

CITY OF ARMADALE

MINUTES

OF TECHNICAL SERVICES COMMITTEE HELD IN THE COMMITTEE ROOM,
ADMINISTRATION CENTRE, 7 ORCHARD AVENUE, ARMADALE ON MONDAY,
5 SEPTEMBER 2016 AT 7:00PM.

PRESENT:

Cr G Nixon (Chair)
Cr G A Best
Cr K Busby
Cr R Butterfield
Cr L Sargeson
Cr J A Stewart

APOLOGIES:

Cr C Frost
Mr K Ketterer Executive Director Technical Services

OBSERVERS:

Nil.

IN ATTENDANCE:

Mr G Davies	Acting Executive Director Technical Services
Mr P Lanternier	Manager Parks
Mr S Asmus	Manager Engineering & Design
Mr M Vermeulen	Manager Asset Management
Ms C Burtenshaw	Environmental Officer
Mrs A Owen-Brown	Minute Secretary

PUBLIC:

Nil.

*“For details of Councillor Membership on this Committee, please refer to the City’s website
– www.armadale.wa.gov.au/your_council/councillors.”*

DISCLAIMER

The Disclaimer for protecting Councillors and staff from liability of information and advice given at Committee meetings were not read as no members of the public were present.

DECLARATION OF MEMBERS' INTERESTS

Nil.

QUESTION TIME

Nil.

DEPUTATION

Nil.

CONFIRMATION OF MINUTES

RECOMMEND

Minutes of the Technical Services Committee Meeting held on 1 August 2016 be confirmed.

**Moved Cr R Butterfield
MOTION CARRIED**

(6/0)

ITEMS REFERRED FROM INFORMATION BULLETIN

- **Outstanding Matters and Information Items**

Various Items.

- **Monthly Departmental Reports**

Technical Services Works Programme.

If any of the items listed above require clarification or a report for a decision of Council, this item to be raised for discussion at this juncture.

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5 SEPTEMBER 2016

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1.1 - FAUNA RESEARCH AND MANAGEMENT IN THE CITY'S BUSHLAND RESERVES

WARD : ALL
FILE No. : M/397/16
DATE : 14 July 2016
REF : CB
RESPONSIBLE : Executive Director
MANAGER : Technical Services

In Brief:

- In a rapidly urbanising City it is important to ensure that native fauna are managed to mitigate local population extinctions. The identification of threats, fauna hotspots and ecological linkages are essential elements to consider. For mammal species such as the Southern Brown Bandicoot genetic biodiversity requires that animals have the ability to move from one habitat to another and are not spatially isolated.
- Environmental Services has proposed a project that incorporates research and monitoring, threat mitigation and identification of opportunities to create ecological corridors to sustain fauna populations within the City's most biodiverse bushland reserves.

Recommend:

That Council:

Notes and supports the project proposal to enhance fauna research and management in the City's bushland reserves.

Tabled Items

Nil.

Officer Interest Declaration

Nil.

Strategic Implications

2.1 The natural environment is valued and conserved

2.1.1 Preserve and improve natural areas

2.1.1.1 Implement the Wungong River Project Management Plan

Legislation Implications

General assessment of relevant legislation has not revealed any restrictions.

Council Policy/Local Law Implications

Assessment of Policy/Local Law indicates that the following are applicable:

- City of Armadale State of the Environment Report 2011/2012 to 2015/2016
- City of Armadale Local Biodiversity Strategy 2009
- Bungendore Park Strategic Directions 2009
- Armadale Settlers Common Strategic Directions 2002
- Department of Parks and Wildlife Forrestdale Lake Nature Reserve Management Plan 2005

Budget/Financial Implications

A budget of \$50,000 has been allocated for this project for the current financial year with an additional \$50,000 in 2017/18 and 2018/19.

Consultation

- Intra Directorate
- Inter Directorate
- Department of Parks and Wildlife
- Main Roads WA

BACKGROUND

The City's rapid urbanisation poses significant threats to the viability of fauna populations within the City's bushland reserves. It is critical to provide large areas of connected bushland and manage threatening processes to ensure fauna will persist in bushland reserves post development. This is especially the case on the Swan Coastal Plain where bushland reserves are becoming development-locked, geographically isolating fauna in some reserves. In order to best manage fauna in City reserves a hierarchy of criteria was used to identify the most biodiverse reserves within the City. Three were identified; Forrestdale Lake Nature Reserve; Bungendore Park; and: Armadale Settlers Common. Initially the project proposes to engage a consultant to undertake fauna research and monitoring in the selected reserves. This will

establish the presence and abundance of species, including feral animals, and inform and guide future management.

Forrestdale Lake Nature Reserve

In 1990 Forrestdale Lake Nature Reserve (FLNR) was designated to the List of Wetlands of International Importance under the Convention of Wetlands (Ramsar, Iran, 1971). FLNR is the most biologically rich and diverse natural reserve vested in the City. The Reserve contains Declared Rare Fauna and Flora, Priority Species, Conservation Category Wetlands, Threatened Ecological Communities and six floristic communities. The Bush Forever Site (No. 345) comprises 383ha of Class A reserve and supports 172 vertebrate fauna. The City of Armadale Local Biodiversity Strategy, 2009, has identified three ecological linkages to FLNR, one connects Bush Forever Site 342 (Anstey Keane Damplands) to the northern side of the reserve and two additional proposed ecological linkages on the western and eastern sides of the reserve provide linkages to Jandakot Botanical Park. **Attachment 1** shows the locations of Declared Rare Fauna and Flora and Ecological linkages for FLNR.

FLNR is under increasing pressure and threat from surrounding development, a drying climate, feral animals, invasive weed species, disease and illegal off road vehicle activity. The reserve is an important remnant of Swan Coastal Plain (SCP) bushland and represents the best opportunity in a City of Armadale reserve on the SCP to conserve a range of vertebrate and invertebrate fauna. The size, connectivity and rich floristic diversity enable the reserve to support viable populations of invertebrates, mammals, reptiles, avifanua and amphibians.

Tenure

FLNR consists of two reserves, Reserve No. 27165 and Reserve No. 24781. Reserve No. 27165 is vested in the City of Armadale and reserved for Parks and Recreation. Reserve No. 24781 is vested with the Conservation Commission of WA and is managed by the Department of Parks and Wildlife (DPAW). The DPAW managed portion of the reserve is currently zoned for the purpose of Conservation. The Armadale Golf Course comprises a 35ha portion of Reserve No. 27165 and is currently leased.

The *Forrestdale Lake Nature Reserve Management Plan, 2005 (Conservation Commission of WA)* proposes that the vesting of Reserve No. 27165, excluding the Forrestdale Golf Course, be transferred to the Conservation Commission to be managed by DPAW as a Conservation Reserve (Conservation Commission WA, 2009). Recent discussions with the DPAW confirm that this is still the intent. However, no further progress has been made on the matter.

Also of note, in the *Department of Premier and Cabinet's Draft Perth and Peel Green Growth Plan for 3.5 Million* Reserve No. 27165 is proposed for “*expansion of Forrestdale Lake Nature Reserve*” as part of the Phase 1 package of sites to be included in crown reserve. Development Services, in a submission for the Draft Perth and Peel Green Growth Plan, have suggested a number of options in response to this.

- That the City be allowed to manage the reserve where there is an existing legal status such as the Armadale Golf Course, or, where the City is willing to take on the management of the reserve.
- The City may consider alternate arrangements for the golf course, including separating the 35ha Lease Area for the golf course from Reserve No. 27165.

- The City may consider support for a management order for the balance portion of Reserve 27165.
- The City may consider entering a formal agreement for joint management of Reserve No. 27165.

The above mentioned uncertainties in regards to tenure of the Reserve will not adversely impact on the proposed fauna project. The City currently has an informal joint management agreement with DPAW and this is likely to be formalised in future. The *FLNR Management Plan (2005)* was written over 10 years ago and to date no progress has been made in regards to the revision of zoning of Reserve No. 27165. This does not appear to be a priority for the DPAW but the City should not miss the opportunity to undertake such an important project that will ultimately enhance the City's environmental and social assets.

Bungendore Park and Armadale Settlers Common

Bungendore Park is a 498ha Class A reserve in the Darling Scarp. The reserve is considered a part of Wungong Regional Park. To the south the Park abuts the Wungong Gorge and in the north portions of Armadale Settlers Common come within a few hundred meters of the Bungendore Park. The proximity of other bushland reserves to the Park provides good ecological linkages to other bushland. Five vegetation communities support four species of Threatened or Priority fauna and 125 vertebrate fauna species.

Armadale Settlers Common (ASC) comprises two portions of land, ASC East and ASC West, covering a total of 383ha of which 278ha is vested in the City of Armadale and 105ha is owned by the Western Australian Planning Commission. ASC is also a part of Wungong Regional Park and like Bungendore Park, provides good connectivity to other bushland on the Darling Scarp. **Attachment 2** shows the locations of Declared Rare Fauna and Flora and Ecological linkages for Bungendore Park and ASC. **Attachment 3** provides an example of the fauna in ASC East.

The Common supports four floristic communities, Declared Rare Flora and Fauna and 145 vertebrate fauna. The reserve also provides habitat for Priority fauna.

Given the size, diversity of floristic communities and connectivity, Bungendore Park and Armadale Settlers Common provide an important refuge for fauna within the City of Armadale.

Key threats to fauna within the above reserves consist of invasive animal and weed species, disease, fire, and a drying climate.

Tenure – Bungendore Park and Armadale Settlers Common

Bungendore Park Reserve No. 4561 and Armadale Settlers Common Reserve No. 4127 are reserved as Parks and Recreation and vested in the City of Armadale. As aforementioned, a 105ha portion of ASC West is owned by the Western Australian Planning Commission and zoned as Parks and Recreation Regional under the Metropolitan Region Scheme.

DETAILS OF PROPOSAL

The proposed fauna project will inform strategic management of fauna in the City's most biodiverse bushland. The aim will be to:

- Provide baseline data on fauna and feral animal presence
- Ensure genetic biodiversity of fauna
- Manage risk to fauna populations
- Identify and develop ecological linkages
- Enhance educational and research opportunities
- Reduce illegal off road vehicle activity
- Enhance recreational opportunities
- Engage the community in citizen science projects

Schedule of Proposed Activities

Reserve	Year 1	Year 2	Year 3
Forrestdale Lake Nature Reserve	<ul style="list-style-type: none"> • Baseline monitoring • Feral animal control • Fencing • Investigate ecological linkages 	<ul style="list-style-type: none"> • Fauna/feral monitoring • Feral animal control • Installation of trails • Fencing • Research/Education 	<ul style="list-style-type: none"> • Fauna/feral monitoring • Feral animal control • Signage • Habitat supplementation • Research/Education
Bungendore Park	<ul style="list-style-type: none"> • Feral animal control 	<ul style="list-style-type: none"> • Baseline monitoring • Feral animal control • Fencing • Habitat supplementation • Investigate ecological linkages 	<ul style="list-style-type: none"> • Fauna/Feral monitoring • Feral animal control • Signage • Habitat supplementation • Research/Education
Armadale Settlers Common	<ul style="list-style-type: none"> • Feral animal control 	<ul style="list-style-type: none"> • Feral animal control 	<ul style="list-style-type: none"> • Baseline monitoring • Feral animal control • Habitat supplementation • Research/Education • Investigate ecological linkages

Following the initial 3 year program the City will be better placed to determine long-term requirements for the possible continuation of the program. Fauna management will be built into existing management plans for each reserve. In the absence of a City management plan, such as the case for FLNR, the requirement for a separate fauna management plan can be investigated.

Conclusion

The proposed project will build on fauna habitat supplementation and selective feral animal control already being undertaken in the City. The Forrestdale Lake Nature Reserve component of the project presents an opportunity to work in a collaborative partnership with the Department of Parks and Wildlife. Research partnerships are also being explored with Murdoch University in regards to fauna monitoring. This project represents the first strategic and targeted management of fauna within City bushland reserves.

ATTACHMENTS

1. [↓](#) Map of Forrestdale Lake Nature Reserve Declared Rare Fauna/Flora and Ecological Linkages
2. [↓](#) Map of Bungendore Park and Armadale Settlers Common Declared Rare Fauna/Flora and Ecological Linkages
3. [↓](#) Preliminary Fauna Monitoring Armadale Settlers Common

RECOMMEND

T51/9/16

That Council:

1. **Notes and supports the project proposal to enhance fauna research and management in the City's bushland reserves.**
2. **Receive a progress report on this project in late 2017.**

**Moved Cr R Butterfield
MOTION CARRIED**

(6/0)

2.1 - ENTRY STATEMENTS

WARD : ALL
FILE No. : M/478/16
DATE : 18 August 2016
REF : PL
RESPONSIBLE : Executive Director
MANAGER : Technical Services

In Brief:

- On 1 August 2016 a Councillor Workshop was held to present preliminary Entry Statement Concepts.
- This report summarises the response to the concepts and outlines the proposed direction following the Workshop.

Recommend:

That Council:

1. Endorse the project brief as an outcome of the Councillor Workshop held on 1 August 2016.
2. Note a detailed report on the style, form and locations for Entry Statements will be further considered at the 3 October 2016 Technical Services Committee meeting.

Tabled Items

Nil.

Officer Interest Declaration

Nil.

Strategic Implications

2.2 Attractive and Functional Public Places

- 2.2.1 Deliver attractive and functional streetscapes, open spaces, City buildings and facilities
- 2.2.2 Protect and enhance the character of the City's spaces and places
 - 2.2.2.1 Implement, survey and define a sense of place or character for each designated area of the City

Legislation Implications

General assessment of relevant legislation (e.g. Local Government Act) has not revealed any restrictions.

Council Policy/Local Law Implications

General assessment has not revealed any applicable Policies/Local Laws.

Budget/Financial Implications

The adoption of the recommendation contained in this report has no financial implications.

Funding of \$50,000 is allocated in the 2016/17 Parks Programme for these works. Similar amounts are included in the Long Term Financial Plan for 2017/18 and 2018/19.

Consultation

- Councillor Workshop.
- Intra Directorate.

BACKGROUND

At the Council meeting held on 23 May 2016, Cr Wielinga referred the following matter to the Technical Services Committee:

'That the matter of style and form of Entry Statements be referred to the Technical Services Committee.'

There has been budget items relating to entry statements but misunderstandings on types of entry statements and I would like clarification on the matter.'

T32/5/16 Recommended

That a report on this matter be submitted to the Technical Services Committee at a future meeting.

DETAILS OF PROPOSAL

On the 1st August 2016 a Councillor workshop was held to present preliminary Entry Statement Concepts. The Entry Statement concepts presented illustrated the proposed landscaping for each individual locality and outlined three options of identification signage for discussion. The Concepts presented were classified as district or local Entry Statements.

This report summaries the response to the Concepts and as a result, forms the project brief as outlined below.

Project Brief

The aim of the Entry Statements is to:

- Provide a sense of arrival to each locality
- Reflect the locality's identity, with an emphasis on depicting the environmental and cultural history of the area; and
- Create a bold landmark which enhances the character of the streetscape and improves orientation and wayfinding

From the workshop discussion, it is proposed the Entry Statements will include a combination of planting, paving, lighting, themed artwork and identification signage if possible/appropriate for the identified locations.

Signage Design

Of the signage options presented, Option 2 (Corten Steel and Laterite Blockwork) was generally considered the preferred option, subject to the following considerations:

- An increase in the scale of the signage as appropriate to create an iconic landmark.
- The inclusion of artwork within the sign which reflects the local and/or environmental history of each locality e.g. local fauna inspired laser cut artwork.
- The inclusion of a plinth where practical, made of local materials or promoting local/historic industries e.g. brickworks, laterite etc.
- Inclusion of waterwise soft landscaping with an emphasis on appropriate species selection with historical ties to the area.
- Inclusion of uplighting or feature lighting where practical and appropriate.
- Writing and wording font to be easily read when entering an area particularly by vehicle.

The attached drawing (**Attachment 1**) illustrates an example Entry Statement for Roleystone (each location would be site specific) based on the aims and considerations gathered from the Workshop.

CONCLUSION

As a result of the recent Councillor Workshop discussions, Officers have been able to design the project brief for the Entry Statements for confirmation. Confirmation will allow Officers to complete a detailed design and costing for each of the locations. The matter will then be submitted to the 3 October 2016 Technical Services Committee Meeting for consideration.

ATTACHMENTS

1. [Example Entry Statement for Roleystone](#)

Committee Discussion

There was some discussion on the design and inclusions for Entry Statements. The Manager Parks clarified that more detail would be available in the report to be presented at the 3 October 2016 Technical Services Committee meeting.

There was some discussion on wording and grammar in the Project Brief section this report. The Manager Parks advised these would be amended in the minutes.

RECOMMEND

T52/9/16

That Council:

1. **Endorse the following project brief as an outcome of the Councillor Workshop held on 1 August 2016.**
 - **An increase in the scale of the signage as appropriate to create an iconic landmark.**
 - **The inclusion of artwork within the sign which reflects the local and/or environmental history of each locality e.g. local fauna inspired laser cut artwork.**
 - **The inclusion of a plinth where practical, made of local materials or promoting local/historic industries e.g. brickworks, laterite etc.**
 - **The inclusion of waterwise soft landscaping with an emphasis on appropriate species selection with historical ties to the area.**
 - **The inclusion of uplighting or feature lighting where practical and appropriate.**
 - **Wording/font to be legible when entering an area particularly by vehicle.**
2. **Note that a report detailing the style, form and locations for Entry Statements will be further considered at the 3 October 2016 Technical Services Committee meeting.**

Moved Cr K Busby
MOTION CARRIED

(6/0)

***2.2 - COUNCIL POLICY REVIEW - ENG 6 STREET TREE MANAGEMENT –
REMOVALS AND REPLACEMENT, TREES IN STREETS, WAYS AND RESERVES***

WARD : ALL
FILE No. : M/500/16
DATE : 24 August 2016
REF : PL
RESPONSIBLE : Executive Director
MANAGER : Technical Services

In Brief:

- At the Technical Services Committee meeting held 29 February 2016, Committee discussed a number of policies as presented at the meeting.
- Committee suggested that one of these policies, Policy ENG 6 – Street Tree Management - Removals and Replacement, Trees in Streets, Ways and Reserves, be referred back for inclusion of aspects related to the Urban Forest Strategy.

Recommend:

That Council:

Pursuant to section 2.7(2)(b) of the *Local Government Act 1995* endorse the proposed amendments to Policy ENG 6 – Street Tree Management - Removals and Replacement, Trees in Streets, Ways and Reserves and continue to apply and operate after amendment for a further three (3) years until March 2019 or such earlier date as Council may determine from time to time.

Tabled Items

Nil.

Officer Interest Declaration

Nil.

Strategic Implications

2.2 Attractive and Functional Public Places

2.2.1 Deliver attractive and functional streetscapes, open spaces, City buildings and facilities

2.2.1.3 Implement the Urban Forest Strategy

4.1 Visionary Civic leadership and sound governance

4.1.2 Make decisions that are sound, transparent and strategic

*4.1.2.1 Implement policies and associated delegations to improve transparency of decisions

Legislation Implications

Assessment of legislation indicates that the following apply:

Section 2.7 of the Local Government Act 1995 states:

- (1) The Council –
 - (a) Directs and controls the Local Governments affairs, and
 - (b) Is responsible for the performance of the Local Governments functions.
- (2) Without limiting subsection (1), the Council is to –
 - (b) Determine the Local Governments policies.

Council Policy/Local Law Implications

Assessment of Policy/Local Law indicates that the following are applicable:

- City of Armadale Policy Manual 2013

Budget/Financial Implications

Works can be accommodated within the 2016/2017 Parks Budget.

Consultation

- Intra Directorate.

BACKGROUND

At its Ordinary Meeting of 4 March 2003, Council formally adopted the Policy Manual and endorsed the associated Management Practices for developing, amending and reviewing policies.

Part 3.1 of the procedure states:

“A review of every policy is to be made every 3 years by the relevant Executive Director, with a third of the policies reviewed each year”.

As per the procedure for developing, amending and reviewing policies, five of the policies that relate to the Technical Services Directorate were reviewed and presented in a report to the Technical Services Committee Meeting held 29 February 2016.

Committee discussed the policies as presented, with the suggestion that *Policy ENG 6 – Street Tree Management – Removals and Replacements, Trees in Streets, Ways and Reserves* be referred back for inclusion of aspects related to the Urban Forest Strategy. Committee agreed that Policy ENG6 would be referred back for further review.

Recommend T 6/2/16

2. That ENG 6 – Street Tree Management - Removals and Replacement, Trees in Streets, Ways and Reserves be referred back for further review.

DETAILS OF PROPOSAL

The Policy and Management Practice *ENG 6 – Removals and Replacements, Trees in Streets, Ways and Reserves* has been further reviewed in accordance with recommendation T 6/2/16 and the procedure for developing, amending and reviewing policies. Aspects related to the City’s Urban Forest Strategy have been included.

CONCLUSION

ENG 6 is now presented, following review along with the applicable management practice and other relevant attachments to this report. It is recommended that Council endorse the policy and associated Management Practice ENG 6 – Street Trees and that the policy be reviewed in March 2019, or such earlier date as determined necessary.

ATTACHMENTS

1. ↓ Attachment 1 - Existing Policy ENG 6 - Street Tree Management - Removals and Replacements, Trees in Streets, Ways and Reserves
2. ↓ Attachment 2 - Existing Management Practice ENG 6 - Street Tree Management - Removals and Replacements, Trees in Streets, Ways and Reserves
3. ↓ Attachment 3 - Revised Policy ENG 6 - Street Tree Management - Removals and Replacements, Trees in Streets, Ways and Reserves
4. ↓ Attachment 4 - Revised ENG 6 Management Practice - Street Tree Management - Removals and Replacements, Trees in Streets, Ways and Reserves
5. ↓ Attachment 5 - Helliwell Tree Evaluation Report - 5 Sep 2016
6. ↓ Attachment 6 - Amenity Tree Valuation Form

Committee Discussion

The Acting Executive Director Technical Services noted that the name of the report would be changed to reflect the name of the Policy as shown in the Recommendation. Some content and formatting issues in the Revised Policy (Attachment 3) and Revised ENG-6 Management Practice (Attachment 4) were highlighted; the document to be updated in the Minutes to reflect the corrections.

There was some discussion regarding the valuation and protection of trees which were addressed by the Manager Parks.

RECOMMEND

T53/9/16

That Council:

Pursuant to section 2.7(2)(b) of the *Local Government Act 1995* endorse the proposed amendments to Policy ENG 6 – Street Tree Management - Removals and Replacement, Trees in Streets, Ways and Reserves and continue to apply and operate after amendment for a further three (3) years until March 2019 or such earlier date as Council may determine from time to time.

**Moved Cr J A Stewart
MOTION CARRIED**

(6/0)

***3.1 - CONFERENCE ATTENDANCE - 2016 NATIONAL LOCAL ROADS AND
TRANSPORT CONGRESS***

WARD : ALL
FILE No. : M/476/16
DATE : 17 August 2016
REF : KK
RESPONSIBLE : Executive Director
MANAGER : Technical Services

In Brief:

- The Australian Local Government Association's (ALGA) National Local Roads and Transport Congress is to be held in Toowoomba, QLD from 9-11 November 2016 and is normally attended by a Technical Services Officer.

- **Recommend:**

That Council:

1. Nominate Councillor as a delegate to the 2016 National Local Roads and Transport Congress, to be held in Toowoomba, QLD from 9-11 November 2016.

*Or should no nomination be received,
then the recommendation is as follows:*

No nomination is made for attendance at the 2016 National Local Roads and Transport Congress.

2. Note the attendance of a Senior Officer from Technical Services as delegate to the 2016 National Local Roads and Transport Congress, to be held in Toowoomba, QLD from 9-11 November 2016.

Tabled Items

Nil.

Officer Interest Declaration

Nil.

Strategic Implications

2.3 Well Managed Infrastructure

2.3.1 Apply best practice design and construction methodologies for the provision of infrastructure

2.3.4 Develop long term transport network planning

3.3 Public Infrastructure that supports economic development

3.3.1 Facilitate and advocate for an efficient movement network connecting employment and business opportunities

4.1.3 Support the role of the elected body

4.1.3.3 Advocate and support Councillor engagement in outside bodies and events to maintain awareness and enhance the City's knowledge base

Legislation Implications

General assessment of relevant legislation (eg. Local Government Act) has not revealed any restrictions.

Council Policy/Local Law Implications

Assessment of Policies/Local Laws indicates that the following are applicable:

- Council Policy ADM3 – Conferences and Training.
- Council Policy EM1 – Reimbursement of Councillor's Expenses.

Budget/Financial Implications

Allowances for Officer and Councillor attendance at conferences have been made within the 2016/2017 Budget.

Consultation

- Intra Directorate.

BACKGROUND

The Australian Local Government Association's (ALGA) National Local Roads and Transport Congress will be held in Toowoomba QLD from 9 - 11 November 2016.

The Congress allows the Local Government sector to address road and transport issues occurring in local communities.

COMMENT

The theme for the 2016 conference is “*Local Infrastructure, Developing Regions*”, which will focus on the value and importance of strong regional and local collaboration. The congress will also discuss the latest State of the Assets report and will serve to highlight the importance of federal funding in overcoming the road and infrastructure challenges facing local governments.

The Congress will also focus on broader policy issues such as:

- Bridges Programme.
- Heavy Vehicle Regulation.
- Airports.

Discussion subjects of importance to metropolitan Councils are:

- Roads to Recovery (R2R) funding streams.
- Road Asset Management.
- Road transport planning.

Key note speakers dealing with local roads and transport have been invited to attend, namely:

- The Hon Darren Chester MP - Minister for Infrastructure and Transport.
- The Hon Anthony Albanese MP - Shadow Minister for Infrastructure, Transport, Cities and Regional Development.
- Mr Martin Matthews – Former Secretary for Transport New Zealand.

ATTACHMENTS

There are no attachments for this report.

RECOMMEND

T54/9/16

That Council:

1. **Nominate Councillor Cr K Busby as a delegate to the 2016 National Local Roads and Transport Congress, to be held in Toowoomba, QLD from 9-11 November 2016.**
2. **Note the attendance of a Senior Officer from Technical Services as delegate to the 2016 National Local Roads and Transport Congress, to be held in Toowoomba, QLD from 9 - 11 November 2016.**

Moved Cr G Nixon
MOTION CARRIED

(6/0)

***3.2 - DEPARTMENTAL ACTIVITY REPORT - EXECUTIVE DIRECTOR'S OFFICE,
TECHNICAL SERVICES ADMINISTRATION, SUBDIVISIONS, ENGINEERING
DESIGN AND ASSET MANAGEMENT***

WARD : ALL
FILE No. : M/468/16
DATE : 12 August 2016
REF : KA
RESPONSIBLE : Executive Director
MANAGER : Technical Services

In Brief:

- A series of Departmental Activity reports have been prepared for Council to provide an overview of the functions of each of the Departments within the Technical Services Directorate.
- The below and attached reports provide an overview of the functions of the Executive Director Technical Services Office and the Finance and Administration Department, the Asset Management Department, the Engineering Design Department and the Subdivisions Department.

Recommend:

That Council note the content of the report.

Tabled Items

Nil.

Officer Interest Declaration

Nil.

Strategic Implications

4.2 An innovative and progressive organisation

4.2.2 Implement business plans and practices that improve service delivery

4.2.2.3 Investigate organisational resources having regard to community needs and expectations

Legislation Implications

General assessment of relevant legislation (eg Local Government Act) has not revealed any restrictions.

Council Policy/Local Law Implications

General assessment has not revealed any applicable Policies/Local Laws.

Budget/Financial Implications

The adoption of the recommendation contained in this report has no financial implication.

Consultation

- Intra Directorate.

BACKGROUND

With the evolution of systems, functions and practices in the Technical Services Directorate over the past few years, it can be appreciated that not all Councillors would be familiar with the details of all the activities of each Department within the Technical Services Directorate. In order to raise the level of awareness, a series of reports will be submitted to Council via the Technical Services Committee. The following attachments provide an overview of the respective Technical Services Departments.

- **Attachment 1** provides an overview of the Executive Director Technical Services (EDTS) Office, and Technical Services Finance and Administration Department.
- **Attachment 2** provides an overview of the Asset Management Department.
- **Attachment 3** provides an overview of the Engineering Design Department.
- **Attachment 4** provides an overview of the Subdivisions Department. The reports detail the range of services provided, the costs of these services and the current Level of Service (LOS) provided for each.

CONCLUSION

The attached reports provide a comprehensive overview of the services provided by these departments within the Technical Services Directorate. Each department is providing valuable services to the Directorate to assist in achieving key strategic outcomes, providing a high level of service to both internal and external customers.

ATTACHMENTS

1. ↓ Departmental Activity Report - Office of the Executive Director and Finance and Administration Department
2. ↓ Departmental Activity Report - Asset Management
3. ↓ Departmental Activity Report - Engineering Design Services
4. ↓ Departmental Activity Report - Subdivisions

Committee Discussion

The Acting Executive Director Technical Services presented an overview of the activities and functions of the departments referred to in this report. The above attachment s(1-4) offer more detail.

RECOMMEND

T55/9/16

That Council note the content of the report.

**Moved Cr R Butterfield
MOTION CARRIED**

(6/0)

***3.3 - ABSENCE OF EXECUTIVE DIRECTOR TECHNICAL SERVICES -
APPOINTMENT OF ACTING EXECUTIVE DIRECTOR TECHNICAL SERVICES - 19
DECEMBER 2016 - 4 JANUARY 2017 INCLUSIVE***

WARD : ALL
FILE No. : M/503/16
DATE : 26 August 2016
REF : KA
RESPONSIBLE : Executive Director
MANAGER : Technical Services

In Brief:

- Advise the proposed absence by the Executive Director Technical Services for the period Monday, 19 December 2016 to Wednesday, 4 January 2017 inclusive.
- **Recommend:**
That Council:
 1. Note the Executive Director Technical Services absence on annual leave from Monday, 19 December 2016 to Wednesday, 4 January 2017 inclusive.
 2. That the Executive Manager Technical Services, Mr G Davies, be appointed Acting Executive Director Technical Services for the period Monday, 19 December 2016 to Wednesday, 4 January 2017 inclusive.

Tabled Items

Nil.

Officer Interest Declaration

Nil.

Strategic Implications

Nil.

Legislation Implications

General assessment of relevant legislation (eg Local Government Act) has not revealed any restrictions.

Council Policy/Local Law Implications

Assessment of Policies/Local Laws indicates that the following is applicable.

- ADM12 – Acting “Senior” Positions.

Budget/Financial Implications

The adoption of the recommendation contained in this report has no direct financial implication.

Consultation

- Chief Executive Officer.

COMMENT

The Executive Director Technical Services will be absent on annual leave on the following dates:

Monday, 19 December 2016 to Wednesday, 4 January 2017 inclusive.

It is recommended that the Executive Manager Technical Services, Mr G Davies, be appointed Acting Executive Director Technical Services for this period.

ATTACHMENTS

There are no attachments for this report.

RECOMMEND

T56/9/16

1. **That Council note the Executive Director Technical Services absence on annual leave from Monday, 19 December 2016 to Wednesday, 4 January 2017 inclusive.**
2. **That the Executive Manager Technical Services, Mr G Davies, be appointed Acting Executive Director Technical Services for the period Monday, 19 December 2016 to Wednesday, 4 January 2017 inclusive.**

**Moved Cr R Butterfield
MOTION CARRIED**

(6/0)

3.4 - CONSIDERATION OF MEN'S SHED AND COMMUNITY GARDENS FOR INCLUSION IN THE PARKS FACILITIES STRATEGY

At the Council meeting held on 22 August 2016, Cr C M (Caroline) Wielinga referred the following matter to the Technical Services Committee.

That the matter of consideration of Men's Shed and Community Gardens for inclusion in the Parks Facilities Strategy be referred to the Technical Services Committee.

Comment from Cr Wielinga

At present there are no guidelines for the location of Men's Sheds and Community Gardens. It is suggested that these facilities be included in the Parks Facilities Strategy, particularly large central hub parks. This would enable community groups to make more informed decisions regarding the use of these facilities.

Officer Comment

The matter is to be investigated and a report will be submitted for consideration at a future Technical Services Committee meeting.

ATTACHMENTS

There are no attachments for this report.

Committee Discussion

As Cr Wielinga was not present to address this matter, the Committee decided to recommit the item to the next Technical Services Committee meeting. The Recommendation was amended to reflect this.

RECOMMEND

T57/9/16

That Council recommit this item to the next Technical Services Committee meeting.

Moved Cr G Nixon

MOTION CARRIED

(6/0)

COUNCILLORS' ITEMS

Nil.

EXECUTIVE DIRECTOR TECHNICAL SERVICES REPORT

Nil.

MEETING DECLARED CLOSED AT 8:37 PM

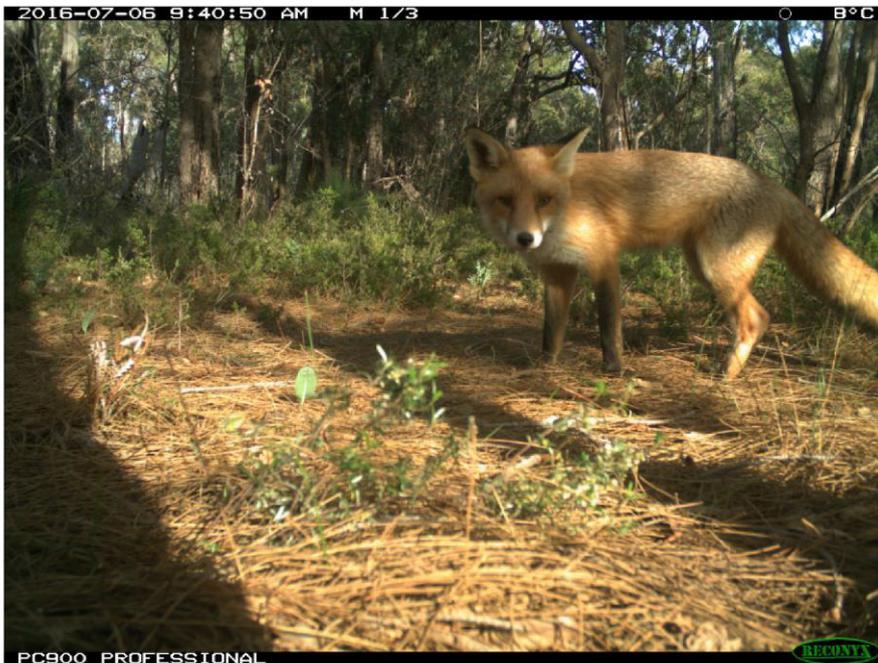
TECHNICAL SERVICES COMMITTEE		
SUMMARY OF ATTACHMENTS		
5 SEPTEMBER 2016		
ATT NO.	SUBJECT	PAGE
1.1 FAUNA RESEARCH AND MANAGEMENT IN THE CITY'S BUSHLAND RESERVES		
1.1.1	Map of Forrestdale Lake Nature Reserve Declared Rare Fauna/Flora and Ecological Linkages	29
1.1.2	Map of Bungendore Park and Armadale Settlers Common Declared Rare Fauna/Flora and Ecological Linkages	30
1.1.3	Preliminary Fauna Monitoring Armadale Settlers Common	31
2.1 ENTRY STATEMENTS		
2.1.1	Example Entry Statement for Roleystone	38
2.2 COUNCIL POLICY REVIEW - ENG 6 STREET TREES		
2.2.1	Attachment 1 - Existing Policy ENG 6 - Street Tree Management - Removals and Replacements, Trees in Streets, Ways and Reserves	39
2.2.2	Attachment 2 - Existing Management Practice ENG 6 - Street Tree Management - Removals and Replacements, Trees in Streets, Ways and Reserves	40
2.2.3	Attachment 3 - Revised Policy ENG 6 - Street Tree Management - Removals and Replacements, Trees in Streets, Ways and Reserves	41
2.2.4	Attachment 4 - Revised ENG 6 Management Practice - Street Tree Management - Removals and Replacements, Trees in Streets, Ways and Reserves	42
2.2.5	Attachment 5 - Helliwell Tree Evaluation Report - 5 Sep 2016	46
2.2.6	Attachment 6 - Amenity Tree Valuation Form	48
3.2 DEPARTMENTAL ACTIVITY REPORT - EXECUTIVE DIRECTOR'S OFFICE, TECHNICAL SERVICES ADMINISTRATION, SUBDIVISIONS, ENGINEERING DESIGN AND ASSET MANAGEMENT		
3.2.1	Departmental Activity Report - Office of the Executive Director and Finance and Administration Department	50
3.2.2	Departmental Activity Report - Asset Management	56
3.2.3	Departmental Activity Report - Engineering Design Services	67
3.2.4	Departmental Activity Report - Subdivisions	75

CONFIDENTIAL
ATTACHMENT

CONFIDENTIAL

ATTACHMENT

Feral - FOX



Brushtail Possum





Note: The brushtail is on the tree and the Quenda is in the foreground.

Quenda



Note there is also a Brushtail possum on the tree in this image

Kangaroo

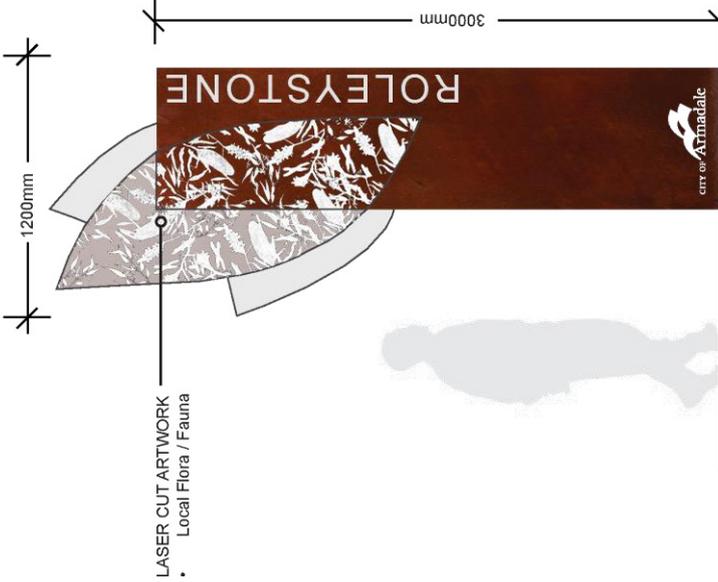


Note – there is a baby in the pouch



Unknown species

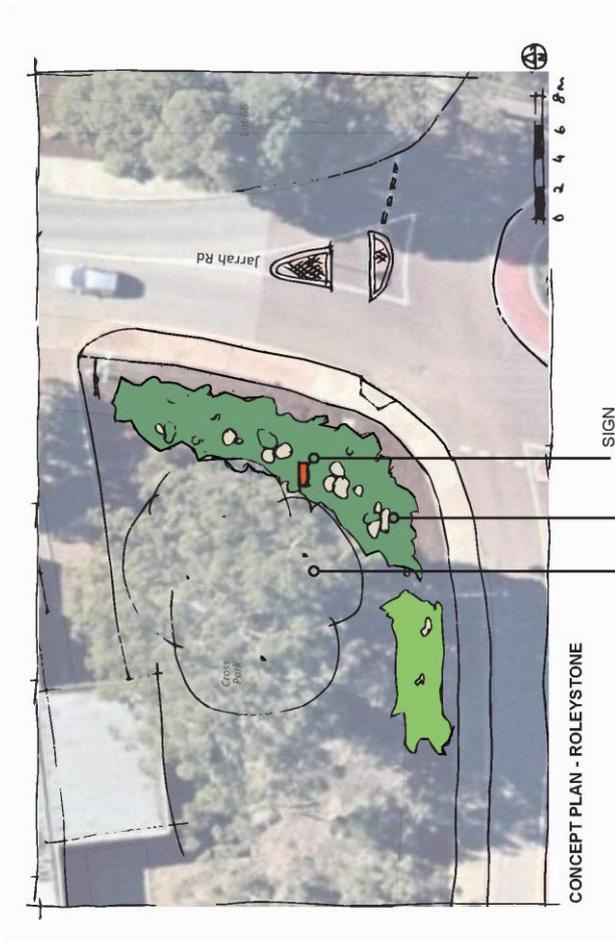




ROLEYSTONE - INDICATIVE SIGNAGE DESIGN



ROLEYSTONE - EXAMPLE ENTRY STATEMENT



CONCEPT PLAN - ROLEYSTONE

FEATURE PLANTING

- Local to hills
- Non-irrigated
- Local rock placement

EXISTING TREES

- Retain and protect



LANDSCAPE PALETTE - ROLEYSTONE

PROJECT: LOCAL AND DISTRICT ENTRY STATEMENTS

Roleystone Entry Statement
 DATE: AUGUST 2016
 DRAWN: JAM



POLICY

**ENG 6 – Street Tree Management –
Removals and Replacements, Trees in
streets, Ways and Reserves**

Management Practice

ENG 6

Relevant Delegation

N/A

Rationale

To maintain satisfactory streetscape standards.

Policy

When developing and maintaining streetscapes, the City will ensure that tree management creates a consistent, coherent streetscape sympathetic to the surrounding neighbourhood.

Such activities shall be in accordance with the current Management Practices.

Related Local Law	Activities and Trading in Thoroughfares and Public Places Local Law
Related Policies	N/A
Related Budget Schedule	Parks
Last Reviewed	11 February 2013
Next Review Date	March 2016
Authority	Council Meeting of : 4 March 2003 (C6/2/03) 19 April 2004 (CS14/4/04) 5 February 2007 (T4/1/07) 9 March 2010 (T20/3/10) 11 February 2013 (T5/2/13)

MANAGEMENT PRACTICE

ENG 6

Streetscape Management – Street Tree Removals and Replacements, Trees in Streets, Ways and Reserves

1. It shall be an objective of the Council to work towards achieving and implementing an Annual Street Planting Programme to ensure the development of sympathetic streetscapes within the City.
2. Street trees shall be removed where they are dead, diseased or dangerous, damaging (or considered to damage) private property, or deemed unsuitable due to interference with City or public utilities following an assessment of the tree and examination of all other options to removal.
3. Street trees shall be removed if they are considered unsuitable trees species only where replacement strategies are in place to avoid mass reduction of living vegetation in the streetscape environment.
4. Residents and occupants shall be advised formally of proposed tree removals and when any follow up tree planting can be expected.
5. Trees beneath powerlines shall be pruned to ensure a suitable clearance is maintained.
6. Trees in parks and reserves not affected by overhead powerlines shall be allowed to develop their natural canopy.
7. Trees in streets and ways shall be under pruned and shaped where necessary to maintain vehicle clearance, pedestrian access and vehicle driver and pedestrian vision.
8. All requests for removal of oversized street trees and/or trees not considered appropriate to the location are to be received in writing before any consideration is given to the request.
9. Where Council determines at the request of an applicant, to extend approval to remove a tree beyond those conditions outlined in (3) and (4) above, such removal will be undertaken only at the full cost of the applicant.
10. A street tree may be removed where a written request has been received for its removal to facilitate the development of a landscape project, which the City considers will have a positive impact on the street environment. Such an application must be accompanied by a landscape development plan and be subject to agreement by the applicant to meet all costs associated with the removal.
11. Applications for planning, building and crossover permits shall be considered with regard as to whether trees are adversely affected by the development. If they are affected, a clear strategy is to be outlined for their care and protection or selective removal during construction upon which specific approval may be granted. Only where other action is impractical are trees to be removed.
12. Owing to the hazardous nature of the task, residents/occupants will not be granted permission to remove trees in streets, ways and reserves.

Last Reviewed

Authority



POLICY

**ENG 6 – Street Trees
Management Practice**

ENG 6

Relevant Delegation

N/A

Rationale

To ensure the City of Armadale becomes a truly leafy City through the appropriate development and management of its street tree urban forest.

Policy

This policy refers to the development and management of trees on street verges including their promotion, valuation, retention, protection, planting, maintenance, pruning, removal and mapping.

Related Local Law

Local Government Act 1995
Local Law: Activities and Trading in Thoroughfares and Public Places

Related Policies

City of Armadale Strategic Community Plan
City of Armadale Local Planning Policy PLN 2.4 Tree Preservation
City of Armadale Financial Plan

Related Budget Schedule

Parks

Last Reviewed

August 2016

Next Review Date

March 2019

Authority

Council Meeting 4 March 2003 (C6/2/03)
Council Meeting 19 April 2004 (CS14/4/04)
Council Meeting 5 February 2007 (T4/1/07)
Council Meeting 9 March 2010 (T20/3/10)
Council Meeting 11 February 2013 (T5/2/13)

<u>MANAGEMENT PRACTICE</u>	
ENG 6	Street Trees

1. Scope

This Management Practice applies to all current and future street trees located in the road reserve regardless of their condition, location, date of planting and whether or not planted by the City.

Compliance with this policy will ensure all street trees are planted, recorded and maintained effectively and efficiently to ensure a full and accurate record of the City's street tree assets, whilst ensuring business dealings, accountability and transparency in decision making and support compliance with relevant City policy and statutory requirements.

2. Definitions

"Street Tree Urban Forest" – the collective total of the City's street trees.

"Tree Protection Zone" – a fenced, no-entry zone around a tree during construction.

"Ecosystem Services" – the collective benefits of street trees.

"Street Tree Masterplan" – a plan identifying which species goes in each street.

"CCTV" – Closed Circuit Television (i.e. Security Cameras).

"Crossover" – the portion of driveway from road to property.

"Helliwell Method" – an industry accepted method of valuating amenity trees.

3. Valuation of Street Trees

3.1. The City shall progressively prepare a valuation of all trees by a qualified arborist or designated officer.

3.2. Every street tree is considered to be an asset and has a monetary value achieved by applying the Helliwell Method of evaluation for Amenity trees.

4. Retention and Protection of Street Trees

4.1. A Tree Protection Zone (TPZ) shall be created and maintained to the relevant current Australian Standard around existing street trees prior to commencement of any earthworks or construction.

4.2. The City may require temporary irrigation to existing verge trees if the Manager Parks Services considers such is necessary to ensure the health and welfare of the tree during any earthworks or construction.

4.3. A Street Tree Bond shall be paid in accordance with the City's Fees and Charges Schedule and refundable upon completion of construction and satisfactory implementation of all other tree protection measures imposed by the City (e.g. Tree Protection Zones).

4.4. Under the Residential Design Codes each application for planning approval is required to be accompanied by an existing site plan which shows tree location, size and other factors listed in the design codes.

- 4.5. A person shall not cause harm, take, injure, kill, remove or attempt to harm, take, injure, kill or remove any street trees growing on the road reserve, unless that person is authorised under a written law or by a City authorised person to do so.

The City may seek the asset value of the street tree from the individual and/or organisation responsible for the decision to remove or detrimentally affect the health of the tree.

5. **Planting of Street Trees**

- 5.1. The Parks Department shall annually submit to Council for consideration for inclusion in the budget funds each year to plant sufficient new street trees in keeping with the Urban Forest Implementation Plan targets and goals.
- 5.2. Trees shall be a mixture of evergreen and deciduous species to reduce the risk of widespread losses due to pest and disease, climate change or other stressors.
- 5.3. Large-growing species will be planted wherever possible due to the superior ecosystem services they provide.
- 5.4. Spacing of street trees shall be the minimum required to maintain a near continuous tree canopy in the street which may include multiple trees per lot frontage.
- 5.5. A Street Tree Masterplan shall progressively be prepared which identifies the species to be planted in each street in accordance with the Urban Forest Implementation Plan.
- 5.6. All street tree planting shall generally be planned and set out as shown on the City's Street Tree Masterplan in accordance with the Urban Forest Implementation Plan.
- 5.7. All relevant utility services shall be located prior to planting.
- 5.8. Excavation and planting shall be in compliance with statutory requirements and in accordance with the City's Standard Drawings and Specifications.
- 5.9. Planting alignment shall follow existing street tree alignments unless otherwise approved.
- 5.10. Developers are required to submit a Street Tree Masterplan to the City of Armadale for approval. This is a requirement for all new developments. The street tree masterplan shall include the following information:
- Street names
 - Proposed distance of the trees from the lot boundary (typically this is the same across the estate and can be a simple verge section)
 - Identify the tree species per street
 - Confirmation on the proposed street tree implementation method

The City has two approved implementation methods for street trees:

- i) Trees are installed as part of the Front Lot Packages
Developer supplies and installs the street trees as part of their front lot package works.
Should the developer seek clearances prior to the installation of the street trees, the Developer is required to pay a bond to the City of Armadale for the uninstalled street trees.

- The outstanding works bond is 125% of the supply and installation cost of the entire number of street trees for the relevant stage.
 - The outstanding (2 year) maintenance bond is 20% of the supply and installation cost of the entire number of street trees for the relevant stage.
 - The bonds will be released when the work is deemed 100% complete.
- ii) Trees are installed by the City on behalf of the Developer. Developer pays the City to supply and install the street trees on their behalf. The installation of the street trees will occur when a significant portion of the housing is established. The Developer is required to inform the purchasers at sale, that there is intent to install street trees to the verge of the relevant development.
- The Developer is required to pay the City for the full cost to supply, install and maintain (for a minimum of 2 years) the street trees for the development.
- The cost per tree is provided by the City at the time of clearances, and payment of the works is required prior to clearances being issued.

6. Consolidation and Maintenance of Street Trees

- 6.1. The Parks Department shall annually submit to Council for consideration for inclusion in the budget sufficient funds each year to manage all street trees in accordance with Best Industry Practice to ensure the highest possible survival rate other than losses due to vandalism and storm damage.
- 6.2. Trees included on the City's Significant Tree Register shall be inspected annually and recommended works actioned.
- 6.3. Trees included on the City's Tree Preservation Order Schedule shall be managed in accordance with Local Planning Policy PLN 2.4.
- 6.4. Trees shall be established for the first three years of consolidation including mulching, watering, pest & disease control, fertilising, formative pruning, in accordance with the City's Tree Management Services - New Street Trees specification and programs.

7. Pruning of Street Trees

- 7.1. Street trees shall generally only be pruned:
 - to clear overhead powerlines and other utility services;
 - to improve the tree's form, structural integrity or health;
 - to clear infrastructure such as street lights, street signs and City controlled CCTV;
 - to maintain pedestrian and vehicle access and/or sightlines;
 - in accordance with statutory and other industry guidelines and requirements.
- 7.2. Only City authorised contractors or approved City staff may prune street trees.
- 7.3. All verbal requests for pruning shall be recorded in the City's Customer Request Management system, written and electronic requests for pruning shall be recorded in the City's Records system, assessed against the criteria listed in

Clause 7.1 above by the City's designated officer and responded to in keeping with the City's policies and procedures.

- 7.4. Tree root encroachment and suspect damage to adjoining infrastructure shall be assessed on a case by case basis and actioned accordingly.

8. Removal of Street Trees

- 8.1. Street trees will generally only be removed where they are dead, diseased, dangerous, causing ongoing infrastructure damage or considered by the Manager Parks Services to present an unacceptable level of risk to persons or property.

- 8.2. Removal of street trees for new crossovers will only be considered where all other design options have been exhausted.

The developer shall pay for the City to:

- remove the tree (including stump grinding)
- plant replacement trees or payment in lieu thereof to the City, an amount of equivalent value (refer Clause 3 – Valuation of Street Trees) - on the verge in question or a nearby verge
- maintain and water the new street trees for the first twelve months.

- 8.3. All requests for removal shall be written or electronic communication and shall be recorded in the City's Records system, assessed against the criteria listed in Clause 8.1 above by the City's delegated officer and responded to in keeping with the City's policies and procedures.

- 8.4. Street trees may be removed by the City if they are considered unsuitable tree species only where replacement strategies are in place such as in association with the Urban Forest Implementation Plan.

- 8.5. Only City authorised contractors or approved City staff may remove street trees.

- 8.6. The City's street tree database shall be updated following the authorised tree removal and replacement tree scheduled for planting the following winter on the same or nearby verge.

9. Promotion of Street Trees

- 9.1. The City shall actively promote the valuation, development, maintenance, protection and improvement of its street tree urban forest through the regular placement of educational, information and articles in the City's website and marketing, local media and by other appropriate means.

10. Mapping of Street Trees

- 10.1. They City's Parks Department will include in their annual budgets funding for Near Infrared (NIR) Mapping or equivalent of its Street Tree Urban Forest.

- 10.2. The NIR Mapping will be completed on an annual basis to show overall canopy coverage, hot spots and assist to achieve the Street Tree Urban Forest targets and goals.

Last Reviewed

Authority



Helliwell Tree Evaluation system

	Points									
	0	0.5	1	2	3	4	5	6	7	8
Size	Less than 2m ²	2 - 5m ²	5 - 10m ²	10 - 20m ²	20 - 30m ²	30 - 50m ²	50 - 100m ²	100 - 150m ²	150 - 200m ²	Over 200m ²
Duration	Less than 2 years		2 - 5 yrs	5 - 40 yrs	40 - 100 yrs	100+ yrs				
Importance	None	Very Little	Little	Some	Considerable	Great				
Tree cover		Woodland	Many	Some	Few	None				
Suitability to setting	Not	Poor	Just	Fairly	Very	Particularly				
Form		Poor	Average	Good						

Helliwell Revision 4 -2008

Six factors are identified for each tree. A score is given for each factor and the scores for all six factors are multiplied together. The product of the scores is then multiplied by the conversion monetary value of **\$50.00** = Amenity value of the tree.

Explanatory Notes:

- 1. Size.** The size of the tree is an assessment of the area the tree occupies when viewed from one side. If this varies from one view point to another, an average figure can be used. (Height x Width)
- 2. Duration.** An estimate is made of the probable length of time that the tree is likely to contribute to the visual amenity of its location. Take into account the normal biological life span for a tree of this species.



3. Importance

No importance	Tree cannot be viewed from a normal vantage point.	0
Very little importance	Tree can only be seen with difficulty of by a very small number of the public.	0.5
Little importance	Trees in woodlands, back gardens or in groups.	1
Some importance	Individual roadside trees, trees in public places.	2
Considerable importance	Prominent individual trees in well frequented places.	3
Great importance	Trees which are of crucial importance as a principal feature or have historic value.	4

4. Presence of Other trees

Woodland	More than 70% of the visual area covered > 100 individual trees.	0.5
Many	More than 30% of the visual area covered >10 individual trees.	1
Some	More than 10 % of the visual area covered and at least 4 trees in total.	2
Few	Less than 10% of the visual area covered but at least 1 other tree present.	3
None	No other trees in the area under consideration.	4

5. Relation to the Setting an assessment of the visual impact the tree has upon the space available. Aim to have the largest and densest tree the space may appropriately contain.

6. Form. The form being assessed here is entirely in aesthetic terms. Most trees will be rated ‘average’.

Report checklist

1. Genus and species of tree(s)
2. Height and width (width is to be taken from a street view perspective)
3. Location (Eg: ‘10 Norman Street, Gosnells’)
4. Multiple trees within an area should be numbered (on aerial photography and referenced within the report)
5. Photo of tree (street view and aerial view)
6. Show individual scores
7. Provide a brief explanation of why you have chosen the individual scores



Amenity Tree Evaluation

Location:

Date of Assessment:

DA/Application number:

Assessor/s:

Introduction:

Species:

Height: m

Width: m
(As viewed from the road)

1.	Size of tree	
2.	Duration (Safe Useful Life Expectancy)	
3.	Importance (In the landscape)	
4.	Tree Cover (Presence of other trees)	
5.	Suitability to the setting	
6.	Form	
	Score	

Please note:

Scores in these sections are multiplied to determine final score.

The final score is then multiplied by a currency factor of \$50, as set out in the City of Armadale Annual Fees and Charges.

Amenity Value: \$

Removal Cost (inc. GST): \$

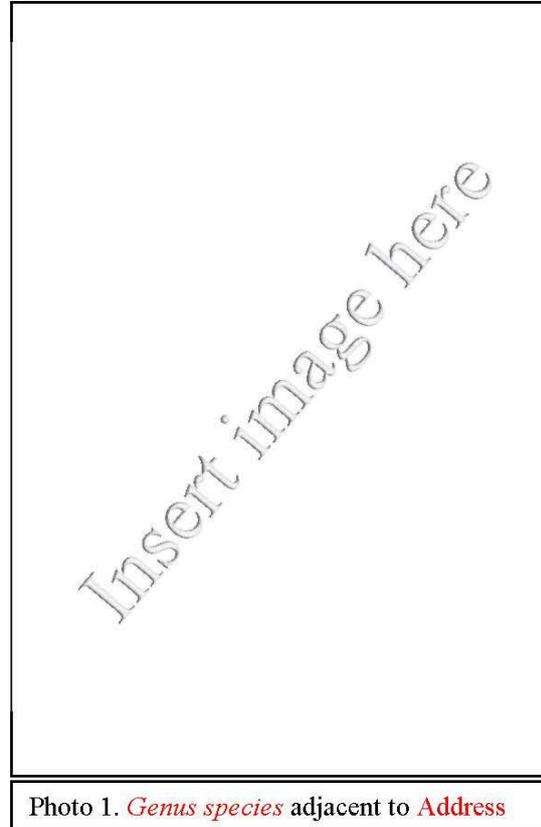
Total Cost: \$

Score selection

1. **Size of Tree:**
2. **Duration:**
3. **Importance:** Individual roadside tree in public place.
4. **Tree Cover:**
5. **Suitability to the Setting:**
6. **Form:**



Conclusion:



Conditions

- *Residents or developers are unable to undertake removal of or engage a contractor to undertake removal of any verge tree.*
- *Should it be found that the specimen has been damaged or removed without approval during the period of construction you may still be liable for the amenity value of the tree.*
- *Any crossover constructed must not be placed closer than two metres from the base of any tree on the verge, as per the City's specification for the construction of vehicle crossings.*
- *There is to be no damage caused to the trunk or any branches of any verge tree.*
- *Building materials or waste materials are not be stored around the base of any tree on a verge and must be kept a minimum of 2 metres away.*
- *Should it be found that any damage has been caused to any verge tree; the developer/owner will be liable for all or part of the amenity value of this tree.*
- *This Assessment is only valid for 12 months from the assessment date, after this time a new assessment will need to be undertaken.*

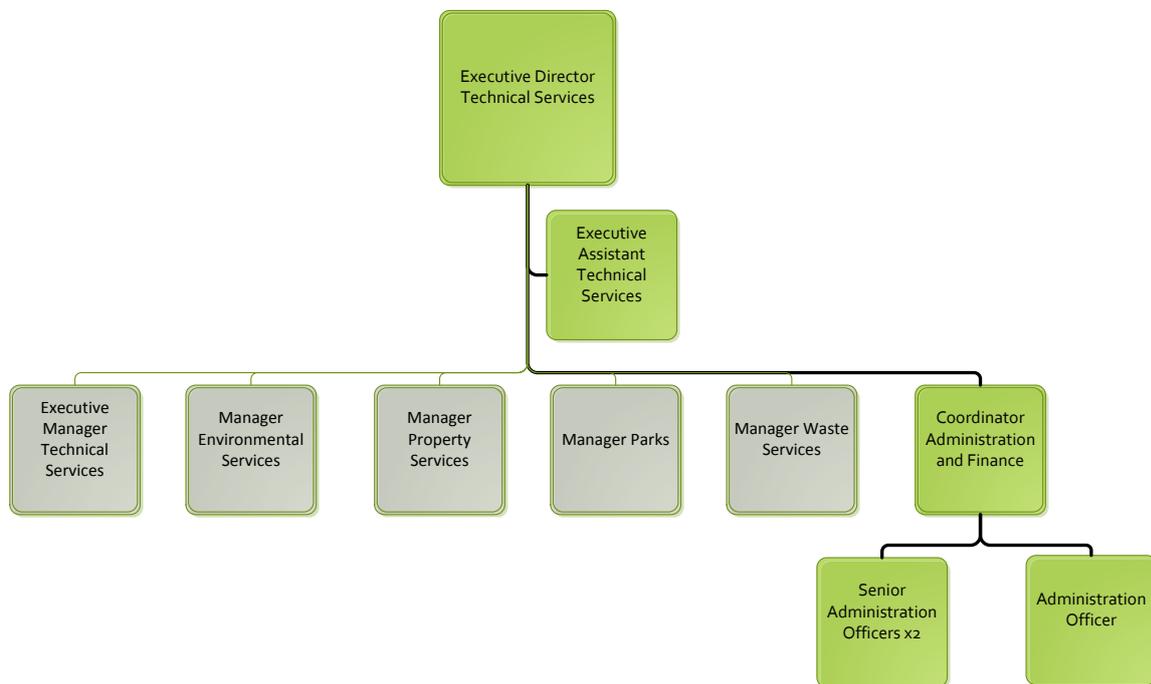
TECHNICAL SERVICES DEPARTMENTAL ACTIVITY REPORT

Departments

- Office of the Executive Director Technical Services
- Finance and Administration Department

Structure

The functions of the Office of the Executive Director Technical Services and the Finance and Administration Department are delivered by means of the following structure:



Functions

In general terms, the functions of the office of the Executive Director Technical Services (EDTS) and the Technical Services Finance and Administration Department provides the administrative support for the whole of the Technical Services Directorate, plus the management of a range of smaller functions which are not readily identified for grouping into one of the larger service areas. These service delivery areas for administration are as follows:

Office of the Executive Director Technical Services

Executive Director and Executive Assistant

This function provides for leadership and management for all the services within the Technical Services Directorate, in particular:

- As a member of MANEX, the EDTS provides input into corporate processes, policy and procedures.
- The EDTS role forms the formal interface between Councillors and the Executive, in particular the interface with the Technical Services functions and Councillors.
- The EDTS serves as the communication conduit between the Directorate and all State and Commonwealth departments in areas relating to the services provided by Technical Services. The main contact areas in this respect are Main Roads WA, The Department of Transport, DPAW, WALGA and the Water Corporation.
- The EDTS represents the City on a range of forums, such as the Rivers Regional Council as a member of the Technical Advisory Committee, and advisory groups dealing with any technical areas of specialisation such as waste management, drainage, groundwater management etc, where the request is specifically made for executive representation.
- Correspondence and communication. While general correspondence is dealt with by the respective managers, all political correspondence is managed through the office of the EDTS. This ensures consistency of message across departments and the development of a good relationship between the offices of the elected representatives and the City.

Technical Services Administration

Coordinator Finance and Administration, 3 x Administration Staff

The main purpose of this function is to provide administrative support for the Technical Services Directorate and also to provide for the delivery of generic functions within Technical Services.

The Functions performed are as follows:

- General administration, correspondence, expenditure administration of a general nature, reception management, Roadwise Committee support, road closure/event administration, building access and security control.
- Agendas and Minutes of Technical Services Committee meetings. The EDTS generally determines the agenda, the consistency of reporting style, grammatical consistency, the tone of the reporting as well as ensures the recommendations are consistent with the Council strategic documentation and direction.
- CCTV management – the CCTV minor works and maintenance service is outsourced to a private company, which provides the following services:
 - Quarterly system inspections
 - Maintenance as required
 - Specific upgrade or replacement of damaged elements as required
 - Advice on improvements or upgrades

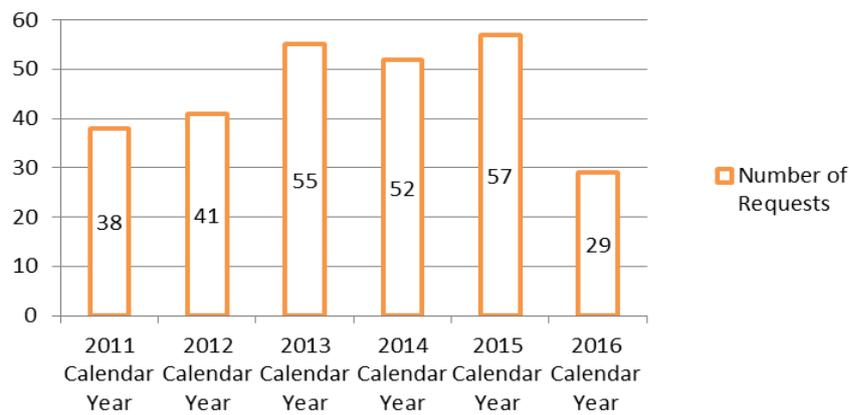
The City manages 140 CCTV cameras. In addition to those located within the City's administration buildings, the City also manages the standalone CCTV systems for:

- The Armadale CBD including Armadale Library
- The Champion Centre
- Seville Grove Library
- The Armadale Arena
- The Armadale Aquatic Centre

Requests to be provided with a copy of the footage from the Police are dealt with by the Finance and Administration Department as they arise.

The following graph represents the number of requests for footage received from the police since 2011 to date.

Requests for CCTV Footage From Police



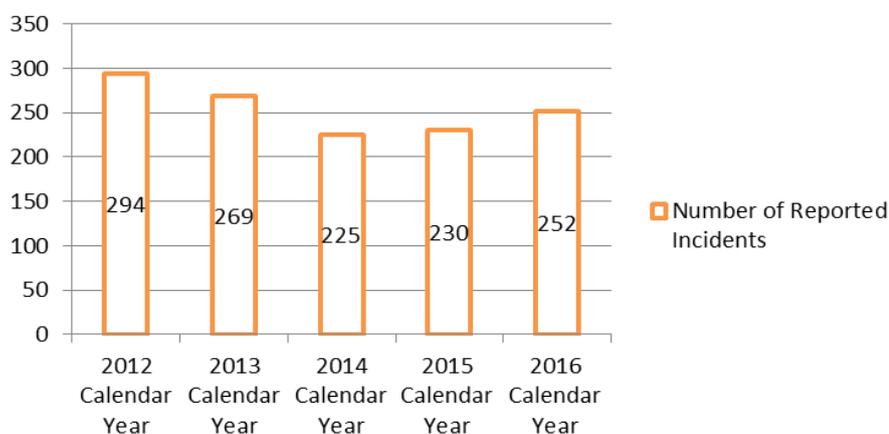
As shown on the above graph, the number of footage requests has been very similar over the past few years with an average of one incident per week being identified.

- Training coordination
- Legal matters – land transactions
- Tender administration coordination:
 - Preparation of New Tenders in Liaison with Governance
 - Tracking and Coordinating of Tender Renewal Timelines
- HR related matters, training, filling of vacancies, performance management
- Street Lighting cost payment
- Graffiti Management

The Administration and Finance department is responsible for arranging for the removal of reported incidents of Graffiti throughout the City in liaison with the Civic Pride Action Group and the City's Contractor.

The below graph represents the number of incidents of Graffiti reported since 2012 to date.

Reported incidents of Graffiti



As shown on the above graph, historically the trend has been a decreasing one with a 22% reduction in the number of reported incidents between 2012 and 2015. However, given the data for the 2016 calendar year so far, it is clear that the number of reported incidents is now on an upwards trajectory. The system of reporting incidents for the public has been simplified which could in part, account for this.

Technical Services Finance

- Technical Services Budget coordination. This function draws together all the Technical Services input at budget preparation time and begins this process in November every year, where input regarding budget matters is prepared and coordinated, such as:
 - Project identification
 - Capital works
 - Operating requirements
 - Workforce planning
 - Any new requirements to services, projects or processes
- Technical Services Financial reporting. This function provides summarised monthly management information to the Executive Director and to Managers regarding the overall performance of each department on the following:
 - Capital works
 - Operating expenditure
 - HR related matters such as training, filling of vacancies and performance management.

Corporate Business Plan

The functions outlined above serve to meet the Corporate Business Plan requirements as follows:

1.3.2 Deliver Services

1.3.2.3 Deliver initiatives that respond to local law enforcement and legislative compliance

4.3.1 Prepare and implement short to long term financial plans

4.3.1.1 Implement the Annual Budget as derived from the Corporate Business Plan

TECHNICAL SERVICES DEPARTMENTAL ACTIVITY REPORT

Department

▪ **Asset Management**

Introduction

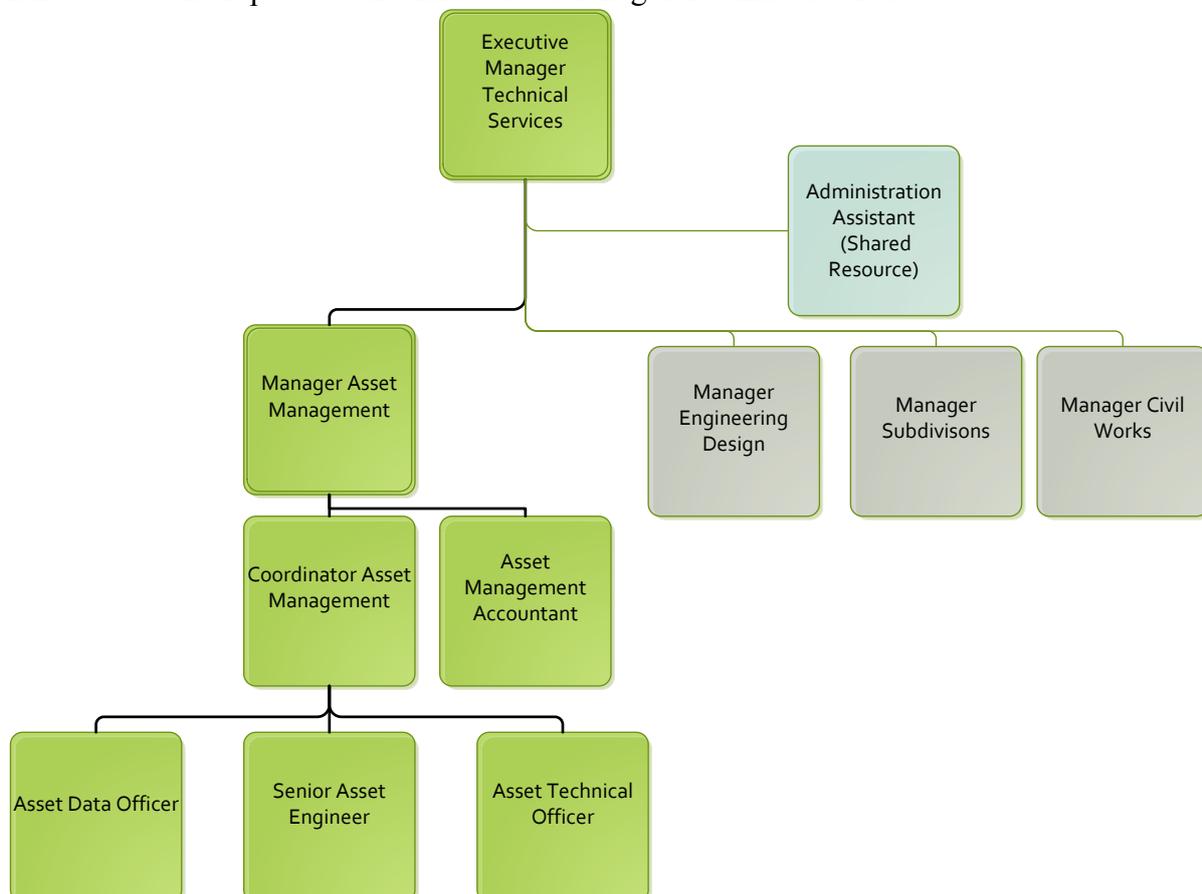
The Asset Management Department is responsible for the following main functions:

- Capture and maintain asset data
- Monitor the condition of all assets on a regular basis
- Prediction modelling and the development of medium to long term renewal work programmes

In accordance with Council's Asset Management Policy and Management Practice, the City aims to sustainably provide the required assets and services to its stakeholders, at an appropriate level of service.

Structure

The Asset Management Department comprises of 6 staff, as depicted on the below organisational diagram. The Department resides within the Technical Services Directorate and reports to the Executive Manager Technical Services.



Functions

The main functions performed by the Asset Management Department comprise the following:

Manager Asset Management

- Overall management of the Asset Management Department
- Develop medium to long term Plant and Fleet Replacement Programmes
- Monitor Plant and Fleet utilisation
- Valuation of Plant and Fleet Assets
- Set charge out rates and monitor the Plant and Fleet Budget

Coordinator Asset Management, Senior Asset Engineer, Asset Technical Officer and Asset Data Officer

- Implementation of a new integrated Asset Management System (myData)
- Oversee the validation and security of asset data
- Record and maintain technical data for all Council Assets at a component level; Information is maintained within the City's integrated Asset Management system (Assetic - myData) as well as spatial software (Intramaps). Assets include gifted or assets constructed by the City's operations team
- Monitor and record asset performance, safety and condition on a cyclical basis
- Perform data analysis and prediction modelling to determine trends and degeneration profiles using the Assetic myPredictor software
- Disseminate asset related information to other departments within the City to enable informed decisions and recommendations to assist in the future planning of services for all stakeholders
- Develop medium to long term draft financial plans for asset renewal and upgrade
- Oversee asset valuations for all asset classes
- Develop Asset Management Plans for all assets having regard for current and future asset needs to inform the City's Long Term Financial Plan
- Draft the Metropolitan Regional Road rehabilitation Grant (MRRG) applications on behalf of the City

Asset Accountant

- Manage Fair Value Financial Components of Council's Assets
- Provide monthly depreciation and asset reconciliation reporting to the Finance Department
- Ensure financial asset information is correctly recorded in the asset management software system
- Capitalisation of asset components, depreciation, revaluations, additions & asset disposal

Whilst most asset management tasks are carried out by the departmental staff, some tasks and projects are outsourced due to the speciality and expertise required or the lack of internal resourcing to accommodate the work requirements in the allocated timeframes.

The Department has engaged an Asset Management Consultant to provide specialised asset management services. The contract is for a term of 3 years with the option to renew for a further 2 years.

The defined services carried out through this contract include:

- Data capturing for new road infrastructure and recording the road attributes in the specialised roads management software program (RAMM)
- Road Condition Assessments
- Pathway Condition Assessments
- Road Safety Inspections
- Pathway Safety inspections.

The cost incurred to Council for the provision of the above services is an average of \$100,000 per annum.

In the future, the City intends to explore the options for insourcing the footpath and road defect inspections to provide consistency with the defects reported, uniformity of the data capture and formulation of an in-house local knowledge base, whilst also achieving improved cost efficiencies for the City.

Corporate Business Plan

The functions outlined above serve to meet the Corporate Business Plan requirements as follows:

2.3 Well Managed Infrastructure

- 2.3.1 Apply best practice design and construction methodologies for the provision of infrastructure

-
- 2.3.1.1 Implement a best practice project management approach to the planning and delivery of infrastructure
 - 2.3.1.2 Apply the latest technological advancements, and optimal energy reduction strategies, in design criteria of facilities
 - 2.3.2 Ensure maintenance activities address required levels of service
 - 2.3.2.1 Review best practice maintenance activities
 - 2.3.2.2 Ensure balance is maintained between Levels of Service and affordability
 - 2.3.3 Develop and implement asset management plans to inform long term funding requirements
 - 2.3.3.1 Investigate future demand for infrastructure based on projected population growth and demand
 - 2.3.3.2 Deliver Asset Management Plans to address medium to long term requirements for renewal and maintenance funding
 - 2.3.4 Develop long term transport network planning
 - 2.3.4.2 Investigate traffic patterns to determine future road capacity requirements
 - 2.3.4.3 Advocate for improved public transport services
 - 2.3.4.3 Investigate and implement the cycling infrastructure strategy

Asset Management Plans

Asset Management Plans (AMP's) have to be developed for all assets on a three (3) yearly basis. The purpose of these plans is to address the following:

Current assets

Each plan must show the detail pertaining to the specific asset category as well as the condition at a component level. The City currently holds the following assets:

Asset Class	No	Length (km)	Current Replacement Cost \$
Buildings	155		105,582,074
Roads		714	588,568,843
Road Bridges	60		22,470,550
Pathways (Parks and On-Road)		435	53,270,745
Stormwater	22,930 Pits	654(pipes)	346,990,267
Parks and Reserves	697		70,055,527
Landfill	1		10,959,279
Land	110		102,763,000
Total			\$1,300,660,285

Table 1

Future Demand

The present population for the City of Armadale is approximately 87,000 and based on current growth estimates is projected to grow to 133,000 by 2031 and 144,000 by 2036. The increased population to 2031 represents an increase in the asset portfolio of approximately \$411 Million. This represents an average annual increase of approximately \$27 Million. Should the current level of growth of 3.23% be sustained the asset portfolio value will increase to approximately \$1.7 Billion by 2031.

The quantities of major infrastructure gifted to the City through development in the past five years can be demonstrated in the graphs below:

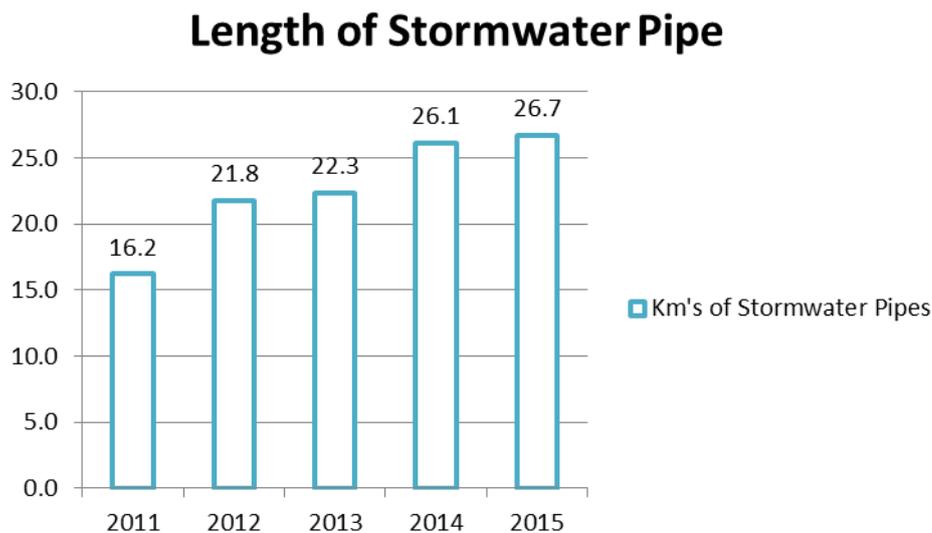


Figure 1

Length of Pathways

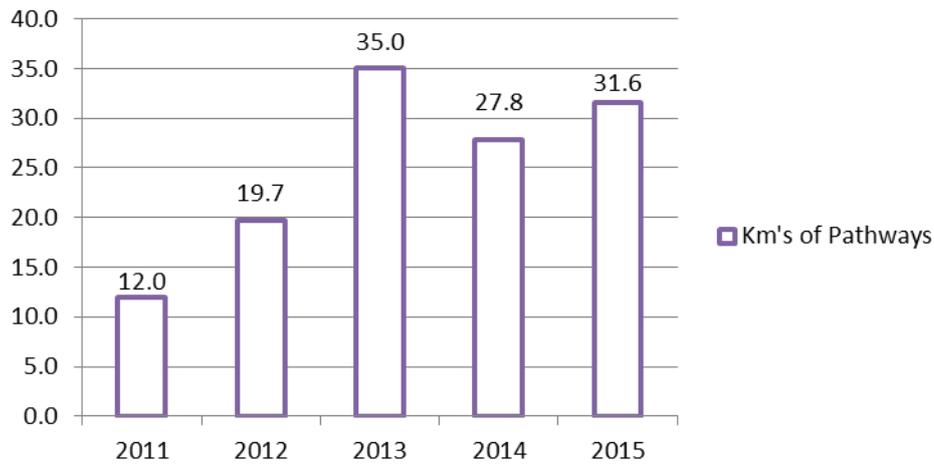


Figure 2

Hectares of Public Open Space

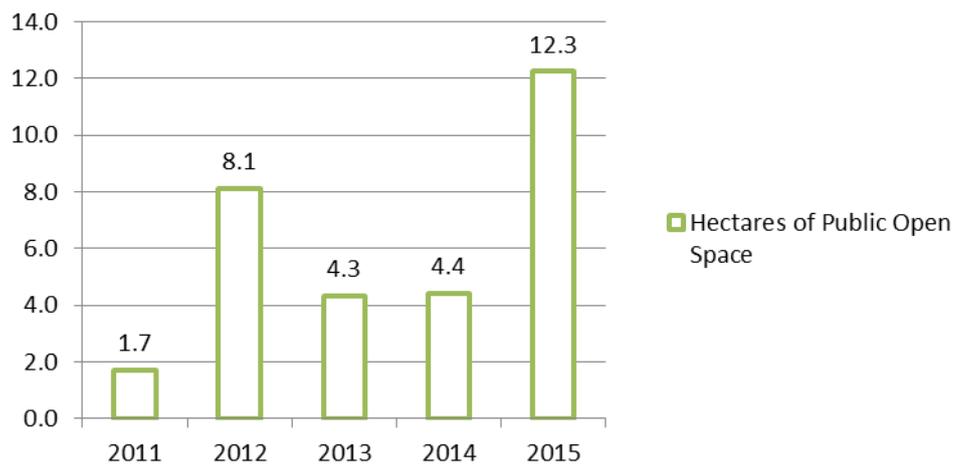


Figure 3

Length of Roads

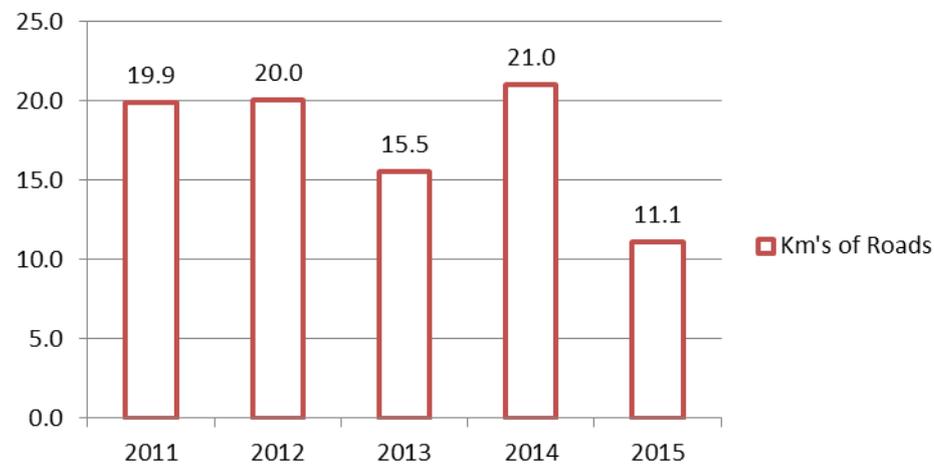


Figure 4

Levels of Service

Levels of service are the foundation for infrastructure management as they describe the outputs, objectives or activities the City intends to deliver to its stakeholders. In developing service levels the interest of all stakeholders within the community should be considered. The City's main stakeholders include:

- Residents and land owners
- Local Business
- Pedestrians
- Cyclists
- Emergency Services
- Motorists (local and visitors)
- City of Armadale
- Main Roads WA

Asset Management Plans address both the Service Level targets as well as their performance. The following is an example of service levels for the road and path network:

Key Performance Indicator	Stakeholder	Level of Service	Asset Group	Performance Measure	Target
Accessibility	City, Motorists, Residents, Emergency Services, Cyclists, Pedestrians, Local Businesses	Network accessible to all users	Roads	Properties within the City have access to a road reserve.	100%
			Paths & Car Parks	Percentage of path segments and car parks that comply with Disability and Discrimination Act requirements.	100%
Availability	Motorists, Emergency Services, Cyclists, Pedestrians, Local Businesses	Network is available for use when required	Roads & Paths	Percentage of days per year that no road or path sections are closed for use, excluding planned renewal or upgrade works.	100%
Financial Sustainability	City, Motorists, Cyclists, Pedestrians	Transport network is financially sustainable.	All	Percentage of AMP sustainability ratio KPIs within target.	100%
Quality	Motorists, Landowners, Emergency Services, Cyclists, Pedestrians, Local Businesses	Transport network is maintained at a suitable quality.	All	Percentage of transport assets at or above their condition intervention point.	100%
Safety	City, Motorists, Residents/Landowners, Emergency Services, Cyclists, Pedestrians	Ensure effective management of risks to health in accordance with relevant legislation and community needs.	Roads & Paths	Percentage of sites investigated with 2 or more recorded crashes/accidents over the previous 5 years.	100%

In developing service levels the City generally will apply Industry Standards as per the International Infrastructure Management Manual and other internal stakeholder engagement processes. Service levels have a direct financial implication and the City therefor has a responsibility to ensure they are effective and affordable.

Financial Planning

The City through an intensive asset modelling process is able to determine the current and future requirement for renewal funding for its asset portfolio. The process aims to:

- Determine the renewal requirement for existing assets / components that would require renewal within a 15 year period (Long Term Financial Plan)
- Develop project detail for a 5 year period
- Determine the renewal requirement for existing and newly constructed assets beyond the 15 year period and to motivate for renewal funding to be set aside
- Identify whether any asset renewal gap exists and make recommendations in order to fund the gap

A detailed report will be submitted to Council during October that would highlight the requirement for renewal funding for all asset classes over the next 15 years (LTFP) as well as an indication of how the asset portfolio is likely to perform over a longer period (25-50) years and how this would impact on future budgets.

Asset Management Plans further will provide an indication of the overall performance and sustainability of the asset portfolio as per asset class in the form of a single ratio. These will include the following:

- **Asset Consumption Ratio (ACR)**
ACR is the average proportion of 'as new condition' left in assets. This ratio shows the depreciated replacement cost (written down value) of the City's depreciable assets relative to their 'as new' (replacement) value.
- **Asset Renewal Funding Ratio (ARFR)**
The ARFR is the ratio of the net present value (NPV) of asset renewal funding in the 10 year long term financial plan (LTFP) relative to the NPV of projected renewal expenditure identified in asset management plans for the same period. It indicates whether the City has the financial capacity to fund asset renewal as required and continue to provide existing levels of service.
- **Asset Sustainability Ratio**
The ASR measures whether assets are being replaced at the rate they are wearing out. Asset Renewal expenditure should match depreciation which should include actual renewal funds required or reserve funding.

Ratio Type	Abbreviation	Target Ratio	Ratio - 2016
Asset Consumption Ratio	ACR	50-75%	75%
Asset Renewal Funding Ratio	ARFR	90-110%	52%
Sustainability Ratio	ASR	75-95%	52%

Asset Accounting

The introduction of a new accounting standard, first applied at the City in the 2012/2013 financial year, AASB13 - Fair Value Measurement, resulted in the City being required to formally value its asset classes on a three (3) yearly cycle. AASB 116 further requires assets to be valued at a component level with a clear indication of long and short life components.

The revaluation cycle for the next 6 years is outlined below:

Asset Class	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Land	X			X		
Buildings	X			X		
Furniture & Fittings			X			X
Plant & Machinery			X			X
Infrastructure - Roads		X			X	
Infrastructure - Pathways		X			X	
Infrastructure - Drainage		X			X	
Infrastructure - Parks & Reserves		X			X	
Infrastructure - Waste		X			X	
Infrastructure - Other		X			X	

Table 2

The City allocates on average approximately \$34,000 per annum, purely on the valuation of non-current assets to meet legislative requirements.

With the asset accounting tasks and functions assigned to the Technical Services Directorate from 2012, an Asset Accountant was appointed to the Asset Management Department to perform capitalisation of asset components, depreciation, revaluations, additions and disposals of assets. These tasks often involve the assistance of other asset management team members in order to meet financial reporting requirements.

Budget Provision

The main cost items necessary to operate the Asset Management Department are as follows:

- Employee costs \$660,000
- Consultancy costs \$53,000
- Data Collection and Processing \$150,000
- Software \$100,000

Asset Management Software

The department has now completed the initial Asset Management Software implementation of 'myData' which was a phased in project over a 3 year period. Further work and time is required to be dedicated to this project to utilise the products' full functionality, i.e. works maintenance planning, predictive modelling etc. The myData software program sits outside the core business software 'Authority' resulting in a myriad of workarounds to retrieve, retain and report on essential data in both systems.

Managed services associated with the myData software are an ongoing requirement for the City, costing \$36,200 per annum.

Consideration is being given to implementing the Assetic Cloud version of myData which will enable the asset databases to be available onsite via web-enabled technology. This will reduce the need for staff inspecting, capturing or accessing asset records to return to the office as the functionality will be available where the internet is accessible.

With the increased rate of development, it became imperative to improve the manner in which the City received 'as constructed' asset information from developers. Prior to 2013, the City received as constructed data in various formats, i.e. hard copy, marked up PDF, GIS file, CD's etc.

From the 1 July 2013, the City standardised the specification of all asset inventory datasets to an industry standard 'A-Spec'. The subscription to A-Spec has necessitated the external processes and information formats to be changed to meet the needs of the A-Spec specifications. Prior to the issue of clearance for any subdivision or development that created Council stormwater drainage, assets within the road reserve or open spaces, the City requires the developer/consultant to submit 'as constructed drawings and information' in a GIS ready form in accordance with the current versions of the drainage, roads and open spaces specifications. This has improved consistency with the format and information supplied associated with gifted assets handed over to the City to maintain. It has reduced staff hours with data validation and capture, enabling master files to be spatially updated without creating the GIS asset data from inception.

Conclusion

The Asset Management function performs a range of technical functions, related to data capture and maintenance, manipulation and processing of this data, and the production of management information to Managers, and ultimately Council.

The main outputs of this team are:

- Accurate and reliable data on all assets, including the inclusion of new and upgraded assets
- Production of draft works programmes for renewal and upgrade of existing assets
- Generation of long term financial requirements for the funding of upgrade and renewal programmes for all asset classes

- Accounting information relating to capitalisation, depreciation and asset ratios for inclusion in the accounting financial year end processes

Recommendation

That Council note the contents of this report.

TECHNICAL SERVICES DEPARTMENTAL ACTIVITY REPORT

Department

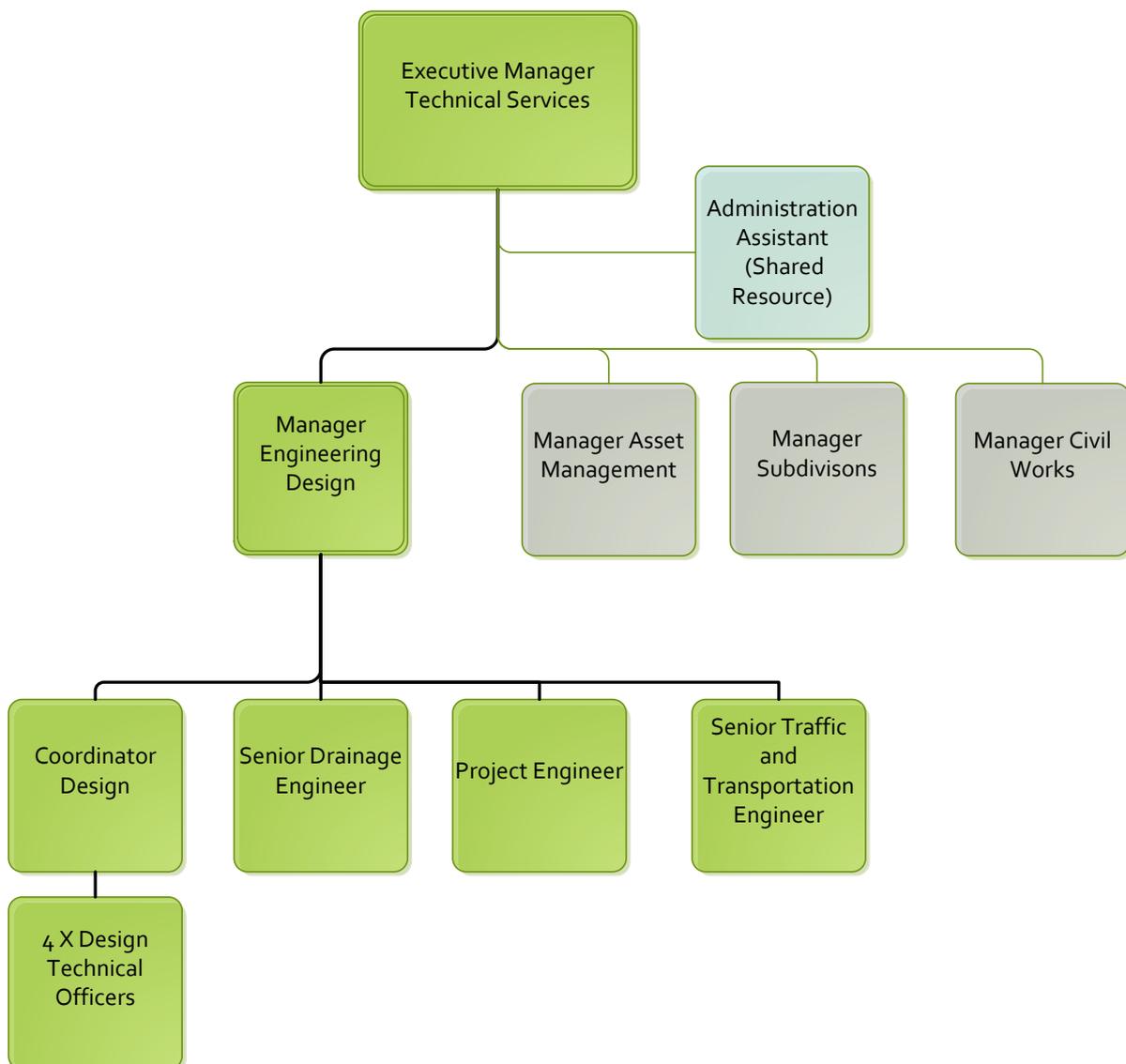
- **Engineering Design**

Introduction

The Engineering Design Department provides all engineering design, analysis and associated services for the provision of renewal, upgrade and new capital municipal projects based on the City's Strategic Plans, five year works programme, and annual budgets.

Structure

The Department comprises nine staff in the following structure:



Functions

The functions of this Department are as follows:

Engineering & Design

Design Co-ordinator, 4 x Engineering Technical Officers

This function prepares engineering designs and drawings for the annual civil works programme. The output of this team, in the form of drawings, specifications, underground service information, survey and standard details, are provided to the Civil Works Department for the construction of the planned works.

This work structure is similar to that of the private sector, where engineering consultants prepare the civil designs and associated documentation for contractors to carry out the construction. In this case, the Engineering Design Department acts as the 'internal consultant'.

In the 2015/16 financial year, a total of 30 Engineering designs were prepared by this Department using a variety of design software and drawing tools. For example, the following designs were completed in 2015/16, demonstrating the variety and range of designs:

- Nicholson Road duplication.
- New Carparks - Gwynne Park Primary School, Challis Primary School.
- Banyard Avenue stormwater upgrade.
- Allen Road Cul de sac.
- Denny Avenue/Streich Avenue intersection upgrade and traffic signals. i.e. Holden Road/Jarrah Road intersection street lighting upgrade.
- Westfield Road, between Champion Drive and Grovelands Drive streetscape and road upgrade.
- Strawberry Drive and River Road. traffic calming.

Similarly in the 2016/17 financial year, the design programme currently lists 28 detailed designs as being required to complete the annual Civil Works programme. Typically this list increases throughout the year as additional projects are included.

The complexity of these designs varies depending upon the scope of the project, with some designs taking up to four weeks to complete and others only a few days. Whilst the preparation of designs forms a major part of this teams function, staff within the team also provide guidance and advice to internal and external stakeholders on technical queries that frequently arise.

Whilst the preparation of designs is the main function performed by the Engineering Technical Officers / Design staff, they also provide other valuable services such as:

- Investigate Traffic Management issues (e.g. school parking, speeding, complaints about road geometry, sight lines)
- Prepare reports to Council on Traffic Management issues, such as school parking
- Assist with updating the annual design, survey program
- Assist with the preparation of annual grant applications

Strategic Engineering Functions

Senior Drainage Engineer

The Senior Drainage Engineer performs a critical role for Technical Services and the City, not only due to the extensive existing drainage infrastructure within its boundaries, which requires regular monitoring and analysis, but also due to the complex nature of current drainage practices and principles.

Stormwater drainage principles and practices have developed significantly over the last 10 or so years, with a stronger focus on environmental impacts in particular now being critical to any drainage design or project.

An essential function of this role therefore is to stay abreast of current drainage practices particularly as they relate to new developments, to ensure drainage infrastructure being installed by developers meets the City's expectations and requirements, as this infrastructure becomes the City's to maintain.

Functions include:

- Strategic drainage analysis on the City's stormwater drainage infrastructure, including modelling, catchment, and flow rate analysis.

Outcomes are the identification and design of localised improvements, or system improvements, usually requiring an upgrade of the capacity of a complete stormwater system or a large proportion of a system.

- Analysing the impacts of new developments on the City's drainage network. This includes assessing Urban Water Management Plans and consultants' designs to ensure compliance with the City's standards.
- Assisting the design staff with complex drainage analysis as part of the annual design programme, particularly where complex modelling is required.

Projects Engineer

Functions include:

- Compilation and maintenance of traffic data throughout the City. This provides a range of base data for the assessment of traffic complaints, as well as forming the basis for the submission of grant funding applications.
- Preparation and updating of the City's 5 Year Skeletal Footpath Programme.
- Traffic analysis and investigations (typically following complaints from residents regarding speeding and hoon driving behaviour).

A significant proportion of this role continues to be the investigation and response to speeding complaints throughout the City. Written complaints from the City's residents are received weekly with the majority of these complaints attributed to a low percentage of inconsiderate motorists that have little regard to their fellow road users and residents. The complaints however do typically necessitate a range of investigatory actions, including the placement of traffic counts to record vehicle numbers, speeds, and checking accident statistics.

- Investigation of street lighting complaints and creation of annual street lighting upgrade program.
- Co-ordination of the annual new and replacement bus shelter programs in conjunction with the Public Transport Authority (PTA).
- Investigation and preparation of the majority of the City's road grants, such as Blackspots, Metropolitan Regional Road Group (MRRG) and Perth Bicycle Network.

This function is extremely important as it can generate significant amounts of external income, which complements available annual municipal funding and other sources of income. In turn this income is used to provide improved road safety upgrades such as new roundabouts, traffic calming devices, upgrade street lighting and improved pedestrian and cycling facilities. In addition, the income also assists to rehabilitate and in some cases upgrade, the City's road network, which again complements the City's own municipal funding.

By way of illustrating the importance of this role to successfully source this funding, listed below are some of the important and more complex road projects over the past 10 years, completed with either full or part funding provided by external income sources.

Key projects completed in the last 10 years from Blackspot funding, MRRG grants and Perth Bicycle Network funds:

- Duplication of Champion Drive from Seville Drive to Tonkin Highway (2/3 funding from the State Government under the MRRG Program).

- Duplication of Warton Road from Nicholson Road to Armadale Road - combination of funding from the Developer Contribution Scheme (DCS) and the State Government's MRRG Program.
- New traffic control signals at the intersection of Tonkin Highway and Champion Drive, new signals and road re-alignment at the intersection of Armadale Road and Railway Avenue, new signals at the intersection of Armadale Road and Seville Drive and new traffic control signals at the intersection Bedfordale Hill Road and South Western Highway. All of these key projects were either fully funded under the Federal Blackspot Program or two thirds funded under the State Blackspot Program.
- Railway Avenue upgrade between Denny Avenue and Westfield Road to incorporate turn lanes and install intersection treatments utilising funding from the State Government's MRRG Program.
- New red asphalt shared path on Armadale Road between Abbey Road and Seventh Road. Also new shared path on Ranford Road between Armadale Road and Warton Road utilising Perth Bicycle Network (PBN) grant funding.

Senior Traffic and Transportation Engineer

As the City is experiencing rapid growth, transport planning and modelling is critical to ensure that traffic forecasting is carried out accurately and future demands predicted. This will inform road planning, future road reserve requirements, and funding requirements to achieve these long term outcomes.

Functions include:

- Undertake intersection and road network capacity analysis and provide recommendations.
- Assess issues associated with and impacting upon specific projects in relation to roads and traffic.
- Co-ordinate external traffic and transport reports to ensure compliance with the overall strategic transport framework as set by the City.
- Undertake technical studies for major projects, report on the feasibility of such projects and provide recommendations.
- Prepare contract documentation for projects where necessary and assess tender submissions for specific projects. This also includes:
 - Project Management of large, complex projects associated with road upgrades in particular.
 - Keep abreast of advancing technologies in transport and traffic planning and modelling.

Corporate Business Plan

The functions outlined above serve to meet the Corporate Business Plan requirements as follows:

2.3 Well Managed Infrastructure

2.3.1 Apply best practice design and construction methodologies for the provision of infrastructure

2.3.1.1 Implement a best practice project management approach to the planning and delivery of infrastructure

2.3.3 Develop and implement asset management plans to inform long term funding requirements

2.3.3.1 Investigate future demand for infrastructure based on projected population growth and demand

2.3.4 Develop long term transport network planning

2.3.4.2 Investigate traffic patterns to determine future road capacity requirements

2.3.4.3 Advocate for improved public transport services

Budget and Costs

Operating Costs

The main cost allocations for this function are as follows:

- Employee costs – an allocation of approximately \$900,000 of which \$550,000 is funded from municipal funds directly, with the balance of \$350,000 charged against externally funded projects such as Blackspots and MRRG, as well as DCS funded works, with the most recent being Ranford Road duplication (MRA) and Nicholson Road.
- Consultant fees – an allocation of \$100,000 for survey and other specialist work not provided for in-house.
- Bus Shelters – an allocation of approximately \$70,000 to provide for matching income with the PTA for the installation of new bus shelters, where the cost is shared on an approximate 50:50 ratio. In 2016/17 a greater allocation has been secured for an additional 10 bus shelters in Piara Waters funded through the DCS.
- Street lighting improvements – an allocation of \$480,000 which is mainly matching funding for Black Spot projects involving street lighting improvements, on a 33:67 ratio.

While the bus shelter and street lighting works are defined as capital works, because the construction is implemented by external agencies (Western Power, PTA etc.) these projects are coordinated by Engineering Design and not by the Civil Works Department.

Grant Funding

As mentioned previously, an important function performed by Engineering and Design is the submission of external road grant funding such as Blackspots, MRRG and PBN grants.

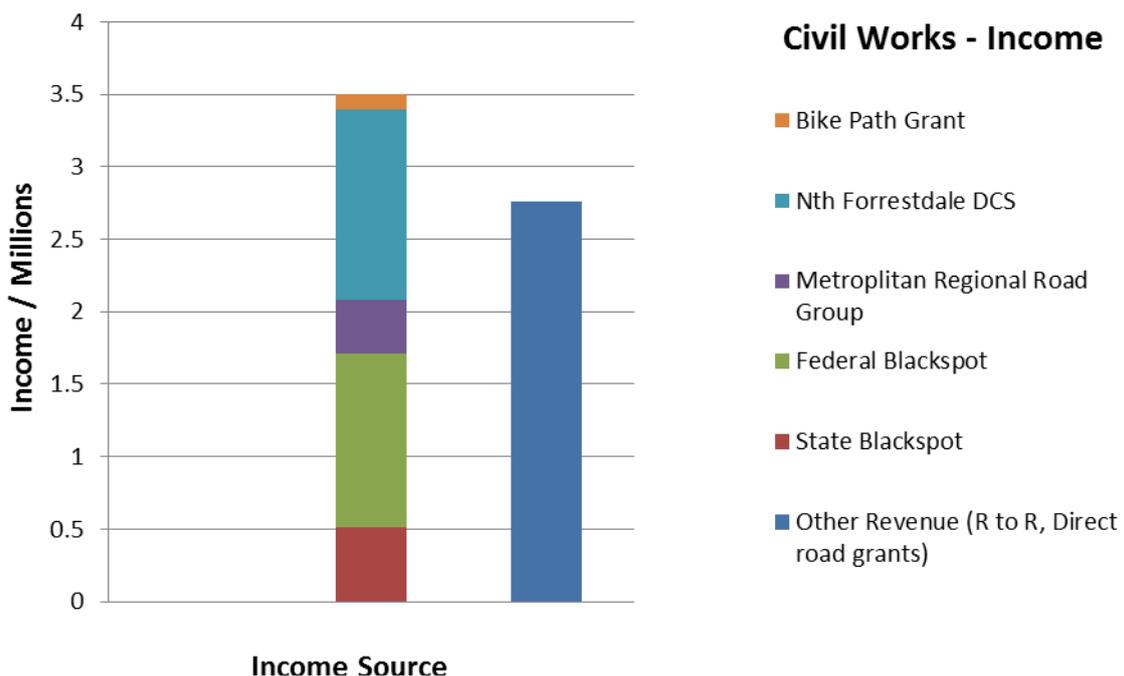
It is important to note that some of this income is gained annually, without the requirement to carry out detailed investigations and submit formal applications. Examples of this income include federally funded Roads to Recovery allocations and Grants Commission allocations.

For clarity these ‘automatic’ grants/income are shown on the below graph as ‘other revenue’ (blue column). The grants that do however require detailed investigations and considerable knowledge and expertise are those that are highlighted in the various colours as per the first column.

It is to be noted that the grant amounts vary from year to year, depending on the success rate of applications, but in general, the City has been very successful in these applications over the past years.

Including the DCS funded projects; approximately \$3.5M is the typical grant funding income over and above the ‘automatic’ grants, which is generated annually by the Engineering Design Department i.e. those that require significant input by Engineering and Design.

The graph below illustrates the annual/grant funded income for Civil Works and provides a comparison between these ‘automatic’ grants (blue column) and those that require significant work and analysis for the 2015/16 financial year.



Level of Service

The City's goal for the completion of all design work for the Civil Works Department is that the plans are completed and ready at least 30 days prior to the commencement date of the works. While historically this aim has not always been achieved, the improvement shown over the past year in this respect is encouraging and is expected to become the standard during the 2016/17 financial year.

At this stage it is planned to have all 2016/17 designs completed by December 2016, with forward planning and preliminary designs for anticipated works for 2017/18, providing for improved cost estimates and budget input for future projects.

The possibility of outsourcing this function has been considered on many occasions in the past but in general, the service from consulting engineers on the projects of municipal scale cannot always match the City's internal service. Typically municipal designs as compared to those in "Greenfields" environments such as new subdivisions and developments require a unique skill set that requires an understanding of the area and expectations of the City's residents. Internal design staff, particularly those that have been employed in Local Government and at the City of Armadale have an improved understanding of these factors and therefore are better equipped to provide this service.

The option of outsourcing this skill therefore is no longer considered to be beneficial as compared to performing this service in house. Only occasionally will specialist work and survey be provided to private consultants.

Conclusion

The Engineering Design function is currently providing an invaluable service to the City in the preparation of design drawings, strategic drainage analysis, transport and traffic planning, and road grant applications for both Civil Works and the City in general.

Recommendation

That Council note the content of this report.

TECHNICAL SERVICES DEPARTMENTAL ACTIVITY REPORT

Department

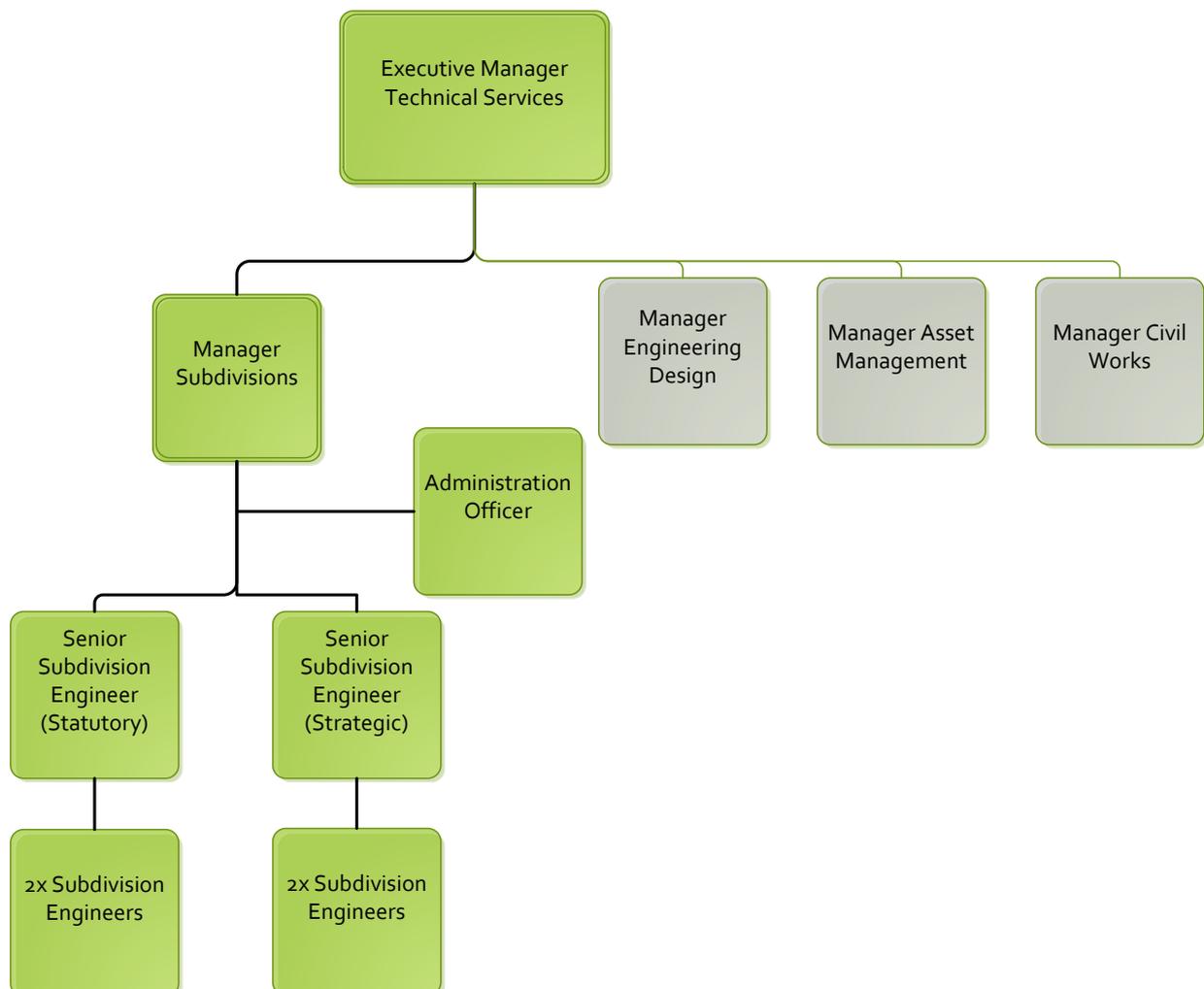
- **Subdivisions**

Background

The ability of State and Local government and the development industry to provide an affordable, sustainable and timely supply of urban land is a key planning priority in the development and progress of the State. The specific requirements necessary to achieve planning and engineering approval for the subdivision of residential, industrial and commercial lots should be clear and transparent and be consistently applied. The Subdivision Department is responsible for assessing planning applications, supervising subdivisional development and mitigating risk for the City of Armadale.

Structure

The Subdivision Department falls within the Technical Services Directorate and is comprised of the following staff:



Functions

Planning Applications – Assessment and Setting Conditions

The Subdivision Department coordinates the Technical Services Directorate response to planning applications including District and Local Structure Plans, scheme and structure plan amendments, subdivisions and developments within the City of Armadale. This includes providing comments on technical reports and recommended conditions for planning application approvals.

The below table demonstrates a proportion of the work undertaken in each category.

	Application Type	Percentage
1	District and Local Structure Plans/Amendments	20%
2	Subdivisional Applications	20%
3	Development Applications	15%
4	Civil Engineering Drawings	20%
5	Technical supporting documentation (UWMPs, TIA s etc)	25%

An important role within Technical Services is the coordination of responses from the Parks and Environmental departments to obtain a coordinated response for planning applications. Of particular relevance is the coordination of comment on drainage and water management issues, particularly to ensure that the input from the engineers, the environmental officers and the landscape architects are integrated and have a common agreed outcome.

Clearance of Conditions

The Subdivision Department is also responsible for determining whether certain Western Australian Planning Commission (WAPC) conditions can be recommended for clearance on approved subdivision applications. The clearance process includes the assessment of technical reports associated with various WAPC subdivision conditions (i.e. Urban Water Management Plans, Traffic Management Plans, Geotechnical Reports, Environmental Reports, Landscape Construction Drawings, Erosion and Sediment Control Management Plans, Civil Design Drawings, etc.). The Subdivision Department is responsible for collecting the various fees and charges associated with the assessment of the technical documents.

Site Supervision for Subdivisional Development

The Subdivisions Department is responsible for local government site supervision of subdivision works in accordance with the Planning and Development Act WA (2005) and generally follows the process identified in the Local Government Guidelines for Subdivisional Development (Institute of Public Works Engineers Australasia, 2011). The Department is responsible for inspection of civil construction works at various hold points, undertaking practical completion inspections, arranging bonds for outstanding works and maintenance, undertaking handover inspections after the 12 month defects liability period and ensuring 'as constructed' asset data (i.e. A-Spec data) is provided to the City and forwarded to the Asset Department.

Corporate Business Plan

- 2.1 The natural environment is valued and conserved
 - 2.1.1 Preserve and improve natural areas
 - 2.1.2 Manage the interface between natural areas and the built environment
 - 2.1.2.3 Manage the preservation of the water quality of local streams, creeks and rivers potentially affected by development
 - 2.1.3 Ensure that developments are sensitive to pre-existing environmental values
 - 2.1.3.1 Implement the Groundwater Resource Position Paper
- 2.2 Attractive and Functional Public Places
 - 2.2.1 Deliver attractive and functional streetscapes, open spaces, City buildings and Facilities
 - 2.2.2 Protect and enhance the character of the City's spaces and places
 - 2.2.2.1 Implement, survey and define a sense of place or character for each designated area of the City
 - 2.2.3 Revitalise existing neighbourhoods whilst retaining the character of places

Finance

Fees and Charges

There are various City of Armadale Fees and Charges that provide cost recovery for services provided by the Subdivision Department. These include:

1. Engineering Supervision Fees - 1.5% of contract value plus GST (with consulting engineer – the most common scenario) or 3.0% of contract value plus GST (without consulting engineer).
2. Development Engineering Assessment Fees - Charged actual cost (based on employee hourly rate) plus administration of \$65.00/hr minimum, \$130.00/hr maximum. These fees are applicable to the time that each Subdivisional, Parks and Environmental Officer has allocated to the assessment or application and are invoiced on a monthly basis to each applicant. The following assessment fees are charged by the Subdivision Department:
 - a. Pre-lodgement assessment services and associated inspections.

- b. Supervision of each stage of subdivisional road and drainage civil works, including associated site inspections.
- c. Assessment of each stage of subdivisional civil works plan submissions for roads, drainage and artificial waterways.
- d. Assessment of technical reports, studies and management plans, such as relevant traffic studies, construction, environmental management plans, erosion and sediment control plans etc.
- e. Assessment of additional plans and drawings for areas of development not addressed in (d) above, such as detailed earthworks plans, landscape plans etc.
- f. Additional site inspections required over and above the standard inspections, such as reinspection of works due to failed area/items, unfinished stage of works or special site visit requests.
- g. Assessment of Local Water Management Strategy (LWMS), Urban Water Management Plan (UWMP), flood, stormwater or any other water management plan or drainage study associated with the development area.
- h. Assessment of additional water management documentation and plans, such as on-site stormwater management studies, including supporting engineering drainage plans detailing detention and retention systems etc., if such information was not addressed in (g).
- i. Assessment of works and/or plan submissions requiring review and comment by independent third party experts / consultants, and these experts / consultants are engaged by the City, such as detailed hydraulics analysis, traffic management plans, proposed road closures, signing of roads etc.
- j. Any other assessment services not directly relating to subdivisional civil works submission.
- k. Decorative Public Open Space (POS) lighting or street lighting operation and maintenance where the City pays a tariff to Western Power for decorative POS lighting or street lighting which includes the energy cost, maintenance cost of the Bulk Globe Replacement Programme. Alternatively, where a tariff is imposed by the energy provider to charge for energy consumption only, with ownership and total responsibility for ongoing maintenance of the POS lighting or street lighting infrastructure ultimately transferred to the City.
- l. Administration Fee for the creation and processing of bonds for incomplete subdivisional civil works at clearance.

The 2016/17 Financial Year Budget identifies the following Operating Revenue and Expenses:

- Operating Expense – mainly employee and associated costs \$927,530
- Operating Revenue – Income generated from the fees as described above \$400,000

Lodgement fees for planning applications such as Structure Plans and Development Applications, is received and accounted by Development Services, forms part of Councils general revenue stream, and is not included in the above figures.

Challenges

The main challenges for the Subdivision Department include resilience and adaptability, particularly where there is a rapid increase in subdivision application lodgements and implementation of development works for conditionally approved subdivisions. This fluctuation brought about by changes in market conditions is reflected in the Department of Planning’s Subdivision Statistics for City of Armadale, which show a general upward trend in proposed lots since the September 2015 quarter (Figure 3).

Since 1st July 2015 (for residential lots) there was an approximate 5 x increase in the number of proposed lots considered in developer lodged applications, a 2 x increase in the number of lots within applications under assessment, an initial doubling of proposed lots in conditional approvals followed by a decline, and a general upward trend in final approvals (i.e. constructed lots). This data suggests there is a considerable number of approved lots that have yet to be constructed but remain in reserve by developers due to slower market conditions.

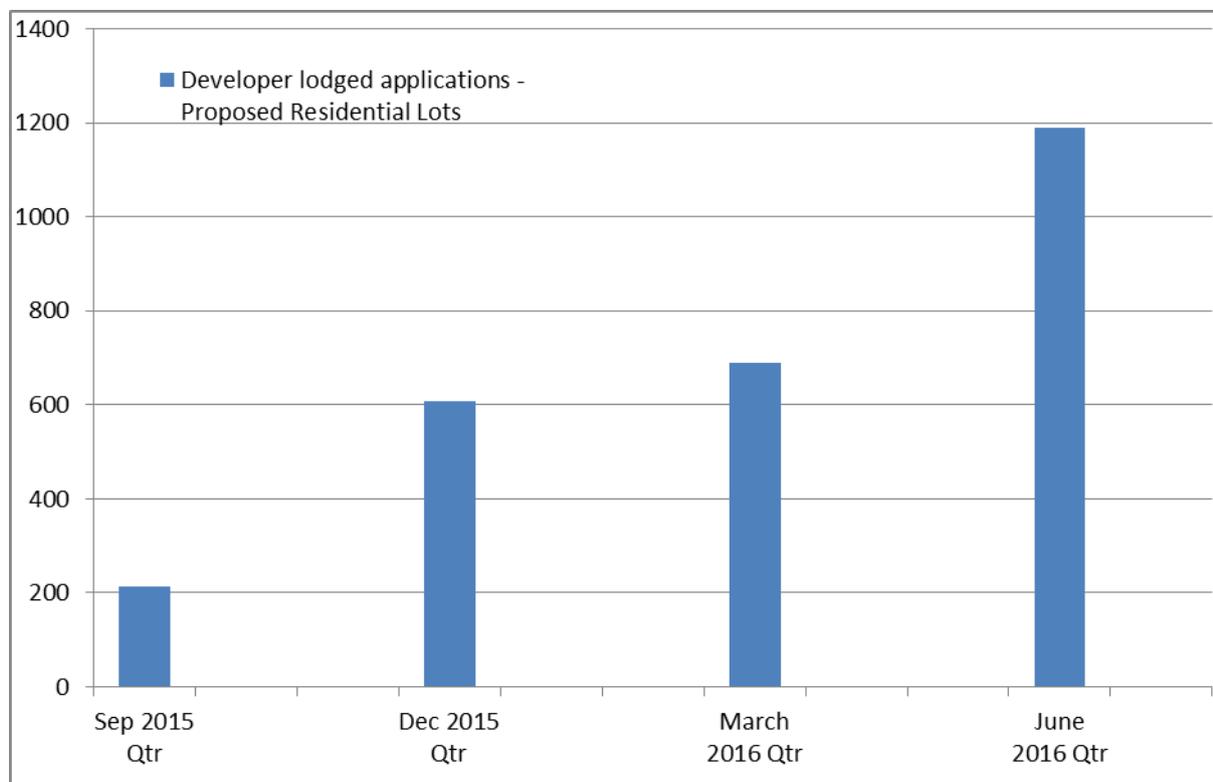


Figure 3 – Subdivision Lot Activity for City of Armadale from 1st July 2015 to 30th June 2016. Data sourced from the Department of Planning.

Risk Management

One of the key functions of the Subdivision Department is to mitigate risk for the City of Armadale. Infrastructure worth millions of dollars is gifted to the City annually which broadly includes roads, drainage and public open space, and the infrastructure components within each one.

The Subdivision Department is responsible for assessing the designs, supervising works, identifying defects and ensuring infrastructure is handed over to the City in working order after the 12-month defects liability period for civil infrastructure and a minimum of 2 years for public open space landscape works (unless otherwise negotiated). Without suitably qualified or experienced local government officers the City is at risk of being gifted assets that are poorly designed or constructed. Similarly, a design may meet specifications but may not necessarily be the best design approach for a given site. This is where a Department of suitably qualified experts in civil, landscape and environmental design (and expert generalists across all three fields) is critical for the City of Armadale to avoid poor outcomes and infrastructure that becomes a costly liability.

Level of Service

The Subdivisional Department is bound by the statutory timeframes for assessment of various types of planning applications. For technical submissions however (civil engineering design plans, landscape plans, environmental assessments, Traffic Impact Assessments, UWMPs etc), the City has determined a reasonable timeframe for comment and feedback to the applicants.

Conclusion

The Subdivision Department ensures that the City's gifted assets are designed to specification, have regard to traffic management, water sensitive urban design, sustainability and ongoing maintenance requirements. While some developers still refuse to accept the conditions and requirements of the City relating to their developments, the outcomes of those which have been approved, demonstrates the accuracy and relevance of these conditions, resulting in general terms great outcomes for the City.

Recommendation

That Council note the contents of this report.