



*The City with Spirit*

## NOTICE OF MEETING

Notice is hereby given that an **Infrastructure Works and Development Committee** meeting of the Devonport City Council will be held in the Aberdeen Room, Level 2, paranaple centre, 137 Rooke Street, Devonport, on Monday 9 December 2019, at the conclusion of the Annual General Meeting which commences at 5:00pm.

**The meeting will be open to the public.**

## QUALIFIED PERSONS

In accordance with Section 65 of the *Local Government Act 1993*, I confirm that the reports in this agenda contain advice, information and recommendations given by a person who has the qualifications or experience necessary to give such advice, information or recommendation.

Matthew Atkins  
ACTING GENERAL MANAGER

**4 December 2019**

**AGENDA FOR A MEETING OF THE INFRASTRUCTURE WORKS AND DEVELOPMENT COMMITTEE  
OF DEVONPORT CITY COUNCIL HELD ON MONDAY 9 DECEMBER 2019  
IN THE ABERDEEN ROOM, LEVEL 2, paranaple centre, 137 ROOKE STREET, DEVONPORT AT  
APPROX. 5:30PM**

<b>Item</b>	<b>Page No.</b>
<b>1.0 APOLOGIES.....</b>	<b>1</b>
<b>2.0 DECLARATIONS OF INTEREST .....</b>	<b>1</b>
<b>3.0 PROCEDURAL.....</b>	<b>2</b>
3.1 PUBLIC QUESTION TIME.....	2
3.2 QUESTIONS ON NOTICE FROM COUNCILLORS.....	3
<b>4.0 TENDERS .....</b>	<b>4</b>
<b>5.0 INFRASTRUCTURE AND WORKS REPORTS .....</b>	<b>6</b>
5.1 Stormwater System Management Plan.....	6
5.2 Pedestrian Bridge over Figure of Eight Creek - Report on Feasibility.....	105
5.3 Asset Management Strategy - Year Five Status Update (D556405) .....	112
5.4 Squibbs Road Stormwater Improvements.....	117
<b>6.0 INFRASTRUCTURE WORKS AND DEVELOPMENT BI-MONTHLY UPDATES .....</b>	<b>121</b>
6.1 Development and Health Services Report.....	121
6.2 Infrastructure and Works Report (D615053) .....	136
<b>7.0 CLOSURE .....</b>	<b>149</b>

Agenda of a meeting of the Devonport City Council's **Infrastructure Works and Development Committee** to be held in the Aberdeen Room, Level 2, paranapple centre, 137 Rooke Street, Devonport on Monday 9, December 2019 commencing at approx. 5:30pm.

**PRESENT**

		<b>Present</b>	<b>Apology</b>
Chairman	Cr L Perry		
	Cr G Enniss		
	Cr P Hollister		
	Cr A Jarman		
	Cr L Laycock		
	Cr L Murphy		

**IN ATTENDANCE**

All persons in attendance are advised that it is Council policy to record Council Meetings, in accordance with Council's Digital Recording Policy. The audio recording of this meeting will be made available to the public on Council's website for a minimum period of six months. Members of the public in attendance at the meeting who do not wish for their words to be recorded and/or published on the website, should contact a relevant Council Officer and advise of their wishes prior to the start of the meeting.

**1.0 APOLOGIES**

**2.0 DECLARATIONS OF INTEREST**

### 3.0 PROCEDURAL

#### 3.1 PUBLIC QUESTION TIME

Members of the public are invited to ask questions in accordance with Council's Public Question Time Policy (Min No 153/19 refers):

1. Public participation shall take place at Council meetings in accordance with Regulation 31 of the *Local Government (meeting Procedures) Regulations 2015*.
  2. Public participation will be the first agenda item following the formal motions: Apologies, Minutes and Declarations of Interest.
  3. Questions without notice will be dependent on available time at the meeting (with a period of 30 minutes set aside at each meeting).
  4. A member of the public who wishes to ask a question at the meeting is to state their name and address prior to asking their question.
  5. A maximum of 2 questions per person are permitted.
  6. A maximum period of 3 minutes will be allowed per person.
  7. If time permits, a third question may be asked once all community members who wish to ask questions have done so. A time limit of 2 minutes will apply.
  8. Questions are to be succinct and not contain lengthy preamble.
  9. Questions do not have to be lodged prior to the meeting, however they will preferably be provided in writing.
  10. A question by any member of the public and an answer to that question are not to be debated.
  11. Questions without notice and their answers will be recorded in the minutes.
  12. The Chairperson may take a question on notice in cases where the questions raised at the meeting require further research or clarification, or where a written response is specifically requested.
  13. Protection of parliamentary privilege does not apply to local government and any statements or discussion in the Council Chambers, or any document produced, are subject to the laws of defamation.
  14. The Chairperson may refuse to accept a question. If the Chairperson refuses to accept a question, the Chairperson is to give reason for doing so in accordance with the Public Question Time Policy.
-

**3.2 QUESTIONS ON NOTICE FROM COUNCILLORS**

At the time of compilation of the agenda no questions on notice from Councillors were received.

## 4.0 TENDERS

There are no tenders to consider at this meeting.

The following table details all tenders and contracts which have been entered into by Council above \$100,000 for the 2019/2020 financial year.

Contract	Contract Period	Extension Options	\$ Value (Excluding GST)	Contractor	Min Ref/ Meeting Date
Contract CT0246-01 Supply, Delivery and Placement of Hot mix Asphalt	September 2019 - June 2020	Not Applicable	\$218,310	Hardings Hotmix Pty Ltd	138/19 Council 22/07/2019
Contract CT0246-02 Supply, Delivery and Placement of Bituminous Surfacing	September 2019 - June 2020	Not Applicable	\$364,245	Hardings Hotmix Pty Ltd	139/19 Council 22/07/2019
Contract 1335 Waterfront Park Superintendent Consultancy	September 2019 – September 2021	Not Applicable	\$9,100 per month	6ty	27/19 IWDC 12/08/2019
Contract CT0256 Roberts Court Renewal	September 2019 – November 2019	Not Applicable	\$182,221	Hardings Hotmix Pty Ltd	Awarded - Delegated Authority - 06/09/2019
Contract CB0082 Waterfront Park Construction	October 2019 – June 2021	Not Applicable	\$16,811,297	Vos Construction & Joinery Pty Ltd	190/19 Council 23/09/2019
Contract CT0252 Berrigan Road & Lyons Avenue Roadworks	October 2019 – December 2019	Not Applicable	\$294,162	ATM Civil	191/19 Council 23/09/2019
CF0026 Side Arm Garbage Truck	October 2019 – May 2020	Not Applicable	\$390,896	Webster Trucks	192/19 Council 23/09/2019
Contract CT0261 Stewart Street Renewal	January 2020 - March 2020	Not Applicable	\$261,146	Civilscape Contracting	222/19 Council 25/11/19
Contract CT0269 Winspears Road Renewal Stage 4	January 2020 - March 2020	Not Applicable	\$218,981	Walters Contracting	223/19 Council 25/11/19
Contract 1336 Waste Transfer	December 2019 - November 2022	1+1 (2 Years Total)	\$232,000	Veolia	239/19 Council 25/11/19
Contract CT0264 Victoria Street Renewal	January 2020 - March 2020	Not Applicable	\$236,873	Civilscape Contracting	240/19 Council 25/11/19
Contract CT0265 Holyman Street Renewal	December 2019 - March 2020	Not Applicable	\$368,846	Hardings Hotmix Pty Ltd	241/19 Council 25/11/19
Contract CT0267 Fenton & Stewart Street RAB	December 2019 - February 2020	Not Applicable	\$295,665	Hardings Hotmix Pty Ltd	242/19 Council 25/11/19

**Infrastructure Works and Development Committee meeting Agenda 9 December 2019**

---

Contract	Contract Period	Extension Options	\$ Value (Excluding GST)	Contractor	Min Ref/ Meeting Date
Contract 1320 – Weed Control – Option Extension	July 2019 – July 2020	1+1 (2 Years Total)	\$107,180	Steeds Weeds Solution	Option approved by delegation

## 5.0 INFRASTRUCTURE AND WORKS REPORTS

### 5.1 STORMWATER SYSTEM MANAGEMENT PLAN

#### RELEVANCE TO COUNCIL'S PLANS & POLICIES

Council's Strategic Plan 2009-2030:

Strategy 2.3.2 Provide and maintain stormwater infrastructure to appropriate standards

#### SUMMARY

This report proposes a Stormwater System Management Plan (SSMP) for adoption.

#### BACKGROUND

The *Urban Drainage Act 2013* was enacted in December of that year, replacing the *Sewer and Drains Act 1954*. The new Act had several impacts on Council's operations, which were identified in a report in June 2015 (Min IWC 23/15 refers). One requirement of the new Act was for Council to develop a SSMP to document its intentions for managing the stormwater system.

The data presented in a SSMP is critical to ensure that Council's finite capital works program allocations for stormwater projects are directed to the most appropriate projects, reducing the risk of flooding to people and property. A SSMP compliments Council's Stormwater Strategy and Stormwater asset management plan (both under review).

#### STATUTORY REQUIREMENTS

Section 10 of the *Urban Drainage Act 2013* requires:

- (1) A council must develop a stormwater system management plan for the urban area of its municipal area within 6 years after the day on which this Act commences.
- (2) A stormwater system management plan is to specify–
  - (a) plans for the management of any assets used for the delivery of a stormwater service; and
  - (b) the level of risk from flooding for each urban stormwater catchment in the public stormwater system; and
  - (c) any other matters prescribed in the regulations or that the council considers appropriate.

#### DISCUSSION

Aspects of the SSMP that meet the requirements of the *Urban Drainage Act 2013* are outlined below:

##### Subsection 10-1

Adoption of the SSMP by Council in December 2019 will satisfy the requirement of this subsection of the Act.

##### Subsection 10-2a

The SSMP describes the three work systems that Council uses to undertake work on its stormwater system:

- Capital
- Operational
- Major maintenance

These work programs compliment each other to optimise the life cycle cost of the assets. Allocations to these programs are guided by the stormwater asset management plan and the stormwater service level document. This suite of documents meets the requirements of this subsection of the Act.

#### **Subsection 10-2b**

Council has allocated considerable resources to surveying of stormwater assets, hydraulic modelling and risk assessments to understand the capacity of the current stormwater system and the risk from flooding in its 75 urban catchments.

The SSMP details the methodology used to determine the risk rating for the catchments and provides details for each catchment and at a summary level. These risk assessments satisfy the requirement of this subsection of the Act.

#### **Subsection 10-2c**

The SSMP includes an action plan which ensures the currency and relevance of the SSMP into the future. Key activities including:

- Completion of risk assessment for 16 catchments in 2020-21
- Reprioritise capital works program based on risk assessments
- Maintain SSMP
- Maintain link SSMP to asset management plan

The SSMP is attached to this report.

#### **COMMUNITY ENGAGEMENT**

No consultation has been undertaken in preparation of this report. It is expected that opportunities for consultation will occur when Council's stormwater asset management plan is updated and during budget deliberations when specific projects will be proposed for funding.

#### **FINANCIAL IMPLICATIONS**

There are no financial implications as a result of this report. The updated stormwater asset management plan will consider the requirements of the SSMP which will in turn inform the forward capital works program. These documents will be presented for consideration when prepared.

#### **RISK IMPLICATIONS**

- Corporate and Business  
The risk assessments included in the SSMP ensures that funding is allocated to the most appropriate projects.
- Asset & Property Infrastructure  
A well developed SSMP will inform that stormwater asset management, leading to improved long term asset management practices.
- Legal Compliance  
Adopting a Stormwater System Management Plan with the required content ensures compliance with the *Urban Drainage Act 2013*.

- Risk Management Practices  
A risk assessment methodology has been developed specifically for the SSMP, based on sound engineering practices and Council's established risk management processes.

**CONCLUSION**

The *Urban Drainage Act 2013* requires Council to develop a SSMP and identifies the requirements of the plan.

A SSMP is attached to this report that meets the requirements of the Act and will assist Council in improving asset management practices and reducing the risk of flooding in a prioritised way in its 75 urban catchments.

**ATTACHMENTS**

1. Stormwater System Management Plan - December 2019

**RECOMMENDATION**

That it be recommended to Council that the report of the Infrastructure and Works Manager be noted and that the Stormwater System Management Plan be adopted.

Author:	Michael Williams	Endorsed By:	Matthew Atkins
Position:	Infrastructure & Works Manager	Position:	Acting General Manager



# STORMWATER SYSTEM MANAGEMENT PLAN

DECEMBER 2019





**Next Date of Review:** Insert Date  
**Document Controller:** Infrastructure and Works Manager  
**Document Reviewer:** City Engineer  
**Date Adopted by Council:** Insert Date  
**Resolution Number:** Insert resolution number



# Table of Contents

- ..... 2
- 1 Executive Summary ..... 6
- 2 Introduction: ..... 9
  - 2.1 Urban drainage area ..... 9
  - 2.2 Urban drainage catchments ..... 9
- 3 Strategic and Legislative Context: ..... 11
  - 3.1 Urban Drainage Act 2013 ..... 11
  - 3.2 Stormwater Strategy ..... 11
- 4 Management of stormwater assets ..... 12
  - 4.1 Asset management plan ..... 12
  - 4.2 Capital Works Program ..... 12
  - 4.3 Maintenance Service Levels ..... 12
- 5 Risk Assessment Methodology: ..... 14
  - 5.1 Updating stormwater asset data ..... 14
  - 5.2 Hydraulic modelling ..... 14
  - 5.3 Risk Assessment Procedure ..... 14
- 6 Stormwater Catchments – Risk of Flooding: ..... 17
  - 6.1 Catchment Aquatic ..... 17
  - 6.2 Catchment Ashburner ..... 18
  - 6.3 Catchment Best ..... 19
  - 6.4 Catchment Bluff ..... 20
  - 6.5 Catchment Caroline ..... 21
  - 6.6 Catchment Chinamans Creek ..... 22
  - 6.7 Catchment Church ..... 23
  - 6.8 Catchment Clare ..... 24
  - 6.9 Sub-Catchment Clayton Drive ..... 25
  - 6.10 Catchment Clements ..... 26
  - 6.11 Catchment Coles Beach Close ..... 27
  - 6.12 Catchment Don View ..... 28
  - 6.13 Catchment Douglas ..... 29
  - 6.14 Catchment Drew ..... 30
  - 6.15 Catchment Enderly ..... 31
  - 6.16 Catchment Fenton (North) ..... 32
  - 6.17 Catchment Fire Station ..... 33
  - 6.18 Catchment Fleetwood ..... 34
  - 6.19 Catchment George ..... 35
  - 6.20 Catchment Georgiana ..... 36



6.21 Catchment Gloucester..... 37

6.22 Catchment Green Bank ..... 38

6.23 Catchment Havelock ..... 39

6.24 Catchment Highfield ..... 40

6.25 Catchment James (East) ..... 41

6.26 Catchment James (West) ..... 42

6.27 Catchment John ..... 43

6.28 Catchment King ..... 44

6.29 Catchment Madden (Showground) ..... 45

6.30 Catchment Madden (West)..... 46

6.31 Catchment Malunnah ..... 47

6.32 Catchment McCabe..... 48

6.33 Catchment Miandetta ..... 49

6.34 Catchment Monash..... 50

6.35 Catchment Mungala..... 51

6.36 Catchment Murray ..... 52

6.37 Catchment Nicholls ..... 53

6.38 Catchment Oldaker (East) ..... 54

6.39 Catchment Oldaker (West)..... 55

6.40 Catchment Parker..... 56

6.41 Catchment Penambul..... 57

6.42 Catchment Quoiba 1 ..... 58

6.43 Catchment Quoiba 2 ..... 59

6.44 Catchment Quoiba 3 ..... 60

6.45 Catchment Richardson ..... 61

6.46 Catchment River 1 ..... 62

6.47 Catchment River 2 ..... 63

6.48 Catchment River 3 ..... 64

6.49 Catchment River 4 ..... 65

6.50 Catchment River 5 ..... 66

6.51 Catchment Riverview ..... 67

6.52 Catchment Ronald ..... 68

6.53 Catchment Rose ..... 69

6.54 Catchment Sheffield 1 ..... 70

6.55 Catchment Sheffield 2..... 71

6.56 Catchment Sheffield 3..... 72

6.57 Catchment Sheffield 4..... 73

6.58 Catchment Sheffield 5..... 74

6.59 Catchment Simplot..... 75



- 6.60 Catchment Spreyton ..... 76
- 6.61 Catchment Steele..... 77
- 6.62 Catchment Stephen..... 78
- 6.63 Catchment Stewart ..... 79
- 6.64 Catchment Surrey ..... 80
- 6.65 Catchment Tarleton..... 81
- 6.66 Catchment Thomas ..... 82
- 6.67 Catchment Torquay..... 83
- 6.68 Catchment Tugrah 1 ..... 84
- 6.69 Catchment Turton..... 85
- 6.70 Catchment William ..... 86
- 6.71 Catchment Winspears ..... 87
- 6.72 Catchment Woodrising ..... 88
- 6.73 Catchment Woorack..... 89
- 6.74 Catchment Wright ..... 90
- 6.75 Catchment Young ..... 91
- 7 Summary of risk assessments:..... 92
- 8 Action Plan:..... 94
  - 8.1 Complete the hydraulic modelling for the remaining catchments..... 94
  - 8.2 Prioritise catchments based on risk assessment..... 94
  - 8.3 Develop feasible concept plans ..... 94
  - 8.4 Update Forward Capital Works Program with priority projects ..... 94
  - 8.5 Maintain asset data, hydraulic models and risk ratings as stormwater network changes ..... 95
  - 8.6 Maintain hydraulic models and risk rating as storm intensities increase (as determined by AR&R) ..... 95
  - 8.7 Maintain relationship between SSMP and Stormwater AMP ..... 95
- 9 Appendices:..... 96
  - 9.1 Council Stormwater strategy – 2012 (Will be updated in 2020)..... 96
  - 9.2 Council Forward Capital works Program 2019-2024..... 96
  - 9.3 Determining existing system capacity procedure..... 96

## 1 Executive Summary

The *Urban Drainage Act 2013* (the Act) requires that all Tasmanian Councils develop a Stormwater System Management Plan (SSMP) for the urban areas within their municipalities. A well-developed SSMP will ensure an appropriate level of understanding and management of the flood risk within all urban drainage catchments.

A SSMP is required to include:

- plans for the management of any assets used for the delivery of a stormwater service; and
- the level of risk from flooding for each urban stormwater catchment in the public stormwater system; and
- any other matters prescribed in the regulations or that the council considers appropriate.

A SSMP can also be used as the basis for developing and prioritising capital works and informing asset management plans.

Council's urban area is divided into 75 stormwater catchments, which each discharge through a single outlet into either Bass Strait, the Mersey River or other natural water courses.

Council has three works systems:

- Capital
- Operational
- Major Maintenance

in which work programs are delivered to manage Council's stormwater assets.

A multi-year project to accurately survey stormwater assets, create hydraulic models and assess the risk from flooding to people and property has been undertaken and the risk ratings are shown in Table 1 below.

Risk Rating	Total Catchments	% Total
High	4	5%
High-Medium	0	0%
Medium-High	1	1%
Medium	9	12%
Low-Medium	45	60%
Low	0	0%
Not Classified (TBC)	16	21%
<b>TOTAL</b>	<b>75</b>	

Table 1 – Summary of risk ratings

The catchments where a high risk from flooding to people or property are large urban catchments:

- Chinamans Creek
- Parker
- Ronald
- William



The risk rating of the stormwater catchments is displayed in map form in Figure 1 below.

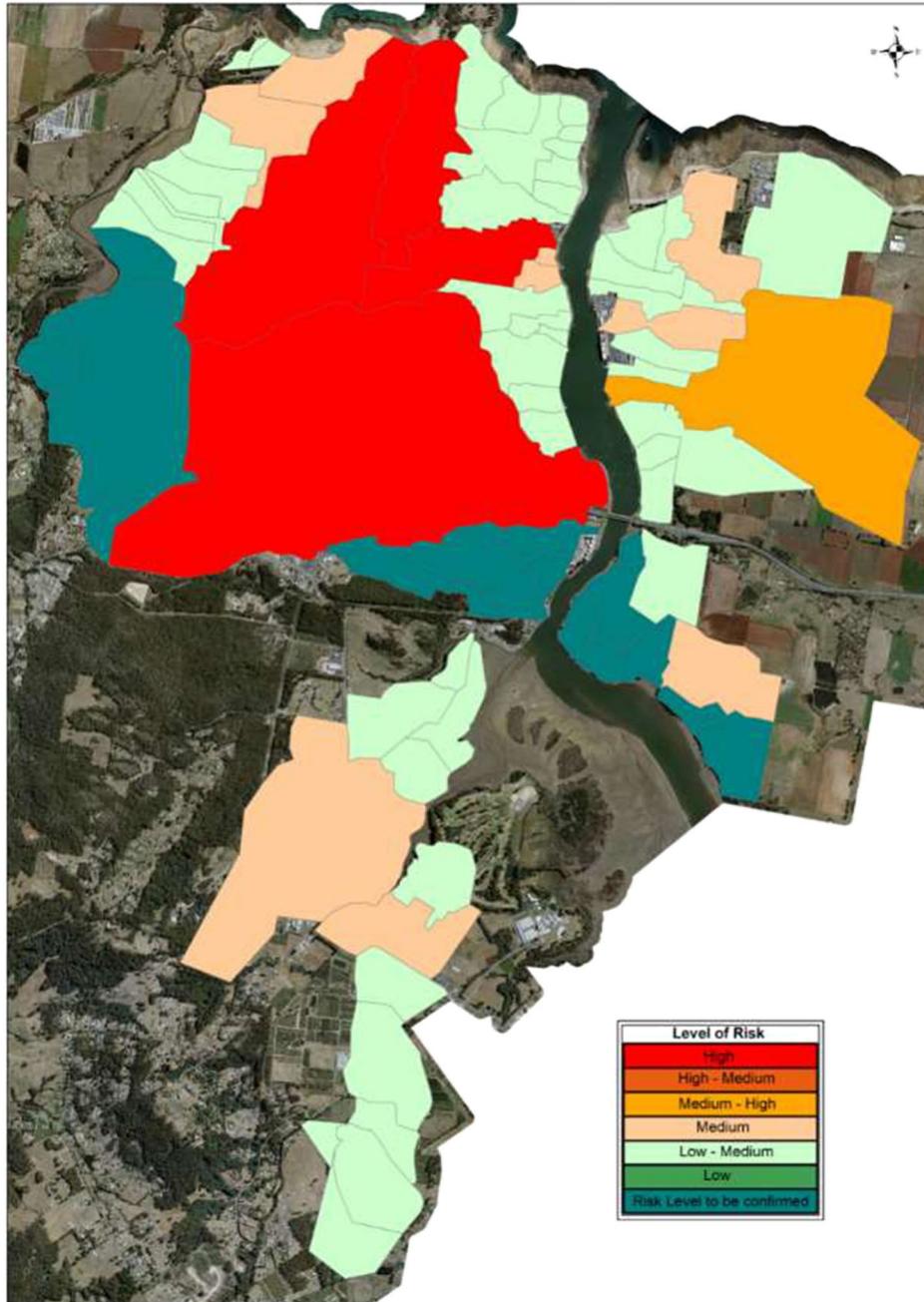


Figure 1 – Stormwater catchment map with risk rating



The action plan for the SSMP includes key activities including:

- Completion of risk assessment for 16 catchments in 2020-21
- Reprioritise capital works program based on risk assessments
- Maintain SSMP
- Maintain link SSMP to asset management plan

2 Introduction:

The *Urban Drainage Act 2013* (the Act) requires that all Tasmanian Councils develop a Stormwater System Management Plan (SSMP) for the urban areas within their municipalities.

A well-developed SSMP will ensure an appropriate level of understanding and management of the flood risk within all urban drainage catchments. The data presented in a SSMP is critical to ensure that Council's finite capital works program allocations for stormwater projects are directed to the most appropriate projects, reducing the risk from flooding to people and property. A SSMP compliments Council's Stormwater Strategy and Stormwater asset management plan (both under review).

2.1 Urban drainage area

The urban drainage area is shown in Figure 2 below. Generally, the area includes properties that have the opportunity to connect to the piped stormwater system.

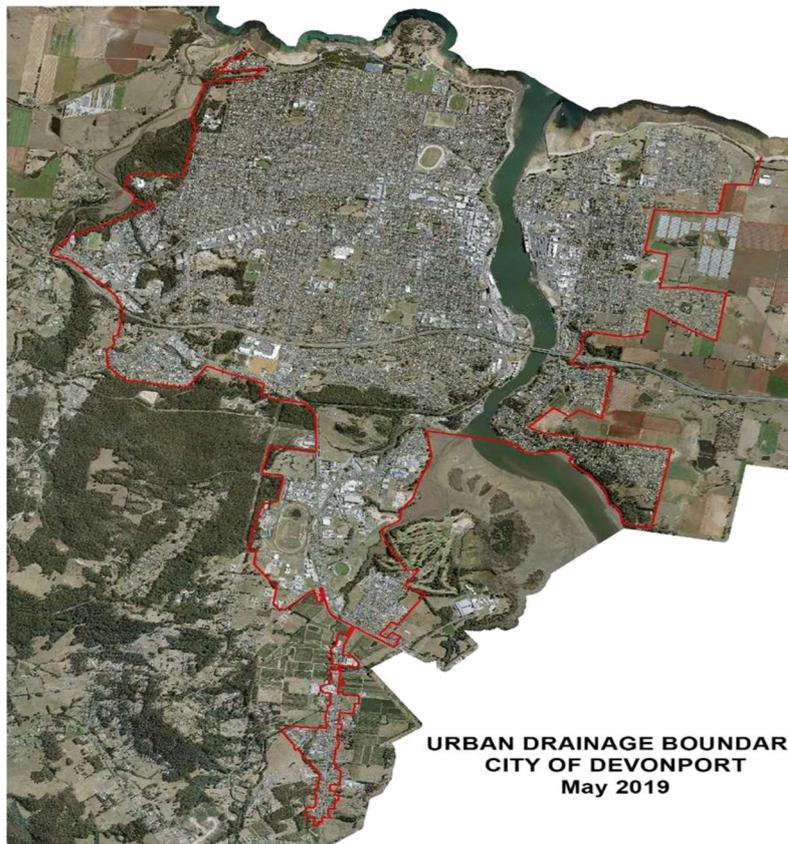


Figure 2 - Urban drainage area

2.2 Urban drainage catchments

Council's urban area is divided into 75 stormwater catchments, which each discharge through a single outlet into either Bass Strait, the Mersey River or other natural water courses. These catchments are shown in Figure 3 below.

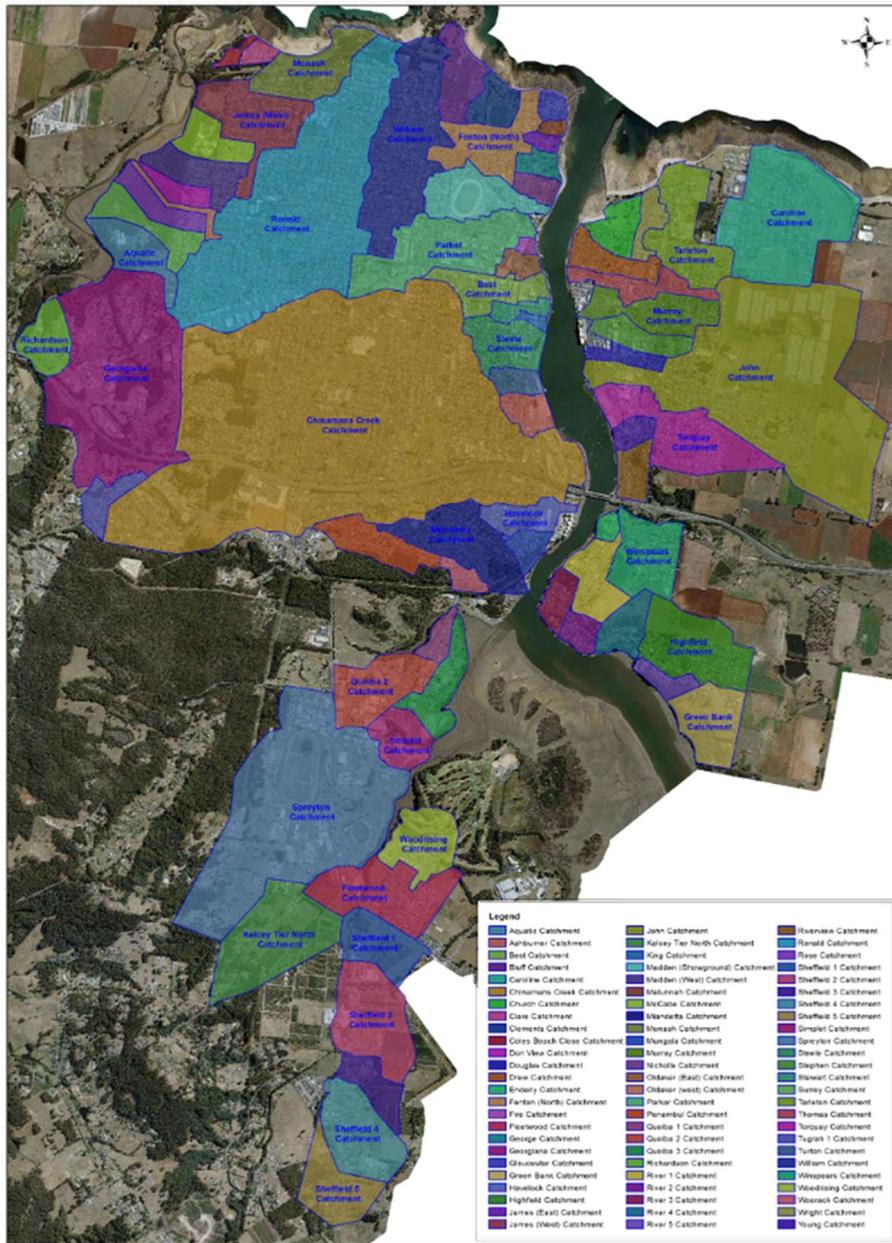


Figure 3 – Stormwater catchment map

### 3 Strategic and Legislative Context:

#### 3.1 Urban Drainage Act 2013

Section 10 of the Act outlines the requirements to develop a plan and details the requirements of that plan

##### 10. Stormwater system management plans

- (1) A council must develop a stormwater system management plan for the urban area of its municipal area within 6 years after the day on which this Act commences.
- (2) A stormwater system management plan is to specify –
  - (a) plans for the management of any assets used for the delivery of a stormwater service; and
  - (b) the level of risk from flooding for each urban stormwater catchment in the public stormwater system; and
  - (c) any other matters prescribed in the regulations or that the council considers appropriate.

#### 3.2 Stormwater Strategy

Council's Stormwater Strategy was adopted in 2012. Since then significant changes have occurred that impact the way stormwater systems are managed. Notably:

- Introduction of the Urban Drainage Act 2013, which changed the rights and responsibilities of Council and the community;
- Updates to Australian Rainfall and Runoff in 2016 and 2019, which has updated the way rainfall is modelled. The updated guide requires that storm intensity increases of 14-47% be allowed for when compared with the 1987 guide. This is reflective of the better availability of weather and climate data but also the impacts of climate change already being felt. Furthermore, allowing for future impacts of climate change requires that storm intensity increases of 31-69% be allowed for.

Subsequently a review of Council's Strategy is underway. The Stormwater strategy will provide Council a clear direction for managing the stormwater system within the City of Devonport. The Strategy will reflect the Council's statutory responsibilities as well as the historic, physical, climatic, community, environmental and economic factors that determine the drainage needs, expectations and priorities of the Council and its stakeholders. The review is scheduled to be complete in early 2020.



#### 4 Management of stormwater assets

Council has three work systems to manage and maintain of stormwater assets. The three categories are Capital work, Major maintenance and operational. Capital works are derived through Council stormwater asset management plan and Capital works program. Major maintenance is work that is not required on a regular basis and cannot reasonably be undertaken within the operational budget. Operational work is day to day works that is to be completed in accordance with Services level documents.



Figure 4 – Council stormwater management

##### 4.1 Asset management plan

The Stormwater asset management plan details information about Stormwater infrastructure assets including actions required to provide an agreed level of service in the most cost-effective manner while outlining associated risks. The plan defines the services to be provided, how the services are provided and what funds are required to provide the services over a 10-year planning period. The Stormwater asset management plan will look at Council stormwater operational and capital expenditure and other various asset renewal factors and provide Council with recommendations on best practices for asset management. The draft stormwater asset management plan is aiming to finalise mid-2020.

##### 4.2 Capital Works Program

Capital works involve the renewal of assets and the creation of new assets. Council has a 5 year forward capital works program which informs a long term financial plan. Prioritisation of capital works considers asset condition, capacity and function. The risk of flooding outlined in the SSMP is a key consideration in prioritising capital works projects.

The current forward works program allocates \$4.815M over next 5 years averaging \$963,000 annually to undertake work on stormwater catchment risk reduction projects. These allocations are based on previous estimates and priorities understood at the time. How this allocation is directed to specific projects will need to be reassessed based on this SSMP.

##### 4.3 Maintenance Service Levels

Council service levels document how stormwater infrastructure is to be maintained at an acceptable and affordable level. Council must also comply with relevant



industry standards and guidelines to ensure its Statutory and Risk Management obligations are met. This service level document encompasses the community's expectations within an economic framework based on meeting "reasonable" maintenance operation targets and asset management programs relative to the stormwater system functions. Activities in the service level document include:

- i. Strategic and statutory objectives;
- ii. Collection collate and process asset condition information;
- iii. Monitor operational and environmental performance;
- iv. Develop work practices and protocols to achieve the aims of the Service Level Document; and
- v. Periodic reviews of practises and implementation of continuous improvement initiatives;

## 5 Risk Assessment Methodology:

Council has developed a methodology to document the risk to people and property from flooding in each urban catchment.

There are no guidelines that support Councils in the development of a SSMP, so it likely that Council's methodology will differ from other jurisdictions. However, the methodology is based on sound engineering and risk management processes and is described below.

### 5.1 Updating stormwater asset data

The first phase of assessing the risk to people and property from flooding is to ensure that the stormwater assets being modelled accurately represent the assets that combine to make up the stormwater system. An extensive survey of each catchment has been undertaken to confirm the location and physical attributes of each asset. This process has identified many 'found' assets and greatly improved the accuracy of Council's stormwater asset data, which improves the accuracy of the Assets Management Plan, which flow onto other key documents for Council.

### 5.2 Hydraulic modelling

Accurate spatial and attribute data is required to create a realistic hydraulic model that can predict the impact of rain events of any severity.

"DRAINS" software package has been used for modelling the hydraulic capacity of each stormwater network in Devonport. Various consultants and in-house resources have been utilised to create hydraulic models. These models are then verified against field observations and historical reports to ensure an acceptable level of accuracy.

This model is used to determine the capacity of the existing piped system. Although this is not required for the risk assessment, it does show how the catchment of the capacity compares against the requirement of Council's Stormwater Strategy, which are:

- 10% AEP for residential areas
- 5% AEP for commercial and industrial areas

Details of the hydraulic models inform the risk assessments. The models can also be to identify and compare upgrade options that would reduce the risk from flooding.

### 5.3 Risk Assessment Procedure

A risk assessment was undertaken for each stormwater catchment which has had a hydraulic model developed. To determine the risk from flooding for each catchment, the two criteria below were used:

- Risk to life, based on unsafe overland flow throughout the entire catchment & private property.
- Risk to property, based on the number of properties that will experience overland flow and the estimated cost of repairs

A minimum freeboard of 300mm is recommended for new dwellings as per DCC Stormwater Strategy 2012. However, this minimum freeboard likely doesn't exist for existing developed properties. It is assumed that a minimum freeboard of 150mm would be more acceptable.

There are no definitive costs that exist for flood damage. A simplified approach has been taken for the assessment of risk to property damage as shown in table 1. Properties with overland flows with a depth of less than 150mm are applied the cost to clean up and repair at \$4,000 per property. Overland flow depths through private properties greater than 150mm are applied with the cost of external damage and clean up and repair costs at \$11,000 per property.



Depth (m)	Cost per property
< 0.15	\$4,000
> 0.15	\$11,000

Table 2 – Overland flow depth costs per property

The risk assessment equates the likelihood of flooding with a particular rain event as shown in Table 3 below.

Likelihood	AEP
Rare	1%
Very Unlikely	2%
Unlikely	5%
Possible	10%
Likely	0.2EY
Very Likely	0.5EY
Almost Certain	1EY

Table 3 – Likelihood

The risk assessment equates the consequence of flooding to the severity of the injury that could occur. It is assumed that these consequences directly correlate with the product of the depth and velocity of the overland flow path. That is, the deeper and faster a flow path is, the more serious unjust will occur from being exposed to that flow. DRAINS considers a depth and velocity product of greater than 0.4 to be unsafe.

The financial consequences from property damage are considered to be the sum total of the number of properties multiplied by the cost per property described in Table 2. The assessment of the consequences of flooding are shown in Table 4 below.

Consequence	Risk to Life		Risk to property
		DxV product	Total Cost of repairs to properties affected
Insignificant	Nil	0	< \$20k
Minor	First Aid	0 - 0.4	\$20k - \$50k
Moderate	Medical Treatment	0.4 - 0.6	\$50k - \$100k
Major	Disability	0.6 - 1.2	\$100k - \$500k
Catastrophic	Fatality	> 1.2	> \$500k

Table 4 – Consequences

As for other Council risk assessments, the risk rating is a product of the likelihood and consequence, which is shown in Table 5 below.



Risk Rating					
Likelihood	Consequences				
	Insignificant	Minor	Moderate	Major	Catastrophic
Rare	Low	Low	Low-Medium	Medium	Medium-High
Very Unlikely	Low	Low	Low-Medium	Medium	Medium-High
Unlikely	Low	Low	Medium	Medium-High	High-Medium
Possible	Low	Low-Medium	Medium	High-Medium	High-Medium
Likely	Low	Low-Medium	Medium-High	High-Medium	High
Very Likely	Low	Low-Medium	Medium-High	High	High
Almost Certain	Low	Low-Medium	Medium-High	High	High

Table 5 – Risk Rating

Each individual catchment was analysed for a range of rain events:

- 1% (major)
- 5% (minor)
- 10% (minor)
- 0.2EY (minor)
- 0.5EY (minor)
- 1EY (minor)

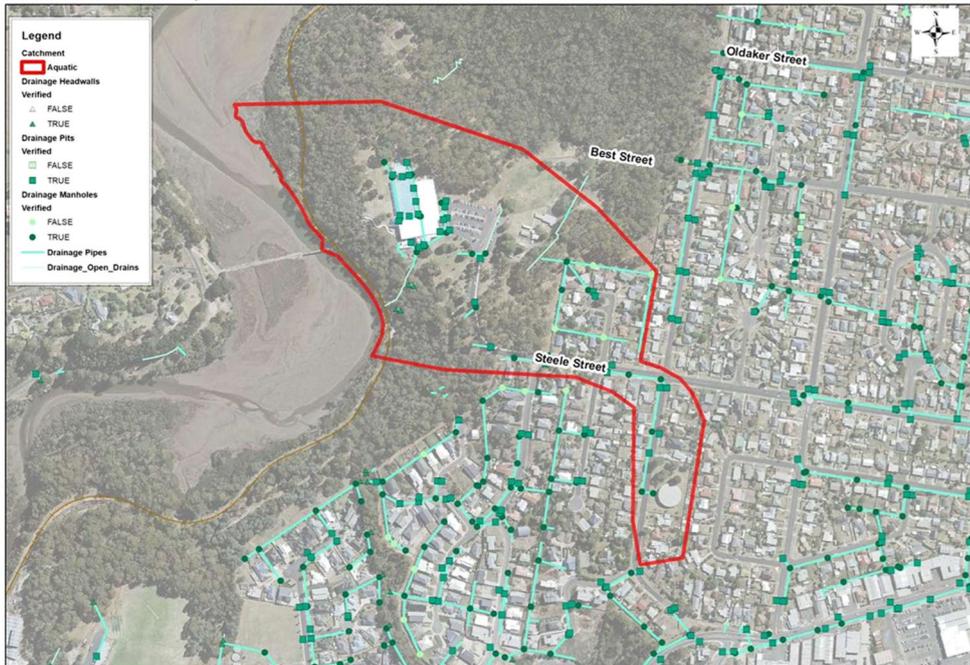
The risk rating applied to each catchment was taken as the highest risk from this range. The details of the risk assessments are shown in Section 6 below, while a summary of the assessments is shown in Section 7.

## 6 Stormwater Catchments – Risk of Flooding:

This section of the SSMP details the location and key characteristics of each urban catchment and identifies the risk to people and property from flooding.

For catchments that are yet to be assessed, details of the program to complete these assessments are provided in the action plan.

### 6.1 Catchment Aquatic



Approx. land area (ha)	18.88
Land use	Recreation, Environmental & Residential
Hydraulic modelling undertaken	TBC
Nominal minor system capacity	TBC
Risk assessment undertaken	TBC
Risk Rating	TBC



6.2 Catchment Ashburner



Approx. land area (ha)	9.59
Land use	Urban mixed use / General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.3 Catchment Best



Approx. land area (ha)	18.52
Land use	Central Business
Hydraulic modelling undertaken	2019
Nominal minor system capacity	1EY (1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



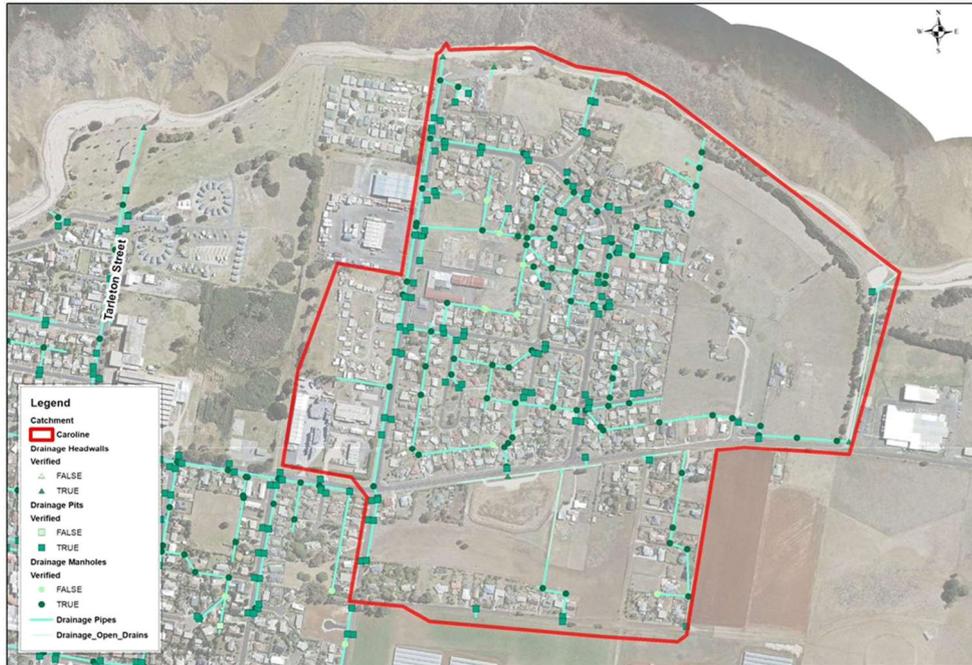
6.4 Catchment Bluff



Approx. land area (ha)	17.99
Land use	Recreation, Open Space & Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



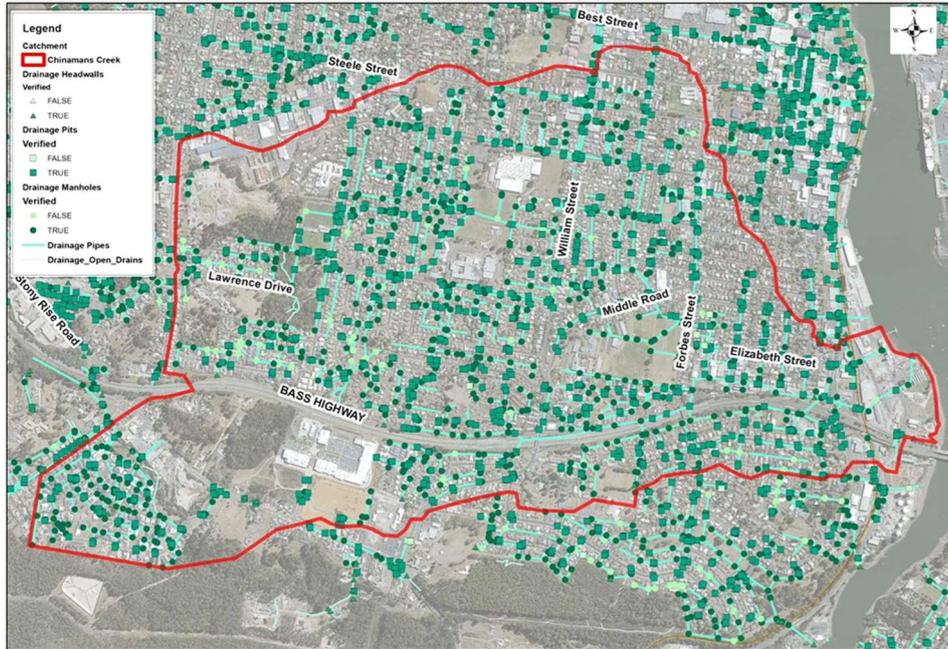
6.5 Catchment Caroline



Approx. land area (ha)	75.95
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.6 Catchment Chinamans Creek



Approx. land area (ha)	445.92
Land use	General Residential, General Industrial & Commercial
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	High



6.7 Catchment Church



Approx. land area (ha)	12.03
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.8 Catchment Clare



Approx. land area (ha)	3.87
Land use	Open Space & Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.9 Sub-Catchment Clayton Drive



Approx. land area (ha)	52.76
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	0.2EY (1 in 5 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.10 Catchment Clements



Approx. land area (ha)	11.14
Land use	Recreation, Open Space & Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



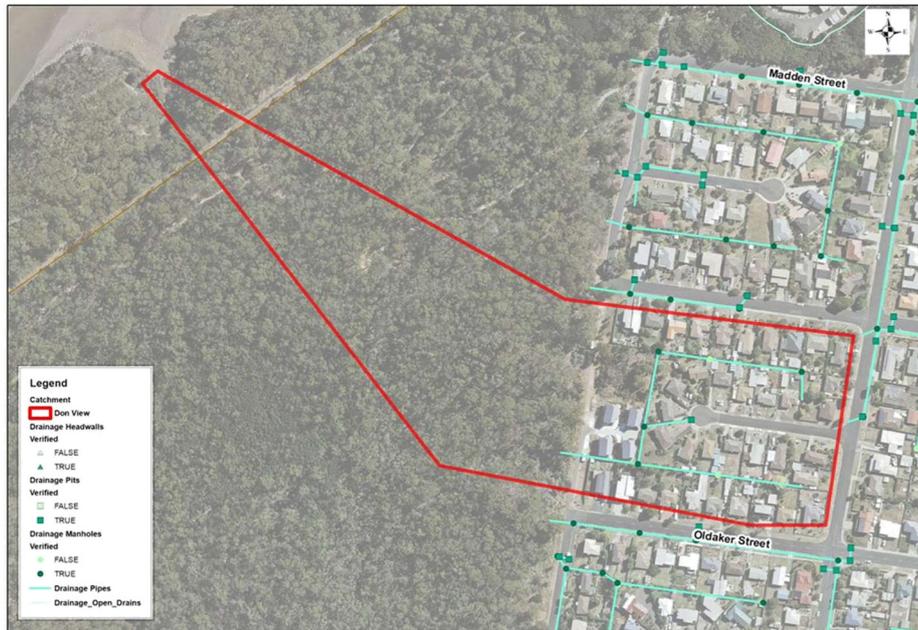
6.11 Catchment Coles Beach Close



Approx. land area (ha)	2.67
Land use	Open Space & Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	10% AEP (1 in 10 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.12 Catchment Don View



Approx. land area (ha)	7.39
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.13 Catchment Douglas



Approx. land area (ha)	6.59
Land use	Light Industrial
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.14 Catchment Drew



Approx. land area (ha)	13.34
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.15 Catchment Enderly



Modelling is planned be completed in 2021.

Approx. land area (ha)	3.24
Land use	General Residential
Hydraulic modelling undertaken	TBC
Nominal minor system capacity	TBC
Risk assessment undertaken	TBC
Risk Rating	TBC



6.16 Catchment Fenton (North)



Approx. land area (ha)	27.23
Land use	General Residential, Recreation & Open Space
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



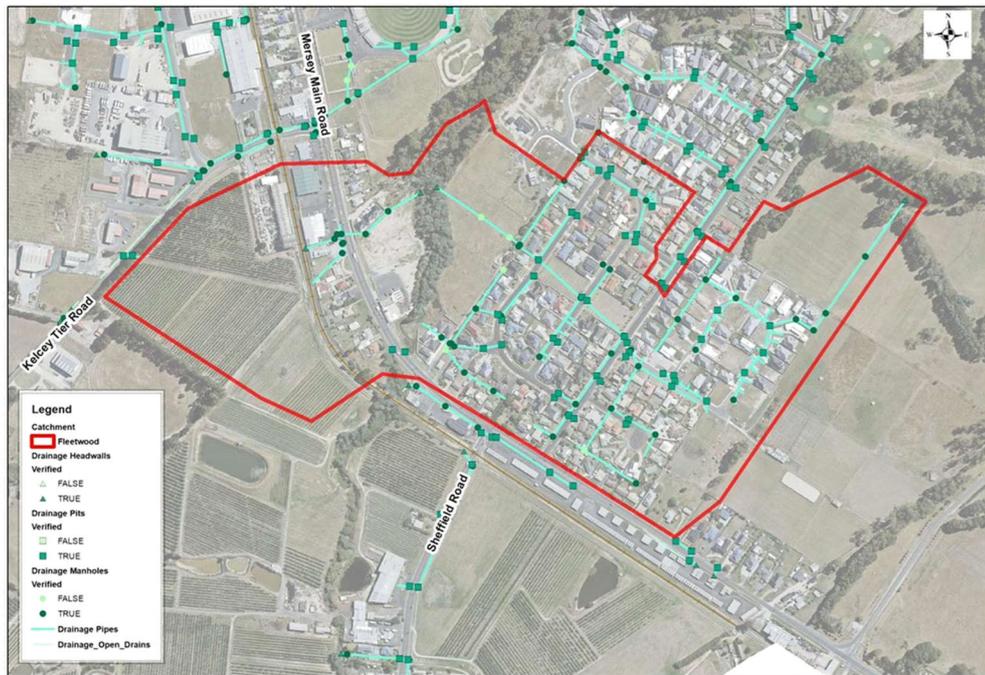
6.17 Catchment Fire Station



Approx. land area (ha)	1.68
Land use	Urban mixed use
Hydraulic modelling undertaken	2019
Nominal minor system capacity	0.5EY (1 in 2 ARI)
Risk assessment undertaken	2019
Risk Rating	Medium



6.18 Catchment Fleetwood



Approx. land area (ha)	38.85
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Medium



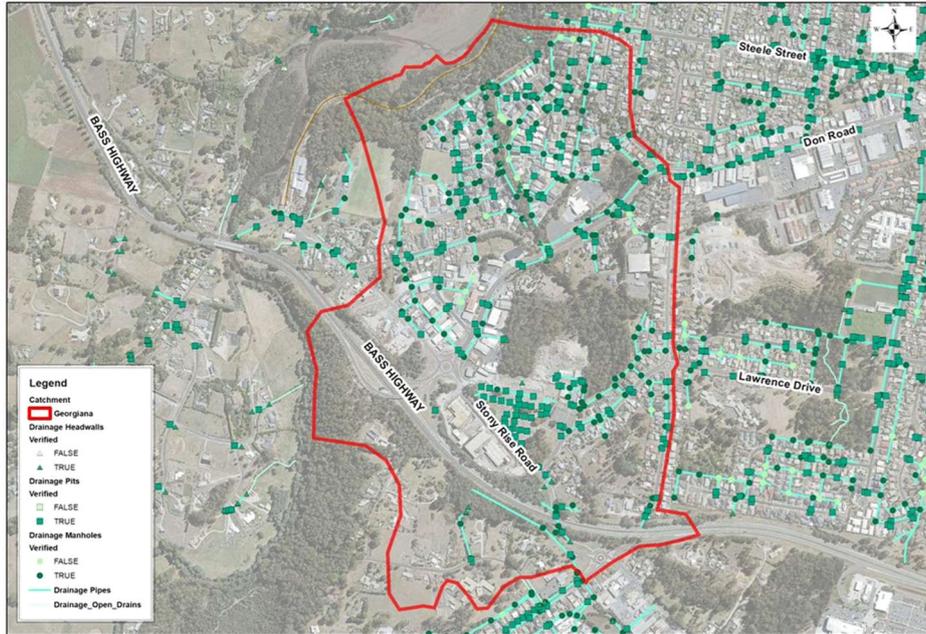
6.19 Catchment George



Approx. land area (ha)	5.76
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	0.5EY (1 in 2 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.20 Catchment Georgiana



Approx. land area (ha)	128.79
Land use	Light Industrial & General Residential
Hydraulic modelling undertaken	TBC
Nominal minor system capacity	TBC
Risk assessment undertaken	TBC
Risk Rating	TBC



6.21 Catchment Gloucester



Approx. land area (ha)	4.22
Land use	Open Space
Hydraulic modelling undertaken	2019
Nominal minor system capacity	0.5EY (1 in 2 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.22 Catchment Green Bank



Modelling is planned be completed in 2021.

Approx. land area (ha)	24.71
Land use	General Residential
Hydraulic modelling undertaken	TBC
Nominal minor system capacity	TBC
Risk assessment undertaken	TBC
Risk Rating	TBC



6.23 Catchment Havelock



Approx. land area (ha)	12.6
Land use	Light Industrial & General Residential
Hydraulic modelling undertaken	TBC
Nominal minor system capacity	TBC
Risk assessment undertaken	TBC
Risk Rating	TBC



6.24 Catchment Highfield



Approx. land area (ha)	37.85
Land use	General residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Medium



6.25 Catchment James (East)



Approx. land area (ha)	3.02
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



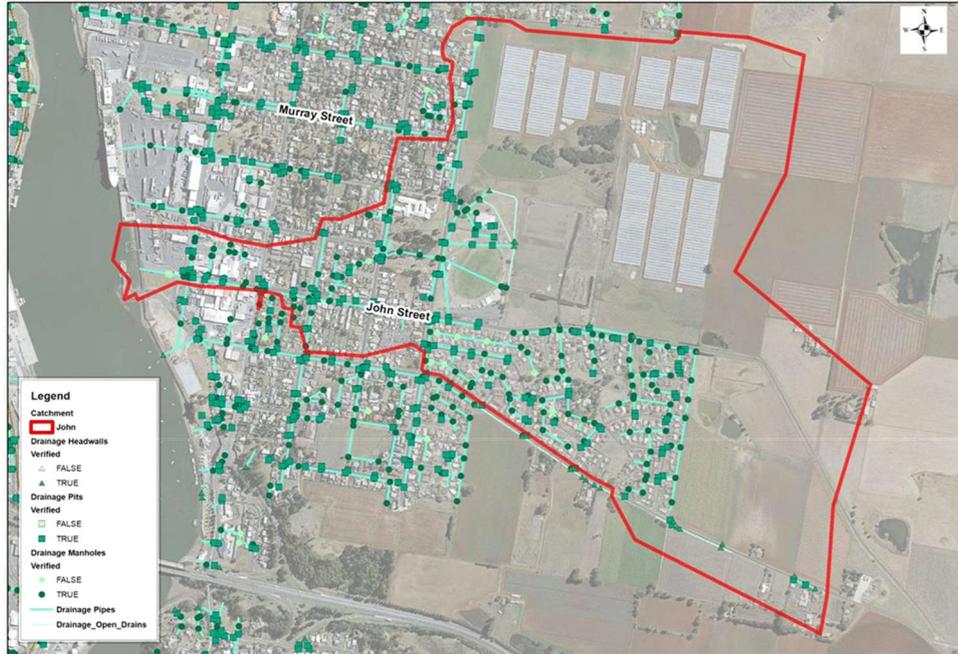
6.26 Catchment James (West)



Approx. land area (ha)	33.1
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Medium



6.27 Catchment John



Approx. land area (ha)	190.94
Land use	General Residential / Light Industrial
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Medium-High



6.28 Catchment King



Approx. land area (ha)	1.79
Land use	Central Business
Hydraulic modelling undertaken	2019
Nominal minor system capacity	0.2EY (1 in 5 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



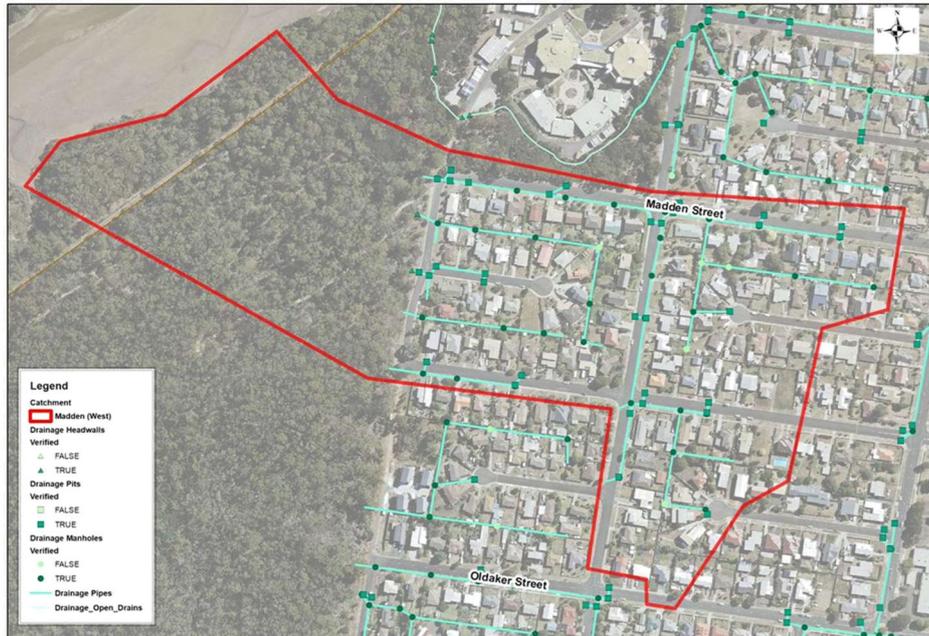
6.29 Catchment Madden (Showground)



Approx. land area (ha)	24.74
Land use	General Residential & Recreation
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.30 Catchment Madden (West)



Approx. land area (ha)	17.61
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.31 Catchment Malunnah



Approx. land area (ha)	2.23
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	0.5EY (1 in 2 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.32 Catchment McCabe



Approx. land area (ha)	14.1
Land use	General Residential & Community Purpose
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.33 Catchment Miandetta



Approx. land area (ha)	35.03
Land use	General Residential & Open Space
Hydraulic modelling undertaken	2019
Nominal minor system capacity	TBC
Risk assessment undertaken	TBC
Risk Rating	TBC



6.34 Catchment Monash



Approx. land area (ha)	27.06
Land use	General Residential & Open Space
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Medium



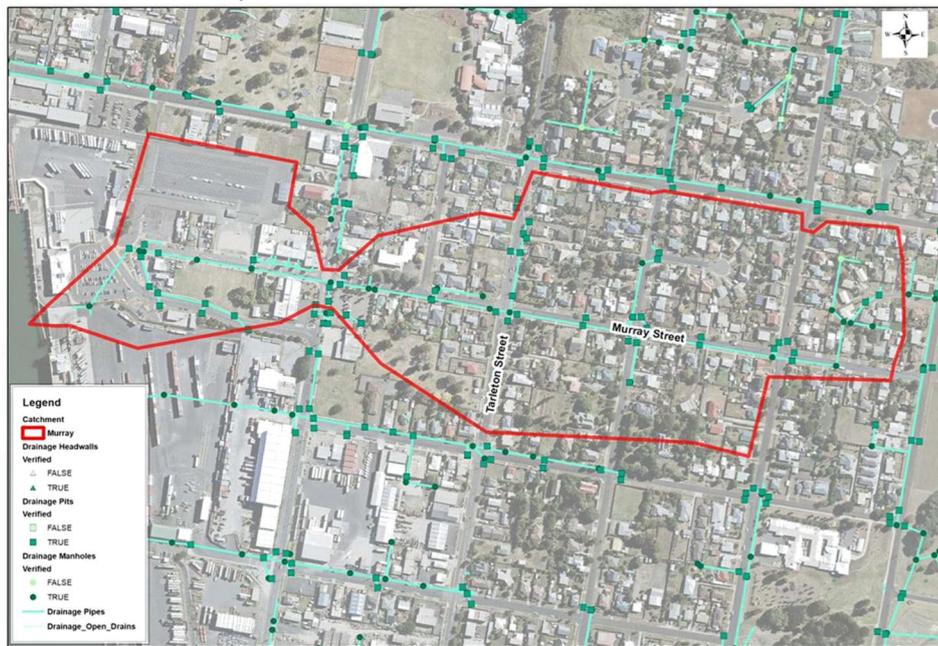
6.35 Catchment Mungala



Approx. land area (ha)	7.02
Land use	General Residential
Hydraulic modelling undertaken	TBC
Nominal minor system capacity	TBC
Risk assessment undertaken	TBC
Risk Rating	TBC



6.36 Catchment Murray



Approx. land area (ha)	23.11
Land use	General Residential / Local Business
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Medium



6.37 Catchment Nicholls



Approx. land area (ha)	6.03
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	10% AEP (1 in 10 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



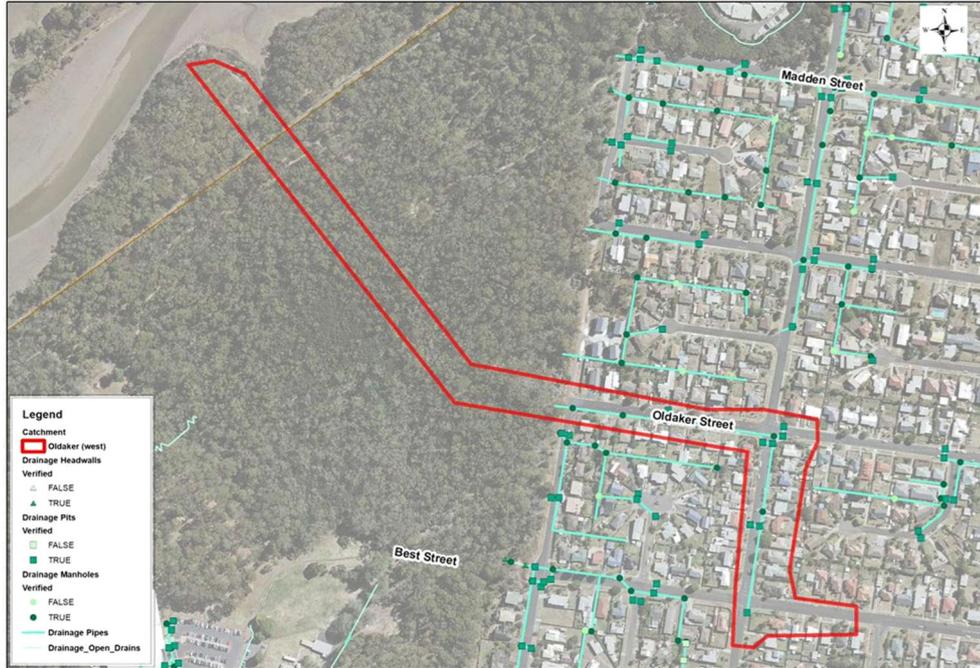
6.38 Catchment Oldaker (East)



Approx. land area (ha)	5.72
Land use	Central Business
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Medium



6.39 Catchment Oldaker (West)



Approx. land area (ha)	4.53
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	0.2EY (1 in 5 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.40 Catchment Parker



Approx. land area (ha)	49.17
Land use	Central Business & Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	High



6.41 Catchment Penambul



Approx. land area (ha)	19.18
Land use	General Residential
Hydraulic modelling undertaken	TBC
Nominal minor system capacity	TBC
Risk assessment undertaken	TBC
Risk Rating	TBC



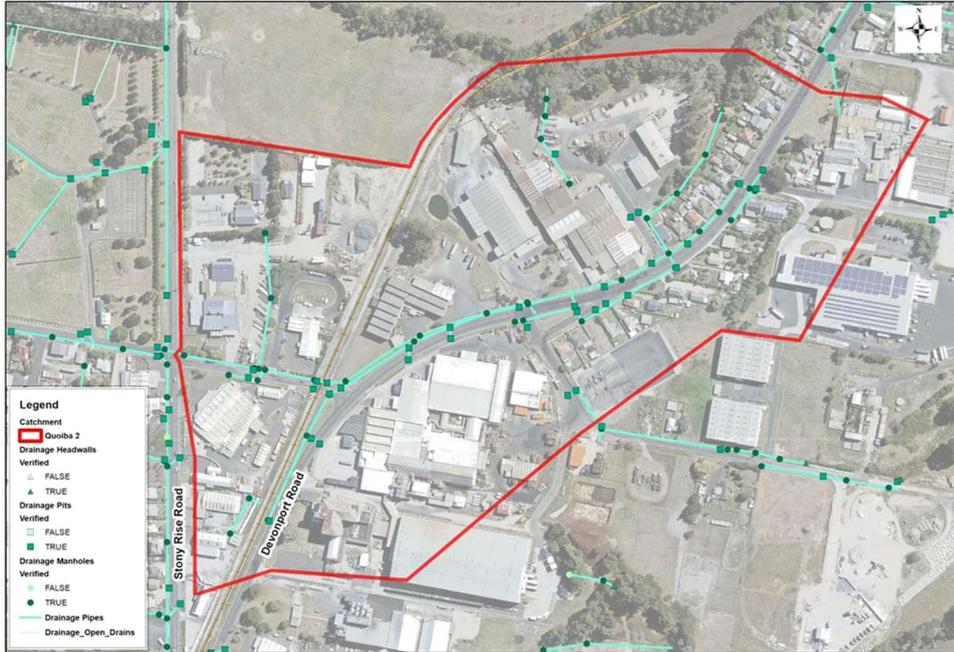
6.42 Catchment Quoiba 1



Approx. land area (ha)	6.17
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.43 Catchment Quoiba 2



Approx. land area (ha)	28.59
Land use	General Industrial, Light Industrial & Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



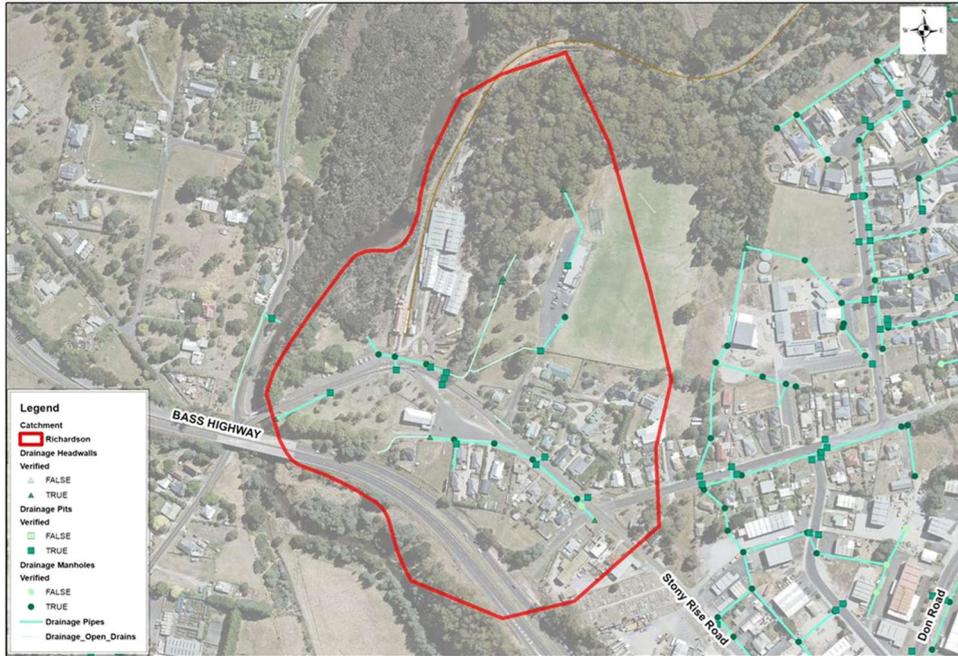
6.44 Catchment Quoiba 3



Approx. land area (ha)	18.81
Land use	General Industrial
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.45 Catchment Richardson



Approx. land area (ha)	16.17
Land use	Open Space, Environmental Management, Recreation and General Residential
Hydraulic modelling undertaken	TBC
Nominal minor system capacity	TBC
Risk assessment undertaken	TBC
Risk Rating	TBC



6.46 Catchment River 1



Modelling is planned to be completed in 2021.

Approx. land area (ha)	18.69
Land use	General Residential
Hydraulic modelling undertaken	TBC
Nominal minor system capacity	TBC
Risk assessment undertaken	TBC
Risk Rating	TBC



6.47 Catchment River 2



Modelling is planned to be completed in 2021.

Approx. land area (ha)	6.89
Land use	General Residential
Hydraulic modelling undertaken	TBC
Nominal minor system capacity	TBC
Risk assessment undertaken	TBC
Risk Rating	TBC



6.48 Catchment River 3



Modelling is planned to be completed in 2021.

Approx. land area (ha)	8.87
Land use	General Residential
Hydraulic modelling undertaken	TBC
Nominal minor system capacity	TBC
Risk assessment undertaken	TBC
Risk Rating	TBC



6.49 Catchment River 4



Modelling is planned to be completed in 2021.

Approx. land area (ha)	12.76
Land use	General Residential
Hydraulic modelling undertaken	TBC
Nominal minor system capacity	TBC
Risk assessment undertaken	TBC
Risk Rating	TBC



6.50 Catchment River 5



Modelling is planned to be completed in 2021.

Approx. land area (ha)	6.74
Land use	General Residential
Hydraulic modelling undertaken	TBC
Nominal minor system capacity	TBC
Risk assessment undertaken	TBC
Risk Rating	TBC



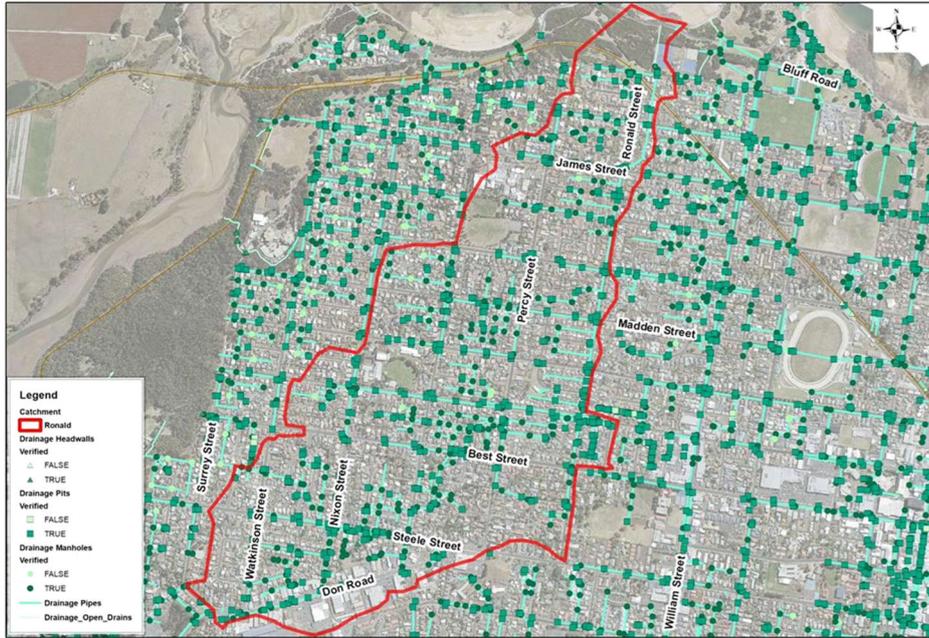
6.51 Catchment Riverview



Approx. land area (ha)	9.93
Land use	General Residential & Local Business
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.52 Catchment Ronald



Approx. land area (ha)	172.83
Land use	General Residential & Commercial
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	High



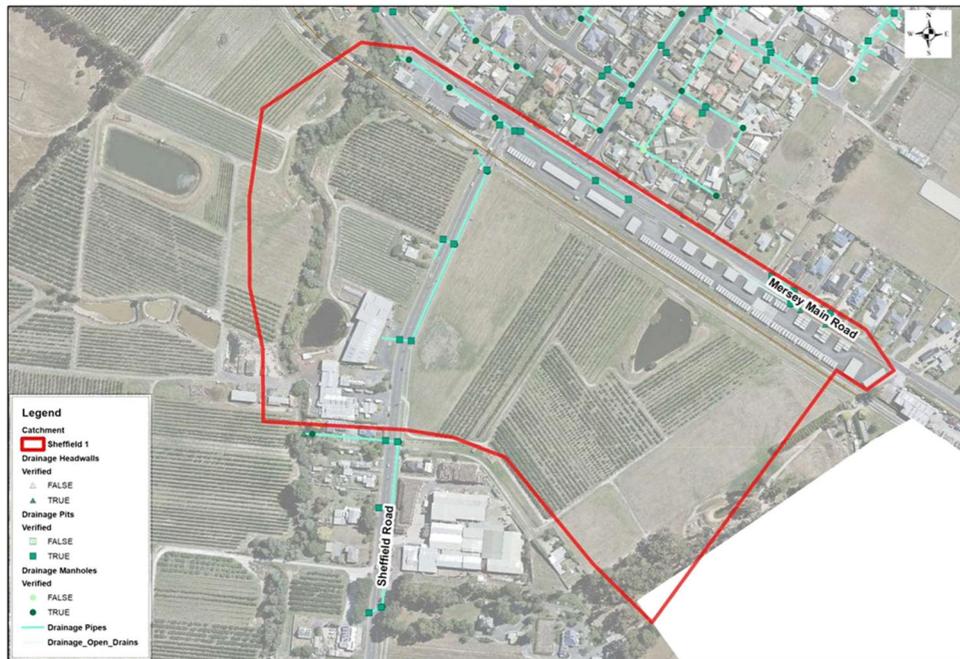
6.53 Catchment Rose



Approx. land area (ha)	11.67
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	1EY (1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



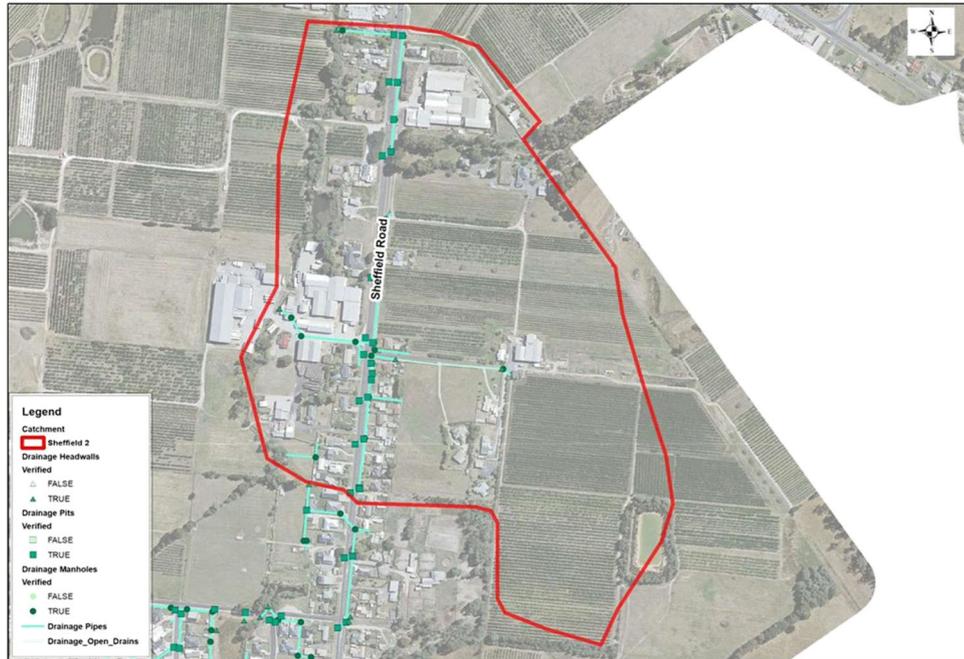
6.54 Catchment Sheffield 1



Approx. land area (ha)	20.84
Land use	Rural Resource
Hydraulic modelling undertaken	2019
Nominal minor system capacity	0.2EY (1 in 5 ARI)
Risk assessment undertaken	Low-Medium
Risk Rating	2019



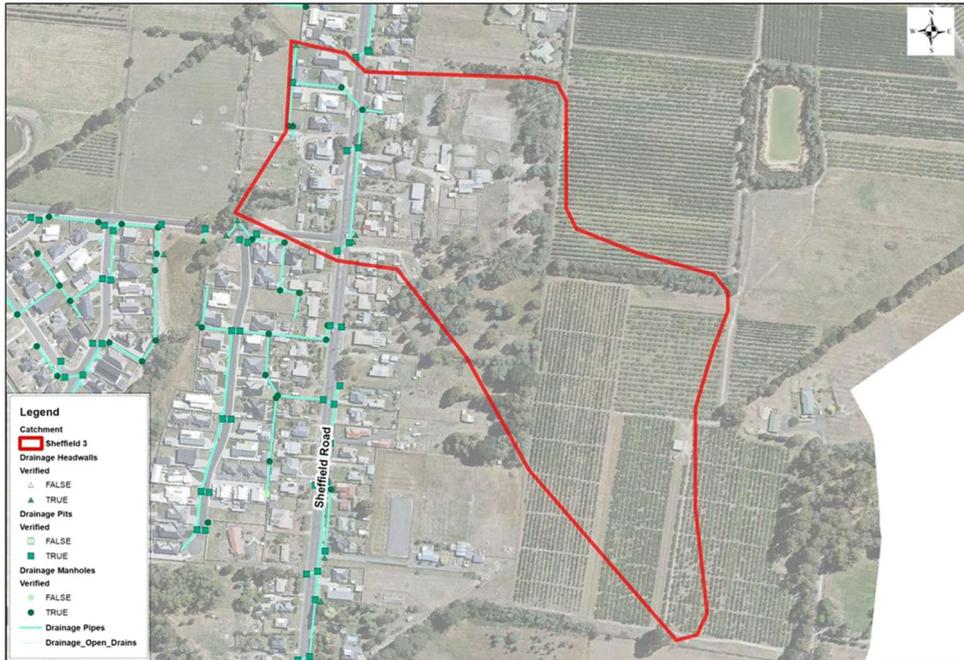
6.55 Catchment Sheffield 2



Approx. land area (ha)	38.04
Land use	Rural Resource & General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	0.5EY (1 in 2 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



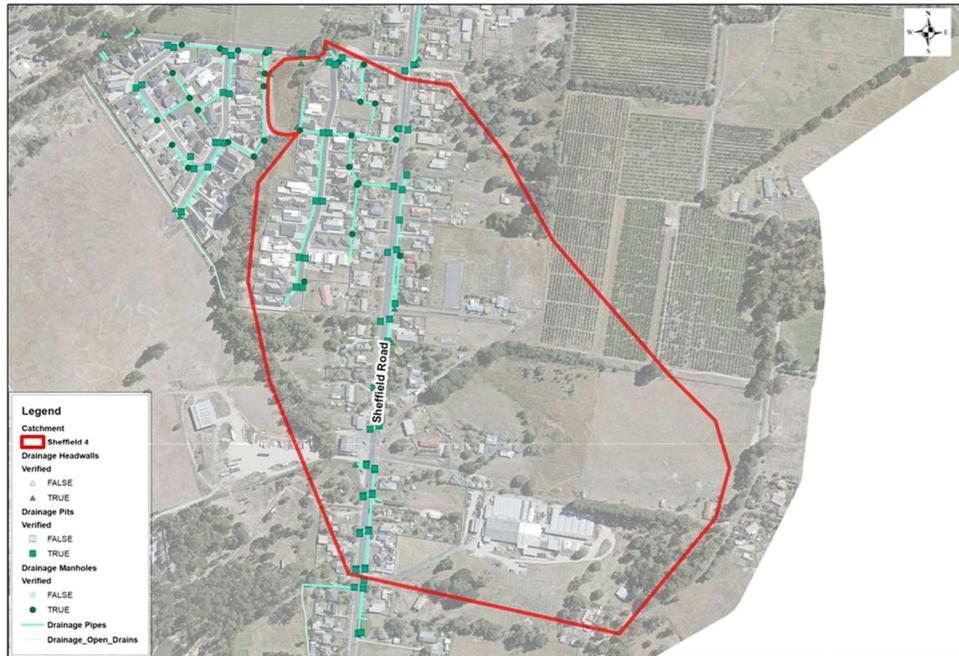
6.56 Catchment Sheffield 3



Approx. land area (ha)	13.73
Land use	Rural Resource & General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	10% AEP (1 in 10 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



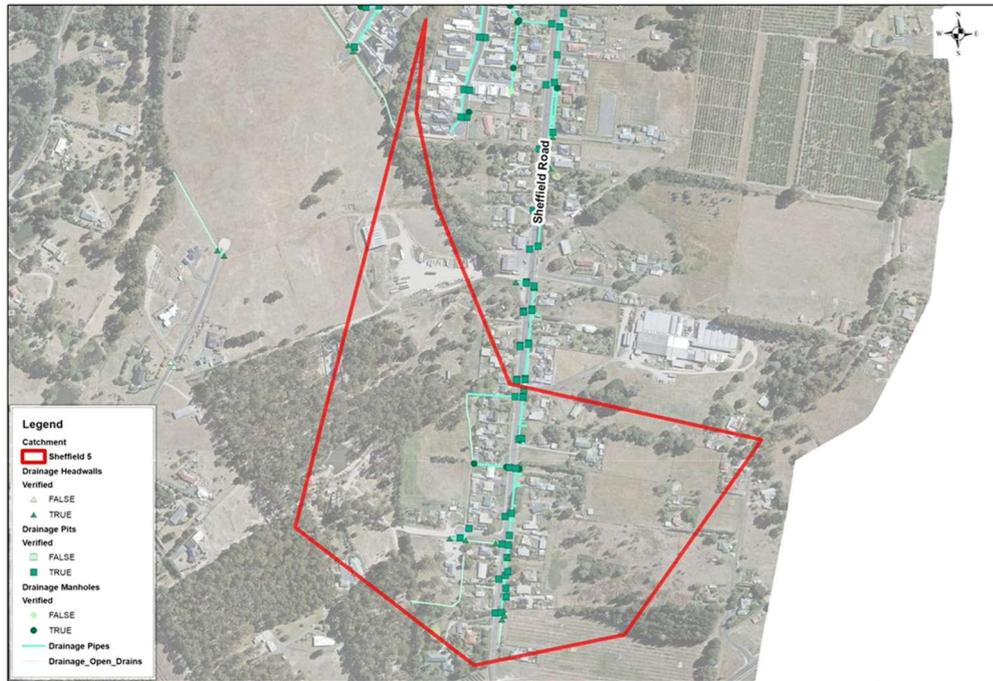
6.57 Catchment Sheffield 4



Approx. land area (ha)	32.77
Land use	Rural Resource & General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	0.2EY (1 in 5 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.58 Catchment Sheffield 5



Approx. land area (ha)	24.46
Land use	Rural Resource & General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	0.5EY (1 in 2 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



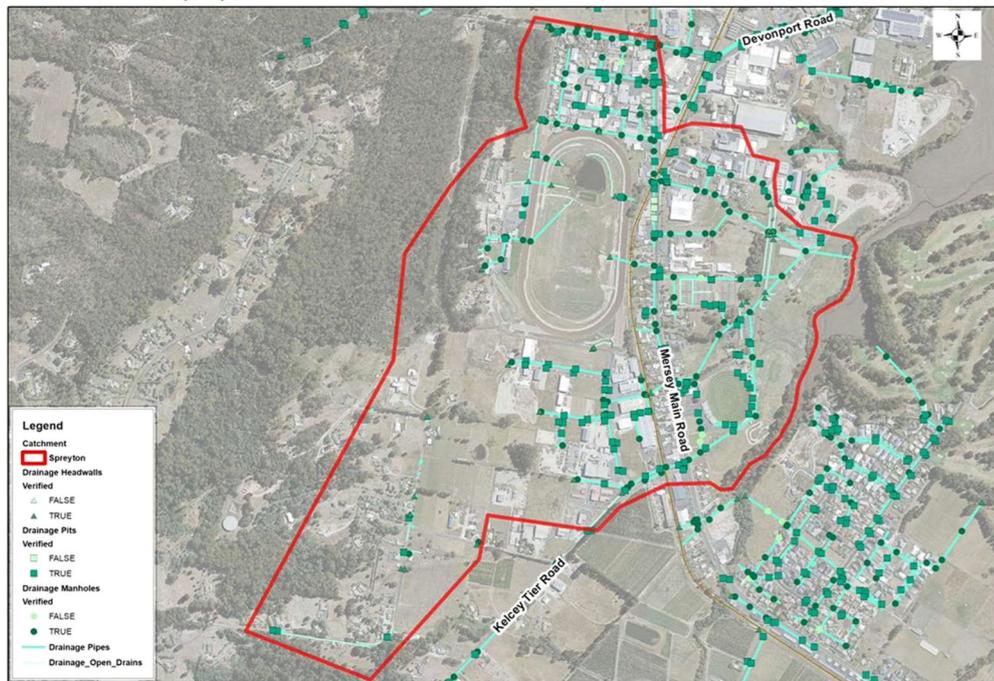
6.59 Catchment Simplot



Approx. land area (ha)	16.2
Land use	General Industrial & Utilities
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.60 Catchment Spreyton



Approx. land area (ha)	163.37
Land use	Light Industrial, Recreation & General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Medium



6.61 Catchment Steele



Approx. land area (ha)	19.89
Land use	Urban mixed use / Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.62 Catchment Stephen



Approx. land area (ha)	12.93
Land use	General Residential & Light Industrial
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.63 Catchment Stewart



Approx. land area (ha)	5.35
Land use	Central Business
Hydraulic modelling undertaken	2019
Nominal minor system capacity	1EY (1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



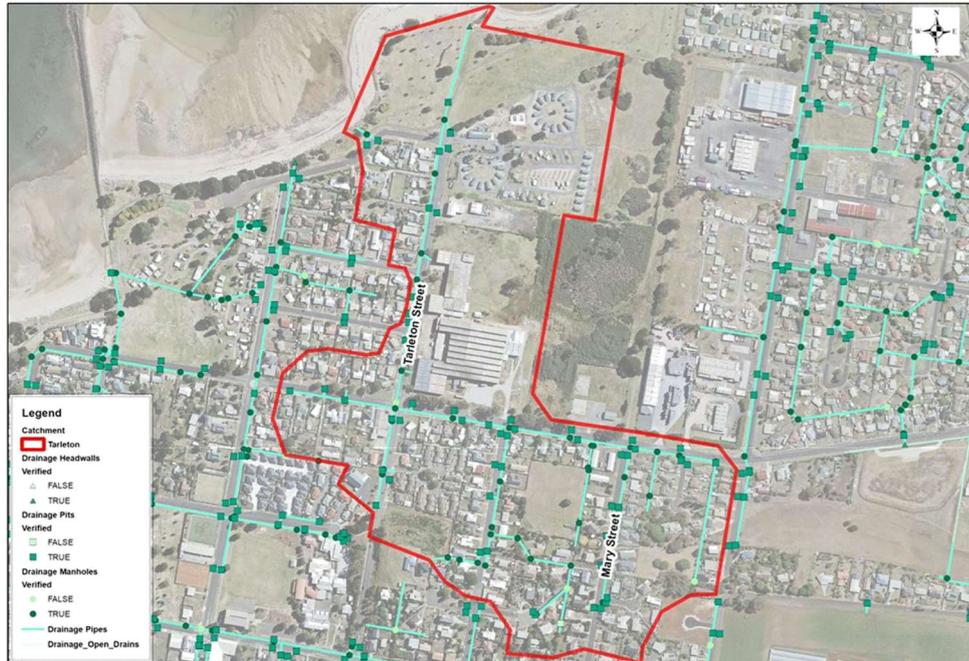
6.64 Catchment Surrey



Approx. land area (ha)	16.61
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	1EY (1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



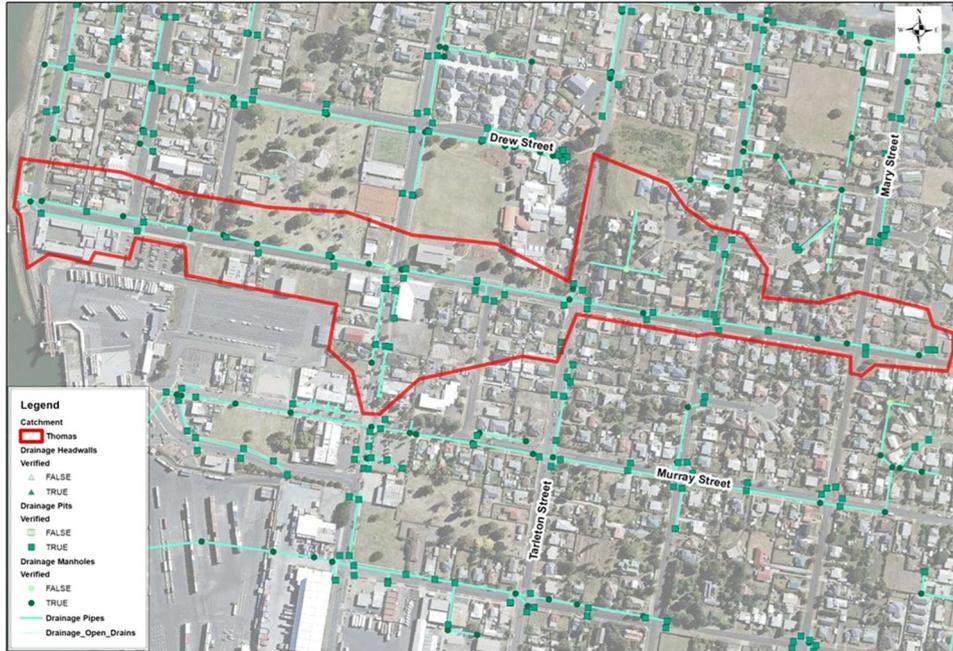
6.65 Catchment Tarleton



Approx. land area (ha)	34.74
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Medium



6.66 Catchment Thomas



Approx. land area (ha)	13.79
Land use	General Residential / Local Business
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.67 Catchment Torquay



Approx. land area (ha)	42.75
Land use	General Residential / Light Industrial
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.68 Catchment Tugrah 1



Approx. land area (ha)	10.06
Land use	General Residential
Hydraulic modelling undertaken	TBC
Nominal minor system capacity	TBC
Risk assessment undertaken	TBC
Risk Rating	TBC



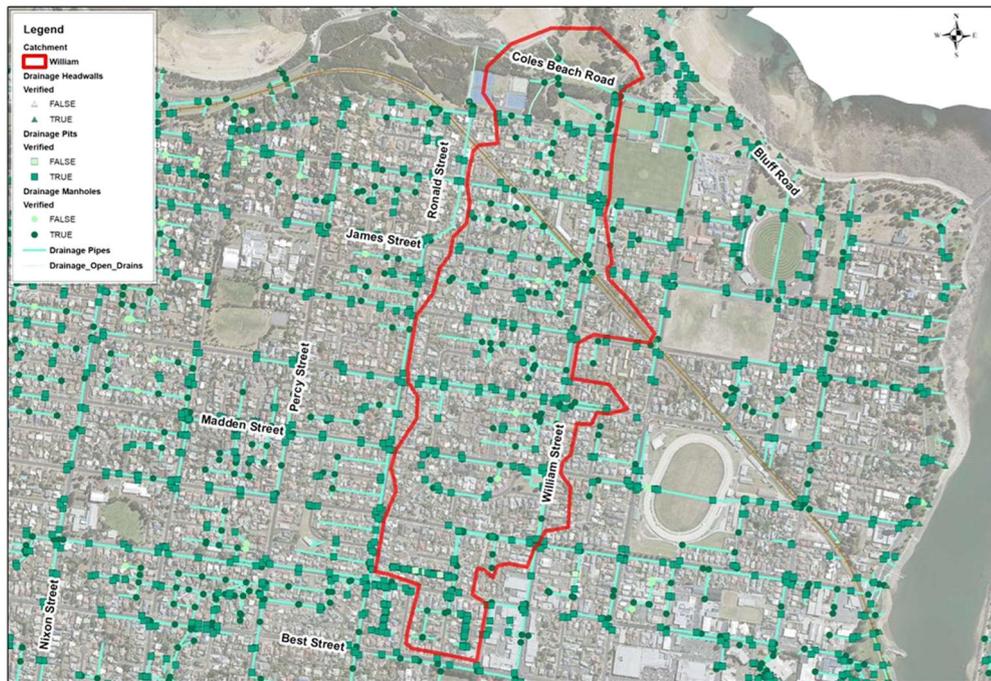
6.69 Catchment Turton



Approx. land area (ha)	6.85
Land use	Urban mixed use & General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.70 Catchment William



Approx. land area (ha)	64.67
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	High



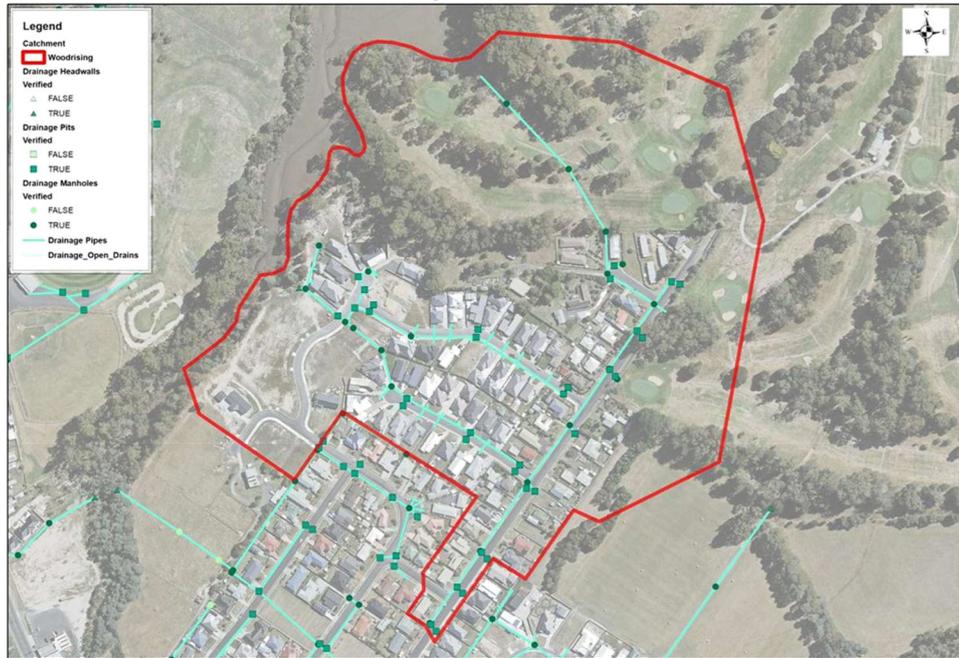
6.71 Catchment Winspears



Approx. land area (ha)	26.85
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



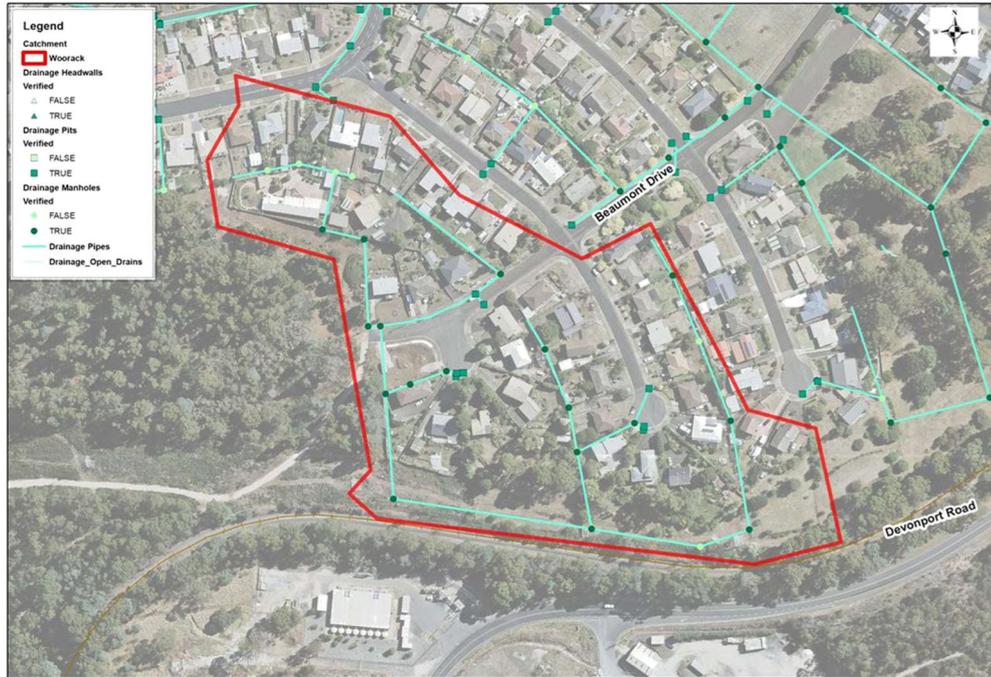
6.72 Catchment Woodrising



Approx. land area (ha)	23.3
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	1EY (1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.73 Catchment Woorack



Approx. land area (ha)	5.31
Land use	General Residential
Hydraulic modelling undertaken	TBC
Nominal minor system capacity	TBC
Risk assessment undertaken	TBC
Risk Rating	TBC



6.74 Catchment Wright



Approx. land area (ha)	7.68
Land use	General Residential
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



6.75 Catchment Young



Approx. land area (ha)	6.03
Land use	Light Industrial
Hydraulic modelling undertaken	2019
Nominal minor system capacity	Less than 1EY (< 1 in 1 ARI)
Risk assessment undertaken	2019
Risk Rating	Low-Medium



7 Summary of risk assessments:

A summary of the risk ratings is shown in Table 7 below.

Risk Rating	Total Catchments	% Total
High	4	5%
High-Medium	0	0%
Medium-High	1	1%
Medium	9	12%
Low-Medium	45	60%
Low	0	0%
Not Classified (TBC)	16	21%
<b>TOTAL</b>	<b>75</b>	

Table 7: Summary of risk ratings

The catchments where a high risk from flooding to people or property are large urban catchments:

- Chinamans Creek
- Parker
- Ronald
- William

The risk rating of the stormwater catchments is displayed in map form in Figure 5 below.

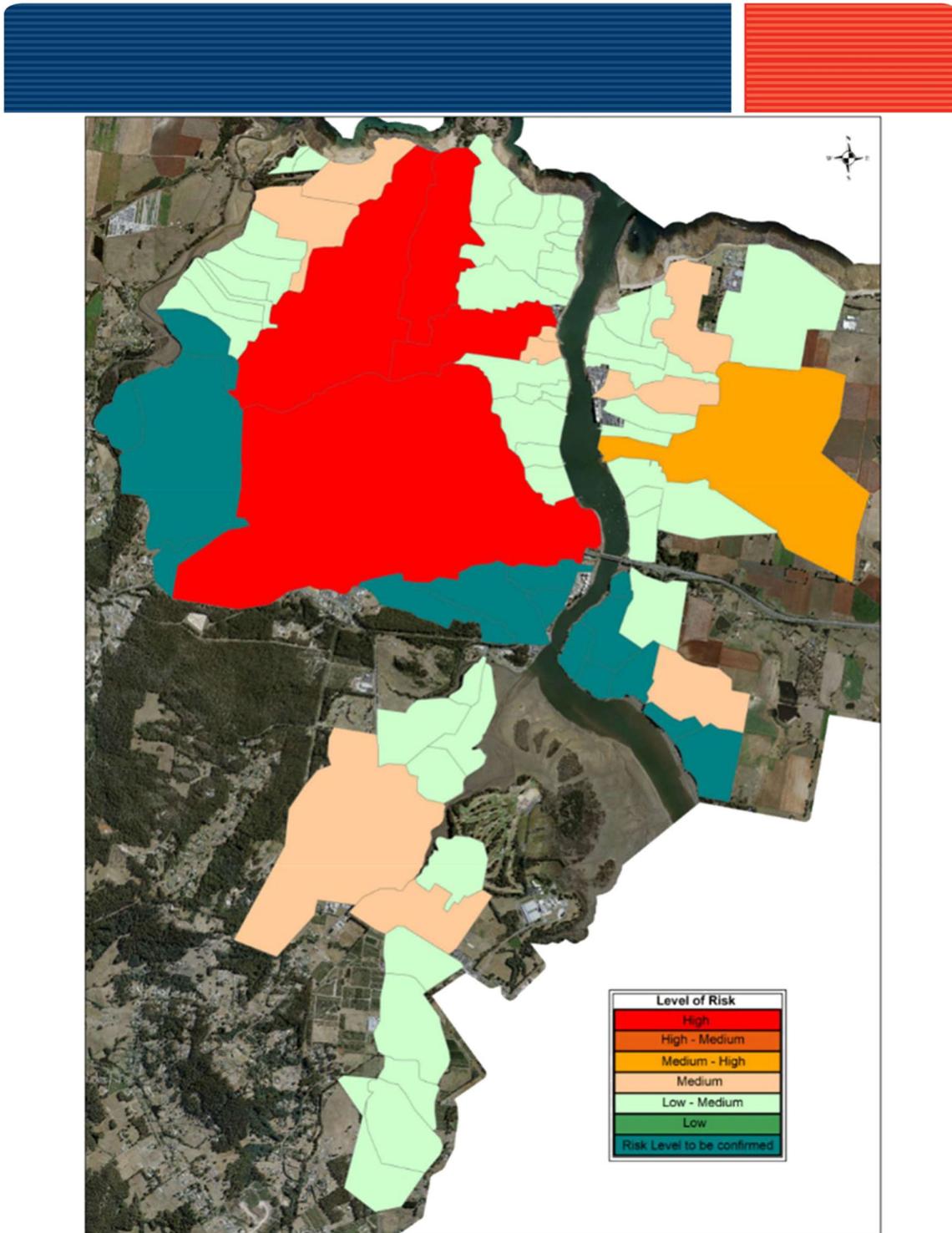


Figure 5: Catchment risk ratings

## 8 Action Plan:

The following items have been identified as priority and ongoing actions for the SSMP

### 8.1 Complete the hydraulic modelling for the remaining catchments

Resources will need to be allocated in the 2020-21 operational budget to complete survey, modelling and risk assessments for the 16 catchments yet to be assessed. Based on anecdotal evidence, it is unlikely that y of these catchments are high risk.

Catchment	Risk assessment planned
Penambul	2020/21
Miandetta	2020/21
Woorack	2020/21
Mungala	2020/21
Havelock	2020/21
Tugrah 1	2020/21
Aquatic	2020/21
Richardson	2020/21
Georgiana	2020/21
Enderly	2020/21
River1	2020/21
River2	2020/21
River3	2020/21
River4	2020/21
River5	2020/21
Greenbank	2020/21

### 8.2 Prioritise catchments based on risk assessment

This action is largely complete as the risk assessments have been completed for the majority of catchments.

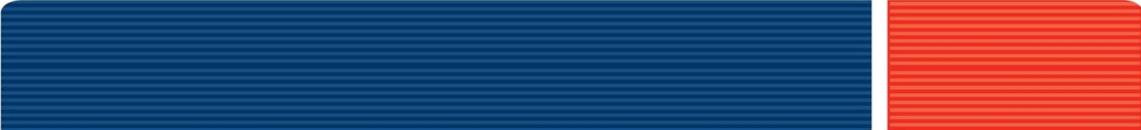
### 8.3 Develop feasible concept plans

Commencing with the priority catchments, identification of 'hot spots' and development of solutions to address these will be required. Costs estimates will need to accompany concept plans

### 8.4 Update Forward Capital Works Program with priority projects

Existing allocations in the forward capital works program should be reallocated to priority projects. However, there will be circumstances where it will be opportune to deliver lower priority projects 'out of sequence' perhaps due to asset condition or combining risk reduction projects with other work.

If new funding allocations were required, then this would have to be considered within the constraints of the Stormwater AMP and the Long Term Financial Plan.



- 8.5 Maintain asset data, hydraulic models and risk ratings as stormwater network changes**  
Multiple projects each year create new stormwater assets and dispose of existing assets. Maintaining accurate asset data, hydraulic models and risk ratings ensure the correct catchments are prioritised.
- 8.6 Maintain hydraulic models and risk rating as storm intensities increase (as determined by AR&R)**  
The storm intensities in AR&R have major impact on the capacity of the system. It is likely that storm intensities will continue to increase due to the impacts of climate change, which reduces the ability of the stormwater system to handle that rain event.  
Maintaining the hydraulic models and the risk assessments will ensure the correct catchments are prioritised.
- 8.7 Maintain relationship between SSMP and Stormwater AMP**  
The AMP will need to identify allocations for risk reductions projects, which are prioritised by the outputs of the SSMP.



## 9 Appendices:

### 9.1 Council Stormwater strategy – 2012 (Will be updated in 2020)

[https://www.devonport.tas.gov.au/wpfd\\_file/stormwater-strategy-2012/](https://www.devonport.tas.gov.au/wpfd_file/stormwater-strategy-2012/)

### 9.2 Council Forward Capital works Program 2019-2024

[https://www.devonport.tas.gov.au/wpfd\\_file/forward-capital-works-program-2019-2024-2/](https://www.devonport.tas.gov.au/wpfd_file/forward-capital-works-program-2019-2024-2/)

### 9.3 Determining existing system capacity procedure

The current capacity of the minor system is determined with how the stormwater system works as whole for each rainfall event. Ideally if no pipes are surcharging and there are no inlet capacity issues for the pits then the system is adequate for that particular rainfall event. However, applying this method to any DCC catchments would always end up resulting in the capacity being <1EY (Less than 1 in 1 ARI). This is primarily based the fact that the existing pits are small and there aren't enough of them to capture the water into the underground piped system, or in other instances the underground pipes are not big enough to accept the flow coming into them from the pits. There is no "one" pit that can capture all the inflow into the underground system. Some overland flow will bypass the upstream pit and another downstream pit would need to capture this additional flow into the underground piped system.

The adopted method in this instance to determine the current capacity for each catchment has been simplified and is based solely on the underground pipes not surcharging (hydraulic grade lines below surface levels). If 100% of the pipe network is not surcharging for a particular rainfall event, then this is the current existing capacity of the system. Note that this method is not perfect because if a stormwater network doesn't have enough inlet pits, then the underground system would perform well since there would be less water entering the piped system, making it appear the system is adequate. Some level of overland flow is always expected in any rainfall event and judgement is required to determine if the stormwater model has been setup to reflect realistic conditions it will experience. Note that the stormwater models are developed on the conservative side and calibration against a range of events is constantly required, which is an ongoing task.

## 5.2 PEDESTRIAN BRIDGE OVER FIGURE OF EIGHT CREEK - REPORT ON FEASIBILITY

### RELEVANCE TO COUNCIL'S PLANS & POLICIES

Council's Strategic Plan 2009-2030:

Strategy 2.3.2 Provide and maintain roads, bridges, paths and car parks to appropriate standards

### SUMMARY

This report provides details of an investigation into the feasibility of a pedestrian bridge over Figure of Eight Creek, between Mulligan Drive and Maidstone Park.

### BACKGROUND

At its August 2019 meeting Council resolved:

*"That Council investigates the costs and environmental impact of a path from Mulligan Drive, Spreyton and subsequent bridge over Figure of Eight creek to Maidstone Park."*  
(Min 167/19 Refers).

This resolution is understood to be in response to requests for such a bridge as residents of the Woodrising area seek improved connectivity of pedestrian facilities.

The Woodrising area includes nearly 300 properties and is bound by Figure of Eight Creek, Mersey Main Road and Council's boundary with Latrobe. Maidstone Park is to the west of Figure of Eight Creek. A planning permit has been granted for the creation of a further 25 residential lots immediately to the west of Figure of Eight Creek. The Woodrising area is shown in Figure 1 below.

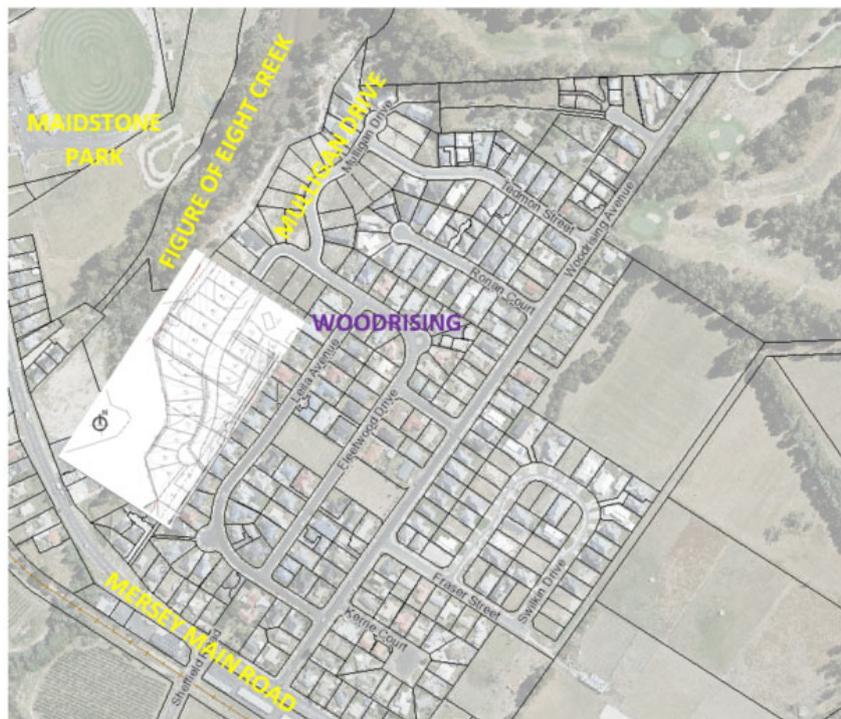


Figure 1: Woodrising area

A bridge over Figure of Eight Creek could provide direct pedestrian access from the Woodrising area to:

- Maidstone Park;
- Mersey Main Road (west of Figure of Eight Creek); and
- the recreational path proposed linking Spreyton to Quoiba and Devonport via the western shore of the Mersey River (future).

The proposed bridge could be considered a duplication of pedestrian facilities between the Woodrising area and Mersey Main Road. A new pedestrian link will be established between Leila Avenue, Fleetwood Drive and Mersey Main Road as part of the approved subdivision, to be completed in 2020, which will provide a convenient link for Woodrising residents. Current pedestrian connectivity is quite poor but will improve as a result of this subdivision.

Current and future pedestrian links are shown in Figure 2 below.

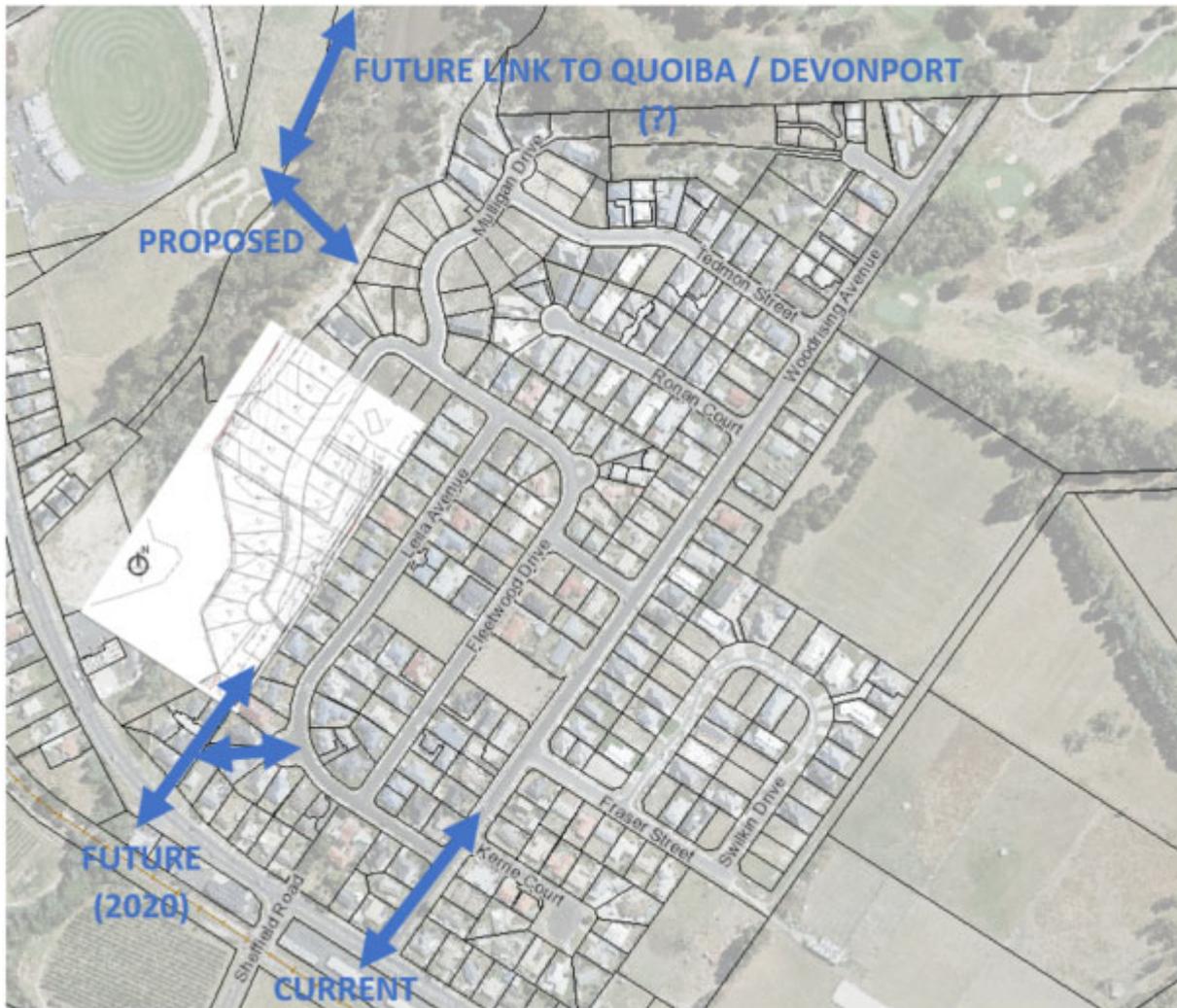


Figure 2: Pedestrian links

**STATUTORY REQUIREMENTS**

In investigating the feasibility of a new bridge over Figure of Eight Creek, Council must consider the requirements of the following legislation:

- Requirements to identify, manage and protect relevant flora and fauna are described in the *Threatened Species Protection Act 1995*, the *Nature Conservation Act 2002* and the *Environment Protection and Biodiversity Conservation Act 1999*.

- Requirements to identify and protect Aboriginal heritage sites are described in the *Aboriginal Heritage Act 1975*.
- Requirements to identify and control weeds on the project site are described in the *Weed Management Act 1999*.
- Requirements for working in and occupying Crown Lands are described in the *Crown Lands Act 1976*.
- Requirements to appropriately manage the procurement processes for the project are outlined in the *Local Government Act 1993*.
- Requirement for appropriate land use and obtaining the necessary approvals for that use are described in the *Land Use Planning Approvals Act 1993*.

## DISCUSSION

An investigation of the site has identified that a bridge could feasibly be constructed over Figure of Eight Creek in the vicinity of the Maidstone Park BMX track. There is possible flexibility in the exact location, to avoid large trees on the banks of the creek. The location shown in Figure 3 below aligns with a small lot of open space that links Fleetwood Drive to Figure of Eight Creek.



Figure 3: Indicative bridge location

Figure 3 above show various connecting paths on the west side of the creek that have been proposed depending on the intent of the bridge. Connecting path option 1a links back to Mersey Road, although the merits of this path are discussed above. Connecting path 1b links to the centre of the Maidstone Park facility. The future connection shown, links the Woodrising area to the recreational path that is currently constructed between Devonport and Quoiba and is proposed to be extended to Maidstone Park in future.

The assessment of the feasibility of a bridge over Figure of Eight Creek identified several issues that need to be addressed for the project to progress.

- **Crown Land**

The proposed bridge would have to be constructed on Crown Land. Council would have to apply for a lease for the land its assets would occupy. Crown Leases have been entered into for other projects and it is unlikely this requirement would impact Council's ability to construct a bridge. The extent of Crown Land is shown in Figure 4 below.

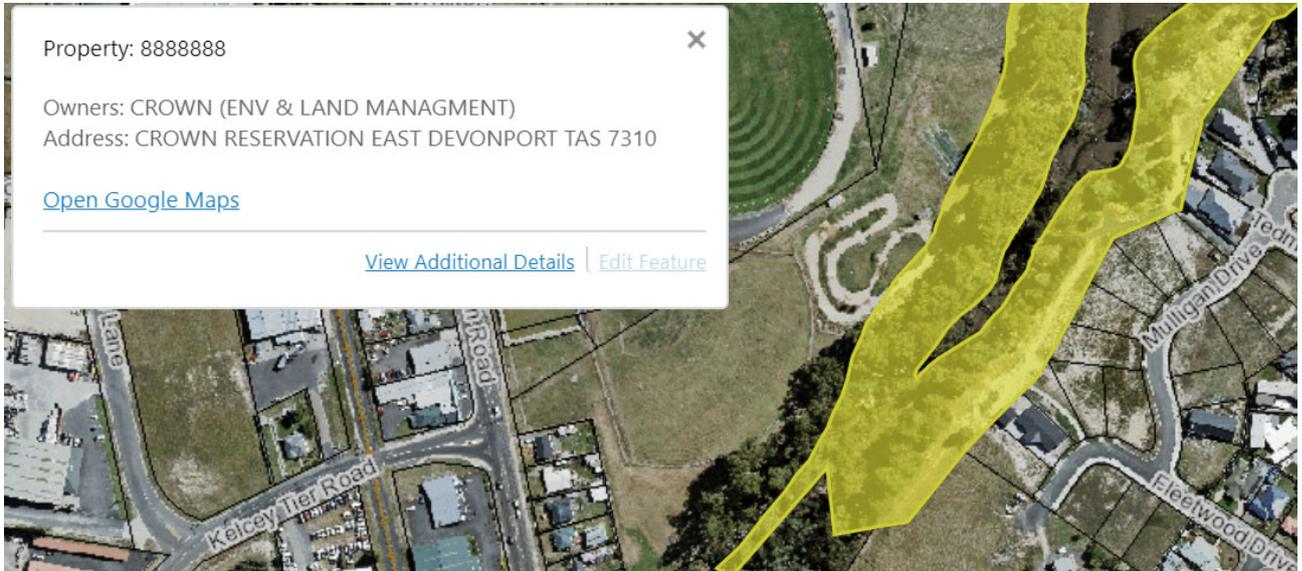


Figure 4: Crown Land on the banks of Figure Eight Creek

- **Environmental**

A desktop assessment of the natural values of the proposed bridge location has been completed. The assessment identified the presence of the endangered Central North Burrowing Crayfish (CNBC) near the proposed bridge location. However, it is likely that a bridge could be constructed without impacting CNBC habitat.

Several weed species were identified in the assessment. These would require management during construction.

Some removal of native trees would be required to facilitate the construction, although offset planting could be undertaken.

- **Heritage**

A desktop assessment has not identified any Aboriginal heritage sites in the area. The likelihood of a discovery is low.

- **Planning**

A discretionary planning permit pathway would be required. However, it is highly likely the project could meet the performance-based criteria.

- **Design and Construction Methodology**

At the proposed bridge site, the profile of Figure of Eight Creek is around 6m deep and around 30m wide. This profile suits the construction of a single span bridge, similar to the Sawdust Bridge over the Don River. This option would remove the need for construction activity in the creek bed and maintains the current hydraulic capacity of the creek profile. In dry weather, access to both sides of the creek is suitable for construction equipment like concrete trucks and cranes.

Some work is required to determine the layout for the connecting paths within Maidstone Park as there are various options available and consideration of the current and future use of the area is required.

- **Stakeholders**

Limited consultation has occurred to date on the proposal.

The Maidstone Park Management Controlling Authority (MPMCA) were invited to make comment on the proposal. The MPMCA expressed concerns about the bridge being used to access the Maidstone Park facilities, based on two issues:

- Unfettered public access to an inconspicuous part of the park is likely to exacerbate the existing problem of dogs being exercised off leash.
- An additional access to the site will affect the sporting clubs' ability to charge gate fees for games and other events.

However, the MPMCA support a bridge as part of the pathway that would link to Mersey Main Road and the future link to Quoiba (refer Figure 3), noting that the path would have to be suitably fenced to protect path users from errant cricket balls and baseballs. Such a fence could be accommodated in the design.

The MPMCA position is potentially problematic as a bridge across Figure of Eight Creek that doesn't provide access to Maidstone Park has little or no benefit to Woodrising residents, without the construction to the other parts of the path, to Quoiba and Devonport. Constructing it beforehand and then preventing access to Maidstone Park renders the bridge somewhat useless in the short term, especially considering the additional connection to Mersey Main Road already planned for 2020 (refer Figure 2). This issue is partially resolved by timing the construction of the project to suit the construction of the future connection to Quoiba and Devonport.

Although no direct consultation with Woodrising residents has been undertaken, strong support for the project is assumed, although it is certainly possible that those near the proposed bridge may be less supportive due to the increased pedestrian activity. As described above, it is unclear what impact the MPMCA position on access to Maidstone Park would have on the level of support for the project, although it seems logical the residents would be expecting a link to Maidstone Park.

- **Financial**

The estimated cost of the proposed bridge and connecting paths is \$450,000. This excludes the future path link to Quoiba, but allows for a path connection to Mersey Main Road.

Construction of the bridge and associated assets would require an ongoing operational budget commitment of around \$12,000, which includes the cost of inspections, maintenance and depreciation.

- **Strategic**

The proposed bridge aligns with the objectives of the relevant Council Strategies; Public Open Space Strategy; Bike Riding Strategy 2015-2020; and the Pedestrian Strategy 2016-2021; although none of the strategy action plans identify the bridge as a priority project. However, all three Strategies are approaching their review dates, with the Public Open Space Strategy review underway and the Bike Riding Strategy review scheduled for 2020-21. These reviews present an opportunity to reassess the priority actions required to deliver the objectives. The Strategy review process includes public consultation which is an excellent opportunity to understand the support for the proposed bridge relative to other proposals.

## **COMMUNITY ENGAGEMENT**

The MPMCA has been consulted in relation to the proposal, but no widespread community engagement has been undertaken. Details of the MPMCA feedback are discussed above.

### **FINANCIAL IMPLICATIONS**

As described above, the estimated cost of the proposed bridge and connecting paths is \$450,000, while the estimated operating cost is \$12,000 per year.

The proposed bridge is not funded in Council's Forward Capital Works Program. Accommodating a project such as this would require a significant adjustment to the program, either by way of deferral of funded projects or an increase in funding which would impact Council's Long Term Financial Plan.

### **RISK IMPLICATIONS**

- **Corporate and Business**  
Whilst construction of a bridge is feasible, the benefits of the project need to be clearly understood. Currently the benefits are unconfirmed due an apparent conflict between stakeholder needs.  
  
Additionally, prior to a commitment of funding to the proposed bridge, the proposal needs to be considered favourably in comparison to other competing projects.
- **Asset & Property Infrastructure**  
The construction of new assets requires an ongoing operational commitment for inspections, maintenance and depreciation in the order of \$12,000 per year.
- **Environmental Sustainability**  
The environmental risks associated with the construction of the proposed bridge have been identified and can be effectively managed.
- **Consultation and/or Communication**  
Limited consultation has occurred, but wider consultation is required both with parts of the community impacted by this project and with the wider community to understand the relative priority of this project. This can be undertaken as part of the planned Strategy reviews.

### **CONCLUSION**

Construction of a bridge over Figure of Eight Creek is feasible, and most issues identified in this report can be effectively managed through thorough planning and design processes.

One unresolved issue is the clarification of the objective of the project. The MPMCA position on the proposal is that they do not support direct access to Maidstone Park from this bridge, which is likely to be one of the main objectives of Woodrising residents. Constructing a bridge once the remainder of the path link to Quoiba is complete, offers some benefit to Woodrising residents, but it is difficult to envisage a project that meets the needs of all users when the needs appear to conflict.

The estimated cost of a bridge and connecting paths is \$450,000. There is no allocation for this project in Council's Forward Capital Works Program.

The proposed bridge aligns with the objectives of Council Strategies but is not identified as a priority action in the Strategies. Relevant strategies are scheduled for review. Further consideration of the objective and priority of the proposed bridge as part of the Strategy reviews could provide the clarity required to advance the project.

### **ATTACHMENTS**

Nil

**RECOMMENDATION**

That it be recommended to Council that the report of the Infrastructure and Works Manager be noted and that the objective, prioritisation and funding of a pedestrian bridge over Figure of Eight Creek be considered in the review of Council's Bike Riding Strategy scheduled for 2020-21.

Author:	Michael Williams	Endorsed By:	Matthew Atkins
Position:	Infrastructure & Works Manager	Position:	Acting General Manager

## 5.3 ASSET MANAGEMENT STRATEGY - YEAR FIVE STATUS UPDATE

### RELEVANCE TO COUNCIL'S PLANS & POLICIES

Council's Strategic Plan 2009-2030:

Strategy 2.3.1 Develop and maintain long term Strategic Asset Management Plans

### SUMMARY

To report to Council on the progress of the actions outlined in Council's Asset Management Strategy (The Strategy).

### BACKGROUND

Council developed and adopted the Strategy to complement the objectives of Council's Asset Management Policy.

The current Strategy was adopted by Council at its meeting in June 2015 and this report provides an update on progress to date.

To ensure the long-term financial sustainability of Council, it is essential to balance the community's expectations for services with their ability to pay for the infrastructure assets used to provide the services. Maintenance of service levels for infrastructure assets requires appropriate investment over the whole of the asset life cycle. To assist in achieving this the Strategy provides the following vision:

*Develop and maintain asset management governance, skills, process, systems and data in order to provide the level of service the community need at present and in the future, in the most cost-effective and fit for purpose manner.*

In line with the vision, the objectives of the Strategy are to:

- ensure that the Council's services are provided in an economical optimal way, with the appropriate level of service to residents, visitors and the environment determined by reference to Council's financial sustainability;
- safeguard Council's assets including physical assets and employees by implementing appropriate asset management strategies and appropriate financial resources for those assets;
- adopt the Long Term Financial plan as the basis for all service and budget funding decisions;
- meet legislative requirements for all Council's operations related to asset delivery;
- ensure resources and operational capabilities are identified and responsibility for asset management is allocated; and
- assist with high level oversight of financial and asset management responsibilities through reporting to Council on development and implementation of the Asset Management Strategy and Financial Management Strategy.

A copy of the Strategy can be found on Council's website at:

<http://www.devonport.tas.gov.au/Council/Publications-Plans-Reports/Council-Plans-Strategies>.

### STATUTORY REQUIREMENTS

Section 70D of the *Local Government Act 1993* relates to Council's requirement to have an adopted Asset Management Strategy.

*Local Government (Content of Plans and Strategies) Order 2014* specifies the matters that are required to be included in plans, strategies and policies under the *Local Government Act 1993*.

## **DISCUSSION**

Achievements and progress since the adoption the Strategy are outlined in the attachment to this report. Of the fourteen actions, six have been completed, either through the completion of a discrete project or through embedment of an asset management task into an existing process. Five more are ongoing, while three have commenced with the intention of completion during 2020.

Progress in the last year includes:

- Completion of a multi-year project to survey stormwater assets and accurately record asset data (Action 5.1)
- Commencement of Project Transform: Council's asset management system implementation project, which will enhance Council's asset management and works management practices and deliver both long and short term benefits (Action 1.2)
- Commencement of Fleet and Parks asset management plans (Action 2.1)
- Reporting on asset management in Council's Annual Report; (Actions 6.2 and 6.4)

Progress to review Council's Asset Management Plans has been slower than anticipated and this has been identified by Council's Auditors. However, a renewed focus on delivering updated Asset Management Plans will see up to date plans in place for all required asset classes in the next year.

A review of the Strategy has commenced, and a draft Asset Management Strategy 2020-2024 will be presented early in 2020.

Actions from the current Strategy that are ongoing or in progress will need to be considered for inclusion in the updated Strategy.

## **COMMUNITY ENGAGEMENT**

There was no community engagement as a result of this report.

## **FINANCIAL IMPLICATIONS**

There are no financial implications as a result of this report.

## **RISK IMPLICATIONS**

- Political/Governance  
Ever increasing legislative obligations are intended to ensure that Council's expenditure is sustainable, the Strategy provides the framework for responsible decision making.
- Assets, Property and Infrastructure  
The Strategy provides direction for Council in the implementation of consistent and best practice asset management. Appropriate asset management practices assist in mitigating a range of risks to Council and the community.
- Financial  
The Strategy will ensure that sound financial principals are followed in all decision making.

- Communication/Reputation  
The Strategy will enable Council to demonstrate best practice within asset management.

**CONCLUSION**

Progress has been made against all actions listed in the Asset Management Strategy, since it was adopted in June 2015. A review of the Strategy has commenced and will be presented in early 2020.

**ATTACHMENTS**

1. Asset Management Strategy Action List – Year 5 Status

**RECOMMENDATION**

That it be recommended to Council that the report of the Infrastructure and Works Manager be received and Council note the status of actions listed in the Asset Management Strategy.

Author:	Michael Williams	Endorsed By:	Matthew Atkins
Position:	Infrastructure and Works Manager	Position:	Acting General Manager

## Action Plan Asset Management Strategy – Year Five Status

No	Action:	Year Planned					Status	Outputs	Responsible Department
		2015/16	2016/17	2017/18	2018/19	2019/20			
<b>Objective 1: Ensure that the Council's services are provided in an economically optimal way, with the appropriate level of service to residents, visitors and the environment determined to reference to Councils financial sustainability</b>									
1.1	Add asset condition data where possible to Council's Annual Report						Completed (embedded)	Information is included in the Annual Report	
1.2	Develop and implement a program to review internal procedures relating to asset management						In progress	Asset Management System Implementation (Project Transform) underway	Asset Management Team
<b>Objective 2: Safeguard Council's assets including physical assets and employees by implementing appropriate asset management strategies and appropriate financial resources for those assets.</b>									
2.1	Develop and implement a program to review Council's existing Service & Asset Management Plans progressively over the next two years						In progress	Transport AM plan has been adopted. Stormwater plan is in draft. Preliminary work on Parks AM plan underway	Inf & Works
2.2	Develop and adopt a Plant & Fleet Service & Asset Management Plan						In progress	Draft Fleet AM plan underway	Inf & Works
<b>Objective 3: Adopt the Long Term Financial Plan as the basis for all service and budget funding decisions</b>									
3.1	Develop and implement a system to progressively review the useful lives of all significant assets						Ongoing	Useful lives of assets are reviewed as part of the revaluation process. This process will be further refined to better align with expectations of the Audit Office	Inf & Works
3.2	Review Long Term Financial Plan incorporating the Asset Management Plan expenditure projections with a sustainable funding position outcome						Completed (embedded)	Long Term Financial Plan reviewed annually	
<b>Objective 4: Meet legislative requirements for all Council's operations relating to asset delivery</b>									
4.1	Develop and document guidelines for revaluation of assets						Complete		Asset Mgmt. Team
<b>Objective 5: Ensure resources and operational capabilities are identified and responsibility for asset management is allocated</b>									
5.1	Develop a program to progressively improve the accuracy of the data in the asset system including collection of additional data						Completed (embedded)	Accuracy of data in the asset system is continually being improved. A multi year project to update and verify stormwater asset data has been completed.	Inf & Works

No	Action:	Year Planned					Status	Outputs	Responsible Department
		2015/16	2016/17	2017/18	2018/19	2019/20			
5.2	Ensure responsibilities for asset management are identified and incorporated into staff position descriptions as required						Ongoing	Responsibilities added to Position Descriptions progressively as they are reviewed	Human Resources
<b>Objective 6: Assist with high level oversight of financial and asset management responsibilities through reporting to Council on development and implementation of the Asset Management Strategy and Financial Management Strategy</b>									
6.1	Report annually to Council on implementation of the Asset Management Strategy and Asset Management Plans.						Completed (embedded)	Annual update on progress against AM Strategy Action Plan includes progress on AM Plans	Asset Mgmt. Team
6.2	Report annually to Council on implementation of Long Term Financial Plan.						Completed (embedded)	A report is provided annually to Council	Organisational performance
6.3	Review Council's strategic documents in relation to asset management and long term financial sustainability both during development of new strategies and reviewing of existing strategies.						Ongoing	Asset management considerations are included in the development of Council's Strategies to varying degrees, but the process is not embedded	Asset Mgmt. Team
6.4	Investigate ways to improve asset condition reporting in Council's Annual Report						Ongoing	Information is included in the Annual Report. Improved reporting is likely to be achievable as asset management practices are improved (item 1.2)	Inf & Works
6.5	Raise awareness of asset management within Council through education of staff						Ongoing	Information provided to staff in the budget manual. Project team formed to deliver improved asset management processes	Asset Mgmt. Team

## 5.4 SQUIBBS ROAD STORMWATER IMPROVEMENTS

### RELEVANCE TO COUNCIL'S PLANS & POLICIES

Council's Strategic Plan 2009-2030:

Strategy 2.3.3 Provide and maintain stormwater infrastructure to appropriate standards

### SUMMARY

This report outlines the current status of the Squibbs Road stormwater improvement project and requests additional funding to undertake the construction phase of the project.

### BACKGROUND

The Squibbs Road stormwater improvement project received a funding allocation of \$90,000 in the 2016-17 capital works program. The objectives of the project were to protect the road from erosion and reduce flooding of the road. The proposed work included excavation of an open drain, new stormwater pipes and reconstruction and widening of the road edge.



Squibbs Road

When design work started, the site was identified as a habitat for the Central North Burrowing Crayfish (*Engaeus granulatus*) which is a species endemic to the Devonport area

and listed as endangered under both the *Threatened Species Protection Act 1995* (Tasmania) and the *Environment Protection and Biodiversity Conservation Act 1999* (Australia).

Work to seek advice and gain approvals up until 30 June has cost \$36,006. This includes the cost of an expert consultant, staff time to liaise with government agencies and prepare permit applications and the cost of the applications. Progress has been slow as there are very limited number of people with suitable experience with this species and the process and systems involved with obtaining the necessary State and Federal Government permits are complex. These costs were not considered during the development of the project budget.

Additional budget allocations were made at the end of the 2017-18 and 2018-19 financial years when savings from other stormwater projects were allocated to this project. \$20,000 and \$10,000 were added respectively.

The expenditure currently available for the project in 2019-20 is therefore \$83,994.

### **STATUTORY REQUIREMENTS**

Requirements to identify, manage and protect relevant flora and fauna are described in the *Threatened Species Protection Act 1995* and the *Environment Protection and Biodiversity Conservation Act 1999*.

### **DISCUSSION**

Work on the project to date this financial year has included the final steps to obtain the necessary permits, the detailed design of the works and the preparation of the construction contract documents. The cost of this work has been \$16,328. This leaves \$67,666 available for the construction phase of the project.

The construction scope of work includes:

- Reconstruction of the road edge and widening;
- Excavation of an open drain;
- Relocation of power poles and a boundary fence;
- Installation of stormwater pipes;
- Selected pavement repairs; and
- Resealing of the road.

The work to comply with the environmental approvals includes:

- Construction of suitable CNBC habitat within the established offset site at 39 Clayton Drive;
- Manual excavation, collection and transfer to of at least 44 specimens to the offset site;
- Training and supervision by a qualified and experienced consultant;
- Ongoing monitoring of the offset site; and
- Reporting to government agencies.

The forecast cost to complete the project is \$136,000 which includes a contingency. This is \$68,334 more than the remaining budget. Three options have been considered to address this issue:

**1. Do not proceed with the project.**

This option would result in no work being carried out on site. This is not recommended as the drain and road edge will continue to deteriorate and require more substantial work in future, by which time the current environmental permits will have lapsed and new applications would be required.

This option would result in all costs to date on the project becoming operational costs which would have a significant impact on Council's operating budget.

**2. Reduce the scope of the project**

This option is not feasible as the scope as designed is essential to deliver the project objectives. Much of the cost of the project either has already been incurred or is related to the management of the CNBC population which is required regardless of the extent of the work.

**3. Increase the budget allocation for this project**

Allocating an additional \$68,334 to the project would enable the project to be complete but would require a budget adjustment. The merits of making such an adjustment are described in the financial implications section of this report.

**COMMUNITY ENGAGEMENT**

Consultation has occurred with property owners adjacent to the project site.

**FINANCIAL IMPLICATIONS**

The estimated cost to complete the work is \$136,000, while the remaining budget is \$67,666. An additional \$68,334 is required to complete the project.

Forecasts on stormwater projects in the 2019-20 capital works program indicate that there are savings available on other projects sufficient to offset the additional funds required. These forecasts are shown in Table 1 below. However, it is important to note that for project CS0090, the savings are as a result of the project now not being required, rather than being completed for less than the allocated budget.

2019-20 capital works program - stormwater		Forecast relative to budget (\$)
CS0055	Squibbs Road drainage improvements	(68,334)
CS0081	John Stormwater Catchment Stage 1	20,000
CS0082	Minor Stormwater Works	0
CS0083	Stormwater outfall risk management	0
CS0084	Tugrah Road drainage	0
CS0086	Coles Beach Road - new pit	2,680
CS0085	Oldaker (East) stormwater catchment upgrade – stage 1	0
CS0087	William Street stormwater improvements - Fourways east side	446
CS0088	Kelcey Tier Road - pipe extension and headwall	8,641
CS0089	Pit replacements	0
CS0090	Watkinson St - north of George Street - stormwater renewal	42,000
	<b>Net</b>	<b>433</b>

Table 1 – Stormwater project forecasts

**RISK IMPLICATIONS**

- Asset & Property Infrastructure  
The project should progress to construction as soon as possible to avoid more costly renewal and repair work in future.

- Environmental Sustainability  
Council has obtained the necessary State and Federal Environmental permits for the project and has included the required controls in the construction contract.

**CONCLUSION**

The Squibbs Road stormwater improvements project is required to protect the road from erosion and reduce flooding of the road. The presence of the endangered CBNC has added significant time, cost and complexity to the project.

It is forecast that an additional \$68,334 is required to complete the project, which can be offset by savings on other projects. Other options were considered to reduce the project cost but are not recommended.

**ATTACHMENTS**

Nil

**RECOMMENDATION**

That it be recommended to Council that the report of the Infrastructure and Works Manager be received and that:

1. the allocation for the Squibbs Road Stormwater improvements be increased by \$68,334; and
2. it be noted the increase will be offset by savings in other stormwater projects from the 2019/20 works program.

Author:	Michael Williams	Endorsed By:	Matthew Atkins
Position:	Infrastructure & Works Manager	Position:	Acting General Manager

## **6.0 INFRASTRUCTURE AND WORKS BI-MONTHLY UPDATE**

### **6.1 DEVELOPMENT AND HEALTH SERVICES REPORT**

#### **RELEVANCE TO COUNCIL'S PLANS & POLICIES**

Council's Strategic Plan 2009-2030:

Strategy 5.4.1 Provide timely, efficient, consistent services which are aligned with and meet customer needs

#### **SUMMARY**

This report provides a summary of the activities undertaken by the Development Services Department for the months of October and November 2019.

#### **BACKGROUND**

This report is provided to the bi-monthly Infrastructure, Works and Development Committee meeting to summarise the activities of the Development Services Department in the preceding two months.

The Council functions undertaken by the Department are:

- Planning;
- Building and Plumbing Services;
- Environmental Health;
- Animal Control; and
- Risk and Regulatory Compliance Services.

#### **STATUTORY REQUIREMENTS**

In carrying out its activities, the Development Services Department is required to ensure compliance with a substantial amount of legislation and regulation. The principal legislation administered by the Department includes the:

- *Local Government Act 1993*
- *Land Use Planning and Approvals Act 1993*
- *Building Act 2016*
- *Building Regulations 2016*
- *Public Health Act 1997*
- *Food Act 2003*
- *Environmental Management and Pollution Control Act 1994*
- *Dog Control Act 2000*
- *Devonport Interim Planning Scheme 2013*
- *Work Health and Safety Act 2012*

#### **DISCUSSION**

##### **1. State Planning Scheme/Local Provisions Schedules**

Council continues to progress towards finalising its draft Local Provisions Schedule (LPS) with the Tasmanian Planning Commission (TPC). The LPS will form part of a single state-wide planning scheme to be known as the Tasmanian Planning Scheme.

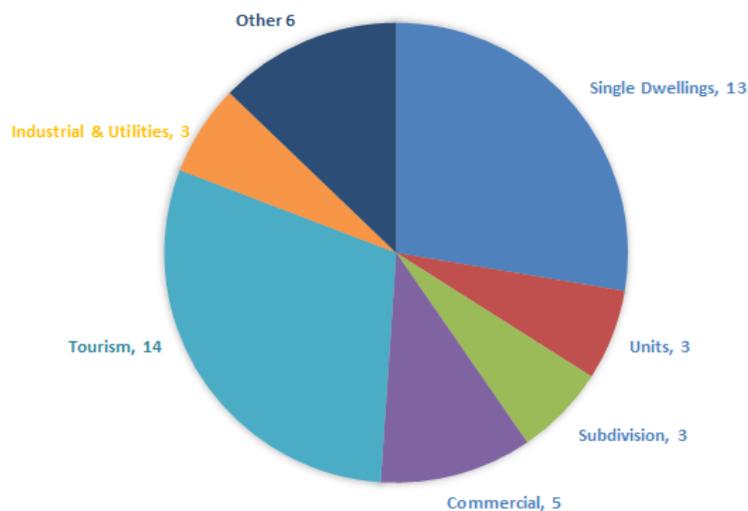
The draft LPS package (which includes a full set of zone and code maps and supporting documentation) has been submitted to the TPC for review.

The review by the TPC is underway and Council have responded to the TPC on a number of items raised.

## 2. Planning

- 2.1. The Historic Cultural Heritage Act 1995 has been amended to build on changes introduced in 2014 to better integrate the provisions of the Land Use Planning and Approvals Act 1993. A fact sheet provided by the State Government to communicate the amendments is Attachment 1 to this report. The changes came into effect from 8 October 2019.
- 2.2. Tasman Street rezoning application. The Tasmanian Planning Commission (Commission) have advised Council that following the Commission's request for further information the applicant has requested that the Commission defer the matter indefinitely to allow further time for the applicant to consider the options regarding the site contamination and land supply. The Commission has sought an extension of time from the Minister of Planning for a 6 month period within which to determine the matter. If this is agreed to by the Minister, the Commission will proceed to hear and determine the matter in the New Year.
- 2.3. The following graph details the breakdown of planning applications received during October and November:

**PLANNING APPLICATIONS RECEIVED BI-MONTHLY BREAKDOWN**



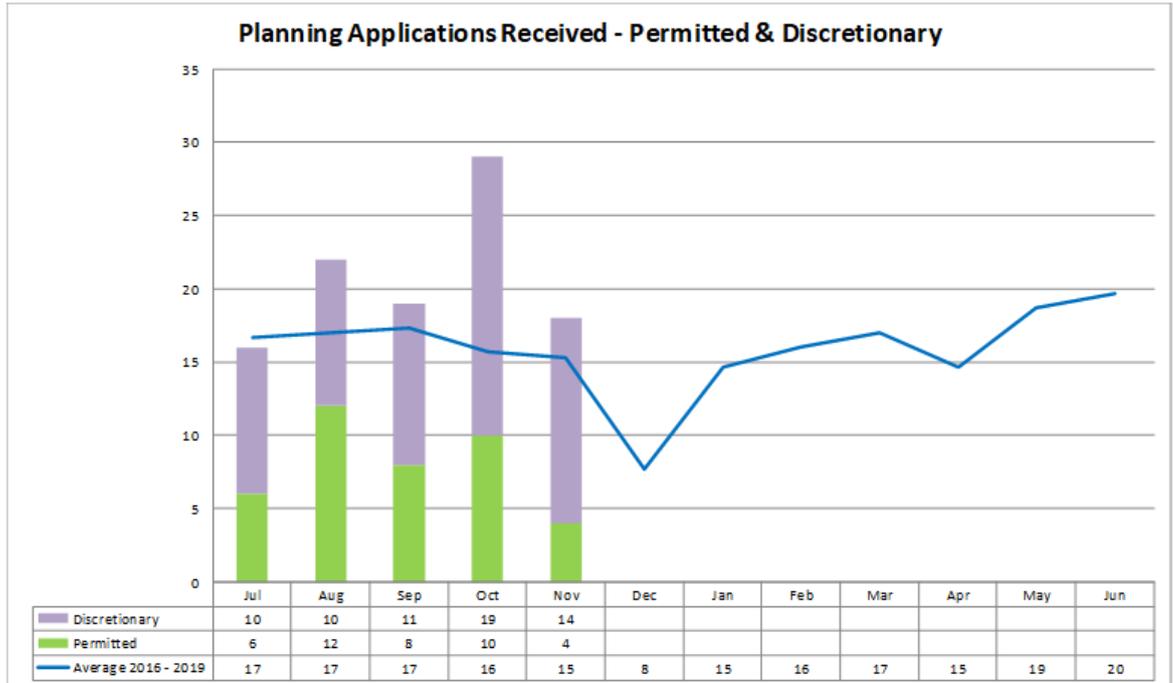
### Note:

- Single Dwellings – means single residential dwelling on a single lot.
- Units – means two or more dwellings on a site.
- Subdivision – means the division of a single lot into multiple lots giving separate rights of occupation, excluding boundary adjustments.
- Commercial – means bulky goods sales, business and professional services, community meeting and entertainment, educational and occasional care, equipment and machinery sales and hire, food services, general retail and hire, hotel industry, research and development.
- Tourism – means tourist operations and visitor accommodation.
- Industrial and Utilities – means extractive industry, manufacturing and processing, port and shipping, recycling and waste disposal. Resource processing, service

industry, storage, transport depot and distribution, utilities, vehicle fuel sales and service.

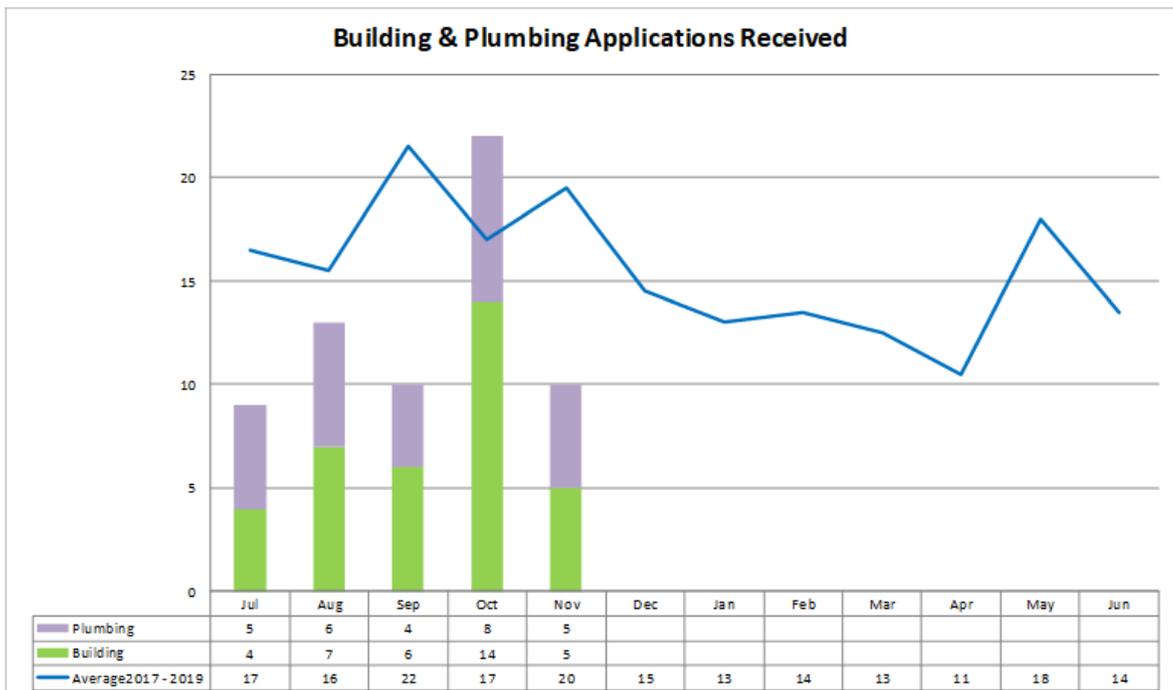
- Other – means all other use classes.

2.4. 23 Discretionary Planning Applications and 14 Permitted Planning Applications were received in October and November. The following graph details the number of Planning Applications received compared to previous years:

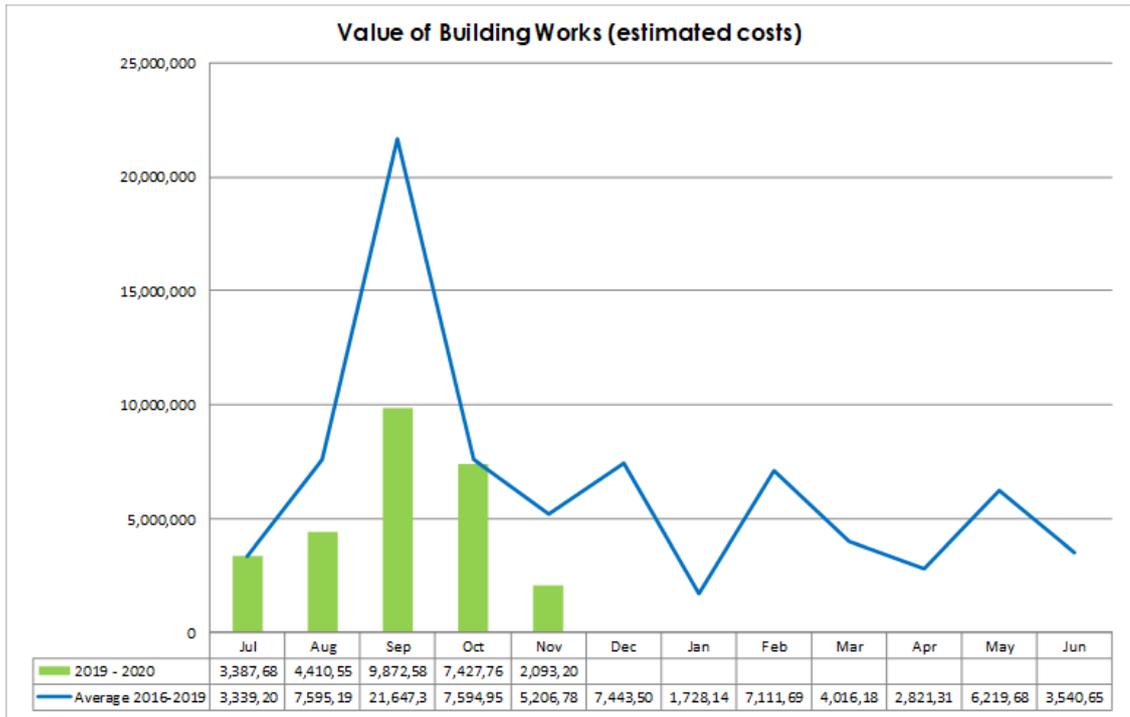


### 3. Building/Plumbing

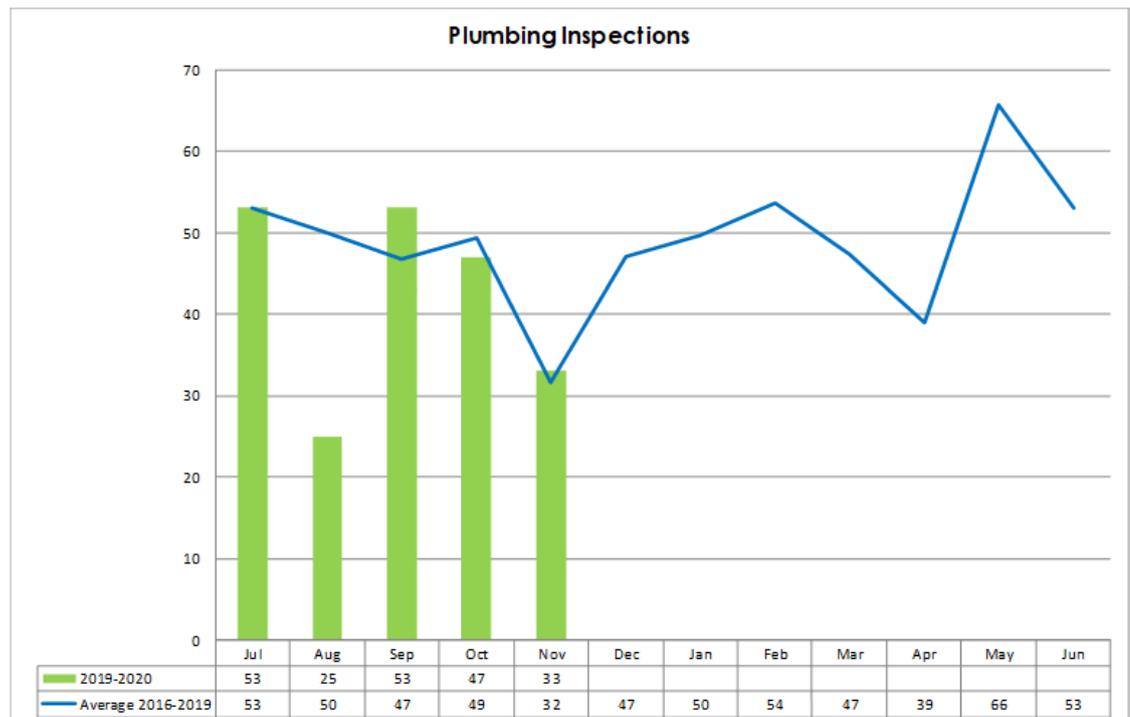
3.1. 19 Building Applications and 13 Plumbing Applications were received in October and November. The following graph details the Building and Plumbing Applications compared to the previous year:



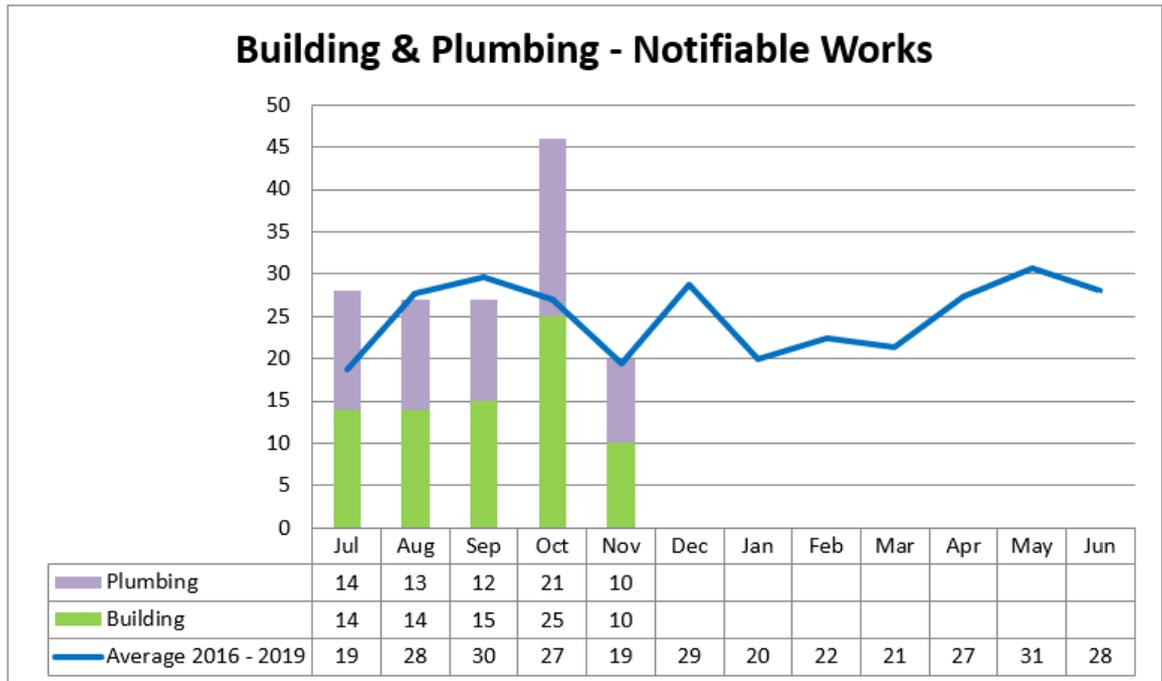
3.2. Building Applications for \$7,427,768 worth of building works was received in October and \$2,093,200 in November. The following graph details the value of buildings works received compared to previous years:



3.3. 47 plumbing inspections were carried out in October and 33 in November. The following graph details the number of plumbing inspections carried out this financial year compared to previous years:

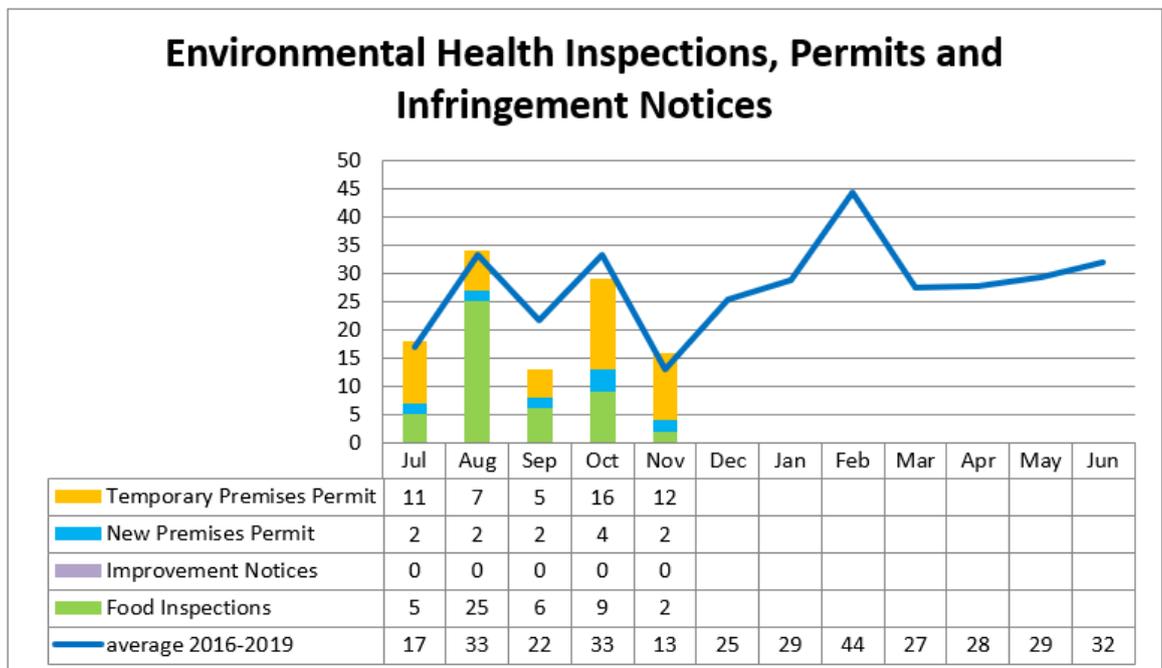


3.4. The following graph details the notifiable works received for building and plumbing that have been issued this year compared to previous years:



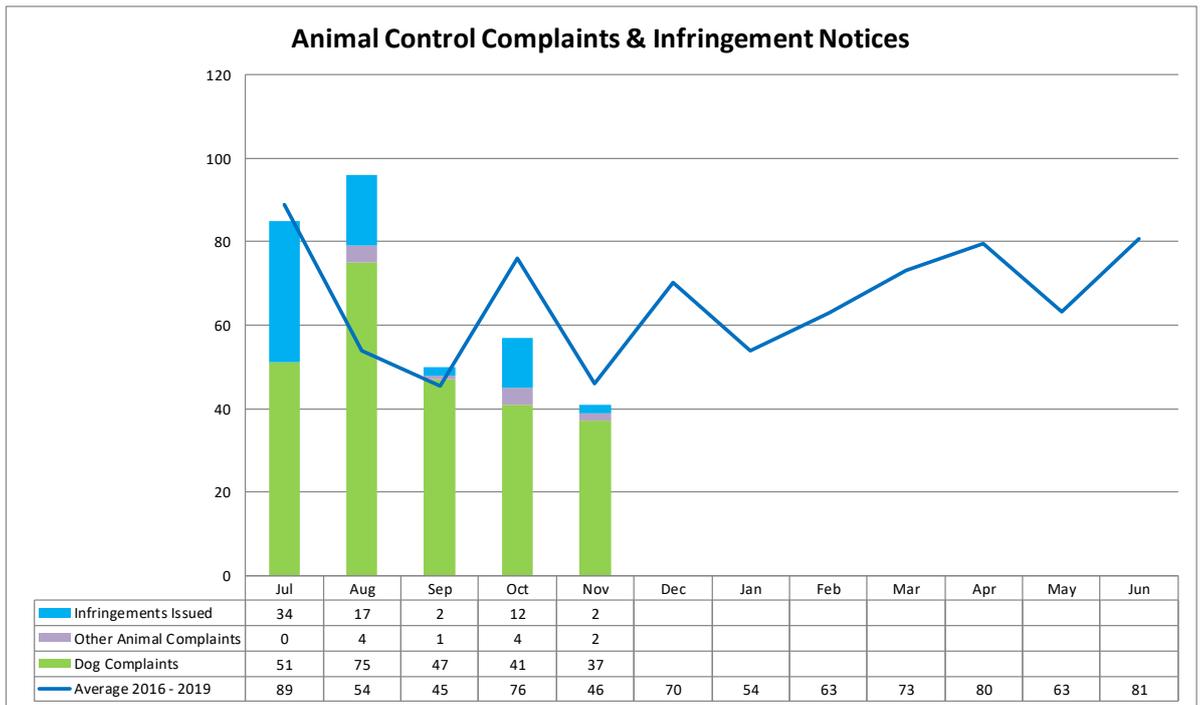
#### 4. Environmental Health

4.1. The following graph details the inspections, permits and infringement notices that have been issued by the Environmental Health Officers this year compared to previous years:



**5. Animal Control**

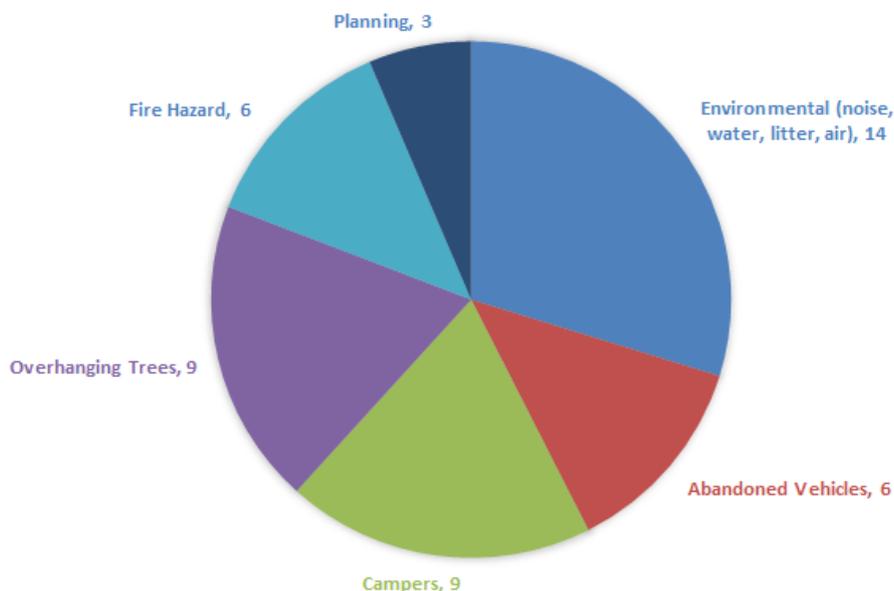
- 5.1. At the end of November there were 3,754 dogs registered in Devonport.
- 5.2. In October and November, a total of 84 animal complaints were received. These complaints predominately related to dog attacks and dogs at large. All complaints were responded to within two working days.
- 5.3. The following graph details the number of animal complaints for this financial year compared to the same period last year:



**6. Risk and Compliance**

- 6.1. The following graph details the breakdown of the complaints received by the Risk Department during October and November:

**COMPLAINTS RECEIVED BI-MONTHLY BREAKDOWN**



6.2. Nineteen internal incidents and fourteen external incidents were reported during October and November. The following table details the types of incidents:

Internal Incident Type	No. of Reports	Description
Personal Injury	3	<ul style="list-style-type: none"> <li>• Injured shoulder</li> <li>• Twisted ankle</li> <li>• Rolled ankle</li> </ul>
Property Damage	10	<ul style="list-style-type: none"> <li>• Concrete splattered onto fence</li> <li>• Damage to vehicle</li> <li>• Fire in toilet block</li> <li>• Broken windows</li> <li>• Security cameras stolen</li> <li>• Vandalism to vehicles</li> <li>• Illegal electrical connection</li> <li>• Burst water pipe</li> </ul>
Motor Vehicle	5	<ul style="list-style-type: none"> <li>• Chipped windscreen</li> <li>• Parked vehicle damaged</li> </ul>
Hazard	1	<ul style="list-style-type: none"> <li>• Conversation recorded without consent</li> </ul>
External Incident Type	No. of Reports	Description
Personal Injury	1	<ul style="list-style-type: none"> <li>• Fall in hole</li> </ul>
Motor Vehicle	7	<ul style="list-style-type: none"> <li>• Incidents reported</li> </ul>
Property Damage	5	<ul style="list-style-type: none"> <li>• Incident reported</li> </ul>
Near Hit	1	<ul style="list-style-type: none"> <li>• Near miss reported</li> </ul>

6.3. The following table details the breakdown of actual claims:

	Internal Incidents	External Incidents
Actual Claims	1	0
Actual Claim Costs	\$1,000	\$0

### COMMUNITY ENGAGEMENT

The information provided above details any issues relating to community engagement.

### FINANCIAL IMPLICATIONS

Any financial implications arising out of this report will be reported separately to Council.

### RISK IMPLICATIONS

There are no specific risk implications as a result of this report.

### CONCLUSION

This report is provided for information purposes only as it relates to the activities of the Development Services Department in October and November 2019.

### ATTACHMENTS

1. Fact Sheet - Historic Cultural Heritage Act 1995 Amendments

**RECOMMENDATION**

That it be recommended to Council that the Development and Health Services Report be received and noted.

Author:	Kylie Lunson	Endorsed By:	Matthew Atkins
Position:	Development Services Manager	Position:	Acting General Manager



# FACT SHEET

## Amendments made to the *Historic Cultural Heritage Act 1995* in October 2019

Amendments were introduced to the Heritage Act in October 2019, which further align the work of local planning authorities and the Tasmanian Heritage Council (THC) who implement the heritage and planning legislation.

*The Historic Cultural Heritage Act 1995 (the Act)* has been amended in accordance with drafting instructions developed in consultation with local government. Of the seven drafting instructions, adopted by State Cabinet and Parliament, five relate to the way in which development applications are assessed by both local planning authorities and the Tasmanian Heritage Council (THC).

The other two series of amendments introduce the role of authorised officers to the Heritage Act and update the THC's governance arrangements.

# FACT SHEET



## Drafting Instruction 1

*Provide that any Act, including the Environmental Management and Pollution Control Act 1994 (EMPCA), affects the assessment period under the Land Use Planning and Approvals Act 1993 (LUPAA), the 'prescribed period' in Part 6 of the Heritage Act is similarly affected;*

The way in which this instruction has been enacted is that the prescribed period is no longer a set 35 day period, but is instead the same LUPAA assessment period which planning authorities work off. The role of the THC now is to provide a decision to the planning authority 7 days prior to this period expiring (subject to s39B). This assessment period may also be subject to any changes which can affect LUPAA, such as an assessment by the board of the EPA, or an agreement pursuant to s57(6A) of that Act. This amendment wholly integrates the timing which decisions are made by the relevant bodies.

### Example:

A proposal for a hotel involves an assessment by the Board of the EPA. The period of time under LUPAA is extended to include the time that the board take to assess that application, including the timing of advertising.

Previously no such provision in EMPCA similarly extended the 'prescribed period' under the Heritage Act. This created a disjoint in the statutory times decisions were due by the relevant bodies. The THC then would have been required to make a decision without being able to have regard to any representations.

This was an undesirable situation, and as a result of these amendments, such a situation will no longer occur.

# FACT SHEET



## Drafting Instruction 2

*Ensures any additional information, revised plans or amended permits relating to a development application are to be forwarded to the Heritage Council for consideration;*

The way in which this instruction has been enacted is that a new section (s39B) has been included, which requires a planning authority to forward any further information received at any time in the application process to the THC.

Where information is forwarded, and in the view of the THC this further information amounts to a substantial change, the THC may revise a notice of interest or decision accordingly (see instruction 3).

Existing provisions relating to the administration of additional information requests have now been amended to require the processing be as soon as practicable (existing) and in any event within 5 days (new).

### Example:

An application for a change of use, including alterations at a heritage place has been received, advertised and assessed by the THC. The THC have consented to a conditional approval.

The applicant is at a late stage made aware that the carpark design does not show the required stormwater design. The applicant provides this detail to the planning authority, showing excavation will occur on land previously undisturbed.

Prior to these amendments, the planning authority were not obliged to forward the new plan to the THC, even though these works could affect the heritage values of the place (such as an impact on subsurface archaeology).

As a result of these amendments the THC will receive this plan and will be able to amend a decision to include new conditions to mitigate heritage impacts (E.G: monitoring of excavation), for inclusion with the permit issued by the planning authority (see drafting instruction 3).



# FACT SHEET

## Drafting Instruction 3

*Provide that in the event that additional information or revised plans are forwarded to the Heritage Council following its notification of interest or notice of decision, and that information reflects a substantial change in the proposed development, the Heritage Council may revise its notice of interest or notice of decision;*

The way in which this instruction has been enacted is by the inclusion of s39B and s39C, which is applicable to both ordinary and combined permit applications. Closely related to drafting instruction 2, where new information is submitted, if a substantial change is determined, a revised notice of interest is to be sent. If a decision has already been issued, both a revised notice of interest and a revised notice of decision are to be sent.

If a permit has already been issued by the planning authority, the means of absorbing any change would be through the existing minor amendment provisions of the Act (s41).

### Example:

An application for a change of use to visitor accommodation included signage, the planning authority has at a late stage of the assessment advised the applicant that the signage does not comply, and the application will be refused.

Rather than having the application refused, the applicant has negotiated to withdraw the signage component, to have the change of use approved.

Because the application at the time of the Heritage decision being made included signage, the Heritage Council recommended conditions be included on the permit which regulated that signage.

Because of these amendments, the Heritage Council can now issue a substitute decision that omits the conditions related to signage no longer being applied for. This will result in consistent decisions by relevant bodies being made on applications which, it is recognised, can change during the course of their assessment.

# FACT SHEET



## Drafting Instruction 4

*Provide that in the event that a planning authority fails to forward a development application to the Heritage Council, the Heritage Council is provided the opportunity to consider and, should it deem necessary, provide comment on, the development application prior to a final decision of the planning authority;*

The way by which this instruction has been enacted is by introducing a provision which states that where a copy of an application is not referred to the THC, the LUPAA period (at 5 days) will halt until that application has been referred.

Halting the LUPAA period does not preclude a planning authority from issuing an approval where an application involves heritage works. Furthermore, any resultant permit will in any case be considered as Heritage approval by the wording of the Act. This provision will however allow sufficient time for permit applications to be properly assessed by the THC if referred late.

### Example:

A planning authority receives a valid application which includes heritage works, but does not check to see if the place is on the Heritage Register.

At the time the application is advertised (day 21), Heritage Tasmania become aware of the application, and requests a referral of that application. The application is referred on day 22 (17 days late).

Without these amendments, the THC would have only 13 days to assess an application, whereas under normal circumstances it would have had a minimum of 30.

As a result of these amendments, the THC period is both integrated with the period referred to in s57(6) of LUPAA, and where a referral is not made in accordance with s36(2) of the Heritage Act, the LUPAA period will halt at day 5, ensuring the THC always have a minimum 30 days to assess an application for development at a heritage place.

In the instance a referral is late, as outlined above, the planning authority must add the number of days the referral was delayed (in this instance 17 days) to their expected due date for determining the application.



# FACT SHEET

## Drafting Instruction 5

*Allows the Heritage Council to be party to the assessment of a combined planning and development application under LUPAA;*

The way by which this instruction has been enacted is by the inclusion of s39A. This section introduces a process akin to an ordinary s39 (s57 LUPAA application), though a report after advertising must be provided to the Tasmanian Planning Commission for consideration, inclusive of the need for any modification of the decision issued prior to advertising.

The hearing process under the direction of the Tasmanian Planning Commission will also allow for new information to inform any change to the decision of the THC, and can be included in a final permit.

This reflects the existing authority of the Commission as final, where an application is made for a combined permit.

This model was identified through consultation as the preference of the Tasmanian Planning Commission.

### Example:

An application for a combined planning scheme amendment and development application was in its later stage of being developed when preliminary advice was sought from Heritage Tasmania.

It was put to the applicant that no mechanism allowed for heritage approval to be granted to the development part of the combined permit application.

Without the amendments, in order to seek heritage approval, an applicant would need to lodge an ordinary planning scheme amendment, and then subsequently seek a development application through the ordinary means, once that amendment came into effect.

This limitation of the Heritage Act was contrary to the intention of the combined permit process, and is now fixed.

Importantly, these amendments will not alter the way that planning authorities and Heritage Tasmania work together for most applications.

While relatively minor changes, they will enable planning authorities and Heritage Tasmania to collaborate on combined permit applications; level two activity under the *Environmental Management and Pollution Control Act 1994*, and more complex applications that change after they have been lodged.



# FACT SHEET

## Other amendments

In addition to the amendments to Part 6, Heritage Works, the Act has been amended to introduce the role of authorised officers and enhance the THC's governance arrangements that are contained in the Act.

### Authorised officers

The Heritage Act now gives the THC the capacity to arrange to appoint an authorised officer to attend a site to investigate compliance and enforcement for a purpose connected with this Act.

The inclusion of Sections 90B to 90E to the Heritage Act introduces a framework, akin to the provisions contained in the *Land Use Planning and Approvals Act 1993*. This will enable Heritage Tasmania to attend a site where an owner does not consent, if a magistrate is satisfied a contravention of, or failure to comply with the Act has been, is being or is about to be committed.

### THC Governance

A number of new governance arrangements have been introduced to the Act.

The Act now allows the THC to appoint a deputy chair. In the past, this was only possible on a once-off basis, when the chair was not able to be present at a meeting. This amendment aims to give the THC the ability to appoint a deputy, to step in for the chair, recognising that the Chair will not always be available, yet the business of the THC continues, in and between meetings.

The Act also recognises that the THC's members come from across Tasmania and it is not always possible to meet in the one location, especially if they need to deal with extra-ordinary business. Recognising this, the Act has been amended to validate the use of telephone and video conferencing, and provide a mechanism to determine urgent matters out of session, if required.

The Act has also been amended to recognise that conflicts of interest are more than pecuniary or financial, and might be pecuniary and non-pecuniary, tangible and intangible. This change reflects contemporary practice and the THC's own policy. It also outlines the recommended pathway to identify, address and manage the declaration of interests when they arise.

### Questions?

Please be mindful that if you have any questions about the Heritage Act or these changes that the staff of Heritage Tasmania and our Heritage Planner are available to give guidance on the operation of Part 6 of the Heritage Act.

Pete Coney (Heritage Planner) can be contacted on 1300 850 332 or via email at: [peter.coney@heritage.tas.gov.au](mailto:peter.coney@heritage.tas.gov.au)

## 6.2 INFRASTRUCTURE AND WORKS REPORT

### RELEVANCE TO COUNCIL'S PLANS & POLICIES

Council's Strategic Plan 2009-2030:

- Strategy 5.4.1 Provide timely, efficient, consistent and quality services which are aligned with and meet our customers needs

### SUMMARY

This report provides a summary of the activities undertaken by the Infrastructure and Works Department during the months of October and November.

Due to the timing of the report, much of the monthly data excludes November.

### BACKGROUND

The report is provided to the Infrastructure, Works and Development Committee and aims to update Councillors and the community on matters of interest. The functional areas of Council covered by this report are:

- Asset Management Program (forward planning and maintenance)
- Capital Works
- Roads, Footpaths and Cycleways
- Streetscape Design (including lighting, signs, furniture, vegetation)
- Stormwater Management
- Traffic Management
- Waste Management
- Recreation Reserves (including playgrounds, parks and gardens)
- Sporting Grounds and Facilities
- Tracks and Trails
- Public Buildings (including public halls, toilets)
- Marine Structures (including jetties, boat ramps)
- Recreation and open space planning

### STATUTORY REQUIREMENTS

Council is required to comply with the provisions of the *Local Government Act 1993* and other relevant legislation.

### DISCUSSION

#### 1. Capital Works Program

- 1.1. In October and November, progress was made on the 2019/20 capital works program.

Capital Works Income & Expenditure Report was provided to the Governance, Finance & Community Services Committee in November.

- 1.2. Lovett Street Soccer Ground - Ground renovation – work has been completed within the required timeframe and the site has now been handed over to the parks teams for the specified maintenance required to prepare the ground for the start of next season. The first photo shows the installation of sand to drainage trenches. The second photo shows the current condition of the field, although the field will not be accessible until March as the grass roots need to develop.



- 1.3. Tenders have been requested for the Ambleside to Latrobe section of the Coastal Pathway. It is anticipated that work will start in January.
- 1.4. Council have taken delivery of a new Variable Message Sign (VMS). This sign was funded by a Grant from the Department of State Growth's Community Road Safety Fund. Council has committed to using the VMS for promoting road safety messages for 90 days per year, while it can be used for Council projects and events at other times. A deployment calendar is being developed in conjunction with Tasmania Police and the Department of State Growth.
- 1.5. Council's reseal program is substantially completed, with both spray seal and asphalt seals applied in November. The photo below shows the reseal and improved parking layout at the Horsehead Creek boat ramp.



- 1.6. The renewal of the Don Reserve path from the aquatic centre to Best Street is complete. This project renewed a section of path in poor condition with a new wider path



- 1.7. The construction of children's memorial pavilion at Mersey Vale Memorial Park is nearing completion. Material will be available soon for families who want to place a plaque or ashes at the pavilion.



- 1.8. The lighting of Coastal Pathway between Aikenhead Point and skate park is complete. These lights will support Council's New Year's Eve event.



- 1.9. Work has commenced on the roundabout at Berrigan Road and Lyons Avenue. Delays have been encountered on this project as power poles were not moved when scheduled. Work will be completed in early 2020 instead of later this year as intended.
- 1.10. Work on the Roberts Court renewal project is nearing completion. This project includes new pavement, kerb and areas of footpath.



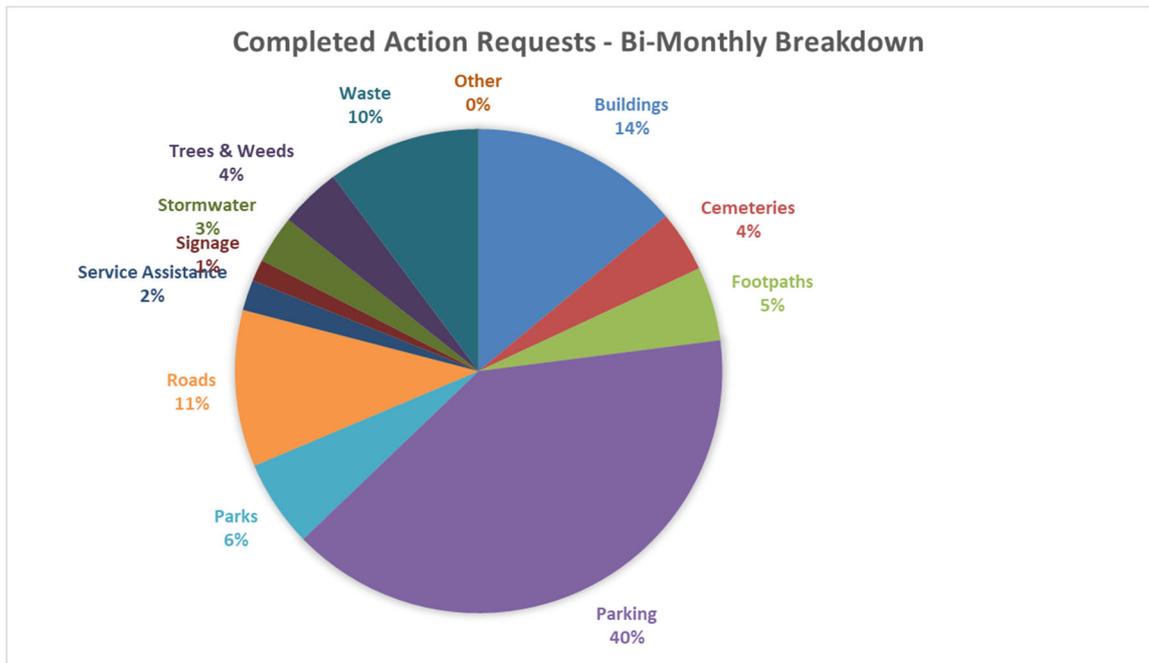
- 1.11. Refurbished Christmas decorations were delivered ready for installation. The option to refurbish existing decorations was preferred to new decorations as the frame for the existing pole decorations were structurally sound and there were concerns about the longevity of the new decorations on the market.
- 1.12. Projects that are likely to see construction commence in the next two months are:
  - Fenton Street and Stewart Street intersection safety improvements (roundabout)
  - Stewart Street renewal – William Street to Gunn Street
  - Mersey Bluff Caravan Park – accessible amenities
  - Mersey Vale Memorial Park - modern burial system
  - Mersey Bluff BBQ renewals

**2. Management**

2.1. The following table is a summary of the action requests for the Infrastructure and Works Department:

Balance of Action Requests as at 30 September 2019	581
Action Requests created in October	366
Action Requests completed in October	344
Balance of Action Requests as at 31 October 2019	603

2.2. The following graph details the categories of the action requests completed during October



**3. Technical and Engineering**

3.1. Consideration has been given to a proposal to install road humps on Bluff Access Road.

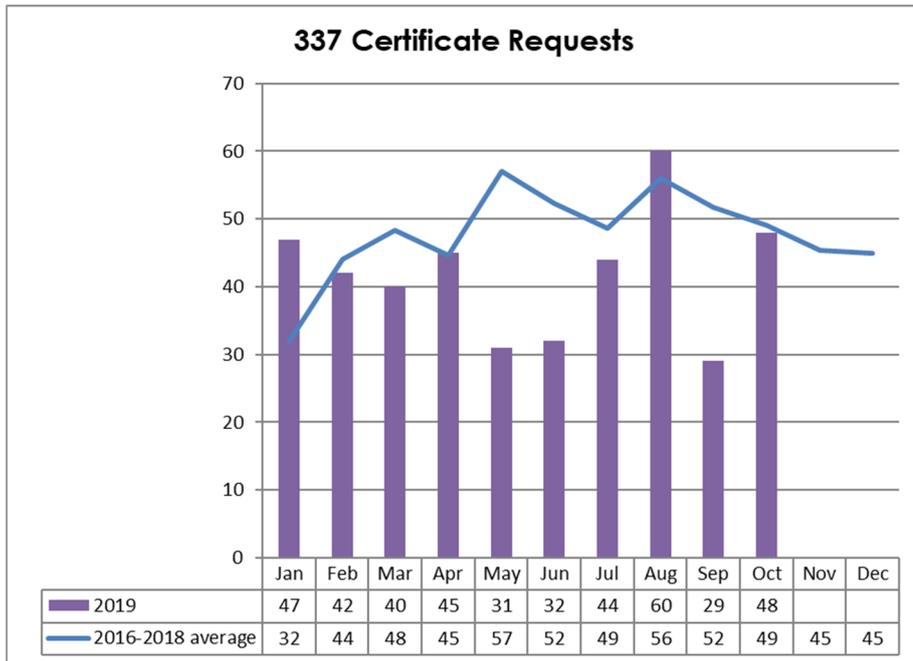
Traffic data was collected at two locations between Coles Beach Road and the entrance to the restaurant car park. Average vehicle speeds were 33km/h which is lower than the 40km/h speed limit and unlikely to be reduced significantly by road humps.

Work on Bluff Access Road is planned for mid-2020 as part of the implementation of the recommendation from the Traffic, Parking and Pedestrian Study completed in 2018. This work has the potential to change traffic patterns and driver behaviour on Bluff Access Road. Traffic data will be collected again once this project is complete and another assessment will be made on the need for road humps.

Further work is proposed in future years including a path parallel to Bluff Access Road, which should remove pedestrians from the roadway.

3.2. Council have committed to a program to install smart energy meters on 37 sites. These meters allow accurate and timely billing without manual meter reading and create the ability for staff to monitor energy usage in real time. These sites have been packaged into a supply contract providing a 5% rate reduction.

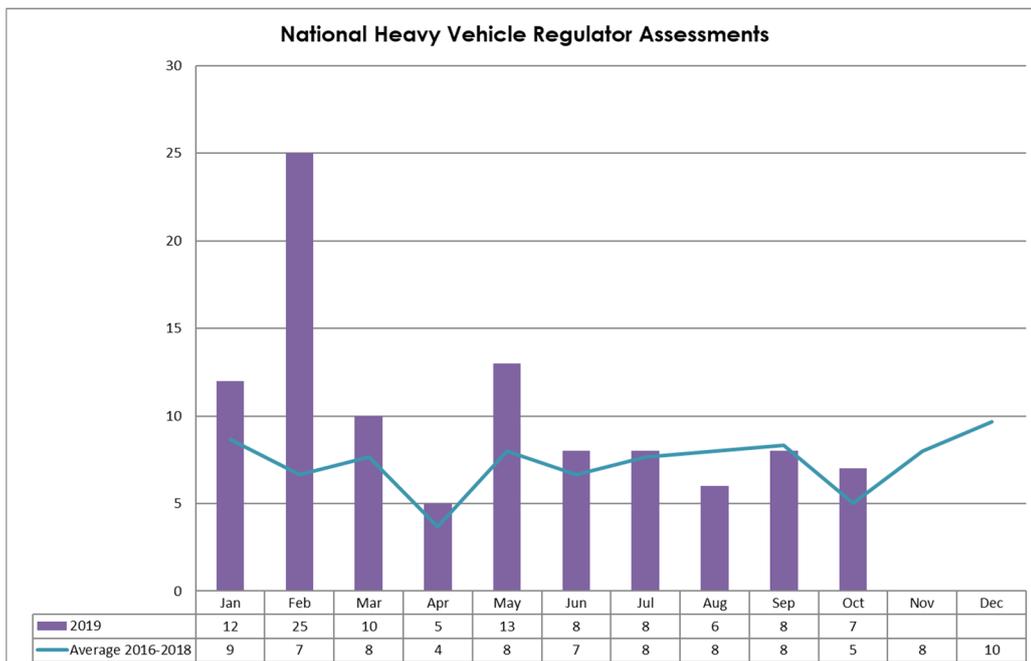
3.3. 48 Section 337 Certificates were processed in October. The following graph details the 337 Certificates that have been assessed by the Infrastructure and Works Department this year compared to previous years:



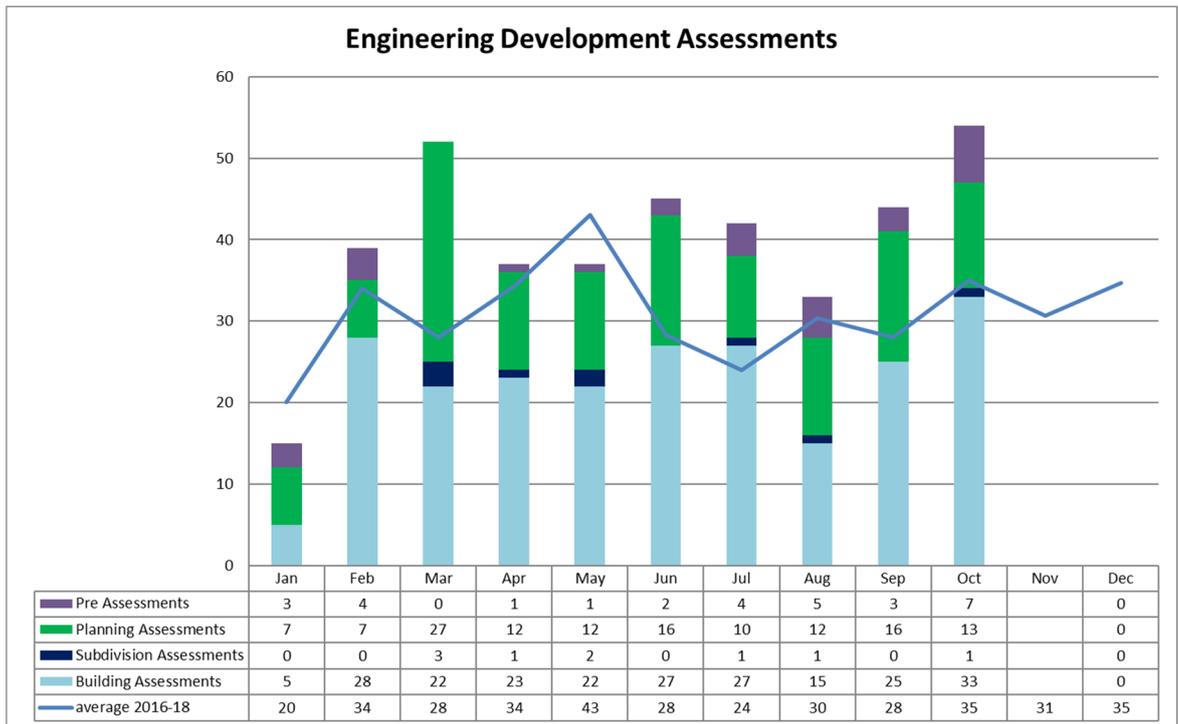
3.4. The following is a summary of the projects capitalised in the period since the last report until 31 October

Number of projects capitalised in period	15
Total value of capitalisations in period	\$0.695M
Total value of Works in Progress (WIP) as at 31 October	\$12.5M
Donated Asset Capitalised (Subdivisions) in October	\$0
Number of projects awaiting capitalisation next period	18

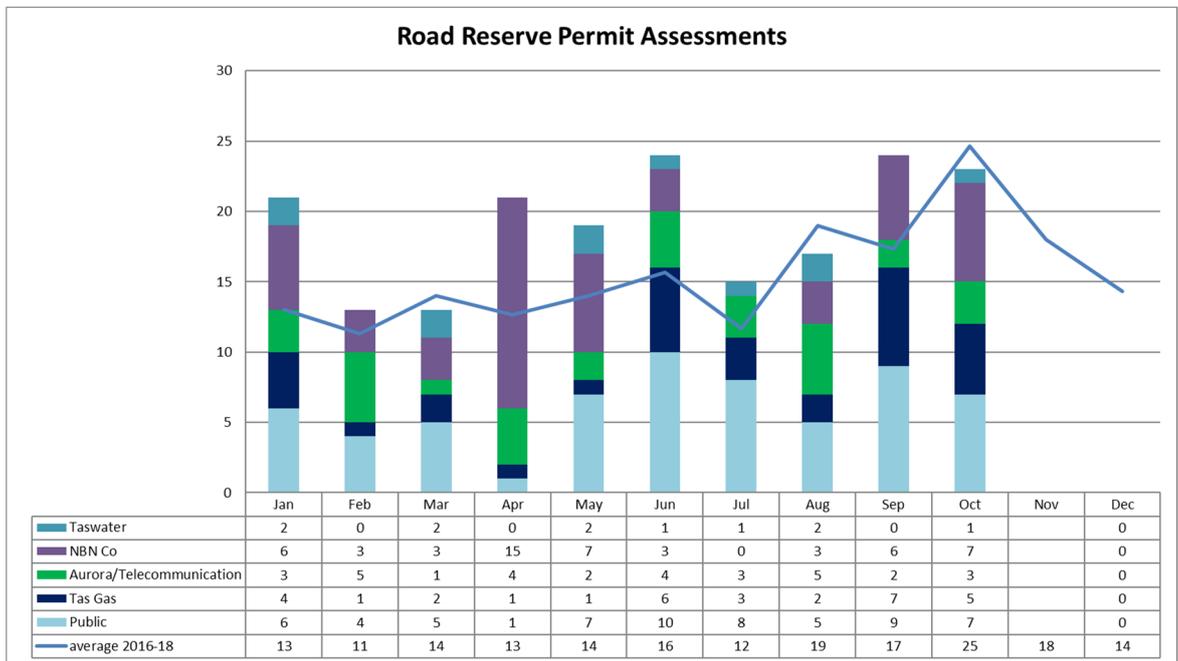
3.5. The following graph details the National Heavy Vehicle Regulator Assessments that have been issued this year compared to previous years:



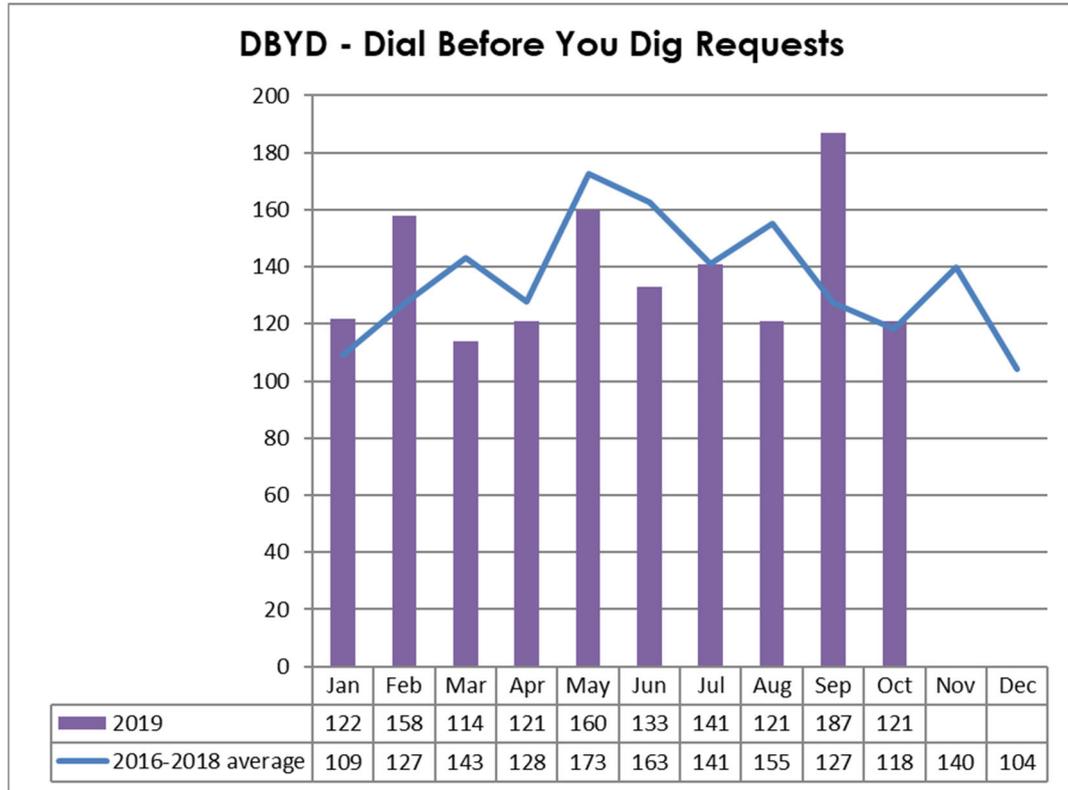
3.6. The following graph details the Engineering Assessments for Development Applications that were completed this year compared to previous years:



3.7. The following graph details the Road Reserve Permit Assessments that were completed this year compared to previous years.



3.8. The following graph details the Dial Before You Dig requests that have been processed this year compared to previous years:



**4. Operational Contracts**

4.1. The following table details the contracts managed within the Infrastructure and Works Department that have been extended this financial year:

Contract	Contract Period	Extension Options	\$ Value (Excluding GST)	Contractor
Contract 1314 - Supply & Delivery of Pre-mixed Concrete	1/07/2019 option 1+1	The original contract signed in June 2017 was for a 12 month period and had an option for two 12 month extensions. Further to a review the option for the second 12 month extension was accepted.	Schedule of Rates (estimated value \$52,700pa)	Boral Construction Materials
Contract – 1320 - Weed Control	1/07/2019 option 1+1	The original contract signed in June 2018 was for a 12 month period and had an option for two 12 month extensions. Further to a review the option for the second 12 month extension was accepted.	\$107,180 per annum	Steeds Weeds Solution
Contract – 1321 - Roadside Mowing	1/07/2019 option 1+1	The original contract signed in June 2018 was for a 12 month period and had an option for two 12 month extensions. Further to a review the option for the second 12 month extension was accepted.	\$65,250 per annum	Mareeba Trust

## 5. Civil Works and Stormwater Maintenance

5.1. Maintenance in accordance with the Service Level Document, undertaken in October and November included:

- Various footpath repairs identified from inspections
- Maintenance of various stormwater pits
- Removing a collapsed and redundant water main from a council land parcel on Palooa Road, which was causing a hazard. The assets and land were not transferred to Taswater and Taswater have declined to take over the land now.

5.2. In December and January, it is anticipated that civil works and stormwater maintenance works will include:

- Urban road patching in East Devonport
- Various footpath repairs identified from inspections

## 6. Parks and Reserves Maintenance

6.1. Maintenance in accordance with the Service Level Document, undertaken in October and November included:

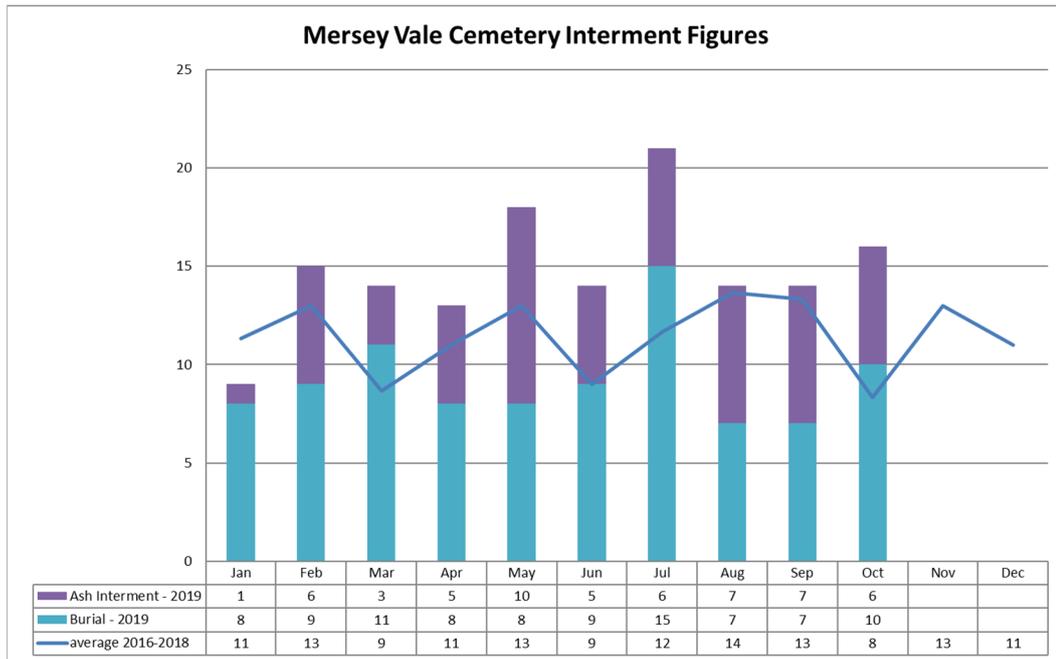
- Seven trees were removed and three were trimmed at 54 Caroline Street. The work was opposed by some adjacent residents. However, the trees removed were in poor health and the residential subdivision on the former reservoir site adds considerable cost and risk to this work in future. The site will be replanted with smaller species in Autumn 2020.
- Work to remove plants from the Formby Road garden bed next to the eastern lane has been completed. Problematic species were removed earlier in the year and the remainder were removed in preparation for replanting in Autumn 2020. Plants have been ordered in preparation for this work.
- Activation of irrigation at Mersey Bluff, Victoria Parade and Wheeler Street East Devonport.
- Preparation of the Cenotaph for Remembrance Day.
- Inspections and maintenance on fire trails and fire breaks.



6.2. In December and January, it is anticipated that parks and reserves maintenance works will include:

- Watering and irrigation
- Maintenance of summer sports grounds, including preparation for the Devonport carnival.
- Mowing
- Reinstatement of Mersey Vale Memorial Park around the children's pavilion

6.3. Mersey Vale Memorial Park interment figures for last year compared to previous years are as follows:



## 7. Building and Facilities Maintenance

7.1. Maintenance in accordance with the Service Level Document, undertaken in October and November included:

- Installation of the Christmas Tree in Rooke Street mall
- Internal and external painting at Devonport Surf Club and Drift
- Staining of BBQ shelters at Reg Hope Park and Pioneer Park
- Replacement of the petrol bowser at Pioneer Park. The previous bowser, which was from a service station had been vandalised and parts were very expensive as they are a collector's item.

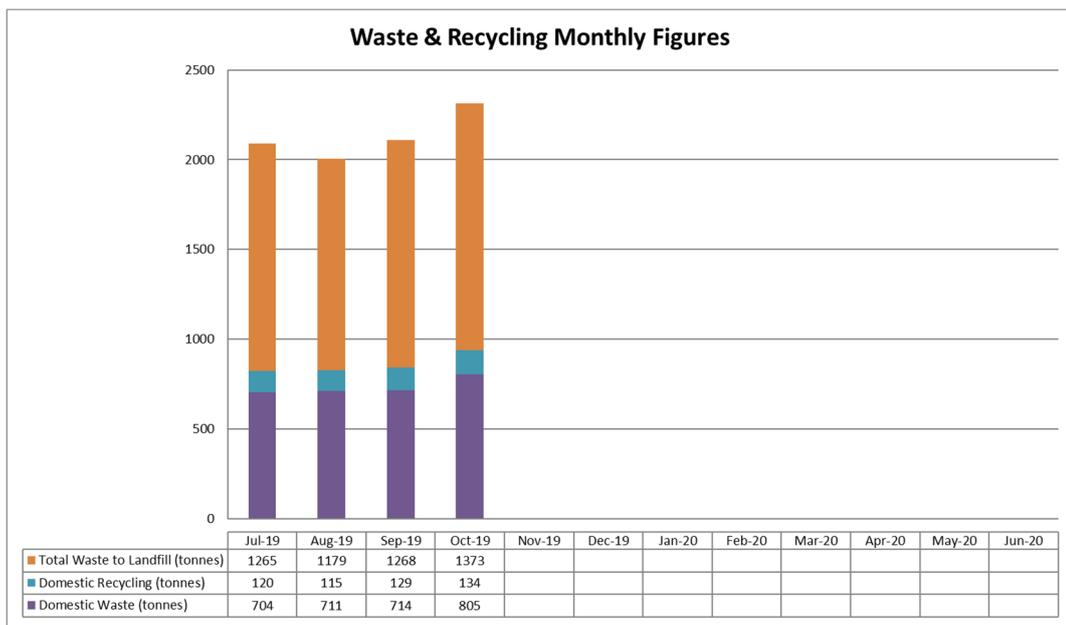


7.2. In December and January, it is anticipated that building and facilities maintenance works will include:

- Sand and reseal stadium floors
- Annual pest control
- Staining weatherboards at Devonport Surf Club
- Staining BBQ shelters at Bluff Plaza

## 8. Waste Management Operations

8.1. Waste Management Services were conducted in accordance with the Service Level Document during October and November. The following graph details the volumes of waste and recycling from the domestic collection services and the total volume of waste to landfill from the Spreyton Waste Transfer Station.



- 8.2. The following table details the monthly figures for the Spreyton Waste Transfer Station:

Item	Oct 19	19/20 YTD	18/19 Total	17/18 Total
Asbestos – large loads (Tonnes)	1.1	3.02	9.16	9.94
Asbestos – small loads (no.)	27	65	149	90
Mattresses (no.)	145	590	1,128	828
Vehicle Loads – up to 0.5m <sup>3</sup> (no.)	341	1467	5,688	5,117
Vehicle Loads – 0.5m <sup>3</sup> to 1.5m <sup>3</sup> (no.)	1426	5392	17,940	11,724
Vehicle Loads – 1.5m <sup>3</sup> to 2m <sup>3</sup> (no.)	175	648	3,135	6,380
DCC Garbage Trucks (Domestic & Commercial Collection Services) (tonnes)	797	2906	8,981	9,207
Steel Recycling (tonnes)	98	318	1,135	845
e-Waste (tonnes)	0	12	45	12
Tyres (no.)	72	195	439	348

- 8.3. 445 T of chipped green waste was transported from the Spreyton Waste Transfer Station to Dulverton for composting.

### COMMUNITY ENGAGEMENT

The information provided above details any issues relating to community engagement.

### FINANCIAL IMPLICATIONS

Any financial or budgetary implications relating to matters discussed in this report will be separately reported to Council.

### RISK IMPLICATIONS

Any specific risk implications have been outlined in the discussion above. Any specific issue that may result in any form of risk to Council is likely to be the subject of a separate report to Council.

### CONCLUSION

This report is provided for information purposes only and to allow Council to be updated on activities undertaken by the Infrastructure and Works Department.

### ATTACHMENTS

Nil

### RECOMMENDATION

That it be recommended to Council that the Infrastructure and Works report be received and noted.

Author: Position:	Michael Williams Infrastructure & Works Manager	Endorsed By: Position:	Matthew Atkins Acting General Manager
----------------------	----------------------------------------------------	---------------------------	------------------------------------------

## 7.0 CLOSURE

There being no further business the Chairperson declared the meeting closed at      pm.

---