

MINUTES

**WORKS AND URBAN DEVELOPMENT
COMMITTEE**

18 AUGUST 2015

APPROVED FOR RELEASE



**GARY STEVENSON PSM
CHIEF EXECUTIVE OFFICER**



CITY of PERTH

MINUTES

**WORKS AND URBAN DEVELOPMENT
COMMITTEE**

18 AUGUST 2015

**THESE MINUTES ARE HEREBY CERTIFIED AS
CONFIRMED**

**PRESIDING MEMBER'S
SIGNATURE**

DATE: 08/09/2015

WORKS AND URBAN DEVELOPMENT COMMITTEE

INDEX

| Item | Description | Page |
|-------------|---|-------------|
| WK104/15 | DECLARATION OF OPENING | 1 |
| WK105/15 | APOLOGIES AND MEMBERS ON LEAVE OF ABSENCE | 1 |
| WK106/15 | CONFIRMATION OF MINUTES | 1 |
| WK107/15 | CORRESPONDENCE | 2 |
| WK108/15 | DISCLOSURE OF MEMBERS' INTERESTS | 2 |
| WK109/15 | IMPACT ON RESIDENTIAL AMENITY DUE TO RECREATIONAL ACTIVITIES IN MOUNT STREET, CLIFF STREET, BELLEVUE TERRACE AND JACOBS LADDER | 2 |
| WK110/15 | BLACK SPOT SCHEME REVIEW | 10 |
| WK111/15 | TENDER 73-14/15 – PROVISION OF ENGINEERING CONSULTANCY SERVICES AND ASSOCIATED PROFESSIONAL SERVICES | 14 |
| WK112/15 | MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN | 19 |
| WK113/15 | GENERAL BUSINESS | 19 |
| WK114/15 | ITEMS FOR CONSIDERATION AT A FUTURE MEETING | 20 |
| WK115/15 | CLOSE OF MEETING | 20 |

Minutes of the meeting of the City of Perth **Works and Urban Development Committee** held in Committee Room 1, Ninth Floor, Council House, 27 St Georges Terrace, Perth on **Tuesday, 18 August 2015**.

MEMBERS IN ATTENDANCE

Cr Limnios - Presiding Member
Lord Mayor Scaffidi
Cr McEvoy

OFFICERS

Mr Stevenson - Chief Executive Officer
Mr Mileham - Director Planning and Development
Mr Dunne - Interim Director Community & Commercial Services
Mr Ridgwell - Manager Governance
Mr Gupta - Manager Street Presentation & Maintenance –
Entered 5.15pm
Mr Newson - Interim Manager Transport – Entered 5.13pm
Ms Carlucci - Governance Officer

OBSERVERS

Cr Butler

WK104/15 DECLARATION OF OPENING

5.12pm The Presiding Member declared the meeting open.

WK105/15 APOLOGIES AND MEMBERS ON LEAVE OF ABSENCE

Nil

WK106/15 CONFIRMATION OF MINUTES

Moved by the Lord Mayor, seconded by Cr McEvoy

That the minutes of the meeting of the Works and Urban Development Committee held on 28 July 2015 be confirmed as a true and correct record.

The motion was put and carried

The votes were recorded as follows:

For: The Lord Mayor, Crs Limnios and McEvoy

Against: Nil

WK107/15 CORRESPONDENCE

Nil

WK108/15 DISCLOSURE OF MEMBERS' INTERESTS

Nil

**WK109/15 IMPACT ON RESIDENTIAL AMENITY DUE TO
RECREATIONAL ACTIVITIES IN MOUNT STREET,
CLIFF STREET, BELLEVUE TERRACE AND JACOBS
LADDER**

BACKGROUND:

FILE REFERENCE: P1020356
REPORTING UNIT: Community and Commercial Services
RESPONSIBLE DIRECTORATE: Community and Commercial Services
DATE: 6 August 2015
MAP / SCHEDULE: Schedule 1 – List of Residents Proposed Solutions

Complaints have been received by the City of Perth over a number of years regarding individuals and groups of people exercising in close proximity of and on Jacobs Ladder, and also in surrounding areas including Mount and Cliff Streets and Bellevue Terrace.

The City of Perth's Local Laws do not adequately address the issues created by these activities, which include antisocial behaviour and the use of the road by people who are exercising. The City's Rangers have limited capacity to prevent people from being active and exercising on the street. These are matters that are under the jurisdiction of the WA Police and can only be enforced by WA Police.

The City of Perth's Rangers however attend the area regularly and the City instituted rules for commercial fitness groups to restrict their hours of operation. Signs were also installed informing visitors to the area to be considerate of residents.

Whilst these measures have resulted in some improvement, the City of Perth continues to receive complaints from a number of residents who reside in Mount and Cliff Streets.

On 27 August 2014 a meeting with residents, the City's Chief Executive Officer and Director City Services and WA Police was held to discuss the residents' on-going concerns and to determine what further measures could be undertaken to address the concerns.

Arising from discussions at the meeting six recommendations were identified for further consideration as listed below:

1. That the Director City Services (now Director Community and Commercial Services) prepare and submit a report to Council as a matter of urgency, through Committee, to address the issues raised at this meeting.
2. Surveys to be conducted and residents' opinions as a matter of urgency sought to ensure that comprehensive information is provided to fully inform Elected Members.
3. The City of Perth to review the wording on permit applications and consider whether permit applications can be refused for this area.
4. That the proposed report to Council referred to in Recommendation 1 should include an option that Jacobs Ladder be physically closed to prevent movement through during 'out of hours', and that guidance be sought from residents for suggestions as to what those hours should be.
5. That the proposed report to Council referred to in Recommendation 1 should include an option that the stretching equipment located at the bottom of Jacobs Ladder be removed.
6. That the prepared report to Council referred to in Recommendation 1 should include an option that parking restrictions be introduced in the area to make parking limited to residents only, and permit holders during 'out of hours', and guidance be sought from residents for suggestions as to what those hours should be.

A report was presented to the Works and Urban Development Committee on the 24 March 2015 which outlined the history to this on-going issue and reported on the six recommendations. The Works and Urban Development Committee resolved to defer consideration of the matter to allow the City to again meet with the residents of the area.

LEGISLATION / STRATEGIC PLAN / POLICY:

Legislation

Section 3.50 of the *Local Government Act 1995*
Part 2 of the *Local Government (Functions and General)
Regulations 1996*

**Integrated Planning
and Reporting
Framework
Implications**

Corporate Business Plan

Council Four Year Priorities: Living in Perth

S9 Promote and facilitate CBD living

9.1 Review and manage the interface between the growing residential population and the City of Perth.

DETAILS:

On the 8 June 2015 a meeting at Council House was held to discuss the on-going concerns from residents in the Cliff Street, Mount Street, Bellevue Terrace area over the adverse amenity affects caused by people using this residential area for recreational and fitness training purposes.

The meeting was attended by the Chief Executive Officer (CEO) and the Director City Services (now Director Community and Commercial Services) together with eight residents representing residents in the entire area affected by the activities with one resident being nominated as spokesperson for the group.

The CEO presented a seven point plan to address concerns of the residents for their consideration. The seven point plan consisted of the following:

1. Increase periodic patrolling and escalate application of Local Law against offending users for enforceable offences.
2. Undertake periodic awareness campaigns to encourage users to respect amenity for residents (including amended signage).
3. Install mobile Wi-Fi CCTV periodically and align remote surveillance to patrolling and enforcement by Rangers and Police.
4. Amend the City of Perth jogging/walking promotional material to discourage organised users.
5. Investigate and consult with affected residents on Cliff Street streetscape alterations to create an interface buffer on the east side and constrain available area for users.
6. Investigate and consult on Mount Street median landscaping to constrain available area for users.
7. Engage cycling clubs and discourage informal criterium and time trial activity.

There was general acceptance to all the points in the CEO's action plan, although residents did express concern over point 5, which was the idea of creating a streetscape buffer on the eastern side of Cliff Street between Mount Street and Jacobs Ladder.

The concern was that such a streetscape design might provide a more attractive space to exercise in and therefore it would have to be designed in such a way as to discourage use for physical exercise activities.

The residents through their spokesperson provided their proposed solutions which numbered 11 items and are outlined in Schedule 1. There was a lot of commonality between the City's draft seven point plan for discussion and the resident's 11 point proposal.

The main areas of difference were the following:

- parking in the area to be prohibited between 6.30pm and 8.00am in the neighbourhood except for residents and permit holders only;
- Jacobs Ladder to be closed between 6.30pm and 8.00am; and
- installation of speed bumps in Mount Street.

It was agreed that all of the other points raised by the residents were adequately covered within the City's proposed seven point plan.

There was considerable discussion over the three main requests of the residents.

In respect to a parking ban other than for residents between 6.30pm and 8.00am, the City expressed its concern about the precedent this would set, as well as the issue of compliance given it is throughout the night, when staff were not currently working.

The residents were of the view that this action was essential for control of the situation as they were of the belief that if parking was denied to those visiting the area to exercise then they would go elsewhere. They also offered to assist with compliance if the City was unable to do so.

The residents also strongly believed that Jacobs Ladder should be closed, as is the tree top walk in Kings Park, of a night. The City's officers explained that given that Jacobs Ladder is a road reserve and a public thoroughfare any form of closure would most likely be strongly objected to by the public.

In more recent times bicycle training consisting of going down Mount Street at speed then going up the steep incline and doing numerous loops in large groups has become an annoyance and a hazard to residents and motorists using Mount Street.

The residents suggested the installation of removable speed bumps to eliminate this practice. The City's officers concern was that the introduction of such speed bumps can create other issues such as noise disturbance when vehicles went over them.

The meeting was a very productive one with there being mutual agreement with the majority of the initiatives.

FINANCIAL IMPLICATIONS:

There is no specific budget for the cost of streetscape alterations in Cliff Street and Mount Street. The actual cost would not be known until a detail design was prepared and costed. If works were to proceed funds would have to be found in budget reviews or from savings in other capital projects.

The City does not have Wi-Fi CCTV cameras available to be located in Mount Street, therefore to undertake this initiative the City would have to purchase a camera at an estimated cost of \$10,000. This figure does not include any associated costs with data installation and transmission.

To fund this CCTV camera the Community Amenity and Safety unit have a capital budget of \$25,000 to install one to three extra CCTV cameras as required in 2015/16.

The other actions proposed would involve labour costs which are difficult to quantify. However, given that Rangers already visit the area on a regular basis any increase should not significantly increase the costs.

As was reported on the 24 March 2015 in the Works and Urban Development Committee report on this subject the estimated cost of undertaking an awareness campaign would cost in the order of \$15,000.

All figures quoted in this report are exclusive of GST.

COMMENTS:

The issue of adverse amenity to residents in Cliff Street, Mount Street and Bellevue Terrace has been a concern for a number of years and whilst the City has endeavoured to control the use of the area by fitness business operators this has not been totally successful and complaints have continued.

It appears that the use of this area, which is close to the CBD where many people work and visit every day, continues to grow in popularity.

The topography of the area, adjacent to Jacobs Ladder and Kings Park offers a safe, attractive and convenient location for people to exercise in.

The City through its Health and Wellbeing Plan does encourage residents, workers and visitors to undertake healthy pursuits and to use the City's wonderful dual use paths and parks. However, there does need to be a balance in using public areas for health pursuits and the amenity of residential precincts such as this area of West Perth.

There is ample public parklands and foreshore spaces including Kings Park which City workers, residents and visitors can use on a daily basis to exercise and that will not impact on residents' amenity.

- 5.13pm** The Interim Manager Transport entered the meeting.
5.15pm The Manager Street Presentation & Maintenance entered the meeting.
5.15pm The Manager Governance departed the meeting.
5.18pm The Manager Governance returned to the meeting.

OFFICER RECOMMENDATION:

That Council:

1. acknowledges that there are adverse amenity impacts to residents in Cliff Street, Mount Street and Bellevue Terrace due to the popularity of Jacobs Ladder and Mount Street for public use;
2. endorses the following actions:
 - 2.1 increasing periodic patrolling and escalating application of Local Laws against offending users for enforceable offences;
 - 2.2 undertaking periodic awareness campaigns to encourage users to respect amenity for residents (including amended signage);
 - 2.3 installing mobile Wi-Fi CCTV periodically and align remote surveillance to patrolling and enforcement by Rangers and WA Police;
 - 2.4 amending the City of Perth jogging/walking promotional materials to discourage organised users;
 - 2.5 investigating and consulting with affected residents on Cliff Street streetscape alterations to create an interface buffer on the east side and constrain available area for users;
 - 2.6 investigating and consulting on Mount Street median landscaping to constrain area for users;
 - 2.7 engaging cycling clubs and discourage informal criterium and time trial activities in Mount Street;
3. does not support the partial closure of Jacobs Ladder as requested by residents;
4. does not support the introduction of residents only parking in Mount Street, Cliff Street and Bellevue Terrace between 6.30pm and 8.00am as requested by residents;
5. requests Officers to investigate potential traffic calming on the northern side of Mount Street to discourage groups of cyclists from using Mount Street as an informal criterium space; and

6. requests Officers to undertake a review of the initiatives outlined in part 2 above to assess whether they have been successful in addressing residents' concerns.

The Work and Urban Development Committee agreed to amend the Officer Recommendation as follows:

That Council:

1. does not support the partial closure of Jacobs Ladder as requested by residents due to its historical significance;
2. acknowledges that there are adverse amenity impacts to residents in Cliff Street, Mount Street and Bellevue Terrace due to the popularity of Jacobs Ladder and Mount Street for public use;
- 2.3. endorses the following actions:
 - 2.3.1 increasing ~~periodic~~ regular patrolling and escalating application of Local Laws against offending users for enforceable offences;
 - 2.3.2 undertaking ~~periodic~~ recurrent awareness campaigns to encourage users to respect amenity for residents (including amended signage);
 - 2.3.3 installing mobile Wi-Fi CCTV ~~periodically~~ and align remote surveillance to patrolling and enforcement by Rangers and WA Police;
 - 2.3.4 amending the City of Perth jogging/walking promotional materials to discourage organised users;
 - 2.3.5 immediately investigating and consulting with affected residents on Cliff Street streetscape alterations to create an interface buffer on the east side and constrain available area for users;
 - 2.3.6 immediately investigating and consulting on Mount Street median landscaping to constrain area for users;
 - 2.3.7 immediately engaging cycling clubs and actively discourage informal criterium and time trial activities in Mount Street and requests Officers to investigate potential traffic calming on the northern side of Mount Street to discourage groups of cyclists from using Mount Street as an informal criterium space;
- ~~3. does not support the partial closure of Jacobs Ladder as requested by residents;~~

4. does not support the introduction of residents only parking in Mount Street, Cliff Street and Bellevue Terrace between 6.30pm and 8.00am as requested by residents;
- ~~5. requests Officers to investigate potential traffic calming on the northern side of Mount Street to discourage groups of cyclists from using Mount Street as an informal criterium space; and~~
- ~~6.~~5. requests Officers to undertake a review of the initiatives outlined in part ~~2-3~~2-3 above to assess whether they have been successful in addressing residents' concerns.

Moved by the Lord Mayor, seconded by Cr McEvoy

That Council:

- 1. does not support the partial closure of Jacobs Ladder as requested by residents due to its historical significance;***
- 2. acknowledges that there are adverse amenity impacts to residents in Cliff Street, Mount Street and Bellevue Terrace due to the popularity of Jacobs Ladder and Mount Street for public use;***
- 3. endorses the following actions:***
 - 3.1 increasing regular patrolling and escalating application of Local Laws against offending users for enforceable offences;***
 - 3.2 undertaking recurrent awareness campaigns to encourage users to respect amenity for residents (including amended signage);***
 - 3.3 installing mobile Wi-Fi CCTV and align remote surveillance to patrolling and enforcement by Rangers and WA Police;***
 - 3.4 amending the City of Perth jogging/walking promotional materials to discourage organised users;***
 - 3.5 immediately investigating and consulting with affected residents on Cliff Street streetscape alterations to create an interface buffer on the east side and constrain available area for users;***

(Cont'd)

- 3.6 *immediately investigating and consulting on Mount Street median landscaping to constrain area for users;***
- 3.7 *immediately engaging cycling clubs and actively discourage informal criterium and time trial activities in Mount Street and requests Officers to investigate potential traffic calming on the northern side of Mount Street to discourage groups of cyclists from using Mount Street as an informal criterium space;***
- 4. *does not support the introduction of residents only parking in Mount Street, Cliff Street and Bellevue Terrace between 6.30pm and 8.00am as requested by residents;***
- 5. *requests Officers to undertake a review of the initiatives outlined in part 3 above to assess whether they have been successful in addressing residents' concerns.***

The motion was put and carried

The votes were recorded as follows:

For: The Lord Mayor, Crs Limnios and McEvoy

Against: Nil

WK110/15 BLACK SPOT SCHEME REVIEW

BACKGROUND:

| | |
|--------------------------|--|
| FILE REFERENCE: | P1026931 |
| REPORTING UNIT: | Transport Unit |
| RESPONSIBLE DIRECTORATE: | Planning and Development |
| DATE: | 29 July 2015 |
| MAP / SCHEDULE: | Schedule 2 – Technical Note Black Spot Scheme Review |

The Nation Building (formerly National) and State Black Spot Programs are in place to assist Local Government Authorities address intersections or sections of road that have an identified crash history. The Departments of Infrastructure, Transport, Regional Development (Federal Government); and Main Roads Western Australia (State Government) are responsible for the administration of the programs in Western Australia.

Each local government is provided with crash data from Main Roads WA for their respective area, which enables the local government to compile a “black spot” list. The list forms the primary basis for road safety improvements within the City.

In the past locations with a high number of vehicle crashes have been prioritised in the Black Spot selection process. This is to ensure that a good benefit cost ratio (BCR) can be achieved for the schemes that the City submits to Main Roads WA, in order to increase the likelihood of the scheme being funded through the Black Spot program. As a result of this arrangement, locations with crashes involving vulnerable road users such as pedestrians and cyclists may not have received a high ranking in the selection process in the past.

The City's Urban Design Framework (UDF) identified the need to place a greater importance on pedestrian movement, cycling and public transport in the city centre. It is therefore considered critical that the safety of vulnerable road users such as pedestrians and cyclists is improved. The Black Spot selection process has therefore been updated to not only prioritise locations with high vehicular crashes but also assign more priority to locations with significant pedestrian/cycle related crashes.

This report summarises the methodology used in setting up the updated Black Spot selection process and the derivation of the list of potential high crash sites that would be further investigated for the eligibility of funding for:

- 2016/17 Black Spot submissions to Main Roads WA (50-100% funded);
- Perth Bicycle Network submissions to DoT (50% funded); and
- Perth Parking Management Fund submissions to DoT (100% funded)

LEGISLATION / STRATEGIC PLAN / POLICY:

Legislation

**Integrated Planning
and Reporting
Framework
Implications**

Strategic Community Plan

Council Four Year Priorities: ‘Getting Around Perth’
S4 Enhanced accessibility in and around the city
including parking.

DETAILS:

Methodology

The latest crash data report for the City of Perth road network was obtained from Main Roads WA which consists of details for five years of crash data recorded from January 2010 to December 2014. Two sets of data were formed from the crash data report: crashes that occurred at intersections; and crashes that occurred on a section of road (mid-blocks).

Crashes involving pedestrians or cyclists were filtered out from the report and the total number of pedestrian, cycle and other crashes were summarised separately in a table for each crash location. Due to the number of pedestrian and cycle crashes

being in the minority when compared with the total number of other crashes, a ranking system with weighting factors was developed in order to assign more priority to locations with pedestrian and cycle crashes.

A series of sensitivity tests were undertaken using different weighting factors for pedestrian/cycle crashes. It was found that a weighting of '50' for the pedestrian crashes, '30' for the cycle crashes and '1' for all other crashes provided sufficient priority to pedestrian and cycle crashes without diminishing other types of crashes.

A total score for each intersection/mid-block was calculated by multiplying the respective weighting factors to the number of pedestrian, cycle and other crashes. Each intersection and mid-block was then ranked against each other based on these scores, generating a list of ranked locations with crash issues.

A further review of the top 100 intersections and top 30 mid-blocks was undertaken, with a view to generate a priority list of locations that would be considered feasible for further investigation. Locations that met the following criteria were considered as priority sites:

- Locations not included within the scope of any recent or future transport related projects.
- Locations with higher crash to traffic volume ratios.
- Locations identified with significantly over-represented crash types.

Results

Following the review of the crash ranking list, taking into consideration factors identified above, separate priority lists for intersections and mid-blocks were produced as follows:

Intersections:

| Intersection | Crash Ranking Score |
|---|----------------------------|
| Adelaide Terrace and Bennett Street | 403 |
| Beaufort Street and Aberdeen Street | 227 |
| Harvest Terrace and Hay Street | 173 |
| Parker Street and Aberdeen Street | 152 |
| St Georges Terrace and Sherwood Court Pedestrian Crossing | 143 |
| John Street and Fitzgerald Street | 137 |
| Pier Street and Aberdeen Street | 130 |
| Palmerston Street and Newcastle Street | 111 |
| Lake Street and Francis Street | 95 |

Mid-block locations:

| Location | Crash Ranking Score |
|---|----------------------------|
| Adelaide Terrace between Bennett Street and Plain Street | 367 |
| William Street between St Georges Terrace and The Esplanade/ Mounts Bay Road | 357 |
| Adelaide Terrace/St Georges Terrace between Victoria Avenue and Hill Street | 329 |
| William Street between Hay Street and St Georges Terrace | 306 |
| St Georges Terrace between Mill Street and Mercantile Lane | 272 |
| Mill Street between Mounts Bay Road and St Georges Terrace | 268 |
| St Georges Terrace between Howard Street Pedestrian Crossing to Sherwood Court Pedestrian Crossing | 250 |
| Francis Street between Lake Street and William Street | 221 |

FINANCIAL IMPLICATIONS:

There are no direct financial implications arising from this report. A sum of \$300,000 per annum has been included in the Long Term Financial Plan for capital costs of Black Spot schemes. There are no projects in the current financial year. It should be noted that projects will have further investigation undertaken and would be referred back to Council when funding is required.

COMMENTS:

Following the in-depth review and ranking of all the crashes occurred on City of Perth roads recorded between January 2010 and December 2014, two priority lists have been generated, identifying nine intersections and eight mid-block locations to be further assessed in detail.

It is intended that Officers will report back to Council in April 2016, with a list of proposed schemes for Council to consider. Depending on the benefit cost ratio of the proposed schemes, submissions will be made to the most appropriate state agency for funding.

Moved by Cr McEvoy, seconded by the Lord Mayor

That Council:

- 1. endorses the updated methodology of prioritising Black Spot schemes;***
- 2. receives the priority list of sites generated through the updated methodology for further investigation as detailed in this report; and***

(Cont'd)

- 3. notes that an annual list of proposed schemes will be presented to Council as part of submissions to government agencies for funding.**

The motion was put and carried

The votes were recorded as follows:

For: The Lord Mayor, Crs Limnios and McEvoy

Against: Nil

**WK111/15 TENDER 73-14/15 – PROVISION OF ENGINEERING
CONSULTANCY SERVICES AND ASSOCIATED
PROFESSIONAL SERVICES**

BACKGROUND:

FILE REFERENCE: P1031318
REPORTING UNIT: Co-ordination and Design
RESPONSIBLE DIRECTORATE: Director Planning and Development
DATE: 28 July 2015
MAP / SCHEDULE: Schedule 3 – Schedule of Rates
Confidential Schedule 4 – Tender Evaluation Matrix –
Distributed to Elected Members under separate cover

On 4 March 2015 suitably qualified companies were invited to submit tenders for the provision of engineering consultancy and associated professional services. The tender is based on a schedule of rates for various capital works. Tendering for these services will ensure future projects such as the two-way street program are adequately resourced in a timely manner.

The current engineering consultancy contract expired on 31 July 2015.

LEGISLATION / STRATEGIC PLAN / POLICY:

Legislation Section 3.57 of the *Local Government Act 1995*
Part 4 of the of the *Local Government (Functions and
General) Regulations 1996*

**Integrated Planning
and Reporting
Framework
Implications** **Corporate Business Plan**
Council Four Year Priorities: Getting Around Perth
S4 Enhanced accessibility in and around the City
including parking
4.2 Deliver two-way street program.

Policy

Policy No and Name: 9.7 – Purchasing Policy

DETAILS:

At the close of tender on 31 March 2015 a total of 291 submissions were received across the following disciplines:

| Discipline | Number |
|---------------------------------------|---------------|
| Civil Engineering | 37 |
| Environmental Engineering | 24 |
| Structural Engineering | 31 |
| Marine Engineering | 14 |
| Geotechnical Engineering | 20 |
| Traffic Engineering | 19 |
| Traffic Planning | 17 |
| Transport Surveys and Audits | 16 |
| Quantity Surveyor | 15 |
| Lighting and Electrical Engineering | 24 |
| Project Management | 45 |
| Universal Access Consultant | 4 |
| Play Ground Safety Auditor | 2 |
| Safety in Design Auditors | 3 |
| Heritage and Archaeology/Anthropology | 9 |
| Landscape Architects | 11 |
| TOTAL | 291 |

Qualitative Criteria

The submitted tenders were assessed by the Tender Assessment Panel against the following qualitative criteria:

- Relevant company experience/history of practice.
- Qualification, knowledge and experience of individual personnel.
- Resource capacity/ability to service City of Perth.
- Quality assurance.

Particular emphasis was placed on relevant experience to ensure companies had the level of skills and knowledge required to undertake City projects.

Qualitative Ranking and Value for Money Assessment

The quality of the submissions varied substantially. The following submissions scored the highest against the criteria:

Civil Engineering – GHD – GHD’s submission ranked highest against the qualitative criteria for Civil Engineering. The company has highly qualified and experienced engineers who are familiar with the requirements of the City. Its submission highlighted key relevant experience in projects with similar complexity to the City’s environment.

Environmental Engineering – Butler Partners Pty Ltd – Butler Partners’ submission ranked highest against the qualitative criteria for Environmental Engineering. Butler Partners Pty Ltd has a wide range of experience in Environmental Engineering which is relevant to City of Perth projects. The company has a well-resourced team to support complex projects if required.

Structural Engineering – Worley Parsons Services Pty Ltd – Worley Parsons’ submission ranked the highest against the qualitative criteria for Structural Engineering. It has extensive experience with structures including structural assessment, integrity and dilapidation surveys which are relevant to the City’s needs. The company has a team of qualified engineers who have extensive knowledge in providing structural engineering and design solutions that meet legislative requirements.

Marine Engineering – MP Rogers and Associates Pty Ltd – MP Rogers’ submission ranked highest against the qualitative criteria for Marine Engineering. MP Rogers has been working for the City over a number of years and were the main consultant for Marine Engineering in the City’s previous Consultancy Services contract. The company has particular expertise in the design of marine structures.

Geotechnical Engineering – Aurecon Australia Pty Ltd – Aurecon’s submission ranked highest against the qualitative criteria for Geotechnical Engineering. The company has highlighted key capability relevant to Geotechnical engineering. Aurecon has worked on a number of projects with State Government agencies and other local governments.

Traffic Engineering – GHD – GHD’s submission ranked highest against the qualitative criteria for Traffic Engineering. GHD has been working for the City over a number of years and were the main consultant for traffic and transport work in the City’s previous Consultancy Services contract. The company has a particular expertise in the design of traffic signal controlled intersections and thus well versed on the requirements of Main Roads Western Australia. It has also provided engineering input to the City’s response to the MAX Light Rail project.

Transport Planning – Cardno (WA) Pty Ltd – Cardno’s submission ranked highest against the qualitative criteria for Transport Planning. Cardno has worked on a number of projects with the City over the last few years, particularly related to parking

studies and road safety audits. The company's submission was of a high quality, it provided structured responses to the requirements and very good career resumes of staff.

Transport Surveys and Audits – Cardno (WA) Pty Ltd – Cardno's submission ranked highest against the qualitative criteria for Transport Survey and Audits. Cardno has worked on a number of projects with the City. The company's submission highlighted a broad range of experience in the delivery of transport surveys.

Quantity Surveying - Rider Levett Bucknall WA Pty Ltd – Rider Levett Bucknall's submission ranked highest against the qualitative criteria for Quantity Surveying. Rider Levett Bucknall has provided estimation services for City projects including Supreme Court Gardens. The company has a large team to support complex projects if required.

Lighting and Electrical Engineering – Engineering Technology Consultants (ETC) – ETC's submission ranked highest against the qualitative criteria for Lighting and Electrical Engineering. ETC has successfully delivered lighting and electrical projects for the City including Murray Street Mall, laneways and Kings Park Road. The company is the lighting consultants for the enhancement works in Barrack Street which are currently under construction. ETC's submission demonstrated a sound understanding of the City's requirements for lighting and they have the resources and capability to service future projects.

Project Management – NS Projects Pty Ltd – NS Projects' submission ranked highest against the qualitative criteria for Project Management. NS Projects has demonstrated City of Perth experience. The company managed the works in Forrest Place and are currently involved in project delivery at Perth City Link for the Metropolitan Redevelopment Authority.

Playground Safety Auditor – Play Check – Play Check's submission ranked highest against the qualitative criteria for Playground Safety Auditors. Play Check has performed playground inspections for the City in the past. The company is well recognised in the industry and are currently a member of the Australian Standards' Committee.

Landscape Architects – AECOM Australia Pty Ltd – AECOM's submission ranked highest against the qualitative criteria for Landscape Architects. AECOM has a wide range of experience which is relevant to City of Perth projects. The company has a large team to support complex projects if required.

The submissions for the following disciplines scored poorly against the qualitative criteria:

- Universal Access;
- Safety in Design Auditors; and
- Heritage and Archaeology/Anthropology.

Issues with these submissions ranged from lack of detail on relevant experience and qualifications and/or limited resources. The Tender Assessment Panel was not confident that these consultants could adequately service City projects and it was therefore proposed to reject tenders for the above three disciplines.

FINANCIAL IMPLICATIONS:

These engineering consultancy and associated professional services will be requested on a project-by-project basis and funded by each specific project budget.

The Coordination and Design and Transport Units have a total budget of \$538,000 over the next 12 months for consultancy services for various projects.

Property and Parks Units have a separate budget for consultancy for their capital works.

COMMENTS:

The consultants selected across the thirteen disciplines are well resourced, experienced and have the capacity to service City projects.

It is therefore proposed to accept tenders as detailed in the recommendation section of this report to provide consultancy services in the thirteen disciplines for a period of one year. Services can be requested on a project-by-project basis.

Moved by the Lord Mayor, seconded by Cr McEvoy

That Council:

- 1. accepts the following tenders, based on the Schedule of Rates detailed in Schedule 3, for the provision of various engineering consultancy services and associated professional services for a period of one year:***

- 1.1 GHD Pty Ltd – Civil Engineering;***
- 1.2 Butler Partners Pty Ltd – Environmental Engineering;***
- 1.3 Worley Parsons Services Pty Ltd – Structural Engineering;***
- 1.4 MP Rogers and Associates PL - Marine Engineering;***
- 1.5 Aurecon Australasia Pty Ltd – Geotechnical Engineering;***
- 1.6 GHD Pty Ltd – Traffic Engineering;***
- 1.7 Cardno (WA) Pty Ltd – Transport Planning;***
- 1.8 Cardno (WA) Pty Ltd – Transport Surveys & Audits;***

(Cont'd)

- 1.9 Rider Levett Bucknall WA Pty Ltd – Quantity Surveyor;**
 - 1.10 Engineering Technology Consultant (ETC) – Lighting and Electrical Engineering;**
 - 1.11 NS Projects Pty Ltd – Project Management;**
 - 1.12 Play Check – Play Ground Safety Auditor;**
 - 1.13 AECOM Australia Pty Ltd – Landscape Architects;**
- 2. notes that the supply of consultancy services is based on tendered rates over a period of one year.**

The motion was put and carried

The votes were recorded as follows:

For: The Lord Mayor, Crs Limnios and McEvoy

Against: Nil

WK112/15 MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN

Nil

WK113/15 GENERAL BUSINESS

Responses to General Business from a Previous Meeting

Nil

New General Business

1. Elected Members Briefing Session with Perth Stadium

The City has received an invitation from Perth Stadium for Elected Members to attend an on-site briefing session for an update on the project. The Works and Urban Development Committee members requested that Perth Stadium provide the briefing at Council House to ensure all Elected Members can attend and be informed appropriately.

2. Main Roads WA – Signs

Cr Limnios requested the Director Planning and Development raise with Main Roads WA the possibility of developing new sign technology to ensure future road signs can be recovered rather than being replaced when damaged.

WK114/15 ITEMS FOR CONSIDERATION AT A FUTURE MEETING

Outstanding Items:

- Northbridge Piazza Screening Wall – Detailed Costings for Enhancement (Raised 18/08/14 and updated by DCI 10/02/15).

The Chief Executive Officer advised that a report on the matter is due to be presented at the next Works and Urban Development Committee meeting.

- Identification and Improvement of “Neglected” Public Realm Spaces (Raised 04/11/14).
- Beautification of the city – Landscaping Options (Raised 05/05/15).

WK115/15 CLOSE OF MEETING

6.02pm There being no further business the Presiding Member declared the meeting closed

SCHEDULES
FOR THE MINUTES OF THE
WORKS AND URBAN
DEVELOPMENT MEETING
HELD ON
18 AUGUST 2015

SCHEDULE 1

PROPOSED SOLUTIONS TO ELIMINATE THE NUISANCE AND ANTI SOCIAL BEHAVIOUR AT JACOBS LADDER, CLIFF STREET/MOUNT STREET AND BELLEVUE TERRACE PRECINCT ("THE NEIGHBOURHOOD"):

1. Parking prohibited between 6:30PM and 8:00AM in The Neighbourhood except for residents and permit holders.
2. Eliminate parking in Cliff Street between Jacobs Ladder and Mount Street but so as not to create more area for exercise.
3. Wi-Fi CCTV to be installed on viewing platform of Jacobs Ladder and at the top of Mount Street.
4. Jacobs Ladder to be closed between 6:30PM and 8:00AM.
5. No fitness groups at any time within The Neighbourhood and no permits to be issued to ANY groups whatsoever for the use of The Neighbourhood for fitness activities or other promotional activities.
6. Installation of speed humps in Mount Street.
7. Actively discourage the use of The Neighbourhood as a fitness area and actively promote alternate sites in parks.
8. Remove all reference to Mount Street/Jacobs Ladder and other locations in The Neighbourhood on the City of Perth's website (and any pamphlets) under the heading "Get Active in the City".
9. Embark on education campaign informing:
 - Personal trainers;
 - Gymnasiums;
 - Boot camp operators;
 - Schools;
 - Sports clubs;
 - Football teams;
 - Fire department, and
 - Police academy
10. Do not install any structure that encourages the use of Jacobs Ladder as a fitness destination and in particular:
 - Public Toilet Amenities.
11. Actively enforce **ALL** of the above by proactive rangers and changing local laws if necessary.

SCHEDULE 2

Blackspot Schemes Review

Transport Unit, 29 July 2015



Technical Note

1. Background

The Nation Building (formerly national) and State Black Spot Programs are in place to assist Local Government Authorities address intersections or sections of road that have an identified crash history. The Departments of Infrastructure, Transport, Regional Development (Federal Government); and Main Roads Western Australia (State Government) are responsible for the administration of the programs in Western Australia.

In the past locations with a high number of vehicle crashes have been prioritised in the Black Spot selection process. This is to ensure that a good benefit cost ratio (BCR) can be achieved for the schemes that the City submits to Main Roads WA, in order to increase the likelihood of the scheme being funded through the Black Spot program. As a result of this arrangement, locations with crashes involving vulnerable road users such as pedestrians and cyclists may not have received a high ranking in the selection process in the past.

The City's Urban Design Framework (UDF) identified the need to place a greater importance on pedestrian movement, cycling and public transport in the city centre. It is therefore considered critical that the safety of vulnerable road users such as pedestrians and cyclists is improved. The Black Spot selection process has therefore been updated to not only prioritise locations with high vehicular crashes but also assign more priority to locations with significant pedestrian/cycle related crashes.

This report summarises the methodology used in setting up the updated Black Spot selection process and the derivation of the list of potential high crash sites that would be further investigated for eligibility of funding for:

- 2016/17 Black Spot submissions to Main Roads WA (50-100% funded)
- Perth Bicycle Network submissions to DoT (50% funded)
- Perth Parking Management Fund submissions to DoT (100% funded)

2. Methodology

2.1 Historical crash data

The latest crash data report for the City of Perth roads was obtained from Main Roads WA. The report is in the form of a spreadsheet and consists of details for five years of crash data recorded from January 2010 to December 2014.

Two sets of data were formed from the crash data report, crashes that occurred at intersections and crashes that occurred on a section of road (mid-blocks). The data was arranged like this as the mid-block crashes require further grouping before further analysis can be undertaken. Both sets of data were then analysed simultaneously.

The latest traffic count data was also collected using both Main Roads' SCATS data system as well as City's temporary traffic counters.

2.2 Data analysis

Each crash from the report was filtered into one of the following types of crash:

- Crash involving pedestrians,
- Crash involving cyclists,
- All other crashes

This data was then summarised in a table displaying the quantities of the three crash types against each intersection and mid-block sections.

2.3 Ranking system

| | Crashes Involving Pedestrians | Crashes Involving Cyclists | All Crashes | Other |
|-----------------|-------------------------------|----------------------------|-------------|-------|
| At Intersection | 2% | 1% | 97% | |
| At Mid-Block | 2% | 2% | 96% | |

As shown in the table above, the percentage of pedestrian and cycle related crashes are in the minority compared to the total number of other crashes. In order to systematically rank each intersection and mid-block against each other and provide priority to locations with high pedestrian /cycle crashes, a weighting system was developed.

A series of sensitivity tests were undertaken using different weighting factors for pedestrian / cycle crashes. It was found that a weighting of '50' for the pedestrian crashes, '30' for the cycle crashes and '1' for all other crashes provided sufficient priority to pedestrian and cycle crashes without diminishing other types of crashes.

2.4 Ranked list of crash locations

A total score for each intersection / mid-block was calculated by multiplying the respective weighting factors to the number of pedestrian, cycle and other crashes. Each intersection and mid-block was then ranked against each other based on these scores, generating a list of ranked locations with crash issues.

3. Shortlisting locations for further investigation

3.1 Past, current and upcoming projects

With the various current and upcoming traffic / transport projects that are proposed by the City and State Agencies, many of the locations identified on the crash ranking list can be modified as part of these projects, in order to address the crash issues. These locations can therefore be considered as low priority sites for the Black Spot program.

Locations that are included in projects that are currently being implemented or were recently implemented (with countermeasures addressing the crash issues) were also considered as low priority sites which should be reviewed in the future. This is so that more data can be collected so the effectiveness of the countermeasures can be evaluated.

The list of intersections / mid-blocks that have been recently modified or will be modified as part of other transport projects are identified in the appendix, along with the name of the corresponding projects.

3.2 Locations with high traffic flows

It was taken into consideration that locations with significant higher traffic flows are likely to record relatively higher number of crashes. This means locations with higher traffic flows could potentially rank above locations with lower traffic flows but with more significant crash issues.

A further review was therefore carried out looking at the ratio between the number of crashes and traffic flows for a selection of locations with higher average daily traffic flows. This ratio was calculated by dividing the total number of crashes (recorded between January-2010 to December-2014) by the average daily traffic. Locations identified with higher crash to traffic flow ratios were considered as high priority sites.

3.3 Identifying locations with crash types that are significantly over-represented

A review of the crash characteristics for locations with high number of crashes was undertaken; locations identified with significantly over-represented crash types were considered high priority sites to target.

4. Results

Following the review of the top 100 intersections and top 30 mid-block locations on the crash ranking lists, taking into consideration of factors identified in sections 3.1, 3.2 and 3.3, separate priority lists for intersections and mid-blocks were produced.

4.1 Intersections

| | Street1 | Street2 | Crashes (Jan2010-Dec2014) | | | Total | Ranking score |
|---|----------------|---|---------------------------|------|-------|-------|---------------|
| | | | Ped | Bike | Other | | |
| 1 | ADELAIDE TCE | BENNETT ST (050510) | 6 | | 103 | 109 | 403 |
| 2 | BEAUFORT ST | ABERDEEN ST (050614) | | 5 | 77 | 82 | 227 |
| 3 | HARVEST TCE | HAY ST (050526) | | 4 | 53 | 57 | 173 |
| 4 | PARKER ST | ABERDEEN ST (051417) | 1 | 3 | 12 | 16 | 152 |
| 5 | ST GEORGES TCE | ST GEORGES TCE & Sherwood Ct Ped Xing (TT) (050501) | 2 | 1 | 13 | 16 | 143 |
| 6 | JOHN ST | FITZGERALD ST (050738) | 1 | 2 | 27 | 30 | 137 |
| 7 | PIER ST NORTH | ABERDEEN ST (051258) | | 4 | 10 | 14 | 130 |
| 8 | PALMERSTON ST | PALMERSTON ST & NEWCASTLE ST (051055) | | 1 | 81 | 82 | 111 |
| 9 | LAKE STREET | FRANCIS ST (051291) | 1 | | 45 | 46 | 95 |

4.2 Mid-blocks

| | Location | Crashes (Jan2010-Dec2014) | | | Total | Ranking Score |
|---|--|---------------------------|------|-------|-------|---------------|
| | | Ped | Bike | Other | | |
| 1 | Adelaide Tce between Bennett St and Plain St | 5 | 1 | 87 | 93 | 367 |
| 2 | William St between St George Tce and The Esplanade / Mounts Bay Rd | 5 | 2 | 47 | 54 | 357 |
| 3 | Adelaide Tce / St George TCE between Vic Ave and Hill St | 5 | 0 | 79 | 84 | 329 |
| 4 | William St between Hay St Mall and St George Tce | 5 | 0 | 56 | 61 | 306 |
| 5 | St George Tce between Mill St and Mercantile lane | 3 | 3 | 32 | 38 | 272 |
| 6 | Mill St between Moutsbay Rd car park and St George Tce | 4 | 1 | 38 | 43 | 268 |
| 7 | St Georges Tce between Howard St Ped Xing (Tt) and Sherwood Ct Ped Xing (Tt) | 4 | 1 | 20 | 25 | 250 |
| 8 | Francis Street between Lake St and William St | 3 | 0 | 71 | 74 | 221 |

5. Summary and recommendation

Following the in-depth review and ranking of all the crashes occurred on City of Perth roads recorded between January 2010 and December 2014, two priority lists have been generated, identifying 7 intersections and 8 mid-block locations to be further investigated. The following exercises should be undertaken when reviewing these locations identified on the priority lists.

- Review the details of crashes recorded for each location noting the over-represented crash types
- Undertake site observation and identify the possible causes of the over-represented crashes
- Identify a list of locations with significant over-represented crashes and could benefit from implementation of road safety improvements
- Collect and review the current traffic volumes and speed of vehicles for the locations identified on the list
- Organise a road safety audit to be undertaken (if necessary)
- Consider possible countermeasures that could be used to address the over-represented crash types, at the each respective locations
- Identify the cost and budget requirements for the proposed schemes

From undertaking the exercise listed above, it is intended that administration would report back to Council in April 2016, with a list of proposed schemes for the Council to approve. Depending on the benefit cost ratio of the proposed schemes, submissions will be made to state agencies for funding.

Appendix

List of the top 100 crash locations at intersections

| Rank | Street1 | Street2 | Ped | Bike | Other | Ranking score | Notes |
|------|---|---|-----|------|-------|---------------|---|
| 1 | Railway St | RAILWAY PDE & LOFTUS ST & THOMAS ST (050705) | | 5 | 484 | 634 | Roe Street Upgrade |
| 2 | Graham Farmer Fwy (Westbound) off to Loftus St | CAMBRIDGE ST & LOFTUS ST (050783) | | 6 | 299 | 479 | Low Crash to Traffic volumes ratio |
| 3 | William Street | ST GEORGES TCE (050503) | 5 | 3 | 137 | 477 | St Georges Terrace Streetscape |
| 4 | Beaufort St | ROE ST (050611) | 4 | 4 | 149 | 469 | Beaufort Street 2way (settle period) |
| 5 | Adelaide Tce | BENNETT ST (050510) | 6 | | 103 | 403 | |
| 6 | Adelaide Tce | PLAIN ST (050509) | 4 | 2 | 140 | 400 | Blackspot Project (settle period) |
| 7 | Thomas street | KINGS PARK RD & BAGOT RD (050693) | 1 | 2 | 284 | 394 | Parallel Walks (settle period) |
| 8 | Mitchell Fwy(Southbound) off to Wellington St | ELDER ST & WELLINGTON ST (050567) | 3 | 2 | 153 | 363 | Main Roads WA scheme proposed |
| 9 | Beaufort St | NEWCASTLE ST & BEAUFORT ST (050615) | 3 | | 182 | 332 | Beaufort Street 2way (settle period) |
| 10 | William Street | HAY ST & HAY ST MALL (050522) | 6 | | 29 | 329 | Pedestrian count down timers (settle period) |
| 11 | Barrack St | WELLINGTON ST & BEAUFORT ST (050560) | 3 | 1 | 137 | 317 | Barrack Street 2way |
| 12 | William Street | WELLINGTON ST (050561) | 2 | 2 | 155 | 315 | Perth City Link / Second Bus Port |
| 13 | William Street | ROE ST (050604) | 2 | 3 | 123 | 313 | Perth City Link |
| 14 | Barrack St | RIVERSIDE DR & BARRACK SQ (004377) | 2 | 1 | 164 | 294 | Elizabeth Quay |
| 15 | Mount St East | ST GEORGES TCE & MILLIGAN ST (050506) | | 6 | 96 | 276 | Parallel Walks |
| 16 | James Street West | FITZGERALD ST (050739) | 1 | 2 | 155 | 265 | Parallel Walks |
| 17 | Vincent St on to Mitchell Fwy (Northbound) | VINCENT ST & LAKE MONGER DR & SOUTHPORT ST (014075) | 1 | 1 | 182 | 262 | Outside CoP boundary |
| 18 | Hay St | HAY ST & THOMAS ST (050533) | 1 | 1 | 179 | 259 | Thomas Street widening project / Parallel Walks |
| 19 | James Street West | WILLIAM ST (050603) | 3 | 2 | 46 | 256 | William Street 2way (settle period) |
| 20 | St Georges Tce | IRWIN ST (050498) | 4 | | 40 | 240 | Parallel Walks (settle period) |
| 21 | Mill St | ST GEORGES TCE (050505) | 3 | 1 | 55 | 235 | Parallel Walks |
| 22 | Wellington St | THOMAS ST & ROBERTS RD (050578) | | 1 | 204 | 234 | Low Crash to Traffic volumes ratio |
| 23 | William Street | MURRAY ST MALL & MURRAY ST (050550) | 4 | | 32 | 232 | Murray St 2way (settle period) / Pedestrian count down timers (settle period) |
| 24 | Wellington St on to Mitchell Fwy (Northbound) | GEORGE ST & WELLINGTON ST (050569) | | 2 | 170 | 230 | Main Roads WA scheme proposed |
| 25 | William Street | THE ESPLANADE & MOUNTS BAY RD (014115) | | 3 | 138 | 228 | Mounts Bay Road 2way (settle period) |
| 26 | Beaufort St | ABERDEEN ST (050614) | | 5 | 77 | 227 | Beaufort St 2way (settle period) |
| 27 | Stirling Hwy | WINTHROP AV (067701) | 1 | | 165 | 215 | Outside CoP boundary |
| 28 | Wanneroo Rd | CHARLES ST ON TO MITCHELL FWY (SOUTHBOUND) | | | 210 | 210 | Outside CoP boundary |
| 29 | Milligan Street | WELLINGTON ST & ENTERTAINMENT CENTRE (050566) | 1 | 3 | 61 | 201 | Parallel Walks / Perth Areana (settle period) |
| 30 | Guildford Rd | GRAHAM FARMER FWY (WESTBOUND) OFF TO EAST PDE | | | 200 | 200 | Outside CoP boundary |
| 32 | Milligan Street | HAY ST (050524) | | 4 | 79 | 199 | Parallel Walks (settle period) |
| 31 | Sutherland St | WELLINGTON ST (067677) | 2 | 1 | 69 | 199 | Parallel Walks (settle period) |
| 33 | William Street | WILLIAM ST & NEWCASTLE ST (050600) | 1 | 1 | 118 | 198 | William St 2way (settle period), William St 2way (CoV) |
| 34 | Lord St | WELLINGTON ST (050558) | 2 | | 93 | 193 | Parallel Walks (settle period) |
| 35 | Roe St | SUTHERLAND ST & RAILWAY ST (067679) | 2 | | 80 | 180 | Blackspot 2013/14 (settle period) |
| 36 | St Georges Tce | KING ST (050504) | 1 | 3 | 38 | 178 | St Georges Terrace Streetscape |
| 37 | Francis Street | WILLIAM ST (050602) | 1 | 3 | 36 | 176 | William St 2way (settle period) |
| 38 | Harvest Tce | HAY ST (050526) | | 4 | 53 | 173 | |
| 39 | Hay St | IRWIN ST (050519) | 2 | 2 | 9 | 169 | Parallel Walks |
| 40 | Spring St | MOUNTS BAY RD & SPRING ST (050606) | | 2 | 107 | 167 | Mounts Bay Road 2way (settle period) |
| 41 | Hay St | KING ST (050523) | 2 | 2 | 6 | 166 | Hay Street 2way |
| 42 | Fitzgerald Street | NEWCASTLE ST & FITZGERALD ST (050735) | 1 | | 104 | 154 | Parallel Walks |
| 43 | Parker Street | ABERDEEN ST (051417) | 1 | 3 | 12 | 152 | |
| 44 | Barrack St | ST GEORGES TCE (050500) | | 1 | 115 | 145 | Barrack Street 2way |
| 45 | Barrack St | MURRAY ST MALL & MURRAY ST (050551) | 2 | 1 | 15 | 145 | Barrack Street 2way |
| 46 | Sherwood Ct | ST GEORGES TCE & Sherwood Ct Ped Xing (TT) (050501) | 2 | 1 | 13 | 143 | |
| 47 | Fitzgerald Street | ROE ST (050740) | 1 | | 92 | 142 | Parallel Walks |
| 48 | East Pde to Lord St | LORD ST & NEWCASTLE ST (050639) | | 1 | 109 | 139 | Main Roads WA project |
| 49 | John Street | FITZGERALD ST (050738) | 1 | 2 | 27 | 137 | |
| 50 | Murray St on to Mitchell Fwy (Southbound) | GEORGE ST & MURRAY ST (050544) | | 2 | 76 | 136 | Murray Street 2way (stage2/3) |
| 51 | Wellington St | KING ST (050563) | 1 | 1 | 56 | 136 | Perth City Link |
| 52 | Mounts Bay Rd | Conv Ctr Access | 1 | | 85 | 135 | Mounts Bay Road 2way (settle period) |
| 53 | Wellington St | HILL ST (050557) | 1 | | 83 | 133 | Parallel Walks (settle period) |
| 54 | Riversie Dr on to Mitchell Fwy (Northbound) | Convention Ctr SE Car Park Exit & PTA controlled Bus Lane | 1 | | 82 | 132 | Main Roads WA |
| 55 | St Georges Tce | ADELAIDE TCE & VICTORIA AV (050497) | | 2 | 72 | 132 | Parallel Walks |
| 56 | Murray St | KING ST (050548) | 2 | | 32 | 132 | Murray Street 2way (settle period) |
| 57 | Pier St North | ABERDEEN ST (051258) | | 4 | 10 | 130 | |
| 58 | William Street | ABERDEEN ST (050601) | | 3 | 39 | 129 | William Street 2way (settle period) |
| 59 | Havelock St | KINGS PARK RD (050890) | | 3 | 39 | 129 | Kings Park Road Study |
| 60 | Wellington St | BENNETT ST (050556) | | 1 | 96 | 126 | Blackspot 2013/14 (settle period) |
| 61 | Kings Park Rd | FRASER AV & MALCOLM ST (050608) | | 2 | 65 | 125 | Kings Park Road Study |
| 62 | Stirling St | ABERDEEN ST (051240) | | 3 | 35 | 125 | Parallel Walks |
| 63 | Lake Street | ABERDEEN ST (051292) | 1 | 1 | 43 | 123 | CoP Capital Works (settle period) |
| 64 | Barrack St | HAY ST & HAY ST MALL (050521) | 2 | | 22 | 122 | Barrack Street 2way |
| 65 | Palmerston St | PALMERSTON ST & NEWCASTLE ST (051055) | | 1 | 81 | 111 | |
| 66 | The Esplanade | BARRACK ST (050605) | | | 110 | 110 | Elizabeth Quay |
| 67 | Elder St on to Mitchell Fwy (Southbound) | ELDER ST & MURRAY ST (050545) | | 1 | 79 | 109 | Murray Street 2way (stage 2/3) |
| 68 | Newcastle Street | LINDSAY ST (051060) | 2 | | 9 | 109 | Outside CoP boundary |
| 69 | St Georges Tce | Central Park Ped Xing (TT) (148655) | 2 | | 9 | 109 | St Georges Terrace Streetscape |
| 70 | Winthrop Avenue | HARDY RD (052634) | 1 | 1 | 18 | 98 | Outside CoP boundary |
| 71 | Adelaide Tce | DE VLAMINGH AV (162273) | 1 | 1 | 18 | 98 | |
| 72 | Lake Street | FRANCIS ST (051291) | 1 | | 45 | 95 | |
| 73 | Riverside Dr | PT FRASER CAR PARK & RIVERSIDE DR (162274) | | 3 | 5 | 95 | |
| 74 | Winthrop Avenue | THOMAS ST & ABERDARE RD (058619) | | | 94 | 94 | |
| 75 | Outram St | HAY ST (050531) | | 2 | 30 | 90 | Blackspot (settle period) |
| 76 | Lucknow Pl | WELLINGTON ST & OUTRAM ST (050577) | | | 89 | 89 | Blackspot 2014/15 (settle period) |
| 77 | Riverside Dr | VICTORIA AV (051266) | | 1 | 58 | 88 | Parallel Walks |
| 78 | Victoria Sqaure | GODERICH ST (051286) | | | 87 | 87 | Blackspot 2014/15 (settle period) |
| 79 | Point Lewist Rty | MOUNTS BAY RD (SOUTHBOUND) (004497) | | 1 | 57 | 87 | MRWA |
| 80 | Outram St | MURRAY ST (050537) | | 1 | 56 | 86 | Murray Street 2way (stage 2) |
| 81 | Plain St | NELSON CR (051250) | | 2 | 26 | 86 | |
| 82 | Hay St | PLAIN ST (050515) | | | 85 | 85 | Parallel Walks (settle period) |
| 83 | Albany Hwy | RIVERSIDE DR (119153) | | | 84 | 84 | MRWA |
| 84 | Kensington St | EAST PDE (051108) | | 1 | 54 | 84 | |
| 85 | Mounts Bay Rd | MERCANTILE L (081701) | 1 | 1 | 4 | 84 | Mounts Bay Road 2way (settle period) |
| 86 | Brook St | PLAIN ST & EAST PDE (051106) | | 1 | 52 | 82 | |
| 87 | Thomas street | SUBIACO RD (121663) | | 2 | 22 | 82 | Outside CoP Boundary |
| 88 | Havelock St | HAY ST (050527) | | 2 | 22 | 82 | Parallel Walks |
| 89 | Wellington St | PIER ST SOUTH (050559) | | 1 | 49 | 79 | Parallel Walks (settle period) |
| 90 | Stirling Hwy | HACKETT DR (004481) | | | 78 | 78 | Public Transport Agency scheme |
| 91 | Thomas street | RHEOLA ST (050696) | | 2 | 16 | 76 | |
| 92 | Adelaide Tce | HILL ST (050512) | | | 74 | 74 | Parallel Walks (settle period) |
| 93 | Hay St | TRINITY AV & HAY ST & BRAITHWAITE ST (050513) | 1 | | 24 | 74 | |
| 94 | Colin St | HAY ST (050530) | 1 | | 21 | 71 | Parallel Walks (settle period) |
| 95 | Winthrop Avenue | MONASH AV (052631) | | | 69 | 69 | |
| 96 | Colin St | WELLINGTON ST (050574) | | | 68 | 68 | Parallel Walks (settle period) |
| 97 | Hay St | BENNETT ST (050516) | 1 | | 17 | 67 | Parallel Walks (settle period) |
| 98 | Milligan Street | MURRAY ST (050546) | | 1 | 35 | 65 | Murray Street 2way (settle period), Parallel Walks (settle period) |
| 99 | Francis Street | BEAUFORT ST (050613) | 1 | | 15 | 65 | Beaufort Street 2way (settle period) |
| 100 | Mitchell Fwy (Northbound) off to Hay St | GEORGE ST & HAY ST (004515) | | | 64 | 64 | Hay Street 2way |

List of the top 30 crash locations at mid-blocks

| | Row Labels | Ped | Bike | Other | Ranking Score | Notes |
|----|--|-----|------|-------|---------------|----------------------------------|
| 1 | Beaufort st_James St East_Francis St | 8 | 1 | 55 | 485 | Beaufort Street Pelican Crossing |
| 2 | William St_Murray St Mall_Hay St Mall | 7 | 2 | 35 | 445 | William Street Transit Mall |
| 3 | Adelaide Tce_Bennett St_Plain St | 5 | 1 | 87 | 367 | |
| 4 | William St_St George Tce_The Esplanade & Mounts Bay Rd | 5 | 2 | 47 | 357 | |
| 5 | St George Tce_Central Park Ped Xing_William St | 5 | 1 | 61 | 341 | St Georges Terrace Streetscape |
| 6 | St Georges Tce_King St_Central Park Ped Xing (Tt) | 5 | 2 | 21 | 331 | St Georges Terrace Streetscape |
| 7 | Adelaide Tce_St George TCE and Vic Ave_Hill St | 5 | 0 | 79 | 329 | |
| 8 | William St_Hay St Mall_St George Tce | 5 | 0 | 56 | 306 | |
| 9 | Hay St_King St_Milligan St | 2 | 3 | 82 | 272 | Hay Street 2way |
| 10 | St George Tce_Mill St_Mercantile lane | 3 | 3 | 32 | 272 | |
| 11 | Mill St_Moutsbay Rd car park_St George TCE | 4 | 1 | 38 | 268 | |
| 12 | Wellington St_Queen St_King St | 3 | 3 | 21 | 261 | Perth City Link |
| 13 | Murray St_Barrack St_Pier St South | 4 | 1 | 29 | 259 | Murray Street 2way (east end) |
| 14 | St Georges Tce_Howard St Ped Xing (Tt)_Sherwood Ct Ped Xing (Tt) | 4 | 1 | 20 | 250 | |
| 15 | Barrack St_Murray St_Wellington St | 4 | 0 | 26 | 226 | Barrack Street 2way |
| 16 | Francis Street_Lake St_William St | 3 | 0 | 71 | 221 | |
| 17 | James Street West_Nicks Lane_William St | 3 | 0 | 47 | 197 | |
| 18 | The Esplanade_Howard St_Sherwood Ct | 3 | 0 | 47 | 197 | Elizabeth Quay |
| 19 | Wellington St_Barrack St and Beaufort_F Forrest Place Ped Xing | 3 | 0 | 34 | 184 | |
| 20 | Terrace Rd_Victoria Ave_Hill St | 1 | 3 | 41 | 181 | |
| 21 | Roe St_Nicks Lane_Lake St | 1 | 3 | 38 | 178 | |
| 22 | Lake Street_Francis St_James St West | 3 | 0 | 24 | 174 | |
| 23 | Hay St_Bennett St_Hill St | 2 | 1 | 43 | 173 | |
| 24 | Roe St_Beaufort St_William St | 0 | 2 | 103 | 163 | |
| 25 | Aberdeen St_Parker St_Lake St | 3 | 0 | 9 | 159 | |
| 26 | George St_Hay St_Murray St | 0 | 5 | 8 | 158 | |
| 27 | Milligan St_St George TCE & Mounts St East_Hay St | 2 | 1 | 25 | 155 | |
| 28 | Shafto Lane_Murray St_Wellington St | 3 | 0 | 3 | 153 | |
| 29 | Fitzgerald Street_James St West_John St | 0 | 4 | 26 | 146 | Light Rail Transit |
| 30 | Wellington St_Bennett St_Hill St | 2 | 0 | 43 | 143 | |

SCHEDULE 3

Provision of Engineering Consultancy Services and Associated Professional Services

-073-14/15.

Schedule A

| AECOM Australia Pty Ltd- Landscape Architects | |
|--|------------------------------|
| | Rate/hour (including GST) |
| Principal / Director | \$294.60 |
| Associate Director | \$221.00 |
| Principal Landscape Architects | \$213.70 |
| Senior Landscape Architects | \$150.15 |
| Landscape Architects | \$117.70 |
| Senior Draftsperson | \$150.00 |
| Draftsperson | \$130.00 |
| Administration | \$127.00 |

| <u>Aurecon Australasia Pty Ltd - Geotechnical Engineering</u> | |
|--|------------------------------|
| | Rate/hour (including GST) |
| Principal / Director | \$260.00 |
| Associate Director | \$248.00 |
| Principal Engineer | \$242.00 |
| Senior Engineer | \$210.00 |
| Design Engineer | \$163.00 |
| Graduate Engineer | \$127.00 |
| Senior Draftsperson | \$157.00 |
| Draftsperson | \$127.00 |
| Technician | \$115.00 |
| Administration | \$115.00 |

| <u>Butler Partners Pty Ltd - Environmental Engineering</u> | |
|---|------------------------------|
| | Rate/hour (including GST) |
| Principal / Director | \$180.00 |
| Associate Director | \$180.00 |
| Principal Engineer/Consultant | \$150.00 |
| Senior Engineer/Consultant | \$150.00 |
| Design Engineer/Consultant | \$130.00 |
| Graduate Engineer/Consultant | \$75.00 |
| Senior Draftsperson | \$90.00 |
| Draftsperson | \$90.00 |
| Technician | \$90.00 |
| Administration | \$90.00 |

Cardno (WA) Pty Ltd -Transport Surveys and Audits

| | Rate/hour (including GST) |
|----------------------|------------------------------|
| Principal / Director | \$300.00 |
| Associate Director | \$220.00 |
| Principal Engineer | \$220.00 |
| Senior Engineer | \$180.00 |
| Design Engineer | \$130.00 |
| Graduate Engineer | \$110.00 |
| Senior Draftsperson | \$130.00 |
| Draftsperson | \$100.00 |
| Technician | \$100.00 |
| Administration | \$90.00 |

GHD Pty Ltd - Civil Engineering

| | Rate/hour (including GST) |
|----------------------|------------------------------|
| Principal / Director | N/A |
| Associate Director | \$272.00 |
| Principal Engineer | \$226.00 |
| Senior Engineer | \$165.00 |
| Design Engineer | \$140.00 |
| Graduate Engineer | \$120.00 |
| Senior Draftsperson | \$120.00 |
| Draftsperson | \$95.00 |
| Technician | \$140.00 |
| Administration | \$99.00 |

GHD Pty Ltd - Transport Engineering

| | Rate/hour (including GST) |
|----------------------|------------------------------|
| Principal / Director | N/A |
| Associate Director | \$254.00 |
| Principal Engineer | \$212.00 |
| Senior Engineer | \$154.00 |
| Design Engineer | \$131.00 |
| Graduate Engineer | \$112.00 |
| Senior Draftsperson | \$112.00 |
| Draftsperson | \$89.00 |
| Technician | \$131.00 |
| Administration | \$92.00 |

**Lighting Technology Consultant (ETC) -
Lighting and Electrical Engineer**

| | Rate/hour (including GST) |
|----------------------|------------------------------|
| Principal / Director | \$265.00 |
| Associate Director | \$240.00 |
| Principal Engineer | \$230.00 |
| Senior Engineer | \$220.00 |
| Design Engineer | \$170.00 |
| Graduate Engineer | \$160.00 |
| Senior Draftsperson | \$150.00 |
| Draftsperson | \$140.00 |
| Technician | \$130.00 |
| Administration | \$110.00 |

**MP Rogers & Associates PL - Marine
Engineering**

| | Rate/hour (including GST) |
|----------------------|------------------------------|
| Principal / Director | N/A |
| Associate Director | N/A |
| Principal Engineer | \$258.00 |
| Senior Engineer | \$209.00 |
| Design Engineer | \$181.00 |
| Graduate Engineer | \$143.00 |
| Senior Draftsperson | \$154.00 |
| Draftsperson | \$121.00 |
| Technician | \$121.00 |
| Administration | \$88.00 |

NS Projects Pty Ltd - Project Management

| | Rate/hour (including GST) |
|------------------------|------------------------------|
| Project Director | \$275.00 |
| Associate Director | \$220.00 |
| Senior Project Manager | \$198.00 |
| Admin Officer | \$99.00 |

Play Check - Play Ground Safety Auditor

| | Rate/hour (including GST) |
|------------------|------------------------------|
| Project Director | \$165.00 |

Rider Levett Bucknall WA Pty Ltd - Quantity Surveyor

| | Rate/hour (including GST) |
|--------------------------|------------------------------|
| Project Director | \$253.00 |
| Quantity Surveyor | \$154.00 |
| Senior Quantity Surveyor | \$176.00 |
| Admin Officer | Included |
| Associate | \$209.00 |

Worley Parsons Services Pty Ltd - Structural Engineering

| | Rate/hour (including GST) |
|----------------------|------------------------------|
| Principal / Director | \$220.00 |
| Associate Director | \$180.00 |
| Principal Engineer | \$160.00 |
| Senior Engineer | \$145.00 |
| Design Engineer | \$120.00 |
| Graduate Engineer | \$90.00 |
| Senior Draftsperson | \$140.00 |
| Draftsperson | \$100.00 |
| Technician | \$90.00 |
| Administration | \$85.00 |

Works and Urban Development Committee
Confidential Schedule 4
(Minute WKS111/15 refers)

Distributed to Elected Members under separate cover

Bound in Consolidated Committee
Confidential Minute Book
Volume 1 2015