

Road Safety Review

Winns Road & Ewers Avenue

Purpose

Ewers Road/Winns Road intersection

- Provide information on the road safety issues at the intersection of Ewers Road/Winns Road intersection
- Discuss options to alleviate road safety issues at the intersection

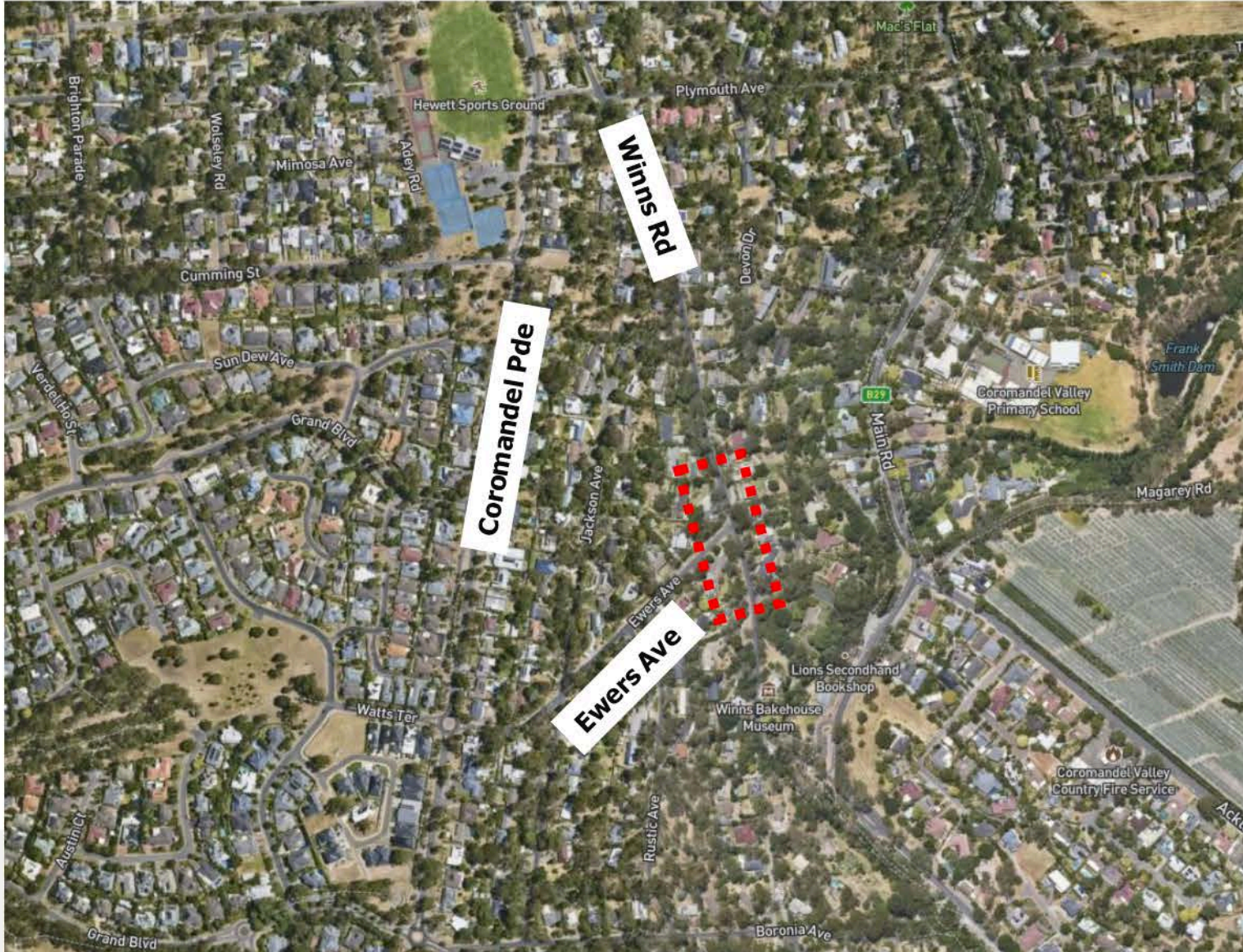
Trevor Tce

- To provide information on the outcomes of the post implementation review for the traffic treatments installed at Trevor Tce.

Questions for discussion ... at the end of presentation

1. Traffic treatment options discussion and feedback
2. Any other questions?

Site Overview



Location:

T-intersection, Coromandel Valley

Speed Limit:

50km/h on both roads

Traffic Speed (85th percentile):

Winns Rd: 51.98 km/h

Ewers Ave: 49.82km/h

Traffic Volume:

Winns Rd : approx. 3000 veh/day

Ewers Ave: approx. 400 veh/day

Key Safety Issues – Restricted Sight Distance



Restricted Sight Distance:

Austrroads required 97m visibility at posted speed limit of 50km/h

Only 30-40m visible.

Key Safety Issues – Restricted Sight Distance



Driver Sight Distance towards South from Ewers Avenue



Driver Sight Distance towards North from Ewers Avenue

Key Safety Issues – Speeding



Ewers Ave:

Steep downhill approaching Winns Road

Winns Roads:

The road slopes downhill in the southbound direction for 450 m prior to Ewers Avenue.

Vehicles on Winns Road frequently exceed their 50km/h speed limit

Winns Rd(southbound) : 54.6 km/h

Winns Rd (northbound) : 49.8 km/h

Key Safety Issues – Speeding



Vehicles on Ewers Ave approaching the intersection

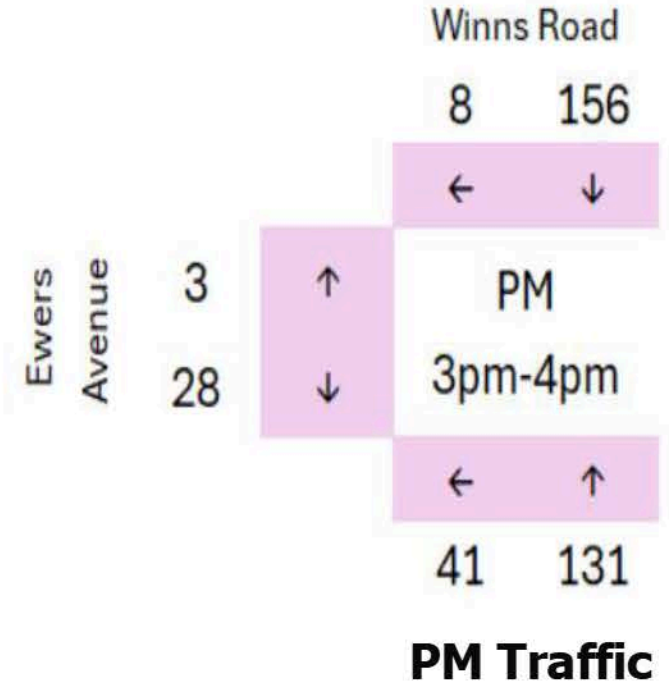
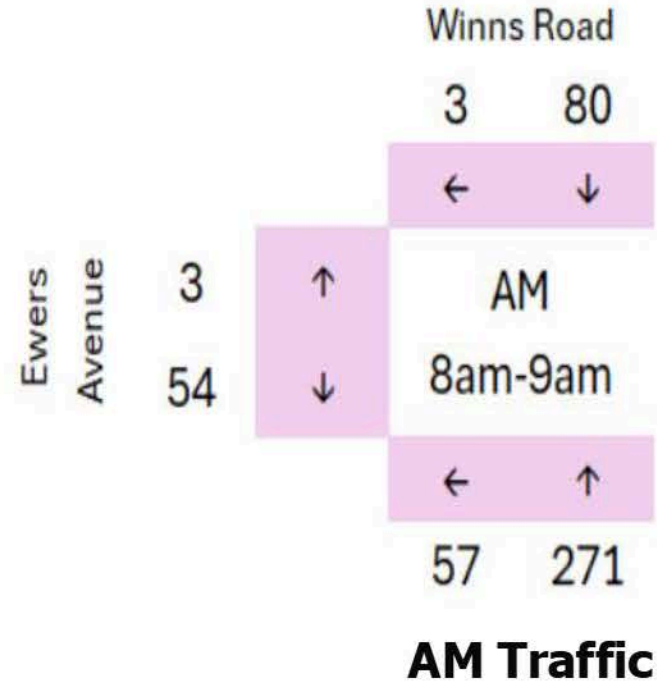
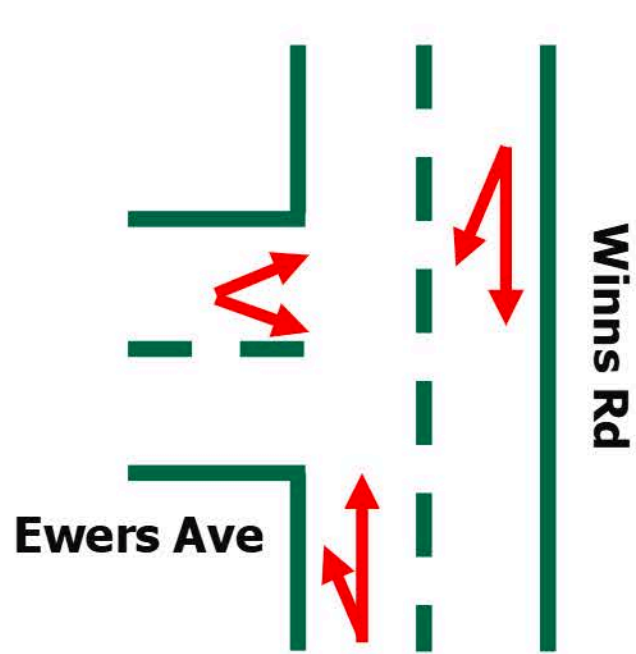


Pavement Condition on Ewers Avenue

Worn surface reduce the braking

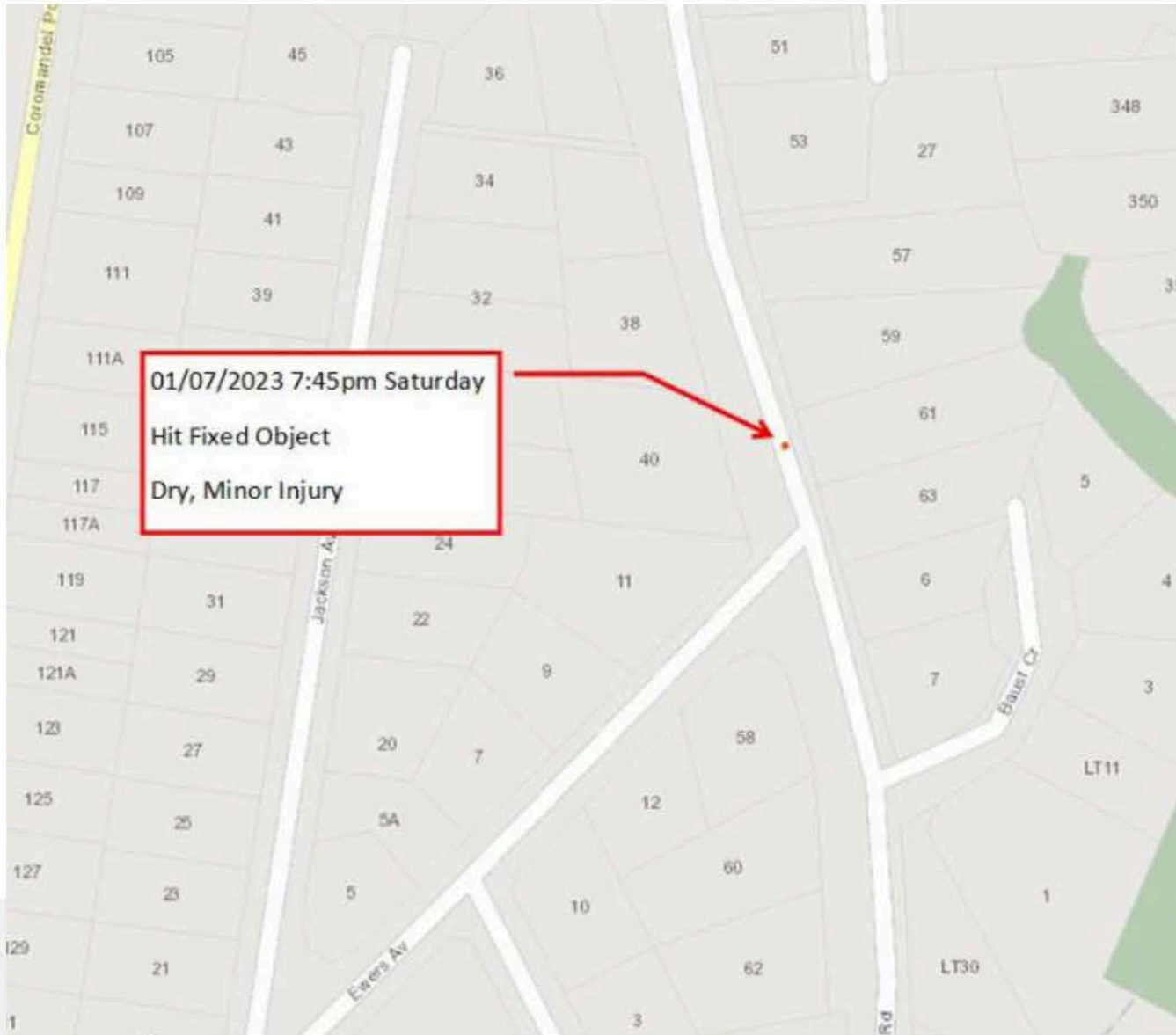
Over next 3-year plan is to renew both kerb
and road

Key Safety Issues – Dangerous Right Turn



Existing Traffic Volume during peak hours

Crash History



Crash History

1 Crash recorded in last 5 years.

However, the intersection presents a heightened safety risk due to severely restricted sight distance.

Key Safety Issues – Summary

☐ **Restricted Sight Distance**

Appx. 30-40m visible. Austroads requires 97m at 50km/h.

☐ **Excessive Speeds on Winns Road**

450m of continuous downhill – vehicles frequently exceed 50km/h.

☐ **Dangerous Right Turn**

54veh during morning peak (8am – 9am) turn right against 80veh of fast southbound traffic.

☐ **Poor Pavement Condition**

Worn surface impact on vehicle braking performance

☐ **Insufficient Lighting at Intersection**

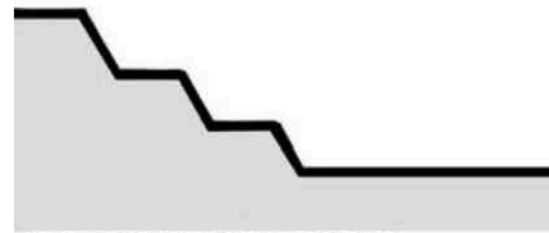
The existing light poles are located a considerable distance from the intersection, resulting in limited illumination of the intersection area.

Traffic Treatments

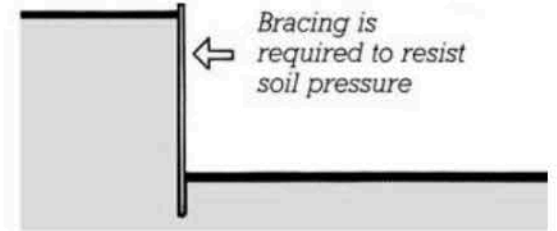
Option 1 –Site Embankment & Vegetation Clearing



Embankment Blocking visibility at the intersection



SECTION THROUGH BENCHED
EXCAVATION

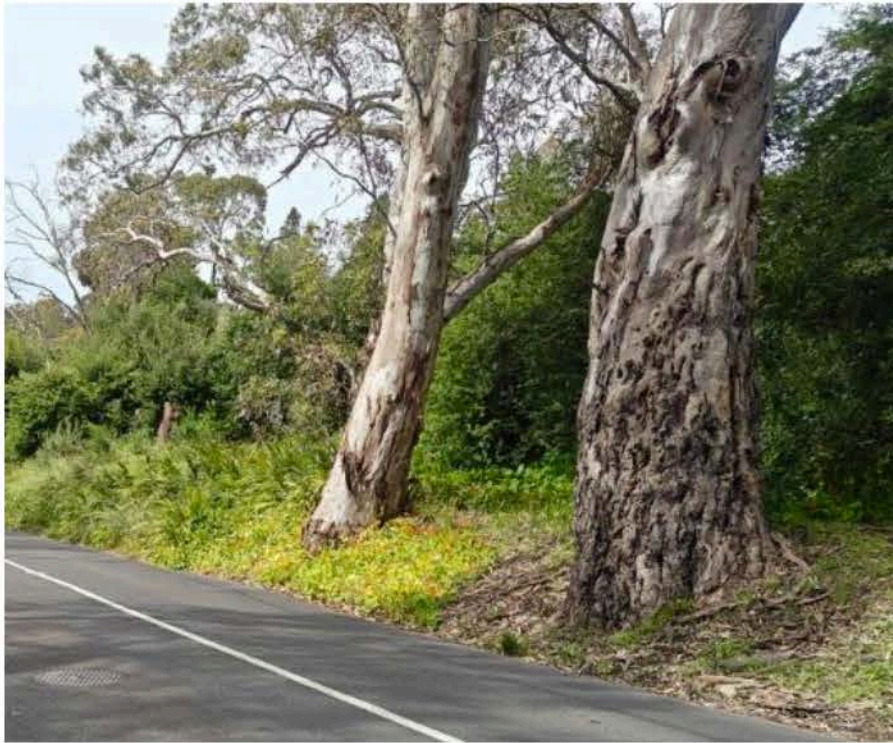


SECTION THROUGH SHEETED
EXCAVATION

Site benching or sheeting could effectively flatten the embankment resulting in unobstructed sight distance

Traffic Treatments

Option 1 –Site Embankment & Vegetation Clearing



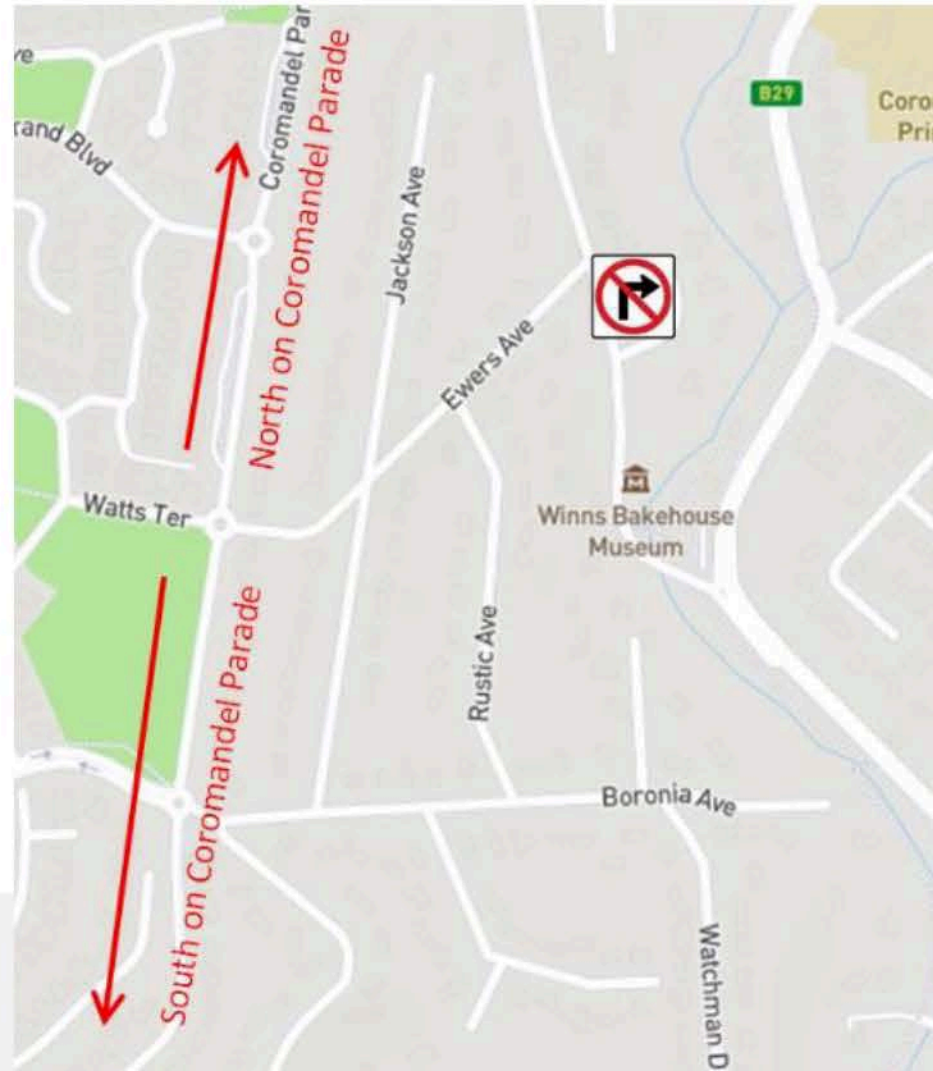
Trees on the South side of the intersection

Given the significant size of the trees, further detailed Arborist assessment required. Potential removal required if this option is preferred.

Vegetation Clearing (incl. tree removal) and Site Embankment can achieve the required 97m sight distance

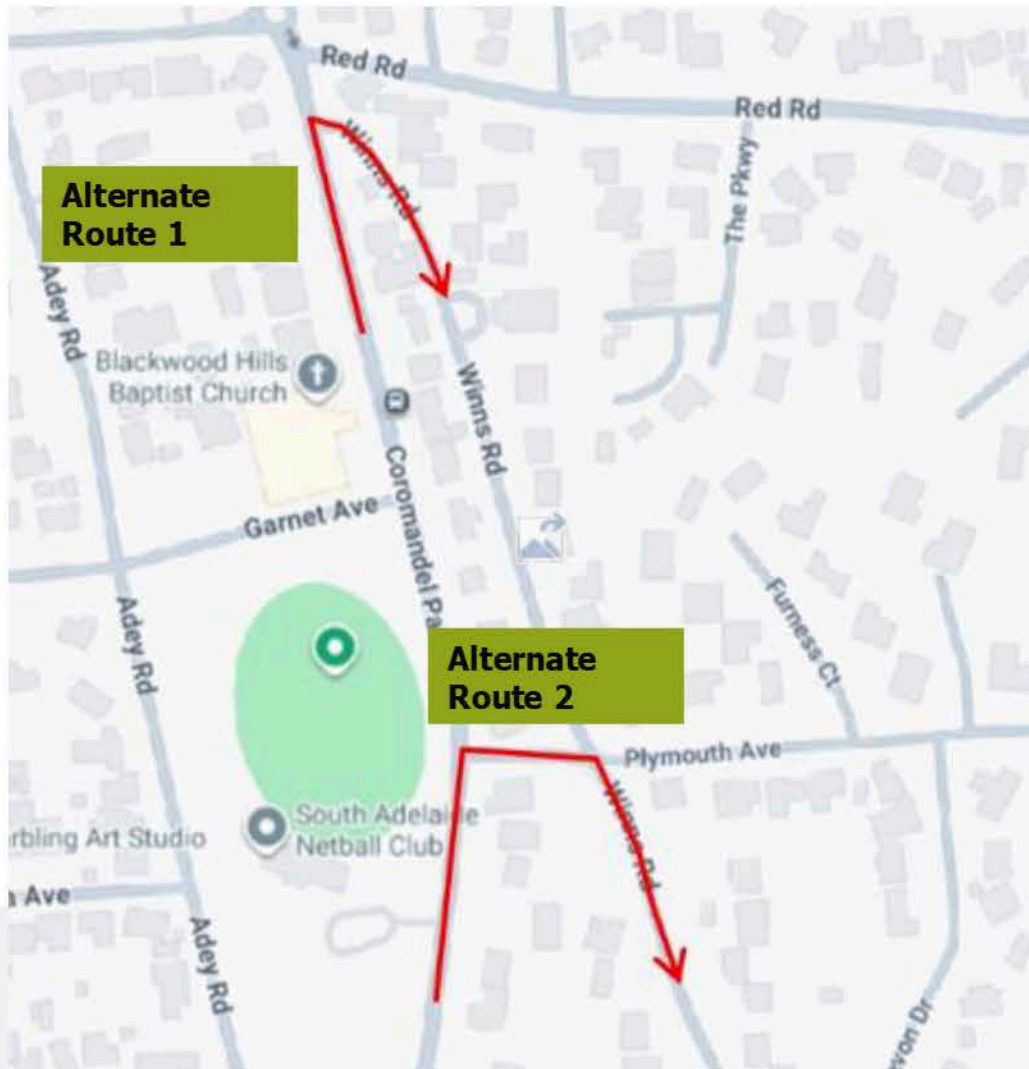
Traffic Treatments

Option 2 – Ban Right - Turn Movements from Ewers Ave



Traffic Treatments

Option 2 – Ban Right- Turn from Ewers Ave



Alternate Route 1

- Additional 1.2km travel
- 2 min

Alternate Route 2

- Additional 1.8km travel
- 3min

This options eliminate the riskiest vehicular movements.

Traffic Treatments

Option 3

- **Traffic Calming** – Slow Point or Speed Humps

Option 3 will not fully eliminate the risk. Where a safety issue exists, the preferred approach is to implement treatments that eliminate the risk wherever possible (Option 1 and Option2) .

Note:

Street Lighting Upgrades – Current lighting does not meet the AS 1158 standard requirement (all proposed options will require street lighting upgrades to achieve the applicable lighting standards.)

Regardless of the option adopted, street lighting upgrades will be required.

Recommended Treatments

Options	Cost	Safety (Risk Mitigated)	Traffic Impact
Option 1 - Site Embankment & Vegetation Trimming	Very High (approx. \$1.5 mil)	Yes	No
Option 2 - Ban Right Turn	Low (approx. \$20,000)	Yes	Yes
Option 3 - Traffic Calming	High (approx. \$150,000)	Not completely eliminated	Yes

All options would require a lighting upgrade, resulting in an additional estimated cost of approximately \$50,000–\$60,000. However, this upgrade will be undertaken as part of the LED Street Lighting Upgrade Program.

Questions for discussion ... at the end of presentation

1. Traffic treatment options discussion and feedback
2. Next Steps?
3. Any other questions?

