



CITY OF HOBART

AGENDA

CITY INFRASTRUCTURE COMMITTEE MEETING (OPEN PORTION OF THE MEETING)

WEDNESDAY 27 APRIL 2016

AT 5.00 PM

THE MISSION

Our mission is to ensure good governance of our capital City.

THE VALUES

The Council is:

about people

We value people – our community, our customers and colleagues.

professional

We take pride in our work.

enterprising

We look for ways to create value.

responsive

We're accessible and focused on service.

inclusive

We respect diversity in people and ideas.

making a difference

We recognise that everything we do shapes Hobart's future.

HOBART 2025 VISION

In 2025 Hobart will be a city that:

- Offers opportunities for all ages and a city for life
 - Is recognised for its natural beauty and quality of environment
 - Is well governed at a regional and community level
 - Achieves good quality development and urban management
 - Is highly accessible through efficient transport options
 - Builds strong and healthy communities through diversity, participation and empathy
 - Is dynamic, vibrant and culturally expressive
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**CITY INFRASTRUCTURE COMMITTEE AGENDA
(OPEN PORTION OF THE MEETING)
27/4/2016**

- 17. QUESTIONS WITHOUT NOTICE – FILE REF: 13-1-10**
- 18. CLOSED PORTION OF THE CITY INFRASTRUCTURE COMMITTEE MEETING**

**BUSINESS LISTED ON THE AGENDA IS TO BE CONDUCTED IN THE ORDER
IN WHICH IT IS SET OUT UNLESS THE COMMITTEE BY SIMPLE MAJORITY
DETERMINES OTHERWISE**

I, Nicholas David Heath, General Manager of the Hobart City Council, hereby certify that:

1. In accordance with Section 65 of the Local Government Act 1993, the reports in this agenda have been prepared by persons who have the qualifications or the experience necessary to give such advice, information or recommendations included therein.
2. No interests have been notified, pursuant to Section 55(1) of the Local Government Act 1993, other than those that have been advised to the Council.



N.D. HEATH
GENERAL MANAGER

CITY INFRASTRUCTURE COMMITTEE AGENDA (OPEN)

Committee Members

Burnet (Chairman)
Deputy Lord Mayor Christie
Reynolds
Denison
Harvey
Aldermen
Lord Mayor Hickey
Zucco
Briscoe
Ruzicka
Sexton
Cocker
Thomas

City Infrastructure Committee (Open Portion of the Meeting) - Wednesday, 27 April 2016 at 5.00 pm in the Lady Osborne Room.

PRESENT:

APOLOGIES:

LEAVE OF ABSENCE:

CO-OPTION OF COMMITTEE MEMBERS IN THE EVENT OF A VACANCY

Where a vacancy may exist from time to time on the Committee, the Local Government Act 1993 provides that the Council Committees may fill such a vacancy.

- 1. MINUTES OF THE OPEN PORTION OF THE MEETING OF THE CITY INFRASTRUCTURE COMMITTEE HELD ON WEDNESDAY, 24 FEBRUARY 2016 A SPECIAL MEETING HELD MONDAY, 22 FEBRUARY 2016**
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2. CONSIDERATION OF SUPPLEMENTARY ITEMS TO THE AGENDA

In accordance with the requirements of Part 2 Regulation 8 (6) of the Local Government (Meeting Procedures) Regulations 2015, the Committee, by simple majority may approve the consideration of a matter not appearing on the agenda, where the General Manager has reported:

- (a) the reason it was not possible to include the matter on the agenda, and
- (b) that the matter is urgent, and
- (c) that advice has been provided under Section 65 of the Local Government Act 1993.

RECOMMENDATION

That the Committee resolve to deal with any supplementary items not appearing on the agenda, as reported by the General Manager in accordance with the provisions of the Local Government (Meeting Procedures) Regulations 2015.

3. INDICATIONS OF PECUNIARY AND CONFLICTS OF INTEREST

In accordance with Part 2 Regulation 8 (7) of the Local Government (Meeting Procedures) Regulations 2015, the chairman of a meeting is to request Aldermen to indicate whether they have, or are likely to have, a pecuniary interest in any item on the agenda.

In addition, in accordance with the Council's resolution of 14 April 2008, Aldermen are requested to indicate any conflicts of interest in accordance with the Aldermanic Code of Conduct adopted by the Council on 27 August 2007.

Accordingly, Aldermen are requested to advise of pecuniary or conflicts of interest they may have in respect to any matter appearing on the agenda, or any supplementary item to the agenda, which the committee has resolved to deal with, in accordance with Part 2 Regulation 8 (6) of the Local Government (Meeting Procedures) Regulations 2015.

4. TRANSFER OF AGENDA ITEMS

Are there any items which the meeting believes should be transferred from this agenda to the closed agenda or from the closed agenda to the open agenda, in accordance with the procedures allowed under Regulation 15 of the Local Government (Meeting Procedures) Regulations 2015?

**5. ESTABLISHMENT OF THE SULLIVANS COVE STAKEHOLDER
COMMITTEE – FILE REF: 16/31**

10x's

Report of the Director City Infrastructure of 20 April 2016 and attachments.

DELEGATION: Council

TO : City Infrastructure Committee

FROM : Director City Infrastructure

DATE : 20 April, 2016

SUBJECT : **ESTABLISHMENT OF THE SULLIVANS COVE
STAKEHOLDER COMMITTEE**

FILE : 16/31 mp:SMLP (o:\council & committee meetings reports\cic reports\27 april\final pdfs for
agenda\establishment of the sullivan's cove stakeholder committee.docx)

1. INTRODUCTION

- 1.1. The purpose of this report is to propose the establishment of a new Sullivan's Cove Stakeholder Committee.
- 1.2. The report provides draft Terms of Reference for the proposed Committee.
- 1.3. The report also recommends that nominations be sought for the membership of the Committee.

2. BACKGROUND

- 2.1. Council has recently made a number of improvements to infrastructure within Sullivan's Cove, including the Morrison Street shared path, the Castray Esplanade shared path, Salamanca Place footpath widening and new amenities within Salamanca Square.
- 2.2. The next stage of the Morrison Street improvement works is currently underway, with other works programmed for the future, including further improvements to Salamanca Place.
- 2.3. Stakeholders, including the Waterfront Business Community, have expressed a keen interest to be actively involved in the planning of future improvements.
- 2.4. Officers have been in discussions with Mr David Quinn representing the Waterfront Business Community regarding the establishment of a Committee to enable businesses to work cooperatively with Council, Tasports and State Government to plan for future improvements to traffic, parking and amenities within Sullivan's Cove. Mr Quinn has provided a proposal for a Steering Committee for the consideration of Council (**Attachment A**).

3. PROPOSAL

- 3.1. It is proposed that a new Sullivan's Cove Stakeholder Committee be formed.

- 3.2. It is proposed that the draft Terms of Reference (**Attachment B**) be endorsed in principle and the General Manager be given authority to make any future amendments.
- 3.3. It is proposed that nominations be sought for the membership of the Committee by two representatives of the local community for the endorsement of Council.
- 3.4. It is proposed that Tasports, the State Government and the Waterfront Business Community be requested to nominate an officer to attend the Sullivans Cove Stakeholder Committee meetings.
- 3.5. It is also proposed that Council nominate a minimum of two Aldermen to the Committee.
- 3.6. The City Infrastructure Committee is requested to consider whether and independent person or an Alderman be elected as Chairman to the Sullivans Cove Stakeholder Committee.

4. IMPLEMENTATION

- 4.1. A further report will be provided to enable Council to elect two community representatives to the Committee.
- 4.2. The Committee will then operate in accordance with its Terms of Reference, with minutes of meetings to be placed on the agenda of the City Infrastructure Committee.

5. STRATEGIC PLANNING IMPLICATIONS

- 5.1. Strategic Reference 1.1.1 *“Establish and implement a framework to engage with the business community”* and 1.3.1 *“Develop and implement a program of city improvements supporting the major retail, commercial and hospitality precincts and small business”* relate to this proposal.

6. FINANCIAL IMPLICATIONS

- 6.1. Funding Source(s)
 - 6.1.1. Funding is allocated for officers to attend these meetings.
- 6.2. Impact on Current Year Operating Result
 - 6.2.1. The operating costs can be met within the current budget.
- 6.3. Impact on Future Years' Financial Result
 - 6.3.1. Any costs identified with future projects would be the subject of reports to Council.
- 6.4. Asset Related Implications

6.4.1. Any asset related implications identified with future projects would be the subject of reports to Council.

7. DELEGATION

7.1. This is a matter for Council to decide.

8. CONSULTATION

8.1. Consultation has been with Mr David Quinn representing the Waterfront Business Community.

9. CONCLUSION

9.1. Council has recently made a number of improvements to infrastructure within Sullivans Cove.

9.2. The next stage of the Morrison Street improvement works is currently under way, with other upgrades in Sullivans Cove programmed to follow in future years.

9.3. Stakeholders, including the Waterfront Business Community, have expressed a keen interest to be actively involved in the planning of future improvements.

9.4. Officers have been in discussions with Mr David Quinn representing the Waterfront Business Community regarding the establishment of a Committee to enable businesses to work cooperatively with Council, Tasports and State Government to plan for future improvements to traffic, parking and amenities within Sullivans Cove.

9.5. It is proposed that a new Sullivans Cove Stakeholder Committee be formed.

10. RECOMMENDATION

That:

10.1. The report mp:smlp(o:\council & committee meetings reports\cic reports\27 april\final pdfs for agenda\establishment of the sullivan's cove stakeholder committee.docx) be received and noted.

10.2. The Sullivans Cove Stakeholder Committee be established.

10.3. The Council nominate at least two Aldermen to the Sullivans Cove Stakeholder Committee.

10.4. The City Infrastructure Committee recommend to the Council whether an Alderman or an independent person be appointed as chairman of the Sullivans Cove Stakeholder Committee.

- 10.5. The draft Sullivans Cove Stakeholder Committee Terms of Reference be endorsed in principle, and the General Manager be authorised to make any necessary amendments.***
- 10.6. Nominations be called for two persons representing the local community to join the Sullivans Cove Stakeholder Committee, for appointment by Council.***
- 10.7. Tasports, the State Government and the Waterfront Business Community be requested to nominate a representative to attend the Sullivans Cove Stakeholder Committee meetings.***

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.



(Mark Painter)

DIRECTOR CITY INFRASTRUCTURE

Attachment(s)	A - Proposal by David Quinn, Waterfront Business Community B - Draft Terms of Reference for the Sullivans Cove Stakeholder Committee
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Proposal for consideration by Hobart City Council**The development of a Traffic, Parking and Amenities Plan for both the city and Sullivans Cove**

- Council and business both want to activate the city and Sullivans Cove and have good linkages between the two
- Business would much prefer to work cooperatively with Council, Tasports and the State Government to achieve such a result rather than be forced to publically criticise the current weaknesses and adhoc approach to decision making
- Business believes there is a critical need for an overarching Traffic and Parking Plan for both the city and Sullivans Cove
- The last traffic and parking study completed for Sullivans Cove was in 1994 and much has changed since that time
- Business urges Council to take the lead role and agree to establish a Steering Committee comprising Council (2 representatives), business (2 representatives), Tasports (1 representative) and the State Government (1 representative)
- The committee would have an independent chair (ie. someone who is experienced, respected....with local knowledge)
- The committee would agree the Terms of Reference for the study, monitor progress and help ensure that stakeholders are kept informed
- Funding would come from Council, Tasports (who are already doing a range of studies on their own / controlled areas in the Cove) and the State Government (as Hobart is the Capital city and Sullivans Cove is the State's premier tourist destination)
- Business representation on the Steering Committee would need to be agreed but could comprise say Frazer Reid who works with Robert Rockefeller or Tim Lucas who works with Ali Sultan (both are highly credentialed and experienced in past studies etc) plus a representative from the Salamanca Market Stallholders Association
- Any plans to remove parking spaces or traffic lanes from within Sullivans Cove be placed on hold until the Steering Committee has been established and has had the opportunity to consider such proposals

Sullivans Cove Stakeholder Committee

Terms of Reference

Draft - April 2016

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Sullivans Cove Stakeholder Committee Terms of Reference

Scope of Sullivans Cove Stakeholder Committee (SCSC)

To provide an advisory, reference and support role to the Council on issues relating to infrastructure and traffic within Sullivans Cove that is of relevance to the City of Hobart.

Objectives

The specific objectives are:

- To provide a forum where experience, specialist knowledge and skills in the area of public infrastructure and traffic can be exchanged and discussed.
- To facilitate project development and outcomes in conjunction with the City of Hobart and other organisations (for example Department of State Growth, Tasmania Police, Metro Tasmania).
- To discuss and share relevant information to assist the consideration and resolution of agenda items.
- To consider any relevant issues of concern including parking, traffic, road/cycleway/footpath projects and maintenance and other associated matters in conjunction with the concerns of other stakeholders.
- To facilitate the development of quality public infrastructure in Sullivans Cove.
- To be actively involved in providing advice related to infrastructure projects undertaken by the City of Hobart in Sullivans Cove.

The Committee is an advisory body. The City of Hobart will note matters raised by its members but is not obliged to act on them.

Role of the Committee

- The principal role of the Committee is to advise the City of Hobart on public infrastructure and traffic related issues within Sullivans Cove.
- To provide comment on proposed infrastructure projects within Sullivans Cove.

Committee Membership

The membership composition of the Committee shall be:

- A minimum of two Aldermen – as nominated by the Council. The Council will determine whether one Alderman is to be appointed as the Chairman or whether an independent Chairman is to be sought
- Two City of Hobart officers - as nominated by the General Manager
- Representative from Waterfront Business Community
- Representative from Tasports
- Representatives from the Department of State Growth
- Two community representatives – nominations to be sought by Expression of Interest and appointed by the Council.

The method for attaining nominations from the community will be:

- An advertisement will be placed in the local newspaper.

Terms of Office

Committee members are appointed for the term of the Council and existing members are welcome to re-nominate for further terms.

Casual Vacancies

Should a committee member resign before the expiration of their term then the vacancy will be filled using the above method of appointment. A member who is appointed to fill a casual vacancy will serve for the remainder of the term of the former member.

Specific Roles of Members

Role of Chairman

- To help focus members on the purpose and objectives of the Committee
- To work with members to ensure meetings are productive, and start/finish on time and consensus decisions are achieved where possible
- To establish and support the “group agreement”
- Where the Chairman is not available for a meeting, an Aldermanic representative will chair the meeting.

Group Representatives

- To act in accordance with the Terms of Reference and the Group Agreement
- To consider new initiatives for the Committee
- To provide information for the Committee for consideration.

City of Hobart Officers

- Liaise with the Chairman of the Committee
- Facilitate the reporting to Council
- Provide information to the Committee
- Provide specialist traffic engineering technical support
- Provide administrative support for the Committee, including preparation of minutes and agendas.

Group Agreement

- Actively work in partnership throughout the process to ensure that concerns and aspirations are consistently understood and considered.

Duration/Frequency/Meeting Content/Rules

- The Committee will meet quarterly but may meet more frequently if needed if unanticipated issues, questions, concerns arise

- The annual meeting schedule will be confirmed at the first meeting of the calendar year
- Meetings will usually last 60 minutes, although some meetings may be longer
- Likely content of meetings includes feedback on issues raised at the previous meetings , the presentation of a progress report by City of Hobart officers and a discussion on issues raised in that report
- The meeting will be minuted and issued to Committee members within two weeks of the meeting.

Conduct of Meetings

- A quorum for the meeting will be where there is at least one Alderman and three other committee members present
- It will be the responsibility of any member who will be absent for a meeting to advise the Chairman in writing prior to the meeting of their absence and may nominate a proxy to attend in their absence
- Where there is a resignation of a committee member it will be made in writing to the Chairman
- Where a committee member fails to attend two or more consecutive meetings, the Chairman may request their resignation in writing
- The Chairman may terminate membership if a satisfactory explanation is not provided, thus creating a casual vacancy.

Reports to Council

- The outcomes of the Committee discussions will be reported to the City Infrastructure Committee by the City of Hobart officers

Functions

- The principal function of the SCSC is to ensure that specific issues and needs of stakeholders are considered by Council in its proposed works whilst giving consideration to other users
- The activities of the Committee will be resourced by the City of Hobart
- Costs related to meetings will be resourced by the City of Hobart
- The City of Hobart will manage, oversee and facilitate minute taking, the preparation of progress reports, and circulation of information to members and manage the outcomes from Committee meetings
- City of Hobart officers will be available to provide additional or specialist support as required
- The Chairman may invite other parties, including but not limited to: other Aldermen, representatives of other interested organisations, specialist consultants and City of Hobart officers to meetings of the Committee. It is advised that these invitations should be limited to no more than two extra people per meeting.

**6. 2016/2017 FEES AND CHARGES - CITY INFRASTRUCTURE DIVISION –
FILE REF: 21-50-12**

11x's

Report of the Director City Infrastructure of 15 April 2016 and attachments.

DELEGATION: Council

TO : City Infrastructure Committee

FROM : Director City Infrastructure

DATE : 15 April 2016

SUBJECT : **2016/2017 FEES AND CHARGES - CITY INFRASTRUCTURE DIVISION**

FILE : 21-50-12 smlp:SMLP (o:\council & committee meetings reports\cic reports\27 april\final pdfs for agenda\fees & charges 2016_2017 - city infrastructure division.doc)

1. INTRODUCTION

- 1.1. In accordance with the requirements of Council Pricing Policy and Guidelines dated 4 February 2016, the Council is to review its fees and charges on an annual basis as part of the budget process.
- 1.2. The purpose of this report is to present the proposed schedule of fees and charges for the City Infrastructure Division for the 2016/2017 financial year.

2. BACKGROUND

- 2.1. The attached fees and charges as summarised in **Attachments A-F** outline the present fees and charges for the City Infrastructure Division and the proposed fees and charges for the 2016/2017 financial year.
- 2.2. No new fees are proposed and no significant fee increases are proposed.
- 2.3. The anticipated income generated by the activities of the Division has been based on a conservative estimate of demand for these services. The income generated by the Division is in part due to the level of construction activity in the community.

3. PROPOSAL

- 3.1. The following provides information in relation to the proposed services and associated fees and charges levied by the City Infrastructure Division within each program area.

3.1.1. Residential Parking – Attachment A

No changes to the fees associated with residential parking permits are proposed for this year. The fees were most recently increased in 2014/2015 and prior to that, in 2010/2011.

The income projection for the residential parking function, including parking exemption permits is \$80,000 which is approximately 30% of the Division's anticipated income.

3.1.2. Traffic Strategy and Projects – Attachment B

These fees and charges relate to use of the road reservation to support construction activities in adjacent land or special events which are conducted in the road reserve.

The income received in 2015/2016 has been higher than estimated due to the increase in the number of special events which have required road closures and due to the level of construction activity occurring in the City, specifically very large developments which require the use of hoardings and road closures in order to undertake construction.

While no fee increases are proposed it is expected that there will be a significant increase in income generated by this function as the level of construction and development activity is expected to continue to be strong in 2016/2017.

Similarly, the demand for road closures to support special events is expected to remain strong.

It is proposed to change the fee charged for the statutory advertising of road closures to more accurately reflect the cost of the advertising and ensure that the pricing of this fee continues to be on a full cost recovery basis.

The income projection for this function is \$92,612 which is approximately 34% of the Division's anticipated income.

3.1.3. Road Strategy and Projects – Attachment C

These fees relate to construction works which take place in the road reservation and are most often associated with the construction or connection of underground services.

As with other construction related activities it is expected that the demand for road opening permits will remain strong.

There is little demand for the inspection fee and the fees were most recently increased last financial year.

There are no fee increases proposed for this budget function.

The anticipated income of \$10,000 associated with this function is approximately 4% of the Division's anticipated income.

3.1.4. Stormwater Strategy and Projects – Attachment D

Investigation of private hydraulic installations is normally conducted by the private sector but can be conducted by the Council on request. During the 2015/2016 financial year to date

there have been no requests for such inspections, however, the fee was last increased during 2014/2015 and the level is considered to still be adequate.

Similarly the fee for re-assessment of stormwater infrastructure plans was last considered during 2014/2015 and is still considered adequate should it need to be applied when sub-standard designs are repeatedly submitted for assessment.

No income is expected from these activities during 2016/2017.

3.1.5. Stormwater Service Connections – Attachment E

The fees associated with stormwater service connections are proposed to be increased by 2% this year in order to still represent a pricing policy of full cost recovery. The anticipated quantity is based on the level of activity during 2015/2016.

The income projection for this function is \$69,086 which is approximately 26% of the Division's anticipated income

3.1.6. Surveying Services – Attachment F

There are no fee increases proposed for this budget function. There is an estimated reduction of income of approximately 7 % compared with the estimated income for the previous financial year as the estimated quantity of final plans of subdivision for sealing and strata plan certificates has been reduced slightly to reflect the level of activity experienced in 2015/2016.

4. IMPLEMENTATION

- 4.1. Subject to Council approval, the fees and charges for the 2016/2017 financial year will become effective from 1 July 2016.

5. STRATEGIC PLANNING IMPLICATIONS

- 5.1. The annual review of the City's fees and charges contributes to Goal 5 - Governance, from the Capital City Strategic Plan 2015-2025.

6. FINANCIAL IMPLICATIONS

- 6.1. The income projected for the Division for 2016/2017 is \$269,498 which is an increase of approximately \$80,203 or 42% of the 2015/2016 budget for those fees. This is summarised per budget function in the table overleaf.

FUNCTION AREA	2015/2016 BUDGET	2016/2017 BUDGET	INCREASE / (DECREASE)
F420 – Residential Parking	\$74,865	\$80,000	\$5,123
F550 – Traffic Strategy and Projects	\$32,230	\$92,612	\$60,382
F540 – Road Strategy and Projects	\$13,000	\$10,000	(-\$3,000)
F620 – Stormwater Strategy and Projects	0	0	\$0
F515 – Civil Maintenance – Stormwater Service Connections	\$50,000	\$69,086	\$19,086
F860 – Surveying Services	\$19,200	\$17,800	(-\$1,400)
TOTAL	\$189,295	\$269,498	\$80,203

7. DELEGATION

7.1. Fees and charges are a matter for the Council to determine.

8. CONSULTATION

8.1. Consultation has occurred with Divisional Budget Function Officers and Executive Officer.

9. CONCLUSION

- 9.1. No new fees have been proposed. Where a fee increase is proposed, this is in order to more accurately reflect cost recovery and market pricing.
- 9.2. Projected income generated by the activities of the Division has been based on a conservative estimate of demand for these services.
- 9.3. The total income generated for 2016/2017 is estimated to be \$269,498 which an increase of approximately 420% of the income estimated for the previous financial year due to strong demand for construction related activities.

10. RECOMMENDATION

That:

- 10.1. *The report smlp:smlp(o:\council & committee meetings reports\cic reports\27 april\final pdfs for agenda\fees & charges 2016_2017 - city infrastructure division.doc) be received and noted.*

10.2. The attached fees and charges for the City Infrastructure Division as detailed in Attachments A-F be implemented for the 2016/2017 financial year.

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.



(Mark Painter)

DIRECTOR CITY INFRASTRUCTURE

Attachment(s)	A – Budget function 420 – Residential Parking
	B – Budget function 550 – Traffic Strategy and Projects
	C – Budget function 540 – Road Strategy and Projects
	D – Budget function 620 – Stormwater Strategy and Projects
	E – Budget function 515 – Civil Maintenance – Stormwater Service Connections
	F – Budget function 860 – Surveying Services

Proposed 2016-17 Fees & Charges: 420 - Residential Parking

Attachment A

Account Number	Description	2014-15 Actual excl. GST	2015-16 Budget excl. GST	2015-16 YTD excl. GST	2015-16 YTD Budget excl. GST	2016-17 Estimate excl. GST
<i>Income from Residential Parking Permits recorded against Parking Enforcement F 421</i>						
421.0303.2279.000	Residential Parking Permit	-69,625.00	-53,045.00	-48,389.00	-30,940.00	
420.0008.2279.000	Administration - Permit	-1,641.82	-21,820.00	-2,104.57	-12,726.00	
420 - On-Street Unmetered Parking		71,266.82	74,865.00	50,493.57	43,666.00	79,997.79
Change from 2015-16 to 2016-17						6.86%

Fee Description	2014-2015 Fee incl. GST	2015-2016 Fee incl. GST	Pricing Method	Last Changed (type <i>New Fee</i> if applicable)	Proposed Fee 2016 - 2017 incl. GST	Fee includes GST (Y/N)	GST \$	Unit	% Variation	Estimated Quantity	Estimated Income excl. GST	Comment
RESIDENTIAL PARKING PERMIT												
Metered Areas												
Permit	\$45.00	\$50.00	Partial Cost Recovery	2015/2016	\$50.00	Y	\$4.55	per annum	0%	20	\$909.00	
Pensioners	\$22.00	\$25.00	Partial Cost Recovery	2015/2016	\$25.00	Y	\$2.27	per annum	0%	5	\$113.65	
Replacement Sticker	\$10.00	\$10.00	Partial Cost Recovery	2008/2009	\$10.00	Y	\$0.91	per sticker	0%	6	\$54.54	
Non-metered Areas												
Permit	\$35.00	\$50.00	Partial Cost Recovery	2015/2016	\$50.00	Y	\$4.55	per annum	0%	1500	\$68,175.00	
Temporary Permit	\$20.00	\$20.00	Partial Cost Recovery	2010/2011	\$20.00	Y	\$1.82	per month	0%	200	\$3,636.00	
Replacement Sticker	\$10.00	\$10.00	Partial Cost Recovery	2008/2009	\$10.00	Y	\$0.91	per sticker	0%	10	\$90.90	
Bed & Breakfast Permit	\$100.00	\$100.00	Partial Cost Recovery		\$100.00	Y	\$9.09	per sticker	0%	10	\$909.10	
EXEMPTION PERMIT												
Up to 4 hours	\$24.00	\$24.00	Partial Cost Recovery	2010/2011	\$24.00	Y	\$2.18	up to 4 hours	0%	10	\$218.20	
Daily	\$36.00	\$36.00	Partial Cost Recovery	2012/2013	\$36.00	Y	\$3.27	per one day	0%	180	\$5,891.40	

Proposed 2016-17 Fees & Charges: 550 - Traffic Strategy & Projects

Attachment B

Account Number	Description	2014-15 Actual excl. GST	2015-16 Budget excl. GST	2015-16 YTD excl. GST	2015-16 YTD Budget excl. GST	2016-17 Estimate excl. GST
550.0008.2279.000	Administration	-25,068.59	-19,030.00	-16,686.14	-11,102.00	
550.0008.2279.815	Administration - Installation of Traffic Counters	0.00	0.00	-428.57	0.00	
550.0529.2279.000	Special Events Traffic Management	-110,953.42	-11,000.00	-18,758.13	-6,419.00	
550.0529.2279.830	Special Events Traffic Management - Advertising	0.00	-2,200.00	0.00	-1,281.00	
550 - Traffic Strategy & Projects		136,022.01	32,230.00	35,872.84	18,802.00	92,612.00
Change from 2015-16 to 2016-17						187.35%

Fee Description	2014-2015 Fee incl. GST	2015-2016 Fee incl. GST	Pricing Method	Last Changed (type <i>New Fee</i> if applicable)	Proposed Fee 2016 - 2017 incl. GST	Fee includes GST (Y/N)	GST \$	Unit	% Variation	Estimated Quantity	Estimated Income excl. GST	Comment
Road Closure Licence												
Long Term Construction - Occupation of Public Highway	\$8.50	\$9.00	Commercial Pricing	2015/2016	\$9.00	N	\$0.00	per square metre per month	0%	5000	\$45,000.00	
Long Term Construction - Occupation of Public Highway. (Minimum Charge)	\$85.00	\$90.00	Commercial Pricing	2015/2016	\$90.00	N	\$0.00	per month	0%	10	\$900.00	
Road Closure Fee	\$275.00	\$275.00	Partial Cost Recovery	2014/2015	\$275.00	N	\$0.00	per closure	0%	20	\$5,500.00	
Road Closure Statutory Advertising	\$160.00	\$160.00	Full Cost Recovery	2010/2011	\$280.00	Y	\$25.45	per closure	75%	40	\$10,182.00	Direct cost of newspaper advertising has increased.
Special Event Occupation Licence	\$250.00	\$275.00	Partial Cost Recovery	2015/2016	\$275.00	N	\$0.00	per application	0%	20	\$5,500.00	
Hoarding Permit	\$9.00	\$9.00	Partial Cost Recovery	2014/2015	\$9.00	N	\$0.00	per square metre per month	0%	1700	\$15,300.00	
Hoarding Permit (Minimum charge)	\$90.00	\$90.00	Partial Cost Recovery	2014/2015	\$90.00	N	\$0.00	minimum charge	0%	10	\$900.00	
Scaffolding Permit	\$9.00	\$9.00	Partial Cost Recovery	2014/2015	\$9.00	N	\$0.00	per square metre per month	0%	120	\$1,080.00	
Scaffolding Permit (Minimum charge)	\$90.00	\$90.00	Partial Cost Recovery	2014/2015	\$90.00	N	\$0.00	minimum charge	0%	10	\$900.00	
Skip Bin Permit	\$40.00	\$40.00	Partial Cost Recovery	2014/2015	\$40.00	N	\$0.00	per week	0%	60	\$2,400.00	
Crane/Concrete Pump/Cherry Picker etc Permits	\$90.00	\$90.00	Partial Cost Recovery	2014/2015	\$90.00	N	\$0.00	per week	0%	55	\$4,950.00	

Proposed 2016-17 Fees & Charges: 540 - Road Strategy & Projects

Attachment C

Account Number	Description	2014-15 Actual excl. GST	2015-16 Budget excl. GST	2015-16 YTD excl. GST	2015-16 YTD Budget excl. GST	2016-17 Estimate excl. GST
540.0008.2279.000	Administration	-26,373.61	-5,500.00	-21,686.38	-3,206.00	
540.0011.2901.000	Development Processing	-8,182.87	-7,500.00	-4,640.91	-4,375.00	
540 - Road Strategy & Projects		34,556.48	13,000.00	26,327.29	7,581.00	10,006.82
Change from 2015-16 to 2016-17						-23.02%

Fee Description	2014-2015 Fee incl. GST	2015-2016 Fee incl. GST	Pricing Method	Last Changed (type <i>New Fee</i> if applicable)	Proposed Fee 2016 - 2017 incl. GST	Fee includes GST (Y/N)	GST \$	Unit	% Variation	Estimated Quantity	Estimated Income excl. GST	Comment
Inspection Fee for Works in the Highway Reserve	\$90.00	\$90.00	Partial Cost Recovery	2014/2015	\$90.00	N	\$0.00	per hour	0%	5	\$450.00	Routine inspections are not charged. This fee would be applicable where excessive inspections were required due to sub-standard contractor performance etc.
Inspection Fee for Works in the Highway Reserve (Minimum charge)	\$90.00	\$90.00	Partial Cost Recovery	2014/2015	\$90.00	N	\$0.00	minimum charge	0%	0	\$0.00	See comments above
Highway Opening Fee	\$350.00	\$350.00	Partial Cost Recovery	2014/2015	\$350.00	N	\$0.00	per week	0%	22	\$7,700.00	Based on ROP numbers issued over the past couple of years
Highway Opening Fee (minor works)	\$180.00	\$180.00	Partial Cost Recovery	2014/2015	\$180.00	N	\$0.00	per day	0%	10	\$1,800.00	Based on ROP numbers issued over the past couple of years
Commercial waste collection vehicle inspection permit	\$35.00	\$35.00	Partial Cost Recovery	2014/2015	\$35.00	N	\$0.00	per vehicle	0%	1	\$35.00	
Use of Council's conduits	\$12.00	\$12.00	Commercial Pricing	2014/2015	\$12.00	Y	\$1.09	per metre per 32mm conduit	0%	2	\$21.82	

Proposed 2016-17 Fees & Charges: 620 - Stormwater Strategy & Projects

Attachment D

		2014-15 Actual	2015-16 Budget	2015-16 YTD excl.	2015-16 YTD	2016-17
Account Number	Description	excl. GST	excl. GST	GST	Budget excl. GST	Estimate excl. GST
620.0609.2279.000	Customer Infrastructure Investigations	0.00	0.00	0.00	0.00	
620 - Stormwater Strategy & Projects		0.00	0.00	0.00	0.00	0.00
				Change from 2015-16 to 2016-17		0.00%

Fee Description	2014-2015 Fee incl. GST	2015-2016 Fee incl. GST	Pricing Method	Last Changed (type <i>New Fee</i> if applicable)	Proposed Fee 2016 - 2017 incl. GST	Fee includes GST (Y/N)	GST \$	Unit	% Variation	Estimated Quantity	Estimated Income excl. GST	Comment
Private hydraulic installation investigation fee for private works	\$160.00	\$160.00	Full Cost Recovery	2014/2015	\$160.00	Y	\$14.55	per hour	0%	0	\$0.00	
Stormwater infrastructure plans requiring re-assessment	\$210.00	\$210.00	Full Cost Recovery	2014/2015	\$210.00	Y	\$19.09	per hour	0%	0	\$0.00	

Proposed 2016-17 Fees & Charges: 515 - Civil Maintenance - Stormwater Service Connections
Attachment E

Account Number	Description	2014-15 Actual excl. GST	2015-16 Budget excl. GST	2015-16 YTD excl. GST	2015-16 YTD Budget excl. GST	2016-17 Estimate excl. GST
515.0604.2279.568	Stormwater Service Connections	-59,871.72	-50,000.00	-52,429.83	-29,169.00	
515 - Civil Maintenance - Stormwater Service Connections		59,871.72	50,000.00	52,429.83	29,169.00	69,086.00
Change from 2015-16 to 2016-17						38.17%

Fee Description	2014-2015 Fee incl. GST	2015-2016 Fee incl. GST	Pricing Method	Last Changed (type <i>New Fee</i> if applicable)	Proposed Fee 2016 - 2017 incl. GST	Fee includes GST (Y/N)	GST \$	Unit	% Variation	Estimated Quantity	Estimated Income excl. GST	Comment
Stormwater branch construction for discharge into a Council stormwater main where the main is in the applicant's property and applicant exposes stormwater main - 100mm	\$975.00	\$994.50	Full Cost Recovery	2015/2016	\$994.50	N	\$0.00	per branch	2%	20	\$19,890.00	
Stormwater branch construction for discharge into a Council concrete kerb and gutter system - 75 x 150 RHS footpath crossing	\$1,540.00	\$1,570.80	Full Cost Recovery	2015/2016	\$1,570.80	N	\$0.00	per branch	2%	20	\$31,416.00	
Stormwater branch construction for discharge into a Council concrete kerb and gutter system - 252 x 76 RHS footpath crossing	\$1,742.50	\$1,778.00	Full Cost Recovery	2015/2016	\$1,778.00	N	\$0.00	per branch	2%	10	\$17,780.00	
Location and marking stormwater infrastructure	Full cost recovery	Full cost recovery	Full Cost Recovery	NA	Full cost recovery	Y	#VALUE!	per location	#VALUE!			Quote provided and work performed on acceptance of quote

Proposed 2016-17 Fees & Charges: 860 - Surveying Services

Attachment F

Account Number	Description	2014-15 Actual excl. GST	2015-16 Budget excl. GST	2015-16 YTD excl. GST	2015-16 YTD Budget excl. GST	2016-17 Estimate excl. GST
860.0808.2205.000	Surveying Services - Sale of Goods	-252.73	-2,000.00	0.00	-1,169.00	
860.0808.2279.000	Surveying Services - Fees & Charges	0.00	-200.00	0.00	-119.00	
860.0808.2901.000	Surveying Services - Other Revenue	-17,098.18	-17,000.00	-8,230.00	-9,919.00	
860 - Surveying Services		17,350.91	19,200.00	8,230.00	11,207.00	17,800.00
Change from 2015-16 to 2016-17						-7.29%

Fee Description	2014-2015 Fee incl. GST	2015-2016 Fee incl. GST	Pricing Method	Last Changed (type <i>New Fee</i> if applicable)	Proposed Fee 2016 - 2017 incl. GST	Fee includes GST (Y/N)	GST \$	Unit	% Variation	Estimated Quantity	Estimated Income excl. GST	Comment
Amendments to Sealed Plans (Section 103 Local Government (Building and Miscellaneous	\$340.00	\$340.00	Market Pricing	2014/2015	\$340.00	N	\$0.00	per application	0%	9	\$3,060.00	
Sealing Final Plans for subdivision and boundary adjustments. (Section 89 Local Government (Building and Miscellaneous Provisions) Act 1993).	\$100.00	\$100.00	Market Pricing	2013/2014	\$100.00	N	\$0.00	per application	0%	34	\$3,400.00	
Subdivision Exemption (Section 90 Local Government (Building and Miscellaneous Provisions) Act 1993)	\$280.00	\$280.00	Full Cost Recovery	2013/2014	\$280.00	N	\$0.00	per application	0%	2	\$560.00	
Strata Plan Certificates (Part 2 & Part 3 Strata Titles Act 1998) plus an additional fee for the issue of Building Certificates and an hourly rate for assessment by the Council's Building Surveyor	\$200.00	\$200.00	Market Pricing	2013/2014	\$200.00	N	\$0.00	per application	0%	37	\$7,400.00	
Adhesion Orders (Section 110 Local Government (Building & Miscellaneous Provisions) Act 1993)	\$220.00	\$220.00	Market Pricing	2012/2013	\$220.00	N	\$0.00	per application	0%	6	\$1,320.00	
Land to form part of a Highway (Section 106 Local Government (Building & Miscellaneous Provisions) Act 1993)	\$220.00	\$220.00	Full Cost Recovery	2012/2013	\$220.00	N	\$0.00	per application	0%	1	\$220.00	
Declaration for buildings over Highway (Section 75CA Conveyancing and Law of Property	\$220.00	\$220.00	Full Cost Recovery	2012/2013	\$220.00	N	\$0.00	per application	0%	2	\$440.00	
Certificate for vesting of blocks subject to rights of way (Section 84D Conveyancing and Law of Property Act 1884)	\$250.00	\$250.00	Full Cost Recovery	2009/2010	\$250.00	N	\$0.00	per application	0%	1	\$250.00	
Detail Sheet Digital Data												
Part of Detail Sheet in digital format for a specific site project. (The equivalent of an A3 at 1:1000)	\$80.00	\$80.00	Full Cost Recovery	2013/2014	\$80.00	N	\$0.00	per request	0%	6	\$480.00	
Digital Orthophotography 2005. (Digital equivalent of an A3 at 1:2000 for a specific project)	\$70.00	\$80.00	Full Cost Recovery	2015/2016	\$80.00	N	\$0.00	per request	0%	5	\$400.00	
Digital scan of aperture card	NA	\$15.00	Partial Cost Recovery	2015/2016	\$15.00	N	\$0.00	per scan	0%	4	\$60.00	
Transfer of bulk digital data	\$110.00	\$130.00	Full Cost Recovery	2015/2016	\$130.00	N	\$0.00	per transfer	0%		\$0.00	
Hard Copy Plans												
A4 copy of detail sheet	\$2.00	\$2.00	Partial Cost Recovery	2008/2009	\$2.00	N	\$0.00	each - 1st copy free	0%	30	\$60.00	
A3 copy of detail sheet	\$3.00	\$3.00	Partial Cost Recovery	2008/2009	\$3.00	N	\$0.00	each - 1st copy free	0%	20	\$60.00	
Detail sheet	\$30.00	\$30.00	Partial Cost Recovery	1996/1997	\$30.00	N	\$0.00	full copy	0%	2	\$60.00	
1:2000 series map sheet at A1	\$15.00	\$15.00	Partial Cost Recovery	2013/2014	\$15.00	N	\$0.00	full copy	0%	2	\$30.00	

**CITY INFRASTRUCTURE COMMITTEE AGENDA
(OPEN PORTION OF THE MEETING)
27/4/2016**

**7. 2016/2017 FEES AND CHARGES - PARKS AND CITY AMENITY DIVISION –
MCROBIES GULLY WASTE MANAGEMENT CENTRE, SOLID WASTE
SERVICES AND CITY CLEANSING – FILE REF: 21-50-06**

8x's

Report of the Director Parks and City Amenity of 14 April 2016 and attachments.

DELEGATION: Council

TO : City Infrastructure Committee

FROM : Director Parks and City Amenity

DATE : 14 April 2016

SUBJECT : **2016/2017 FEES AND CHARGES - PARKS AND CITY AMENITY DIVISION – MCROBIES GULLY WASTE MANAGEMENT CENTRE, SOLID WASTE SERVICES AND CITY CLEANSING**

FILE : 21-50-06 gd:ar (p:\p&cs divisional\fees and charges\2016-2017\pca fees and charges 16-17 for cic.docx)

1. INTRODUCTION

- 1.1. The purpose of this report is to seek approval of the proposed fees and charges applicable to the Parks and City Amenity Division's McRobies Gully Waste Management Centre, the provision of Solid Waste and City Cleansing Services for the 2016/2017 financial year.

2. BACKGROUND

- 2.1. The fees and charges for the McRobies Gully Waste Management Centre and the provision of Solid Waste and City Cleansing Services for the 2016/2017 financial year have been assessed including methods and timing of payment. The following provides the background for assessing the fees and charges.

3. PROPOSAL

- 3.1. It is recommended the attached schedules of fees and charges be endorsed for the 2016/2017 financial year which incorporates the following amendments:

McRobies Gully Waste Management Centre Operations & Maintenance

- 3.2. The introduction of the City's Residential Kerbside Green Waste Collection Service will divert an estimated 1,700 tonnes of green waste from landfill in 2016/2017.
- 3.3. Fees have been amended to both promote recycling and as an incentive to separate materials to support the waste diversion initiatives in the City's Waste Management Strategy.
- 3.4. Product Delivery fees have been introduced, to be provided under quote, to offset the City's cost in delivery of products to customers.

- 3.5. The minimum waste and green waste disposal fees remain unchanged at \$10 and \$8 respectively.
- 3.6. Overall revenue collected at the McRobies Gully Waste Management Centre is expected to decrease marginally by approximately \$9,000 or 0.7% expenditure at the site will be reviewed to take account of this reduction.

McRobies Gully Waste Management Centre Operations & Maintenance (Volumetric Disposal)

- 3.7. Volumetric charging is only used in the event that the weighbridge charging system fails.
- 3.8. Fee increases of around 1% are proposed to keep pricing in line with market pricing and with the existing weight based charging.

Wheelie Bins – Hire/New/Upgrades

- 3.9. Fees in relation to Wheelie Bin Hire are POA with specific quantum provided upon request.
- 3.10. In respect to the provision of waste or recycling bins for new residences or commercial properties, a slight increase to the fee for a new 120L service is proposed.
- 3.11. It is proposed to increase the annual fee associated with the upgrading of residential waste bins from 120 litres to 240 litres, from \$130 to \$135 to accommodate the direct cost of supplying and servicing these bins.
- 3.12. Revenue for 2016/2017 is expected to increase by \$11,000 or 8.21%.

Solid Waste and Cleansing – Requested Works

- 3.13. All fees in relation to this service are POA with specific quantum provided upon request, with emergency works calculated on a 'do and charge' basis.
- 3.14. The 2015/2016 revenue expectations were ambitious and will not be met. As such revenue for the 2016/2017 financial year is anticipated to decrease against last year's budget by \$9,000 or 11%.

4. IMPLEMENTATION

- 4.1. Upon approval, the new fees and charges will be incorporated in the Divisions procedures, processes and promotions.

5. FINANCIAL IMPLICATIONS

5.1. Funding Source(s)

- 5.1.1 The fees and charges are accounted for within the relevant budget function areas of the 2016/2017 Parks and City Amenity Division.
- 5.1.2 The review of the fees and charges for the Division's Cleansing and Solid Waste Unit has been undertaken and expected increases for the 2016/2017 financial year for each function area is expected to be:

FUNCTION AREA	2015/2016 BUDGET	PROPOSED 2016/2017 BUDGET	INCREASE / (DECREASE)	
McRobies Gully Waste Management Centre Operations & Maintenance	\$1,262,022	\$1,253,289	-\$8,733	-0.7%
Wheelie Bins – Hire/New/Upgrades	\$134,000	\$145,000	\$11,000	8.2%
Solid Waste and Cleansing – Requested Works	\$88,435	\$78,759	-\$9,675	-10.9%

5.2 Impact on Current Year Operating Result

- 5.2.1 Not applicable

5.2. Impact on Future Years' Financial Result

- 5.3.1 Refer table above.

5.3. Asset Related Implications

- 5.4.1 Not Applicable

6. DELEGATION

- 6.1. Council (meeting of 23 May 2016)

7. CONSULTATION

- 7.1. Manager Cleansing and Solid Waste, Manager Fleet and Fabrication Services.

8. **RECOMMENDATION**

That

7.1 *Report rv:ar (p:\p&cs divisional\fees and charges\2015-2016\osr fees and charges 15-16 for pcsc.docx) be received and noted.*

7.2 *The attached schedule of fees and charges be implemented for the 2016/2017 financial year.*

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.



(Glenn Doyle)

**DIRECTOR
PARKS AND CITY AMENITY**

Attachment A	McRobies Gully Waste Management Centre
Attachment B	McRobies Gully Waste Management Centre – Volumetric Disposal
Attachment C	Wheelie Bins
Attachment D	Solid Waste – Requested Works

Proposed 2016-17 Fees & Charges: 245 - McRobies Gully WMC Operations & Maintenance

Account Number	Description	2014-15 Actual	2015-16 Budget	2015-16 YTD excl.	2015-16 YTD	2016-17
		excl. GST	excl. GST	GST	Budget excl. GST	Estimate excl. GST
245.0724.2205.000	Organic Waste Ops	0.00	-140,285.00	-57,913.19	-52,668.00	125,806
245.0724.2279.000	Organic Waste Ops - Green Waste	-217,079.42	-198,637.00	-112,477.37	-115,871.00	217,800
245.0726.2279.000	Landfill Operations - Fees	-1,055,208.52	-923,100.00	-613,454.84	-538,475.00	909,684
		1,272,287.94	1,262,022.00	783,845.40	707,014.00	1,253,289.36
				Change from 2015-16 to 2016-17		-0.69%
						-8,733

[illegible]

Proposed 2016-17 Fees & Charges: 245 - McRobies Gully MWC Volumetric Disposal

Account Number	Description	2014-15 Actual excl. GST	2015-16 Budget excl. GST	2015-16 YTD excl. GST	2015-16 YTD Budget excl. GST	2016-17 Estimate excl. GST
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McRobies Gully MWC Volumetric Disposal

245 - McRobies Gully MWC Volumetric Disposal

Fee Description	2014-2015 Fee incl. GST	2015-2016 Fee incl. GST	Pricing Method	Last Changed (type <i>New Fee</i> if applicable)	Proposed Fee 2016 - 2017 incl. GST	Fee includes GST (Y/N)	GST \$	Unit	% Variation	Estimated Quantity	Estimated Income excl. GST	Comment
Volumetric Rates												
Fees only to be used in event of weighbridge being inoperable												
Trucks GVM >3t to 7t	\$45.00	\$45.00	Market Pricing	2014/2015	\$46.00	Y	\$4.18	per m3	2.2%		\$0.00	
Trucks GVM >7t to 12t	\$104.00	\$105.00	Market Pricing	2015/2016	\$106.00	Y	\$9.64	per m3	1.0%		\$0.00	
Trucks GVM >12t Single Axle	\$175.00	\$177.00	Market Pricing	2015/2016	\$178.00	Y	\$16.18	per m3	0.6%		\$0.00	
Trucks GVM >12t Dual Axle	\$220.00	\$222.00	Market Pricing	2015/2016	\$223.00	Y	\$20.27	per m3	0.5%		\$0.00	
Dual Axle Trailers (behind trucks)	\$220.00	\$222.00	Market Pricing	2015/2016	\$223.00	Y	\$20.27	per m3	0.5%		\$0.00	
Skip Bin up to 4m ³	\$65.00	\$66.00	Market Pricing	2015/2016	\$67.00	Y	\$6.09	per m3	1.5%		\$0.00	
Skip Bin >4m ³ to 8m ³	\$131.00	\$132.00	Market Pricing	2015/2016	\$133.00	Y	\$12.09	per m3	0.8%		\$0.00	
Skip Bin >8m ³ to 12m ³	\$186.00	\$188.00	Market Pricing	2015/2016	\$189.00	Y	\$17.18	per m3	0.5%		\$0.00	
Skip Bin >12m ³ to 15m ³	\$230.00	\$232.00	Market Pricing	2015/2016	\$233.00	Y	\$21.18	per m3	0.4%		\$0.00	
Skip Bin >15m ³ to 20m ³	\$305.00	\$308.00	Market Pricing	2015/2016	\$310.00	Y	\$28.18	per m3	0.6%		\$0.00	
Skip Bin >20m ³ to 25m ³	\$382.00	\$386.00	Market Pricing	2015/2016	\$387.00	Y	\$35.18	per m3	0.3%		\$0.00	
Skip Bin >25m ³ to 30m ³	\$464.00	\$469.00	Market Pricing	2015/2016	\$470.00	Y	\$42.73	per m3	0.2%		\$0.00	
Skip Bin >30m ³	\$611.00	\$617.00	Market Pricing	2015/2016	\$618.00	Y	\$56.18	per m3	0.2%		\$0.00	
Compactors <7m ³	\$170.00	\$172.00	Market Pricing	2015/2016	\$172.00	Y	\$15.64	per m3	0.0%		\$0.00	
Compactors <7m ³ to 15m ³	\$350.00	\$354.00	Market Pricing	2015/2016	\$355.00	Y	\$32.27	per m3	0.3%		\$0.00	
Compactors <15m ³ half full	\$240.00	\$242.00	Market Pricing	2015/2016	\$243.00	Y	\$22.09	per m3	0.4%		\$0.00	
Compactors >15m ³ full	\$555.00	\$561.00	Market Pricing	2015/2016	\$562.00	Y	\$51.09	per m3	0.2%		\$0.00	
Compactors >15m ³ half full	\$371.00	\$375.00	Market Pricing	2015/2016	\$376.00	Y	\$34.18	per m3	0.3%		\$0.00	
Controlled Waste Commercial	\$164.00	\$166.00	Market Pricing	2015/2016	\$167.00	Y	\$15.18	per m3	0.6%		\$0.00	
Controlled Waste Residential	\$30.00	\$30.00	Market Pricing	2014/2015	\$31.00	Y	\$2.82	per m3	3.3%		\$0.00	
Light vehicles & trailers <1 m ³ waste	\$10.00	\$10.00	Market Pricing	2013/2014	\$11.00	Y	\$1.00	per m3	10.0%		\$0.00	waste & green waste
Light vehicles & trailers 1 - 3m ³ waste	\$20.00	\$20.00	Market Pricing	2014/2015	\$21.00	Y	\$1.91	per m3	5.0%		\$0.00	waste & green waste

Proposed 2016-17 Fees & Charges: 240 - Wheelie Bins

Attachment C

Account Number	Description	2014-15 Actual excl. GST	2015-16 Budget excl. GST	2015-16 YTD excl. GST	2015-16 YTD Budget excl. GST	2016-17 Estimate excl. GST
240 - Wheelie Bins		133,981.16	134,000.00	140,175.13	134,000.00	145,000.00
Change from 2015-16 to 2016-17						8.21% 11,000

Fee Description	2014-2015 Fee incl. GST	2015-2016 Fee incl. GST	Pricing Method	Last Changed (type <i>New Fee</i> if applicable)	Proposed Fee 2016 - 2017 incl. GST	Fee includes GST (Y/N)	GST \$	Unit	% Variation	Estimated Quantity	Estimated Income excl. GST	Comment
Wheelie Bin Hire	\$7.00	POA	Full Cost Recovery	2015/2016	POA	Y		per use				
Wheelie Bins - Upgrades/Replacements/Repairs												
Wheelie bins upgrade from 120 litre to 240 litre garbage residential*	\$125.00	\$130.00	Market Pricing	2015/2016	\$135.00	Y	\$12.27	per bin	4%	1000	\$122,730.00	* Subject to medical certification to the satisfaction of the General Manager, a rebate of \$135 per annum will apply to households where a member of the household has a medical condition that justifies the increased waste disposal capacity.
Initial Service Charge - waste or recycling, residential or commercial	\$90.00	\$90.00	Market Pricing	2014/2015	\$90.00	Y	\$8.18	per 240L bin	0%	150	\$12,273.00	charge for a service using a 240L bin
Initial Service Charge - waste or recycling, residential or commercial	\$80.00	\$80.00	Market Pricing	2014/2015	\$85.00	Y	\$7.73	per 120L bin	6%	80	\$6,181.60	charge for a service using a 120L bin
Wheelie bin - 240 litre garbage for new commercial property	\$90.00	\$90.00	Market Pricing	2014/2015		Y		per bin	-100%			charge incorporated into above categories.
Wheelie Bins - Residential Kerbside Green Waste Collection - 240 litre - new service or additional bin*				<i>New Fee</i>	\$50.00	Y	\$4.55	per bin	New Charge	12000		new service introduced May 2016

Proposed 2016-17 Fees & Charges: Solid Waste Requested Works

Attachment D

Account Number	Description	2014-15 Actual excl. GST	2015-16 Budget excl. GST	2015-16 YTD excl. GST	2015-16 YTD Budget excl. GST	2016-17 Estimate excl. GST
201.0736.2251.000	Cleansing - Graffiti	-10,000	-5,000	0	0	10,000
201.0737.2251.000	Cleansing - Street Sweeping	-2,886	-50,000	-2,480	-29,169	20,000
201.6840.2251.819	Cleansing - Private Works	-55,311	-18,435	-20,585	-10,752	33,759
243.0702.2279.000	Solid Waste - Private Works - Collection	-341	0	-3,887	0	0
243.6840.2251.000	Solid Waste - Private Works	-617	-15,000	-680	-8,750	15,000
Solid Waste Requested Works		69,155	88,435	27,632	48,671	78,759
		Change from 2015-16 to 2016-17				-10.9% -9,676

Fee Description	2014-2015 Fee incl. GST	2015-2016 Fee incl. GST	Pricing Method	Last Changed (type <i>New Fee</i> if applicable)	Proposed Fee 2016 - 2017 incl. GST	Fee includes GST (Y/N)	GST \$	Unit	% Variation	Estimated Quantity	Estimated Income excl. GST	Comment
Provision of Waste & Recycling Services for events	POA	POA		2014/2015	POA	Y		per service				A quote to be provided subject to extent of works requested.
Amenities of Cleansing Services for events	POA	POA		2014/2015	POA	Y		per service				A quote to be provided subject to extent of works requested.
Provision of Road and Footpath Cleansing Services by request or identified need	POA	POA		2014/2015	POA	Y		per service				A quote to be provided subject to extent of works requested. Emergency works to be calculated on a 'do and charge' basis.

**8. 110 GIBLIN STREET, LENA VALLEY – SUBDIVISION - NAMING OF
NEW ROADS – FILE REF: 33-15-2**

11x's

Report of the Director Infrastructure Services of 11 April 2016 and attachments.

DELEGATION: Council

TO : City Infrastructure Committee

FROM : Director City Infrastructure

DATE : 11 April, 2016

SUBJECT : **110 GIBLIN STREET, LENA VALLEY - SUBDIVISION
- NAMING OF NEW ROADS**

FILE : 33-15-2 EB:SMLP (o:\council & committee meetings reports\cic reports\27 april\working docs\road naming giblin street subdivision.docx)

1. INTRODUCTION

- 1.1. The purpose of this report is to recommend that names be assigned to the new roads being constructed at 110 Giblin Street, New Town, known as the K&D brickworks subdivision.

2. BACKGROUND

- 2.1. The new roads are located at 110 Giblin Street being the former K&D Brickworks site, shown in **Attachment A**.
- 2.2. The first road into the subdivision has been built and then subsequent roads will be formed as part of the development of the subdivision.
- 2.3. The roads require naming and the developer has suggested a number of possible names. A copy of the letter from JMG, the developer's consultant is provided as **Attachment B**.
 - 2.3.1. Following advice from the officer supporting the Nomenclature Board, the use of the name 'Seabrook' is no longer proposed as it has been used extensively in the south of the state, which may cause confusion.
 - 2.3.2. The naming of the park is a separate matter and not considered as part of this report.
- 2.4. Following negotiation, the developer has suggested the following road names for consideration, which all relate to people who were originally involved in the Hobart Brick Company, being:
 - 2.4.1. William Cooper Drive
 - 2.4.2. Denning Close
 - 2.4.3. Tabart Street
 - 2.4.4. Noble Drive
 - 2.4.5. Dowding Crescent

- 2.5. The officer supporting the Nomenclature Board has advised that the proposed names, except William Cooper Drive, are acceptable as they are in accordance with both the current *Rules for Placenames in Tasmania* and the Australian Standard.
- 2.6. William Cooper Drive is not ideal as it does not comply with the draft *Tasmanian Placenames Guidelines* due to the use of both first and last name. It also does not comply with the Australian Standard for length of road name. However, the Nomenclature Board has advised that the naming of a road is a decision for the Council.
- 2.7. The developer is very keen to name the road after William Cooper as he is a distant relative. It has been suggested that both the first and last name is used in this instance.
 - 2.7.1. The use of the name 'Cooper' is not acceptable as there is already a Cooper Street in Glenorchy.
 - 2.7.2. The draft *Tasmanian Placenames Guidelines* says: "Placenames assigned to geographic features, localities and roads for commemorative purposes should only incorporate use the surname, not the first or given names (e.g. *Lake Plimsoll* named after the former Tasmanian Governor Sir James Plimsoll)."
 - 2.7.3. An extract from the draft *Tasmanian Placenames Guidelines*, which details the requirements for personal and commemorative names is provided as **Attachment C**.
- 2.8. If William Cooper Drive is not acceptable to Council then the developer has proposed Flevin Drive as an alternative, commemorating Edward Flevin who supervised the construction of a new brick kiln which was opened in April 1923.

3. PROPOSAL

- 3.1. The proposed road names all have historical associations with the Hobart Brick Company, the precursor to K&D.
 - 3.1.1. Flevin Drive – Edward Flevin supervised the construction of a new kiln at the site in 1923.
 - 3.1.2. Denning Close – Victor Ernest Denning was a founder of Kemp and Denning Limited.
 - 3.1.3. Tabart Street – Thomas Tabart was the first company secretary of the Hobart Brick Company.
 - 3.1.4. Noble Drive – William John Noble was the first works manager of the Hobart Brick Company at Forster Street, New Town. The Noble family has had a continuous association with the Hobart

Brick Company for 80 years. Noble Cottage, one of the existing buildings on the site will be located on this road.

3.1.5. Dowding Crescent – Arthur Dowding was one of the founding Directors of the Hobart Brick Company.

3.2. This biographical information has been sourced from *K&D: Centenary History of Kemp and Denning Limited 1902 – 2002* by A.L. Graeme-Evans and A.G. Kemp.

3.3. The layout of the proposed roads is shown in **Attachment D**.

4. IMPLEMENTATION

4.1. Advice of Council's decision to assign new road names must be provided to the Nomenclature Board within 40 days of the decision, in accordance with the *Survey Co-ordination Act 1944*

4.2. The statutory maps will be updated and new road name signs will be installed.

5. STRATEGIC PLANNING IMPLICATIONS

5.1. The naming of the road supports the following element from the Capital City Strategic Plan:

5.1.1. Priority Area of activity – TWO – Urban Management, specifically Strategic Objective 2.2.2 *Develop, manage and maintain the City's urban spaces and infrastructure*.

6. FINANCIAL IMPLICATIONS

6.1. Funding Source(s)

6.1.1. The naming of the new roads requires no additional funding. The installation of the new street signs can be accommodated within the existing budget.

6.2. Impact on Current Year Operating Result

6.2.1. Not applicable.

6.3. Impact on Future Years' Financial Result

6.3.1. Not applicable.

6.4. Asset Related Implications

6.4.1. Not applicable.

7. DELEGATION

- 7.1. This is a matter for the Council to determine.

8. CONSULTATION

- 8.1. Consultation has also occurred with the City's Senior Cultural Heritage Officer, who supports the use of the names proposed. However, he does not support the use of William Cooper Drive due to the use of the first and last name.
- 8.1. The City's neighbouring Councils have been advised of the proposed road names and no objections have been raised.

9. COMMUNICATION WITH GOVERNMENT

- 9.1. Consultation has occurred with the officer supporting the Nomenclature Board and neighbouring Councils.
- 9.2. The officer supporting the Nomenclature Board has advised that William Cooper Drive is not in strict accordance with the rules however it is a Council decision to decide on a name for a road.

10. CONCLUSION

- 10.1. The roads that form part of the K&D subdivision at 110 Giblin Street, New Town need to be named.
- 10.2. The developer has suggested that the roads be named after people who had an association with the Hobart Brick Company which operated at this site.

11. RECOMMENDATION

That:

11.1. The report eb: smlp(o:\council & committee meetings reports\cic reports\27 april\working docs\road naming giblin street subdivision.docx) be received and noted.

11.2. The new roads created by the subdivision at 110 Giblin Street, New Town be named as shown in Attachment D:

11.2.1. Flevin Drive

11.2.2. Denning Close

11.2.3. Tabart Street

11.2.4. Noble Drive

11.2.5.Dowding Crescent***11.3. The Nomenclature Board of Tasmania and the developer be advised of the Council's decision.***

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.



(Mark Painter)

DIRECTOR CITY INFRASTRUCTURE

- Attachment
- A – Plan showing location of subdivision
 - B – Letter from JMG dated 5 April 2016
 - C – Extract from the draft *Tasmanian Placenaming Guidelines* (draft in progress April 2016)
 - D – Plan showing roads and proposed road names in subdivision



JMG Ref: J133030
Your Ref: PLN-13-01331-01

Attachment B

5th April 2016

General Manager
Hobart City Council
Via email: planning@hobartcity.com.au & burche@hobartcity.com.au

Attention: Emily Burch

Dear Emily,

110 GIBLIN STREET - ROAD NAMES

We write on behalf of the applicant On Giblin Pty Ltd, in response to Council's request for street names for the above development.

Road 1 - William Cooper Drive:

William Cooper was an early chairman of the Hobart Brick Company which operated on the site. William Cooper, also an original member of the Company, was building the Carnegie Building in Argyle Street. It was at his instigation that the plan by Alan Walker and Douglas Salier, was revised from all freestone, to a brick and freestone building, as the tender was over budget. As such, he needed to ensure he had enough bricks to construct it.

Road 2 - Seabrook Crescent:

William Seabrook was an early builder and principle shareholder in the Hobart Brick Company.

Road 3 - Tabart Row (or Street as a second preference):

Thomas Tabart was the first company secretary of the Hobart Brick Company. Note the area between Road 3 and Giblin Street will principally be 2-3 three storey conjoined townhousing hence the preference for 'Row'.

Road 4 - Noble Drive:

William John Noble (brickmaker) was appointed as the first works manager for the new Hobart Brick Company at Forster Street, New Town. The Noble family over three generations were associated with the Hobart Brick Company for 80 continuous years. Historic Noble Cottage is also located on this road.

Road 5 - Denning Close:

Victor Ernest Denning was a founder of K& D Bricks and Pavers.

Park - Garrington Park:

Garrington is the middle name of Andrew Garrington Kemp.

117 Harrington Street
Hobart 7000
Phone (03) 6231 2555
Fax (03) 6231 1535
infohbt@jmg.net.au

49-51 Elizabeth Street
Launceston 7250
Phone (03) 6334 5548
Fax (03) 6331 2954
infohbt@jmg.net.au

www.jmg.net.au

Principals:
IT Johnston
CG Purdon
CC Holloway
GL Atherton

Associates:
RC Berry
R Bessell
MS Clark
NP Stolp
CC Marlow

Johnstone McGee &
Gandy Pty Ltd
ABN 76 473 834 852
ACN 009 547 139
as trustee for Johnstone
McGee & Gandy
Unit Trust

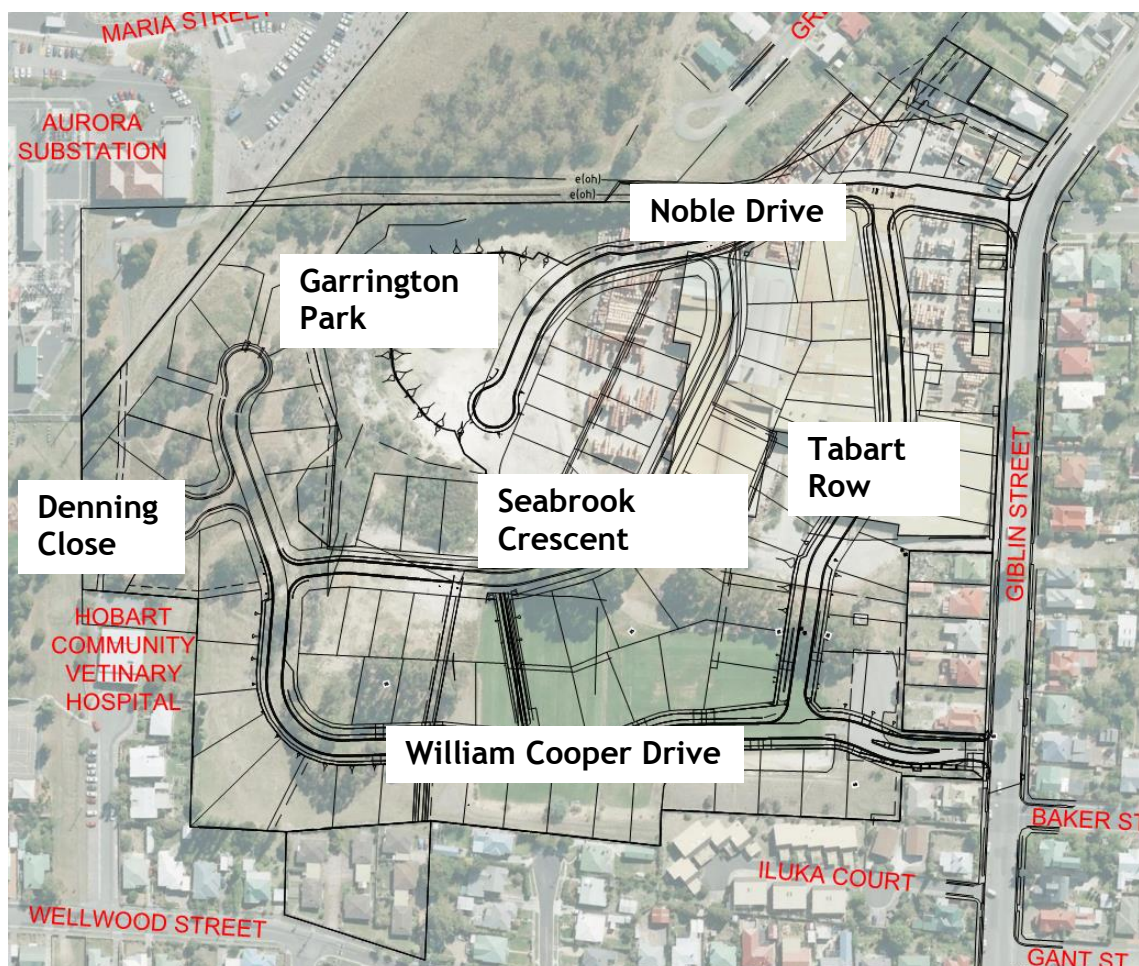
We trust that the above satisfies Council's requirements for street-names and meets the Nomenclature Board of Tasmania Rules for Place Names in Tasmania but please contact us on 6231 2555 if we can provide any further information in relation to this matter. I attach some historical information regarding the Hobart Brick Company that may be of assistance.

Yours faithfully

JOHNSTONE MCGEE & GANDY PTY LTD



Matthew Clark
ASSOCIATE / SENIOR TOWN PLANNER



3.10. Dual naming

The dual naming of features is a legitimate means of assigning an additional Aboriginal name to a feature which already has an existing approved name of non-Indigenous origin. The principles, practices and processes for assigning dual names are outlined in a separate Government policy document and must conform to that policy.

Dual naming will only apply to natural geographic features where an Aboriginal name is applied to a feature with the same extent or area as the feature that already has an existing approved name of non-Indigenous origin. Where there are dual names assigned to a feature, either or both names may be used as the official name.

The recording and depiction of dual naming on official mapping products, reports, documents and signage must also conform to the following requirements:

- Both approved dual names are to be represented;
- The aboriginal name will be the preceding name, followed by a solidus ' / ' and then by the non-Aboriginal name e.g. *wukalina* / Mount William. The solidus must be preceded and followed by a space;
- Both the Aboriginal name and the non-Aboriginal name must be in the same font, type, size, type and colour.

3.11. Personal and commemorative names

Placenames for geographic features commemorating a person should only be assigned posthumously. The person being commemorated should have had a direct and long-term association (over 10 years) with the location or have made a significant contribution to the area. Ownership of the land should not in itself be grounds for proposing the owner's name to a geographical feature, nor should a commemorative name be used to commemorate victims of, or mark the location of accidents or tragedies.

Placenames commemorating living persons are not effective choices for place names as community attitudes and opinions can change over time. Better alternatives can be commemorative plaques or naming a particular community facility such as an oval after the person to be commemorated.

Naming authorities must gain consent from family members of the person being commemorated, except if the person has been deceased for more than ten years at the time that the place name is proposed.

Placenames assigned to geographic features, localities and roads for commemorative purposes should only incorporate use the surname, not the first or given names (e.g. *Lake Plimsoll* named after the former Tasmanian Governor Sir James Plimsoll).

Initials of a given name must not be used in any placename.

Tasmanian Placenames Guidelines

The first name and surname may be used for cultural features such as parks and sports grounds if necessary to avoid duplication with an existing feature or in cases of a memorial park or reserve for example *Max Angus Memorial Reserve*.

3.12. Business and commercial place names

A placename should not include the name of a commercial business, trade name, or non-profit organisation or any term that may be construed as advertising a commercial or industrial enterprise. The words 'Limited' or 'Proprietary' or their abbreviations, whether in combination with other words or alone must not be used.

Exceptions may apply for cultural features where the business or organisation has had a long association with the area and is held in strong regard by the community and/or has contributed to the establishment of the feature. Any proposals must provide the reasons and evidence of the business or organisations' association with the area.

Geographic (natural features) must not include a commercial or business name.

3.13. Unsuitable placenames

The Placenames Advisory Committee may refuse to assign a name if it is undesirable, likely to be offensive to members of the public, unduly cumbersome or difficult to pronounce. (Note: Aboriginal names which may appear at first to be complex in spelling and/or pronunciation become familiar and easy to use over time.)

Consideration must be made to the use of placenames in diverse cultural situations and names that can be construed as derogatory, discriminatory, poor taste or likely to cause offence must not be used.

3.14. Use of protected and restricted words

The following words are regulated in their use and can only be used if they comply with these regulations:

- 'ANZAC' or any word resembling it is safeguarded by the *Protection of Word 'ANZAC' Regulations 1921* (Commonwealth). These regulations describe when the use of 'Anzac' requires the authority of the Federal Minister for Veterans Affairs and the uses that may be excluded from regulated.
- 'Abt Railway', 'Abt Wilderness Railway' or 'Abt Heritage Railway', or any combination of these names, are protected from commercial purposes under the *Abt Railway Development Act 1999* with written permission required of the Ministerial Corporation established under that Act.
- 'Bicentennial', either alone or in combination with other words, previously required written approval of the relevant Federal Minister responsible for the *Australian Bicentennial Authority Act*

Attachment D

**9. CITY OF HOBART WASTE MANAGEMENT STRATEGY 2015-2030 – FILE
REF: 44-10-1**

63x's

Report of the Director Parks and City Amenity and the Manager Cleansing and Solid Waste of 20 April 2016 and attachment.

DELEGATION: Council

TO : City Infrastructure Committee

FROM : Director Parks and City Amenity
Manager Cleansing and Solid Waste

DATE : 20 April, 2016

SUBJECT : **CITY OF HOBART WASTE MANAGEMENT STRATEGY
2015-2030**

FILE : 44-10-1 JH:JH (o:\pr\reports\infrastructure services\2016\27 april\waste strategy 2015-2030.docx)

1. INTRODUCTION

- 1.1. The purpose of this report is to seek the Council's endorsement of the *City of Hobart Waste Management Strategy 2015-2030*, marked as **Attachment A**.

2. BACKGROUND

- 2.1. At its meeting of 21 December 2015 the Council resolved *inter alia* as follows;

“the Draft City of Hobart Waste Management Strategy 2015-2030, be endorsed for public exhibition.

the public exhibition be for a period of 8 weeks during January to February 2016, after which a further report be provided.”

- 2.2. The Draft Waste Management Strategy 2015-2030 (prepared to replace the former Waste Management Strategy 2010-2015) was developed involving extensive stakeholder engagement including public meetings, on-line surveys and one-on-one meetings with industry, government and community groups.
- 2.2.1. The duration of the strategy aligns with the proposed closure date of McRobies Gully as an active landfill (subject to EPA and Planning Authority approval).
- 2.3. Following the Council's decision of 21 December, the draft Strategy was released for public comment commencing 18 January 2016 and ending 11 March 2016 upon which nine submissions were received from the public exhibition period.

3. COMMUNITY ENGAGEMENT RESULTS

- 3.1. The responses received from the draft Strategy public exhibition period were very positive and demonstrate strong community support for the identified actions.
- 3.2. All submissions have been reviewed by City Officers and a summary of key findings are detailed in Table 1.

Table 1 – Summary of Draft Waste Management Strategy 2015-2030 Submissions

Key focus Area	Submission Summary	Number of references to the Key Focus Area in the 9 submissions
Advocating for change	Submissions indicate clear support for the City to perform an advocacy role. Many consider the State Government should be more involved and active, particularly in the areas of a waste levy and container deposit schemes.	11
Finance	There is agreement that the City needs to understand the true cost of landfill operations. There is support to recover true costs for the landfill and recycling services provided.	5
Education & Engagement	The submissions received listed education and engagement as high priority issues vital to the success of the strategy.	4
Organics	There is support for diversion of organics from landfill. There is some comment that green waste should be accepted free, as it is then sold by the Council after the composting process.	4
Litter & Illegal Dumping	There is agreement for the City to monitor and document litter and dumping, including calling for strong actions such as issuing fines to offenders.	4
Inert Waste	There is a good understanding of the need for source separation and the benefits this provides to both the City (reduced landfill, increased recycling) and the landfill customer (reduced fees).	5
City Waste	There is clear support for the City to lead by example in reducing waste from its own operations, services and events, and improve the number & quality of public place recycling and waste bins.	4
Innovation, Programs & Services	There is strong support for this key focus area, specifically to invest in preventative measures rather than disposal solutions, and source separation prior to delivery to the waste management centre.	5

- 3.3. Submissions indicated community emphasis on the removal of food and hazardous waste (2 listings each) from the waste stream. Other materials mentioned were construction waste, metals, and plastic.
- 3.4. When asked about '*materials not identified in the strategy that should be*' responses were electronic waste (x2), oils, grease and paints, and CRT glass (from old televisions). These materials were already included in the strategy however amendments have been made to clarify that these materials are covered (as detailed in Table 2).
- 3.5. The submissions indicate there is a clear understanding from the community of the importance of source separation in delivering the Waste Strategy objectives.
- 3.6. The greatest emphasis from the community submissions was on the importance of the City's role in advocating to other tiers of government, in particular to the State Government, to improve resource recovery. This was in relation to issues including implementing a state waste levy, encouraging source separation and introducing a container deposit scheme.
- 3.7. There is support for the City to improve its knowledge of the cost of waste and landfill operations, and to apply true cost in charging for landfill space.
- 3.8. Upon consideration of a request of the Committee of 9 December 2015,
Officers explore opportunities and report back to committee on engaging with social enterprises as a component of the City's procurement processes associated with waste management activities, as outlined within the Community Recycling Network Forum, Attendance Report

Action 1.2 of the Strategy has been expanded to consider 'Social enterprises' when undertaking the review of the City's procurement policies.

- 3.9. The Director of the consultancy firm employed by the City to undertake the initial community consultation process for the Draft Strategy provided comments that the City has produced an excellent strategy, and that there are aspects of the strategy they will use when developing strategies for their clients including clear language, pull quotes, and clear recommendations.

Summary of changes

- 3.10. Amendments have been made to the strategy to address comments made during the public exhibition process. There are no changes to the structure or the key components of the strategy. These changes clarify some aspects of the strategy and improve the scope or detail of actions in accordance with the submissions feedback.

Table 2 details each amendment and the relevant section of the Draft Strategy.

Table 2 – Summary of Amendments

Amendment	Section/Action
Action included to support retail businesses to introduce waste avoidance and reduction strategies	Action 8.26
Action expanded to consider 'Social enterprises' when undertaking the review of the City's procurement policies	Action 1.2
Clarified the inclusion of paints, oils, greases within any future household hazardous waste collection/drop off program	Action 8.6, Action 3.5
Clarified the current arrangements for recycling of paints, oils etc at the Waste Management Centre	Section 2.3
Clarified that electrical appliances can be recycled at the Waste Management Centre	Section 2.3
Clarified the action about public place litter and recycling bins	Action 5.2
Additional comment in regard to reviewing processes to issue infringement notices and fines for littering offences	Action 5.3
Clarify in the strategy actions to support at home composting programs	Action 4.3

- 3.11. The Strategy includes in excess of 90 actions for implementation over the next 15 years. Minor reviews of the Strategy will be undertaken annually with a major review to be undertaken in five years. Progress under the Strategy will be documented in an annual report to be placed on the City's website.

3.12. The implementation of a series of waste reduction programs is a key component of the Strategy at an estimated cost of \$180,000 commencing in the 2016/2017 financial year.

3.12.1. The funding amount may vary for future years subject to the extent of programs identified annually. Each year's funding request will be presented to the Council for consideration through the annual budgeting process.

3.12.2. Significant waste reduction programs, such as the procurement of capital items or implementing new services, will be presented to Council for consideration via a report.

4. PROPOSAL

4.1. It is proposed that the *City of Hobart Waste Management Strategy 2015-2030* (**Attachment A**) be endorsed to enable implementation.

4.2. An allocation of \$180,000 be considered for approval in the 2016/17 budget estimates towards waste reduction programs to progress the strategy.

5. IMPLEMENTATION

5.1. Actions under the Strategy will be implemented.

6. STRATEGIC PLANNING IMPLICATIONS

6.1. The City's Strategic Plan includes Strategic Objective 3.2, Strong Environmental Stewardship, this contains Objective 3.2.5

Develop and Implement a new waste management strategy 2015-2030 for the city.

7. FINANCIAL IMPLICATIONS

7.1. Funding Source(s)

7.1.1. Funding for waste minimisation initiatives and programs resides within the Solid Waste Strategy & Projects Budget Function (240).

7.2. Impact on Current Year Operating Result

7.2.1. There is no impact on the current year's operating result.

7.3. Impact on Future Years' Financial Result

7.3.1. The Waste Management Strategy 2015-2030 implementation program for 2016/17, at an estimated cost of \$180,000, is to be

submitted for consideration as part of the 2016/2017 Budget Estimates.

7.4. Asset Related Implications

- 7.4.1. Asset related implications will be managed through the City's Asset Management processes, and if required through future reports to the Council.

8. DELEGATION

- 8.1. Council

9. CONSULTATION

- 9.1. Consultation has occurred with the public, the Manager Cleansing & Waste, and the Cleansing & Waste Policy Coordinator.
- 9.2. Throughout the preparation of the Strategy consultation has occurred with a range of stakeholders such as the Environmental Protection Authority (EPA), neighbouring council's, industry service providers, MRA Consulting Group, ratepayers and the community.

10. CONCLUSION

- 10.1. It is proposed that Council adopt the *City of Hobart Waste Management Strategy 2015-2030* (Attachment A).
- 10.2. The draft strategy was released for public comment commencing 18 January 2016 and ending 11 March 2016 upon which a total of 9 submissions were received.
- 10.3. The responses received from the public exhibition period show that there is strong support for the implementation of this strategy.
- 10.4. Amendments have been made to the Strategy in response to the public exhibition period (detailed in Table 2).
- 10.5. Progress against the Strategy will be reported at least annually, and the strategy will be reviewed for its appropriateness at 5 yearly intervals. Progress reports will be made available to the public, interested community groups, governments, and industry through the City's internet site.

11. RECOMMENDATION

That:

- 11.1. The report JH:jh(o:\pr\reports\infrastructure services\2016\27 april\waste strategy 2015-2030.docx) be received and noted.*
- 11.2. The City of Hobart Waste Management Strategy 2015-2030, be endorsed.*
- 11.3. An allocation of \$180,000 be considered for approval in the 2016/2017 budget estimates to fund waste reduction programs to progress the implementation of the Strategy.*

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.



(Dave Holman)
**MANAGER
CLEANSING AND SOLID WASTE**



(Glenn Doyle)
**DIRECTOR
PARKS AND CITY AMENITY**

Attachment A

WASTE MANAGEMENT STRATEGY 2015-2030

APRIL 2016

A Strategy to achieve
zero waste to landfill by 2030



City of HOBART

This Strategy has been prepared by the
City of Hobart, with the assistance of

MRA Consulting Group
JustWaste Consulting

The City would like to thank all those members of
the community, industry, government, peak bodies,
and council staff who kindly gave their time to
provide input into the development of this Strategy
through the consultation process.

This document is printed on recycled paper

EXECUTIVE SUMMARY

The City of Hobart is preparing for life without its own landfill, and has set a target date of 2030 to cease the operation of the landfill at McRobies Gully in South Hobart. The City has developed the Waste Management Strategy 2015-2030 to implement significant waste reduction actions and programs with the primary aim to achieve zero waste to landfill. This represents a long term commitment to waste reduction that will provide environmental, financial, and social benefits to the community of Hobart.

Around 25,000 tonnes of general waste is disposed to the McRobies Gully landfill each year. This represents a waste reduction of 50% over the past decade due to measures including recycling programs, organics composting, and inert waste recycling. External factors including commercial operators increasing recycling and waste diversion, the availability of multiple waste disposal facilities in Southern Tasmania and increases to gate fees have also contributed. The City recognises that the landfill should not be seen as a long term revenue raising activity, and this strategy should be evaluated on delivery of reduced future transport & disposal costs to the community through better resource recovery.

This strategy has been developed to place the City in the best possible situation in 2030, with the ultimate aim of zero waste to transport and dispose at an alternative landfill facility by that time. The timing of the strategy has purposely been set to coincide with the proposed closure of landfill operations at McRobies Gully. It will provide a considerable lead in time to allow for progressive waste reduction to occur, and for technology advancements relating to the residual waste to develop and become reliable and financially viable.

The City's previous waste management strategy delivered considerable improvements to infrastructure and waste reduction, with completion of a waste transfer station and resource recovery facility. The City has undertaken substantial consultation and research in the preparation of this strategy, resulting in accurate baseline data and the identification of the waste stream composition entering landfill. This has enabled specific actions to be detailed to reduce waste that consider the:

- amount of waste that can be avoided, reduced, reused or recycled

- cost effectiveness of identified options
- field of influence of the City of Hobart Council
- practicality and achievability of programs and actions

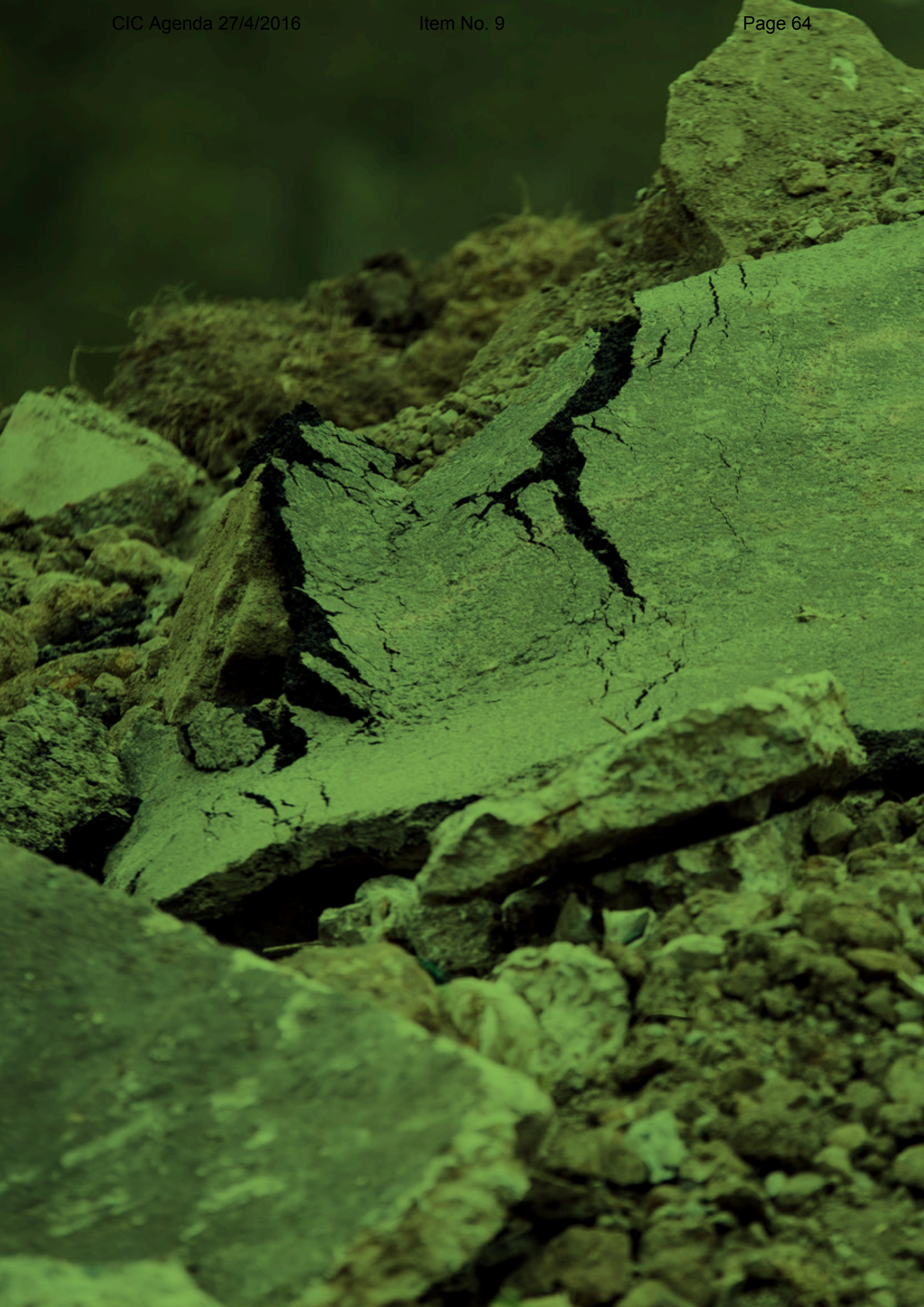
This strategy will provide the blueprint and strategic impetus for eliminating waste disposed to landfill, in addition to wider ranging waste reduction benefits. This will be achieved by a combination of actions including cooperation, collaboration, advocacy, education, and the delivery of recycling services and waste reduction programs.

The strategy details a committed, planned approach to waste reduction, focussing on key priority areas and maintaining cost effectiveness, service to the community, whilst creating social inclusion and positive environmental outcomes.



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1. INTRODUCTION

This strategy will build on the outcomes of previous strategies, in particular the built waste infrastructure.

1.1 WHY DO WE NEED A STRATEGY?

The City is making a commitment to achieving zero waste to landfill and to cease operating the McRobies Gully Landfill by the year 2030.

To be in the best possible position come 2030, the City must find ways to progressively reduce the amount of waste being disposed to its landfill, and as such a waste strategy from now until 2030 is required that outlines the actions needed to achieve this goal.

Once the City ceases to have a facility to dispose of waste, there will be significant costs for the consolidation, transport, and disposal of any residual waste to an alternative facility. We have the remaining 15 years to implement as many actions as we can to reduce that liability.

Actions to be implemented by 2030 will range from targeting specific materials for reduction or removal from the waste stream, to broader education and advocacy programs.

1.2 WHAT WILL THE STRATEGY DELIVER?

MORE

Recycling
Waste Diversion
Community Awareness
Cooperation



LESS

Organics to Landfill
Greenhouse Gas Emission
Illegal Dumping
Reliance on Landfill



2. WHERE ARE WE NOW?

2.1 BACKGROUND & PREVIOUS STRATEGIES

In 2010 the City identified the need to develop strategic documentation and plans to detail how to deal with increasing community expectation, increased environmental controls, and planning of appropriate infrastructure and waste management service requirements into the future. The development of the Waste Management Strategy 2010-2015 and the McRobies Gully Waste Management Centre Strategic Plan 2010-2015 have provided the blueprint for advancements in waste management for the City. Both plans have reached the end of their life span, a new phase of strategic planning is required.

The implementation of the former strategies has provided infrastructure and service review, and new planning needs to build on these achievements and delve further into waste avoidance, reduction and recycling programs.

The previous strategies outlined objectives and actions to ensure the development of infrastructure at the Waste Management Centre in particular. Some of the major actions completed include:

- Construction of a Waste Transfer Station and Resource Recovery Centre
- Landfill rehabilitation works
- Completion of significant diversion drain works to divert clean water around the landfill
- Implementation of a waste grants program
- A range of waste reduction programs focusing on concrete, ewaste, phone and battery recycling, & organic waste.

These outcomes represent a sound foundation on which the City can build to support its future waste requirements. The importance and quality of these outcomes was reinforced when the City was shortlisted as a finalist in the Waste Management Association of Australia Landfill and Transfer Stations Excellence & Innovation Awards for 2015.

A key focus of the development of the former Waste Management Strategy was to ensure all actions were realistic and achievable, with the progress made to date demonstrating that this has been accomplished.

The development of the new Waste Management Strategy 2015-2030 is more focussed on goals associated with minimising waste to landfill through reuse and recycling programs and reducing waste generation.

The City's waste strategy aims to deliver evidence based waste management outcomes that consider economic, environmental, social and regulatory impacts. This will enable the City and the community to understand and measure the waste management initiatives implemented.



2.2 DEMOGRAPHICS

The City of Hobart municipal area is approximately 78km², with a population of 50,655 as at June 2014. The population is approximately 10% of the state total.

The City is the most densely populated local government area in the state, with 650 people per km². There are only 3 other areas with a population density over 100 people per km², being Glenorchy (378) Devonport (230) and Clarence (143).

The population of Hobart has remained fairly static in recent years, with a very slight increase of 0.4% from 2013 to 2014.

The average weekly earnings for Tasmania are the lowest in the Country, at \$1,290 per full time adult at ordinary hours. The low population growth in conjunction with comparatively low earnings effectively reduces the level of consumption and associated waste generation compared to the rest of the country.

Around 400,000 tonnes of waste is landfilled in Tasmania annually, with the average waste generated per person in Tasmania around 0.8 tonnes per person per year.

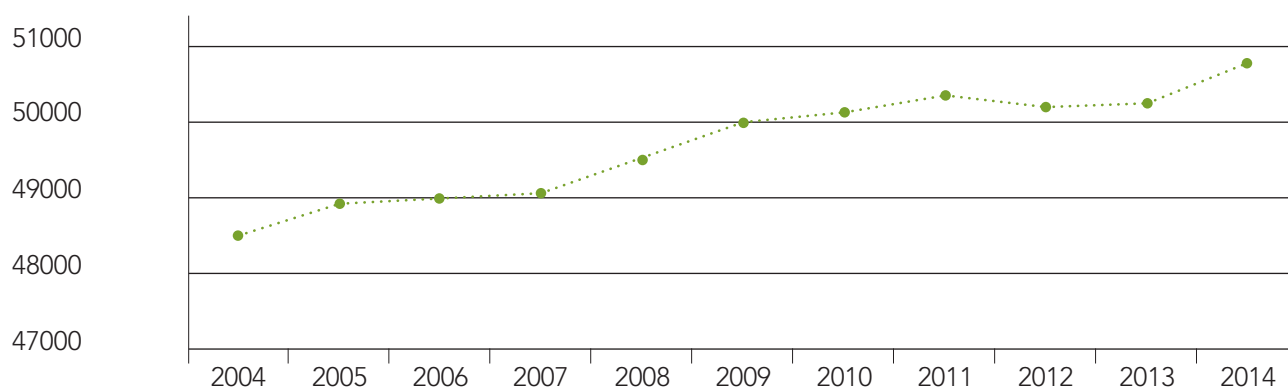


Figure 3 – Population of Hobart

60% of waste in household bins is organic material that should be removed from the waste stream.

2.3 CURRENT WASTE INFRASTRUCTURE & SERVICES

The City currently operates/ provides the following facilities and services

- One Waste Management Centre, incorporating
 - o an active category 2 landfill
 - o a transfer station
 - o a resource recovery centre, incorporating recycling drop off and Tip Shop
 - o an organic waste composting facility
 - o facilities for the recycling of engine oil, ewaste, appliances, batteries, tyres, concrete, paint, cardboard, comingled recycling & steel.
- Weekly kerbside waste collection (120L)
- Fortnightly kerbside recycling collection (240L)
- Twice yearly bulk green kerbside waste collection (up to 2m3)
- Up to five free entry weekends to the waste management centre for residents of the City.

2.4 KERBSIDE COLLECTION SERVICES

The City's current standard kerbside service provision to residents is a weekly collection of a 120L waste bin, and a fortnightly collection of a 240L recycling bin per rateable property. Commercial operators are provided a service upon request, as per the residential service. The City collects around 20,000 waste bins per week, predominately from the residential sector (95%). The City currently collects around 12,000 tonnes of waste via the kerbside system each year, representing almost 50% of all general mixed waste delivered to landfill. As such, waste reduction across the kerbside waste system will have a significant impact on achieving zero waste to landfill.

The City has undertaken detailed waste audits in preparing this strategy, for both the kerbside waste service and waste transported directly to the landfill. The City has a reliable set of data for the commencement of the strategy, and will continue to audit waste to landfill to inform program development and track progress towards waste reduction targets.

A typical domestic waste bin collected in the City weighs 11kgs, with contents as shown in Figure 4 (A detailed composition analysis is included as Appendix A). The data shows that there is a low level of recycling ending up in the waste bin that should have been placed in the kerbside recycling bin (12%). However, it does indicate that there is work to do for the City to improve the clarity and delivery of messages to the community to ensure all recyclables are placed in the right bin over the course of this strategy.

The results also indicate that organics represent around 60% of the average bin. For this strategy to be effective it must implement measures to remove and recycle both garden and food waste as a high priority.

Improving recycling rates and implementing measures to remove organic waste will leave the average bin about a quarter full compared to current levels, with the remaining material a ready-made input source for waste to energy systems. There will be many issues to address including cost, processing options, location and regulatory requirements prior to adopting new services.

A sound approach, in terms of waste reduction, will be to introduce a garden waste collection service, by use of a 3rd kerbside bin, collected fortnightly, followed by expanding this service to include food waste after the garden waste service has been bedded down. Throughout this process, domestic recyclables will continue to be targeted to drive materials from the waste bin to the recycling bins.

A staged approach to recovering the organics and recyclables from household bins could reduce the average bin weight from 11kgs down to 4kgs.

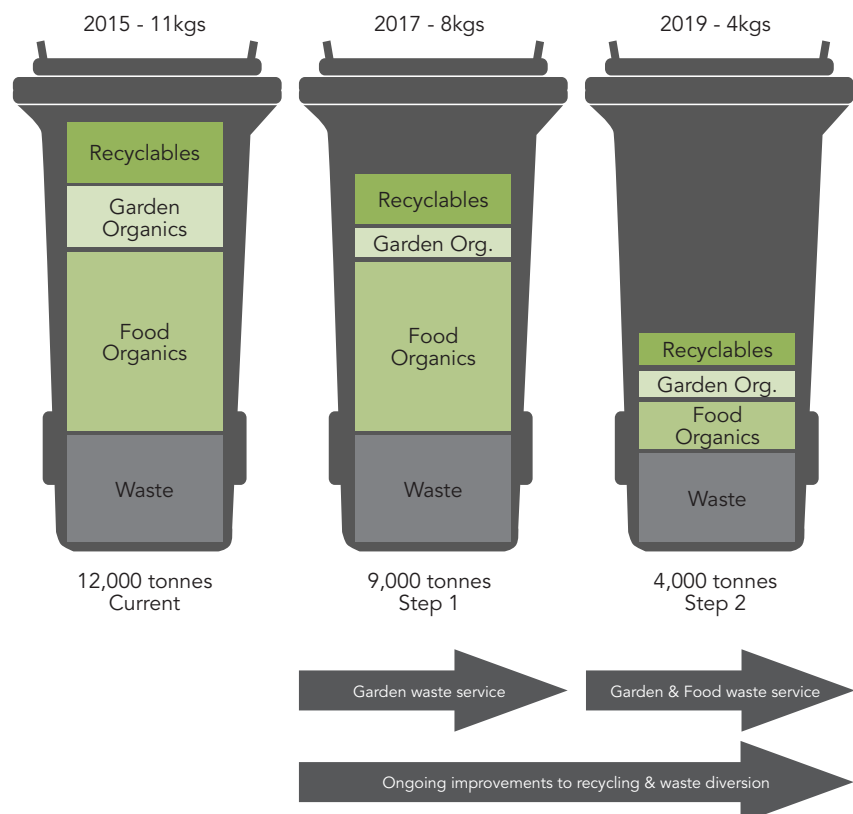
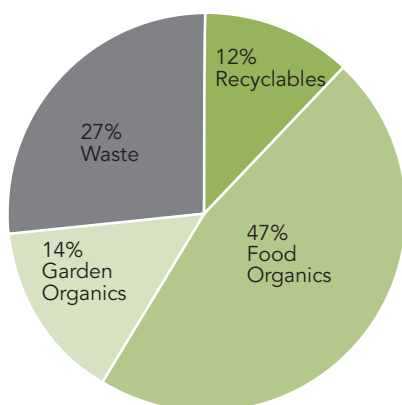


Figure 4 – Material composition in a kerbside waste bin (% by weight)

Figure 5 –Example staged process to reduce waste in kerbside waste bins

Hobart's recycling contamination rate of around 3% is consistently lower than national averages.

It may not be feasible to recover 100% of recyclables and organic waste from bins, however, even halving the amount of recycling entering waste bins and recovering 80% of organics, would result in a waste reduction of 8,000 tonnes per year in waste to landfill.

The City collects around 4,500 tonnes of material through its kerbside recycling service, through the fortnightly collection of a 240L bin from each residential property, and a small number of commercial properties. Kerbside collection systems across Tasmania generally perform well, and collect materials per person in excess of the national averages. This could be for a number of reasons, including increased commitment to recycling and knowledge, or a lack of a container deposit scheme, however whilst systems are in place and operating well there is little need to alter the current kerbside recycling system. The main issue will be to access the 12% of the general waste bin that should be going into the kerbside recycling bins and to continue to minimise the contamination levels in recycling bins through education.

Whilst there is room to improve the level of kerbside recycling, as far as recycling programs go it is one of the most successful ever implemented across Australia. The main types of materials in the domestic waste stream that should be collected through the recycling system are plastics, in particular food containers, plastic bottles, and paper waste.

Based on the current kerbside waste & recycling analyses, more can be done to educate residents about the range of recyclable materials that can be presented kerbside, in particular plastic containers and plastic food packaging, and paper products such as magazines, brochures, and cardboard packaging. Figure 6 details the types of recyclable materials ending up in household waste bins.

The City has over a number of years achieved very low contamination rates within its kerbside recycling, ranging between 2-4% over the past 5 years. The main sources of contamination continue to be plastic bags and unclean recyclable material (e.g. glass jars full of food waste). A typical recycling bin collected in Hobart weighs around 8.5kgs.

Residents have become accustomed to the kerbside recycling system, and it performs a vital waste reduction outcome, in addition to the associated reductions in use of virgin resources by avoiding the creation of new products from new inputs.

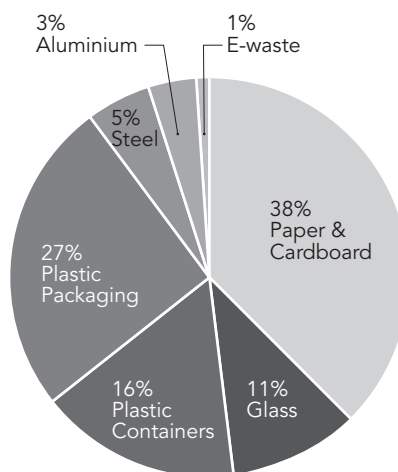


Figure 6 – Recyclable materials being placed in waste bins (kerbside collections)



2.5 WASTE TO MCROBIES GULLY LANDFILL

The City has operated the McRobies Gully landfill since the mid 1970's, when it was identified as a site that could cater for the long term waste disposal needs of a growing City. The main wastes disposed of to the site include municipal solid waste (kerbside collections), construction and demolition waste (inert wastes such as clean fill and rubble) and commercial and industrial wastes. Waste to the landfill has steadily declined over the past decade, with waste to landfill historically being 50-60,000 tonnes, reducing to around 25,000 tonnes in recent years.

The reductions in tonnages in recent times can be attributed to 3 main factors

- Improved waste classification, data management, and reporting.
- Increased recycling programs such as kerbside recycling, organic waste, and inert waste.
- Increased competition and landfill availability within the region.

There is no doubt that highly successful recycling and waste diversion programs have been implemented, however there is a relative over supply of waste acceptance facilities within the Southern Tasmanian region, including both transfer stations and landfills. As a result, residents and commercial operators have several options for waste disposal in the Greater Hobart area and can easily compare factors such as cost, proximity, amenity, and customer service in deciding where to dispose of waste.



Figure 7 – Waste to landfill 2007/08 to 2014/15



A decline in waste to landfill would generally be considered favourable in terms of waste reduction outcomes, but landfills have historically been seen as a significant source of revenue for their operators, and declining inputs perceived as having a negative impact on the bottom line. In the case of a council owned landfill, an unprofitable landfill or one that doesn't at least meet its operating & ongoing costs leads to it requiring subsidisation by ratepayers. It is vital that the costs associated with the operation of the landfill are recognised and fees are set accordingly.

An important influencing factor is that the Council has become increasingly aware and involved in the management of waste in recent times, and understands that the landfill should no longer be seen as a long term significant revenue generating activity. The value of the landfill is now being measured by its worth as a community asset, and in particular in its capacity to reduce long term transport and disposal costs.

Over the past 8 years to 2015, general waste to City of Hobart landfill has halved.



Figure 8 – xxx



In 2025 the City of Hobart will be a city that is recognised for its natural beauty and quality of environment

The City has undertaken comprehensive reviews of the waste streams entering its landfill, both from the commercial and industrial sector delivering direct to the landfill, from the waste transfer station on site, and from deliveries to the Resource Recovery Centre. The landfill accepts a wide array of material, much of which could be diverted for recycling or reuse. Detailed information on the breakdown of materials to landfill is included as Appendix B, and the most predominant materials disposed to landfill by weight are:

- Masonry materials, such as concrete and bricks (32%)
- Unpackaged food waste (10%)
- Garden organics (7%)
- Treated/painted timber (7%)

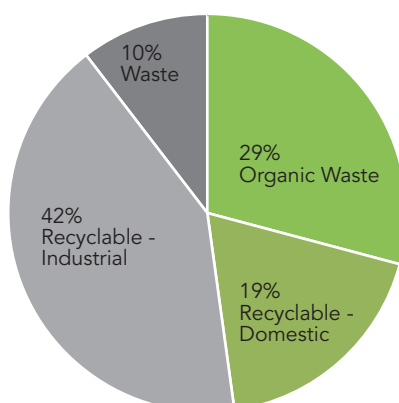


Figure 9 – Waste to Landfill – by category

There is currently a high volume of materials being landfilled that simply don't need to be.

The reasons for this include a lack of source separation and financial encouragement to recycle, and the ease of disposing to landfill. A look at the detailed material composition entering the landfill reveals significant opportunities to reduce waste to landfill. Broadly grouped, there are 4 main categories of materials entering the site.

- Organic waste – Organic material that could be treated through composting or other organic method. Includes food waste, garden waste & timbers.
- Recyclable Domestic – Materials that can be recycled at the domestic level. Includes items such as cardboard, paper, plastics and ewaste.
- Recyclable Industrial – Materials that could be recycled through commercial and industrial programs and facilities. Includes items such as bricks, concrete, and textiles.
- Waste – Those materials that at present have no viable reuse or recycling option.

The waste composition studies undertaken highlight that there are significant opportunities to reduce waste to landfill. Opportunities are material specific but include:

- Increased & improved source separation
- Increased commercial and industrial recycling
- Increased construction and demolition recycling
- Improved education and messaging about the materials that can be recycled through kerbside services
- Increased recycling at public events
- Improved waste management of City operations
- Increased cooperation and collaboration with government and industry

The City has a limited sphere of influence, and whilst there are many waste programs it can implement, the most sustainable waste reduction gains will come from ongoing collaboration with other stakeholders across government and industry. To drastically reduce the amount of waste disposed to landfill, detailed programs will need to be undertaken targeting specific wastes from a variety of sources.



2.6 STRATEGIC ALIGNMENT

The City has a number of strategic documents, plans and policies that interact with and impact upon waste management; these include the City's Strategic Plan, Corporate Plan, Annual Plan, and Long Term Financial Management Plan 2016-2036

The current vision & mission for the City of Hobart is that in 2025 Hobart will be a city that:

- Offers opportunities for all ages and is a city for life
- Is recognised for its natural beauty and quality of environment
- Is well-governed at a regional and community level
- Achieves good quality development and urban management
- Is highly-accessible through efficient transport options
- Builds strong and healthy communities through diversity, participation and empathy
- Is dynamic, vibrant and culturally expressive

Our mission is to ensure good governance for our capital City

The implementation of this waste strategy will assist the City to achieve its mission and visions, in particular the vision associated with quality of environment. In addition to strategic documentation, there are key groups within the Council that will interact with the waste field, including the Aldermen and the Executive Leadership Team. Waste management transgresses many units across council, and this strategy will seek to improve collaborations, in work areas such as Community Development, Events and Marketing, Bushland & Biodiversity, Civil Construction & Maintenance, Environmental Engineering, and Parks and Reserves.

In addition to internal alignments, the City has and will need to further develop strategic partnerships and alliances with external parties, such as other local government organisations, commercial operators and peak industry/community representative bodies.

60% of all waste generated across australia is diverted from landfill

2.7 NATIONAL & STATE WASTE POLICY INTEGRATION

There have been significant improvements in waste policy, regulation, and legislation in recent times, indicating the increased importance and action the community expects from all tiers of government in relation to environmental aspects impacting society. There are currently two overarching policies that impact directly on the City in this area:

- National Waste Policy
- Tasmanian Waste & Resource Management Strategy

These strategy documents set out National and State priorities and actions across a range of areas such as governance, coordination, regulation, data collection and waste minimisation. There are plans, policies, and legislation to which the City must remain cognisant throughout the life of this strategy in areas including product stewardship schemes, freight equalisation schemes, container deposit legislation, waste management laws and levies.

NATIONAL SNAPSHOT – RECYCLING RATES

At present there are approximately 29 million tonnes of material recycled, and 20 million tonnes of waste landfilled in Australia each year. The main sectors for recycling are the construction & demolition (25%), the commercial and industrial (18%) and kerbside recycling (15%). These sectors support a national recycling rate of just under 60%, being the amount of material that once generated, does not reach landfill.

The situation in Tasmania varies from the national averages. Current estimates are that the Tasmanian recycling rate is around 33%. Around 600,000 tonnes of waste is generated in Tasmania and 400,000 tonnes landfilled, with the main sectors for recycling being kerbside (17%), commercial and industrial (16%) and construction & demolition (1%). The kerbside recycling and commercial and industrial recycling rates for Tasmania are comparable with the national averages, and in fact the kerbside recycling performs better than the national average. The construction and demolition recycling data however suggests that either there is very limited construction and demolition recycling being undertaken, or, more likely, there are issues with

the data collection impacting the results.

This highlights the need for consistent and accurate recording and reporting mechanisms to be implemented on regional, state, and national levels. The need to improve the coordination and extent of data collection systems in Tasmania was highlighted in the State Governments Tasmanian Waste and Resource Management Strategy, 2009.

For the City, the refinement of waste categorisation and the undertaking of regular waste audits are vital to support confident reporting of waste diversion rates.

WASTE REDUCTION TARGETS

At present all states and territories have dedicated waste reduction targets with the exception of Tasmania and the Northern Territory. Targets range from the ACT's 100% target, to WA's target of 65% by 2020.

This Strategy will support the City to deliver accurate and reliable data in regard to any future State waste targets, should they be initiated.





3. WHERE DO WE WANT TO BE?

The city has committed to cease operating the McRobies Gully Landfill by 2030.

3.1 VISION

We want to close the McRobies Gully landfill operation and achieve zero waste to landfill by the year 2030. The current estimates are that the City's landfill at McRobies Gully will reach capacity by 2030. When the capacity of the McRobies Gully landfill is reached we want to be in the position where there is no material left for disposal to landfill.

The City does not intend to open any further landfills, and as such any residual waste would incur transport and disposal costs to an alternative facility. The closer to zero waste the City gets the lower the disposal to landfill costs to its ratepayers.

We aim to achieve our vision by working collaboratively and supportively with partners across the community, government, and industry to deliver economically, environmentally, and socially beneficial waste reduction programs.

3.2 KEY OUTCOMES & PRIORITIES

The overarching target for this strategy is to achieve zero waste to landfill within the City of Hobart by 2030. There will be various milestones along the way, and key actions to be undertaken over the course of the strategy. Some of the Key outcomes and priorities of this strategy are;

- A better funded and regulated waste sector
- Maximised resource recovery
- A more waste aware community
- A reduction in organic materials disposed to landfill
- A better informed waste disposal fee structure
- More frequent and accurate waste to landfill and waste diversion data collection

Sections 4 and 5 of this Strategy detail the measures and actions required to enable progress towards zero waste.

The comprehensive reviews undertaken in developing this strategy indicate that the City provides a high standard of service, with a high level of community acceptance and represents good value for money. This strategy will enable the City to maintain those high service standards, whilst improving waste reduction and diversion from landfill.



4. HOW WILL WE GET THERE?

4.1 STAKEHOLDER ENGAGEMENT & PUBLIC CONSULTANCY

Prior to the development of this strategy the City undertook a thorough stakeholder engagement process, including one on one meetings with industry, government, and peak representative bodies. Public forums were also held for the residents and broader community and on-line surveys made available to identify waste related issues.

The objective of the pre strategy consultation process was to provide a comprehensive stakeholder analysis of current waste issues for the development of the City's Strategy. The stakeholder consultation was designed to provide the following information:

- Stakeholder type and interest point
- Any current waste issues to be considered
- The identification of potential actions that could be undertaken in order to address the issues raised.

The involvement and buy-in of stakeholders was very positive, and has provided insight into the community's expectations in relation to waste management and the development of this strategy. A series of potential actions were analysed qualitatively for their value for money (cost per tonne of waste diverted), range of impact and achievability prior to inclusion in the strategy.

4.2 GAP/NEEDS ANALYSIS

Through the analysis of previous strategies and programs, the stakeholder engagement process, and staff review, the City has been able to undertake a gap analysis to inform the options for achieving zero waste to landfill.

The City will have limited influence on some of the issues identified, such as waste levies, external landfill pricing, and consumption; however there are opportunities to lead and lobby in these areas. There are a range of issues the City can address, some on its own and some in partnership with others. The main gaps identified are as follows:

- An understanding of the full cost of disposing to landfill across the region
- An adequately resourced peak body to represent and support the waste sector at the regional/state level
- A state waste levy that increases landfill costs & as such the viability of alternative recycling programs
- Productive partnerships with the private sector to achieve shared goals
- Reliable, up to date & accurate baseline data across all areas of waste (tonnes landfilled, recycling rates, costs, litter collections, illegal dumping, resource recovery etc)
- Adequate source separation of waste prior to arrival at McRobies Gully Waste Management Centre

There are 8 key areas the city must focus on to achieve substantial waste reduction.

4.3 KEY FOCUS AREAS

The City has undertaken an audit of the waste entering the landfill and identified diversion and recycling options for materials where available. A list of materials currently being landfilled that have alternative options is provided in Appendix C – Alternative treatment options

and costs analysis. Figure 10 provides a pictorial account of the material types with costs and the relative complexity and effort required for implementation. Materials closer to the bottom and left of the figure represent the best value for money to target for recycling programs. These are generally materials with low costs to recycle &/or a

capacity to divert high volumes from landfill.

The City has identified 8 key focus areas that will result in improved waste reduction. The focus areas involve increasing recycling, diverting more waste from landfill, enhancing cooperation across industry and government and improving education.

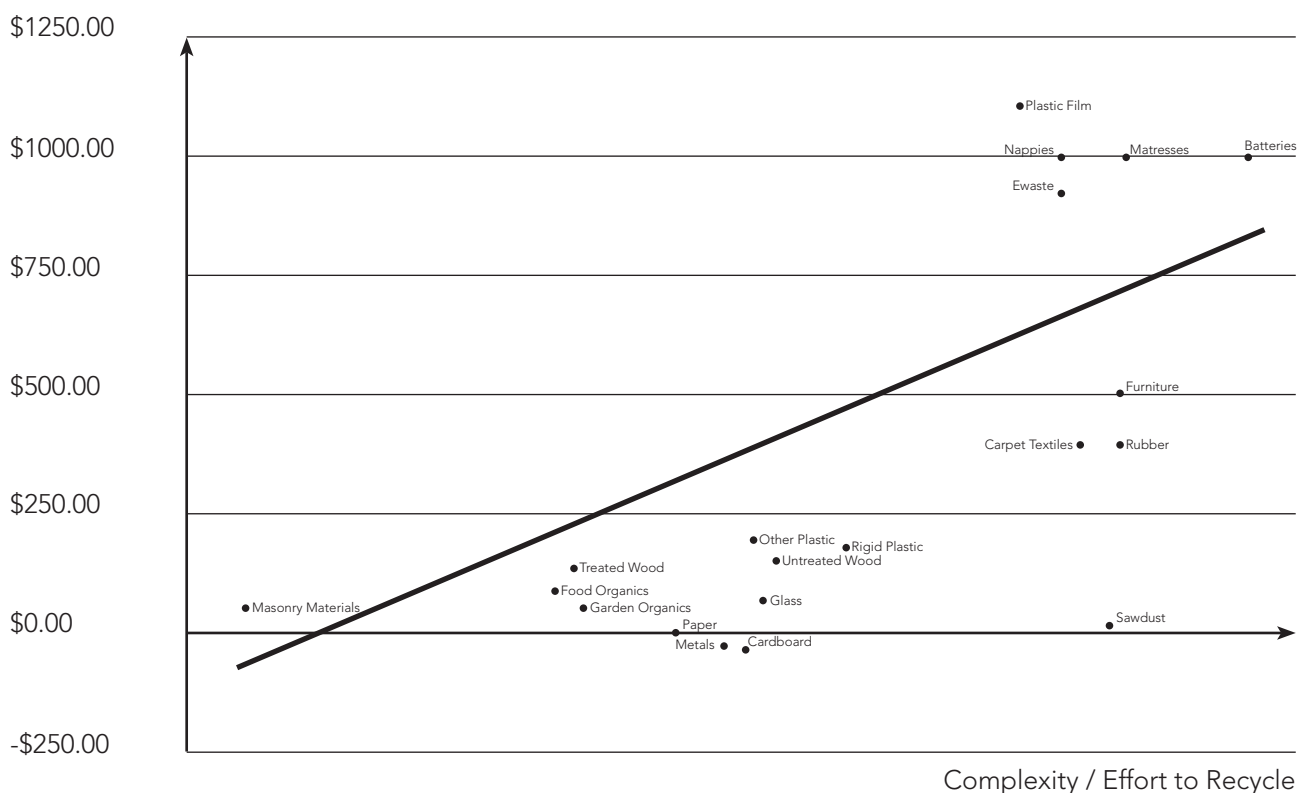


Figure 10 – Waste reduction cost, capacity, and complexity summary

4.3.1 ADVOCATING FOR CHANGE

Achieving broad behavioural change and waste reduction will require extensive cooperation and the City needs to collaborate with state authorities and other local governments to implement regional governance for waste management. The City must also advocate for the establishment of state waste reduction targets and the introduction of a state waste levy. It must investigate its capacity to impact on commercial and industrial operators through legislative processes such as development and planning applications, and also learn from progressive sectors of government and industry. In addition to advocacy functions, the City must ensure effective planning for the long term needs of the immediate community and broader region.

4.3.2 FINANCE

The City needs to improve its understanding of the costs of landfill and recycling programs, as an incorrectly costed landfill can result in long-term financial liabilities. Accurate and transparent accounting of all waste and resource recovery operations is necessary, as is working in partnership with government and industry to develop long term contracts and commercial opportunities. Through detailed financial analysis, materials that cost the least per tonne to divert from landfill will be able to be prioritised to provide the most effective value for money waste reduction.

4.3.3 EDUCATION & ENGAGEMENT

An important component of education and engagement programs is securing the funding required to implement them, and ensuring regional consistencies. The establishment of appropriate regional governance and a state levy may provide the necessary resources for a successful education program; the City should continue to work towards establishment of both. However the City can still make significant improvements to the local education and community engagement processes, through programs and working collaboratively with community and environmental groups.

Community groups and projects often have a reach far greater than council programs, and generate local connections within and across communities. The City recognises the importance of a vibrant, engaged and proactive community, and will provide assistance and support to achieve shared goals of waste reduction.

Over 90 actions will be required to progress towards zero waste to landfill by 2030.

4.3.4 ORGANICS

Organics represents a significant proportion of waste to landfill at McRobies Gully, with around 60% of the kerbside waste bin contents being organics. In addition, around 30% of the waste delivered direct to the landfill tip face is organic. Organics is one of the most significant waste inputs, and is also one of the most cost effective waste streams to divert from landfill. The costs of different technology types for composting, kerbside collection services and bin configurations must be investigated and appropriate services implemented as a priority. Organics represent a great opportunity to make substantial inroads into the zero waste targets.

4.3.5 LITTER & ILLEGAL DUMPING

Currently there is limited measurement regarding the amount of illegal dumping and costs incurred by the City in the collection of illegally dumped waste and litter. A baseline needs to be established to inform the prevalence, make up, and resource implications associated with litter and illegal dumping. The City must also expand its vision and consult with neighbouring land owners to develop regional litter and illegal dumping monitoring and education and enforcement programs. Litter and illegal dumping can have a considerable impact on the environment and amenity of natural areas, and measures need to be taken to prevent the occurrences and impacts associated with illegal dumping and litter.

4.3.6 INERT WASTE

The City already conducts a range of inert waste recycling programs with materials such as concrete, clean fill, bricks and steel diverted from landfill at significant rates. The capacity of McRobies Gully Landfill is vital to the City, and inert wastes shouldn't be taking up valuable airspace. The City must proactively manage the inert waste types and volumes delivered to the site to ensure there is no oversupply of materials surplus to the ongoing needs of the site. Mechanisms to encourage source separation of construction and demolition waste need to be explored including legislative controls and landfill fee structures. Identification and support of alternative facilities for the acceptance and treatment of inert waste, either operated by the City, or externally, must also be investigated.

4.3.7 CITY WASTE

The City contributes a significant portion of waste to landfill, with the majority generated by the civil works area, however other arms of council also generate waste such as council owned buildings, offices, parks and reserves, and events. The City conducts some internal recycling programs, however, the range and scale of these needs to be significantly increased. An audit of City generated waste needs to be undertaken that captures the complete picture of waste generation from City services and facilities. Such an audit will provide baseline data and waste generation trends to enable targeted programs to be delivered. The City must take the lead and set the example for its community to follow. There are significant opportunities to reduce waste from City operations and services, and these must be explored as a priority.

4.3.8 INNOVATION, PROGRAMS & SERVICES

Waste technology will develop throughout the life of this strategy and it is expected that new and innovative solutions will emerge for diversion and for post 2030 residual waste. The key for the City will be to assess options as they arise and determine the appropriate time to adopt proven technologies. Innovation brings with it considerable risk, and there are many examples across the country of advanced waste treatment facilities that have failed. The City needs to encourage innovation while continuing to monitor advancements in the waste technology and management fields. In parallel, the City must make inroads into waste reduction in preparation for implementing a solution for the residual waste stream when the appropriate options become clear.

The City must implement programs that target specific materials for removal from the waste stream. This strategy provides actions to target and reduce a range of materials currently entering the landfill such as:

- Organics
- Mattresses
- Plastics
- Wood
- Batteries
- Glass
- Ewaste
- Paper and cardboard
- Inert waste

There are viable options to recycle much of the waste that is currently landfilled. These may be more costly than current landfilling costs and require additional infrastructure and services to be implemented. However, more accurate landfill accounting models and a clear intent to reduce waste to landfill will see the viability of recycling programs increase.

For some materials methods to recycle are as yet unavailable or unsustainable. For these materials the City must monitor advancements in recycling technologies and processes, and where relevant support the development of programs that increase the accessibility and viability of recycling such materials.



5. HOW WILL THE STRATEGY BE IMPLEMENTED?

5.1 OPTIONS APPRAISAL

Every waste type being disposed to McRobies Gully Landfill was reviewed to identify alternatives. Appendix C – Alternative Treatment Options & Costs Analysis provides a summary of the various treatment methods available for waste entering McRobies Gully Landfill. The estimated cost to divert all materials that currently have alternative recycling options is over \$2m per year.

For each of the key focus areas a series of actions was identified and assessed for their suitability and appropriateness using a multi-criteria analysis. This approach has provided a listing of actions in order of priority.

The prioritisation of actions effectively provides a strategic blueprint for the implementation of the strategy, and considers factors such as the amount of waste stream reduced, cost effectiveness, the range of impact, and achievability. Appendix D - City of Hobart Zero Waste to Landfill Strategy Action Priority Listing provides a complete listing of all actions by their priority, with highest scoring actions listed first.

The City has identified 90 actions to be undertaken during the life of this strategy. Actions cover a wide range of areas and move from advocacy and developing partnerships, working collaboratively with others, through to on the ground actions completed solely by the City.

All actions have undergone a thorough assessment process to allocate a priority for action. The priority identification process encompassed the following aspects;

- the amount of waste reduced
- cost effectiveness
- the range of impact
- practicality and achievability

Actions outlined within this strategy will be subjected to regular review and reporting, and waste reduction rates will be reported and communicated to the community consistently.

It is the aim of this strategy to deliver the outcome of zero waste to landfill by 2030. Critical to the success of the strategy in reducing waste to landfill is the support of the Aldermen and senior management within the City of Hobart. All actions have undergone a robust analysis, and adequate resourcing levels to achieve the desired outcomes must be allocated for the life of the strategy if the vision is to be achieved.

This strategy is the driver for the City to implement wide ranging waste reduction programs over the next 15 years that will benefit both the environment and the community of the City of Hobart and Greater Hobart.

Table 1 details all Actions under each of the 8 Key Focus areas

1. ADVOCATING FOR CHANGE

1.1	Advocate to the State Government for a state based waste levy
1.2	Implement internal procurement policies that favour recycled products and waste diversion including engagement of social enterprises in the waste area
1.3	Increase the capacity of the Resource Recovery Centre to divert waste from landfill. Provide assistance, facilities, and work together with the site operator to recover as much material as possible, including C&D wastes
1.4	Investigate the use of planning processes to improve source separation and recycling programs
1.5	Advocate to State Government to support a state wide Container Deposit System
1.6	Support the establishment of, and be represented on an adequately resourced Regional Waste Authority
1.7	Lobby for additional product stewardship programs to be regularly implemented through the National Waste Policy
1.8	Work with the EPA and other facilities to establish common definitions for waste
1.9	Evaluate the costs and benefits of joining existing or new Waste Authorities
1.10	Optimise the use of the Derwent Park site for regional waste infrastructure provision
1.11	Advocate to the State Government for the establishment of state waste reduction targets.
1.12	Provide assistance and advice to others looking to establish transfer stations and resource recovery facilities
1.13	Develop a regional waste managers network with representatives from government and industry
1.14	Monitor National Policy movements such as National Packaging Covenant developments and advocate for change when required
1.15	Engage with agencies that make recycling a mandatory component of contracts
1.16	Adequately Plan and fund post closure requirements, and work in accordance with the Landfill sustainability Guidelines, the sites Environmental Management Plan. Ensure all reasonable efforts are made to protect the ecology of the area surrounding the landfill
1.17	Work with other facilities to rationalise regional waste infrastructure, and investigate shared infrastructure and services
1.18	Promote existing take back schemes (tyres, ewaste, fluorescent globes) & lobby for the development of further schemes (mattresses, pallets, plastics)

2. FINANCE

2.1	Set fees & charges (annually) to encourage waste avoidance and investment in commercial recycling programs
2.2	Conduct a full cost accounting study of the landfill to review the pricing for current operations and long-term financial liabilities, including post closure requirements
2.3	Where possible, work with others towards joint procurement and purchasing in the waste management and resource recovery area, resulting in savings from greater economies of scale in relation to delivering the objectives of the strategy
2.4	Evaluate the cost effectiveness of the use of external facilities for waste disposal
2.5	Conduct a review into the pricing and the business model for green waste processing at the landfill

3. EDUCATION & ENGAGEMENT

3.1	Implement mandatory recycling and waste diversion requirements on all City coordinated events
3.2	Support the development of regional recycling education strategies and programs
3.3	Support and encourage organisers to implement recycling and waste diversion programs for events, including food waste
3.4	Appoint a Waste Education Officer
3.5	Identify and provide viable recycling systems for difficult wastes such as polystyrene, batteries, oils, fluorescent light globes, paint, and effectively promote facilities and services to the community
3.6	Make available to residents an App that provides a range of information on Council services and facilities for recyclable products, & upgrade the City's internet pages to reflect the strategy implementation
3.7	Encourage and support School recycling and waste diversion programs and projects
3.8	Promote and support community reuse programs such as the Art From Trash Annual exhibition
3.9	Work to develop a regional kerbside recycling contamination reduction education program
3.1	Develop campaigns to promote the use of sustainable materials and recycled products
3.11	Progressively report to Council to seek funds to implement the strategy
3.12	Develop a Good Neighbour Agreement with the South Hobart Community
3.13	Undertake community engagement and education on the closure of McRobies Gully Landfill, and the potential post closure uses for the site
3.14	Implement branding across the City's waste services & infrastructure
3.15	Promote achievements in relation to waste minimisation programs as they are implemented
3.16	Conduct regular contamination audits of kerbside recycling
3.17	Ensure open and transparent communication with industry and residents through ongoing education and engagement programs
3.18	Provide details on the end markets for recyclables to the community

4. ORGANICS

4.1	Implement a fortnightly green waste kerbside collection service, to appropriate tenements
4.2	Implement a food waste kerbside collection service, after the successful introduction of the green waste kerbside collection service, and once appropriate receipt infrastructure & facilities are identified
4.3	Encourage & support existing and new community gardens and at home composting programs
4.4	Investigate commercial food organics diversion, and identify alternative sites and technologies for organics processing (either regional or stand alone City facility)
4.5	Work with others to establish a regional organics quantity analysis and processing plan
4.6	Review the costs and benefits of providing home composting kits and education
4.7	Review the kerbside waste service frequency of collection and bin capacity following the introduction of other services such as kerbside green and food waste collection

5. LITTER & ILLEGAL DUMPING

5.1	Support extended producer responsibility programs to address localised litter generation and removal
5.2	Continue to refine the public waste and recycling bin program, including locations, sizes, and collection frequencies, and increasing the number of recycling bins
5.3	Develop strategies to prevent illegal dumping within Hobart, and review processes for the issuing of fines for litter related offences
5.4	Work with other councils and industry on joint litter and illegal dumping prevention and monitoring programs
5.5	Investigate measures to refine the operation of public waste & recycling bin infrastructure, such as bin level sensors, solar powered compaction units and route optimisation
5.6	Monitor the quality and appearance of waterways through regular testing and litter reduction measures

6. INERT WASTE

6.1	Work with government & industry to establish regional C&D sorting facilities, and develop and promote C&D recycled materials markets
6.2	Investigate long term facilities for the sorting, storage, & recycling of inert waste, at McRobies gully or alternative locations
6.3	Implement programs to increase concrete recycling
6.4	Work with C&D recyclers to establish take back systems and back loading of recyclable materials

7. CITY WASTE

7.1	Secure approvals to operate a general waste landfill to 2030
7.2	Improve source separation of City generated waste
7.3	Implement a disposal strategy/policy for City assets that incorporates reuse and recycling
7.4	Conduct an audit of all City generated waste, and develop a waste minimisation plan with programs to increase recycling and reduce waste generation
7.5	Investigate disposal to alternative facilities for City generated wastes
7.6	Implement office recycling programs in all City work areas
7.7	Incorporate recycled products into City designed works where viable such as glass into concrete applications, the use of recycled plastics and replacement of sand with glass in civil works

8. INNOVATION & PROGRAMS

8.1	Implement effective cardboard and paper recycling programs at the Waste Management Centre
8.2	Continue to provide kerbside recycling services and explore additional materials for inclusion when economically viable
8.3	Provide an annual Waste Reduction Grants Program, to fund public waste reduction initiatives and projects
8.4	Establish a regional long-term solution for glass recycling, including market options
8.5	Seek grant funding opportunities (for the City and the community)
8.6	Identify solutions and costs for residential services for the drop off and recycling of household hazardous waste, including oils, grease, paints, pesticides, and medicines
8.7	Improve signage at McRobies Gully to ensure diversion of waste to the Resource Recovery Centre
8.8	Consider implementing a 'waste reduction levy' to fund recycling programs for materials delivered to the waste management centre (in absence of a state based levy)
8.9	Develop recycling options for building materials such as plasterboard and masonry items
8.1	Increase the use of recycled products within City projects
8.11	Implement effective plastics recycling programs at the Waste Management Centre
8.12	Research, Identify & commission feasibility studies into Alternative Waste Treatment and Energy from Waste facilities
8.13	Support regional, state, and national waste reduction and education programs such as the Garage Sale Trail, & National Recycling Week
8.14	Establish a mattress recycling program, locally or regionally
8.15	Review collection fleet to ensure optimum compaction, capacity, configuration and functionality
8.16	Review the frequency and appropriateness of the free entry weekends program
8.17	Review e-waste recycling options and continue to implement the most environmental and economic program available
8.18	Support and expand the flexible plastics recycling programs currently undertaken by the retail industry
8.19	Continue to separate steel from the waste stream for recycling
8.20	Conduct regular audits of waste to landfill, and kerbside waste and recycling composition
8.21	Review opening days & hours of the Waste Management Centre to suit the needs of the community & site operations
8.22	Improve Tyre recycling programs and work to identify viable recycling options.
8.23	Investigate and conduct cost modelling for alternative treatment options for timber waste, such as pyrolysis
8.24	Develop improved systems for multi-tenement waste and recycling services
8.25	Implement a textiles recycling program
8.26	Support the retail industry to introduce waste avoidance and recycling strategies and programs

Table 1 – Actions of the Waste Strategy 2015-2030



6. HOW WILL PROGRESS AGAINST THE STRATEGY BE MEASURED?

6.1 TARGETS

A series of targets at 5 yearly intervals will be applied to monitor progress under the strategy towards the goal of zero waste to landfill by 2030. The current waste diversion rate from landfill is 32%, and all future targets will be assessed against current waste acceptance and recycling levels (2015).

2015 Rate	32%
2020 Target	50%
2025 Target	70%
2030 Target	100%

6.2 MEASUREMENT

A range of measurement processes will be require to track progress against the strategy and to appropriately define diversion rates of material from landfill. Key performance indicators will be derived from a range of measurement processes including

- Regular Audits (waste to landfill, kerbside)
- Contamination audits of kerbside collection services
- Environmental monitoring
- Litter control records
- Review of the number and types of services and programs provided
- Financial measurement and reporting
- Regulatory compliance

The measurement processes above will provide information to Council on economic and environmental performance, and community service provision in addition to providing waste diversion rates. All measurement processes will be undertaken annually as a minimum, and in many instances quarterly and monthly measurement will be required.

This strategy will be formerly reviewed at 5 year intervals, to ensure it remains relevant to the City and on track to meet diversion targets.



ATTACHMENTS

ATTACHMENT A – COMPOSITION OF CITY OF HOBART KERBSIDE WASTE BIN

CATEGORY	PRODUCT	% of BIN
PAPER & CARDBOARD	Paper - Newspaper & Magazines	1.31%
	Paper - Office Paper	1.77%
	Cardboard - Pizza Box	0.21%
	Cardboard - Corrugated	2.21%
	Liquid paper containers	0.25%
	Paper towel	1.43%
	contaminated soil paper	0.11%
ORGANICS	Food - kitchen	46.81%
	garden organics	14.53%
	Kitty Litter organic	4.11%
	wood	1.01%
	Textiles - organic	3.44%
	leather	0.06%
	rubber - organic	0.33%
	oils	0.20%
GLASS	Glass - packaging/containers	1.90%
	glass - mixed fines	0.20%
PLASTICS	PET #1	0.70%
	HDPE #2	0.57%
	PVC #3	0.05%
	LDPE #4	0.07%
	Polypropylene #5	0.77%
	Polystyrene #6	0.18%
	Rigid plastic #7	0.64%
	plastic bags	0.07%
	plastic packaging	4.90%
	Polystyrene (non container)	0.16%
METAL	Steel Cans	0.54%
	Steel aerosols	0.04%
	Ferrous other	0.41%
	Ferrous composite	0.00%
	Aluminium cans, aerosols, foil	0.57%
	Non ferrous (other copper, brass etc)	0.05%
HAZARDOUS	Household Hazardous - flourescent globes	0.29%
	Household Hazardous - Dry cell batteries	0.00%
	Household Hazardous - chemicals & pharmaceuticals	0.01%
	Household Hazardous - other	0.02%

CATEGORY	PRODUCT	% of BIN
EARTH BASED	Ceramics	0.78%
	Dust/dirt/rock/inert	2.38%
	Ash	0.21%
OTHER	Ewaste	0.27%
	Nappies - disposalable paper nappies	4.41%
	Toner Cartridges	0.03%
	Electrical items	0.25%
	Coffee pods	0.05%
	Liquids	0.08%
	Photo paper	0.23%
	Plasterboard	0.26%
	CD's/DVD's	0.28%
	Textiles - Carpets	0.05%
	Miscellaneous	0.80%

ATTACHMENT B – COMPOSITION OF WASTE TO LANDFILL – MCROBIES GULLY

WASTE CATEGORY	WASTE PRODUCT	% of Landfill
Organics 29.18%	Food organics – unpackaged	10.43%
	Wood – treated/painted	7.85%
	Wood – treated - pallets	0.60%
	Garden organics	7.24%
	Wood – untreated	1.70%
	Food organics – packaged	1.11%
	Other - sawdust	0.13%
	Wood – untreated - pallets	0.12%
Recycling 19.39%	Paper – other	2.18%
	Plastic – other	2.15%
	Cardboard – dry – loose	1.92%
	Plastic – film packaging	1.58%
	Glass – packaging	1.50%
	Metal (ferrous) – non-packaging – LD	1.19%
	Glass – non-packaging	1.19%
	Metal (ferrous)– non-packaging – HD	1.14%
	Cardboard – wet /wax – loose	0.80%
	Metal (ferrous) – packaging	0.77%
	Paper – office	0.73%
	Plastic – rigid packaging	0.59%
	Metal (non-ferrous) – packaging	0.57%
	Metal (non-ferrous)– non-pack – LD	0.47%
	Paper – packaging	0.23%
	Plastic – EPS foam	0.22%
	Cardboard – wet /wax – compacted	0.14%
	Metal (non-ferrous)– non-pack – HD	0.07%
	Cardboard – dry – compacted	0.02%
	Other – batteries	0.02%
	Textiles – mattresses	0.43%
	Electrical – TVs	0.40%
	Electrical– computers and peripherals	0.37%
	Electrical – other	0.35%
	Electrical – whitegoods	0.36%

WASTE CATEGORY	WASTE PRODUCT	% of Landfill
C&D 42.18%	Masonry materials – concrete/bricks	32.12%
	Masonry materials – other	6.70%
	Textiles - covered furniture	0.69%
	Textiles - carpet	0.56%
	Rubber	0.48%
	Textiles & leather	1.63%
Waste 9.25%	Other - nappies	1.59%
	Other - insulation	0.30%
	Other - fines	0.23%
	Other - clinical	0.20%
	Other - asbestos	0.03%
	Other - miscellaneous	6.90%
		100.00%

ATTACHMENT C – ALTERNATIVE DISPOSAL OPTIONS AND COSTS ANALYSIS

WASTE PRODUCT	% OF STREAM TO MCROBIES	PROCESS	WASTE REDUCTION OPTION(S)
Cardboard	2.88%	Recycling	Kerbside recycling service, paper & cardboard recycling facilities at WMC bale on site & sell
Paper	3.14%	Recycling	Kerbside recycling service, recycling facilities at WMC, increase education about paper recycling. Consider adding paper to composting processes
Metal	4.21%	Recycling	Kerbside recycling service, recycling facilities at WMC collect and sell to metals recyclers
Wood – untreated	1.82%	Recycling	Collect for re-sale, shred to sawdust or add to composting processes. Consider take back scheme on pallet manufacturers. Consider collection & transport to pyrolysis facility
Sawdust	0.13%	Compost	Include in composting process, ensure all loads delivered to organics area
Batteries	0.02%	Recycling	Recycling facilities at waste management centre, and other locations for collection and recycling
Plastic – rigid packaging	0.59%	Recycling	Increase community education to ensure materials which can be recycled are promoted. Collect on site and send to Victoria for recycling
Rubber	0.48%	Recycling	Collect, bale & transport to recycling facility in Victoria
Textiles - covered furniture	0.69%	Recycling	Sell through tip shop, or recycle components through deconstruction process
Glass	2.69%	Recycling	Kerbside recycling collection, recycling facilities at WMC, crush to aggregate and use in road construction applications and other civil construction projects
Textiles - carpet & leather	2.19%	Recycling	Consider shredding and exporting
Other - nappies	1.59%	Avoidance	Encourage use of organic nappies & associated products
Garden organics	7.24%	Avoidance & Recycling	Increase fees for green waste to encourage commercial composting. Increase advertising of green waste recycling and use of composting facility
Mattresses	0.43%	Recycling	Mattress recycling program - deconstruct & recover steel, bale textiles for transport to recycling facility. Work with other councils to provide a mattress recycling scheme
Plastic – other	2.37%	Recycling	Kerbside recycling service, recycling facilities at WMC, collect on site & deliver to recycling contractor
Electrical – TV's, whitegoods, Computers, other	1.48%	Recycling	Capture through ewaste recycling systems at WMC, and under National Product Stewardship Scheme
Food organics	11.51%	Compost	Residential & Commercial Kerbside Collection service. Increase information regarding at home composting and on site composting options
Wood – treated/ painted	8.45%	Compost	Consider collection & transport to pyrolysis facility
Plastic – film packaging	1.58%	Recycling	Bale on site and sell

	COST PER TONNE (\$)	LIKELY % OF STREAM REDUCED	COST TO REMOVE FROM LANDFILL (PER YEAR)	RELATED ACTION NUMBER(S)	CUMULATIVE COST (P/A)
	-\$50	2.50%	-\$31,250	1.3,8.1,8.2	-\$31,250
	-\$40	3.00%	-\$30,000	8.1,8.2,1.11,8.11	-\$61,250
	\$-	4.00%	\$-	8.5,8.16	-\$61,250
	\$160	1.50%	\$-	8.8,3.18	-\$61,250
	\$30	0.13%	\$975	2.4	-\$60,275
	\$1,000	0.02%	\$5,000	2.5,7.3	-\$55,275
	\$200	0.50%	\$25,000	7.5	-\$30,275
	\$400	0.25%	\$25,000	2.5, 3.17	-\$5,275
	\$400	0.25%	\$25,000	8.17	\$19,725
	\$75	2.00%	\$37,500	8.3	\$57,225
	\$400	0.50%	\$50,000	8.17	\$107,225
	\$200	1.00%	\$50,000	8.21	\$157,225
	\$60	6.00%	\$90,000	2.1,2.2,2.4	\$247,225
	\$1,000	0.40%	\$100,000	3.11,8.17	\$347,225
	\$200	2.15%	\$107,500	2.5, 7.5	\$454,725
	\$1,000	1.00%	\$250,000	1.3,4.6	\$704,725
	\$150	8.00%	\$300,000	4.2,3.8,3.9	\$1,004,725
	\$200	7.00%	\$350,000	7.2	\$1,354,725
	\$1,000	1.50%	\$375,000	7.5,8.15	\$1,729,725

WASTE PRODUCT	% OF STREAM TO MCROBIES	PROCESS	WASTE REDUCTION OPTION(S)	
Masonry materials – concrete/bricks	32.12%	Recycling	Crush to rubble either through on site machinery or sorting platform at McRobies or remove & crush contract. Consider source separation through DA's & other means	
Masonry materials – other (insulation, plasterboard, fines etc)	7.23%	Recycling	No current viable recyclable options for plasterboard, insulation, glues etc	
Other - asbestos	0.03%	N/A	No current viable recycling avenue	
Other - clinical	0.20%	N/A	No current viable recycling avenue	
Other - miscellaneous	6.93%	N/A	No current viable recycling avenue	
	100.00%			

	COST PER TONNE (\$)	LIKELY % OF STREAM REDUCED	COST TO REMOVE FROM LANDFILL (PER YEAR)	RELATED ACTION NUMBER(S)	CUMULATIVE COST (P/A)
	\$50	31.00%	\$387,500	8.9,6.1	\$2,117,225
		0.00%	N/A	8.8	
		0.00%	N/A	8.21	
		0.00%	N/A	8.21	
		0.00%	N/A	8.21	
		72.70%			

ATTACHMENT D – CITY OF HOBART ZERO WASTE TO LANDFILL STRATEGY ACTION PRIORITY LISTING

RANK	ACTION NO.	CATEGORY	ACTION
1	2.1	Finance	Set fees & charges (annually) to encourage waste avoidance and investment in commercial recycling programs
2	1.1	Advocating for Change	Advocate to the State Government for a state based waste levy
3	1.2	Advocating for Change	Implement internal procurement policies that favour recycled products and waste diversion including engagement of social enterprises in the waste area
4	1.3	Advocating for Change	Increase the capacity of the Resource Recovery Centre to divert waste from landfill. Provide assistance, facilities, and work together with the site operator to recover as much material as possible, including C&D wastes
5	3.1	Education & Engagement	Implement mandatory recycling and waste diversion requirements on all City coordinated events
6	8.1	Innovation & programs	Implement effective cardboard and paper recycling programs at the Waste Management Centre
7	1.4	Advocating for Change	Investigate the use of planning processes to improve source separation and recycling programs
8	2.2	Finance	Conduct a full cost accounting study of the landfill to review the pricing for current operations and long-term financial liabilities, including post closure requirements
9	3.2	Education & Engagement	Support the development of regional recycling education strategies and programs
10	3.3	Education & Engagement	Support and encourage organisers to implement recycling and waste diversion programs for events, including food waste
11	8.2	Innovation & programs	Continue to provide kerbside recycling services and explore additional materials for inclusion when economically viable
12	4.1	Organics	Implement a fortnightly garden waste kerbside collection service, to appropriate tenements
13	4.2	Organics	Implement a food waste kerbside collection service, after the successful introduction of the garden waste kerbside collection service and appropriate receival infrastructure & facilities identified
14	3.4	Education & Engagement	Appoint a Waste Education Officer
15	7.1	City Waste	Secure approvals to operate a general waste landfill to 2030
16	8.3	Innovation & programs	Provide an annual Waste Reduction Grants Program, to fund public waste reduction initiatives and projects
17	8.4	Innovation & programs	Establish a regional long-term solution for glass recycling, including market options
18	8.4	Innovation & programs	Establish a regional long-term solution for glass recycling, including market options

	SCORE	WASTE STREAM IMPACTED	OUTCOME
	13	ALL	Increased waste avoidance through alternative disposal/recycling programs
	13	ALL	Creation of a fund to provide statewide waste minimisation programs
	13	ALL	Reduced waste from City operations, support for community organisations
	13	ALL	Increased waste diversion and recycling, in particular Construcion & Demolotion wastes
	13	ALL	Increased recycling at community events organised by the City
	13	Cardboard	Increased recycling of cardboard
	12	C&D	Increased waste redcution in the building sector
	12	ALL	Increased understanding of true costs associated with landfill, and ability to charge correctly
	12	ALL	Improved consistency accross the region and increased communications
	12	ALL	Increased recycling from public events
	12	Recycling	Continued diversion form landfill of kerbside recyclables
	12	Garden Organics	Increased waste diversion (of garden waste)
	12	Food	Increased waste diversion (of food waste)
	12	C&D	Increased education programs for waste reduction
	12	ALL	Increased products recovered and recycled
	11	ALL	Increased waste diversion through grant projects
	11	Glass	Increased recycling of glass
	11	Glass	Increased recycling of glass

RANK	ACTION NO.	CATEGORY	ACTION
19	1.5	Advocating for Change	Advocate to State Government to support a state wide Container Deposit System
20	1.6	Advocating for Change	Support the establishment of, and be represented on an adequately resourced Regional Waste Authority
21	1.7	Advocating for Change	Lobby for additional product stewardship programs to be regularly implemented through the National Waste Policy
22	2.3	Finance	Work with others towards joint procurement and purchasing, resulting in savings from greater economics of scale.
23	2.4	Finance	Investigate the use of external facilities for landfilling operations
24	2.5	Finance	Conduct a review into the pricing and the business model for green waste processing at the landfill
25	3.5	Education & Engagement	Identify and provide viable recycling systems for difficult wastes such as polystyrene, batteries, oils, fluorescent light globes, paint, and effectively promote facilities and services to the community
26	3.6	Education & Engagement	Make available to residents an App that provides a range of information on Council services and facilities for recyclable products, & upgrade the City's internet pages
27	3.7	Education & Engagement	Encourage and support School recycling and waste diversion programs and projects
28	3.8	Education & Engagement	Promote and support community reuse programs such as the Art From Trash Annual exhibition
29	4.3	Organics	Encourage and support existing and new community gardens and at home composting programs
30	5.1	Litter/Illegal Dumping	Implement extended producer responsibility programs to address localised litter generation and removal
31	1.8	Advocating for Change	Work with the EPA and other facilities to establish common definitions for waste
32	8.5	Innovation & programs	Seek grant funding opportunities (for the City and the community)
33	7.2	City Waste	Improve source separation of City generated waste
34	7.3	City Waste	Implement a disposal strategy/policy for city assets that incorporates reuse and recycling
35	8.6	Innovation & programs	Identify solutions and costs for residential services for the drop off and recycling of household hazardous waste, including oils, grease, paints, pesticides and medicines
36	8.7	Innovation & programs	Improve signage at McRobies Gully to ensure diversion of waste to the Resource Recovery Centre
37	7.4	City Waste	Conduct an audit of all City generated waste, and develop a waste minimisation plan with programs to increase recycling and reduce waste generation

	SCORE	WASTE STREAM IMPACTED	OUTCOME
	11	Beverage Containers	Reduced litter, and increased recycling of beverage containers
	11	ALL	Increased capacity to contribute to regional waste management programs
	11	ALL	Increased national programs to reduce waste to landfill
	11	ALL	Improved purchasing power, increased viability of recycling programs
	11	ALL	Increased airspace capacity at McRobies
	11	Organics	Increased accountability and knowledge of costs associated with composting
	11	ALL	Increased recycling of household waste items
	11	ALL	Increased information provision to the community
	11	ALL	Increased recycling from schools and school events
	11	ALL	Increased awareness of waste reduction and associated programs
	11	Organics	Increased organic waste reduction
	11	litter	Reduced litter surrounding businesses
	11	ALL	Improved data reporting
	11	ALL	Increased revenue sources for waste reduction programs
	11	ALL	Increased recycling
	11	ALL	Increased emphasis on recycling rather than disposal of council assets
	11	Household Hazardous	Increased diversion of household hazardous waste from landfill
	11	ALL	Increased visitation to the resource Recovery Area, increased recycling
	11	ALL	Increased data to enable wastes to be targetted, increased waste diversion

RANK	ACTION NO.	CATEGORY	ACTION
38	8.8	Innovation & programs	Consider implementing a 'waste reduction levy' to fund recycling programs for materials delivered to the waste management centre (in absence of a state based levy)
39	8.9	Innovation & programs	Develop recycling options for building materials such as plasterboard and masonry items
40	6.1	Inert Waste	Work with government & industry to establish regional C&D sorting facilities, and develop and promote C&D recycled materials markets
41	1.9	Advocating for Change	Evaluate the costs and benefits of joining existing or new Waste Authorities
42	1.10	Advocating for Change	Optimise the use of the Derwent Park site, for regional waste infrastructure provision
43	1.11	Advocating for Change	Advocate to the State Government for the establishment of state waste reduction targets.
44	1.12	Advocating for Change	Provide assistance and advice to others looking to establish transfer stations and resource recovery facilities
45	3.9	Education & Engagement	Work to develop a regional kerbside recycling contamination reduction education program
46	3.1	Education & Engagement	Develop campaigns to promote the use of sustainable materials and recycled products
47	4.4	Organics	Investigate commercial food organics diversion, and identify alternative sites and technologies for organics processing (either regional or stand alone City facility)
48	4.5	Organics	Work with others to establish a regional organics quantity analysis and processing plan
49	5.2	Litter/Illegal Dumping	Continue to refine the public bin program, including locations, sizes, and collection frequencies, and increasing the number of recycling bins
50	6.2	Inert Waste	Investigate long term facilities for the sorting, storage, & recycling of inert waste, at McRobies gully or alternative locations
51	6.3	Inert Waste	Implement programs to increase concrete recycling
52	8.10	Innovation & programs	Increase the use of recycled products within City projects
53	7.5	City Waste	Investigate disposal to alternative facilities for City generated wastes
54	8.11	Innovation & programs	Implement effective plastics recycling programs at the Waste Management Centre
55	7.6	City Waste	Implement office recycling programs in all City work areas
56	1.13	Advocating for Change	Develop a regional waste managers network with representatives from government and industry
57	8.12	Innovation & programs	Research, Identify & commission feasibility studies into Alternative Waste Treatment and Energy from Waste facilities
58	8.13	Innovation & programs	Support regional, state, and national waste reduction and education programs such as the garage sale trail

	SCORE	WASTE STREAM IMPACTED	OUTCOME
	11	ALL	Increased waste reduction
	11	C&D	Reduced masonry waste to landfill
	11	C&D	Increased C&D recycling
	10	ALL	Increased long term security
	10	ALL	Capacity of Derwent Park site to provide waste management programs optimised
	10	ALL	Increased state commitment of waste reduction
	10	ALL	Increased knowledge sharing
	10	Recycling	Reduced contamination in kerbside recycling bins
	10	ALL	Increased use of sustainable materials
	10	Food Organics	Reduced organic waste to landfill
	10	Organics	Increased efficiencies across the region for organic waste processing
	10	Litter	Increased public waste and recycling capacity
	10	Inert Waste	Improved handling and increased recycling of inert waste
	10	Concrete	Increased concrete recycling
	10	ALL	Reduced use of new virgin resources
	10	ALL	Increased landfill capacity for the communities waste
	10	Plastics	Reduced plastic to landfill
	10	Office Recycling	Increased recycling of office based waste such as paper, toner cartridges, beverage containers
	10	ALL	Increased cooperation and collaboration between operators
	10	ALL	Remain informed of state of play regarding alternative treatment methods
	10	ALL	Increased products recovered and recycled

RANK	ACTION NO.	CATEGORY	ACTION
59	3.11	Education & Engagement	Progressively report to Council to seek funds to implement the strategy
60	1.14	Advocating for Change	Monitor National Policy movements such as National Packaging Covenant developments and advocate for change when required
61	3.12	Education & Engagement	Develop a Good Neighbour Agreement with the South Hobart Community
62	4.6	Organics	Review the costs and benefits of providing home composting kits and education
63	8.14	Innovation & programs	Establish a mattress recycling program, locally or regionally
64	8.15	Innovation & programs	Review collection fleet to ensure optimum compaction, capacity, configuration and functionality
65	8.16	Innovation & programs	Review the frequency of the free entry weekends program
66	8.17	Innovation & programs	Review e-waste recycling options and continue to implement the most environmental and economic program available
67	3.13	Education & Engagement	Undertake community engagement and education on the closure of McRobies Gully Landfill, and the potential post closure uses for the site
68	8.26	Innovation & programs	Support the retail industry to introduce waste avoidance and recycling strategies and programs
69	8.18	Innovation & programs	Support and expand the flexible plastics recycling programs currently undertaken by the retail industry
70	8.19	Innovation & programs	Continue to separate steel from the waste stream for recycling
71	7.7	City Waste	Incorporate recycled products into City design processes, such as glass into concrete applications, and recycled plastic street furniture, bollards, and interpretation panels
72	3.14	Education & Engagement	Implement branding across the City's waste services & infrastructure
73	3.15	Education & Engagement	Promote achievements in relation to waste minimisation programs implemented
74	8.25	Innovation & programs	Implement a textiles recycling program
75	1.15	Advocating for Change	Engage with agencies that make recycling a mandatory component of contracts
76	3.16	Education & Engagement	Conduct regular contamination audits of kerbside recycling
77	8.20	Innovation & programs	Conduct regular audits of waste to landfill, and kerbside waste and recycling composition
78	3.17	Education & Engagement	Ensure open and transparent communication with industry and residents through ongoing education and engagement programs
79	3.18	Education & Engagement	Provide details on the end markets for recyclables to the community
80	5.3	Litter/Illegal Dumping	Develop strategies to prevent illegal dumping within Hobart and review processes for the issuing of fines for litter related offences

	SCORE	WASTE STREAM IMPACTED	OUTCOME
	10	ALL	Increased funding capability to implement increased range of programs
	9	ALL	Increased recycling programs on a national scale
	9	ALL	Increased community connection
	9	Organics	Increased organics recycling
	9	Mattresses	Reduced mattresses to landfill
	9	ALL	Improved collection service fleet
	9	ALL	Improved customer service and efficiencies in operations
	9	Ewaste	Reduced ewaste to landfill
	9	ALL	Educated community
	9	ALL	Reduction in retail waste
	9	Plastics	Increased recycling of flexible plastics
	9	Steel	Reduced steel to landfill
	9	ALL	Reduced use of virgin materials
	9	ALL	Increased profile & awareness of City services and facilities
	9	ALL	Increased awareness of waste reduction achievements
	8	Textiles	Increased textiles recycling
	8	ALL	Improved recycling provisions within city contracts
	8	Recycling	Increased data collection to enable targeted education programs
	8	ALL	Increased data collection to enable targeted education programs
	8	ALL	Educated community
	8	ALL	Educated community
	8	Litter	Reduced litter

RANK	ACTION NO.	CATEGORY	ACTION	
81	5.4	Litter/Illegal Dumping	work with other councils and industry on joint litter and illegal dumping prevention and monitoring programs	
82	5.5	Litter/Illegal Dumping	Refine public waste & recycling bin infrastructure, with bin level sensors, solar powered compaction units and route optimisation	
83	6.4	Inert Waste	Work with C&D recyclers to establish take back systems and back loading of recyclable materials	
84	8.21	Innovation & programs	Review opening days & hours of the Waste Management Centre to suit the needs of the community & site operations	
85	8.22	Innovation & programs	Improve tyre recycling programs and work to identify viable recycling options.	
86	8.23	Innovation & programs	Investigate and conduct cost modelling for alternative treatment options for timber waste, such as pyrolysis	
87	1.16	Advocating for Change	Adequately Plan and fund post closure requirements, and work in accordance with the Landfill Sustainability Guidelines, the sites Environmental Management Plan. Ensure all reasonable efforts are made to protect the ecology of the area surrounding the landfill	
88	5.6	Litter/Illegal Dumping	Monitor the quality and appearance of waterways through regular testing and litter reduction measures	
89	4.7	Organics	Review the kerbside waste service frequency of collection and bin capacity following the introduction of other services such as kerbside garden and food waste collection	
90	8.24	Innovation & programs	Develop improved systems for multi-tenement waste and recycling services	
91	1.17	Advocating for Change	Work with other facilities to rationalise regional waste infrastructure, and investigate shared infrastructure and services	
92	1.18	Advocating for Change	Promote existing take back schemes (tyres, ewaste, fluorescent globes) & lobby for the development of further schemes (mattresses, pallets, plastics)	

	SCORE	WASTE STREAM IMPACTED	OUTCOME
	8	Litter	Reduced litter
	8	ALL	Increased efficiency in public infrastructure collection services
	8	C&D	Increased transport efficiencies
	8	N/A	Improved customer service and efficiencies in operations
	8	Tyres	Increased collection and recycling of tyres
	8	Timber	Increased timber recycling, and increased energy production from waste
	8	N/A	Sufficient resources provided to cover post closure requirements
	8	Litter	Reduced litter in waterways
	7	ALL	Increased efficiencies in waste collection
	7	ALL	Reduced street clutter, improved security on use of facilities
	6	ALL	Improved collaboration with other service providers and infrastructure owners
	6	ALL	Increased products recovered and recycled

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**CITY INFRASTRUCTURE COMMITTEE AGENDA
(OPEN PORTION OF THE MEETING)
27/4/2016**

**10. SOCIAL ENTERPRISES AS A COMPONENT OF THE CITY'S
PROCUREMENT PROCESSES ASSOCIATED WITH WASTE
MANAGEMENT ACTIVITIES – FILE REF: 44-10-1**

2x's

Memorandum of the Director Parks and City Amenity of 20 April 2016.

DELEGATION: Committee



44-10-1

20 April, 2016

MEMORANDUM: CITY INFRASTRUCTURE COMMITTEE

SOCIAL ENTERPRISES AS A COMPONENT OF THE CITY'S PROCUREMENT PROCESSES ASSOCIATED WITH WASTE MANAGEMENT ACTIVITIES

At the City Infrastructure Committee meeting of 9 December 2015 the Committee resolved *inter alia* as follows:

"Officers explore opportunities and report back to committee on engaging with social enterprises as a component of the City's procurement processes associated with waste management activities, as outlined within the Community Recycling Network Forum, Attendance Report."

It is noted that the City currently engages with various social enterprises in relation to waste management activities, in particular:

- The **Resource Work Cooperative**, who operate the Tip Shop and perform salvaging operations at McRobies Gully;
- **Launceston City Mission**, who collect ewaste for recycling;
- **Oak Enterprises** who purchased the City's security shredding service business in 2015 and who are also currently engaged to bag compost material from the McRobies Gully Waste Management Centre site;
- The City has also had initial discussions with social enterprises to explore the provision of litter collection and management at McRobies Gully.

City of Hobart Waste Management Strategy 2015-20130

A report on The City of Hobart Waste Management Strategy 2015-20130 is listed on the agenda seeking endorsement of the Strategy following recent community engagement on the draft document.

Upon considering the Committee's request above, Action 1.2 of the Strategy has subsequently been expanded to consider 'Social enterprises' when undertaking the review of the City's procurement policies.

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The report tabling the strategy recommends this amendment, along with various other amendments as a result of the recent community engagement process.

RECOMMENDATION

That the information be received and noted.

A handwritten signature in black ink, appearing to read 'Glenn Doyle', written over a large, empty, rounded rectangular box.

(Glenn Doyle)

DIRECTOR PARKS AND CITY AMENITY

**CITY INFRASTRUCTURE COMMITTEE AGENDA
(OPEN PORTION OF THE MEETING)
27/4/2016**

**11. INTERSECTION OF HILL STREET AND ARTHUR STREET, WEST
HOBART TRAFFIC MANAGEMENT REVIEW – FILE REF: R0568 & R0320**

36x's

Memorandum of the Director City Infrastructure of 20 April 2016 and attachment.

DELEGATION: Committee



R0568 & R0320
AJM; SMLP

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20 April 2016

**MEMORANDUM: LORD MAYOR
DEPUTY LORD MAYOR
ALDERMEN**

INTERSECTION OF HILL STREET AND ARTHUR STREET, WEST HOBART TRAFFIC MANAGEMENT REVIEW

In considering traffic issues near the intersection of Hill Street and Arthur Street, West Hobart the Council resolved on 7 September 2015, inter alia, that:

A review of the traffic issues identified in the report attached to Supplementary item 13 of the City Infrastructure Committee agenda of 26 August 2015, in relation to the new 'Hill Street Grocer' store in Hill Street, West Hobart, be conducted in six months time.

The review has been undertaken and a copy of Traffic Management Review report is provided as **Attachment A**.

The Traffic Management Review includes:

- A summary of the reported crashes before and after the opening of the new Hill Street Grocer store.
- An assessment of the risks for various issues – both existing risks and the likely residual risk for each of these issues following the implementation of a range of traffic management measures.
- A list of preliminary recommendations.

The recommendations are shown in the table overleaf, including any comments in response to these, as appropriate.

Recommendation		Comment
PRIORITY: IMMEDIATE		
1	Consult with key stakeholders about on-street parking on Hill Street between Arthur Street and the northern driveway to AA Lord Homes.	
2	Hill Street Grocer provide additional signage within their car park.	This has been undertaken.
3	Prepare a design for extended medians on Hill Street and Arthur Street.	
PRIORITY: IN CURRENT BUDGET PERIOD		
4	Subject to a suitable design, implement a median treatment in Arthur Street to prevent the right turn out of Hill Street Grocer without negatively impacting the right turn into Mellifont Street.	
5	Review the effectiveness of any parking changes implemented (as per Item 1). If additional works are considered necessary and following consultation with the Hill Street Grocer – implement a median treatment in Hill Street to prevent the right turn into Hill Street Grocer.	
6	Prepare a concept design for a roundabout at the intersection of Hill Street and Arthur Street.	This recommendation will not be progressed as Council is currently pursuing the option of installing traffic signals at this intersection though the Department of State Growth.
PRIORITY: AS TIME AND FUNDING ALLOWS		
7	Install a roundabout at the intersection of Hill Street and Arthur Street.	Not to be progressed, refer comments above.

Recommendation:

That the Traffic Management Review report be received and noted and that officers proceed with report recommendations 1-5 as prioritised.



(Mark Painter)

DIRECTOR CITY INFRASTRUCTURE

Attachment A - Traffic Management Review - Surrounds – 70 Arthur Street
(19 April 2016)



Traffic Management Review - Surrounds – 70 Arthur Street

Version 3.0 – 19 April 2016

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1. Introduction

The West Hobart 'Hill Street Grocer', formerly located at 109 Hill Street, relocated to its new premises at 70 Arthur Street in May 2015.

This relocation has led to changes to the traffic conditions (for both pedestrian and vehicular traffic) in the vicinity of the new premises.

A number of alterations were made to traffic controls / infrastructure immediately prior to the opening of the new store, including:

- The reconstruction of the north-east corner of the Arthur Street / Mellifont Street intersection, to reduce the speed of vehicles turning (and resolve a history of rear-end crashes at the site) and to provide improved pedestrian safety;
- The provision of a crossing point for pedestrians on Hill Street about 40 metres south of the Hill Street / Arthur Street. This pedestrian crossing point was constructed primarily to provide improved crossing facilities for elderly pedestrians from AA Lord Homes to access the new 'Hill Street Grocer';
- The installation of parking controls.

A series of additional parking changes and minor alterations were also made in the weeks immediately following the opening of the new store to address issues as they arose.

A 'Keep Clear' zone was installed on Hill Street at the entrance to 70 Arthur Street, following the opening of the store. This 'Keep Clear' zone was intended to reduce the amount of time that a vehicle waiting to turn right into 70 Arthur Street would be obstructed by queued traffic.

This review and the associated report was initially written in August 2015. The report was subsequently updated in February 2016.

This review is written based primarily on the traffic conditions as identified during the period from Tuesday 21 July to Tuesday 28 July 2015. This period is about 2 months after the initial opening of the new store, and is towards the end of the typical 3 month period of adjustment for road users to adapt to changed traffic conditions. The 'Keep Clear' zone was in place during that period.

This review describes the conditions at the surrounds of the subject site, and includes a risk assessment of the current arrangements.

The review has been prepared by Council's Road & Traffic Engineer. Council's Road & Traffic Engineer, Mr Owen Gervasoni, holds current qualifications in 'Road Safety Audit: A Safe System Approach', and in 'Apply Risk Management Processes'.

- The initial version of this report (V1.0), was completed on 28 August 2016.
- A revised version (V2.0) was completed on 26 February 2016, and included the addition of Section 4.1 discussing the crash history since the opening of the store, and the updating of Appendix B.
- This version (V3.0), was completed on 19 April 2016, and included:

- Updates to Section 4.1 to include an undated review of the crash database (no crashes reported to 19 April 2016 since the last update), and the updating of Appendix B;
- Updates to Section 8, to include discussion of the MRCagney Report “West Hobart Local Area Traffic Investigation – 22 December 2015” in the context of the discussion of Option F (installation of traffic signals at Hill Street / Arthur Street) & Option G (installation of a roundabout at Hill Street / Arthur Street).

2. Investigation Scope

The review consists of:

- A review of the existing traffic (for both vehicular traffic and pedestrian traffic) in the surrounds of the new ‘Hill Street Grocer’ premises at 70 Arthur Street, following the opening of the new store in May 2015;
- The compiling of a risk assessment of road safety matters in the surrounds of the new ‘Hill Street Grocer’ premises at 70 Arthur Street;
- The nomination of potential treatments to address and medium risks and high risks identified in the risk assessment;
- The preparation of a revised risk assessment taking into account the impact of any potential treatments;
- The making of recommendations for investigation / implementation of potential treatments.

It should be noted that the scope of this report only considers those matters as described above.

3. Matters Considered

During the undertaking of this review, the following actions have been undertaken:

- The subject site has been inspected and observed on numerous occasions;
- Data on pedestrian movements across streets in the vicinity of the site, and vehicle movements into and out of the subject site car park were observed and recorded;
- Matters raised by members of the community (via telephone calls and correspondence to Council) have been reviewed and considered;
- The recorded history of crashes on streets surrounding the subject site has been reviewed;
- A discussion has been undertaken on-site with representatives of the Hill Street Grocer and AA Lord Homes;

4. Review of Crash History – Prior to Opening of 70 Arthur Street Premises

The Department of State Growth maintains a database of all crashes reported to and recorded by the Tasmanian Police on streets in Tasmania from the year 2000 to the present. A review was undertaken of this database to determine the history of crashes in the vicinity of the subject site.

Figure 4.1, below, shows a summary of the recorded crashes in the immediate vicinity of the subject site. The full listing of the crash details is available in Appendix B.

The area considered is that area where the vehicular movements generated by the development at 70 Arthur Street would have their most significant impact:

- The intersection of Hill Street / Arthur Street;
- The intersection of Arthur Street / Mellifont Street / Butterworth Street;
- Arthur Street, between Butterworth Street and Hill Street;
- Hill Street, between Arthur Street and Hamilton Street;
- Butterworth Street, between Arthur Street and Hamilton Street.

It should be noted that in early 2008, Arthur Street (from the Mellifont Street intersection to the Arthur Street intersection) was upgraded to provide dedicated turning lanes and pedestrian islands. This resulted in a significant reduction in the rate of crashes at Hill St / Arthur Street, and at Arthur Street / Mellifont St / Butterworth Street.

In Figure 4.1, below, the crash history has been divided into the periods before and after that 2008 upgrade on the impacted sections.

	Years	Recorded Crashes			Crash Rate (per Year)		
		Property Damage	Injury	Total	Property Damage	Injury	Total
Hill Street / Arthur Street							
1/1/2000 to 1/1/2008 (prior to 2008 Upgrade)	8	4	3	7	0.500	0.375	0.875
1/7/2008 to 1/7/2015 (post 2008 Upgrade)	7	0	0	0	0.000	0.000	0.000
Arthur Street (between Mellifont Street & Hill Street)							
1/1/2000 to 1/1/2008 (prior to 2008 Upgrade)	8	0	0	0	0.000	0.000	0.000
1/7/2008 to 1/7/2015 (post 2008 Upgrade)	7	1	0	1	0.143	0.000	0.143
Arthur Street / Mellifont Street / Butterworth Street							
1/1/2000 to 1/1/2008 (prior to 2008 Upgrade)	8	11	2	13	1.375	0.250	1.625
1/7/2008 to 1/7/2015 (post 2008 Upgrade)	7	6	2	8	0.857	0.286	1.143
Butterworth St (between Arthur St & Hamilton St)							
1/1/2000 to 1/1/2008	8	0	0	0	0.000	0.000	0.000
1/7/2008 to 1/7/2015	7	0	0	0	0.000	0.000	0.000
Hill St (between Arthur St & Hamilton St)							
1/1/2000 to 1/1/2008	8	2	0	2	0.250	0.000	0.250
1/7/2008 to 1/7/2015	7	1	0	1	0.143	0.000	0.143
Total Crash Rate (1/7/2008 to 1/7/2015)					1.143	0.286	1.429

Figure 4.1 – All recorded crashes, 1/1/2000 to 30/6/2015

Overall, in the 7 years since the upgrading of Arthur Street, the historical rate of crashes in the immediate vicinity of the subject site is 1.429 total crashes per year, comprised of 1.143 property damage crashes and 0.286 injury crashes per year.

The approximate location of each of the recorded crashes in the period 1/7/2008 to 1/7/2015 is shown diagrammatically on Figure 4.2.



Figure 4.2 – All recorded crashes, 1/7/2008 to 30/6/2015

As shown in Figure 4.2, there was no history of crashes at Hill Street / Arthur Street prior to the opening of the supermarket at 70 Arthur Street.

The most significant crash location is Mellifont Street / Arthur Street / Butterworth Street. Six of the eight crashes are 'rear-end' type crashes. The developer of 70 Arthur Street's original Traffic Impact Assessment identified the curve radius on the left turn from Mellifont Street into Arthur Street as a potential safety risk, and suggested that the curve be reconstructed to reduce the speed of turning vehicles (and reduce the risk of rear end crashes on this approach). This work was undertaken by Council in 2015 prior to the opening of the Hill Street Grocer, and it is expected that this will reduce the rate of these crashes.

The Austroads Guide to Road Safety Engineering Risk Assessment – Part 7: Crash Rates Database (2010), taken recorded crash rates at intersections across Australia, and generates Australia wide mean casualty rates by intersection type.

In summary, in urban areas, a three leg intersection has an expected casualty crash rate of 1.54 casualty (injury) crashes per 10 million vehicle movements. A four leg intersection has an expected casualty crash rate of 1.98 casualty (injury) crashes per 10 million vehicle movements. An intersection with a roundabout has an expected casualty crash rate of 1.81 casualty (injury) crashes per 10 million vehicle movements, and an intersection with traffic signals has an expected casualty crash rate of 2.07 casualty (injury) crashes per 10 million vehicle movements.

Figure 4.3, below lists the two intersections, with their recorded casualty crashes since the 2008 upgrade. The vehicle turning movements at each intersection is calculated from the peak hour turning movements at the intersection recorded by Traffic Engineering consultant Milan Prodanovic in his 2011 report on the site. The two weekday peak hours were summed, multiplied by 5 to obtain a weekday volume. Weekend volumes were estimated based on 7 day surveys on Hill Street in 2009, and a total turning movement per year estimated.

Intersection	Data Period	Recorded Casualty Crashes in Data Period	Vehicle Turning Movements / Year	Recorded Casualty Crashes / 10M VE	Intersection Type	Expected Casualty Crashes / 10M VE	Expected Casualty Crashes over Period
Hill St / Arthur St	1/7/08 to 1/7/15	0	3,958,604	0.00	Urban - 3 Leg	1.54	4.3
Arthur St / Mellifont St / Butterworth St	1/7/08 to 1/7/15	2	3,673,904	0.78	Urban - 4 Leg	1.98	5.1

Figure 4.3 – Actual and Expected Casualty Crashes – Adjacent Intersections

Based on the mean casualty crash rates, the expected number of casualty crashes at Hill Street / Arthur Street from 1/7/2008 to 1/7/2015 is 4.3. The recorded number of casualty crashes is zero.

Based on the mean casualty crash rates, the expected number of casualty crashes at Arthur Street / Mellifont Street / Butterworth Street from 1/7/2008 to 1/7/2015 is 5.1. The recorded number of casualty crashes is 2.

The wider impact of the Hill Street Grocer store on the surrounding network would be that it will generate increased pedestrian activity on the surrounding street network, a locals walk to and from the store.

A review of the history of crashes involving pedestrians in the period 1/1/2000 to 30/6/2015 on the public streets within approximately 400 metres walk of the subject site was undertaken.

The result is summarised in Figure 4.4. Essentially in the 15.5 years to which we have access to records, there have been two recorded crashes involving pedestrians. These are:

- In 2001, a pedestrian was struck by a vehicle on Mellifont Street, between Newdegate Street and Summerhill Road, resulting in first aid at the scene;
- In 2005, a pedestrian was struck by a vehicle at the intersection of Mellifont Street / Cato Avenue, resulting in minor injuries to the pedestrian;



Figure 4.4 – All recorded Pedestrian crashes on Streets within 400m walk of Site, 1/1/2000 to 30/6/2015

This history does not indicate a significant pedestrian safety issue on the street network surrounding the subject site.

Pedestrian crashes tend to be relatively infrequent events at specific locations. An analysis of five years of crash data at 1000 marked and 1000 unmarked pedestrian crossings in the USA published in the ITE Journal in January 2004 found that pedestrian crashes at these crossings occurred at a rate of 0.12 pedestrian crashes per million pedestrian crossing movements.

Using this figure, and the pedestrian movements observed in the immediate surrounds of the site (as detailed in Appendix A), it is estimated that a pedestrian crash would occur at a rate of 1 every 17.5 years, in the immediate vicinity of the subject site.

4.1 Review of Crash History – Post Opening of 70 Arthur Street Premises

Following the opening of the supermarket at 70 Arthur Street in May 2015, to 19 April 2016 (the date the crash history was reviewed for the preparation of this updated report), the following crashes have been

reported on streets in the vicinity of the subject site (the same area, as shown in Figure 4.2, used in the initial review):

- In June 2015, a vehicle turning right at Arthur St / Butterworth St / Mellifont St was struck, resulting in minor injuries. One of the vehicles was a bicycle.
- In August 2015, two vehicles on Hill Street in the vicinity of 120 Hill Street were involved in a 'rear-end' collision, resulting in property damage.
- In August 2015, two vehicles at the intersection of Hill Street / Arthur Street were involved in a 'rear-end' collision, resulting in minor injuries. One of the vehicles was a motorcycle, and the collision occurred on the Hill Street approach.
- In August 2015, a vehicle turning right at Arthur St / Butterworth St / Mellifont St was struck, resulting in property damage.
- In November 2015 a vehicle exiting the driveway of 70 Arthur Street onto Arthur Street collided with another vehicle resulting in property damage.

In the same time period (May 2015 to 19 April 2016) the following crashes involving pedestrians have been recorded on streets within 400m walk of the site (the same area, as shown in Figure 4.4, used in the initial review):

- No crashes involving pedestrians have been reported.

5. Issues Identified with Existing Conditions

The following issues were identified:

Hill Street – Entry Driveway to 70 Arthur Street

At times when the on-site car park is at capacity, shoppers will queue in the car park aisle, and the queue will extend onto Hill Street. This queue:

- Can obstruct the pedestrian footpath on Hill Street;
- Can create confusion for northbound through traffic on Hill Street, who can be unsure if a vehicle waiting to turn left is queued to turn left into Arthur St or into the carpark;
- Can lead to vehicles waiting to turn right into the site from Hill Street obstructing southbound traffic on Hill Street.

At other times, the turning movement into the site is less problematic. Right turners into the site must still select appropriate gaps in northbound Hill Street traffic and across the pedestrian footpath, and execute a right turn into the site.

70 Arthur Street – Internal Matters

Many pedestrians accessing the supermarket from Hill Street choose to walk via the driveway. With very high parking demand, and very high parking turnover, vehicles are frequently reversing into and out of 90 degree parking spaces, and at busy times are queued waiting for available parking in the parking aisle.

Given the frequency of movements into and out of parking spaces, there is a risk of a pedestrian or other vehicle being struck by a reversing vehicle.

Arthur Street – Exit Driveway from 70 Arthur Street

Since opening, a “left turn only” sign has been erected at the exit to 70 Arthur Street, to essentially ban the right turn out of the subject site. A significant proportion of exiting vehicles continue to perform this movement. There is a risk of a right turning vehicle striking a through vehicle on Arthur Street, or striking the median pedestrian island.

Some drivers continue to drive into the subject site via the driveway to Arthur Street.

Arthur Street / Hill Street Intersection

The intersection of Arthur Street / Hill Street has not been altered as part of the redevelopment of the 70 Arthur Street site. There would be an increase in the vehicular and pedestrian traffic at the intersection resulting from the development.

The intersection is a ‘t’ – intersection, with the Hill Street approach controlled by ‘give way’ signage. During the commuter peak periods there are relatively high volumes of traffic turning right from Arthur Street into Hill Street, and seeking to turn left from Hill Street into Arthur Street. These drivers must select gaps in traffic movement to turn into, and there is a risk that a driver will make an error in gap selection and strike a pedestrian (crossing Hill Street), or a through vehicle on Arthur Street.

It can be uncomfortable for pedestrians to cross at this intersection, particularly at busy commuter times.

Council upgraded this intersection in early 2008, by installing a separate right turn facility, and installing median pedestrian shelter islands on Arthur Street.

According to the crash database of Police crash reports maintained by the Department of State Growth, prior to the upgrade works in 2008, the crash history at this site was:

- 4 recorded ‘property damage’ crashes in 8 years;
- 3 recorded ‘injury’ crashes in 8 years (0.375 injury crashes per year);
- 7 total recorded crashes in 8 years (0.875 total crashes per year).

In its current form (from July 2008 to the opening of the Hill Street Grocer store) the crash history at the site is:

- 0 recorded ‘property damage’ crashes in 7 years;
- 0 recorded ‘injury’ crashes in 7 years (0 injury crashes per year);
- 0 total recorded crashes in 7 years (0 total crashes per year).

Despite the excellent recent crash history at this intersection, the additional activity at the intersection, including the additional demand for on-street parking (and the associated reduction in sight distance for road users) will increase the likelihood of crashes occurring at the site.

Arthur Street / Mellifont Street / Butterworth Street Intersection

This is an offset ‘t’ – intersection, with the Mellifont Street and Butterworth Street approach controlled by ‘give way’ signage. During the commuter peak periods there are relatively high volumes of traffic

turning right from Arthur Street into Mellifont Street, and seeking to turn left from Mellifont Street into Arthur Street. These drivers must select gaps in traffic movement to turn into, and there is a risk that a driver will make an error in gap selection and strike a pedestrian (crossing Mellifont Street), or a through vehicle on Arthur Street. There are low volumes of traffic turning into and out of Butterworth Street, but with the relatively high volumes of traffic performing the left turn from Mellifont to Arthur, and the right turn from Arthur to Mellifont, these movements (particularly the right turn from Butterworth to Arthur and the straight movements from Butterworth to Mellifont and Mellifont to Butterworth can be difficult for drivers.

On Street Parking

There is a high turnover of on-street parking on-streets in the immediate vicinity of the subject site. There is a risk of parking / unparking vehicles striking and damaging other parked vehicles.

6. Risk Assessment

A risk ranking exercise was undertaken for both the access to and from the subject site, and on the road network immediately surrounding the subject site.

The risk ranking was undertaken by identifying safety issues, then estimating the “consequence”, and the “likelihood” of that consequence occurring.

Categories of “Likelihood” and “Consequence” were taken from Tables 4.1 and 4.2 of AustRoads Guide to Road Safety, Part 6: Road Safety Audit. These are reproduced as Table 6.1 and 6.2, below.

Frequency	Description
Frequent	Once or more per week
Probable	Once or more per year (but less than once a week)
Occasional	Once every five or ten years
Improbable	Less often than once every ten years

Table 6.1 – Likelihood (Frequency) of Event

Severity	Description	Examples
Catastrophic	Likely multiple deaths	High-speed, multi-vehicle crash on a freeway. Car runs into crowded bus stop. Bus and petrol tanker collide. Collapse of a bridge or tunnel.
Serious	Likely death or serious injury	High or medium-speed vehicle/vehicle collision. High or medium-speed collision with a fixed roadside object. Pedestrian or cyclist struck by a car.
Minor	Likely minor injury	Some low-speed vehicle collisions. Cyclist falls from bicycle at low speed. Left-turn rear-end crash in a slip lane.
Limited	Likely trivial injury or property damage only	Some low-speed vehicle collisions. Pedestrian walks into object (no head injury). Car reverses into post.

Table 6.2 – Likely Severity of Event

The resultant “Risk Rating” was identified from Table 4.3 of AustRoads Guide to Road Safety, Part 6: Road Safety Audit, this is reproduced as Table 6.3, below:

	Frequent	Probable	Occasional	Improbable
Catastrophic	Intolerable	Intolerable	Intolerable	High
Serious	Intolerable	Intolerable	High	Medium
Minor	Intolerable	High	Medium	Low
Limited	High	Medium	Low	Low

Table 6.3 – Risk Rating

The AustRoads Guide to Road Safety also includes Table 4.4 (reproduced below) that suggests treatment approaches for the resultant “Risk Ratings”. This is reproduced at Table 6.4, below:

Risk	Suggested treatment approach
Intolerable	Must be corrected.
High	Should be corrected or the risk significantly reduced, even if the treatment costs is high.
Medium	Should be corrected or the risk significantly reduced, if the treatment cost is moderate, but not high.
Low	Should be corrected or the risk reduced, if the treatment cost is low.

Table 6.4 – Suggested Treatment Approach

7. Risk Summary

Table 7.1 to 7.3 summarises the risk ratings for the existing conditions.

It should be noted that in the ‘consequence and likelihood estimate’ column of these tables, an estimate has been made of the likelihood of an injury or property damage incident involving a road user. This is more detailed than the simple categorisation of frequency as described in Table 6.1, but has been provided to allow an indicative comparison of the relative likelihood of the various incidents occurring.

These estimates are based on observations at the subject site, the review of the existing crash history, and experience reviewing other sites.

<i>Issue</i>	<i>Event</i>	<i>Cause</i>	<i>Consequence</i>	<i>Consequence & Likelihood Estimate</i>	<i>Risk</i>
Hill Street (driveway to 70 Arthur) Vehicles Turning Left into Carpark Queued onto Hill Street.	Footpath obstructed by queued Traffic. Pedestrian slips / trips walking around queued vehicle.	<ul style="list-style-type: none"> Insufficient on-site car parking capacity; 	Injury to pedestrians or cyclists	Limited. Improbable.(estimated as 1 injury per 10+ years).	Low.
	Vehicular Traffic seeking to turn left into Arthur Street queued behind Traffic seeking to turn left into 70 Arthur, then needing to navigate out and around queue, involved in side-swipe / rear end crash	<ul style="list-style-type: none"> Insufficient on-site car parking supply; Lack of dedicated left turn lane for car park access off Hill Street; 	Injury to motorists / cyclists.	Minor Improbable (estimated as 1 injury per 10+ years).	Low.
			Property damage and other financial losses.	Limited Occasional (estimated as 1 property damage incident per 2 to 5 years).	Low.
Hill Street (driveway to 70 Arthur) Vehicles Turning Right into Carpark Queued onto Hill Street	Vehicular Traffic seeking to turn into Hill St from Arthur St strikes queued right turning traffic.	<ul style="list-style-type: none"> Insufficient on-site car parking capacity; Insufficient space for through traffic to pass queued vehicle on Hill Street (See Note A). 	Injury to motorists / cyclists	Minor Occasional (estimated as 1 injury per 2 to 5 years).	Medium.
			Property damage and other financial losses	Limited Occasional (estimated as 1 property damage incident per 1 to 2 years).	Low.
Hill Street (driveway to 70 Arthur) Vehicles Turning Right into Carpark	Vehicular Traffic seeking to turn right into 70 Arthur St strikes pedestrian on footpath.	<ul style="list-style-type: none"> Complex traffic environment may potentially lead to driver error in judging gap. 	Injury to pedestrians or cyclists	Minor Improbable (estimated as 1 injury per 10+ years).	Low.
Hill Street (driveway to 70 Arthur) Vehicles Turning Right into Carpark	Vehicular Traffic seeking to turn right into 70 Arthur St strikes northbound vehicle on Hill Street.	<ul style="list-style-type: none"> Complex traffic environment may potentially lead to driver error in judging gap. 	Injury to motorists / cyclists	Minor Improbable (estimated as 1 injury per 10+ years).	Low.
			Property damage and other financial losses	Limited Occasional (estimated as 1 property damage incident per 5 to 10 years).	Low.

Notes A – Post opening, additional 'No Stopping' restrictions and a 'Keep Clear' zone were installed in Hill Street to reduce this risk. This assessment is following those changes;

Table 7.1 – Risk Ranking (Movements into 70 Arthur Street from Hill Street)

<i>Issue</i>	<i>Event</i>	<i>Cause</i>	<i>Consequence</i>	<i>Consequence & Likelihood Estimate</i>	<i>Risk</i>
70 Arthur Street – Pedestrian and Vehicle Conflict	Pedestrians entering site from Hill St, and pedestrians exiting parked cars walk behind parked cars struck by vehicles reversing into / out of parking spaces.	<ul style="list-style-type: none"> Lack of physical separation of pedestrians and parking / un parking movements (See Note B). 	Injury to pedestrians	Minor Occasional (estimated as 1 injury per 2 to 5 years).	Medium.
70 Arthur Street – Parking and un parking Vehicle Conflict	Parking / un parking vehicles strike other vehicles in carpark.	<ul style="list-style-type: none"> Insufficient on-site car parking capacity; High parking turnover; (See Note B). 	Property damage and other financial losses	Limited Probable (estimated as 1 to 2 property damage incidents per year).	Medium.
Arthur Street (driveway to 70 Arthur St) Vehicles Turning Right from Carpark.	Vehicular Traffic seeking to turn right from 70 Arthur St strikes vehicle on Arthur Street.	<ul style="list-style-type: none"> Complex traffic environment may potentially lead to driver error in judging gap. Lack of convenient alternative route for exiting traffic encourages ignoring of turn ban (See Note C). 	Injury to motorists / cyclists	Minor Occasional (estimated as 1 injury per 5 to 10 years).	Medium.
			Property damage and other financial losses	Limited. Occasional (estimated as 1 property damage incident per 1 to 2 years).	Low.
Arthur Street (driveway to 70 Arthur St) Vehicles Turning Right from Carpark.	Vehicular Traffic seeking to turn right from 70 Arthur St strikes pedestrian island in Arthur Street Median.	<ul style="list-style-type: none"> Complex traffic environment may potentially lead to driver error in judging gap (See Note C). Lack of convenient alternative route for exiting traffic encourages ignoring of turn ban. 	Injury to pedestrians	Minor Occasional (estimated as 1 injury per 5 to 10 years).	Medium.
			Property damage and other financial losses	Limited. Occasional (estimated as 1 property damage incident per 1 to 2 years).	Low.
Arthur Street (driveway to 70 Arthur St) Vehicles Entering Carpark.	Vehicular Traffic entering carpark of 70 Arthur St via the exit driveway strikes exiting vehicle.	<ul style="list-style-type: none"> Complex traffic environment may potentially lead to driver not noticing ;No Entry' signage 	Property damage and other financial losses	Limited. Occasional (estimated as 1 property damage incident per 1 to 2 years).	Low.

Notes B - Post opening, the Hill Street Grocer has staff supervising the on-site carpark at peak times. This assessment is following those changes;

C - Post opening, the Hill Street Grocer added a 'Left Turn Only' signed restriction for traffic exiting their carpark. This assessment is following those changes;

Table 7.2 – Risk Ranking (Movements internal and out of 70 Arthur Street to Arthur Street)

<i>Issue</i>	<i>Event</i>	<i>Cause</i>	<i>Consequence</i>	<i>Consequence & Likelihood Estimate</i>	<i>Risk</i>
Crash at Arthur Street / Hill Street Intersection.	Pedestrian crossing Hill Street struck by vehicle.	<ul style="list-style-type: none"> Complex traffic environment may potentially lead to driver error in judging gap (See Note D). 	Injury to pedestrians or cyclists	Serious Improbable (estimated as 1 injury per 10+ years).	Medium.
	Vehicle seeking to pick gap in traffic strikes other vehicle.	<ul style="list-style-type: none"> Complex traffic environment may potentially lead to driver error in judging gap. 	Injury to motorists / cyclists.	Minor Occasional (estimated as 1 injury per 5 to 10 years).	Medium.
			Property damage and other financial losses.	Limited. Occasional (estimated as 1 property damage incident per 5 to 10 years).	Low.
Crash at Arthur Street / Mellifont Street / Butterworth Street Intersection.	Pedestrian crossing Arthur Street / Butterworth Street / Mellifont Street struck by vehicle.	<ul style="list-style-type: none"> Complex traffic environment may potentially lead to driver error in judging gap (See Note E). 	Injury to pedestrians or cyclists	Serious Improbable (estimated as 1 injury per 10+ years).	Medium.
	Vehicle seeking to pick gap in traffic strikes other vehicle.	<ul style="list-style-type: none"> Complex traffic environment may potentially lead to driver error in judging gap. 	Injury to motorists / cyclists.	Minor. Occasional (estimated as 1 injury per 5 to 10 years).	Medium.
			Property damage and other financial losses.	Limited. Occasional (estimated as 1 property damage incident per 2 to 5 years).	Low.
Hill Street – Arthur Street – Butterworth Street damage to parked cars.	Vehicles parking / unparking collide with other parked vehicles.	<ul style="list-style-type: none"> Insufficient on-site car parking supply. High parking turnover. 	Property damage and other financial losses.	Limited. Probable (estimated as 1 to 2 property damage incidents per year).	Medium.

Notes D – To coincide with opening, an accessible pedestrian crossing point (kerb bulbings and a sheltered median) were installed on Hill Street about 40 metres south of the intersection to reduce this risk. This assessment is following those changes;
E – To coincide with opening, the corner of Mellifont Street / Arthur Street was reconstructed to reduce vehicle speeds, and a pedestrian median was provided on Mellifont Street at Arthur Street to reduce this risk. This assessment is following those changes;

Table 7.3 – Risk Ranking (Surrounds of 70 Arthur Street)

8. Option Discussion

Eight options have been identified for addressing the risks identified in Section 7 of this review.

These are discussed below:

Option A – Extend Yellow ‘No Stopping’ Line (Hill Street Opposite Driveway to 70 Arthur Street);

This is the most straightforward option to address the risks associated with the queuing of right turning vehicles from Hill Street into 70 Arthur Street.

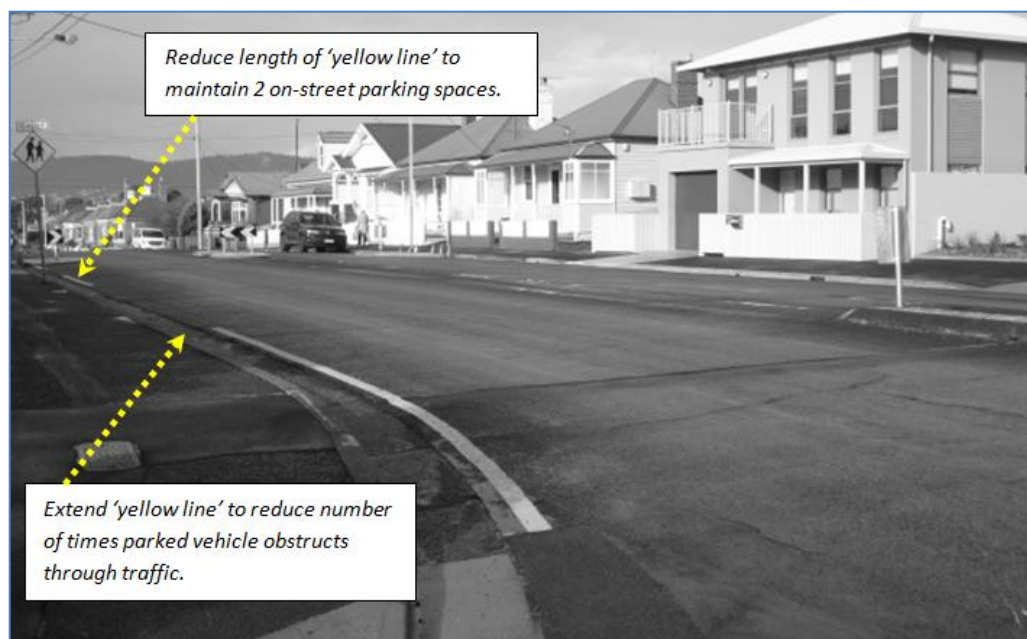


Figure 8.1 – Option A - Yellow Line Extension – Hill Street

Essentially, it extends the length of the existing yellow line on Hill Street to ensure that parked vehicles on the eastern side of Hill Street opposite the 70 Arthur Street driveway are parked further from the Arthur Street intersection. This would reduce the number of incidences when a vehicle waiting to turn right into 70 Arthur Street obstructs a through vehicle on Hill Street because of the presence of a parked car.

Currently there is space for 2 vehicles to park on this section of Hill Street. This parking is heavily used by visitors to the Hill Street Grocer. The existing yellow line could be extended by 1.0 metres, and still leave 11.0 metres for parking (sufficient length for 2 vehicles). If the existing yellow line at the southern end of this parking zone (adjacent to the northernmost driveway to AA Lord Homes) was shortened from 5.5 metres to 2.0 metres, the yellow line could be extended by a total of 4.5 metres while retaining 2 parking spaces.

This treatment is proposed to address the risk of vehicular traffic seeking to turn into Hill St from Arthur St striking queued right turning traffic into 70 Arthur Street.

This treatment would be expected to:

- reduce inconvenience and delay to Hill Street traffic;
- not alter the likelihood of injury to road users;

- slightly reduce the rate of property damage incidents.

Estimated Treatment Cost – Low (<\$1,000).

Option B – Remove Parking (Hill Street Opposite Driveway to 70 Arthur Street);

This option is to address the risks associated with the queuing of right turning vehicles from Hill Street into 70 Arthur Street.



Figure 8.2 – Option B – Parking Ban – Hill Street

Essentially, it extends the length of the existing yellow line on Hill Street the full length between the northernmost driveway to AA Lord Homes and the Arthur Street intersection. This would eliminate incidences of a vehicle waiting to turn right into 70 Arthur Street obstructs a through vehicle on Hill Street because of the presence of a parked car.

Currently there is space for 2 vehicles to park on this section of Hill Street. This parking is heavily used by visitors to the Hill Street Grocer. These spaces would be removed under this option.

This treatment is proposed to address the risk of vehicular traffic seeking to turn into Hill St from Arthur St striking queued right turning traffic into 70 Arthur Street.

This treatment would be expected to:

- reduce inconvenience and delay to Hill Street traffic;
- reduce slightly the likelihood of injury to road users;
- reduce the rate of property damage incidents.

Estimated Treatment Cost – Low (<\$1,000).

Option C – Extend Median Island on Hill Street to Eliminate Right Turn from Hill Street into 70 Arthur St;

This option would address risks associated with:

- the queuing of right turning vehicles from Hill Street into 70 Arthur Street;

- right turns into the site striking road users on the Hill Street footpath;
- right turners into the site striking northbound traffic on Hill Street.



Figure 8.3 – Option C – Median Extension (Turn Ban) – Hill Street

Essentially, it extends the existing median island on Hill Street at the Arthur Street intersection, sufficient distance to prevent right turns into 70 Arthur Street from Hill Street.

It physically prevents this right turning movement from occurring, and the only access into 70 Arthur Street would then be the left turn into the site from Hill Street.

This treatment would be expected to:

- eliminate the risk of injury or property damage associated with right turns from Hill Street into 70 Arthur Street;
- create a potential issue with southbound vehicles on Hill Street seeking to perform a 'u' turn at the end of the median to then perform a left turn into 70 Arthur Street;

Estimated Treatment Cost – Moderate (estimated to be about \$10,000).

Option D – Install Additional Signage to Communicate that Exit from 70 Arthur St to Arthur Street is 'Left Turn Only';

This option is to address the risks associated with a vehicle turning right out of 70 Arthur Street striking a road user on Arthur Street, or a pedestrian or the median island in the centre of Arthur Street. It also addresses the risk of a vehicle entering (the wrong way) and striking an exiting vehicle.



Figure 8.4 – Option D – Install Additional Signage – 70 Arthur Street Driveway Exit



Figure 8.5 – Option D – Install Additional Signage – 70 Arthur Street Driveway Exit

This option is the installation of additional signage to make it clearer to drivers entering and exiting 70 Arthur Street via the driveway to Arthur Street that this driveway is suitable for exit only, and left turn exit movements only.

This treatment would only be expected to be of benefit if some of those drivers who currently enter the driveway, or perform the right turn out of the driveway are doing so in error, because they are unaware that the current signage restricts them from undertaking these movements. Any drivers that currently undertake these movements while aware that they should not be doing are likely to continue to perform these movements regardless of the amount of additional signage installed.

It is expected that this treatment would essentially not significantly change the existing situation. It would however ensure that drivers choosing to perform the right turn out of the driveway (or enter the exit) could not reasonably do so in error.

Estimated Treatment Cost – Low (<\$1,000).

Option E – Extend Median Barrier to Physically Block Right Turn from 70 Arthur Street to Arthur Street;

This option is to address the risks associated with a vehicle turning right out of 70 Arthur Street striking a road user on Arthur Street, or a pedestrian or the median island in the centre of Arthur Street.



Figure 8.6 – Option E – Extend Median Island on Arthur St to Eliminate Right Turn from 70 Arthur St Driveway Exit

It would physically restrict vehicles from performing the right turn to exit 70 Arthur Street.

This treatment would be expected to:

- reduce the number of vehicles turning right from 70 Arthur Street onto Arthur Street;
- reduce the likelihood of injury to road users;
- reduce the likelihood of property damage incidents;
- eliminate the risk of a pedestrian on the pedestrian median island being struck by a right turning vehicle;

The design would need to be carefully considered to allow the median to be extended, without shortening the right turn lane from Arthur Street into Mellifont Street. It is also considered likely that some drivers would continue to undertake the right turn, by turning left, then immediately performing a 'u' turn around the end of the traffic island.

Estimated Treatment Cost – Moderate (estimated to be about \$10,000).

Option F – Install Traffic Signals at Intersection of Hill Street / Arthur Street;

This option is to address the risks associated with a pedestrian crossing Hill Street at the Hill / Arthur Street intersection being struck and injured, and the risk of a turning vehicle at the intersection of Hill Street / Arthur Street making an error in selecting a gap in traffic to turn into and striking another vehicle.

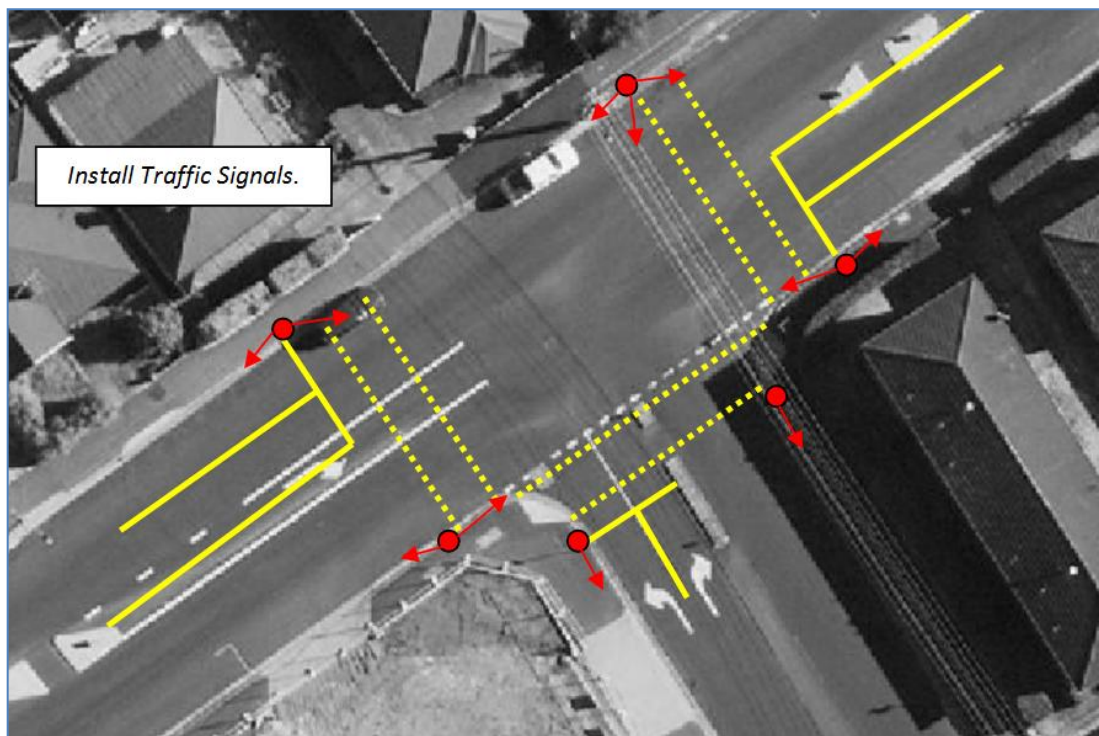


Figure 8.7 – Option F – Install Traffic Signals at Hill Street / Arthur Street

From a road safety perspective, the installation of traffic signals at an unsignalised intersection is a treatment with mixed effectiveness.

The AustRoads Guide to Road Safety – Part 8: Treatment of Crash Locations (2009), summarises data collected by the Australian Transport Safety Bureau for the effectiveness of safety countermeasures on crash rates at intersections.

Installing traffic signals (with no separate turning arrows) at an unsignalised intersection, results in:

- A 70% decrease in the rate of crashes from 'adjacent approaches';
- A 90% increase in the rate of crashes from 'opposing turns';
- A 30% decrease in the rate of crashes where a vehicle 'hits a pedestrian';

As described in Section 4 of this review, prior to the opening of the Hill Street Grocer, there have been no recorded crashes at this intersection in the 7 years since the 2008 upgrade. Similarly, as described in Section 4, the mean rate of casualty crashes per 10 million vehicle movements across Australia is higher at signalised intersections than at standard 3 leg intersections like Hill Street / Arthur Street.

This treatment would be expected to:

- Increase the comfort of pedestrians crossing;
- Have an unknown impact on the rate of crashes at the intersection (but may increase the rate of crashes);
- increase the overall delays for people in vehicles and pedestrians at this intersection;

Estimated Treatment Cost – High (estimated to be about \$300,000).

The report "West Hobart Local Area Traffic Investigation – 22 December 2015" prepared by MRCagney considered pedestrian and vehicular traffic conditions in West Hobart, with a particular focus on

pedestrian conditions on Hill Street between Arthur Street and Patrick Street. The MRCagney report considers the possible installation of traffic signals at the intersection of Hill Street / Arthur Street and the intersection of Hill Street / Patrick Street / Lansdowne Crescent (the MRCagney report identifies that the primary benefit of signalisation is that it would create platoons of traffic along Hill Street between the two sets of signals, and as such provide increased gaps for pedestrians to cross Hill Street between the sites).

It should be noted that the signalisation of Hill Street / Arthur Street (and the concurrent signalisation of Hill Street / Patrick Street / Lansdowne Crescent) was considered the lowest priority of the recommendations provided by MRCagney. To quote from the report:

“This solution will work, although MRCagney consider that other recommendations should be installed first. This is an expensive solution, and it is difficult to see how this could be the area of the City that has the most dire need for signalised intersections.”

The benefits identified in the MRCagney report for the installation of traffic signals at Hill Street / Arthur Street include:

“it will create clear, safe and inviting pedestrian crossings at intersections, and will also platoon traffic and create gaps to cross midblock.”

“the installation of traffic signals would make for a safer environment for cyclists.”

The negative impacts identified in the MRCagney report for the installation of traffic signals at Hill Street / Arthur Street include:

“The design of the intersection if/when signals are introduced must also take into account the current less than ideal access into the Hill Street Grocer off Hill Street. It is likely that intersection traffic will continually be queued beyond the access driveway, effectively preventing people turning right in from Hill Street. While this might not be a bad outcome, it certainly must be examined in detail during the design phase.”

“Signalisation with a view towards optimising pedestrian utility will, as shown, come at the expense of some traffic delay.”

It is difficult to assess the impact of signalisation on pedestrian delay.....however....during off-peak periods a small increase in delay may be typical, given the relatively low traffic volumes on Hill Street.”

The MRCagney report modelled the impact of signalising the intersection of Hill Street / Arthur Street, and found that signalisation increased the delays to road users (motorised vehicles, cyclists, public transport) from about 5.0 seconds per vehicle to about 20 seconds per vehicle during peak times.

At its meeting of 7 March 2016, the Hobart City Council considered the MRCagney report, and resolved to pursue a number of its recommendations. While not one of the MRCagney recommendations, Council also resolved that Council approach the State Government regarding the installation of traffic signals at the intersection of Arthur and Hill Streets, and that consideration be given to the submission of an application for the 2016 round of Blackspot Program Funding, to support the installation of signals at this location.

Option G – Install Roundabout at Intersection of Hill Street / Arthur Street;

This option is to address the risks associated with a pedestrian crossing Hill Street at the Hill / Arthur Street intersection being struck and injured, and the risk of a turning vehicle at the intersection of Hill Street / Arthur Street making an error in selecting a gap in traffic to turn into and striking another vehicle.

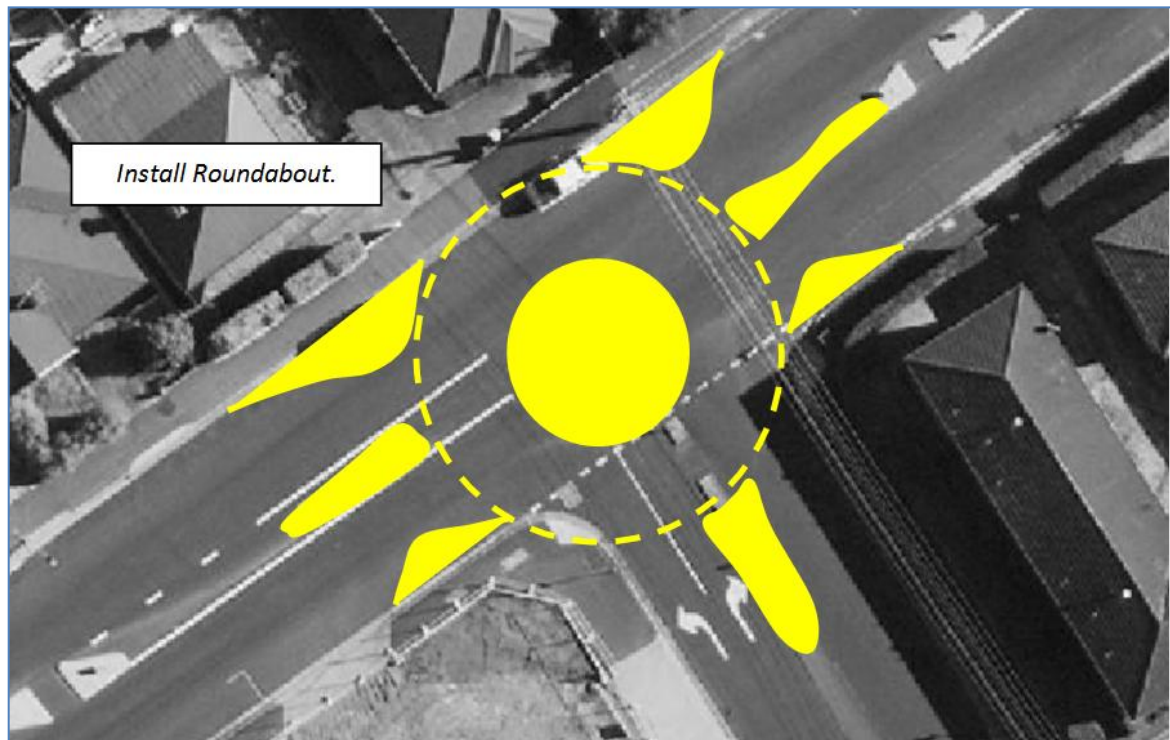


Figure 8.8 – Option G – Install Roundabout at Hill Street / Arthur Street

From a road safety perspective, the installation of roundabouts at an unsignalised intersection is a treatment with generally positive impacts.

The AustRoads Guide to Road Safety – Part 8: Treatment of Crash Locations (2009), summarises data collected by the Australian Transport Safety Bureau for the effectiveness of safety countermeasures on crash rates at intersections.

Installing a roundabout at an unsignalised intersection, results in:

- A 70% decrease in the rate of crashes from ‘adjacent approaches’;
- A 20% increase in the rate of ‘rear-end’ crashes;
- No change in the rate of crashes where a vehicle ‘hits a pedestrian’;

As described in Section 4 of this review, prior to the opening of the Hill Street Grocer, there have been no recorded crashes at this intersection in the 7 years since the 2008 upgrade.

This treatment would be expected to:

- Have an unknown but marginal impact on pedestrian safety and comfort;
- Have an unknown impact on the rate of crashes at the intersection (but may increase the rate of crashes);
- increase the overall delays for people in vehicles and pedestrians at this intersection;

Estimated Treatment Cost – High (estimated to be about \$300,000).

It should be noted that it would be likely that the design of a roundabout at this location (with relatively constrained widths available, and a need to provide for the movement of Metro Buses) may be difficult. Detailed design work would need to be undertaken to determine if a suitable design can be implemented.

The report “West Hobart Local Area Traffic Investigation – 22 December 2015” prepared by MRCagney considered pedestrian and vehicular traffic conditions in West Hobart, with a particular focus on pedestrian conditions on Hill Street between Arthur Street and Patrick Street. The report discussed existing roundabouts on Hill Street as follows:

“These roundabouts improve traffic flow, but offer no defined pedestrian crossings. Roundabouts also inherently create fewer traffic flow interruptions for pedestrians to utilise, and do not require vehicles to yield to pedestrians. It makes it frustratingly difficult to cross Hill Street despite the relatively low traffic volumes.”

“Roundabouts offer little safety for cyclists and are often the scene of accidents involving cyclists and motorists.”

Notwithstanding the MRCagney report, the author is of the opinion that small single lane roundabouts in residential areas are very effective Local Area Traffic Management devices, that increase the safety of all road users (including pedestrians and cyclists) by more effectively reducing the speed of vehicular traffic on all approaches and departures than would traffic signals, and by simplifying the driving task for cars, bikes and public transport.

Option H – Eliminate Turning Movements at Butterworth St / Arthur St / Mellifont St

This option is to address the risks associated with turning movements where a driver at the intersection of Butterworth Street / Arthur Street / Mellifont Street makes an error in selecting a gap in traffic to turn into and striking another vehicle.



Figure 8.9 – Option H – Make Butterworth Street ‘One Way’

This option is to simplify the intersection by removing three of the twelve turning movements at the intersection (the left and right turn out of Butterworth Street, and the straight movement from Butterworth Street into Mellifont Street). Essentially this makes Butterworth Street a ‘one way’ street operating from Arthur Street to Hamilton Street.

The AustRoads Guide to Road Safety – Part 8: Treatment of Crash Locations (2009), summarises data collected by the Australian Transport Safety Bureau for the effectiveness of safety countermeasures on crash rates at intersections.

The closest standard ‘countermeasure’ described is ‘street closure (one leg of cross intersection) which, results in:

- A 50% decrease in the rate of crashes from ‘adjacent approaches’;
- A 50% decrease in the rate of crashes from ‘opposing turns’;
- A 50% decrease in the rate of crashes where a vehicle ‘hits a pedestrian’;
- A 10% decrease in the rate of ‘loss of control on L or R turns’ crashes;

As described in Section 4 of this review, prior to the opening of the Hill Street Grocer, there have been 8 recorded crashes at this intersection in the 7 years since the 2008 upgrade. Six of these 8 crashes were ‘rear end’ type crashes, that have been treated by the reconstruction of the kerb line on the northeastern corner of the intersection in 2015.

This treatment would be expected to:

- Reduce slightly the rate of crashes at the intersection;
- Inconvenience, and increase the travel times, for residents in Butterworth Street that currently exit Butterworth Street at Arthur Street;

Estimated Treatment Cost – Moderate (estimated to be about \$10,000).

It is worth noting that a roundabout may also be an appropriate treatment at this location, however the design of a roundabout at this location (with relatively constrained widths available, and need to provide for the movement of Metro Buses, and the slightly offset of the intersection legs) may be difficult.

9. Revised Risk Assessment

Tables 9.1 to 9.3 take the initial risk assessment from Section 7, and reconsider the identified risks if each of the various options discussed in Section 8 of this report were applied.

Where a treatment option has been proposed, this option is listed. The 'Consequence and Likelihood Estimate' is then revised, and if it is considered that the treatment would alter this estimate, the change is highlighted in red text.

The risk is then re-assessed and revised based on the new consequence and likelihood estimate.

A very approximate cost of the treatment is then listed in the 'Cost' column of each table, and categorised as either 'low', 'medium', or 'high'.

<i>Issue</i>	<i>Event</i>	<i>Consequence</i>	<i>Consequence & Likelihood Estimate</i>	<i>Risk</i>	<i>Treatment Option</i>	<i>Revised Consequence & Likelihood Estimate</i>	<i>Revised Risk</i>	<i>Cost</i>
Hill Street (driveway to 70 Arthur) Vehicles Turning Left into Carpark Queued onto Hill Street.	Footpath obstructed by queued Traffic. Pedestrian slips / trips walking around queued vehicle or is struck by northbound vehicle on Hill Street.	Injury to pedestrians or cyclists	Limited. Improbable.(estimated as 1 injury per 10+ years).	Low.	No Treatment Proposed		Low	
	Vehicular Traffic seeking to turn left into Arthur Street queued behind Traffic seeking to turn left into 70 Arthur, then needing to navigate out and around queue, involved in side-swipe / rear end crash	Injury to motorists / cyclists.	Minor Improbable (estimated as 1 injury per 10+ years).	Low.	No Treatment Proposed		Low	
		Property damage and other financial losses.	Limited Occasional (estimated as 1 property damage incident per 2 to 5 years).	Low.	No Treatment Proposed		Low	
Hill Street (driveway to 70 Arthur) Vehicles Turning Right into Carpark Queued onto Hill Street	Vehicular Traffic seeking to turn into Hill St from Arthur St strikes queued right turning traffic.	Injury to motorists / cyclists	Minor Occasional (estimated as 1 injury per 2 to 5 years).	Medium.	A – Extend Yellow Line	Minor, Occasional (estimated as 1 injury per 2 to 5 years)	Medium	Low (<\$1k)
					B – Remove Parking	Minor, Occasional (estimated as 1 injury per 5 to 10 years)	Medium	Low (<\$1k)
					C – Extend Median	Eliminated. Care required to ensure safety issue does not migrate.	Eliminated	Moderate (\$10k)
	Property damage and other financial losses	Limited Occasional (estimated as 1 property damage incident per 1 to 2 years).	Low.		A – Extend Yellow Line	Limited, Occasional (estimated as 1 property damage incident per 2 to 5 years)	Low	Low (<\$1k)
					B – Remove Parking	Limited, Occasional (estimated as 1 property damage incident per 5 to 10 years)	Low	Low (<\$1k)
					C – Extend Median	Eliminated. Care required to ensure safety issue does not migrate.	Eliminated	Moderate (\$10k)
Hill Street (driveway to 70 Arthur) Vehicles Turning Right into Carpark	Vehicular Traffic seeking to turn right into 70 Arthur St strikes pedestrian on footpath.	Injury to pedestrians or cyclists	Minor Improbable (estimated as 1 injury per 10+ years).	Low.	C – Extend Median	Eliminated. Care required to ensure safety issue does not migrate.	Eliminated	Moderate (\$10k)
Hill Street (driveway to 70 Arthur) Vehicles Turning Right into Carpark	Vehicular Traffic seeking to turn right into 70 Arthur St strikes northbound vehicle on Hill Street.	Injury to motorists / cyclists	Minor Improbable (estimated as 1 injury per 10+ years).	Low.	C – Extend Median	Eliminated. Care required to ensure safety issue does not migrate.	Eliminated	Moderate (\$10k)
		Property damage and other financial losses	Limited Occasional (estimated as 1 property damage incident per 5 to 10 years).	Low.	C – Extend Median	Eliminated. Care required to ensure safety issue does not migrate.	Eliminated	Moderate (\$10k)

Table 9.1 – Revised Risk Rankings With Proposed Treatments – Driveway to Hill Street

Issue	Event	Consequence	Consequence & Likelihood Estimate	Risk	Treatment	Revised Consequence & Likelihood Estimate	Revised Risk	Cost
70 Arthur Street – Pedestrian and Vehicle Conflict	Pedestrians entering site from Hill St, and pedestrians exiting parked cars walk behind parked cars struck by vehicles reversing into / out of parking spaces.	Injury to pedestrians	Minor Occasional (estimated as 1 injury per 2 to 5 years).	Medium.	No Treatment Proposed		Medium.	
70 Arthur Street – Parking and un parking Vehicle Conflict	Parking / unparking vehicles strike other vehicles in carpark.	Property damage and other financial losses	Limited Probable (estimated as 1 to 2 property damage incidents per year).	Medium.	No Treatment Proposed		Medium	
Arthur Street (driveway to 70 Arthur St) Vehicles Turning Right from Carpark.	Vehicular Traffic seeking to turn right from 70 Arthur St strikes vehicle on Arthur Street.	Injury to motorists / cyclists	Minor Occasional (estimated as 1 injury per 5 to 10 years).	Medium.	D – Additional Signage	Minor Occasional (estimated as 1 injury per 5 to 10 years).	Medium	Low (<\$1k)
					E – Provide Median Barrier	Minor Improbable (estimated as 1 injury per 10+ years).	Low	Moderate (\$10k)
		Property damage and other financial losses	Limited. Occasional (estimated as 1 property damage incident per 1 to 2 years).	Low.	D – Additional Signage	Limited. Occasional (est as 1 property damage incident per 1 to 2 years).	Low	Low (<\$1k)
					E – Provide Median Barrier	Limited. Occasional (est as 1 property damage incident per 5 to 10 years).	Low	Moderate (\$10k)
Arthur Street (driveway to 70 Arthur St) Vehicles Turning Right from Carpark.	Vehicular Traffic seeking to turn right from 70 Arthur St strikes pedestrian island in Arthur Street Median.	Injury to pedestrians	Minor Occasional (estimated as 1 injury per 5 to 10 years).	Medium.	D – Additional Signage	Minor Occasional (est as 1 injury per 5 to 10 years).	Medium	Low (<\$1k)
					E – Provide Median Barrier	Eliminated.	Eliminated	Moderate (\$10k)
		Property damage and other financial losses	Limited. Occasional (estimated as 1 property damage incident per 1 to 2 years).	Low.	D – Additional Signage	Limited. Occasional (est as 1 property damage incident per 1 to 2 years).	Low	Low (<\$1k)
					E – Provide Median Barrier	Eliminated.	Eliminated	Moderate (\$10k)
Arthur Street (driveway to 70 Arthur St) Vehicles Entering Carpark.	Vehicular Traffic entering carpark of 70 Arthur St via the exit driveway strikes exiting vehicle.	Property damage and other financial losses	Limited. Occasional (estimated as 1 property damage incident per 2 to 5 years).	Low.	D – Additional Signage	Limited. Occasional (estimated as 1 property damage incident per 2 to 5 years).	Low	Low (<\$1k)

Table 9.2 – Revised Risk Rankings With Proposed Treatments – 70 Arthur Street & Driveway to Arthur Street

Issue	Event	Consequence	Consequence & Likelihood Estimate	Risk	Treatment	Revised Consequence & Likelihood Estimate	Revised Risk	Cost
Crash at Arthur Street / Hill Street Intersection.	Pedestrian crossing Hill Street struck by vehicle.	Injury to pedestrians or cyclists	Serious Improbable (estimated as 1 injury per 10+ years).	Medium.	No Treatment		Medium	
					F – Install Traffic Signals	Serious Improbable (est as 1 injury per 10+ years).	Medium	High (\$300k)
					G – Install Roundabout	Minor Improbable (est as 1 injury per 10+ years).	Low	High (\$300k)
	Vehicle seeking to pick gap in traffic strikes other vehicle.	Injury to motorists / cyclists.	Minor Occasional (estimated as 1 injury per 5 to 10 years).	Medium.	No Treatment		Medium	
					F – Install Traffic Signals	Minor Occasional (est as 1 injury per 5 to 10 years).	Medium	High (\$300k)
					G – Install Roundabout	Minor Improbable (est as 1 injury per 10+ years).	Low	High (\$300k)
		Property damage and other financial losses.	Limited. Occasional (estimated as 1 property damage incident per 5 to 10 years).	Low.	No Treatment		Low	
					F – Install Traffic Signals	Limited. Occasional (est as 1 property damage incident per 1 to 2 years).	Low	High (\$300k)
					G – Install Roundabout	Limited. Occasional (est as 1 property damage incident per 2 to 5 years).	Low	High (\$300k)
Crash at Arthur Street / Mellifont Street / Butterworth Street Intersection.	Pedestrian crossing Arthur Street / Butterworth Street / Mellifont Street struck by vehicle.	Injury to pedestrians or cyclists	Serious Improbable (estimated as 1 injury per 10+ years).	Medium.	No Treatment		Medium	
					H – Butterworth St One Way	Serious Improbable (estimated as 1 injury per 10+ years).	Medium	Moderate (\$10k)
	Vehicle seeking to pick gap in traffic strikes other vehicle.	Injury to motorists / cyclists.	Minor. Occasional (estimated as 1 injury per 5 to 10 years).	Medium.	No Treatment		Medium	
					H - Butterworth St One Way	Minor. Occasional (estimated as 1 injury per 5 to 10 years).	Medium	Moderate (\$10k)
		Property damage and other financial losses.	Limited. Occasional (estimated as 1 property damage incident per 2 to 5 years).	Low.	No Treatment		Low	
					H - Butterworth St One Way	Limited. Occasional (estimated as 1 property damage incident per 2 to 5 years).	Low	Moderate (\$10k)
Hill Street – Arthur Street – Butterworth Street damage to parked cars.	Vehicles parking / unparking collide with other parked vehicles.	Property damage and other financial losses.	Limited. Probable (estimated as 1 to 2 property damage incidents per year).	Medium.	No Treatment Proposed.		Medium.	

Table 9.3 – Revised Risk Rankings With Proposed Treatments – Site Surrounds

10. Scope for Further Work

This review is a relatively straightforward review of existing conditions, and identification of issues and potential countermeasures. In terms of additional work that could be undertaken:

The behaviour of road users in and around the subject site would be expected to continue to alter and adjust for about three months following the changes to the site (including the opening of the Hill Street Grocer) in mid May 2015. Regardless of what changes (if any) are made, it would be beneficial to review the crash history in the surrounds of the subject site, to compare the crash rates prior to opening, with the crash rates following the initial three month adaption period:

- The crash history from 1 September 2015 (after the three month adaption period of the new arrangements), could be compared to the crash history for the period prior to the new arrangements (from 1/7/2008 to 1/5/2015).

A more accurate cost / benefit analysis could be undertaken for the high cost options (the installation of roundabouts / traffic signals by:

- Undertaking a feasibility design of the installation of roundabouts / traffic signals, to allow a more accurate cost estimate to be prepared;
- Undertaking modelling / review of the operation of the intersections with traffic signals / roundabouts in place, to determine the impact of the changes on travel times / congestion (and convert this to a cost to the community).

11. Preliminary Recommendations

As described previously, the information considered during the preparation of this report is relatively simplistic. The author has derived preliminary recommendations, based on that information.

The preliminary recommendations are:

IMMEDIATE

- The key stakeholders (AA Lord Homes and the 'Hill Street Grocer') be consulted about the potential removal of the on-street parking on Hill Street between the Arthur Street intersection and the northernmost driveway to AA Lord Homes. Depending on the results of this consultation, the parking should either be adjusted (Treatment A), or removed (Treatment B).
- The 'Hill Street Grocer' be written to, with the suggestion that they (or the property owner) add additional signage on the property (Treatment D).
- A design for the installation of an extended median on Hill Street and Arthur Street, to prevent right turns into and out of the 'Hill Street Grocer' site be prepared (Treatment C & E).

IN THE CURRENT BUDGET PERIOD

- If a practical means of extending the median island on Arthur Street to prevent right turn movements out of the 'Hill Street Grocer' site was developed (without negatively impacting the right turn lane from Arthur Street into Mellifont Street), this treatment be installed (Treatment E).
- A review of the effectiveness of Treatment A / B (the removal of parking on Hill Street) on managing the risks associated with the right turns into the site from Hill Street be conducted. If it is determined that further treatment is required due to safety concerns, the 'Hill Street Grocer'

be consulted about the potential extension of the median island to remove right turn movements, and depending on the results of the consultation the median be extended (Treatment C).

- A concept design be prepared for the installation of a roundabout at the intersection of Hill Street / Arthur Street, and in the event that a roundabout that can cater for Metro Buses and other road users is feasible, a detailed design and costing be prepared (Treatment G).

AS TIME & FUNDS ALLOW

- A roundabout be installed at the intersection of Hill Street / Arthur Street (Treatment G).

12. Appendix A – Existing Conditions Survey Results Summary Table

Pedestrian and Vehicle Movement Survey - Arthur Street (Butterworth to Hill St) - Post Opening of 'Hill Street Grocer' at 70 Arthur St																				
Date: Tue 28 July 2015										Surveyor: O Gervasoni										
Weather: Fine, Cool.																				
From	To	Pedestrians					Hill Street Grocer Exit				Arthur St / Mellifont St / Butterworth St (Butterworth Movements Only)						Total			
		Crossing Butterworth @ Arthur	Crossing Arthur @ Crossing West of Buttworth	Crossing Mellifont @ Arthur	Crossing Arthur, between Butterworth & #85	Crossing Arthur @ #85	Left into Arthur - Then Left into Butterworth	Left into Arthur - Then Straight on Arthur	Left into Arthur - Then Right into Mellifont	Right into Arthur	Left into Arthur	Straight to Mellifont	Right to Arthur	Right to Butterworth	Straight to Butterworth	Left to Butterworth (exc vehicles from Grocer)	Vehicles Exiting Grocer Carpark	Other Vehicle Movements	Pedestrians	All Movements
											Butterworth Street			Arthur Street	Mellifont Street	Arthur Street				
2:30	2:44	5	7	5		2	5	2	5	8						2	20	2	19	41
245	259	6	4			7	7	1	1	9					3	2	18	5	17	40
300	314	4	3		2	3	4		8	3		1			5	4	15	10	12	37
315	329	8	3	6	1	10	4	1	8	6	1					8	19	9	28	56
330	344	3	1			9	6	2	9	2	1	2				3	19	6	13	38
345	359	7	6			2	5	1	8	4	1		1		1	2	18	5	15	38
400	414	7	5			9	5		7	4	1		1		2	5	16	9	21	46
415	429	6	9	1	1	7	4	1	12	6					4	4	23	8	24	55
430	444	4	5	1	1	7	3		8	8			2		1	2	19	5	18	42
445	459	4	6		1	8	7	3	9	6		1			1	3	25	5	19	49
500	514	8	5			10	9	1	5	6	1	1				3	21	5	23	49
515	529	14	6			5	13	1	9	2	1	4	1		1	8	25	15	25	65
530	544	7	8	2		5	8		10	5	1		1		1	4	23	7	22	52
5:45	5:59	7	5		2	11	2	2	14	11		2	3			6	29	11	25	65
14:30	18:00	90	73	15	8	95	82	15	113	80	7	11	9	0	19	56	290	102	281	673
16:45	17:45	33	25	2	1	28	37	5	33	19	3	6	2	0	3	18	94	32	89	215
17:00	18:00	36	24	2	2	31	32	4	38	24	3	7	5	0	2	21	98	38	95	231
Notes:																				
4 vehicles turned left into the Hill St Grocer Exit. 1 vehicle turned right into the Hill St Grocer Exit. A significant volume of pedestrians use Butterworth St to access the Hill St Grocer. Of the vehicle doing the "illegal" right turn out of the Grocer Exit, 42% continued straight down Arthur, 58% turned right into Hill St.																				

Pedestrian and Vehicle Movement Survey - Hill Street (Arthur to #130 Hill St) - Post Opening of 'Hill Street Grocer' at 70 Arthur St																	
Date: Tue 21 July 2015						Surveyor: O Gervasoni (2:30 to 4:30), A Moore (4:30 to 6pm)											
Weather: Fine, Cool, Overcast																	
From	To	Pedestrians Crossing Hill St			Hill Street		Hill St (Right Turn Into Grocer Only)							Total			
		@ Ped Crossing @#130	Between #130 & Arthur	@ Arthur St	Vehicles Left into Grocer	Total Vehicles Right into Grocer	Turn with No Delay	Turn with Delay by Queue in Carpark	Turn with Delay by Peds on Fpath	Turn with Delay by NorthB Q on Hill St	Turn with Delay by NorthB Traffic on Hill St	Vehicles Queued in Position that blocked Southbound Traffic			Vehicles into Carpark	Pedestrians Crossing Hill St	All Movements
												If Arthur St Parking Occupied	If Arthur St Parking Banned	No Times Q into Arthur St			
2:30	2:44	1		1	6	4	3				1				10	2	12
245	259	2	2		11	5	5								16	4	20
300	314	6		3	16	3		1		1	1	2		1	19	9	28
315	329	5	4	5	11	6	3	3				1		1	17	14	31
330	344	5		5	16	4	3				1				20	10	30
345	359	1	1		13	7	6	1				1			20	2	22
400	414	4		1	18	5	3	1		1					23	5	28
415	429		1	2	12	5	2				3	2			17	3	20
430	444	2		4	14	6	2	3			1	1		1	20	6	26
445	459	5	2	1	21	8	4	1			3	1			29	8	37
500	514	4	3		16	7	4				3				23	7	30
515	529	8	5	1	18	6	2	1			3				24	14	38
530	544	4	3	2	19	5	2	1			2	1			24	9	33
5:45	5:59	1	4	1	17	6	3				3	2	1		23	6	29
14:30	18:00	48	25	26	208	77	42	12	0	2	21	11	1	3	285	99	384
16:45	17:45	21	13	4	74	26	12	3	0	0	11	2	0	0	100	38	138
17:00	18:00	17	15	4	70	24	11	2	0	0	11	3	1	0	94	36	130
Notes: 19 of the 25 peds who crossed Hill St between #130 and Arthur had parked on Hill St opposite site. Busiest Hour, for movements (vehicles into carpark, and pedestrians crossing Hill St) was 4:45-5:45																	
Other Notes. Left turner into the carpark were observed to at times straddle the two approach lanes. When carpark access blocked by queued cars inside carpark, this can lead to these vehicles obstructing through traffic. Similarly, when left turners into the carpark queue onto Hill Street, through traffic seeking to turn left at the intersection can be stuck behind these vehicles (being unsure if they are turning into the carpark or Hill St). This tends to resolve by vehicles overtaking after a short delay. It was observed that right turners tend to often avoid making the right turn if they can see the car park is full (or there is a queue in the driveway that would not allow them to turn right and enter the site). Queued vehicles from the car park do at times block the footpath.																	

13. Appendix B – Crash History Summary Table

Date	Time	Severity	Crash Type	Location	Factors
Mellifont St / Hill St / Butterworth St					
16/05/2000	22:36	Property Damage	160 Parked	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Inexperience
28/06/2000	8:20	Property Damage	130 Vehicles in same lane/ rear end	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Inattentiveness, Inattentiveness
02/09/2000	14:15	Minor	110 Cross traffic	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Other
27/10/2000	18:30	Property Damage	160 Parked	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Excessive speed for the conditions / circumstances
18/05/2001	18:30	Property Damage	130 Vehicles in same lane/ rear end	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Other
03/11/2002	11:30	Property Damage	131 Vehicles in same lane/ left rear	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Inattentiveness
12/01/2003	17:30	Property Damage	121 Right through	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Inattentiveness
25/08/2003	8:40	Minor	130 Vehicles in same lane/ rear end	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Inattentiveness
27/09/2003	13:25	Property Damage	164 Permanent obstruction on carriageway	Mellifont Street, West Hobart, Hobart	Other, Excessive speed for the conditions / circumstances
22/05/2004	15:05	Property Damage	130 Vehicles in same lane/ rear end	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Inattentiveness
11/02/2005	8:30	Property Damage	131 Vehicles in same lane/ left rear	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Inattentiveness
21/05/2005	18:15	Property Damage	130 Vehicles in same lane/ rear end	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Other
14/06/2005	8:25	Not known	130 Vehicles in same lane/ rear end	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Inattentiveness
06/05/2009	8:00	Minor	130 Vehicles in same lane/ rear end	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Inattentiveness
14/04/2010	8:30	Property Damage	130 Vehicles in same lane/ rear end	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Inattentiveness
18/05/2011	8:08	Property Damage	130 Vehicles in same lane/ rear end	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Excessive speed for the conditions / circumstances
12/08/2011	15:00	Property Damage	131 Vehicles in same lane/ left rear	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Inattentiveness
30/01/2014	8:05	Property Damage	131 Vehicles in same lane/ left rear	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Public Reported
22/03/2014	0:20	Property Damage	181 Off right bend into object/parked vehicle	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Excessive speed for the conditions / circumstances
24/05/2014	17:50	Property Damage	130 Vehicles in same lane/ rear end	Mellifont Street, West Hobart, Hobart	Inattentiveness
06/06/2015	14:53	Minor	111 Right far	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Fail to give way
27/08/2015	9:15	Property Damage	121 Right through	Intersection of Arthur Street and Butterworth Street and Mellifont Street, West Hobart, Hobart	Turning without care. Fail to give way
Arthur St (between Mellifont St & Hill St)					
01/06/2010	10:10	Property Damage	133 Vehicles in parallel lane/ lane side swipe	Arthur Street, West Hobart, Hobart	Improper overtaking, Turning without care, Fail to give way
20/11/2015	15:30	Property Damage	147 Emerging from driveway or lane	Arthur Street, West Hobart, Hobart	Fail to give way
Arthur St / Hill St					
14/09/2000	8:35	Minor	113 Right near	Intersection of Arthur Street and Hill Street, West Hobart, Hobart	Fail to give way
27/10/2000	19:00	Property Damage	110 Cross traffic	Intersection of Arthur Street and Hill Street, West Hobart, Hobart	Fail to give way
19/04/2001	17:07	Property Damage	145 Reversing	Intersection of Arthur Street and Hill Street, West Hobart, Hobart	Inattentiveness, Reversing without care
22/12/2001	22:20	Minor	111 Right far	Intersection of Arthur Street and Hill Street, West Hobart, Hobart	Inattentiveness
07/04/2004	10:00	Property Damage	110 Cross traffic	Intersection of Arthur Street and Hill Street, West Hobart, Hobart	Fail to give way
05/04/2006	16:30	Property Damage	132 Vehicles in same lane/ right rear	Intersection of Arthur Street and Hill Street, West Hobart, Hobart	Inattentiveness, Distraction - in vehicle
29/11/2007	17:08	Minor	130 Vehicles in same lane/ rear end	Intersection of Arthur Street and Hill Street, West Hobart, Hobart	Inattentiveness
22/08/2015	11:35	Minor	130 Vehicles in same lane/ rear end	Intersection of Arthur Street and Hill Street, West Hobart, Hobart	Inattentiveness
Hill St (between Arthur & Hamilton)					
15/04/2003	22:06	Not known	160 Parked	Hill Street, West Hobart, Hobart	null
19/06/2004	16:40	Property Damage	140 U turn	Hill Street, West Hobart, Hobart	Inattentiveness
14/05/2011	1:39	Not known	173 Right off carriageway into object/parked vehicle	Hill Street, West Hobart, Hobart	Inexperience, Excessive speed for the conditions / circumstances
12/08/2015	11:20	Property Damage	130 Vehicles in same lane/ rear end	Hill Street, West Hobart, Hobart	null

Note, data was extracted from database on 19/4/2016.

**CITY INFRASTRUCTURE COMMITTEE AGENDA
(OPEN PORTION OF THE MEETING)
27/4/2016**

**12. MUNICIPAL ASSOCIATION OF VICTORIA (MAV) AND VICTORIA
WALKS - SMART URBAN FUTURES NATIONAL CONFERENCE
MELBOURNE 22 & 23 MARCH 2016 – FILE REF: 13-2-22**

12x's

Report by Alderman Thomas and Alderman Reynolds of April 2016 regarding the Municipal Association of Victoria (MAV) and Victoria Walks Smart Urban Futures National Conference held in Melbourne on 22-23 March 2016.

DELEGATION: Committee

Smart Urban Futures Conference

**Report from Alderman Damon Thomas and Alderman Anna Reynolds
Melbourne, 22 - 23 March 2016**

City design and the core work of local government is being reframed to respond to the new challenges of our time – an ageing population, an epidemic of obesity, the need for cities to compete globally for creative talent and the threat of climate change are all the new strategic drivers for urban design. The built environment of our cities is pivotal for creating health communities to manage the crippling costs of health treatment and an ageing population.

Hobart is attracting retirees and migrants from around Australia and internationally, seeking a new future in a capital city offering all of the services of the mainland capital but with a slower and restful pace of life. Hobart is also competing with a number of cities hoping to attract students and young creative professionals.

Council has a responsibility and an ability to making Hobart a better place to live for our ageing community, but there are many more tools that we can use to take a more proactive role in driving change. Our ability to drive this change is centred on getting our community moving – both for recreation and for active transport.

Our challenge is to drive this change when the city also has limited public transport options and a high dependence on cars. These two factors have defined our city's development and continues to make our work to create an active community somewhat challenging.

An active and walkable city is the new benchmark for cities that hope to position themselves as attractive places to work and do business. There is much more work needed to change the mindset of how people intend to travel from one part of the city to another for work or recreation. Council needs to be even more proactive and focused in its transport and urban design efforts to help get the community moving.

Hobart has been promoted as an exceptional small city of the world which is attracting increases in tourist numbers and more people considering a move to Hobart. The conference also provided good ideas for how to deal with traffic congestion, which may be a result of finally reaching a 'tipping point' of a growing city that has not put enough innovative thought into modern approaches to transport.

The conference was organised by Victoria Walks and the Metropolitan Association of Victoria in recognition of the vital role local government plays in helping residents to balance lifestyle and health with a strong focus on place making and active transport, in particular walking.

This conference was a wake-up call for cities, like Hobart, which have an ideal lifestyle but are challenged by the rapidly ageing demography, and underutilised public transport system, a lack of public transport alternatives and other factors which deter people from changing their car dependent attitudes.

The conference under lined the importance of the following basic principles:

1. The importance of creating and maintaining an active transport strategy - including the provision of quality on road and off road bicycle and pedestrian infrastructure and aligning Council's planning scheme so that it properly incorporates and recognises the role of active transport;
2. Putting strategic priority on improving the environment for walking, cycling and public transport, including developing a transport strategy which places walking at the top of the hierarchy of modes to be supported;

3. Develop targets for the percentage of people walking and cycling and actively promote these practices;
4. Implementing more peak demand measures before making infrastructure changes that lock in and make car dependence worse. This means managing and changing the expectations of people being able to drive one person per car and optimising the transport network by providing all users with guidance on modes to use and the most appropriate routes available;
5. Introducing a model of state and local partnership, combined with encouraging neighbourhood community voices to become part of determining creative place making and transport strategies;
6. Encouraging higher densities within 10-15 minutes' walk of the city or neighbourhood hubs;
7. Land use policy so that housing growth results in the development of a network of complete local neighbourhoods promoting convenient living options.

Another important observation from this conference was that these ideas are not only being promoted by wealthy, inner city capital cities – many speakers at the conference were from relatively small Councils that were taking small steps but making a big difference in a community's health and quality of life.

There were 3 key themes that we took from the conference of interest for Hobart.

1. An Active Ageing Community

Key learning's

- Dr Bob Sallis, from the [Every Body Walk Movement](#) - was the keynote speaker and is a pioneer of the concept that exercise is indeed medicine – as he said *"If walking was a pill, it would be the new wonder drug"*. He presented compelling medical evidence of the health benefits of even modest amounts of walking.
- To be a city renowned for its lifestyle and the health and well-being of its population, there are a number of simple yet effective steps that can be taken in leadership and collaboration. It is more cost effective to take measures to assist people to maintain an active lifestyle before potentially bad habits or an activity lead to premature ageing and disability.
- Hobart could like the City of Bendigo undertake an *Active Living Census*, using data to shape and build the narrative of needing to become a more active city. Well timed and well researched data can build consensus and create momentum for changes to the city's policies in the area of health and active transport. In Bendigo they drove strategic objectives with good local information and tracked their performance against targets. The data also helped them apply for more grants to fund active transport and active ageing initiatives.

Case Studies

- [The Age-friendly Streets Toolkit for Victoria](#) helps Councils to focus on making local shopping streets more resilient by being easier and more appealing for older people. This is important because older people can often only get to the local shops. There is a mutual inter-dependence - shop-keepers need older people, as they use shopping precincts in different ways and at different times of the day. Councils need to make sure local shopping streets are accessible and review what streetscape features support people walk into a shopping centre most days?

- Toolkit helps create 3 essentials for older people - places of peace (not too noisy), places of rest (places to sit), places of belonging.
- Age friendly inner city development – Rathdowney Place Aged Care, Carlton was the redevelopment of public housing. The aged care provider, Australian Unity, paid for the inclusion of a senior's precinct in this complex (along with public housing and market housing). The well-being centre, a public cafe and pool was open to general community to use, "our facilities are part of the community infrastructure".

2. Walking and Place making - go hand in hand

Key learning's

- Infrastructure and place matter in terms of getting the community walking – the best predictor of whether people will walk is if there is a destination to walk to. Council can play an important role in ensuring local shopping areas are destinations to build community. Help turn these places into public markets, meeting places with public spaces and streetscape improvements as the anchor, not the shopping centre / shops only.
- Great Cities don't just happen – local government has to develop a key sense of the kind of place it wants and be a strong influencer in promoting the vision, not just delivering it.
- Place making is a great organisational model around which to work – it's a way to bring together all elements of the Council staff to collaborate. One city that presented had a Director of Planning and Place making as they had decided to put 'place' at the centre of city planning.
- Staff from community development, infrastructure, parks and planning can all be involved in the goal of place making – it's a great focus to break down the silos that are very old school. Have a place-led approach, rather than a discipline led approach. Teams across disciplines, project driven collaboration...and then share the successes.
- A healthy city has increasing productivity, reducing environmental footprint (with firm targets and benchmarks), increasing social inclusion and good health and safety. Local Governments that are succeeding in these ways are creating cities that are thriving economically. Local Government needs to bring the players together so that the 'place' is considered, not just the system.
- Central to successful cities is a strong core and middle urban neighbourhood hubs. The hubs should be connected to each other and to the core with good transit and housing along the corridors. It's important to increase densities to create a "20 minute city" (or 10 minute city in smaller places) which can create strong neighbourhoods of identity for local economy and active neighbourhoods – active both physically and socially.
- Get your neighbourhoods working for and with Councils and devolving more decisions to neighbourhoods to get strategies implemented. For example the Liveable Yarra Process where 60 people selected from a range of backgrounds to help develop the plan, give Saturday mornings for several months.
- Train councillors, council staff and community together on innovative approaches like place making. Its training people how to collaborate. Run a "Solutions Cafe" - 5 minutes, problem and solution needs to be presented open to residents or staff to do.
- Places to linger, places that provide conviviality activate the night economy. The power of celebration...expresses our creativity out in the streets and beauty is a great economic driver, with landscaping, colour.

- Cities around the world are realising that neighbourhood place making as an essential strategy for active transport and health and socially connected communities. Working with the traders and the local community:
 - Have a Bold Vision - educate and inspire
 - Assist and train the champions of change
 - Create small wins and celebration
 - Fund a business development program and help the traders, if you lose local streets you will create more car-dependent communities
 - Traffic calming through street improvement

Case Studies

- Vienna - walkability is central to their city planning and indicates successful urban development. 27% of all trips in Greater Vienna are walking, 60% of all trips done on foot in the inner city.
- City of Ballarat spoke about their central strategy being a 10 minute city - a city in the landscape. Their focus is on driving convenience living corridors where people can live within 200-400 metres of frequent convenient public transport. They negotiated with state transport authority to go from 20 minute buses to 10 min buses. They have identified the hubs for each 10 minute neighbourhoods, immediate needs within a 10 minute walk...this now drives their Transport, Place making and City Strategy. It all fits!

They also funded a city circle bus to teach people how to take the bus and get people out of their cars, received \$50,000 from state government, 25% of the cost. Also free travel in the CBD grid, they got permission from state government as a way of helping deal with congestion.

Ran a walk to school program with 17 schools, one of the school now has 56% of kids walking and cycling to school.

3. Transport & Infrastructure – a city for people

Key learning's

- Transport strategy needs to also create places - recognise the difference between movement corridors, vibrant streets and public places and local roads and streets. But all of them can be made great places for people and transport, but they need to be considered together.
- The conference highlighted the work of cities such as Yarra, Port Philip and Bayside with their innovative approaches to streets which have included converting road space to open space, a greater sharing this street space and traffic planning to encourage walking for short, local trips.
- If your city needs more public transport, local government can and should advocate for it, not just with letters but also fund campaigns to take your community with you (like Yarra City, "Trains not toll roads campaign").
- Any thriving and growing city will have challenges with road space allocation - what gives? Pedestrians, car parking, bike lane or a bus lane? Many Victorian Councils have now built their Transport Strategy from the bottom up.
- Major movement corridors (like Macquarie & Davey) still have to be kept open for active transport and businesses. Key elements that we need to have regard for...mobility, peacemaking & amenity, environment (noise & air quality), safety, accessibility & social connectedness. MPA and VIC Roads are working on boulevards (street trees) on major arterials.

- Travel Demand Management is a crucial - in chaos there is opportunity, use a congestion problem as a chance to get change. Lessons from Travel Planning and demand management for the Christchurch earthquake, Glasgow and London Olympics and introduction of light rail to Sydney. In many cities 90% of traffic, carries 30% of the people.

Governments need to be using motivators to change travel behaviour:

- increasing levels of active travel (your fitness)
- reduce carbon emissions
- avoiding congestion and parking costs
- Journey time reliability (but only if public transport is given priority)

Case Studies

- Auckland – has decided to go from being a city of cars to a city for people and introduced a city centre targeted rate which generates, \$23 mill extra a year to implement the 'Auckland Plan' which aims to get more people living in the city and becoming more of a university city.

The City Centre Master Plan 2012 has a shared space program – transitioning streets to shared spaces. An essential part of the roll out and public acceptance of the program has been data collection. Foot traffic counters, perception surveys, use surveys...there is power in the example, demonstrate the example, collect the data. For example 1 year after upgrade, 439% increase in hospitality spending and foot traffic up 140%.

- Bayside City Council - Walking Strategy

The Council set a goal to achieve 40% of trips under 1km to be undertaken by foot. The walking strategy is a key part of their Integrated Transport Strategy, ["A Sustainable Journey"](#) which is a 10 year strategy around a vision of inclusiveness.

The Walking Strategy was coordinated by consultant, Studio Haus. They developed an interactive map to identify the barriers to walking and asked the community to give feedback. It was promoted to schools, traders, residents.

Guiding principals

- Opportunity - fixing the barriers identified, paved footpaths, non-conforming infrastructure, sub-standard pram ramps
- Motivation - places for people and walking, new maps, walking programs, neighbourhood destinations
- Capability - confidence of shared path, walk to school

Targets were based around participation and safety goals. \$1.45 million for implementation, starting with the barriers that the community had identified so that people felt valued for giving input.

- A number of Councils have made policy changes to improve infrastructure for walking. For example, Bayside City and City of Port Philip and have not installed roundabouts for a number of years because of a policy decision that this infrastructure is not safe for pedestrians and cyclists.

Opportunities for Hobart – Recommendations

1. Council consider creating a Hobart health profile and include a survey of the community – talk to the community about the results to drive the prioritisation of active transport in our Transport Strategy.
2. Test cross discipline teams comprising both Council staff and external parties to lead and to show how successful project delivery can be utilising mixed skills and perspectives. Drive change and deliver more innovative results with some high profile examples of projects being delivered by cross organisation teams. Start with...
 - Staff from community development, infrastructure, parks and planning can all be involved in the goal of place making in Hobart's local shopping precincts.
 - Traffic engineers together with positive ageing and health promotion staff to run an active transport project for healthy community outcomes
3. Use Hobart's traffic congestion to drive positive change – not deliver backward steps. The Council shouldn't just try to tackle the problem with reactive steps; we first need to ask what kind of city we want and then implement the changes we can influence. Lobby strongly for the things that other levels of government, business and community can change.

As a first step City of Hobart can play a thought-leadership role in promoting Travel Demand Management and the opportunity to spread the peak congestion problem. We recommend inviting Rose MacArthur, a Travel Demand specialist to come to Hobart to speak to regional Councils and State Government to inspire urban centres to work together to coordinate through the lens of travel demand management. Rose is a great speaker, currently running a travel demand management campaign for the introduction of light rail in Sydney's George Street.

rose.mcarthur@mottmacdonald.com

4. Use the 10 / 20 Minute City model as central for the development of our Transport Strategy – get our residents out of cars with walkable local shops, walk to school programs and lobby for free inner city bus travel and more regular services in inner city neighbourhoods.
5. Partner with the Heart Foundation of Tasmania to build upon the excellent work that organisation by promoting the benefits of walking, the attractiveness of the built environment and its suitability for exercise and active travel. Also speak with other organisations and businesses providing city walks as opportunity might exist there for special offers for locals to join in.
6. Look at opportunity to install simple exercise infrastructure along major walking routes e.g., Sandy Bay road and the inner-city cycleway. The Rotary project which its saw the installation of a number of exercise machines on the Domain adjacent to the bike hire shop was a great demonstration of community/city cooperation.
7. Develop a detailed strategy for how to persuade the State Government to make a major investment in public transport and resist the attempts to take over control of Davey and Macquarie Streets because of concerns it will undermine Hobart's '*a city for people*' goal in our two most iconic streets.
8. Our Transport Strategy should be built on the 'road user hierarchy' that many Councils are placing at the centre of their transport and place making strategies. The hierarchy from most important to least important are walkers, cyclists, people using public transport and finally single occupant vehicles.

Notes from Individual Presentations

The following commentary from the presentations was worthy of inclusion in our report

Dr Bob Sallis

- The power of health behaviours;
- Physical inactivity is harmful and is the major public health problem of the time ;
- A drug called 'exercise'
- 30 minutes every day for 5 days a week
- Avoid sedentary!!! It's a risk factor for disease. 'Exercise as a vital sign' on a medical record.
- Not about weight but exercise
- Medicine.org "Exercise is medicine " Australia
- Exercise is Medicine – campus life time plan for fitness
- Walking 150 minutes a week!! 5x30 minutes
- Kaiser Permanente 'Thrive' program Be your OWN cause – stay healthy
- EVERY BODY WALK! City Walk.MD
- What can urban planners do? Make our cities more walkable.
- Include gyms in houses
- Exercise must be a 'vital sign' every medical assessment.
- It's time for a change – change and the world changes with you

Maria Vassilakou Deputy Mayor Vienna

- the city of Vienna has an ambitious 40% target to reduce personal energy use
- STEP 2025 Vienna Plan Urban Mobility Plan
- Decreased public transport costs doubled bus users
- Public space design concept
- A city good for children is good for everyone!
- 'The outside of a building is the inside of a city '
- 'Walking indicates successful urban development'
- Vienna is a walking city
- Great public space is where people slow down and places to share
- The city is the river of life of a city
- Great public space enable social and gender equity and needs active management
- 650 community workers work in Vienna
- 'play streets' temporary urban playgrounds
- Let your city be the party!
- Encourage and support citizen's actions
- Find more innovative public land –eh over subways example
- Marienstrasse boulevard ...71% agreed to turn it to walking boulevard
- Traffic light signals depict families walking!

John Stanley UOS

- Cities reap agglomeration benefits from growth but growth produces inequity
- The value of a planning blue print
- No long term plans ----- see slide and use for article ...look at Vancouver ... what do you want to BE? As a state >
- Second slide --- goals

- online good increase densities in key transport corridors
- Connect hubs
- 'Plan Melbourne '
- Integrated planning – vertical and horizontal planning
- Lack of trust between levels of government
- MCC good performer for the small area of the city – international brand and reputation
- The 20 minute city – look for major people and transport areas and use for his **People and Parks Foundation**. It's an urban forest which crosses LG boundaries. John may thru his Foundation be able to source funds.

Sameem Moslih Vic Roads

- Smart Roads
- The role of roads in our community
- Shared heads
- Accessibility and social connectedness
- 25% of the community > 65 years old
- Noise and air quality
- Putting 'ourselves into the shoes of our customers'
- Cars as an alternative mode of transport
- Challenge the status quo , look to challenge the evidence , innovative , creative , using information better
- Movement corridors

Peter Seamer

1. Designs and allows for major new infill or outlying sites
2. Landscape architects on payroll
3. Coordination better now
4. 'Politics is the art of the achievable' –Otto Von Bismarck

Stephen Yarwood

1. Melbourne – consistent approach has been outstanding
2. Vancouver 100 score for creativity and environment
3. Safety education culture health care recreation gender belief in ideas
4. Generation engagement – need to be involved
5. Look at simple things like loneliness
6. Urban Futurist --- City 2050 [long term transfer – preferred and probable change] Community 2050 Future cities scholarship Stephen won 15 years ago. Now revisited
7. Passion of the DNA in cities
8. 'people in different cities THINK differently
9. 'Flip phones to smart phone '.... City Wi-Fi
10. Google translatordirect instant translationcheck it out
11. Better landscape navigation ...meant I met more people ...shopping centres serving multiple roles....vertical car and bike parking no tap handles – all electronic ...recycling works ..

Opal presentation about how to embed active transport and walkability into the community + with local schools. Fraser Keegan, Opal South Australia.

1. Walkability

2. Flinders University –working with Health Science faculty
3. International Walk charter

Rose Mc Arthur – Integrated Transport Demand specialist

- Christchurch , London , Sydney – uncoordinated in case of Christchurch
- Traffic management plan informs the community
- Stakeholder management program plan – see slide
- Be truthful about the problem
- George st will be pedestrianized after LR is in ;
- Change mode , timing , reroute , reduce – slide

Gyles Bendall

- Auckland a city of cars transformed to a city of people Shared Spaces and their role in ‘Auckland’s City Centre Transformation ‘
- Fast growing
- Inner city special rate tax imposed. Targeted rate 10 year extended for ten years .
- Transport issues
- Modal choice is changing 60 000 students 90000 workers into city university city 45000 living in city centre /bad connections , disconnected waterfront ,
- 8 strategies including Quay st becoming a destination boulevard
- Laneway circuit to a linear park
- Public life huge lifts since cars out and beautification – big increase in walking traffic – 439% increase in hospitality spending – dealt with the complaints on lost car parking
- ‘the long game ‘

Building Strong regional communities

1. Platypus physical fitness mascot
2. Axedale River community –get the community excited

Swan Hill

- Incentive of a \$5 voucher for cyclists attending events
- Get councillors involved
- Making walks fun , warning about hazards e.g. magpie warnings
- Beautifying walking trails ‘get your heart beating in Swan Hill
- Really working on the ‘culture ‘ of walking and cycling
- ‘Get your heart beating in Swan Hill’
- Bicycle user group – help people back onto the saddle
- Roundabout training!

Walkable community areas – defined

Garry Hack – Uni of Pennsylvania

Dramatic property value increase in walkable locations

The denser the residential area the more likely people are to walk to nearby shopping centres

Look at value of social impacts by walkability – connecting people

Developers seek sites with active living research.org walkability shopping centre

Hack article place synopsis in report

Gilbert

- DNA of a great street
- Great food is vital for a good cluster
- Connection builds community
- Put public markets back!
- Importance of a meeting place
- Consider him re possible Mel markets?
- 'touching people'
- 'sticky places - to linger, longer '
- Good livelihood trader aim
- Active day and night e.g. Smith st Collingwood
- The power of celebration
- Beauty and play drives business / foot traffic drives business
- An 'eco literacy of place 'we yearn for meaning and connection ... happy customers ... ease of access – destroy the 'spiritual vampires / [the naysayers] praise the one third that says 'YES'
- What do people want – new destinations and experiences? An anchor trader helps
- Beautiful and well curated places
- Traders that develop community – meets etc. money back to projects.
- Vibrant night economy
- Increase in conviviality – I know what you want!
- A sense of pride and authenticity leads to pride.
- Get the food mix right.
- Walkability increases impulse shopping
- Streets need to become community.
- 'illegal acts of the heart'
- Melbourne 98% increase in 15 years of walkability after new place creating
- 'cars don't shop people shop'
- Times Square – removal of cars rents went up \$1350 a square foot!
- How to –have a BOLD vision /educate and inspire / get 'champions of change'. Get them on your team /small wins and celebrations – growth in cultural retail the big one /moderate speed /traffic calming /naysayers become advocates
- Glass texture destroys place making.
- 'St Kilda triangle'

Bayside Project –walking strategy

- Improve equal access
- Improve strategy
- 10 year on a vision of inclusiveness
- 5 stage development process
- Web based platform – mapping platform ; what were the barriers E.g seats , fountains ,
- Walkability audit
- Community and stakeholder consultation
- Assessing capability
- Promoted to schools , traders

- New footpath policy , where , when and with what material
- New master short walks
- Website
- Behavioural change program
- Targets for participation
- From shopping trips from 21%-40% by 2025
- Also safety targets
- Achieve a rise in confidence on safety within 10 years
- Strategy adopted in 2015
- Projects underway

City of Port Philip - Sustainability and Transport

Transport Safety Engineering

- Brighton Rd commuter road 100,000 cars a day
- Signals, pedestrian responsive outside peak hours...call up and extended time outside peak hours
- parking lane, bike lane, 4 traffic lanes (each direction), tram reservation
- 3 - 4 year's negotiations with VIC Roads
- No new roundabout installations...no good for bike and pedestrians
- Road user hierarchy - walkers, bike, PT, single occupant vehicle, sustainable transport strategy (doesn't have years)
- Assessments and designs factor into this traffic hierarchy
- Shift in culture started 18 years ago
- Consultation with community...people will not use cars if there are other provisions
- 50% of municipality is now covered by 40km zones
- No matter what you do there are always those that are "born to drive"
- Consultation - seek comments not yes or no....letter drop area, info on website, no public meetings
- speed influences activities...encourages people to walk...do it on an area wide basis (40-50) not a street basis
- arterial streets 60km

Roads built for through traffic - local roads protected before you start playing with arterial roads

- stopped doing pedestrian fencing 15 years ago...we need to make sure all roads are safe rather than separating

- Roundabouts - not installing any for last 15 years and have been retrofitting zebra crossings on roundabouts since then, have done 17 with 20 more to do
- first roundabout 12 years ago...took 1 year to persuade VIC roads, they have to OK zebra crossings.
- Australian roads guidelines...6 metres set back minimum - this is crazy for pedestrians. So we install crossings within 3-4 metres of the roundabout is best. \$130 - \$150,000 cost of the treatment.
- Raised zebra treatment is ok for up 8,000 vehicles a day, Mitford St has 9,500 per day
- But will put in a zebra crossing on a roundabout in quiet streets too. 20 pedestrians or more per hour, just 1 hour of the day is the trigger for us to install this treatment
- Now VIC Roads accept this and are promoting our treatment
- Around busy shopping streets, every street has raised pavement on every side street and painted yellow...helps cars follow road rules in terms of the give way sign.

City of Yarra

The city is a leading advocate of shared road use and the increasing pedestrian friendly street initiatives as part of important place making. The city is proud of its achievements and keen to show them off to anybody who is interested.

- Strategy is a good way to start people thinking about change public engagement, married to budget to implement it

Local Area Traffic Management Plans....active streets, place making, street trees, planter boxes on roads

- Lower speed limits without impact on traffic times
 - We want more people out walking
 - divided Yarra into 21 precincts (1km X 1.5km in size)
 - treated up to its neck, traffic counts showed people weren't doing 50km/h...it's not difficult
 - LATMPs process...40% were 40 km, and then did the lot about 3-4 years
 - Collector streets with up to 10,000 vehicle movements a day are also covered in some LATMPs for example Victoria parade, 50% not local traffic, 40km/h, Wellington St
- Local Area - consultation 1 year, construction the following year - studies...analysis of traffic movements, 3 meetings, and data provided (6months)
- Fresh eyes
 - 10 years to come back...process & recommendations + spot funding

Transport Strategy 2006, refresh it 2012 - what's needed, what's not, what worked, what didn't

Most Important Principal - hierarchy of users...safety comes first

- Development of networks...connectivity
 - Public transport campaign...placards, petitions, billboards, training of community members + legal case...1 train = 800 cars off the road
 - 5 - 10 year's implementation
 - Values based
 - Over-riding principal - we need those of you who can walk and cycle to do that, so that those who need to use the car can do so....we will slow people down do use their car through your suburb
- Bike policy...anytime there is a resheet, it gets marked with some sort of bike marking, bike lanes on every road, even small roads. Bike lane has two functions - bikes and traffic calming.

**CITY INFRASTRUCTURE COMMITTEE AGENDA
(OPEN PORTION OF THE MEETING)
27/4/2016**

13. HOBART BICYCLE ADVISORY COMMITTEE – FILE REF: 37-1-4

6x's

Memorandum of the Director City Infrastructure of 8 April 2016.

DELEGATION: Committee

37-1-4
smlp:SMLP

8 April 2016

MEMORANDUM: CITY INFRASTRUCTURE COMMITTEE

HOBART BICYCLE ADVISORY COMMITTEE

The Hobart Bicycle Advisory Committee met on 16 March 2016 and the draft notes from this meeting are attached.

Recommendation:

That the draft notes of the Hobart Bicycle Advisory Committee meeting held 16 March 2016 be received and noted.



(Mark Painter)
DIRECTOR CITY INFRASTRUCTURE

HOBART BICYCLE ADVISORY COMMITTEE

NOTES

Meeting held Wednesday 16 March 2016 at 1.00 pm in the Lower Ground Conference Room, Town Hall.

PRESENT:

NAME	POSITION
Philip Cocker	Chairman – Alderman, Hobart City Council
Luke Middleton	Project Manager Active Transport and Signage Infrastructure, Department of State Growth
Corey Peterson	Sustainability Manager, Commercial Services and Development, UTAS
Garry Bailey (Proxy)	Bicycle Network Tasmania

CITY OF HOBART OFFICERS:

NAME	POSITION
Mark Painter	Director City Infrastructure
Scott Morgan	Group Manager Infrastructure Planning
Robert Mather	Group Manager Open Space
Angela Moore	Manager Traffic Engineering

1. Apologies:

NAME	POSITION
Jeff Briscoe	Alderman, Hobart City Council
Helen Burnet	Alderman, Hobart City Council
Suzy Cooper	Alderman, Hobart City Council
Anna Reynolds	Alderman, Hobart City Council
Neal Denning	Associate Director, Strategy and Planning, UTAS
Emma Pharo	Adviser, Bicycle Network
Will Oakley	Community Advisor, RACT
Mary McParland	Executive Officer, Cycling South – Greater Hobart Councils Regional Cycling Committee
Shane Smith	Road and Public Order Services, Tasmania Police
Bernd Wechner	Community Representative
Ben Thorp	Community Representative
Neil Noye	Director City Planning (ICAP representative)

2. **Confirmation of Previous Notes** – Notes of 20 January 2016 were confirmed as a true and accurate record.
3. **Battery Point Connections (signage)**
 - Route options to be provided at the next meeting to determine the best option to progress the project.
4. **Projects List – for consideration**
 - Refer attached spreadsheet – Scott ran through the different sections of the spreadsheet explaining how the projects have been collated.
 - In regard to future funding of projects, it was noted that \$50,000 per annum is included in the first 3 years of the capital works program for cycling projects and that \$500,000 per annum is proposed for implementation of the Transport Strategy from 2017/2018.
 - A request was made to include a project from CSIRO to AJ White Park, where the existing path is quite narrow.
 - Alderman Cocker and Mark Painter will be attending the Draft 10 year Capital Works Programme Aldermanic Workshop this evening.
 - Rather than citing individual projects for funding, an overall increase in funding would be preferred and then managed to provide funding to prioritised projects, large and small.
5. **Other Business**
 - Preparation of the UTAS Transport Strategy has commenced and is planned for completion by the end of 2016. As the Council is also currently preparing its Transport Strategy, Corey would appreciate any input in relation to information that would need to be included in the UTAS strategy from the Council strategy.
 - As part of the Linear Park upgrades, investigations into the best approach for 'etiquette education' when using shared paths will be completed. This was discussed in the wider Statewide context of appropriate use of all walking/cycling shared paths, including signage and marking.
 - Brooker Bridge – Bicycle Network and Cycling South have made submissions advising that they believe the bridge is too narrow. Angela advised that she is not aware of a safety audit having been completed at this stage but understands the width of the bridge does meet the necessary regulations. The clear width of 3 metres is the distance between the handrails, not the walls.
 - The Traffic Engineering Unit is investigating the possibility of lane amendments in Campbell and Argyle Streets whereby the streets would be 3 vehicle lanes at peak times and 2 vehicle lanes at off peak times, with consideration of clearways.
 - It was agreed by the Committee that the road/footpath treatment upgrades in Liverpool Street (between Elizabeth and Murray Streets) are generally working well for cyclists.
 - A request for bike hoops outside the UTAS Medical Science Precinct was made and Angela will look into.
 - Rob can provide information on off-road projects that the Parks and City Amenity Division have completed or are working on if required.
 - Angela advised that the City of Hobart's Transport Strategy will be broken down into 4 modules. Cycling will be considered as a component of the relevant modules:
 - Private;
 - Public;
 - Freight; and
 - Local Area Issues.

- The Committee agreed that some simple but visible bicycle infrastructure/treatments, such as cycling stop boxes at traffic lights, would be beneficial to raise the general awareness of motorists and pedestrians that cyclists are using the road.
- Rob suggested that the creation of a Cycling Strategy/Plan for the next five years would be a useful tool for programming actions and works.

6. Date of Next Meeting: Wednesday 18 May 2016.

7. Meeting Closed: 2.30 pm.

City of Hobart Cycling Projects - Draft List for HBAC consideration 16 March 2016

Projects In Progress or Undergoing Detailed Planning

Project Title	Project Description (Cycling component)	HBAC Priority (red dots)	Action/Stage	Timeframes	Funding
AP03 - Morrison St - Stage 2	Includes shared cycling/pedestrian way along waterfront side of Morrison St from Brooke St to Castray Esplanade	Not included	Second stage of works, planning permit approved	Completed by end of 2016	\$1,200,000 (in 2016/17)
AP04 - Collins Street / Hobart Rivulet Linear Park Connection	Improved cycling and walking connection along Collins St from end of Hobart Rivulet Linear Park track to Harrington St (incl crossing of Molle St)	8 + 6 dots	Undergoing options analysis	Planned for 2018/19	\$1,400,000 (in 2018/19)
AP07 - Brooker Bridge - Pedestrian & Cyclist Crossing over Brooker Ave	Shared pedestrian and cycling bridge over Brooker Avenue between Domain and Bathurst Street	1 dot	Detailed design	Construction planned for 2016/17	\$4,000,000 (in 2016/17)
AP08 - Castray Esplanade Upgrade	Works including extension of cycling/pedestrian facilities along Castray Esplanade	4 dots	Feasibility design completed, discussions with other parties incl CSIRO	Construction planned for 2017/18	\$350,000 across 2016/17 and 2017/18
AP18 - Tasman Highway Shared Bridge	Shared pedestrian and cycling bridge over Tasman Highway between Domain and Regatta Grounds	Not included	EoI to be issued for design consultancy	Planned for 2017/18	Total of \$8,000,000 (grant funded)
Macquarie Point Linkage	Shared cycle/pedestrian way through the Macquarie Point site	Not included	Subject to Macquarie Point development process	Expected to be early in the development timeframe for the site	Not known, dependant on design
Federal Street (Elizabeth St to Letitia St)	Improvements to enhance cycling safety along Federal St	Not included	Detailed design	Planned for 2016/17	Funds approved (\$50,000)
Commercial Road	Works to improve cycling access along Commercial Road at Elizabeth Street	Not included	Detailed design	Planned for 2016/17	Funds approved (\$10,000)
Battery Point Connections (signage)	Signage to indicate a cycling route through Battery Point	3 dots	Signage design and route selection to be finalised	To be installed in 2016	Funds available
Hobart Linear Park - Sealing of track from start to McKellar Street	Sealing of the section of track between the entrance near Molle Street and McKellar Street	Not included	Construction to commence in April 2016	Construction in 2016	Funds approved (\$265,000)
Hobart Linear Park - Tara St Crossing	Crossing facilities for pedestrians and cyclists at Tara St	Not included	Construction planned for 2016/17	Planned for 2016/17	\$23,000 in 2016/17
Hobart Rivulet Linear Park - Other Works	Various works to improve the track in Hobart Linear Park	Not included	Report going to Council on 21 March 2016 with a range of works	Various timeframes included in report	Report includes a range of works and costs up until 2020/21 year

Undergoing Investigation

Project Title	Project Description (Cycling component)	HBAC Priority (red dots)	Actions/Stages	Timeframes	Funding
Alternative Access between Bus Mall and Waterfront	Options for improved access for walking/cycling between the Bus Mall and Waterfront	Not included	Consultants to be appointed to investigate and report on options	Consultancy to be completed in 2016. No time frame set for implementation	Will depend on option selected
Battery Point Walkway (Stage 1)	Walkway for southern section of Battery Point	Not included	Alternatives being reviewed as to how best to progress	Indicative construction date of 2018/19, depending on achieving an approved design	\$3,000,000 (indicative) - 2018/19
Huon Road (Uphill cycling lanes)	Widened shoulders on Huon Road between Hillborough Road and Pillinger Drive	3 dots	Preliminary consideration only	Indicative construction date of 2018/19	\$500,000 (indicative) - 2018/19

Other Funding for Cycling Infrastructure or Traffic Safety Works

Project Title	Project Description (Cycling component)	HBAC Priority (red dots)	Actions/Stages	Timeframes	Funding
Cycling Projects - Annual Allocation	To implement minor cycling improvement projects as identified	Not included	Annual allocation for small projects	Various	\$50,000 per annum
Blackspot Projects - Annual Allocation	To implement road blackspot projects as approved by State Govt	Not included	Annual allocation	Various	\$50,000 per annum
Local Area Traffic Management Projects - Annual Allocation	To implement minor LATM works as identified	Not included	Annual allocation	Various	\$50,000 per annum
City Laneways and Paths - Access and Lighting Upgrades	Projects to improve access on city laneways (primarily pedestrian focus)	Not included	Annual allocation proposed	To be determined	\$100,000 per annum from 2017/18 proposed
Implementation of Transport Strategy	Projects to implement Strategy	Not included	Annual allocation proposed	To be determined	\$500,000 per annum from 2017/18 proposed

Proposed Cycling Infrastructure Projects

Note: The estimates for a number of the following projects are considered to be very approximate until the works have scoped and undergone detailed design

Project Title	Project Description (Cycling component)	HBAC Priority (red dots)	Actions/Stages	Timeframes	Estimate
Lenah Valley Rivulet Track - Missing Links	Several sections of track are required to be installed or upgraded to link the track from the Brooker Highway to Wellington Park	8 dots	Rivulet plan report going to Council 21 March 2016. Two sections subject to negotiations with land owners.	Proposed for all works described in review to be completed by 2019/20	Total costs about \$800,000 (plus land acquisition costs)
Collins Street - Contra-flow lane	Contra flow lane for cycling on Collins Street between Elizabeth Street and Murray Street	8 dots	Preliminary investigation. Will need extensive stakeholder engagement.	Timeframe not yet established	\$200,000 to \$400,000+ depending on design requirements (significant civil works)
Argyle Street - Davey St to Brisbane St	Infrastructure changes to support cycling in Argyle Street to link with existing cycling lanes	6 dots	Concept design to be developed subject to review of traffic issues at Liverpool St and impacts of Bus Mall re-design. Also in conjunction with Campbell St.	To be investigated, for possible consideration in 2018/19 budget	\$100,000+, depending on scope and design
Brooker Highway to Bell Street	Track from Brooker Highway nr Queens Walk Apartments to junction of Bell Street and Queens Walk.	6 dots	No design work planned by CoH at this stage. New footpath planned for Queens Walk in 2016/17.	New footpath between Cornelian Bay and Queens Walk Apartments planned for 2016/17	\$170,000 for Queens Walk footpath in 2016/17; About \$50,000 for gravel track around sportsground perimeter
Elizabeth Street Uphill Cycling Lanes	Cycling lanes from North Hobart to Augusta Road	5 dots	Concept designs to be prepared in 2016/17 year.	Investigation 2016/17, for possible consideration in 2017/18 budget	\$50,000 to \$100,000+ depending on design
UTAS - Melville St Accommodation - Improved Cycling Access	Cycling infrastructure to improve access from UTAS accommodation development between Melville and Brisbane Streets to other cycling links	5 dots	No design work undertaken by CoH at this stage	Would seek to align with opening of accommodation facility	Initial low cost works \$20,000, more detailed works Brisbane/Melville could be upto \$250,000
Crossing at Regent/Antill/Fitzroy Streets	Improvements to crossing point at the Regent/Antill/Fitzroy/Digney St intersection	5 dots	Previous work by CoH to be reviewed and options considered in 2016/17	No timeframe currently set	In the order of \$25,000 to \$50,000 for improved crossing point
Tasman Bridge - Footpath widening	Widening of the Tasman Bridge footpath	5 dots	Responsibility of Department of State Growth	No timeframe currently set	Not known
Campbell Street (Brisbane to Davey Streets) - Cycling Improvements	Infrastructure changes to support cycling in Argyle Street to link with existing cycling lanes	4 dots	Concept design to be developed in 2016/17. Any works will not commence until after RHH road closures end in 2018.	No timeframe currently set	\$100,000+, depending on scope and design
Forster Street (New Town Rd to Valentine St)	Cycling lanes in Forster St from New Town Rd to Valentine Street and also cycling improvements in Risdon Rd on the eastern side of New Town Rd	1 dot	Preliminary concept has been developed for Forster St, but further design work needed. No work yet on Risdon Rd.	No timeframe currently set	\$40,000 for Forster St works; Risdon Rd works to be scoped
Marievile Esplanade	Off road cycle or shared path parallel to Marieville Esplanade	1 dot	Concept design has been developed. Project has been put on hold.	Awaiting further consideration of Battery Point Walk	Approx \$200,000 for current concept design
Fitzroy Place and Byron St intersection	Fitzroy Place and Byron St intersection - Improvements to make crossing easier	0 dots	No CoH investigation at this stage	No timeframe currently set	Perhaps \$25,000, though will depend on design
Letitia St and Park St (Federal St to Risdon Rd)	Cycling lanes and other infrastructure to improve linkage between intercity cycleway and North Hobart along Park St and Letitia St	0 dots	No CoH investigation at this stage	No timeframe currently set	\$200,000+, depending on scope of work
Strickland Avenue	Improvements to Strickland Avenue at selected locations to assist cycling on uphill side of road	0 dots	No CoH investigation at this stage and has not been scoped	No timeframe currently set	Not scoped

Cycle maintenance stations	Stations installed at selected locations (such as on the Intercity Cycleway) to support maintenance of bicycles	0 dots	No CoH investigation at this stage	No timeframe currently set	About \$5,000 to \$10,000 per station
Federal St to City pathway (parallel to Brooker Highway)	Existing footpath (and associated crossing points) which parallels the Brooker Highway between Burnett St and Bathurst St considered sufficient.	0 dots	No works proposed at this time	No timeframe currently set	Nil
Augusta Rd (Elizabeth St to Giblin St)	Improvements to Augusta Rd to support cycling such as uphill cycle lanes	0 dots	A portion of this will be considered as part of the Local Retail Precincts Plan for the Lenah Valley precinct	Lenah Valley precinct upgrade in 2017/18	In the order of \$300,000 for line marking, but about \$2,000,000 for concrete road surface upgrade
Marieville Esplanade to Sandy Bay Rd Crossing	Widening of existing footpath between Marieville Esplanade and Sandy Bay Rd to provide direct link to crossing point on Sandy Bay Rd	0 dots	No CoH investigation at this stage	No timeframe currently set	\$5,000 - \$10,000, depending on width

Cycling Related Issues for Transport Strategy (Copy of timeline provided below from report to Council in December 2015)

Lower CBD speed limits
Sustainable Transport Plan Update
Traffic Signal Improvements

Transport Strategy Development Timeline

Description	Timing
1 Development of background papers, project framework and key objectives to be considered during development.	3 months
2 Initial Aldermanic Workshop to agree on key objectives, module scope and development sequence.	2 weeks
3 Finalisation of background papers and completion of project framework development. ^{1,2}	1 month
4 Development of the community engagement strategy. This step should identify which community groups, individuals and stakeholders wish to be involved with the development of each of the individual modules.	1 month
5 Initial engagement process with community and other stakeholder groups to work through the background papers and process for engagement in developing the modules of the Transport Strategy.	2 weeks
6 Develop content for each individual module of the Transport Strategy. The scope of the modules will be determined through the input from the earlier stages.	12 to 18 months
7 Consolidate modules into Draft Transport Strategy.	6 months
8 Draft Transport Strategy presented to Council.	
9 Final community and stakeholder engagement process with the Draft Transport Strategy.	
10 Feedback considered in finalising the Transport Strategy for Council endorsement.	Target of December 2017

**CITY INFRASTRUCTURE COMMITTEE AGENDA
(OPEN PORTION OF THE MEETING)
27/4/2016**

**14. ANNUAL GENERAL MEETING 2015 – RESPONSE - GIBLIN STREET
QUARRY – FILE REF: 13-1-14**

2x's

Memorandum of the Director City Infrastructure of 30 March 2016.

DELEGATION: Committee



13-1-14

(AGM 23112015 - Question)

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2015 responses\agm_2015 response_branding strategy.doc

30 March 2016

MEMORANDUM: CITY INFRASTRUCTURE COMMITTEE

RESPONSE TO QUESTION TABLED AT THE ANNUAL GENERAL MEETING

At the Annual General Meeting conducted on 23 November 2015 the following question was asked by the Council of Hobart Progress Association (CHPA) through a formal submission lodged in relation to the Annual Report.

At the meeting the question were taken on notice. A response is subsequently provided below and has been conveyed to the Council of Hobart Progress Association.

Question: Future Direction 4.2

"Can you please tell us what the options are for the future use of the Giblin Street Quarry? What consultations, if any, were held with the adjoining Lenah Valley and Mount Stuart communities?"

Response:

The Council has requested that a detailed report be prepared giving consideration to possible future uses of the Giblin Street Quarry, and detailed investigation work is underway.

The potential future uses of the site are limited as the existing unprotected quarry rock faces present a high level of risk, and significant mitigation works would be required to reduce the hazards to the minimum acceptable standard for any form of future development on the site.

Additionally, the site would be difficult and costly to service in terms of reticulated water and sewerage and other services.

Under the City of Hobart Interim Planning Scheme 2015 the majority of the quarry site is zoned as Utilities wherein residential development is not a permitted use. An application to amend the planning scheme would be required should any form of residential use be contemplated within this zone.

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The rezoning of a section of land adjacent to the former hotmix plant site to residential use has been proposed as part of the Tasmanian Planning Commission's consideration of the Hobart Interim Planning Scheme. The outcome of this proposal is not yet known.

No engagement has been undertaken with the nearby communities and it is considered appropriate to do so when all the constraints of the site are known – particularly in terms of safety, practicality of servicing and planning scheme requirements.

A report will be provided to the City Infrastructure Committee when the Planning Commission's decision is known.

A handwritten signature in black ink, appearing to read 'M Painter'.

(Mark Painter)

DIRECTOR CITY INFRASTRUCTURE

15. RESPONSES TO QUESTIONS WITHOUT NOTICE – FILE REF: 13-1-10

The General Manager reports:-

“In accordance with the procedures approved in respect to Questions Without Notice, the following responses to questions taken on notice are provided to the Committee for information.

The Committee is reminded that in accordance with Regulation 29(3) of the Local Government (Meeting Procedures) Regulations 2015, the Chairman is not to allow discussion or debate on either the question or the response.”

15.1 CBD PEDESTRIAN CROSSINGS - COUNTDOWN TIMERS

Ref. Open CIC 10.2, 25/11/2015

Attachment

15.1

Memorandum to Aldermen from the Director
City Infrastructure of 17 March 2016.

RECOMMENDATION:

That the attached memorandum be received and noted.

City of **HOBART**

13-1-10

(cic 25 nov 2015 - cbd pedestrian crossings - countdown timers)

17 March 2016

**MEMORANDUM: LORD MAYOR
DEPUTY LORD MAYOR
ALDERMEN**

QUESTIONS WITHOUT NOTICE – RESPONSE CBD PEDESTRIAN CROSSINGS - COUNTDOWN TIMERS

Pursuant to Council Policy 2.01, Clause A(10), where a response to a Question without Notice is not able to be provided at a meeting, the question is taken on notice. Upon distribution of the response to all Aldermen, both the Question and the Response is to be listed on the agenda for the next available ordinary meeting of the committee at which it was asked, whereat it will be listed for noting purposes only, with no debate or further questions permitted, as prescribed in the Section 29 of the Local Government (Meeting Procedure) Regulations 2015.

At the City Infrastructure Committee meeting held on 25 November 2015 the following question without notice was asked by Alderman Reynolds:

Question: Are countdown timers being considered for the CBD through the Road Safety Advisory Council and State Growth? Can the officers involved with this discussion provide an update? Will this process also look at extending the time available to cross major city streets at peak pedestrian times?

At the meeting the Question was taken on notice. A response is subsequently provided below:

Response: The City of Hobart's officers are not involved with the Road Safety Advisory Council and so cannot provide advice regarding the process, but are of the understanding that countdown timers for the CBD are being considered by the Department of State Growth.

(Mark Painter)

DIRECTOR CITY INFRASTRUCTURE

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16. CITY INFRASTRUCTURE COMMITTEE STATUS REPORT

17x's

A report indicating the status of current decisions is attached for the information of Aldermen.

DELEGATION: Committee

Recommendation:

That the information be received and noted.

CITY INFRASTRUCTURE COMMITTEE – STATUS REPORT

OPEN PORTION OF THE MEETING

November 2014 to 31 March 2016

Ref.	Title	Report / Action	Action Officer	Comments
1	221A LENA VALLEY ROAD, 2-16 CREEK ROAD, LENA VALLEY – SUBDIVISION (86 RESIDENTIAL LOTS, 8 ROAD LOTS, 7 PUBLIC OPEN SPACE LOTS) AND STORMWATER INFRASTRUCTURE (ADJOINING FURTHER ASSOCIATED SUBDIVISION OUTSIDE OF MUNICIPAL BOUNDARY) – PLN-14-00584-01 Council 22/9/2014, item 9.2	That the Council undertake an urgent review of the Lenah Valley Traffic Management Plan with particular reference to the management of traffic in Augusta, Creek, Alwyn and Chaucer Roads and Monash Ave.	Mark Painter, Director City Infrastructure	There is no Local Area Traffic Management Plan for Lenah Valley. The issue will be included in the development of the Transport Strategy.
2	CASTRAY ESPLANADE AND MORRISON STREET, HOBART – PROPOSED LAND TRANSFERS RESULTING FROM TASPORTS BOUNDARY ADJUSTMENTS Council 15/12/2014, item 26	The General Manager be authorised to negotiate with TasPorts to purchase for nominal consideration the three parcels of land identified in the report considered by the Infrastructure Services Committee on 26 November 2014 and the land be dedicated as public highway.	Mark Painter, Director City Infrastructure	Negotiations are underway.
3	SANDY BAY RETAIL PRECINCT STREETSCAPE REVITALISATION – COMMUNITY ENGAGEMENT Council 10/2/2015, item 11 Closed Council 25/5/2015, item 6	1. Discussion commence with Woolworths in relation to management and possible improvements to the existing public toilet facilities. (i) Consideration be given to the flexibility of parking arrangements in the area.	Glenn Doyle, Director Parks and City Amenity	The draft lease over the public toilet facilities was approved by Council at its meeting held on 23 September 2015. The lease document has been provided to Woolworths to enable the execution of the documentation and is currently with their legal department for review. Detailed design works complete with quotes being assessed.

Ref.	Title	Report / Action	Action Officer	Comments
			i) Mark Painter, Director City Infrastructure	(i) Parking arrangements in the area are under review.
4	INNER CITY ACTION PLAN AP01 – FINAL DESIGN – TENDER PROCESS COMMENCEMENT – RECONSTRUCTION OF LIVERPOOL STREET, BETWEEN ELIZABETH STREET AND MURRAY STREET Council 10/2/2015, item 16	The Council endorse the commencement of a detailed network operation study to evaluate other traffic network efficiencies, to overcome any potential future capacity constraints caused by the reduction of Liverpool Street to a single lane, at an expected cost of \$60,000, to be funded from the Public Infrastructure Fund.	Neil Noye, Director City Planning	The development of the project scope to commence in the second quarter of 2016.
5	NOM – IMPROVEMENTS TO PEDESTRIAN CROSSINGS Council 13/4/2015, item 10	<ol style="list-style-type: none"> 1. A report be prepared looking at other opportunities for improvements to pedestrian crossings on key pedestrian routes in the City, including consideration of zebra crossings. 2. Consideration be given to pedestrian crossings, including the potential for zebra crossings where appropriate, in the planning of the Local Retail Precinct Plans, and that community input be sought. 	Mark Painter, Director City Infrastructure	<ol style="list-style-type: none"> 1. Investigation is to be scheduled. 2. Consideration will be given to pedestrian crossings in the Local Retail Precincts Plans and in the development of the Transport Strategy.
6	INTRODUCTION OF A FORTNIGHTLY KERBSIDE GREEN WASTE COLLECTION SERVICE Council 13/4/2015, item 19	<p>A fortnightly kerbside green waste collection service utilising wheelie bins be implemented, commencing as early as possible in the 2015 calendar year and apply to the following residential properties - three or less tenancies; a land area between 400m² and 4,000m²; and located outside Sullivans Cove, the CBD and Fern Tree.</p> <p>A further report be provided on the need for the continuation of the green waste free entry</p>	Glenn Doyle, Director Parks and City Amenity	<p>The Council approved the service at its meeting on 9 February 2016.</p> <p>The service is to commence in the week starting 2 May 2016.</p>

Ref.	Title	Report / Action	Action Officer	Comments
		weekends at the McRobies Gully Waste Management Centre, following the implementation of the fortnightly kerbside green waste collection service.		
7	HAMPDEN ROAD, BATTERY POINT – TRAFFIC CALMING AND STREETScape IMPROVEMENTS Council 11/5/2015, item 13	<p>Kerb replacement, footpath widening and associated new stormwater infrastructure be constructed in Hampden Road between Francis Street and De Witt Street during 2015/2016.</p> <p>The remaining aspects of the project, including entry thresholds, raised pedestrian thresholds, kerb bulbing and artistic elements be further investigated as part of the development of the Local Area Retail Precincts Plan.</p> <p>The Battery Point and Sullivans Cove Citizens Association Traffic Sub-Committee and associated businesses in the area be advised of the Council's decision.</p>	Mark Painter, Director City Infrastructure	<p>Construction of Stage 1 of Hampden Road commenced in the first quarter of 2016 to meet trader requirements. Work should be completed by the end of April.</p> <p>This site is also included within the scope of the Local Retail Precincts Plan - refer to item 28.</p>
8	MCRIBIES GULLY WASTE MANAGEMENT CENTRE LANDFILL – EXTENDED OPERATIONAL LIFE AND REVISED REHABILITATION LEVY Council 25/5/2015, item 19	That the status quo remain in respect to the McRobies Gully Landfill Rehabilitation levy until such time as the Council has considered the response from the Tasmanian Environmental Protection Authority in respect to its application for amendment to the current Environmental Protection Notice to increase the landfill profile of the McRobies Gully Landfill site.	Glenn Doyle, Director Parks and City Amenity	<p>The first component of the approval process was the lodgement of a Development Application (DA) which has been undertaken.</p> <p>The DA has been subsequently been referred to Environmental Protection Authority for assessment.</p> <p>The DA was advertised for public comment. This period closed on 11 January 2016.</p> <p>The City's Development Appraisal team is awaiting final advice and recommendation from the EPA to inform the DA process.</p>
9	BARRACK STREET AT COLLINS STREET –	The intersection of Barrack Street and Collins	Mark Painter,	Construction has commenced and is expected to

Ref.	Title	Report / Action	Action Officer	Comments
	TRAFFIC CAPACITY IMPROVEMENTS Council 9/6/2015, item 14	Street be modified including the associated permanent removal of three on-street metered parking spaces.	Director City Infrastructure	be completed by the end of May.
10	HILL STREET/ARTHUR STREET, WEST HOBART – TRAFFIC Council 10/8/2015, item 12 Council 7/9/2015, item 14	<p>A review of the traffic issues identified in the report in relation to the new 'Hill Street Grocer' store in Hill Street, West Hobart, be conducted in six months time.</p> <p>A report be prepared on options for safer pedestrian crossings in Hill Street, West Hobart. The report also investigate the implementation of either a traffic roundabout or traffic signals at the corner of Hill and Arthur streets and other appropriate alternatives, including bike lanes.</p> <p>The Council investigate a 40 km per hour speed limit for all residential areas within the Hobart municipal area.</p>	Mark Painter, Director City Infrastructure	<p>The review has been conducted and is scheduled for inclusion on the April Committee agenda.</p> <p>This matter was considered by the Council in March 2016, see item 33 for continuation</p> <p>This matter will be considered in the development of the Transport Strategy.</p>
11	BURNETT STREET, NORTH HOBART – REQUEST FOR OCCUPATION LICENCE Council 10/8/2015, item 13	The Council undertake improvements to the nature strip adjacent to 32 Burnett Street, North Hobart, particularly to the lawn area.	Mark Painter, Director City Infrastructure	Options for improvement of the nature strip are being investigated.
12	MAJOR WORKS PROJECTS – CBD TO WATERFRONT PEDESTRIAN ROUTE OPTIONS – FEASIBILITY STUDY Council 10/8/2015, item 14	The Council approve the expenditure of up to \$150,000 from the Public Infrastructure Fund for the purposes of undertaking a consultancy to develop designs and an implementation plan for improved pedestrian links between the Hobart CBD and the waterfront, taking into account the recommendations contained within the Gehl report of 2010 and Inner City Action Plan project number AP03 and a media release relating to the project be prepared following the appointment	Neil Noye, Director City Planning	A project plan and associated project brief is currently under development.

Ref.	Title	Report / Action	Action Officer	Comments
		of a suitable consultant.		
13	MUNICIPAL EMERGENCY MANAGEMENT COORDINATOR POSITION Council 10/8/2015, item 15	The Council endorse the nomination of Mr Paul Jackson as the next Municipal Emergency Management Coordinator for the Hobart City Council and the Director State Emergency Services and the State Emergency Management Controller be so advised	Heather Salisbury, Deputy General Manager	Complete. The Minister has endorsed the appointment.
14	SANDY BAY RETAIL PRECINCT – STREETSCAPE REVITALISATION Council 7/9/2015, item 10	<ol style="list-style-type: none"> 1. The amended conceptual streetscape design for the Sandy Bay Retail Precinct be approved with work to be scheduled for completion in 2016/2017, acknowledging that some works may commence earlier in 2016. 2. The traffic issues raised during the community engagement process that relate to the intersection of King Street and Sandy Bay Road, Sandy Bay, be considered in consultation with representatives from the Department of State Growth. 3. The speed limit on Sandy Bay Road between Osborne Street and Ashfield Street, Sandy Bay, be reviewed following completion of the works and the Lord Mayor be requested to write to the Minister for State Growth regarding any planned speed limit changes for the main retail precinct on Sandy Bay Road. 4. Opportunities for increased bike parking be investigated as part of the detailed design for the Sandy Bay Retail Precinct streetscape revitalisation. 	Mark Painter, Director City Infrastructure	<p>Detailed design work to implement to Council's resolution is in progress.</p> <p>Correspondence in relation to Clause 3 has been received indicating that consideration would be given to reducing the speed limit if the proposed streetscape works are designed to moderate vehicle speeds.</p>

Ref.	Title	Report / Action	Action Officer	Comments
15	SANDY BAY CYCLING AND WALKING PROJECT, SANDY BAY – STAGE 3 – OUTCOME OF COMMUNITY ENGAGEMENT Council 7/9/2015, item 13	<p>The design for the Sandy Bay Cycling and Walking Project – Stage 3 be approved with a view to implementing the project in the 2015/2016 financial year with the estimated cost of \$1.2 million be funded from the Roads to Recovery Program.</p> <p>Further consultation with residents to progress additional design in order to provide a pedestrian crossing at 745 Sandy Bay Road, and a footpath link between 749 and 755 Sandy Bay Road and further consultation with the owner of 896 Sandy Bay Road</p> <p>Residents and businesses in Sandy Bay Road (between Wayne Avenue and the southern municipal boundary with Kingborough), and the Hobart Bicycle Advisory Committee be advised of the Council's decision.</p>	Mark Painter, Director City Infrastructure	<p>A report considering a minor design modification following discussions with a property owner at 896 Sandy Bay Road was considered by the Council on 9 February. See item 31 for continuation</p> <p>Works commenced on site in February 2016.</p>
16	PETITION – RESIDENTIAL PARKING PERMITS Council 12/10/2015, item 6.1	The Deputy Lord Mayor presented a petition requesting the Council return the annual residential parking permit fees for the Glebe area to the 2014/2015 levels with a further request that the Council give consideration to developing a residential parking permit scheme aimed at lowering the future cost to residents and supporting the principle of resident amenity.	Mark Painter, Director City Infrastructure	Work to implement to Council's resolution has commenced.
17	ICAP – MORRISON STREET, BROOKE STREET & DESPARD STREET URBAN RENEWAL – COMMUNITY ENGAGEMENT Council 12/10/2015, item 11	<ol style="list-style-type: none"> 1. Morrison Street, Brooke Street and Despard Street be upgraded 2. The three proposed parking spaces on Morrison Street, adjacent to Peter Johnston Ship Chandlers, be deleted from the design to 	Mark Painter, Director City Infrastructure	1 & 2 Work will commence on site after Easter 2016 following mediation of appeal.

Ref.	Title	Report / Action	Action Officer	Comments
		<p>provide for a wider footpath at that location.</p> <p>3. Officers undertake further discussion with Tasports in relation to the Mission to Seafarers potentially utilising the existing bus stop on Franklin Wharf near the Brooke Street Pier, after hours.</p> <p>4. Businesses and other stakeholders be advised of the Council's decision.</p> <p>5. A media release be issued at the appropriate time.</p>		<p>3. TasPorts have considered this proposal and at this stage do not feel it is necessary to provide additional parking for Misson to Seafarers.</p> <p>4 & 5. A communications strategy to support this project has been developed and advice will be provided to all stakeholders prior to construction commencing and during the course of the project.</p>
18	<p>ICAP – HOBART CENTRAL BUS INTERCHANGE PLANNING PROJECT – ELIZABETH STREET BUS MALL IMPROVEMENT PROJECT – DISCUSSIONS WITH METRO TASMANIA AND ONE-WAY BUS MALL</p> <p>Council 12/10/2015, item 12</p>	<p>1. The Council approve the assessment and documentation of the three options for the Elizabeth Street Bus Mall, being:</p> <p>2. The Council continue to work with the Hobart Central Bus Interchange Planning Project partners (Metro Tasmania, the Department of State Growth and TasBus) to progress the assessment of the options.</p> <p>3. A further report be provided on the issues and design implications of pursuing an alternative option for the Elizabeth Street Bus Mall Improvement Project.</p> <p>4. A media release be issued noting that further options for the Bus Mall are being assessed in response to feedback received during the June 2015 stakeholder and community engagement process.</p>	Mark Painter, Director City Infrastructure	<p>Design work to implement to Council's resolution has commenced.</p> <p>A report was considered by the Committee in December 2015.</p> <p>See item 27 for continuation.</p>
19	<p>PEDESTRIAN ACCESS AND SAFETY ON HOBART STREETS</p>	<p>1. Following the development and implementation of a suitable engagement</p>	Mark Painter, Director City	Planning underway.

Ref.	Title	Report / Action	Action Officer	Comments
	Council 12/10/2015, item 14	<p>strategy, the current Highways By-law (3 of 2008) be enforced with particular emphasis on the Elizabeth Mall, Wellington Court and Salamanca Square (including Woobys Lane and Kennedy Lane).</p> <p>2. The General Manager be authorised to modify the management of commercial furniture and infrastructure on public footpaths towards a best practice model approach, where such furniture and signage is only permitted if it does not interfere with the safe and equitable movement of pedestrians along that public footpath.</p> <p>3. A further report be prepared that identifies how the Council may achieve a clear building line with minimum footpath widths in the future, in order to best satisfy the provision of an accessible path as required by the Disability Discrimination Act 1992.</p> <p>4. During the review and renewal of the current Highways By-law, appropriate amendments be made to ensure that signboards are prohibited from being placed immediately adjacent to buildings</p> <p>5. As part of the review of signage, alternative options to sandwich boards, such as sign posts be investigated.</p> <p>6. Officer hold discussions with relevant stakeholders in relation to the hazards potentially created through application of the Disability Discrimination Act 1992 with regard to the setbacks required from building</p>	Infrastructure	

Ref.	Title	Report / Action	Action Officer	Comments
		frontages.		
20	PETITION - GOULBURN STREET, HOBART Council 23/11/2015 item 6.1	A report be prepared in response to a petition requesting the Council monitor the number of vehicles turning right from Molle Street into Collins and Liverpool Streets, and left into Harrington Street from Macquarie Street and further requesting the Council give consideration to ways of encouraging more vehicles to cross the City using these City streets in an effort to avoid the need to utilise Goulburn Street which is considered by the community as a residential street.	Mark Painter, Director City Infrastructure	Work to implement to Council's resolution has commenced.
21	COMMUNITY RECYCLING NETWORK FORUM – ATTENDANCE REPORT CIC 9/12/2015, item 6	Officers explore opportunities and report back to Committee on engaging with social enterprises as a component of the City's procurement processes associated with waste management activities, as outlined within the Community Recycling Network Forum, Attendance Report.	Glenn Doyle, Director Parks and City Amenity	This matter is contained within the Waste Management Strategy report, attached to the agenda
22	ICAP AP14 – SALAMANCA PLACE – PEDESTRIAN CROSSING AT MONTPELIER RETREAT CIC 9/12/2015, item 7	Officers investigate previous proposals to close the Morrison Street link road adjacent to the Salamanca Lawns and those investigations be the subject of a further report.	Neil Noye, Director City Planning	A report will be compiled in the second quarter of 2016 addressing this item.
23	DEVELOPMENT OF A CITY OF HOBART TRANSPORT STRATEGY CIC 9/12/2015, item 13	A Transport Strategy for the City of Hobart be developed.	Mark Painter, Director City Infrastructure	Work to implement to Council's resolution has commenced.
24	HOBART BICYCLE ADVISORY COMMITTEE – NOTES FROM MEETING OF 18 NOVEMBER 2015 CIC 9/12/2015, item 14	The options for a cycling link on Marieville Esplanade be reviewed when the future of the Battery Point foreshore walk is determined.	Mark Painter, Director City Infrastructure	The options will be reviewed when the future of the Battery Point foreshore walk is determined.

Ref.	Title	Report / Action	Action Officer	Comments
25	DRAFT CITY OF HOBART WASTE MANAGEMENT STRATEGY 2015-2030 Council 21/12/2015, item 14	The Draft City of Hobart Waste Management Strategy 2015-2030 be endorsed for public exhibition for a period of 8 weeks during January to February 2016, after which a further report be provided	Glenn Doyle, Director Parks and City Amenity	A report is attached to the agenda.
26	ICAP AP14 – SALAMANCA PLACE, BETWEEN MONTPELIER RETREAT AND GLADSTONE STREET – PROPOSED FOOTPATH Council 21/12/2015, item 15	A review be undertaken of the pedestrian, vehicular traffic and stakeholder implications of the proposal to widen the pedestrian footpath on the southern side of Salamanca Place, between Montpelier Retreat and Gladstone Street, and the outcome of the review be the subject of a further report. The Council not allow additional permanent umbrellas to be placed in the widened footpath proposed for Salamanca Place between Montpelier Retreat and Gladstone Street.	Mark Painter, Director City Infrastructure	Work to implement to Council's resolution has commenced
27	ICAP – HOBART CENTRAL BUS INTERCHANGE PLANNING PROJECT – ELIZABETH STREET BUS MALL IMPROVEMENT PROJECT – ALTERNATIVE OPTION TO CURRENT ARRANGEMENT Council 21/12/2015, item 16	<ol style="list-style-type: none"> 1. The Council give in principle support to the further development of a one-way Elizabeth Street Bus Mall, with displaced bus stops relocated to Collins Street (Option 3) 2. The General Manager be authorised to undertake further discussions with Metro Tasmania and the Department of State Growth to resolve residual issues and concerns. 3. The General Manager be authorised to undertake community engagement for Option 3 once the substantial concerns of Metro Tasmania and the Department of State Growth have been appropriately addressed, with the results of the engagement to be the 	Mark Painter, Director City Infrastructure	Work to implement to Council's resolution has commenced

Ref.	Title	Report / Action	Action Officer	Comments
		<p>subject of a further report prior to any final decision on the improvement project.</p> <ol style="list-style-type: none"> 4. A detailed design, cost estimate with identified funding sources be developed for the relocation of the Campbell Street bus stop (opposite City Hall) into Macquarie Street, which would be the subject of a future report. 5. The Council approve the reallocation of \$330,000 from the Public Infrastructure Fund 2015/2016 allocation for the Elizabeth Street Bus Mall Improvement Project, for the purposes of installing the new bus shelters on Macquarie Street adjacent to Franklin Square 6. A further report be provided on the implications, operation, cost and funding possibilities for an intrastate bus departure facility incorporating the underutilised area within the Franklin Square amenities building 		
28	LOCAL RETAIL PRECINCTS PLAN Council 21/12/2015, item 17	<ol style="list-style-type: none"> 1. The Council endorse “A Plan for Hobart’s Local Retail Precincts”, as the framework basis for developing the City’s significant local retail precincts. 2. Detailed design work be undertaken for the Lenah Valley retail precinct based on the concept design provided in “A Plan for Hobart’s Local Retail Precincts”, and a further report be provided once detailed design and community and trader engagement has been completed in 2016, with a view to the works being completed in 2017/2018. 3. Detailed design work be undertaken for 	Mark Painter, Director City Infrastructure	Work to implement to Council’s resolution has commenced

Ref.	Title	Report / Action	Action Officer	Comments
		<p>improved pedestrian crossing facilities in South Hobart in line with the concepts described in "A Plan for Hobart's Local Retail Precincts" with a view to works being undertaken in 2016/2017.</p> <p>4. An implementation plan based on "A Plan for Hobart's Local Retail Precincts" be prepared for Council consideration.</p> <p>5. Feedback based on the information contained in "A Plan for Hobart's Local Retail Precincts" and the decisions of the Council in relation to this matter be provided to the traders and other stakeholders who participated in the development of the Plan.</p>		
29	<p>NAMING OF ROADS CREATED BY 221A LENA VALLEY ROAD SUBDIVISION Council 21/12/2015, item 19</p>	<p>The Council's policy on road naming be reviewed to give preference to road names which have an historical connection with the area and provide opportunities to better represent the City's cultural diversity.</p>	<p>Mark Painter, Director City Infrastructure</p>	<p>To be undertaken as part of the annual review of Council Policies</p>
30	<p>SANDY BAY ROAD WALKING AND CYCLING PROJECT – STAGE 2 – ONE YEAR REVIEW – WARNING LIGHTS FOR DRIVEWAYS Council 21/12/2015, item 20</p>	<p>1. The installation of convex mirrors on gate posts or garage doors (where technically possible) on both sides of all driveways on the eastern side of Sandy Bay Road, between Marieville Esplanade and Drysdale Place, be offered to the residents of those properties.</p> <p>i. Maintenance and future replacement of these mirrors become the responsibility of the individual property owners.</p> <p>2. Residents and property owners of Sandy Bay Road (on the eastern side, between Marieville Esplanade and Drysdale Place) be advised of</p>	<p>Mark Painter, Director City Infrastructure</p>	<p>Residents and property owners have been advised and no requests for the installation of convex mirrors have been received.</p>

Ref.	Title	Report / Action	Action Officer	Comments
		Council's decision.		
31	SANDY BAY ROAD WALKING AND CYCLING PROJECT STAGE 3 - MODIFICATION TO DESIGN Council 9/2/2016	<ol style="list-style-type: none"> 1. The design for Stage 3 of the Sandy Bay Road Walking and Cycling Project, as approved by the Council at its meeting of 7 September 2015, not be modified and accordingly, no additional parking near 896 Sandy Bay Road be provided. 2. The residents of 896 Sandy Bay Road be advised of the Council's decision 	Mark Painter, Director City Infrastructure	Complete.

Ref.	Title	Report / Action	Action Officer	Comments
32	MURRAY STREET – REQUEST FOR FOOTPATH CLOSURE AND REDUCED TRAFFIC LANES – ICON COMPLEX Council 22/2/2016	<ol style="list-style-type: none"> 1. Conditional approval in-principle be given for the developer of the ICON Complex – Stage 2 site to implement lane closures and road closures in Murray Street initially as a four-week trial with the view to making this a more permanent arrangement (subject to approval), for approximately 22 months until the works are complete, noting that these changes will ensure that both traffic lanes remain open at specified times. 2. The General Manager be authorised to modify and/or withdraw the above approval if the above works result in safety concerns or unreasonable congestion and the continuation of the traffic management arrangements be subject to the General Manager's approval 3. The Council develop and implement a communication strategy to ensure that nearby businesses are aware of the progress of the development; and the travelling public are aware of the traffic network changes and alternative travel routes as a result of this and other concurrent developments 	Mark Painter, Director City Infrastructure	<p>The 4 week off-peak traffic lane closure trial in Murray Street commenced in mid-March.</p> <p>A communications plan has been developed to support the lane closures required to facilitate the redevelopment of the Myer site. The City is working with the Hobart Chamber of Commerce to facilitate Hutchinsons engaging with nearby businesses and a trader meeting was held on 17 March.</p>

Ref.	Title	Report / Action	Action Officer	Comments
33	WEST HOBART LOCAL AREA TRAFFIC INVESTIGATION Council 7/3/2016	1. The recommendations of the consultant report titled West Hobart Local Area Traffic Investigation – Final Report, , be supported in-principle and the following actions be undertaken: <ul style="list-style-type: none"> (i) A workshop be convened with stakeholders in relation to the West Hobart pedestrian environment. (ii) The Department of State Growth be requested to establish Statewide warrants for the installation of pedestrian crossings within Tasmania. (iii) The Council write to the Department of State Growth requesting that consideration be given to the installation of an unsupervised children's crossing in Hill Street in the 40km/h zone near Caldew Park. (iv) Median lanes and median islands be installed in Hill Street between Allison Street and Patrick Street and between Hamilton Street and Warwick Street, in 2016/2017 following the development of concept designs and community engagement. (v) A review be undertaken following the installation of the median islands and pedestrian crossings in Hill Street. (vi) Concept design development and consultation be undertaken with directly affected residents in 2016/2017 to provide more generous pedestrian crossings in Hill Street where refuge islands are already provided. 	Mark Painter, Director City Infrastructure	Work to progress the Council's resolution is underway

Ref.	Title	Report / Action	Action Officer	Comments
		<ol style="list-style-type: none">2. The West Hobart Resident Traffic Committee, Lansdowne Crescent Primary School, The Friends School, Taroona High School, Lawrenny Court, businesses along Hill Street and those people who participated in the consultation conducted by MRCagney, be advised of the Council's decision.3. A temporary treatment to the median islands and pedestrian crossings be considered, in an effort to gauge their impact.4. The Council approach the State Government regarding the installation of traffic signals at the intersection of Arthur and Hill Streets.5. Consideration be given to the submission of an application for the 2016 round of Blackspot Program Funding, to support the installation of signals at this location.		

Ref.	Title	Report / Action	Action Officer	Comments
34	ICAP AP07 – BROOKER AVENUE SHARED BRIDGE Council 7/3/2016	<ol style="list-style-type: none"> 1. The Brooker Avenue Shared Bridge be developed at an estimated value of \$4 million to be funded from an allocation provided in the Public Infrastructure Fund in the 2016/2017 Annual Plan. 2. Landlord consent be given for the Brooker Avenue Shared Bridge to be lodged as a planning application. 3. The Council initiate formal negotiations with: <ol style="list-style-type: none"> (i) The State Government to enable the Council to acquire land for the purposes of future road widening over part of 19 Bathurst Street (ii) The University of Tasmania for public access rights over the new footpaths and bridge structure proposed to be located on the Domain House Campus site. 4. A further report be provided to the City Infrastructure Committee outlining progress on the negotiations, prior to finalising any tender for the construction of the bridge. 5. A media release be issued 	Neil Noye, Director City Planning	
35	7A THELMA DRIVE, WEST HOBART – NAMING OF NEW ROAD Council 7/3/2016	<ol style="list-style-type: none"> 1. The new road created by the subdivision at 7A Thelma Drive, West Hobart be named Hutchinson Place. 2. The Nomenclature Board of Tasmania and the developer be advised of the Council's decision. 	Mark Painter, Director City Infrastructure	Work to progress the Council's resolution s underway

17. QUESTIONS WITHOUT NOTICE – FILE REF: 13-1-10

Pursuant to Section 29 of the Local Government (Meeting Procedures) Regulations 2015, an Alderman may ask a question without notice of the Chairman, another Alderman or the General Manager or the General Manager's representative in accordance with the following procedures endorsed by the Council on 10 December 2012:

1. The chairman will refuse to accept a question without notice if it does not relate to the Terms of Reference of the Council committee at which it is asked.
2. In putting a question without notice, an Alderman must not:
 - (i) offer an argument or opinion; or
 - (ii) draw any inferences or make any imputations – except so far as may be necessary to explain the question.
3. The chairman must not permit any debate of a question without notice or its answer.
4. The chairman, Aldermen, General Manager or General Manager's representative who is asked a question without notice may decline to answer the question, if in the opinion of the intended respondent it is considered inappropriate due to its being unclear, insulting or improper.
5. The chairman may require an Alderman to put a question without notice, to be put in writing.
6. Where a question without notice is asked at a meeting, both the question and the response will be recorded in the minutes of the meeting.
7. Where a response is not able to be provided at the meeting in relation to a question without notice, the question will be taken on notice and
 - (i) the minutes of the meeting at which the question is put will record the question and the fact that it has been taken on notice.
 - (ii) a written response will be provided to all Aldermen, at the appropriate time.
 - (iii) upon the answer to the question being circulated to Aldermen, both the Question and the Answer will be listed on the agenda for the next available ordinary meeting of the committee at which it was asked, whereat it be listed for noting purposes only, with no debate or further questions permitted, as prescribed in Section 29(3) of the Local Government (Meeting Procedures) Regulations 2015.

**CITY INFRASTRUCTURE COMMITTEE AGENDA
(OPEN PORTION OF THE MEETING)
27/4/2016**

18. CLOSED PORTION OF THE CITY INFRASTRUCTURE COMMITTEE MEETING

The following items were discussed:-

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| Item No. 1. | Minutes of the Closed Portion of the City Infrastructure Committee Meeting held on 24 February 2016 |
| Item No. 2 | Consideration of Supplementary Items to the Agenda |
| Item No. 3. | Indications of Pecuniary and Conflicts of Interest |
| Item No. 4. | City Infrastructure Committee – Status Report |
| Item No. 5. | Questions Without Notice – File Ref: 13-1-10 |