.8 Gateshead Street

Most community concerns centred on speeds past the child care centre and cars taking short cuts in the median. The issue of speeds past the child care centre has been addressed under Ely Street (refer above). It has also been previously noted that the issue of vehicles crossing over the verge area has been addressed by Council through the installation of posts along both sides of the reserve. Note that Gateshead Street is also within the Westwood Park development area and there may be opportunities as part of this project to address the issue of speeds through alterations to the design or function of the road.

Recommendation

## Further consideration be given to this matter as part of the Westwood Park development.

### 5.9 Adermener Street

Concern was expressed over the use of the street by trucks and the speed of some vehicles. The road connects Grand Junction Road with Athol Street and passes through a mixed commercial / industrial / residential precinct. Traffic restrictions to reduce access for commercial vehicles are not considered appropriate.

### 5.10 Annette Street

Concern was expressed over vehicle speeds in Annette Street. The 85 ${ }^{\text {th }}$ percentile speed for the road is $55 \mathrm{~km} / \mathrm{h}$ which is reasonably typical of residential streets operating with the default general urban speed limit.

The concerns reflect the overall concern for road user behaviour throughout the whole precinct. Treating Annette Street in isolation is not considered appropriate, particularly as the road is a bus route, which limits the availability of traffic control restrictions. Traffic volumes are in the order of 740 vpd which is considered reasonable for a residential street. Annette Street is within the Westwood Park development area and may see some changes in the coming years.

### 5.11 Wride Street

Community concerns included the parking of commercial vehicles in the street (especially nights and weekends) and difficulty access to / from property due to trucks parked either side of driveway. It was also noted that the road is apparently used to avoid delays at the intersection of Grand Junction Road and Hanson Road.

Further concerns were raised over regular U-turns by drivers in Grand Junction Road (from the west) apparently to access the 'Fish Factory' on the southern side of the road.

Wride Street is one of three connectors between Grand Junction Road, the commercial precinct and Athol Street. Restrictive traffic control devices are therefore not considered appropriate. Similarly, closure of the median in Grand Junction Road (to prevent rat-running) will only put additional traffic loadings into White Avenue and Adermerer Street for users with ‘legitimate’ access needs.

## Recommendation

Council consider the installation of a No Stopping zone along one side of the road to improve accessibility to adjacent properties.

## Council seek endorsement for the installation of a 'No U-Turn' sign in the median from DTEI.

### 5.12 Hanson Road

### 5.12.1 Hanson Road - Side Road Access

Several respondents to the community survey identified difficulty turning onto Hanson Road from various side roads, due to parked vehicles, bus stops and other sight restrictions. With the exception of the Millicent Street junction (where angle parking is applied to the western side of Hanson Road south of the junction) conditions at the other side roads are reasonably typical of junctions between side streets and arterial roads.

Sight distances can be limited when vehicles, particularly trucks/vans or buses are parked near the corners. Compounding factors for gaining access onto Hanson Road include the constant traffic flow and limited median width for sheltering when turning. North south traffic movements along Hanson Road are reasonably random in this area rather than being platooned with larger gaps that allow traffic to enter. There is also a higher proportion of commercial vehicles in this area. Under these conditions access can be difficult and the availability of adequate sight distances is critical.

## Recommendation

Consideration should be given to marking longer no stopping zones (e.g. 15-20 metres) in Hanson Road at the various side roads junctions.

### 5.12.2 Hanson Road / Gateshead Street / Ely Street

Traffic conditions at this location are less than desirable as there are two 4-way intersections crossing an arterial road, in close proximity to each other. Four-way intersection are typically not favoured along arterial roads due to the added risk of collisions, in comparison with staggered T-junctions. The nearby location of a pedestrian crossing on Hanson Road and potential for queuing through the intersections is a further complication.

## Recommendation

Conditions at the intersection be reviewed through discussion with DTEI, Westwood Development and the Port Adelaide Enfield Council. Consideration should be given to the closure of one or more approaches to establish staggered $T$-Junctions rather than two four way intersections. Similar improvements could be achieved by restricting traffic movements at one or both intersections.

### 5.12.3 Hanson Road - Bike Lanes

One respondent to the community circular suggested bike lanes are needed along Hanson Road between Grand Junction Road and Torrens Road. This suggestion is outside the scope of this project and should be referred to DTEI for further consideration.

### 5.13 Lighting

Several residents expressed concern over the adequacy of lighting throughout the precinct and with particular reference to :

- Athol Street near Glenroy
- Berkshire Street
- Annette Street
- Millicent Street
- Ely Street

Council should review these locations relevant to the normal standard of lighting accepted in residential areas.

### 5.14 Footpaths

The following locations should be reviewed by Council for early intervention and remediation as part of its ongoing footpath management strategy.

- Yvonne Street (raised cracked due to trees)
- In front of 33 Clare Street
- No footpath on west side of Glenroy Street
- No footpath on eastern side of Glenroy Street outside wrecking yard
- Rising footpath (trip hazard) in front of \#2 Glenroy Street
- Cracked sections along Gateshead Street
- Athol Street
- Hanson Road
- Grand Junction Road
- Amy Street (one section)
- Corner of Amy Street and Lavinia Street
- Hamilton Road (at one end)
- Millicent Street


### 5.15 Community Bus

One respondent to the community circular requested Council consider the provision of a community bus to servicing local shops and Arndale, Port Adelaide and West Lakes.

## Recommendation

This matter is considered outside of the scope of this traffic study but should be considered by Council as the demographics of the area change along with the Westwood Development.

## 6. Community Feedback

The following section outlines the draft recommendations issued for community review together with the results of the community feedback. Where appropriate, responses are offered to comments made by the community, and the draft recommendations have been amended.

The draft recommendations were circulated through the Athol Park Residents Association as well as the broader community. Overall, there was a strong support for all of the recommendations.

Response received
Athol Park Residents Association 19
Broader Community 9

### 6.1 Land Use Planning

## Draft Recommendation

Council should consider opportunities to progressively change the land use zoning throughout Athol Park to remove the existing conflicts between residential and commercial / industrial activities.

Level of Community Support
$100 \%$ support was received from the Residents Association and community feedback.

Suggested Amendment to Recommendation
No change is considered necessary to the recommendation.

### 6.2 Westwood Development

## Draft Recommendation

Council should ensure that the various traffic issues identified in this report through community consultation should be addressed as part of the Westwood Development. Particular attention should be given to:

- Traffic speeds along Ely Street
- Speeds and the percentage of commercial vehicles in Millicent Street
- Speeds past the community centre in Gateshead Street
- The intersection of Hanson Road / Ely Street and Gateshead Street


## Level of Community Support

100\% support was received from the Residents Association and community feedback.

## Suggested Amendment to Recommendation

No change is considered necessary to the recommendation.

### 6.3 Heavy Vehicle Access

## Draft Recommendation

Council should initiate discussions with DTEI to investigate the practicality of installing traffic signals at the junction of Grand Junction Road and Glenroy Street, thereby providing full access to Glenroy Street.
$B$-Double access at the intersection of Hanson Road and Athol Street be reviewed given the limitations of larger vehicles turning at this location.

## Level of Community Support

The clear majority of the community supported this recommendation. A number of responses acknowledged the importance of this recommendation to reduce commercial vehicle usage (in particular) of Athol Street, Millicent Street and Lavinia Street. The recommendation was also noted as being important to reduce the difficulties experienced by B-Doubles at the corner of Athol Street and Hanson Road.

One resident suggested that Glenroy Street be realigned on the approach to Grand Junction Road to form an intersection with Eastern Parade. This suggestion would require land acquisition from the property on south western corner of the existing junction, but could nonetheless be examined as part of the discussions with DTEI into the signalisation of the intersection.

Only one response disagreed with this recommendation, although no explanation was given by the respondent.

## Suggested Amendment to Recommendation

Council should initiate discussions with DTEI to investigate the practicality of installing traffic signals at the junctions of Grand Junction Road, Glenroy Street and Eastern Parade to provide full access to Glenroy Street.
$B$-Double access at the intersection of Hanson Road and Athol Street be reviewed given the limitations of larger vehicles turning at this location.

### 6.4 Glenroy Street

## Draft Recommendation

Council formalise two traffic lanes and one parking lane on the eastern side of Glenroy Street as shown in Appendix E. Parking be prohibited from the western side of the road. Kerb protuberance and plantings be introduced at regular intervals along the road within the parking lane. A shared bicycle lane be provided along the westerns side of the road.

## Level of Community Support

The clear majority of the community supported this recommendation. One response disagreed with this recommendation, although no explanation was given by the respondent.

## Suggested Amendment to Recommendation

No change is considered necessary to the recommendation.

### 6.5 Glenroy Street / Park Avenue

## Draft Recommendation

Consideration could be given to establishing a shared right turn lane between the two junctions with Park Avenue as shown in Appendix G. Signposting of the curves also be improved as shown in the concept sketch. Vegetation be removed and the property fence line adjusted to improve sight lines between Park Avenue (west) and the northern leg in Glenroy Street.

## Level of Community Support

100\% support was received from the Residents Association and community feedback.

## Suggested Amendment to Recommendation

No change is considered necessary to the recommendation.

### 6.6 Lavinia Street

## Draft Recommendation

Council investigate the feasibility of installing a roundabout at either the junctions of Cook Street or Amy Street (or both as a 'dog-bone' configuration), that reduces midblock speeds yet maintains accessibility for commercial vehicles. However, this may be difficult as the roundabout will have to accommodate usage by semi-trailers and other large commercial vehicles.

## Level of Community Support

The majority or residents supported this recommendation. Notwithstanding, some concerns were noted that any treatment of one street should not move traffic to another side road. One respondent reiterated the importance of improving access at the junction of Glenroy Street and Grand Junction Road, and that if this access is improved, there may not be any need for treatments in Lavinia and Millicent Streets.

## Suggested Amendment to Recommendation

Council investigate the feasibility of installing a roundabout at either the junctions of Cook Street or Amy Street (or both as a 'dog-bone' configuration), that reduces midblock speeds yet maintains accessibility for commercial vehicles. The need for this treatment should be considered in the context of proposed discussions with DTEI with regard to the junction of Glenroy Street and Grand Junction Road.

### 6.7 Millicent Street

## Draft Recommendation

Council should investigate the feasibility of installing roundabouts or junction rearrangements at one or two selected junctions along Millicent Street. While this treatment could be undertaken in isolation, Council should discuss the appropriateness of these treatments in conjunction with the Westwood development.

## Level of Community Support

100\% support was received from the Residents Association and approximately two thirds of support was also received from community feedback. Some concern was again noted that any treatment of one street should not move traffic to another side road. While one response suggested the need for this treatment should be subject to signalisation of Grand Junction Road and Glenroy Street, other responses urged that the treatment of Millicent Street should happen immediately and should not be dependent upon the Westwood Development.

## Suggested Amendment to Recommendation

Council should investigate the feasibility of installing roundabouts or junction rearrangements at one or two selected junctions along Millicent Street. The need for this treatment should also be considered in the context of proposed discussions with DTEI with regard to the junction of Glenroy Street and Grand Junction Road.

### 6.8 Ely Street

## Draft Recommendation

Subject to the implementation of the Westwood development, Council consider the installation of road humps/plateau along Ely Street to offer an immediate control on speeds.

Council could also consider the installation of a $25 \mathrm{~km} / \mathrm{h}$ School Zone (When Children Present) adjacent the centre, in both Ely Street and Gateshead Street. However, these zones are not typically used adjacent child care centres as the children are kept behind gates and only use the roads in the accompany of adult carers.

Consideration should be also given to addressing these concerns as part of the Westwood development.

## Level of Community Support

100\% support was received from the Residents Association and approximately two thirds of support was also received from community feedback. The primary concerns were the potential for more traffic to use other side roads (notably Lavinia Street), and need to consider the potential upgrade of Grand Junction Road and Glenroy Street.

The focus of the recommendation is still on the resolution of existing traffic concerns as part of the Westwood Development. There appears sufficient support to investigate interim measures to reduce speeds in Ely Street, particularly due to the adjacent Child Care Centre.

## Suggested Amendment to Recommendation

No change is considered necessary to the recommendation.

### 6.9 Wride Street

## Draft Recommendation

Council consider the installation of a No Stopping zone along one side of the road to improve accessibility to adjacent properties. Council seek the installation of a 'No UTurn' sign in the median from DTEI.

## Level of Community Support

100\% support was received from the Residents Association and community feedback.

## Suggested Amendment to Recommendation

No change is considered necessary to the recommendation.

### 6.10 Hanson Road

## Draft Recommendation

Consideration should be given to marking longer no stopping zones (e.g. 15-20 metres) in Hanson Road at the various side roads junctions.

## Level of Community Support

100\% support was received from the Residents Association and community feedback.

## Suggested Amendment to Recommendation

No change is considered necessary to the recommendation.

### 6.11 Hanson Road / Ely Street / Gateshead Street

## Draft Recommendation

Conditions at the intersection be reviewed through discussion with DTEI, Westwood Development and the Port Adelaide Enfield Council. Consideration should be given to the closure of one or more approaches to establish staggered $T$-Junctions rather than two four way intersections. Similar improvements could be achieved by restricting traffic movements at one or both intersections.

## Level of Community Support

$100 \%$ support was received from the Residents Association and community feedback.

Suggested Amendment to Recommendation
No change is considered necessary to the recommendation.

### 6.12 Summary

Overall, there was strong support for the recommendations outlined in the Draft Traffic Plan issued for Community Feedback. The main points of 'disagreement' related more so to the order or priority of treatment. The community acknowledged the importance of improving heavy vehicle access between Glenroy Street and Grand Junction Road.

If accessibility can be improved through the signalisation of the junction (or intersection with Eastern Parade), traffic pressures in the east-west side roads (Athol Street, Lavinia Street and Millicent Street) should be reduced, potentially negating the need for traffic controls in these streets.

While the proposed signalisation of Grand Junction Road and Glenroy Street should reduce some of the traffic concerns in the broader area, it must be noted that there's considerable work to be done to resolve the practicality of installing traffic signals and potentially realigning the road to meet with Eastern Parade.

Accordingly, we believe that concurrent consideration should be given to the installation of traffic control devices in Lavinia Street and Millicent Street in particular. These investigations should also consider the future road layout as part of the Westwood Development project.

The following table summarises the level of support for each recommendation received from the broader community consultation. It is not possible to combine the results of the previous survey with the Residents Association due to slight differences with the format of the questionnaire. Notwithstanding, all recommendations were strongly supported by the Residents Association.

|  | 6.1 | 6.2 | 6.3 | 6.4 | 6.5 | 6.6 | 6.7 | 6.8 | 6.9 | 6.10 | 6.11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| STRONGLY AGREE | 6 | 5 | 7 | 5 | 4 | 2 | 4 | 1 | 5 | 5 | 4 |
| AGREE | 3 | 3 | 2 | 3 | 2 | 4 | 1 | 5 | 4 | 4 | 5 |
| DISAGREE | 0 | 0 | 0 | 1 | 0 | 2 | 3 | 3 | 0 | 0 | 0 |
| STRONGLY DISAGREE | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \% Support | 100\% | 100\% | 90\% | 89\% | 100\% | 75\% | 63\% | 67\% | 100\% | 100\% | 100\% |
| \% Non-Support | 0\% | 0\% | 10\% | 11\% | 0\% | 25\% | 37\% | 33\% | 0\% | 0\% | 0\% |

enginemina

## 7. Final Recommendations

### 7.1 Land Use Planning

Council should consider opportunities to progressively change the land use zoning throughout Athol Park to remove the existing conflicts between residential and commercial / industrial activities.

### 7.2 Westwood Development

Council should ensure that the various traffic issues identified in this report through community consultation should be addressed as part of the Westwood Development. Particular attention should be given to:

- Traffic speeds along Ely Street
- Speeds and the percentage of commercial vehicles in Millicent Street
- Speeds past the community centre in Gateshead Street
- The intersection of Hanson Road / Ely Street and Gateshead Street


### 7.3 Heavy Vehicle Access

Council should initiate discussions with DTEI to investigate the practicality of installing traffic signals at the junctions of Grand Junction Road, Glenroy Street and Eastern Parade to provide full access to Glenroy Street.

B-Double access at the intersection of Hanson Road and Athol Street be reviewed given the limitations of larger vehicles turning at this location Street be reviewed given the limitations of larger vehicles turning at this location.

### 7.4 Glenroy Street

Council formalise two traffic lanes and one parking lane on the eastern side of Glenroy Street as shown in Appendix E. Parking be prohibited from the western side of the road. Kerb protuberance and plantings be introduced at regular intervals along the road within the parking lane. A shared bicycle lane be provided along the westerns side of the road.

### 7.5 Glenroy Street / Park Avenue

Consideration could be given to establishing a shared right turn lane between the two junctions with Park Avenue as shown in Appendix G. Signposting of the curves also be improved as shown in the concept sketch. Vegetation be removed and the property fence line adjusted to improve sight lines between Park Avenue (west) and the northern leg in Glenroy Street.

### 7.6 Lavinia Street

Council investigate the feasibility of installing a roundabout at either the junctions of Cook Street or Amy Street (or both as a 'dog-bone' configuration), that reduces midblock speeds yet maintains accessibility for commercial vehicles. The need for this treatment should be considered in the context of proposed discussions with DTEI with regard to the junction of Glenroy Street and Grand Junction Road.

### 7.7 Millicent Street

Council should investigate the feasibility of installing roundabouts or junction rearrangements at one or two selected junctions along Millicent Street. The need for this treatment should also be considered in the context of proposed discussions with DTEI with regard to the junction of Glenroy Street and Grand Junction Road.

### 7.8 Ely Street

Subject to the implementation of the Westwood development, Council consider the installation of road humps/plateau along Ely Street to offer an immediate control on speeds.

Council could also consider the installation of a $25 \mathrm{~km} / \mathrm{h}$ School Zone (When Children Present) adjacent the centre, in both Ely Street and Gateshead Street. However, these zones are not typically used adjacent child care centres as the children are kept behind gates and only use the roads in the accompany of adult carers.

Consideration should be also given to addressing these concerns as part of the Westwood development.

### 7.9 Wride Street

Council consider the installation of a No Stopping zone along one side of the road to improve accessibility to adjacent properties.

Council seek the installation of a 'No U-Turn' sign in the median from DTEI.

Final Recommendations

### 7.10 Hanson Road

Consideration should be given to marking longer no stopping zones (e.g. 15-20 metres) in Hanson Road at the various side roads junctions.

### 7.11 Hanson Road / Ely Street / Gateshead Street

Conditions at the intersection be reviewed through discussion with DTEI, Westwood Development and the Port Adelaide Enfield Council. Consideration should be given to the closure of one or more approaches to establish staggered T-Junctions rather than two four way intersections. Similar improvements could be achieved by restricting traffic movements at one or both intersections.


Appendix A

## Appendix A

## Community Circulars

## Local Area Traffic Management Review Athol Park

Council is reviewing traffic and road safety in the Athol Park area bounded by:

- Grand Junction Road
- Hanson Road
- Ninth Avenue
- Glenroy Street and Audley Avenue

A Local Area Traffic Management (LATM) Plan will be developed to address a range of factors including management of the road network for all users including, pedestrians, cyclists, public and community transport, commercial transport, and private vehicles. The LATM plan has to balance the needs of the community that live in the area with the transport uses of the roads within the precinct. Sometimes this is not easy as legitimate traffic movements can affect the residential amenity and safety within the area.

Council has engaged Tonkin Consulting to develop the LATM Plan in consultation with the community. The first stage of the process will be to identify the existing traffic and road safety issues within the precinct. While Tonkin Consulting will examine traffic data and crash records, and undertake their own independent review of the road network, they would also value your comments regarding these matters.

Your comments can be provided by returning the attached response form in the enclosed reply paid envelope.

Once all data has been collected and comments have been received, Tonkin Consulting will develop options for road engineering measures to address the problems. These options will be discussed and refined through liaison with Council and the Athol Park Resident's Committee. A draft LATM plan will subsequently be prepared for broader consultation with all residents and businesses in Athol Park.

Ultimately, Council requires a concise LATM plan for the Athol Park precinct that:

- identifies existing and future traffic related problems
- determines if road engineering solutions are warranted, and if so,
- the most appropriate and acceptable solutions to the community.


## For further information contact Paul Simons on 82733100.

CHARLESSTURT

## Athol Park LATM

## Community Survey

Name: $\qquad$ Address: $\qquad$

Please identify any traffic and road safety concerns you have in the area.
$\square$ Speed of vehicles $\square$ Parking Arrangements $\quad \square$ Bicycle Facilities $\square$ Footpaths $\square$ Road Lighting $\square$ Road Safety $\square$ Other
$\square$ Traffic Noise $\quad \square$ Traffic Volumes $\quad \square$ Street Environment $\square$ Property $\square$ Activities associated with land use
Locations and Issues: (eg. cracked footpath on the corner of Cook Street and Athol Street)

Locations and Issues: (eg. cracked footpath on the corner of Cook Street and Athol Street)
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## What solutions or opportunities do you think could be considered to resolve the issues you have identified?

Solutions/Opportunities
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$\qquad$
$\qquad$

Thank you for taking the time to complete the questionnaire. Please return it in the reply paid envelope marked City of Charles Sturt, 72 Woodville Road, Woodville SA 5052.

Onkin

CHARLES
STURT

## ATHOL PARK LOCAL AREA TRAFFIC MANAGEMENT (LATM) PLAN

## Dear Sir / Madam

Our records show that in June last year you responded to a request for comments about traffic issues in your local area. Your comments were used to develop a draft LATM Plan in consultation with the Athol Park Residents Association.

Council has recently endorsed the "Findings and Recommendations for Consultation" report, prepared by Tonkin Consulting, and is now finalising the LATM Plan for Athol Park (and three other areas in Council Woodville South, Royal Park, and West Croydon).

The Plans will help the Council to make traffic planning decisions in these areas and will improve the amenity of these local areas. The traffic control devices recommended in the Plans will be constructed over the next few years (as funds are made available).

Council is now seeking your feedback on the recommendations in the reports. We have enclosed a summary of the recommendations for the Athol Park LATM area. Full copies of the report are available to read at the Council offices at 72 Woodville Road, Woodville, or on the Council's website at www.charlessturt.sa.gov.au

We have also enclosed a response form for you to complete. The response form is also available on the website. I invite you to review the recommendations for traffic improvements in Athol Park and send your response to :

ATHOL PARK LATM Consultation Feedback,
PO Box 1
WOODVILLE SA 5011.

## Consultation closes on Friday 31 March 2006.

Thank you for your interest.


Paul Simons
Project Manager
On Behalf of City of Charles Sturt

## ATHOL PARK LATM <br> RESPONSE FORM

## Name:

$\qquad$
Address $\qquad$
Telephone: $\qquad$

## General Questions:

1. Do you support the draft LATM plan in the Athol Park Report?

Yes / No (delete as appropriate)
2. Does the draft LATM plan address your concern about traffic in Athol Park? Yes / No (delete as appropriate)
3. If not, why not?
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Specific Questions:

How strongly do you agree/disagree with the Report Recommendations (circle as appropriate)?
6.1: Land Use Planning

Strong agree / Agree / Disagree / Strongly disagree
6.2: Westwood Development

Strong agree / Agree / Disagree / Strongly disagree
6.3: Heavy Vehicle Access

Strong agree / Agree / Disagree / Strongly disagree
6.4: Glenroy Street

Strong agree / Agree / Disagree / Strongly disagree
6.5: Glenroy Street/Park Avenue

Strong agree / Agree / Disagree / Strongly disagree
6.6: Lavinia Street

Strong agree / Agree / Disagree / Strongly disagree
6.7: Millicent Street

Strong agree / Agree / Disagree / Strongly disagree
6.8: Ely Street

Strong agree / Agree / Disagree / Strongly disagree

## Continued over page

6.9: Wride Street

Strong agree / Agree / Disagree / Strongly disagree
6.10: Hanson Road

Strong agree / Agree / Disagree / Strongly disagree
6.11 Hanson Road/Ely Street/Gateshead Street

Strong agree / Agree / Disagree / Strongly disagree
Comments:
$\qquad$
$\qquad$
$\qquad$
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$\qquad$

## Thank you for your interest

## Please return to :

ATHOL PARK LATM Consultation Feedback
PO Box 1
WOODVILLE SA 5011.
Consultation closes on Friday 31 March 2006.

Appendix B

## Appendix B

## Speed and Volume Data




Appendix C

## Appendix C

## Collision Maps




Appendix D

## Appendix D

## Hanson Road / Athol Street B-Double Turning Path

Appendix D

B-Double - LEFT TURN Movement


City of Charles Sturt
Athol Park LATM - Draft Findings and Recommendations for Consultation
20050191RA4.doc

B-Double - RIGHT TURN Movement


Appendix E

## Appendix E

## Glenroy Street Concept Parking Lane Configuration



ADELAIDE
TONKIN CONSULTING
5 COOKE TERRACE
WAYVILLE SA 5034
T +61882733100
F +61882733110
E adelaide@tonkin.com.au
W www.tonkin.com.au

City of Charles Sturt
Athol Park Traffic Study 1999-2004 GLENROY ST SUGGESTED PARKING OPTIONS

## Appendix F

## Glenroy Street / Park Avenue Collision Diagrams






Appendix G

## Appendix G

## Glenroy Street / Park Avenue Concept Sketch



ONKIN CONSULTING 5 COOKE TERRACE WAYVILLE SA 5034

