

South Perth School Bicycle Infrastructure Audit

Summary Report

CEP02279



Prepared for
City of South Perth

May 2014

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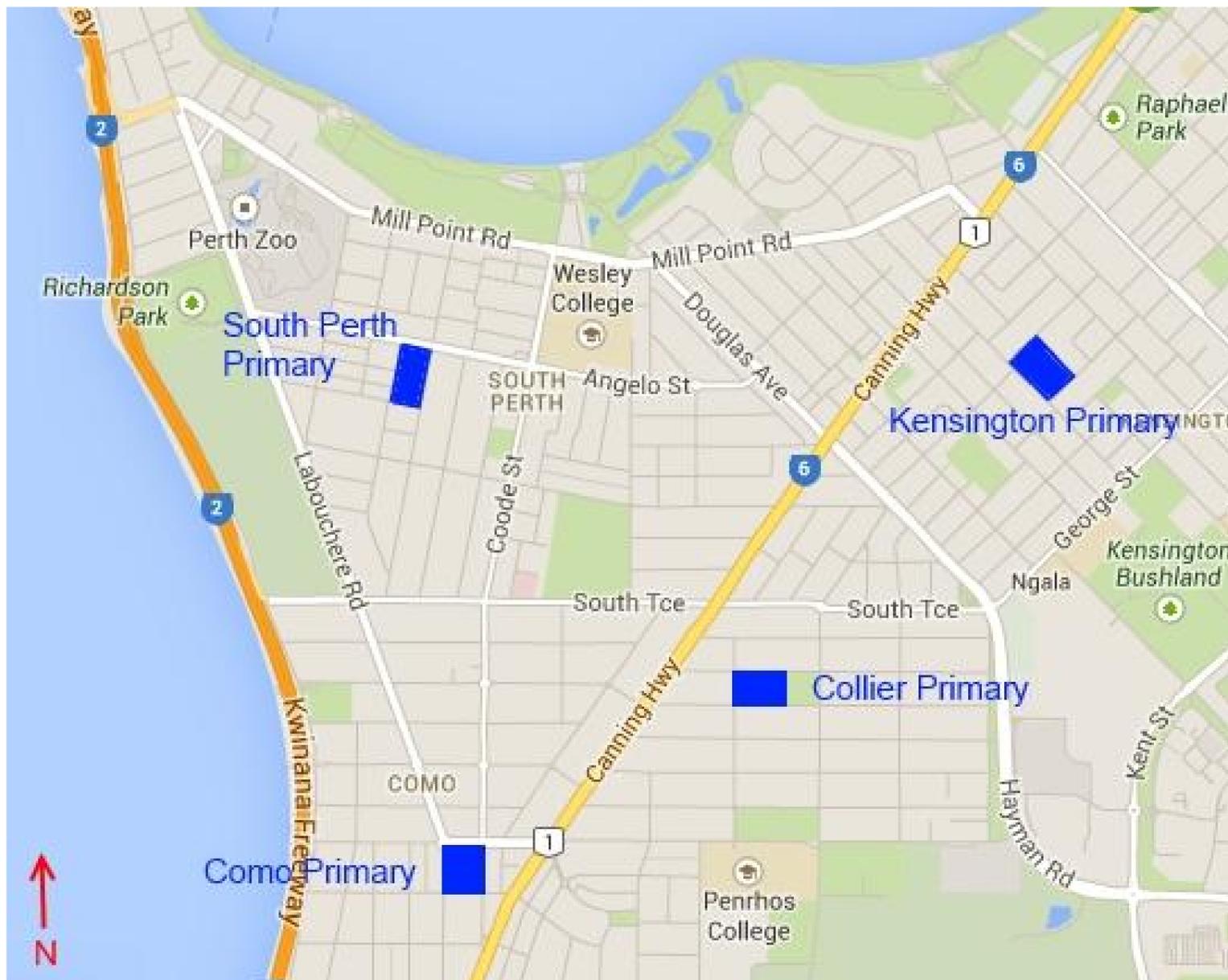
1 Introduction

1.1 Background

The City of South Perth Bike Plan 2012-2017 highlights the significance of improving the cycle network to schools as a solution to improving health and congestion on the local road network.

Following a 50% funding grant from the Department of Transport, the City of South Perth commissioned Cardno to undertake a School Bicycle Infrastructure Audit of four primary schools: Collier, Como, Kensington and South Perth. The location of these schools is shown in Figure 1-1.

Figure 1-1 Location of Schools



1.2 Project Methodology

Several components were involved in this project, including:

- > Existing City of South Perth planning documents (e.g. Local Bicycle Plan) were reviewed to identify previously investigated issues and proposed measures which may impact the schools.
- > Documentation and feedback received by the City of South Perth related to cycling issues in and around the four schools was reviewed to identify common themes and specific locations.
- > A survey was distributed to students and parents of the four schools, requesting feedback on student commuting habits, attitudes towards cycling and specific safety issues around the school.

- > A sample count was undertaken of the number of students cycling to school on a random weekday in April 2014. Directionality of trips was also recorded where possible.
- > A review of existing bicycle parking facilities at each of the schools was undertaken.
- > A desktop review was undertaken of each school to identify key approach routes for students cycling to school. These routes were then confirmed with school representatives before a saddle survey was undertaken to identify key issues and constraints. As part of the saddle survey, the selected routes were benchmarked against the goals outlined in the Roadwise *Road Safety around Schools* document and Austroads' *Guide to Traffic Engineering Practice*.
- > A Works Schedule was prepared detailing the proposed improvements and upgrades to approach routes for each of the schools.

The following chapters of this report outline the details of the assessment for each school.

2 Collier Primary School

Collier Primary School is located in the block bounded by Hobbs Avenue, Murray Street, Monash Avenue and Throssell Street, Como.

2.1 Bicycle Facilities

Bicycle parking is provided in the form of unsecured bicycle racks. The racks are located within the core of the school, not visible from the road. Access is generally via the main gate on Monash Avenue.

2.2 Cycling Count

A survey of students cycling to/from school was undertaken on Tuesday, 8 April 2014, adjacent to the Monash Avenue gate. The number of cyclists recorded is presented in Table 2-1.

Table 2-1 Cycling Count – Collier Primary School

Direction	Number of students cycling	
	AM	PM
Monash Avenue (East)	0	0
Monash Avenue (West)	0	0
TOTAL	0	0

2.3 Survey Results

Fifteen (15) responses to the Collier Primary School survey were received. Of the 15 responses, 5 children cycled to school a mixture of 1, 2 and 3 days per week. Several children also walked or rode scooters.

Several specific location complaints and/or suggestions were raised, including:

- > Ryrie Avenue / Throssell Street difficult to cross for young children.
- > Driveway exiting onto Murray Street from shops on Monash Avenue corner is a blind exit and vehicles exiting the driveway come close to colliding with path users.
- > Crossing Murray Street is tricky in the mornings due to the volume of traffic. Suggest some sort of safety measure for crossing Murray Street.
- > The roundabout at South Terrace / Murray Street / David Street is busy and drivers are inconsiderate to parents trying to cross with kids.
- > Suggest zebra crossing at Murray Street / Todd Avenue intersection.

Several general complaints and/or suggestions were raised, including:

- > Crossing roads is difficult for young children.
- > Vicious dog in street (street not specified).
- > Cars parked over footpath, particularly tradepersons/builders.
- > Cars reversing out of driveways.
- > Suggest more chicanes or speed humps around schools to slow drivers down.

2.4 Saddle Survey

A saddle survey was undertaken in April 2014, covering the approach routes illustrated in Figure 2-1. The routes were assessed from the perspective of primary school age children and included consideration of key items including:

- > Signage
- > Linemarking
- > Grab rails
- > Pavement condition and continuity
- > Kerb ramps
- > Road crossings and sightlines
- > Vegetation encroachment
- > Illegally parked vehicles

The routes assessed as part of the saddle survey were then benchmarked against the goals of the Roadwise *Road Safety around Schools* document and Austroads' *Guide to Traffic Engineering Practice*.

2.5 Works Schedule

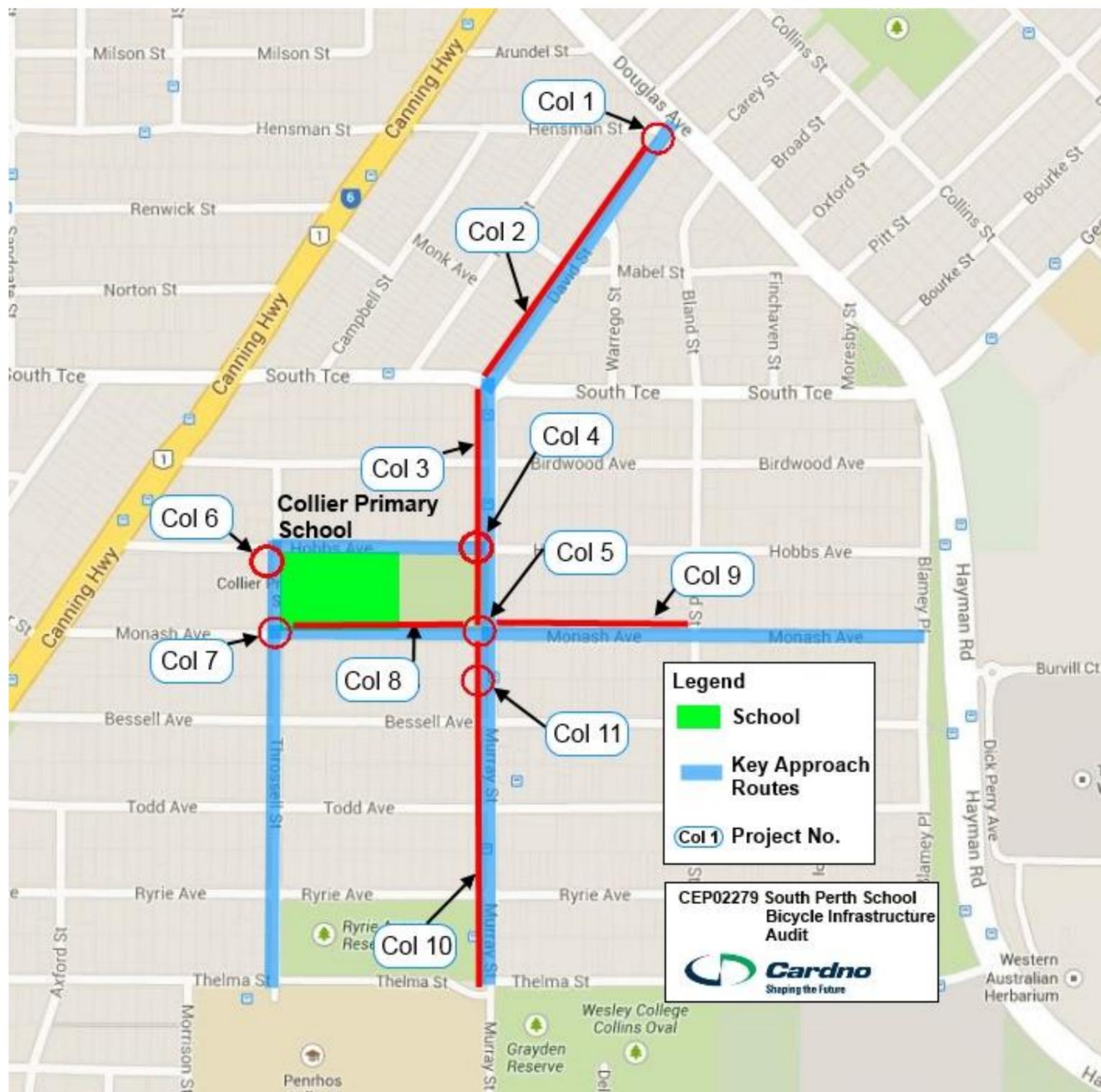
From the saddle survey, a series of proposed remedial and improvement measures were developed into a Works Schedule, which is set out in **Table 2-2**. The items in the Works Schedule have been developed with a focus on safety issues identified in the saddle survey and raised in the school survey, especially road crossings and managing conflicts between path users and vehicles exiting driveways. Each project within the Works Schedule has been prioritised according to relative importance and affordability. Where two or more projects have been allocated the same priority, they should be implemented at the same time. An order of cost estimate has also been prepared for each works schedule item. The order of cost estimates refer to civil works based on an indicative scope but make no allowance for unknowns such as utility relocations, site surveys, landscaping, traffic management, etc.

Table 2-2 Works Schedule – Collier Primary School

Priority	Project No.	Project Description	Order of Cost Estimate
		David Street, adjacent to Hensman Street intersection	
1	Col 1	Install wheel stops in 90 degree parking bays to prevent vehicles from blocking path.	\$4,000
		Throssell Street, between Hobbs Avenue and Monash Avenue	
1	Col 6	Install wheel stops in 90 degree parking bays to prevent vehicles from blocking path.	\$7,000
		Monash Avenue, Throssell Street to Murray Street	
2	Col 8	Widen path on northern verge from 2m to 3m and install shared path pavement markings. Length 300m.	\$55,000
		Murray Street, Monash Avenue to Thelma Street	
3	Col 10	Widen path on western verge to 2.5m and install shared path pavements and edge lines across all driveways. Length 370m.	\$40,000
		Murray Street, south of Monash Avenue	
3	Col 11	Realign path 2m closer to traffic lane to mitigate the blind exit from the shopping centre car park. Includes the remove of one parking space on Murray Street. Length 30m.	\$55,000
		Murray Street, South Terrace to Monash Avenue	
4	Col 3	Widen path on western verge to 2.5m and install shared path pavement markings and edge lines across all driveways. Length 110m.	\$25,000
		Murray Street / Hobbs Avenue intersection	
4	Col 4	Install raised crossing with pedestrian / cyclist priority across western leg of intersection.	\$45,000
		David Street, Hensman Street to South Terrace	
5	Col 2	Widen narrow section of path to 2.5m where possible and install shared path pavement markings and edge lines across all driveways. Length 320m.	\$50,000

Priority	Project No.	Project Description	Order of Cost Estimate
6	Col 5	Monash Avenue / Murray Street intersection Install raised crossing with pedestrian / cyclist priority across northern leg of intersection	\$45,000
6	Col 9	Monash Avenue, Murray Street to Bland Street Construct 2.5m wide shared path along northern verge, tying into proposed raised crossing at Murray Street and existing kerb ramp crossings at Bland Street. Length 300m	\$65,000
7	Col 7	Throssell Street / Monash Avenue intersection Construct raised crossing with pedestrian / cyclist priority across eastern leg of intersection.	\$45,000

Figure 2-1 Collier Primary School – Approach Routes & Proposed Works



3 Como Primary School

3.1 Bicycle Facilities

Bicycle parking is provided in the form of unsecured bicycle racks. The racks are located within the school core, not visible from the road. The main cycling access is via the Coode Street gate.

3.2 Cycling Count

A survey of students cycling to/from school was undertaken on Tuesday, 8 April 2014, adjacent to the Coode Street gate. The number of cyclists recorded is presented in Table 3-1.

Table 3-1 Cycling Count – Como Primary School

Direction	Number of students cycling	
	AM	PM
Coode Street (North)	1	1
Coode Street (South)	2	2
Other	1	1
TOTAL	4	4

3.3 Survey Results

A total of forty-one (41) responses were received to the Como Primary School survey. Of these, only 3 students were listed as cycling to school.

Several specific location complaints and/or suggestions were raised, including:

- > Crossing Labouchere Road is dangerous due to traffic speeds at bottom of hill – need a safer crossing at Alston Avenue.
- > Need a zebra crossing at Labouchere Road / Thelma Street roundabout as it is difficult for children to cross on foot, scooters or bicycles. Drivers do not slow down, even if people are in the process of crossing the road.
- > Crossing Coode Street at Thelma Street is difficult.
- > Cars parked on along McDonald Street obstruct the path.
- > Need to retain crossing attendant at Thelma Street / Coode Street intersection.
- > No systems in place to support walk / cycle to school from Roberts Street to Thelma Street. Robert Street often has heavy and fast moving traffic despite calming measures and no cycle markings on road.
- > Speed patrols required to ensure drivers obey speed limits.
- > Suggest a pedestrian overpass at Canning Highway / Thelma Street intersection as a number of students attending Como Primary School live east of Canning Highway.

Several general complaints and/or suggestions were raised, including:

- > Bicycle safety program needed for students.
- > Bicycle lane markings needed along roads.
- > Cars parked over footpath, particularly tradepersons/builders.
- > Cars reversing out of driveways.
- > Crossing of busy intersections.
- > Cycle lessons at school to teach safe cycling to students.

- > Secure bicycle storage needed.

3.4 Saddle Survey

A saddle survey was undertaken in April 2014, covering the approach routes illustrated in Figure 3-1. The routes were assessed from the perspective of primary school age children and included consideration of key items including:

- > Signage
- > Linemarking
- > Grab rails
- > Pavement condition and continuity
- > Kerb ramps
- > Road crossings and sightlines
- > Vegetation encroachment
- > Illegally parked vehicles

The routes assessed as part of the saddle survey were then benchmarked against the goals of the Roadwise *Road Safety around Schools* document and Austroads' *Guide to Traffic Engineering Practice*.

3.5 Works Schedule

From the saddle survey, a series of proposed remedial and improvement measures were developed into a Works Schedule, which is set out in Table 3-2. The items in the Works Schedule have been developed with a focus on safety issues identified in the saddle survey and raised in the school survey, especially road crossings and managing conflicts between path users and vehicles exiting driveways.

Each project within the Works Schedule has been prioritised according to relative importance and affordability. Where two or more projects have been allocated the same priority, they should be implemented at the same time.

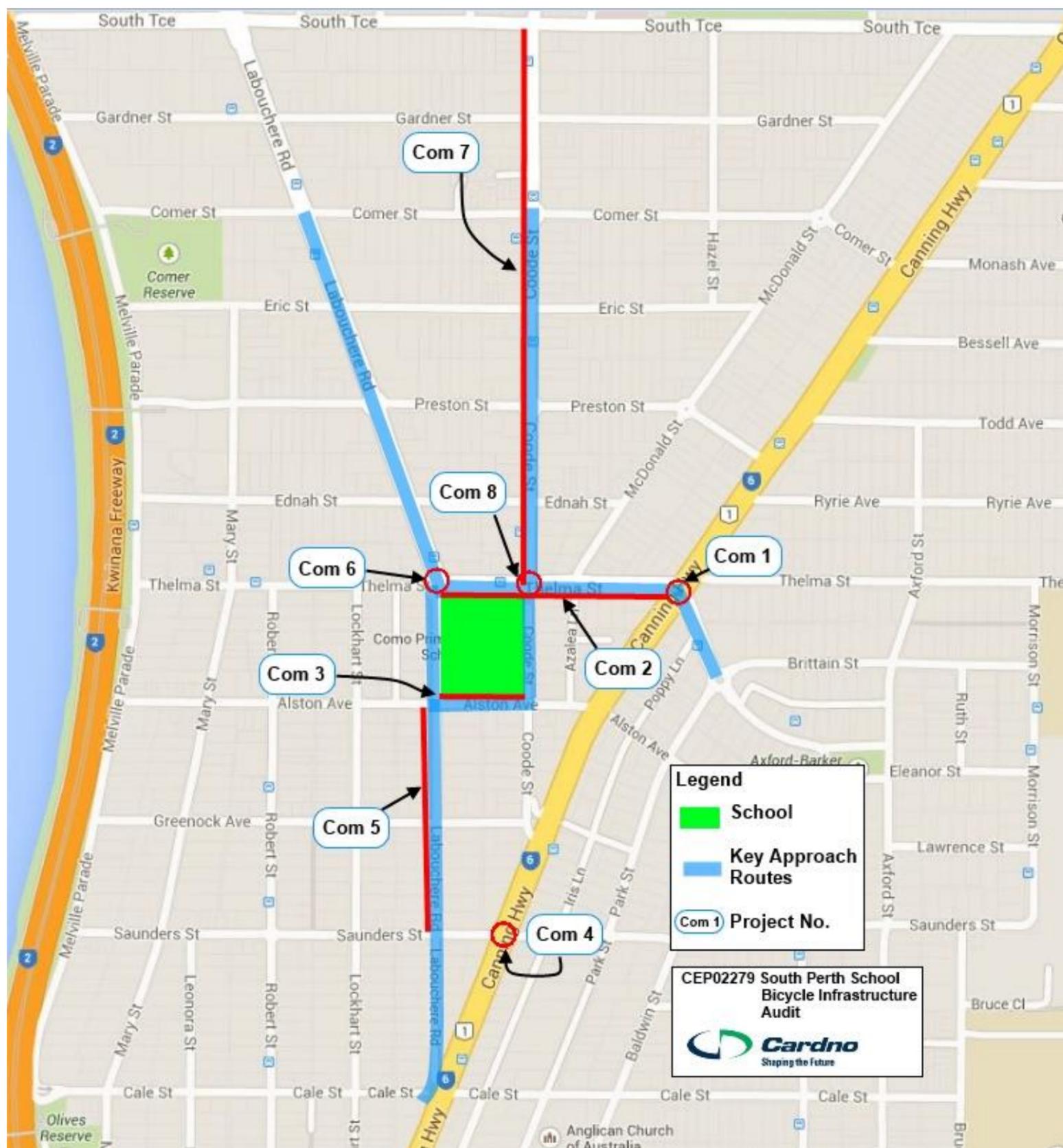
An order of cost estimate has also been prepared for each works schedule item. The order of cost estimates refer to civil works based on an indicative scope but make no allowance for unknowns such as utility relocations, site surveys, landscaping, traffic management, etc.

Table 3-2 Works Schedule – Como Primary School

Priority	Project No.	Project Description	Order of Cost Estimate
1	Com 2	Thelma Street, Canning Highway to Labouchere Road Mark shared path pavement markings and edgelines along southern verge path.	\$2,000
2	Com 4	Canning Highway / Saunders Street intersection Remove grab rails which are located in the centre of kerb ramps on all legs of intersection.	\$2,000
3	Com 3	Alston Avenue, Coode Street to Labouchere Road Widen path on northern verge by 1m and install wheel stops in parking spaces to prevent parked vehicles from blocking path. Length 150m.	\$45,000
4	Com 1	Canning Highway / Thelma Street intersection Install cycle lanterns on all crossings. This project will require cooperation with MRWA and the order of cost estimate makes allowance for installation of new lanterns and associated electronics. MRWA may require additional work above and beyond this allocation.	\$40,000
5	Com 8	Coode Street / Thelma Street intersection Widen Coode Street throat and install median island to provide staged crossing.	\$25,000

Priority	Project No.	Project Description	Order of Cost Estimate
6	Com 5	Labouchere Road, Alston Avenue to Saunders Street Widen path on western verge to 2.5m and install shared path pavement markings and edge lines across all driveways. Length 360m.	\$30,000
7	Com 7	Coode Street, Thelma Street to South Terrace Install shared path pavement markings and edge lines across all driveways, along path on western verge.	\$10,000
8	Com 6	Labouchere Road / Thelma Street Widen path on SE corner of intersection, using school land, to remove blind corner. Design fee allocation only.	\$15,000

Figure 3-1 Como Primary School – Approach Routes & Proposed Works



4 Kensington Primary School

4.1 Bicycle Facilities

Bicycle parking is provided in the form of a semi-secure bicycle parking shed, located on the Fourth Avenue frontage.

4.2 Cycling Count

A survey of students cycling to/from school was undertaken on Tuesday, 8 April 2014, in two locations:

- > Fourth Avenue gate
- > Banksia Terrace gate

The number of cyclists recorded is presented in Table 4-1.

Table 4-1 Cycling Count – Kensington Primary School

Direction	Number of students cycling	
	AM	PM
Fourth Avenue (West)	12	10
Fourth Avenue (East)	0	0
Banksia Terrace gate	9	7
TOTAL	21	17

4.3 Survey Results

A total of thirteen (13) responses were received to the Kensington Primary School survey. Of these, 6 students were listed as cycling to school, mostly 3 days per week.

Several specific location complaints and/or suggestions were raised, including:

- > Banksia Terrace slow point / one lane section in front of school causes erratic behaviour from motorists
- > Motorists parking along Fourth Avenue obstruct visibility for path users – consider a replacement path inside school grounds
- > Existing Kiss and Ride facility causes conflicts between parents and path users

Several general complaints and/or suggestions were raised, including:

- > Cars parked over footpath, particularly tradepersons/builders
- > Cars reversing out of driveways
- > Crossing busy intersections adjacent to school
- > Theft risk at current bike parking facility

4.4 Saddle Survey

A saddle survey was undertaken in April 2014, covering the approach routes illustrated in Figure 4-1. The routes were assessed from the perspective of primary school age children and included consideration of key items including:

- > Signage
- > Linemarking
- > Grab rails
- > Pavement condition and continuity

- > Kerb ramps
- > Road crossings and sightlines
- > Vegetation encroachment
- > Illegally parked vehicles

The routes assessed as part of the saddle survey were then benchmarked against the goals of the Roadwise *Road Safety around Schools* document and Austroads' *Guide to Traffic Engineering Practice*.

4.5 Works Schedule

From the saddle survey, a series of proposed remedial and improvement measures were developed into a Works Schedule, which is set out in Table 4-2. The items in the Works Schedule have been developed with a focus on safety issues identified in the saddle survey and raised in the school survey, especially road crossings and managing conflicts between path users and vehicles exiting driveways.

Each project within the Works Schedule has been prioritised according to relative importance and affordability. Where two or more projects have been allocated the same priority, they should be implemented at the same time.

An order of cost estimate has also been prepared for each works schedule item. The order of cost estimates refer to civil works based on an indicative scope but make no allowance for unknowns such as utility relocations, site surveys, landscaping, traffic management, etc.

Table 4-2 Works Schedule – Kensington Primary School

Priority	Project No.	Project Description	Order of Cost Estimate
1	K13	Banksia Terrace, Fourth Avenue to View Street Remove one-lane slow point and replace to 6m wide two-way carriageway.	\$30,000
1	K7	Banksia Terrace / Fourth Avenue intersection Construct raised crossing with pedestrian / cyclist priority across eastern leg of intersection.	\$45,000
2	K8	Banksia Terrace / View Street intersection Construct raised crossing with pedestrian / cyclist priority across southern leg of intersection.	\$45,000
2	K9	View Street, Banksia Terrace to King Street Construct a 'Copenhagen Lane' style cycle path (similar to Banksia Terrace treatment) along southern verge from Banksia Terrace to King Street to replace existing path. Length 270m.	\$180,000
3	K6	Banksia Avenue / Third Avenue intersection Construct raised crossing with pedestrian / cyclist priority across eastern leg of intersection.	\$45,000
4	K1	Banksia Avenue, northern end of Canning Highway underpass Extend paved area 6m northward to cover the unused road pavement. Install new kerb ramps on 45 degree angle to ease road crossing.	\$8,000
4	K2	Banksia Avenue, Canning Highway to Mill Point Road Install shared path pavement markings, broken centre line and solid edge lines across all driveway crossings to reinforce prominence of path.	\$3,000
4	K3	Banksia Avenue / Canning Highway underpass Install shared path pavement markings and solid centre line on approaches to underpass.	\$1,000
4	K4	Hurlingham Road, Mill Point Road to end of road Install shared path pavement markings, broken centre line and solid edge lines across all driveway crossings to reinforce prominence of path.	\$4,000

Priority	Project No.	Project Description	Order of Cost Estimate
4	K5	Banksia Avenue, southern end of Canning Highway underpass Install appropriate pavement markings on transition to 'Copenhagen Lane' section.	\$1,000
5	K10	Fourth Avenue / Gwentyfred Road intersection Construct kerb ramp crossing across south-eastern leg of intersection	\$5,000
6	K11	Banksia Terrace, View Street to George Street Install shared path pavement markings, broken centre line and solid edge lines across all driveway crossings to reinforce prominence of path.	\$6,000
7	K12	Douglas Avenue, between Market Street and David Street Construct kerb ramp crossing across Douglas Avenue.	\$6,000

Figure 4-1 Kensington Primary School – Approach Routes & Proposed Works



5 South Perth Primary School

5.1 Bicycle Facilities

Bicycle parking is provided in the form of unsecured bicycle racks near the Forrest Street frontage.

5.2 Cycling Count

A survey of students cycling to/from school was undertaken on Tuesday, 8 April 2014, adjacent to the Forrest Street gate. The number of cyclists recorded is presented in Table 4-1.

Table 5-1 Cycling Count – South Perth Primary School

Direction	Number of students cycling	
	AM	PM
Forrest Street (North)	6	10
Forrest Street (South)	7	4
TOTAL	13	14

5.3 Survey Results

A total of eighteen (18) responses were received to the South Perth Primary School survey. Of the responses, 50% of the students listed as cycling to school do so once per week.

Several specific location complaints and/or suggestions were raised, including:

- > Drivers do not stop at zebra crossing on Angelo Street adjacent to Anstey Street
- > Speeding drivers on Angelo Street
- > Crossing Coode Street at Hensman Street is hazardous, suggest a roundabout

Several general complaints and/or suggestions were raised, including:

- > Crossing busy roads / intersections
- > Cars exiting driveways

5.4 Saddle Survey

A saddle survey was undertaken in April 2014, covering the approach routes illustrated in Figure 5-1. The routes were assessed from the perspective of primary school age children and included consideration of key items including:

- > Signage
- > Linemarking
- > Grab rails
- > Pavement condition and continuity
- > Kerb ramps
- > Road crossings and sightlines
- > Vegetation encroachment
- > Illegally parked vehicles

The routes assessed as part of the saddle survey were then benchmarked against the goals of the Roadwise *Road Safety around Schools* document and Austroads' *Guide to Traffic Engineering Practice*.

5.5 Works Schedule

From the saddle survey, a series of proposed remedial and improvement measures were developed into a Works Schedule, which is set out in Table 5-2. The items in the Works Schedule have been developed with a focus on safety issues identified in the saddle survey and raised in the school survey, especially road crossings and managing conflicts between path users and vehicles exiting driveways.

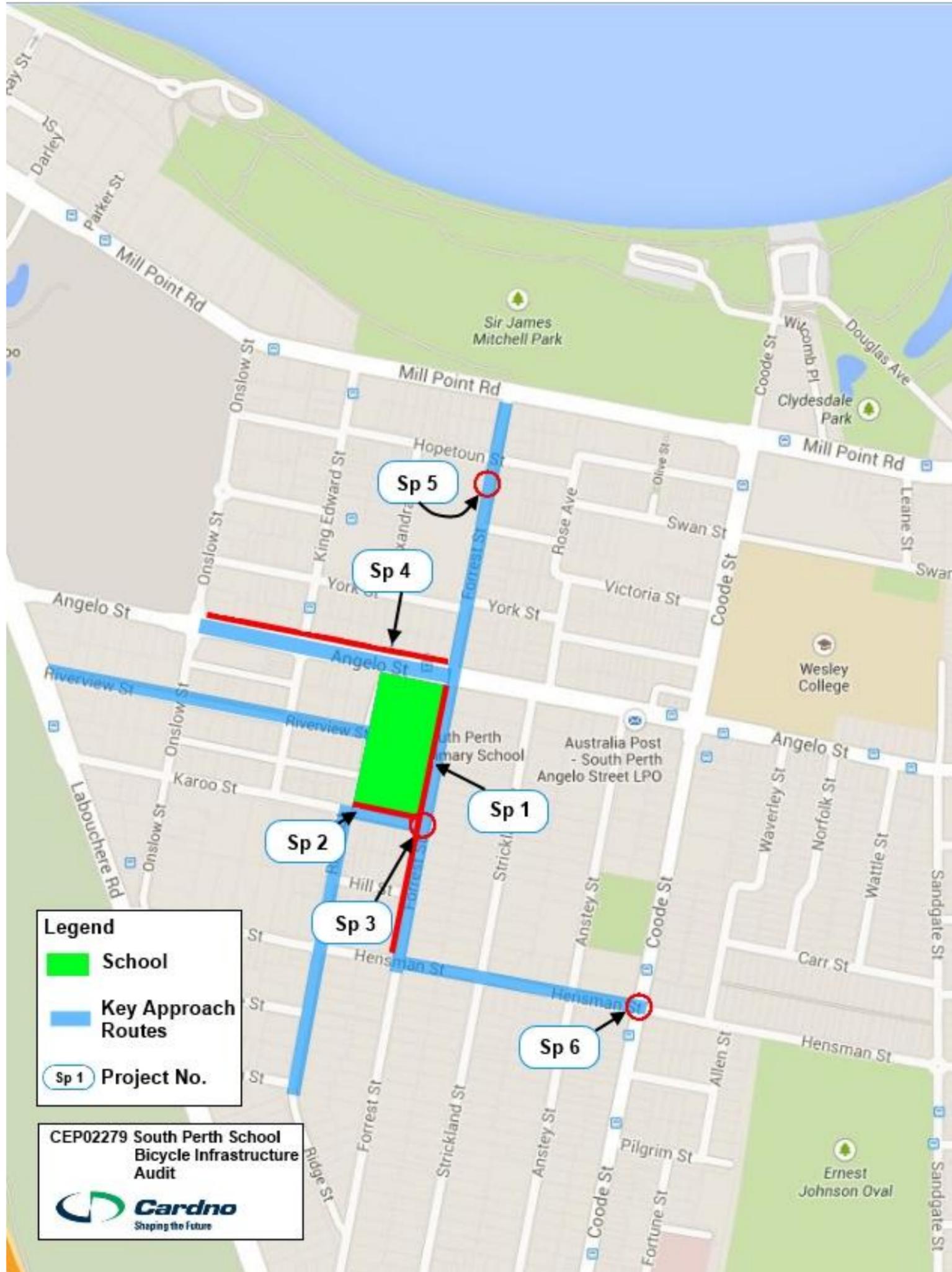
Each project within the Works Schedule has been prioritised according to relative importance and affordability. Where two or more projects have been allocated the same priority, they should be implemented at the same time.

An order of cost estimate has also been prepared for each works schedule item. The order of cost estimates refer to civil works based on an indicative scope but make no allowance for unknowns such as utility relocations, site surveys, landscaping, traffic management, etc.

Table 5-2 Works Schedule – South Perth Primary School

Priority	Project No.	Project Description	Order of Cost Estimate
		Forrest Street, outside St Columbia Primary School	
1	SP5	Install wheel stops in 90 degree parking bays to prevent vehicles from blocking path.	\$3,000
		Karoo Street, between Ridge Street and Forrest Street	
1	SP2	Install wheel stops in 90 degree parking bays to prevent vehicles from blocking path.	\$9,000
		Forrest Street, between Angelo Street and Hensman Street	
2	SP1	Widen path to 2.5m and install shared path pavement markings and edge lines across driveways. Length 420m.	\$25,000
		Forrest Street / Karoo Street intersection	
2	SP3	Install raised crossing with pedestrian / cyclist priority across western leg of intersection.	\$45,000
		Angelo Street, Onslow Street to Forrest Street	
3	SP4	Widen path on northern verge to 2.5m and install shared path pavement markings and edge lines across all driveways. Length 370m.	\$35,000
		Coode Street / Hensman Street intersection	
4	SP6	Construct roundabout to slow traffic and provide safer crossing. [It should be noted that this project is unlikely to be eligible for cycling grant funding.]	\$200,000

Figure 5-1 South Perth Primary School – Approach Routes & Proposed Works



6 General Items

6.1 Path Maintenance and Enforcement

The school surveys and saddle survey identified a number of maintenance and enforcement issues which are not specific to any particular location.

Issues identified include:

- > Vehicles parked on the verge or road, partially obstructing the path. Identified 'hot spots' for this behaviour included Banksia Avenue, Market Street and on the corner of David Street / Hensman Street.
- > Vehicles parked on driveways, fully obstructing the path.
- > Vegetation being allowed to grow to obstruct either the width or headroom of the path.

It is recommended that the City of South Perth actively address the abovementioned issues as they are considered just as critical to encouraging cycling and walking to school as the capital works.

Vehicles parked across paths is a particularly serious issue as, aside from the inconvenience to path users; it exposes children to significant risks when they detour onto the road to negotiate the obstruction. The perception of danger in such a situation also acts as a strong deterrent against parents allowing their children to walk or cycle to school.

6.2 End of Trip Facilities for Primary Schools

The existing end of trip facilities at the four schools generally consist of unsecured bicycle racks, with the exception of Kensington Primary School, which has a lockable bicycle enclosure. Weather protection at the existing facilities is minimal and placement is variable: some are visible from the road, while others are not. None of the existing facilities would be considered to be best practice.

One of the key factors encouraging or discouraging cycling the school which identified through the survey is bicycle security. Some parents noted that there are theft concerns at Kensington and South Perth Primary Schools, where the bicycle racks are visible from the road. With after school activities being variable throughout the week, students may need to leave bicycles parked at school overnight and this increases the theft risk if the facility is not sufficiently secure.

When planning for end of trip facilities at schools, the different needs of students must be considered, including:

- > Parking is almost always long stay (> 4 hours) and arrival / departure times are very strict. Therefore a lockable bicycle cage is appropriate, with a responsible person from the school controlling access to the facility.
- > Most bicycle parking guidelines advocate the placement of bicycle parking facilities in areas visible to and accessible by the public. However, schools are different to other public facilities or workplaces. Placement of the facility near the school boundary can be a great symbol of the school's support for sustainable transport and develop awareness among the school population; however exposure to passing traffic does bring with it a theft or vandalism risk. If the facility is to be located in view of the public then it needs to be fully secure to cater for bicycles left overnight or on weekends, and be vandalism proof.
- > Weather protection – in the form of a roof to protect from rain and sun – is very desirable to reduce exposure to the elements. This is particularly desirable on very wet or very hot days where the bicycles may become unrideable due to wetness or heat exposure.

Whichever location and type of facility is selected, the need for future capacity expansion must be considered to match the anticipated growth in cycling to schools.

It is recommended that schools be encouraged to install secure bicycle cages for their students. The City may wish to contribute financially, and/or assist the school by applying for 'Connecting Schools' grants from the Department of Transport.

7 Funding Opportunities

In addition to normal funding streams with the City's budget, there are several grant programs for which projects recommended in this report could qualify. These are outlined below.

7.1 Perth Bicycle Network (PBN)

The PBN Grants Program is a State Government funding initiative to provide financial assistance to metropolitan Local Governments for planning and implementing cycling related projects. Its intention is to fund projects that deliver the greatest benefit for the community and in particular those that reduce barriers to additional people cycling to specific destinations.

The important priorities for the grants program are:

1. Projects that improve the integration between cycling and public transport.
2. Projects that encourage students to cycle to school or tertiary institutions.
3. Projects that connect to strategic Activity Centres identified in State Government's *Directions 2031*.

Grants can be applied for network planning, on road infrastructure, path infrastructure and 'other infrastructure' which includes bicycle parking facilities and signage.

All projects recommended within this report may be eligible for grant funding under Priority 2. In addition, several projects may also satisfy Priorities 1 and / or 3 by virtue of being on Local Bicycle Routes identified in the South Perth Bike Plan 2012-17. In determining the eligibility of any project, consideration will need to be given to the type of cyclist likely to use the proposed infrastructure.

All grants are 50:50 contributions to specific projects nominated by the applicant.

Applications for grants under this program generally open in September of each year and should be made to the Department of Transport.

7.2 Connecting Schools

Connecting Schools is a grant program aimed at improving bicycle access and end of trip facilities for schools. In the 2013/14 financial year, a total of \$100,000 was available in 50:50 matched funding. To be eligible for the grant, schools must also employ complementary behaviour change techniques through the 'TravelSmart to School' program, to encourage increased cycling to school.

The definition of infrastructure for this grant is flexible, encouraging innovative approaches. Examples of traditional infrastructure includes: internal shared paths (on school grounds), on road bicycle lanes, bicycle shelters, bicycle and scooter racks and end of trip facilities. Innovative infrastructure may include place making installations, bicycle parks to teach children how to ride (similar to the old traffic schools) and other initiatives which may encourage students to cycle. Applicants for this grant must demonstrate how the infrastructure proposed is expected to have a positive impact on the number of students cycling to school.

Applications for grants under this program are run generally in parallel with the PBN grant program through the Department of Transport.

7.3 Royal Automobile Club (RAC)

The RAC offers community sponsorship grants for grass roots initiatives, projects and partnerships, ranging from \$5,000 to \$50,000. The grants are generally aimed at programs and events to promote safe driving, less emissions, and active and public transport. Significant capital works, major equipment or infrastructure costs are generally not supported for these grants and therefore it is considered unlikely that any projects recommended in this report would be eligible for funding.

Further information can be obtained by contacting the RAC Sponsorship team on (08) 9436 4584 or at sponsorship@rac.com.au.

7.4 Office of Road Safety (ORS)

The State Government has made funds available from the Road Trauma Trust Account to assist in the development and implementation of road safety projects. These road safety projects use the widespread support and participation of communities throughout the State to assist in the prevention of road crashes causing serious injury and death. Grants are available for projects that focus on the Safe System approach that aligns with Towards Zero the WA Road Safety Strategy 2008-2020.

Project Grants are made available to groups to implement road safety projects. These are usually 12 month projects with a plan to be sustainable after funding. However, funding will generally not be provided for capital works projects and it is therefore considered that the majority of projects recommended in this report would not be eligible for funding.

Further information can be obtained by contacting the Road Safety Community Grants Officer on roadsafety.grants@mainroads.wa.gov.au.

About Cardno

Cardno is an ASX200 professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world. Cardno's team includes leading professionals who plan, design, manage and deliver sustainable projects and community programs. Cardno is an international company, listed on the Australian Securities Exchange [ASX: CDD].

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