

VML:CD
Vicki Lukritz
3810 6221

17 May 2018

Sir/Madam

Notice is hereby given that a Meeting of the **INFRASTRUCTURE AND EMERGENCY MANAGEMENT COMMITTEE** is to be held in the Council Chambers on the 2nd Floor of the Council Administration Building, 45 Roderick Street, Ipswich commencing at **8.30 am** on **Monday, 21 May 2018.**

<u>MEMBERS OF THE INFRASTRUCTURE AND EMERGENCY MANAGEMENT COMMITTEE</u>	
Councillor Bromage (Chairperson) Councillor Silver (Deputy Chairperson)	Councillor Councillor Wendt (Acting Mayor) Councillor Morrison Councillor Ireland

Yours faithfully

ACTING CHIEF EXECUTIVE OFFICER

INFRASTRUCTURE AND EMERGENCY MANAGEMENT COMMITTEE

AGENDA

8.30am on **Monday**, 21 May 2018

Council Chambers

Item No.	Item Title	Officer
1	Infrastructure Delivery Progress as at 4 May 2018	CFM
2	TMR/Local Government Cost Sharing Arrangement	IPM
3	Update to the Local Disaster Management Recovery and Isolated Community Sub Plans	PO(EM)

** Item includes confidential papers

INFRASTRUCTURE AND EMERGENCY MANAGEMENT COMMITTEE NO. 2018(05)

21 MAY 2018

AGENDA

1. **INFRASTRUCTURE DELIVERY PROGRESS AS AT 4 MAY 2018**

With reference to a report by the Commercial Finance Manager dated 4 May 2018 concerning the delivery of the 2017–2018 Infrastructure Services Capital Works Portfolio.

RECOMMENDATION

That the report be received and the contents noted.

2. **TMR/LOCAL GOVERNMENT COST SHARING ARRANGEMENT**

With reference to a report by the Infrastructure Planning Manager dated 3 May 2018 concerning the Cost Sharing Arrangement, developed by the Local Government Association of Queensland and the Department of Transport and Main Roads, which was executed in October 2017.

RECOMMENDATION

That the report be received and the contents noted.

3. **UPDATE TO THE LOCAL DISASTER MANAGEMENT RECOVERY AND ISOLATED COMMUNITY SUB PLANS**

With reference to a report by the Principal Officer (Emergency Management) dated 4 May 2018 concerning review of the Local Disaster Management Isolated Community Sub Plans

RECOMMENDATION

- A. That the Local Disaster Management Sub Plans, as detailed in Attachments B through to J, of the report by the Principal Officer (Emergency Management) dated 4 May 2018, be adopted.
- B. That the Local Disaster Management Sub Plans as detailed in Attachments B through to J, of the report by the Principal Officer (Emergency Management) dated 4 May 2018, be provided to the Local Disaster Management Group for review.

- C. That the Chief Operating Officer (Works, Parks and Recreation), in consultation with the Mayor and the Chairperson of Infrastructure and Emergency Management Committee, be authorised to make any minor amendments deemed necessary on the basis of comment received from the Local Disaster Management Group.
-

** Item includes confidential papers

and any other items as considered necessary.

Infrastructure and Emergency Management Committee	
Mtg Date: 21.05.18	OAR: YES
Authorisation: Charlie Dill	

4 May 2018

MEMORANDUM

TO: CHIEF OPERATING OFFICER (INFRASTRUCTURE SERVICES)

FROM: COMMERCIAL FINANCE MANAGER

RE: INFRASTRUCTURE DELIVERY PROGRESS AS AT 4 MAY 2018

INTRODUCTION:

This is a report by the Commercial Finance Manager dated 4 May 2018 concerning the delivery of the 2017-2018 Infrastructure Services Capital Works Portfolio.

BACKGROUND:

The Infrastructure Services (IS) Department is responsible for the planning and delivery of the city's transport and municipal capital infrastructure. The Infrastructure Services Monthly Activity Report (Attachment A) is for the month of April as of 4 May 2018.

CONCLUSION:

The Infrastructure Services Monthly Activity Report provides a status on the delivery of the Capital Works Portfolio, progress update on key capital projects and community affairs.

ATTACHMENT:

Name of Attachment	Attachment
Infrastructure Services Monthly Activity Report - April 2018	Attachment A

RECOMMENDATION:

That the report be received and the contents noted.

David Hillman
COMMERCIAL FINANCE MANAGER

I concur with the recommendation/s contained in this report.

Charlie Dill
CHIEF OPERATING OFFICER (INFRASTRUCTURE SERVICES)



Infrastructure Services

Monthly Activity Report
April 2018
Presented by Charlie Dill





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Glossary of Terms

Term / Acronym	Description
CO	Financial carry-over from previous financial year
EOFY	End of Financial Year
FFC	Forecast Final Cost
FY	Financial Year
FYTD	Financial Year to Date
IS	Infrastructure Services Department

Introduction

Council's Department of Infrastructure Services (IS) is the lead service provider in the Ipswich community for the planning and delivery of the city's transport and municipal capital infrastructure. This includes Strategic Transport and Investment Planning, Program Development, Traffic Engineering & Road Safety Advice, Program Management, Design and Survey, Procurement, Project Management and Construction.

The IS Department's activities are delivered through its four (4) Branches:

- Infrastructure Planning, comprising of:
 - Transport Planning
 - Infrastructure Planning
 - Management of Customer Service Requests related to transport, traffic and local drainage
 - Manage and operate the traffic signal network and intelligent transport systems
- Program Management & Technical Services, comprising of:
 - Program Management and Coordination Section (Pre-Tender Management)
 - Technical Services Section (Design, Survey, Geotech)
- Construction, comprising of:
 - Transport Delivery
 - Municipal Works Delivery (Open Space, Drainage, Facilities, Divisional works)
- Business Support
 - Cost Management
 - Procurement
 - Performance and Control

This monthly activity report, dated 4 May 2018, provides a status of Infrastructure Services key activities for the 2017-2018 Infrastructure Services Capital Works Portfolio.

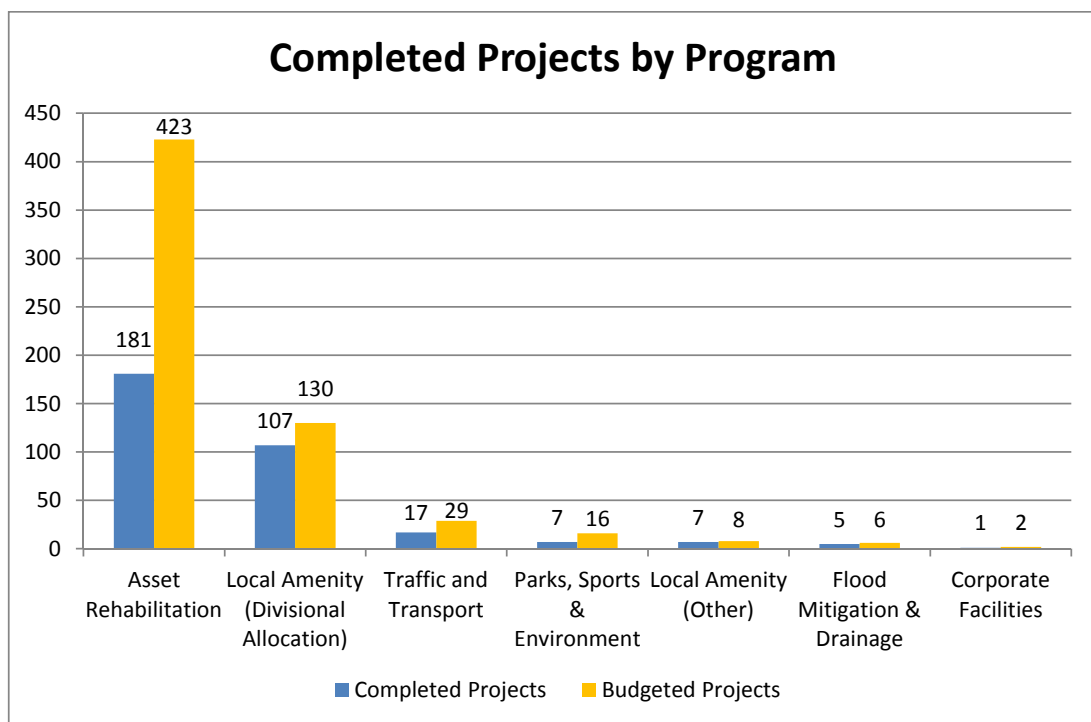
“Trusted Advisor to Council for Infrastructure Planning, Design and Delivery”

Capital Portfolio

Progress Summary

The 2017-2018 Portfolio performed well against the Master Schedule for the period. IS has completed 325 projects financial year to date out of approximately 614 construction projects. It should be noted that this includes 331 reseal and rehab road projects of which there are 197 reseal projects remaining to be completed.

Current forecast indicate that there are 52 'construction' projects to carry over into 2018-2019 FY of which 30 of these are reseal projects.



Cost Summary

The Council Approved Budget (BAv2) for IS Deliverable component of the 2017-2018 Capital Works Portfolio is \$81.6 million with progress tracking well against budget.

Planning

The recommended actions outlined in iGO continue to be progressed; including strategy and policy development, investment and corridor planning, grant applications, project scoping and feasibility and provision of transport and traffic advice.

Norman Street Bridge Preliminary Business Case – In Progress (iGO Action R9). The Preliminary Business Case to “Address Congestion, Cross River Connectivity and Network Resilience in the Ipswich City Centre” has commenced. The options prioritisation workshop to prioritise the options identified in the Strategic Business Case is complete. The high priority options have undergone further technical analysis and a preferred option has been identified to take to the Detailed Business Case. A risk assessment workshop on the preferred option will be held with the Stakeholder Working Group in mid-May.

10 Year Transport Infrastructure Investment Plan (10 Year TIIP) – In Progress (iGO Action D8). The 10 Year TIIP provides intelligence for logical and effective program management and the delivery of major transport projects including effective planning, design, procurement, pre-construction and construction processes. The annual revision of the plan has commenced and will be further consulted on with Council’s Executive Team prior to being reported to the Infrastructure and Emergency Management Committee. The 10 Year TIIP will be completed once the 2018-2019 capital works portfolio has been finalised.

Springfield Parkway Planning Study – In progress (iGO Action R2).). A road corridor planning study for the upgrade of Springfield Parkway between Old Logan Road and the Centenary Highway to four (4) lanes. The consultant has completed the site review and assessment of intersection requirements. A workshop to discuss and identify the preferred road alignment and configuration is completed with concept plans of the preferred option now being developed.


Goodna Roundabout Planning Study – In progress (iGO Action R2). Project analyses potential short to long term upgrade options which improve the intersection’s traffic operations during peak hours (queuing and delays) and improves pedestrian safety and mobility when crossing approach roads of the intersection. Consultation with the Divisional Councillor will commence in the coming months.

iGO Public Transport Advocacy & Action Plan – In progress (iGO Action PT7). This project will identify short, medium and long term improvements to the future public transport system and advocacy strategies. A Project Advisory Group meeting was held on 9 April 2018 to discuss the plan’s draft actions. The document is now being prepared and will be circulated for internal officer comments in the coming month.

iGO Parking Pricing Strategy – Commencement pending for 2018 -2019 (iGO Action P6). The project will identify short, medium and long term pricing actions; technologies, zones, pricing models, etc. to effectively manage short and long stay parking arrangement in the Ipswich City Centre.

iGO Active Transport Action Plan Implementation – In progress (iGO ATAP Action 1.1, 1.2 and 2.2). Concept planning of the 2018-2019 projects is in progress.

TMR Cycle Network Local Government Grants – In progress (iGO ATAP Action 1.3). Successful applications will be announced on 1 July 2018.



iGO Active Transport Way Finding Strategy – Commenced (iGO Action AT5 and iGO ATAP Action 6.1). Project involves the development of an active transport signage strategy and signage design guide. Development of the strategy and design manual is currently in progress.

DTMR Ipswich CBD Public Transport Study – In Progress. Project is a joint study between the Department of Transport and Main Roads and Council which will determine current and future public transport demands and infrastructure requirements within the Ipswich Central Business District. A SWOT analysis workshop was held on 10 April 2018 and the second Technical Working Group is scheduled for 14 May 2018.

iGO Intelligent Transport Systems Action Plan – Commenced (iGO Action R5). Project involves the development of a strategic plan for road based technologies. Two Stakeholder Working Groups have been held to discuss the vision, objectives and aspirations of the document. The project is to be delivered by the end of August 2018.

Deebing Creek Bikeway Corridor Plan – Commenced (iGO Action AT9 and iGO ATAP Action 1.4). A bikeway corridor planning study for Deebing Creek between Carr St (Ipswich) and the Cunningham Highway (Yamanto/ Flinders View) further building upon the work completed in the WPR & IS Deebing Creek Corridor Plan. The project inception meeting was held on 19 April 2018.

2017-2018 Strategic Intersection Counts – Commenced (iGO Action TDM4). Council monitor traffic volumes at key intersections within the Ipswich LGA to inform transport planning, traffic operations and development control activities. Procurement of a consultant to undertake the program has commenced.

Community

- Land acquisition negotiations are ongoing for the following projects:
 - Marsden Parade realignment
 - Brisbane Street and
 - Old Toowoomba Road.
- Ongoing consultation efforts to support the following projects:
 - Brisbane Street Interim Upgrade
 - Old Toowoomba Road
 - Goodna Creek Bikeway
 - Springfield Library
 - Rosewood Library
 - Resurfacing works across the City
 - Hunter Street
 - Planning for consultation for: Redbank Plains Road Stage 3, Cole Street and Brisbane Road.

Opening/Media Events

No media events or project openings to report.

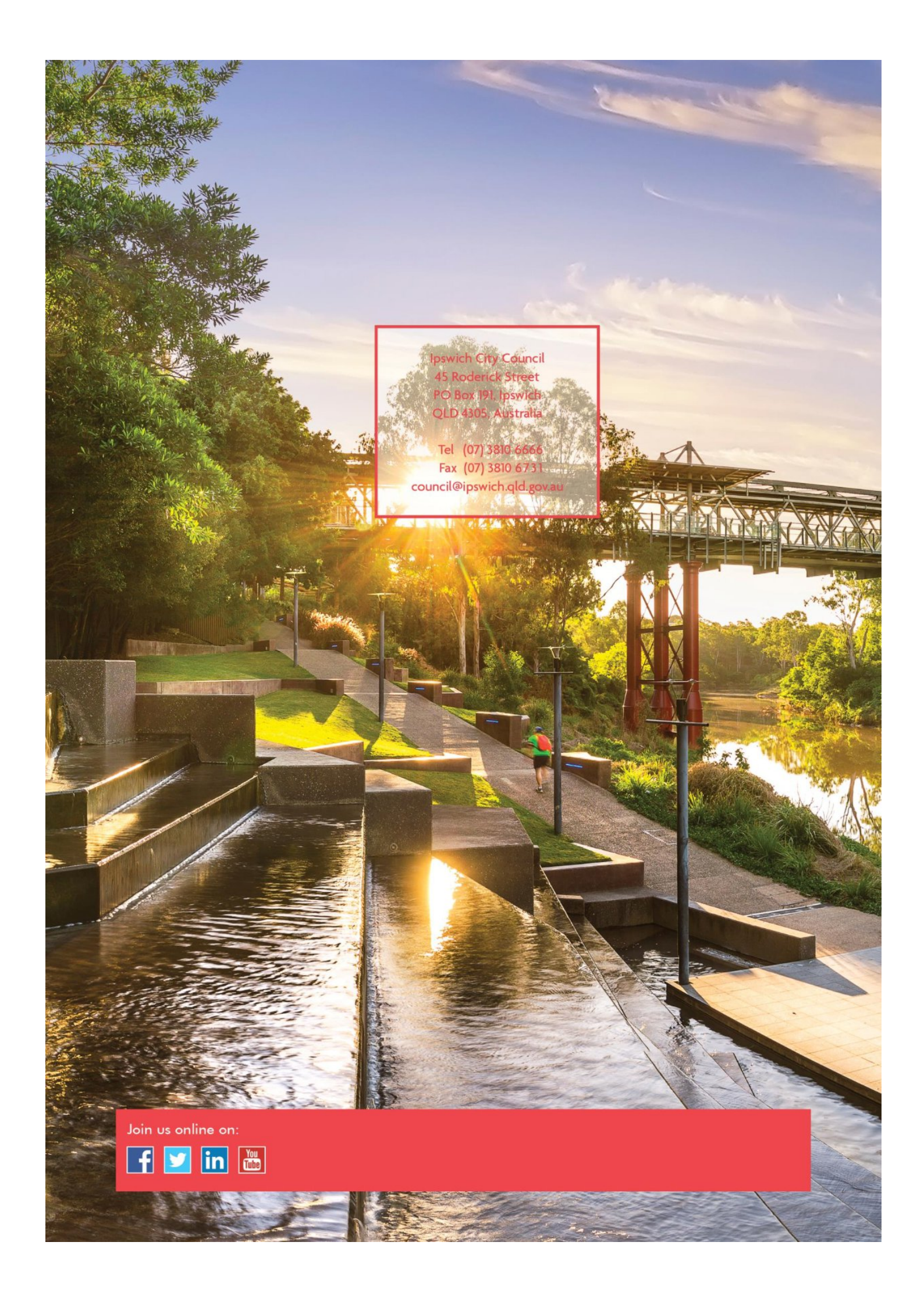
Media Releases/Articles Published

No media releases or articles to report.

Schedule

Key Capital Project Updates

- **Springfield Central Library** – Fit-out works are continuing on site, both internally and externally to the building. The Contractor has issued an Extension of Time (EOT) claim which is under review by IS. Current EOT revised completion date is early July 2018. Discussions are also underway between IS, the contractor and Stakeholders for early access to Level 1 to enable Council to undertake the library setup and mobilisation works prior to the full completion of the Contractor works to mitigate any potential delay.
- **Rosewood Library** – Detailed Design is continuing, with the Development Application lodged and the 80% detailed design package due early May 2018. Procurement for the building works will commence in June 2018.
- **Road Resurfacing Program** – Scoping of all Divisions are complete. Construction works are complete in Divisions 9 and 10 (Package 1). Construction works are underway for Divisions 8, 7, 6, 5 and 4. Divisions 8 and 7 are scheduled for completion late May 2018. Division 3 will commence early May 2018. Quotes for Divisions 1, 2 and 10 (Package 2) are under review. The three (3) additional R2R mill and fill projects are out to tender through Local Buy and closes mid-May 2018.
- **Kerb & Channel (K&C) Program** – The 2017-2018 Program is complete. Forward design for the 2018-2019 K&C projects are underway with the majority of the designs to be completed by June 2018. This will allow construction to commence early in the 2018-2019 financial year.
- **Redbank Plains Stage 3** – Design kick-off meeting was held on 18 April 2018 with detail design now underway.
- **Old Toowoomba Road, Leichhardt** – Property resumptions to be finalised. Relocation of major services scheduled to commence in May 2018. Contract has been awarded for the demolition of three (3) houses with works to commence mid-May 2018. Procurement for the civil construction works will commence in June 2018.
- **Brisbane Street, West Ipswich** – Property resumptions to be finalised. Relocation of major services progressing. Procurement for the civil construction works will commence late May 2018.
- **Blackstone/South Station Roads – Intersection upgrade** – Service relocations are nearing completion for all accessible areas (property acquisition for remaining service relocations nearing completion). Procurement for the civil construction works will commence late May 2018.
- **Marsden Parade realignment** – Design progressing with 40% design review completed in April 2018. IS will finalise and award the proposal to identify extent of site contamination at the old service station including remediation options by mid-May 2018.



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Join us online on:



Infrastructure and Emergency Management Committee	
Mtg Date: 21.05.18	OAR: YES
Authorisation: Charlie Dill	

TD: TD
A4814992

3 May 2018

MEMORANDUM

TO: CHIEF OPERATING OFFICER (INFRASTRUCTURE SERVICES)
FROM: INFRASTRUCTURE PLANNING MANAGER
RE: TMR/LOCAL GOVERNMENT COST SHARING ARRANGEMENT

INTRODUCTION:

This is a report by the Infrastructure Planning Manager dated 3 May 2018 concerning the Cost Sharing Arrangement, developed by the Local Government Association of Queensland and the Department of Transport and Main Roads, which was executed in October 2017.

BACKGROUND:

Policies and practices related to cost-sharing arrangements between the Department of Transport and Main Roads (TMR) and local government have evolved over time through a long standing relationship that is based on trust and mutual understanding. In 2000, the then Department of Main Roads and the Local Government Association of Queensland (LGAQ) consolidated cost sharing policies and practices into a single, consistent, state-wide agreement. In 2015, LGAQ and TMR agreed that a review was warranted.

A Cost Sharing Arrangement document (CSA) is the result of a collaborative effort in undertaking this review and has involved staff from TMR and LGAQ, along with representatives from a select group of Queensland local governments (including Ipswich City Council). Following broad consultation across TMR and all local governments [refer Attachment A tabled at City Infrastructure and Emergency Management Committee Meeting November 2016] this CSA now confirms the collaborative approach for the establishment of cost sharing arrangements.

THE DOCUMENT:

The final CSA was signed off by LGAQ and TMR in October 2017 at the LGAQ Annual Conference. A copy has been included in Attachment B. The document provides a framework for the determination of agreements between local governments and their respective TMR District office. It places emphasis on planning and encourages negotiation at the local level.

The CSA is comprised of two parts:

Part 1 – A Memorandum of Understanding (MOU)

Establishes the guiding principles for the determination of the cost sharing arrangements.

Part 2 – Cost Sharing Modules

Contains modules that provide a starting point for (16) common activities where cost sharing arrangements are typically established between TMR and local governments.

There are many variations between the original 2000 version and the now adopted 2017 CSA. Below are some of the more significant changes in position, largely in local governments favour.

- TMR to pay 100% of street lighting costs (the 2000 agreement saw local government pay one third of costs for state-controlled roads)
- TMR pay a significant portion of maintenance costs for kerb and channel in urban areas (the 2000 agreement saw councils pay 100% of maintenance costs in urban areas)
- TMR to pay 100% of replacement costs of water main relocation regardless of age (the 2000 agreement saw councils pay in proportion to remaining useful life).

CONCLUSION:

Following a detailed review, LGAQ and TMR have produced and adopted a Cost Sharing Arrangement (CSA). This document, which comprises of a Memorandum of Understanding and supporting Modules, provides a framework for the determination of agreements between local governments and their respective TMR office.

ATTACHMENTS:

Name of Attachment	Attachment
Report from CI&EM Committee 2016 (11) regarding draft LGAQ/TMR Cost Sharing document	Attachment A
2017 TMR/Local Government Cost Sharing Arrangement	Attachment B

RECOMMENDATION:

That the report be received and the contents noted.

Tony Dileo

INFRASTRUCTURE PLANNING MANAGER

I concur with the recommendation contained in this report.

Charlie Dill

CHIEF OPERATING OFFICER (INFRASTRUCTURE SERVICES)

City Infrastructure & Emergency Management	
Mtg Date: 02.11.2016	OAR: YES
Authorisation: Charlie Dill	

TD:KP

<https://objprd.council.ipswich.qld.gov.au/id:A3834634/document/versions/latest>

20 October 2016

MEMORANDUM

TO: CHIEF OPERATING OFFICER (INFRASTRUCTURE SERVICES)

FROM: INFRASTRUCTURE PLANNING MANAGER

RE: DRAFT LGAQ/TMR COST-SHARING MEMORANDUM OF UNDERSTANDING CITYWIDE

INTRODUCTION:

This is a report by the Infrastructure Planning Manager dated 20 October 2016 concerning the recently released draft cost-sharing Memorandum of Understanding (MOU) developed by the Local Government Association of Queensland (LGAQ) and the Department of Transport and Main Roads (TMR).

BACKGROUND:

In 2000, LGAQ (on behalf of members) and TMR entered into an 'Agreement' for cost-sharing based on responsibilities within state-controlled roads. This cost-sharing Agreement is often referred to as the 'Blue Book'. It is viewed as 'unfair' by many urban Local Governments (LG's) because under the Agreement LG's are responsible for construction, maintenance and operation of many elements including:-

- parking lanes
- footpaths
- street furniture
- pedestrian facilities over and under state-controlled roads, etc.

In addition, the funding of:-

- 50% of pedestrian fences/barriers
- 33% of street lighting

During the period from 2009 to 2011, the LGAQ and TMR sought to negotiate a revised Agreement. However, this revised Agreement never proceeded to formal adoption. In Ipswich City Council's view, this document did not recognise or reflect the shift by the Department over the years from 'Main Roads' to 'Transport and Main Road'. That is, the Department now has the broader responsibility for all modes of transport including walking, cycling and public transport. Hence, in 2012 the following motion, moved by Ipswich City Council, was carried at the LGAQ Annual Conference:

'That the Local Government Association of Queensland place on hold the Draft 2011 LGAQ/TMR cost-sharing Agreement and seek further review and input from Local Government, particularly urban Councils'.

This successful motion ultimately prevented LGAQ from entering into the revised Agreement.

AGREEMENT REVIEW:

The LGAQ and TMR agreed in mid-2015 that a review of the cost-sharing Agreement protocol was warranted. To aid this review, a Steering Committee and Technical Working Group were established to guide the project. Council's Infrastructure Planning Manager, Tony Dileo, was invited by the LGAQ to be part of the Technical Working Group for this review. With oversight from the Steering Committee, the project has progressed the development of a Memorandum of Understanding (MOU) that reflects more contemporary arrangements. The draft MOU places emphasis on relevant parties (i.e. a council and its relevant TMR district) collaborating to identify, agree and document cost-sharing arrangements that are relevant to local circumstances.

Supporting the draft MOU is a series of draft Modules (referred to as Activities in the Blue Book) that provide an agreed position from a policy standpoint and form the basis for consultation and agreement between councils and TMRs. The draft Modules cover common areas typically requiring cost sharing arrangements and are intended to be part of a living document that can be updated by agreement throughout the life of the MOU, thus ensuring currency.

It is currently intended that the MOU will be formally signed by the LGAQ President (on behalf of local governments) and by the Minister for Main Roads, Road Safety and Ports, Minister for Energy, Biofuels and Water Supply, and the Minister for Transport and the Commonwealth Games (on behalf of TMR) in the first half of 2017.

CONSULTATION:

The Steering Committee has endorsed a draft of the MOU and the supporting Modules for consultation across councils and TMR (refer to Attachments A and B respectively). A document that explains the major differences between the 'Activities' contained in the 2000 cost-sharing Agreement (i.e. the Blue Book) and the draft supporting Modules is attached for reference (Attachment C).

The above mentioned documents have been distributed to key staff across Council and comments have been collated. The deadline for Council's response was 30 September 2016. Hence, Council's comment's (refer to Attachment D) have been provided to LGAQ subject to final endorsement by Council.

The Technical Working Group is due to meet to consider all feedback and suggest necessary amendment/changes for Steering Committee consideration.

CONCLUSION:

LGAQ and TMR have for some time been reviewing the protocol agreement for 'cost sharing based on responsibilities within state-controlled roads'. To this end, a draft LGAQ/TMR cost-sharing Memorandum of Understanding (MOU) and supporting Modules have now been produced and distributed to all Councils for review and comment.

The Steering Committee for the project has approved the release of these documents for consultation purpose only. LGAQ is undertaking consultation with Councils, while TMR will undertake its own internal consultation. As such, these documents are confidential and are not to be circulated outside of our Council.

Key staff across Council have reviewed the documents and comments have been collated. To meet LGAQ's consultation timeline Council's comments have been submitted subject to Council's final endorsement.

ATTACHMENT/S:

Name of Attachment	Attachment
Draft LGAQ/TMR Cost-sharing MOU	Attachment A
Draft LGAQ/TMR Cost-sharing Modules	Attachment B
LGAQ/TMR Cost-sharing Agreement Significant Variations between 2000 & Draft 2016	Attachment C
ICC Feedback on draft Cost-sharing MOU and Modules	Attachment D

RECOMMENDATION:

- A. That the report be received and the contents noted.
- B. That the feedback on the draft LGAQ/TMR Cost-sharing Memorandum of Understanding and Modules, as outlined in Attachment D of the report by the Infrastructure Planning Manager dated 20 October 2016, be approved and the Local Government Association of Queensland be notified accordingly.

Tony Dileo
INFRASTRUCTURE PLANNING MANAGER

I concur with the recommendation/s contained in this report.

Charlie Dill
CHIEF OPERATING OFFICER (INFRASTRUCTURE SERVICES)

The following report has been prepared by



Draft LGAQ / TMR Cost Sharing Modules

(For Statewide Stakeholder Input)

27 July 2016
PSA Reference: 0508



**Queensland
Government**

Document Control

Document: Draft LGAQ / TMR Cost-Sharing Modules (for Statewide Stakeholder input)

This document has been prepared for:



Queensland
Government



Contact: Scott Britton
Principal Advisor – Advocacy
Roads, Transport and Infrastructure
LOCAL GOVERNMENT ASSOCIATION OF QUEENSLAND

This document has been prepared by:



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Revision History

VERSION	DATE	DETAILS	AUTHOR	AUTHORISATION
1	20 June 2016	Draft for TWG Input	Philip Stay Kate Burke Tim Boxall	
2	27 July 2016	Minor changes in preparation for Statewide input	Philip Stay	

General Disclaimer

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DRAFT LGAQ / TMR COST SHARING MODULES

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Note: These draft Modules are being circulated to Local Governments and Transport and Main Roads Districts (TMR) across Queensland for their respective comments and input. Every effort has been made to simplify the existing cost sharing arrangements. It is recognised that there is diversity of interpretation on the previous 2000 Cost Sharing Agreement Guidelines and as such, there are a variety of precedents across the State. As such, there will be instances where these draft guidelines depart from accepted practice. Nevertheless, Local Governments and TMR Districts are invited to consider the broader State-wide application of these revised guidelines when providing feedback.

INTRODUCTION

The following draft Modules detail the cost sharing arrangement between the Local Government Association of Queensland (LGAQ) and the Department of Transport and Main Roads (TMR).

Overarching these Modules is a Memorandum of Understanding (MOU) which accompanies this document. The MOU clearly articulates the principles underlying the relationship between local governments and TMR Districts across Queensland.

These draft Modules were prepared following a Technical Working Group workshop held in Brisbane in October 2015. Subsequent discussions by members of the Technical Working Group and Steering Committee have further refined these Modules to a stage where they can now be circulated to local governments and TMR Districts across the State for feedback and input.

MODULE 1: TRAFFIC LANES

1.1 Scope

This Module sets out the responsibilities for the planning, construction, maintenance and ownership of traffic lanes on the State-controlled Road (SCR) corridors (including National Highways but excluding Motorways).

The road pavement along a SCR corridor functions as a multi-modal transport conduit ensuring private vehicles, freight vehicles, buses, coaches, cyclists, other road based transport and pedestrians can each co-exist and operate safely and efficiently with other transport modes.

For the purposes of simplifying this cost sharing arrangement, the road pavement will only be referred to as 'traffic lanes' and 'permanent parking areas'. As there is usually no provision for parking on rural open-road and highway situations (i.e. posted speed 100kms / hr or greater), this demarcation between traffic lanes and permanent parking areas applies only to urban areas and to a much lesser extent, outer urban areas.

Traffic lanes are lanes catering for moving traffic. Traffic lanes include through traffic lanes, bus lanes, cycle lanes, clearways, auxiliary lanes, turning lanes, overtaking lanes, indented bus bays, and shoulders. Shoulders are discussed further in Module 2 and are included in this module as they play an important role in the safety of vehicle movements using the through traffic lanes.

Permanent parking areas serve no purpose other than providing parking for properties fronting the SCR. Permanent parking areas are only found in urban environments and do not exist on rural open-roads. Permanent parking areas include parallel parking bays, median parking bays, angled parking bays and roadside standing areas for freight / longer vehicles. As detailed in Module 3, parallel parking areas along congested urban arterials can sometimes operate as a clearway during peak periods. In these cases where the parking lane caters for through movements, albeit on a part-time basis, these lanes are considered to be traffic lanes rather than permanent parking areas.

Figures 1.1 to 1.3 illustrate the typical demarcations between traffic lanes and permanent parking areas in urban areas. To assist with interpreting the demarcation, areas coloured yellow are pavements that can be classified as traffic lanes. Areas of pavement without colour are permanent parking areas.

Typically, in the urban areas of cities and townships, there is kerb and channel on both sides of the carriageway and the carriageway fulfils many transport related functions. Figure 1.1 illustrates an application where although a road has parallel parking lanes on both sides of the carriageway, the utilisation of one side as a clearway during peak periods results in that parking lane being classified as a traffic lane. Alternatively, as the opposite side of the road is only used for parking, the width of the parking bay (i.e. 2.5 metres out from the kerb and channel) is classified as a permanent parking area.

Figure 1.2 applies to an outer urban arterial / State highway. Whilst still being located within the built-up area of a city or township, there is not always kerb and channel constructed. Here the shoulder (which is also used by cyclists) is classified as a traffic lane, while the pavement on the opposite side does not cater for moving traffic and as such is classified as a permanent parking area.

There are many SCRs running through the centre of regional cities and townships. Many have wide road reserves, with pavement seals significantly wider than required for traffic lanes. Generally, the non-trafficked areas of these wider pavements are used for parking (parallel, angled, median), or standing areas for multi-combination vehicles including heavy, freight and car / caravan combinations. These 'other' areas of pavement do not cater for moving traffic and for the purpose of this cost sharing arrangement, these areas are classified as permanent parking areas. These areas are also discussed in detail in Module 3 – Parking.

Figure 1.3 provides illustrations of SCR main street traffic lanes through regional cities and townships. In these situations, traffic lanes are those lanes that are carrying through traffic. In acknowledging that the road shoulder plays a role in providing safe travel for through traffic including cycles, the traffic lanes include an

additional 1.0 metre on the kerb-side of each carriageway where there is no dedicated cycle lane. Where a cycle lane exists, the actual width of the cycle lane will apply.

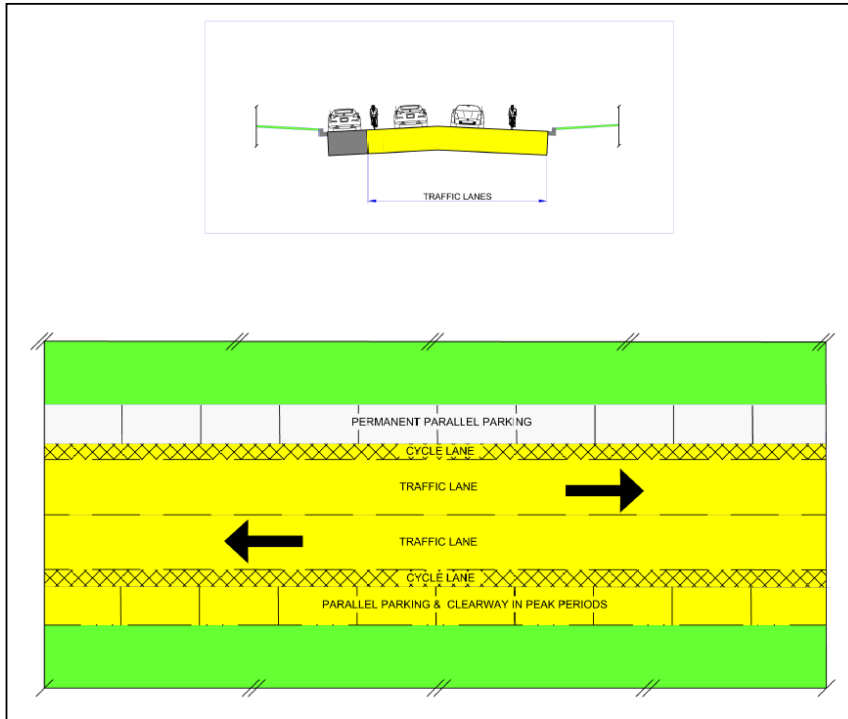


Figure 1.1: Traffic Lanes along Urban Arterials

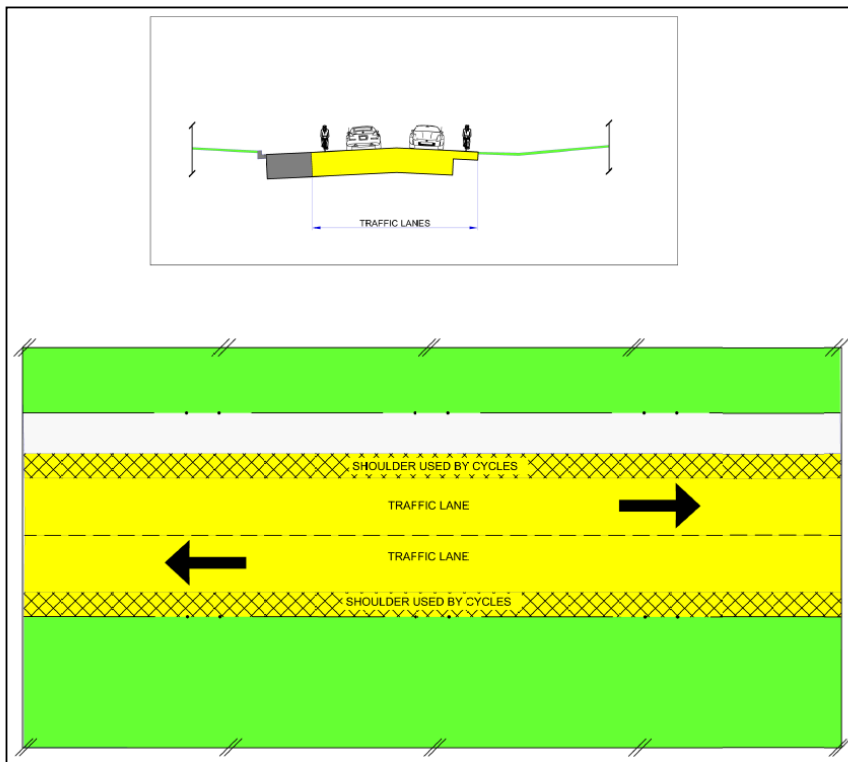


Figure 2: Traffic Lanes along Outer Urban Arterials

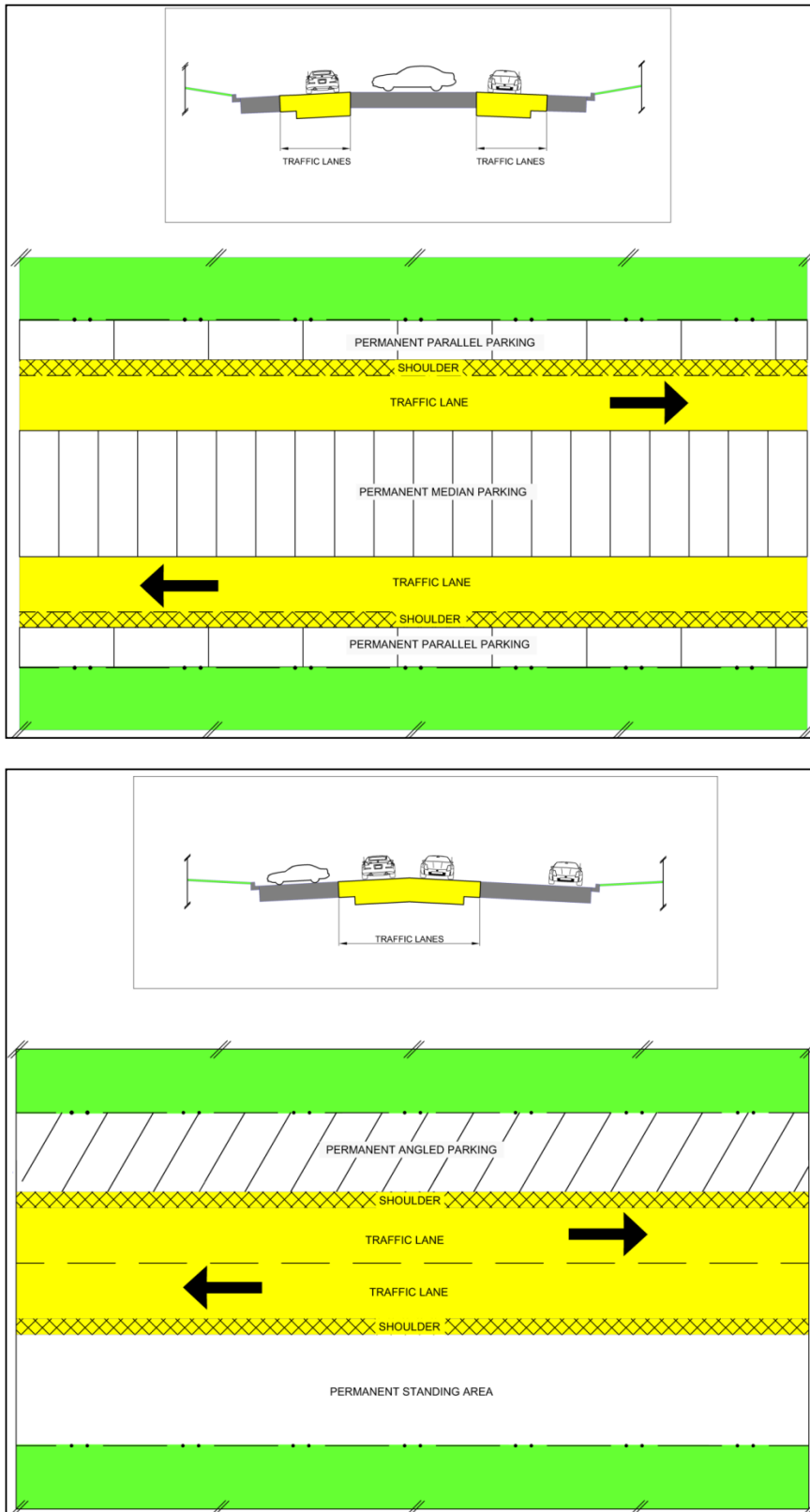


Figure 1.3: Wide Road Reserves in Regional Cities and Townships

1.2 Planning, Design and Construction

TMR as the proponent is responsible for the planning, design, construction and funding of the construction / rehabilitation of the traffic lanes. Generally, TMR will construct / rehabilitate a width and depth of pavement that will service the forecast traffic volumes over the design life of the pavement.

In urban areas where kerb and channel defines the width of the traffic lanes, it is usual that TMR will construct a uniform depth pavement from kerb to kerb so that pavement adjacent to the kerb could be used for not only parking or cycles, but could also operate as a traffic lane in the future e.g. clearway. In this type of application, TMR would be responsible for the full cost of pavement construction / rehabilitation.

In urban areas where there is no kerb and channel and no demand for an additional traffic lane, it is TMR's prerogative as to whether it will construct the pavement wider than the required shoulder. Where TMR determines there is no traffic requirement for additional width of the pavement but the local government would like to provide permanent sealed parking, the local government is to contribute to the cost of the additional pavement.

Similarly, on roads with existing kerb and channel, should a local government request the existing kerb and channel be set back and an additional width of pavement be provided for permanent parking, the local government is to contribute to the additional construction cost, including relocation of kerb and channel and any public utility relocations.

1.3 Maintenance and Ownership

Generally, any routine maintenance, including reseals of the traffic lanes (and shoulders), will be the responsibility of TMR. The Road Maintenance Performance Contract (RMPC) sets the intervention levels for each item of maintenance.

For permanent parking areas outside of traffic lanes, the funding of maintenance for these areas will be the responsibility of the local government.

In the case of major reseals, it is not efficient for both the local government and TMR District to only undertake reseals of their areas of pavement. Rather, there needs to be coordination between both entities so that the reseal of all areas of responsibility are delivered cost effectively and at the same time.

All pavement in the SCR corridor is owned by TMR, irrespective of whether it is a traffic lane or a permanent parking area.

MODULE 2: ROAD SHOULDERS

2.1 Scope

In rural open-road applications, the shoulder is an important component of the carriageway. Not only does the shoulder reduce edge wear and moisture ingress into the pavement, but it provides safety to road users through separation of opposing traffic flows, as well as reducing the level of off-road crashes. It also provides separation and sealed surfaces for cyclists and breakdowns.

In most situations, the rural open-road links of SCR highways and roads will not have on-road parking and as such, the full width of pavement is classified as traffic lanes, irrespective of pavement depth. Figure 2.1 illustrates typical traffic lanes and shoulders.

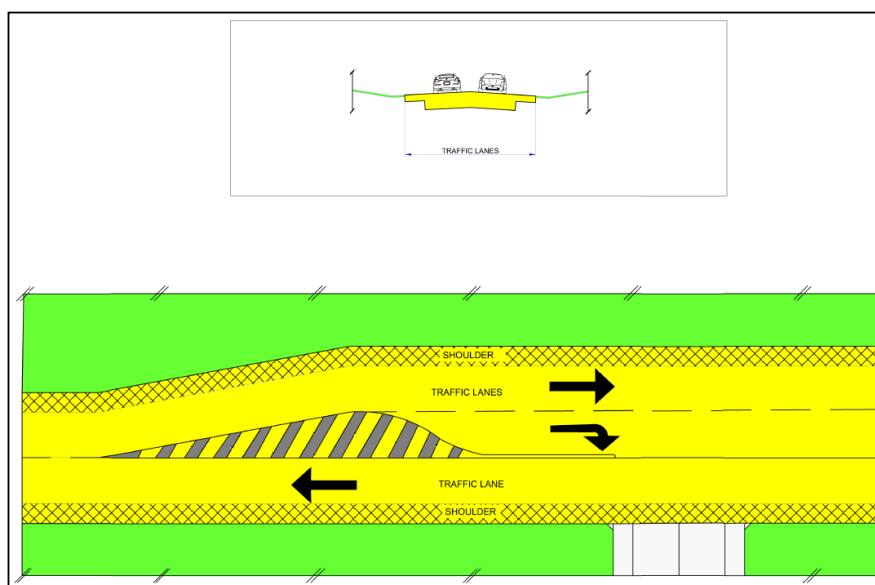


Figure 2.1: Shoulders along Rural Open-roads

For the purposes of this arrangement, the actual width of the shoulder will apply. However, for pavements adjacent to permanent parking bays, the minimum width of the shoulder is to be 1.0 metre (assuming a 2.5 metre width of parking bay and a 3.5 metre width of lane).

2.2 Planning Design and Construction

TMR is responsible for the planning, design and construction of shoulders on all SCRs. At TMR's discretion, the depth of the shoulder pavement may differ to that of the through traffic lanes. In urban areas where a local government requires a wider shoulder than proposed for the purposes of permanent parking, the local government is to contribute to the additional costs of extending the shoulder pavement.

2.3 Maintenance and Ownership

TMR is responsible for the routine maintenance (including reseals) of all SCR road shoulders, whether sealed or unsealed. The Road Maintenance Performance Contract (RMPC) sets the intervention levels for shoulder maintenance. Maintenance funding for 'wide' shoulders that are being used for permanent parking is the responsibility of the local government.

TMR owns all pavement (including shoulders) within the SCR corridor.

MODULE 3: PARKING

3.1 Scope

The provision of parking only applies to SCR's through urban areas. Module 1 outlines the demarcation between traffic lanes, which are provided by TMR to cater for through movements, and localised on-road parking, which is generally provided to meet a local amenity issue.

Module 1 uses the terminology of permanent parking areas. These paved areas within a SCR carriageway serve no other purpose than providing parking for properties fronting the road. Permanent parking areas include parallel parking bays, median parking bays, angled parking bays and roadside standing areas for freight and longer vehicles.

Not all parking along a SCR is classified as permanent parking. As detailed in Module 1, parallel parking areas along congested urban arterials can sometimes operate as a Clearway during peak periods. In cases where the parking lane caters for through movements, albeit on a part-time basis, these lanes are considered to be traffic lanes rather than permanent parking areas. Further, there could be other priority uses in the future, which would see the conversion of this permanent parking into a cycle lane, breakdown lane, clearway or the like.

Hence, this Module only applies to those 'other' areas of sealed pavement, which are outside the definition of traffic lanes, and which are used solely for parking purposes. These areas can be used as both formal and informal standing areas for heavy freight vehicles and car / caravan combinations, or structured angled, median or parallel parking.

This Module also includes park'n'ride for commuters which are increasingly being constructed on the fringes or outskirts of built-up areas.

3.2 Planning Design and Construction

TMR is responsible for the planning, design and construction of traffic lanes. Where the outer lane serves a dual role of catering for both through movements and parking, TMR will meet the full cost of construction.

Should a local government require additional parking, standing areas or park'n'ride along the SCR and where that area cannot be classified as traffic lanes, the local government is to contribute to the additional costs of constructing these permanent parking areas.

3.3 Maintenance and Ownership

The maintenance funding for these sealed (and unsealed) pavements being used as permanent parking areas is the responsibility of the local government. This includes both routine maintenance, reseals and rehabilitation of the pavement.

All infrastructure within the SCR is owned by TMR, even though the construction and maintenance of the permanent parking area is funded by the local government.

MODULE 4: CYCLE LANES / BIKEWAYS

4.1 Scope

Both the local government and TMR have responsibilities to provide infrastructure that provides a safe environment for cyclists. These cycle facilities cater for a range of users including the recreational and commuter cyclist. Cycle facilities can be either on-road cycle lanes or off-road bikeways.

While each authority has its own responsibilities to improve and expand the cycle networks across their respective jurisdiction, the delivery of new cycle infrastructure generally follows one of the following mechanisms:

a) The cycle facility is required as part of the Priority Cycle Network Plan (PCNP).

The provision of funding through the PCNP is outside this cost sharing arrangement. Consequently, the construction of bikeways/cycle lanes does not come under this cost sharing arrangement. However, as the PCNP does not provide funds for maintenance, the maintenance of bikeways/cycle lanes that have been constructed with PCNP funding will come under this module.

b) The cycle facility is not part of the PCNP

Both the construction and maintenance of bikeways/cycle lanes that are not part of the PCNP come under this Module. This includes the provision of cycle facilities when undertaking major upgrades to the SCR or alternatively, the bikeway is part of the local government's local cycle network.

The provision of on-road cycle facilities for major road upgrades can be problematic, particularly in constrained environments or where safety issues exist with the existing geometry. In these situations, TMR may choose to provide an off-road shared bikeway along the SCR corridor. Alternatively, TMR may elect to construct or contribute to a shared bikeway outside of the SCR corridor and along local government roads or in Crown Land.

Similarly, the local government may approach TMR for authorisation to construct a shared off-road bikeway along the SCR corridor, where alternative routes are non-existent or too constrained from an ecological or terrain perspective.

4.2 Planning Design and Construction

Responsibilities for funding the construction of cycle facilities other than PCNP are shown in Table 1. It is essential that both the local government and TMR plan cycle facilities using an integrated one-network approach, so that infrastructure not be duplicated.

4.3 Maintenance and Ownership

Responsibilities for funding the maintenance of all cycle facilities are shown in Table 1. Ownership of cycle facilities other than PCNP is also shown in Table 4.1.

Table 4.1: Responsibilities for Cycle Facilities other than PCNP

Location	Funding of Construction	Funding of Maintenance	Ownership of Facility
1) Cycle lane on SCR carriageway (part of TMR SCR upgrade)	TMR 100% as part of road upgrade. Usually located within the sealed shoulder.	TMR 100%	TMR
2) Shared off-road bikeway along SCR corridor (part of TMR SCR upgrade)	TMR 100% as an alternative to having the facility on-road.	TMR 50% / LG 50%	LG
3) Alternative route along LG roads or Crown Land (part of TMR SCR)	Joint funding between TMR and LG if there is no suitable	LG 100%	LG

Location	Funding of Construction	Funding of Maintenance	Ownership of Facility
upgrade)	alignment on pavement or along SCR corridor.		
4) Shared off-road bikeway along SCR corridor (not part of TMR SCR upgrade / requested by LG)	LG 100%	LG 100%	LG

MODULE 5: FOOTWAYS, FOOTPATHS, PEDESTRIAN CROSSINGS, BARRIERS AND REFUGES

5.1 Scope

This Module sets out the cost sharing arrangements for footways, footpaths, pedestrian crossings, barriers and refuges within the State-controlled Road (SCR) corridor (including National Highways but excluding Motorways).

Footways cater for services including electricity, gas, water, sewerage, and telecommunications. Where the footway is unformed, it is referred to as a verge. In some cases in steep terrain, the verge in existence is negligible.

A Footpath is the strip of concrete or asphalt located along the footway. It acts as a durable wearing surface for pedestrians. Where the footpath is shared between cyclists and pedestrians, the footpath strip can be classed as a shared off-road bikeway. In urban business centres, the footpath can often at times be full width with different surface textures including pavers, stencilled concrete and exposed concrete.

Pedestrian crossings are line-marked crossing points across roadways where pedestrians have right of way over vehicular traffic.

Pedestrian refuges are small islands on the road pavement where pedestrians can stop and wait before completing their crossing. Often at times on busy roads, barriers in the form of fencing or guardrail are provided to constrain / protect pedestrians.

Figure 5.1 illustrates the typical demarcation of footways and footpath strips along SCRs in urban areas. In these areas and where the carriageway includes kerb and channel, the local government has responsibility for the footway, irrespective of whether there is a footpath or not. The demarcation in these cases is back of kerb.

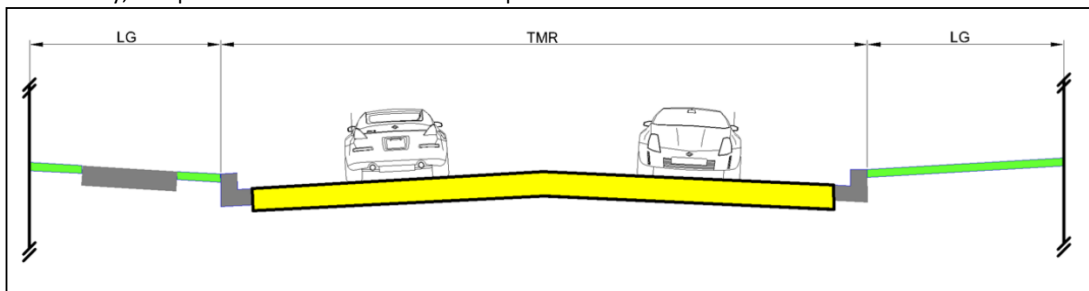


Figure 5.1: Urban Applications

In outer urban and rural situations where table drains rather than kerb and channel provide longitudinal drainage for surface stormwater, the demarcation is the outer hinge point of the table drain as shown in Figure 5.2.

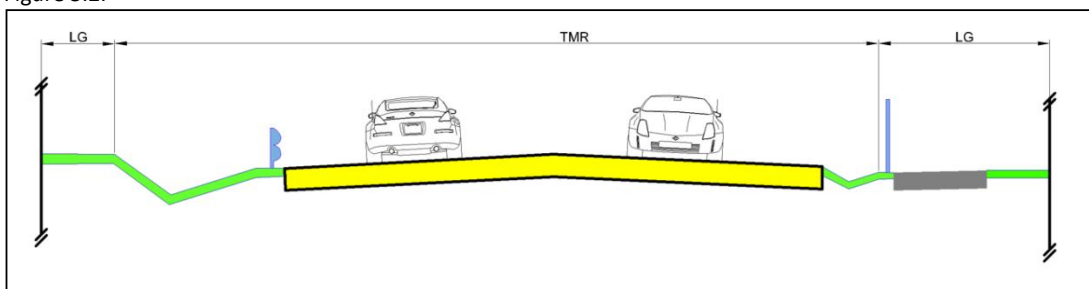


Figure 5.2: Outer Urban Applications

In rural areas, TMR is responsible for the entire verge as shown in Figure 5.3.

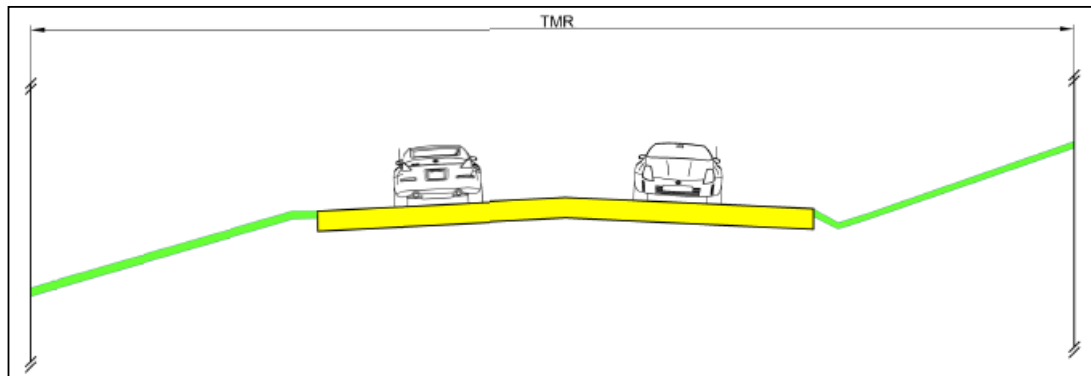


Figure 5.3: Rural Applications

5.2 Planning Design and Construction

It is essential that there is cooperation between the local government and TMR in the delivery of linear pedestrian facilities along a SCR. The early planning and consultation between both parties will ensure an integrated one-network approach and that every effort is made to advance connectivity where there are miscellaneous, disjointed sections of footpath strips along a corridor.

TMR is typically responsible for the regulation of levels and adequate clearing of vegetation along an unformed verge with no kerb and channel where there is a demand for a footway from light pedestrian traffic. Typically, this type of footway caters for limited recreational activities of residents where settling into new subdivisions, particularly in the outer urban areas or in rural areas where there are persons (including children) riding horses along the SCR.

The local government has a responsibility for imposing footway regulation and vegetation clearing along the frontage of any new subdivision fronting the SCR as a condition of the Development Application approval. Where it is apparent the cumulative pedestrian traffic from all subdivisions along the SCR will be significant, the conditions of development should include a footpath strip in addition to the formation of the footway.

A problem or difficulty can arise in developing outer urban areas where subdivisions are required to provide footpath strips but subsequent developments are not constructed contiguous to one another. This creates a real safety issue for new residents and cooperation needs to occur between the local government and TMR as to how to provide an interim linear footway around those adjacent parcels of land that are still to be developed/ subdivided.

In urban areas, the local government may request special footpath strip treatments. It is important that the ongoing maintenance of these special treatments be discussed and agreed in the early stages of planning for the project. Should the construction costs be more than what TMR would normally pay for concrete or asphalt footpath strips, then the local government is to meet the additional cost of construction.

It should be noted that TMR TransLink Division also provides funding for bus stop upgrades as part of its Public Transport Facilities Program (PFTP). The upgrades can often at times include urban design features including small retaining walls, landscaping and stainless steel handrails. In the past, the handover of these facilities to the local government or TMR has been ad-hoc and further discussions at the planning stage between TransLink and the local government needs to occur.

The provision of pedestrian crossings, refuges and barriers is the responsibility of TMR where the demand from pedestrians wanting to cross the SCR at a specific location, justifies the installation of the crossing / refuge. For all other instances and particularly in the case where a pedestrian crossing / refuge across a SCR is

requested by the local government, potentially as part of a new bikeway/ pedestrian link, the construction costs are to be met by the local government.

Similarly TMR has a responsibility to erect vehicular barriers to protect pedestrians using the verge.

5.3 Maintenance and Ownership

Table 5.1 outlines the respective maintenance cost sharing for footways, footpaths, pedestrian crossings, barriers and refuges in urban, outer urban (within built up areas) and rural open-road applications.

The maintenance of signs, lines, and barriers associated with pedestrian crossings and refuges is the responsibility of TMR.

The maintenance of PTFP facilities is the responsibility of the local government, with the exception of the building structures, which will remain the responsibility of TransLink.

TMR as owner of the SCR corridor owns all infrastructure in that corridor. The local government has a life cycle responsibility to replace footpath strips when irregularities through wearing of surface become a trip hazard to pedestrians.

Table 5.1: Responsibilities for Footways, Footpaths, Pedestrian Crossings, Barriers and Refuges

Type	Application	Planning	Footpath Construction	Maintenance	Footpath Lifecycle Replacement
Urban Arterial/ Highway	Grassed footway with kerb and channel	N/A	N/A	LG 100% footway maintenance from back of kerb to property alignment	N/A
	Footpath strip on grassed footway with kerb and channel	Joint TMR/LG to ensure connectivity and functionality	If demand justified - TMR 100% If demand unjustified – LG 100% If special footpath treatment requested by LG then LG to pay additional costs	LG 100% footway and footpath maintenance from back of kerb to property alignment	LG 100%
Outer Urban (within built up area)	Grassed verge or footway with or without table drain	N/A	N/A	TMR 100% to RMPC standards TMR has a responsibility to regulate levels/ vegetation along unformed verge to make it safe when being used by residents of new subdivisions along a SCR Regulation of	N/A

Type	Application	Planning	Footpath Construction	Maintenance	Footpath Lifecycle Replacement
				levels, vegetation clearing and possibly footpath strip along frontage of new subdivision to be conditioned by LG as part of DA approval	
	Footpath strip along grassed footway with no kerb and channel	Joint TMR/LG to ensure connectivity and functionality	If demand justified - TMR 100% If demand unjustified – LG 100%	TMR 100% to outer hinge point of table drain. LG 100% from outer hinge point of table drain	LG 100%
Rural	As per Outer Urban				

MODULE 6: STORMWATER DRAINAGE

6.1 Scope

This Module sets out the responsibilities for stormwater drainage within the State-controlled Road (SCR) corridor. The following definitions provide clarity on the various components of stormwater drainage.

Stormwater drainage in the SCR corridor can generally be classified as either surface drainage or sub-surface drainage.

Surface drainage includes grass / concrete-lined / rock-lined table drains, kerb and channel and swales. It also includes bund walls, levees and retaining walls to channel water away from private properties or alternatively to protect the SCR pavement.

Sub-surface drainage includes:

- Integrated underground stormwater drainage networks (either longitudinal or cross-road);
- Independent underground stormwater drainage (an example is a standalone intersection drainage not connected to a drainage network but still containing gully pits, stormwater manholes, pipes/ box culverts and outfall);
- Pipe and box culverts (cross-road structures transferring stormwater from one side of the carriageway to the opposite side); and
- Major bridges and culverts (cross-road structures passing over major waterways).

Generally, TMR is responsible for surface drainage and any independent stormwater drainage system in the SCR. The local government is responsible for the integrated underground stormwater drainage network. These can be either longitudinal stormwater drains along the SCR or a transverse crossing of the SCR corridor by the stormwater drainage network.

Often at times stormwater drainage in the SCR corridor is under capacity and the flooding problem is accentuated by upstream development that increases the impervious area over time. This is prevalent in greenfield areas where crossroad drainage and longitudinal stormwater drains are undersize. As a condition of the Development Application approval, it is normally a requirement that the development provides no net worsening of flood levels up and downstream. As a result, detention of stormwater run-off on upstream properties is a common outcome in meeting this requirement by proponent of the development.

Due to the costs of underground stormwater drainage, there is sometimes reluctance for TMR to consider the upgrade of SCR roads when it requires a major upgrade of the local government stormwater drainage network. In all upgrades involving stormwater improvements, there needs to be shared responsibility and close cooperation in the planning phase by both the local government and TMR so that resolution can be reached as to the cost sharing arrangements for construction and maintenance, together with the ownership and responsibility for the stormwater infrastructure in the long term.

The Lawful Point of Discharge is sometimes a contentious issue and any increased discharge onto or from the SCR corridor also needs to be agreed early in the planning phase between the local government and TMR.

There has, in recent years, been an increase in the number of swales, bunds, levees, and retaining walls in low-lying areas to protect either residential properties or SCR infrastructure. There needs to be close cooperation between the local government and TMR during the planning phase of new road upgrades, or alternatively the assessment of Development Applications, to ensure both the local government and TMR agree on the ongoing maintenance and ownership of these infrastructures. Refer to Figure 6.1.

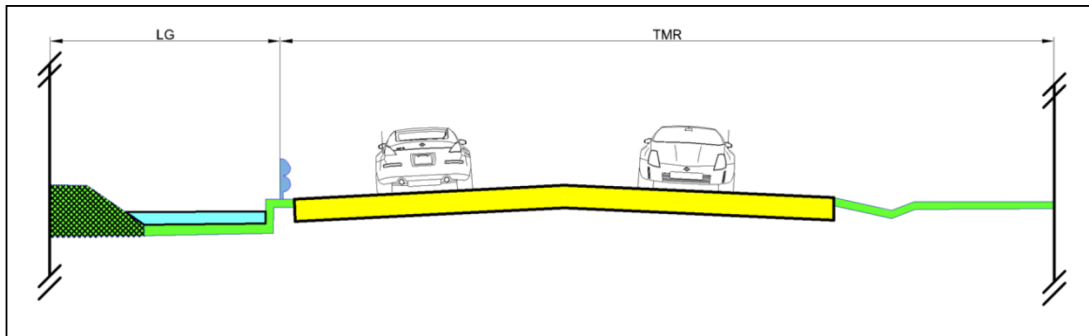


Figure 6.1: Responsibilities in Low Lying Areas

6.2 Planning Design and Construction

TMR is responsible for funding the construction of stormwater infrastructure that drains the SCR carriageway and corridor. This includes TMR constructing table drains, kerb and channel, intersection stormwater drainage, cross-road drainage structures (where those structures are not integrated into the local government stormwater network), and where an extension to a local government stormwater drainage network is required to drain the SCR corridor.

The local government is responsible for funding the construction of underground stormwater drainage networks. This includes the construction of relief drainage when capacity of the existing underground stormwater network is exceeded.

Where during a SCR upgrade it is determined there is a need to increase the capacity of the existing local government stormwater drainage infrastructure and this need can be directly attributed to the road upgrade, TMR is to contribute to the relief stormwater drainage construction costs. TMR's contribution is to be in proportion to the respective flows from the SCR corridor and upstream areas.

The need and quantum of contribution should be discussed and agreed early in the planning for the road upgrade project. For TMR projects with significant stormwater drainage costs, it may be desirable for local government and TMR to review the total catchment management strategy to ascertain if there is a more affordable and efficient solution.

6.3 Maintenance and Ownership

TMR is responsible for the maintenance of:

- Table drains (as part of the verge maintenance);
- Kerb and channel;
- Independent intersection stormwater drainage; and
- Independent cross-road structures.

Local government is responsible for the maintenance of:

- Gullies, manholes, pipe work and inlet / outlets when part of an integrated underground stormwater network; and
- Bunds / levees / retaining walls in low-lying areas where these measures protect private property from inundation and in turn constrain stormwater within the SCR verge.

Ownership of stormwater infrastructure is as per the maintenance responsibilities.

MODULE 7: UTILITY SERVICES

7.1 Scope

This Module only applies to situations where the local government owns the utility service. Typical examples of utilities include potable water mains, sewerage mains, stormwater trunk and reticulation mains, and in a few isolated cases, local government owned gas reticulation. The cost sharing arrangement does not apply to Urban Utilities and Unity Water, which are commercial water businesses in SEQ.

7.2 Planning Design and Construction

Main Replacement Initiated by SCR Road Upgrade

The requirement to relocate a main predominantly occurs when TMR undertakes an upgrade of the SCR. Key to this cost sharing arrangement is the early liaison between the local government and TMR on how best to alleviate any relocation of the main. This may require potholing by local government and TMR to ascertain the exact locations and depths of the main. The early confirmation of exact location then allows the design to develop solutions that avoid relocation.

Where relocation cannot be avoided, there is now no need to calculate the remaining life-expectancy of the main. Rather the following principles will apply:

- The local government utility is to be fully transparent with TMR regarding a) any planned upgrades of the main; or b) any deficiencies in its capacity;
- TMR is to pay the full cost of a replacement main, irrespective of its age, where the size of the main remains unchanged;
- Where the local government has need for capacity increase of the existing main, the local government shall contribute to the cost of relocation, in proportion to the increased capacity;
- Where the local government has planned future upgrades to the main (i.e. PFTI, 10 year Financial Plan), TMR is to pay the bring forward costs of relocation; and
- In situations where the main is in the wrong location or at depth or alignment unknown, and where TMR design had genuinely tried to locate to avoid a relocation of the main, the local government will be responsible for the full cost of relocation.

Main Replacement Initiated by Local Government

On occasions, a main within a SCR corridor may burst, or due to its age, it may require replacement by the local government. In these cases, the local government is responsible for the full cost of replacement. Should the burst main damage TMR assets, the local government will be responsible for compensating TMR the costs of repairs to the TMR asset.

New Main

Where a local government utility wishes to install a new main along the SCR corridor, it has responsibility to liaise with and to obtain approval from TMR for the alignment and depth, and to install the service at the nominated alignment and depth.

7.3 Maintenance and Ownership

The local government utility owns their respected services along the SCR and is responsible for maintenance and replacement when the service life is reached.

MODULE 8: SERVICE ROADS, ACCESS ROADS, PROPERTY ACCESS AND UNFORMED ROADS

8.1 Scope

The TMR corridor management policies and guidelines apply to existing approvals for property access to the SCR. Under those policies, both local government and TMR have responsibilities to ensure that property accesses meet sound engineering and safety requirements.

From a local government perspective, an application for new development, including reconfiguring a lot (subdivision), must ensure safe access to and from the SCR carriageway. Where there is no existing access, the property owner is to obtain Section 62 approval from TMR specifying the type and location of access to the SCR corridor.

It is acknowledged that when TMR undertakes a road upgrade project, some properties and businesses could be affected and that not all existing accesses and movements can be retained. The cutting off of driveways and the reconfiguration of intersections with possible restrictions on movements is part of TMR's responsibility to make the SCR safe.

This Module attempts to address the cost sharing arrangement for a range of private accesses to the SCR. These include but are not limited to the following.

Service Road is a standalone sealed road that services multiple properties and businesses fronting the SCR, so that each of these individual properties does not require their own individual access to the main carriageway.

Where TMR has specifically declared in a SCR corridor the boundary between the State-controlled road and the service road, the service road is the responsibility of the local government. In these cases, the point of demarcation is usually dependent on whether there is kerb and channel along the main SCR carriageway as shown in Figure 8.1.

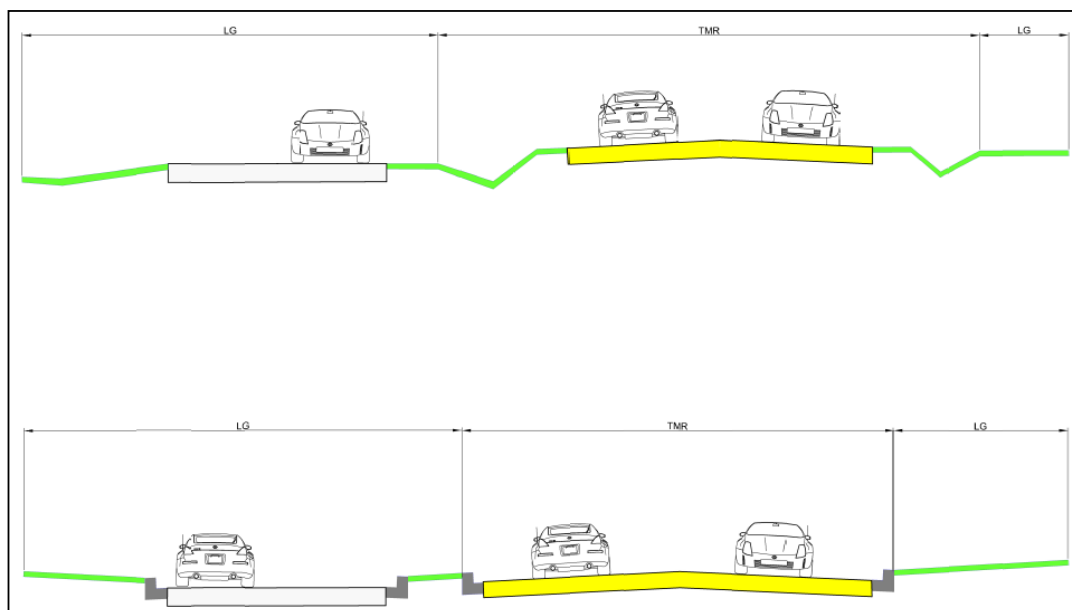


Figure 8.1: Responsibilities for Service Roads where Declared as Separate Roads

Access Road provides a sealed carriageway from the SCR traffic lanes to a commercial property such as a roadside service centre. Access roads are required as a condition of the Development Application and remain the responsibility of the developer / proprietor to construct and maintain the access roads within the SCR in a serviceable condition.

Driveways and Property Accesses provide access from the SCR carriageway to one or more properties. While driveways in urban situations are usually constructed of durable materials such as concrete or asphalt, property access in outer urban or rural locations are usually unsealed tracks providing access to a number of properties so that each property can have and enjoy safe access to the SCR carriageway at one location as shown in Figure 8.2.

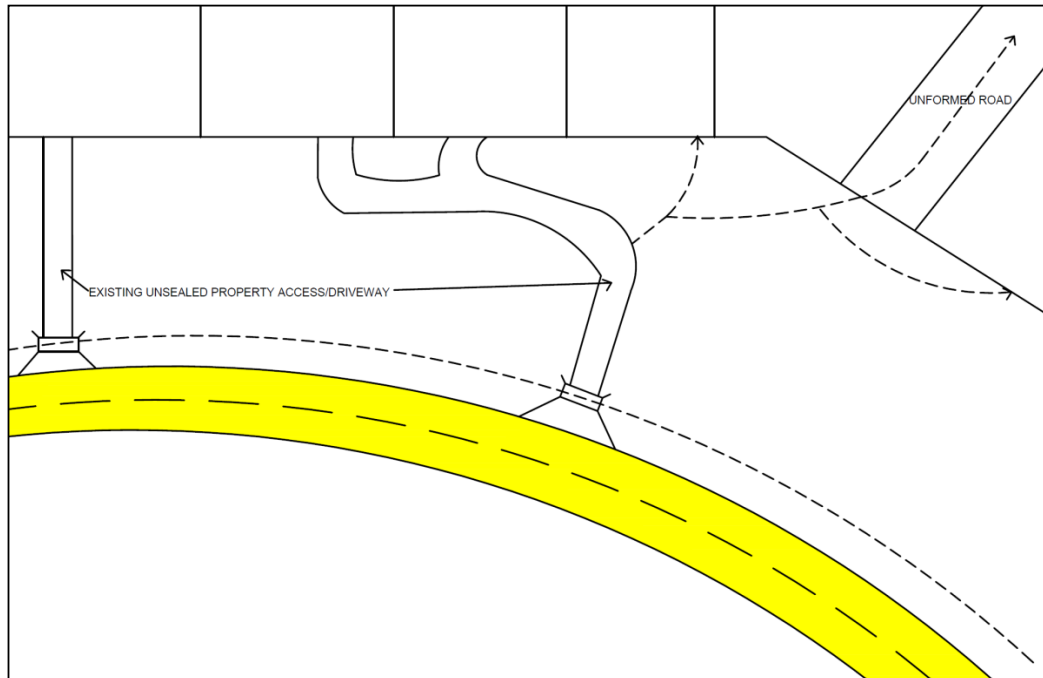


Figure 8.2: Property Access and Unformed Roads

Although the authorisation for older property accesses and sometimes their respective maintenance has some historical arrangement, there is no requirement for local government and TMR to construct or maintain the access track.

A common issue is requests by property owners without existing access, requesting local government or TMR to construct an access along an **unformed road**, whether it is within a SCR corridor or an unformed road off the SCR. In this or similar cases, there are no requirements for local government or TMR to provide access, albeit the owner needs to obtain Section 62 authorisation from TMR for the access.

8.2 Planning Design and Construction

Typically, the construction / creation of a service road will occur during an upgrade of the SCR carriageway. As such, funding of any new construction or modifications to an existing SCR carriageway being converted to a service road will usually be the responsibility of TMR.

In regards to private access roads and driveways, Table 8.1 links 'approvals' and 'responsibility for construction' as it is essential that any access to the SCR be approved. It is important that local government and TMR provide the same response to the applicant regarding the access standard and that ongoing maintenance will be their responsibility.

8.3 Maintenance

For maintenance responsibilities, refer to Table 8.1.

Table 8.1: Responsibilities for Service Roads, Access Roads, Driveways and Unformed Roads

Description	Approval	Construction	Maintenance
Service road	Joint TMR/LG	TMR or LG	LG
Access road	TMR Section 62 LG Development Approval	Private	Private
Driveway / access road /unformed road	TMR Section 62	Private	Private

MODULE 9: INTERSECTIONS

9.1 Scope

This Module addresses the situation where a local government road intersects with the SCR. The intersection can take many forms including:

- Conventional T-intersection (with or without auxiliary lanes and channelization);
- Y-junction (typically found in rural areas);
- Roundabout;
- A signalised intersection (typically three or four leg); and
- A motorway ramp intersecting with the local road network.

9.2 Planning Design and Construction

When upgrading the SCR, there is a responsibility for TMR to extend the works along the local government road to sufficiently address traffic engineering issues. This requirement is specified in the TMR Road Planning and Design Manual. Funding for these necessary improvements to the local government road when part of a SCR road upgrade project is the responsibility of TMR.

Where the local government (including developers of subdivisions) provide a new or an upgrade to a local government road that intersects with the SCR carriageway, the local government and/or developer is to meet the full cost of upgrading the SCR carriageway so that it meets traffic engineering requirements as set out in the TMR Road Planning and Design Manual.

In both applications, the limits of construction will be set by the constructing authority. Should the local government or TMR require additional work on the SCR or local government road respectively, beyond what is reasonably expected, the local government / TMR are to contribute towards the cost of that additional work.

9.3 Maintenance and Ownership

In the past, the demarcation of maintenance responsibilities for intersections has created some contention and debate between local government and TMR. It is essential that each case be considered on its merits. However to provide guidance, the following principle will apply:

- For intersections where there is no channelization extending down the local government road, the demarcation will be the tangent point of the seal closest to the property alignment; and
- Where channelization exists in the local government road, the demarcation between local government and TMR responsibilities will be the furthest face of the median kerb and shown in Figure 9.1.

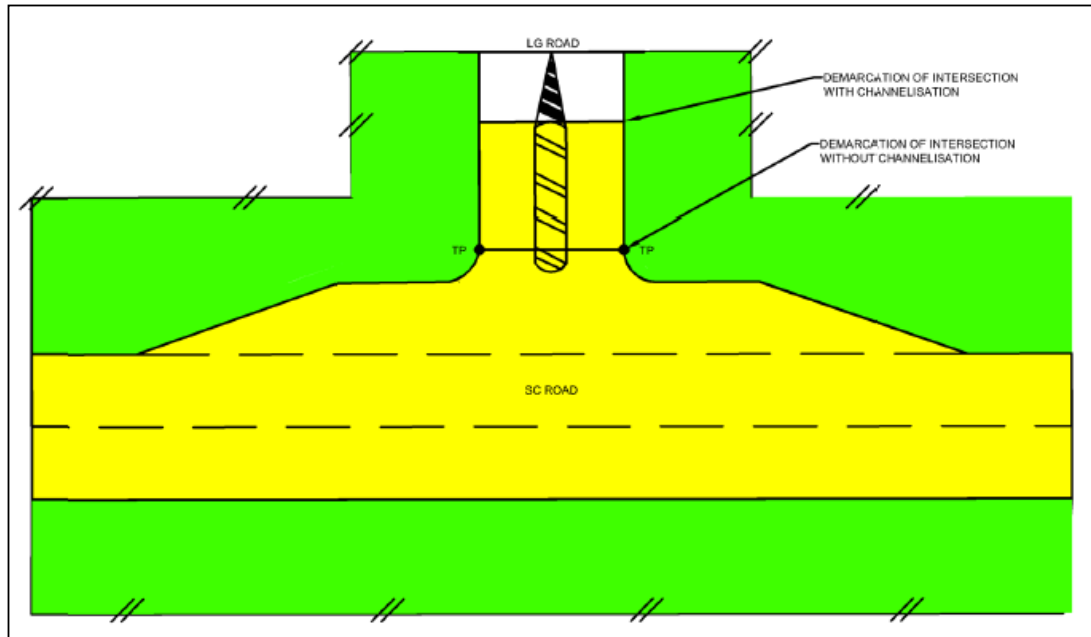


Figure 9.1: Demarcation of Maintenance and Ownership at a SCR / Local Government Road Intersection

TMR owns all road infrastructure in the SCR corridor. Where the SCR is intersected by a local government road, the demarcation of ownership is the extension of the SCR property boundary. It is to be noted that this ownership can be different to the maintenance cost-sharing arrangement when channelization exists at the intersection.

MODULE 10: BRIDGES

10.1 Scope

Bridges provide a variety of functions within a SCR corridor. Typical bridge situations include:

- Road bridge spanning a waterway (with or without footways);
- Road overpass or underpass;
- Rail overpass or underpass
- Grade-separated interchange or intersection;
- Pedestrian or bikeway overpass or underpass; and
- Pedestrian and / or bikeway spanning a waterway.

This Module focuses on the application where local government and TMR have joint responsibilities for the bridge and/or carriageways and/or footways. To assist in the interpretation of the cost sharing arrangement, Figure 10.1 shows three typical grade separation situations namely:

- An overpass across the SCR corridor carrying a local government road;
- An overpass across a local government road carrying a SCR;
- A pedestrian / cycleway overbridge across the SCR corridor.

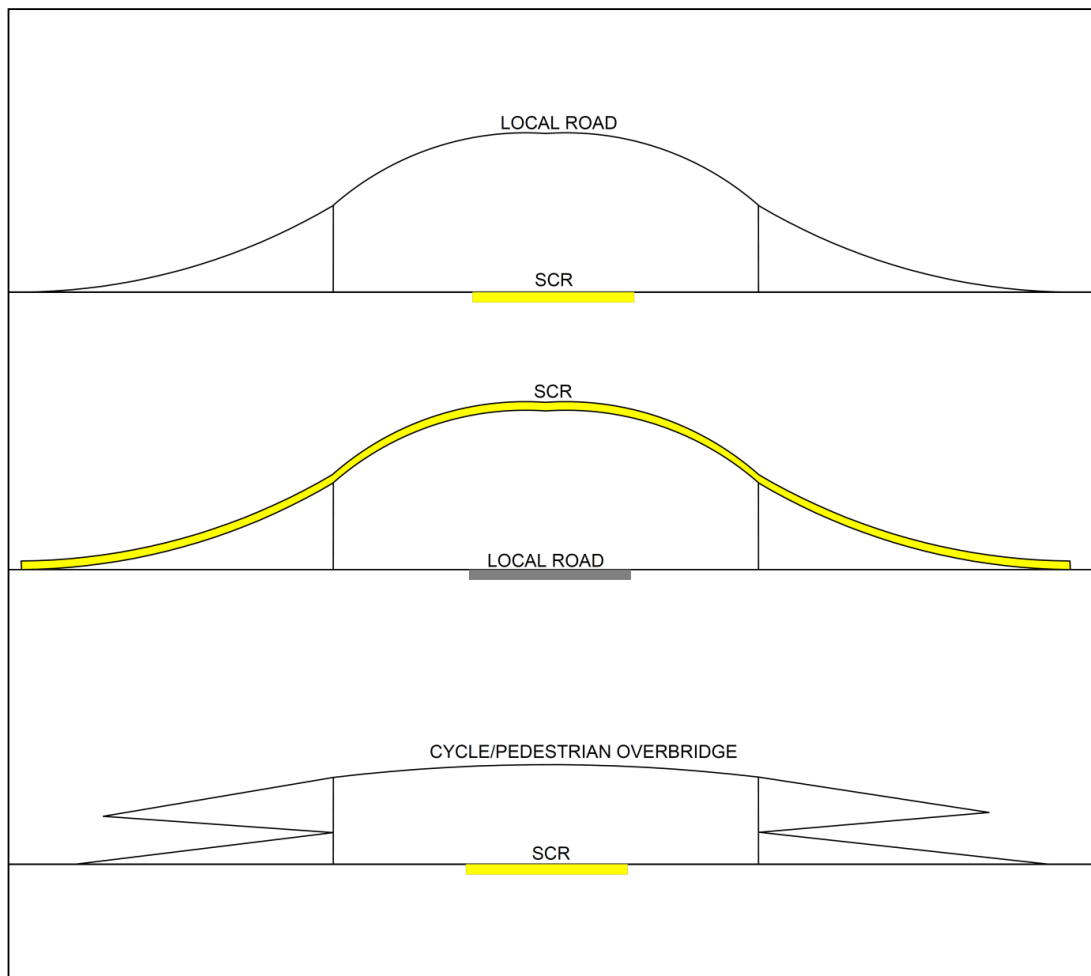


Figure 10.1: Typical Examples of Bridges Crossing the SCR Corridor

Similarly, Figure 10.2 shows two typical SCR at-grade bridge situations namely:

- A road bridge over a waterway within the SCR and with a shared pedestrian / cycle footway on the same structure; and
- A free standing shared cycle and pedestrian footbridge over a waterway within the SCR corridor.

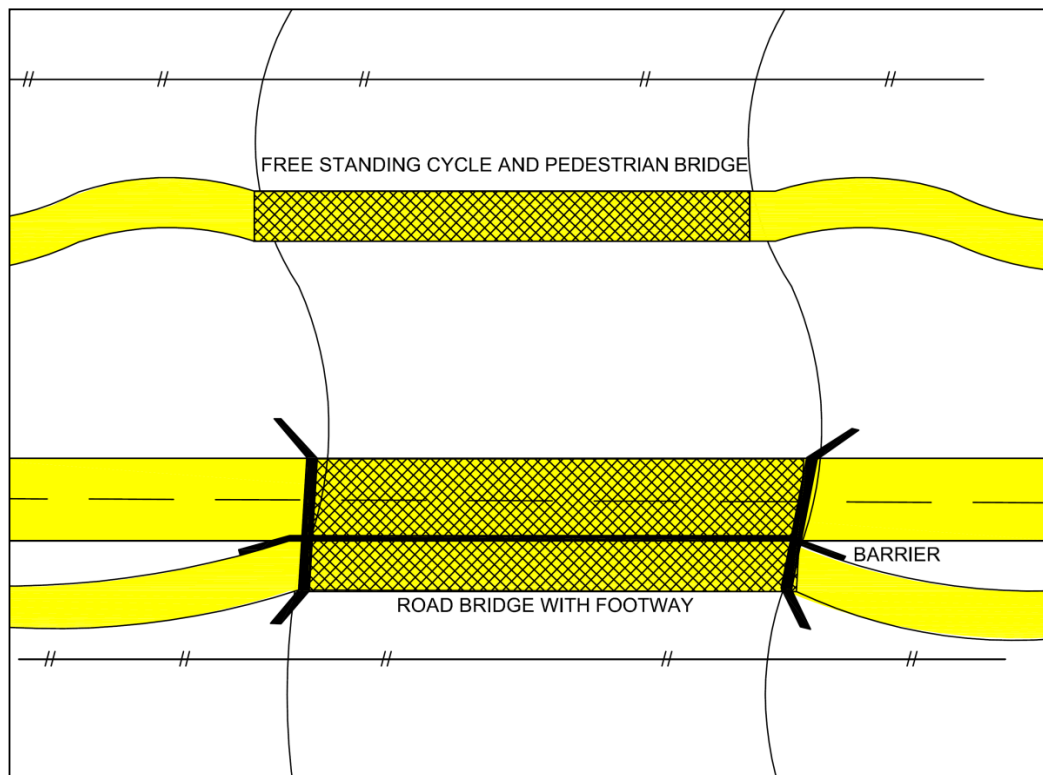


Figure 10.2: Typical Examples of Bridges within the SCR Corridor

Any bridge structure within the SCR corridor (with the exception of freestanding cycle and pedestrian bridges and rail bridges) is the responsibility of TMR; irrespective of who constructed or funded the structure or the purpose for which it was erected. This position is based on the premise that any catastrophic failure of the bridge structure would have major ramifications on the functionality of the SCR. Hence from a risk management perspective, TMR accepts full responsibility for the ongoing structural integrity of SCR bridges.

10.2 Planning Design and Construction

Bridges can be funded and constructed by either TMR, local government or a developer. Of greater importance is early discussion and agreement between local government and TMR regarding the functionality of the structure, the structural design standards, the ownership of the structure, and the demarcation of bridge and surrounds maintenance.

Grade-separated road bridges

The funding and construction of grade-separated road bridges can be by either local government or TMR. Generally, TMR will construct bridges as part of a new interchange, to eliminate turning movements at an existing intersection, or to reconnect local roads severed by a realignment of the SCR. The local government and developers will on occasions also fund the construction of a road bridge to connect new greenfield developments on either side of a major SCR.

Grade-separated cycle and pedestrian bridges

Both local government and TMR fund and construct footbridges across the SCR corridors, particularly when a grade-separated active transport connection will save vehicular trips and improve safety for cyclists and pedestrians crossing a busy SCR.

At-grade bridges

The funding and construction of at-grade road bridges within the SCR corridor is the responsibility of TMR. The funding and construction of freestanding footbridges for cycles and pedestrians can be either TMR or the local government and is dependent on the demand for such a structure. Generally, where there is an existing footway provision on the existing road bridge, the funding and construction of a standalone footbridge is the responsibility of local government.

10.3 Maintenance and Ownership

Table 10.2 outlines the maintenance responsibilities for road bridges and footbridges. Any capital improvements in the form of barriers or guardrails will be the responsibility of the authority responsible for the road pavement. All improvements must be authorised by TMR as structural owner of the asset

Table 10.1: Maintenance Responsibilities

Component	Responsibility
Structure	TMR
Pavement of SCR and local government road	TMR / LG respectively
Kerb and Channel of both SCR and local government road	LG
Footway / verge of SCR (no kerb and channel or footpath)	TMR
Footway / verge of SCR (with kerb and channel and / or footpath)	LG
Footway / verge / barriers of local government road	LG
Footpath of SCR and local government road	LG
Barrier of SCR separating pedestrians and vehicles	TMR
Bridge railings	TMR (part of structure)
Embankments (within SCR corridor)	Usually TMR
Line marking of SCR and local government road	TMR / LG respectively
Lighting	Refer to Module 12
Graffiti removal	TMR

Ownership of grade-separated bridges

Irrespective of the constructing agency and the purpose, TMR will accept ownership of all grade-separated road cycle and pedestrian structures over or under the SCR, subject to that structure having been designed and constructed to TMR standards. This will require early discussion and sign-off by TMR throughout the planning, design and construction phases of the bridge.

Ownership of at-grade bridges

TMR owns all road bridges in the SCR corridor. In regard to footbridges, where a footbridge has been funded and constructed by TMR, the Department accepts responsibility for that structure. Where a footbridge has been funded and constructed by the local government or a developer, the facility is owned by local government.

MODULE 11: LANDSCAPING, VEGETATION, LITTER AND GRAFFITI CONTROL

11.1 Scope

The demarcations that have been previously established in earlier Modules also apply to this Module.

Local government and TMR have a responsibility to each other to ensure that their respective areas of responsibility along the SCR corridor are maintained to the same standard, and that public expectations are carefully managed in this regard. This means that there should be no discernible difference in the standard of landscaping between that being maintained by local government and TMR respectively. It also applies more broadly to the standard of landscaping along the SCR corridor compared with that of the local road network.

This Module includes the following range of services:

- Grass mowing;
- Grass slashing;
- Vegetation removal for safety reasons i.e. clear zones and site distances meeting safety standards;
- Noxious weed control;
- Conservation of flora and fauna habitat;
- Fire management;
- Dead animal removal;
- Visual amenity improvements;
- Garden bed planting and maintenance;
- Median and roundabout landscaping;
- Footway landscaping;
- Litter collection;
- Graffiti removal; and
- Other landscaping infrastructure i.e. sprinkler systems, estate entrance statements or the like .

11.2 Planning Design and Construction

The construction of new landscaping along the SCR can be funded and delivered by:

- TMR as part of a SCR road upgrade project;
- The local government as part of an urban amenity project; or
- Private developers as part of a new subdivision or development entrance statement.

During the planning phase for a new SCR road upgrade and where local government will be required to undertake the maintenance role of landscaping, and vegetation litter and graffiti control, there needs to be early discussions between local government and TMR regarding the standard of landscaping. Both entities should have a say into the standard of vegetation and any other infrastructure i.e. irrigation systems, so that annual maintenance costs can be kept to a minimum.

For new road upgrades, it is the responsibility of TMR to ensure new plantings are well established before the completion of project. This is particularly important in protection against earth batter erosion.

In regard to private sector landscaping, developers will sometimes provide a higher standard of landscaping at entrances to their development/subdivisions as a short-term marketing strategy to improve the amenity of their development. It is essential that in these cases, there is an agreement in place at the time of approving the operational works, as to the long-term standard of this landscaping. This can include agreement that the developer will reduce the standard of landscaping before handover or alternatively Council agreeing to levy the new residents in that development to assist in funding the higher maintenance costs.

11.3 Maintenance and Ownership

It is well recognised that there is never sufficient funding for local government and TMR to provide a high standard of landscape maintenance. As such, intervention standards as set out in the RMPC are based on affordability and value for money. Maintenance must be seen as a partnership and both local government and TMR must work together on these matters particularly in the following areas:

Efficiency

Stretching the maintenance dollar is essential and efficiencies in maintenance operations must be continuously sought. Rather than maintenance crews from both local government and TMR being mobilised to undertake works in the same location, it is recommended that agreement be reached between both parties, so that the most efficient, lowest-cost resources are used irrespective of demarcation responsibilities.

Litter collection

On highly trafficked roads, the cost of traffic control to provide a safe working environment for litter collection can be significant. Whilst the demarcation of responsibilities is different for each SCR corridor, there are locations where both local government and TMR are undertaking maintenance in relative close proximity, with each incurring costs for their own traffic control. The opportunity to significantly save on traffic control costs could be achieved with the better planning by the entities to undertake work simultaneously.

Dead animals

In the past, there has been issues as to where the dead animal has been located, resulting in both local government and TMR gangs being mobilised. This is a major issue in rural and remote townships where a supervisor / gang must travel significant distances to determine the entity responsible for removing the animal. Agreement should be reached between local government and TMR so that the animal is removed by any crew irrespective of responsibility.

Graffiti removal

Graffiti is commonly applied to acoustic fencing and structures within the SCR corridor under both local government and TMR responsibility, requiring both entities to dispatch their respective crews. Once again, agreement should be reached so that only one crew is mobilised to clean up graffiti covering both responsibilities. Refer to Modules 15 and 10 for responsibility of removing graffiti from acoustic fences and bridge structures respectively.

MODULE 12: ROAD LIGHTING

12.1 Scope

Australian Standard AS 1158 specifies the following categories of lighting applicable to the SCR:

- Lighting for vehicular traffic using roads and public spaces - Category V; and
- Lighting for pedestrian areas along roads and public spaces - Category P.

12.2 Planning Design and Construction

TMR has a responsibility to provide route lighting to Category V standard to ensure the safe operation of road traffic using the SCR. This responsibility includes construction, maintenance and operating costs of such lighting. The warrants for road lighting are detailed in Volume 6: Lighting, of the TMR Road Planning and Design Manual 2nd Edition and design standards in AS 1158.

Similarly, the local government has a responsibility of providing route lighting along its local road system and service roads to ensure the safe operation of those roads.

For upgrades of the local government intersections with the SCR, the constructing authority as outlined in Module 9 is responsible for the provision of lighting to make the intersection safe, irrespective of whether the lighting is located within the SCR or local government road corridor.

Where in urban areas, the footpath demand is high and there is inadequate spillage from road lighting, local government is to fund the installation of additional footpath lighting meet Category P standards.

12.3 Maintenance, Ownership and Operational Costs

For road upgrades, it is essential that local government and TMR discuss and agree the future ownership, maintenance and operational cost sharing arrangement for lighting during the planning phase.

For all existing lighting, the following will apply:

- All lighting of SCR carriageways, including motorways, will be the responsibility of TMR;
- The demarcation of lighting will be the extension of the SCR property alignment across the intersection unless otherwise agreed; and
- Any specific lighting of footpaths, footways, off-road bikeways/shared pathways or service roads along the SCR will be the responsibility of the local government.

MODULE 13: ROADSIDE FURNITURE AND FACILITIES

13.1 Scope

Roadside furniture generally fulfils a safety and / or amenity function and can include the following:

- Barriers;
- Pedestrian fencing;
- Emergency telephones;
- Reflective markers;
- Guide posts;
- Signs postings;
- Flood markers;
- Safety ramps;
- Etc.

Roadside furniture can also include:

- Bus stop seating, shelter, j-poles, blades, concrete pads, etc.;
- Stairs and handrails in steep terrain along verges;
- Retaining walls in verges;
- Pedestrian fences;
- Tourist information display boards;
- Etc.

Roadside facilities are provided along SCR's to minimise driver fatigue and enhance motorist's experience, and as a result, enhance road safety. Typically they include:

- Roadside rest areas;
- Heavy vehicle rest areas;
- Lookouts;
- Tourist information bays;
- Picnic shelters;
- Fireplaces;
- Toilets;
- Playgrounds;
- Emergency tank water supply;
- Etc.

13.2 Construction and Maintenance

Roadside Furniture

TMR is responsible for the provision of all roadside furniture along the SCR corridor that provides a safety function. TransLink Division and / or local government usually fund the construction and maintenance of bus facilities.

For tourist information display boards, roadside advertising, etc., these are the responsibility of the respective organisation and must be installed within the SCR corridor under permit from TMR.

Roadside Facilities

There is no simple arrangement regarding who undertakes improvements or who maintains roadside facilities, as each has a historical agreement as to how it came into existence and who presently accepts responsibility for improvements and maintenance. Where the maintenance of these facilities is the responsibility of TMR, this is included in the RMPC.

Where the local government or a community service organisation is responsible for the ownership of the facility, they have responsibility for the maintenance.

MODULE 14: SIGNS AND ROADMARKINGS

14.1 Scope

Road Signs

The Manual of Uniform Traffic Control devices (MUTCD), outlines the various signage that is commonly found in a SCR corridor. Signs are categorised as follows:

- Regulatory signs;
- Warning signs;
- Guide signs;
- Temporary signs; and
- Hazard markers.

Road Markings

Road markings are essential for the safe operation of traffic using the SCR. They provide for traffic separation, demarcation of traffic lanes including turning lanes, the safe operation of signalised and unsignalised intersections, the location of pedestrian crossings, approved regulatory parking and other kerbside management areas.

14.2 Planning Design and Construction

TMR is responsible for the installation of road signs and line marking along the State-controlled road and at intersections with local government roads to ensure the entry and exit from a SCR is performed in a safe and efficient manner. At these intersections, TMR is also responsible for road signs and line marking in the 'zone of influence' that extends from the intersection a distance down the local government road. Due to the variances of each intersection, the limits of the zone need to be agreed and documented by local government and TMR so that maintenance responsibilities are clear.

TMR is also responsible for road signs and road markings associated with traffic control devices such as traffic signals and pedestrian crossings along the SCR. In addition to road signs, TMR is typically responsible for the following signs:

- SCR street name signs;
- Advance street name signs for both SCR and local government roads;
- Advance direction signs;
- Tourist signs (refer to TMR policy);
- Welcome signs (refer to TMR policy);
- Bridge names;
- Waterway names;
- State borders;
- Etc.

Local government is responsible for the installation of road signs and line marking on local government roads. Local government is also responsible for secondary signs along the SCR. These signs must conform to MUTCD and TMR standards. Signs include:

- Community facility signs i.e. churches, libraries, sporting facilities etc;
- Local street name signs;
- Local government borders and local government welcome signs;
- Regulated parking signs
- Etc.

14.3 Maintenance and Ownership

Local government and TMR are responsible for maintaining their respective signs along the SCR corridor. At intersections with a local government road, TMR will also own and maintain the road signs and road marking a distance down the local government road from the intersection as discussed in section 14.2.

MODULE 15: NOISE ATTENUATION

15.1 Scope

A noise barrier is a natural or artificial physical screen located between the source of the noise (road traffic) and a receptor (e.g. residence), which interrupts the path of the noise. A noise barrier includes:

- Earth mound;
- Earth mound and noise fence; or
- Noise fence.

TMR's *Transport Noise Management Code of Practice Volume 1 – Road Traffic Noise (Nov 2013)* details the Department's position on noise attenuation measures. It states:

For departmental projects, the Department's preference will be implementing noise attenuation within road corridors by using noise barriers. In rare situations, the Department may consider exceptional circumstances treatments for noise sensitive buildings outside road corridors.

For proposed developments, the process for considering each strategy is outlined in Figure 6.2. The Department generally discourages noise sensitive development land uses adjacent to the State controlled road corridor. However, these decisions are made at the land use planning stage in local government planning schemes via state planning policies. Where such policies allow noise sensitive development within noise-affected areas, the strategies set out in the following sections should be used to ensure the impact of road traffic noise is minimised.

- *Noise sensitive use exclusion zones;*
- *Noise barriers; and*
- *Acoustic design of buildings.*

A developer's noise attenuation treatments (e.g. noise fences) on a private property near a road corridor boundary shall be entirely within the property. Where land is used outside of the road corridor (including buffer strips) for the purpose of noise fences and landscaped earth mounds, it shall be owned and maintained by the private landowners or local government.

Developers' noise barriers may be permitted within the State-controlled road corridor in limited situations where applicants can show alternative structure locations are appropriate. In these situations, an applicant will be:

- *Conditioned to pay to the Department 10 years maintenance costs upfront. These costs will usually be a minimum of 50% of the construction cost. If future planning is known by the Department (e.g. upgrading within 10 years), then a minimum of 100% of the construction cost will apply. The construction cost shall be determined from the Department's cost base. The construction cost could include those for the noise barrier, safety barrier, embankment widening, pavement widening and extension of drainage structures.*
- *Required to obtain further approval under the Transport Infrastructure Act 1994 before any work is undertaken for the design and construction of the barrier.*

15.2 Planning Design Construction and Maintenance

Noise Fence

Where the noise fence has been installed by TMR, as part of a SCR road upgrade project and it is located within the SCR corridor, the ownership and maintenance of the noise fence (including graffiti removal) will be the responsibility of TMR.

Where the noise fence has been installed by a developer on private property, the property owner/body corporate is responsible for the maintenance of the facility.

Where the size, access, or location of the required noise fence makes it unreasonable for the property owner/body corporate to maintain the noise fence, the developer may negotiate with TMR to place the noise fence within the SCR. In this situation, TMR will accept responsibility for the maintenance of the fence using the developer's contribution as explained in Section 15.1.

Noise Mound

With reference to Figure 10.1, the land tenure preference for noise mounds is that the developer deeds all land, containing the part of the noise mound between the old and proposed SCR boundary, from the development to the local government. Further, the developer arranges a covenant to be placed on the part of the mound contained within private property. The purpose of the covenant is to legally allow TMR and local government to access the area to upgrade, repair, maintain or remove road traffic amelioration works.

The landowner shall not legally be able to affect the noise amelioration works or construct any structures or remove any of the mound without written approval of TMR or the local government. The local government maintains the mound between the old and proposed SCR boundary and any associated noise fence.

Funding of the maintenance will be negotiated between TMR, the local government and the developer. The relevant owners are responsible for maintaining the vegetation on the part of the mound contained on private property.

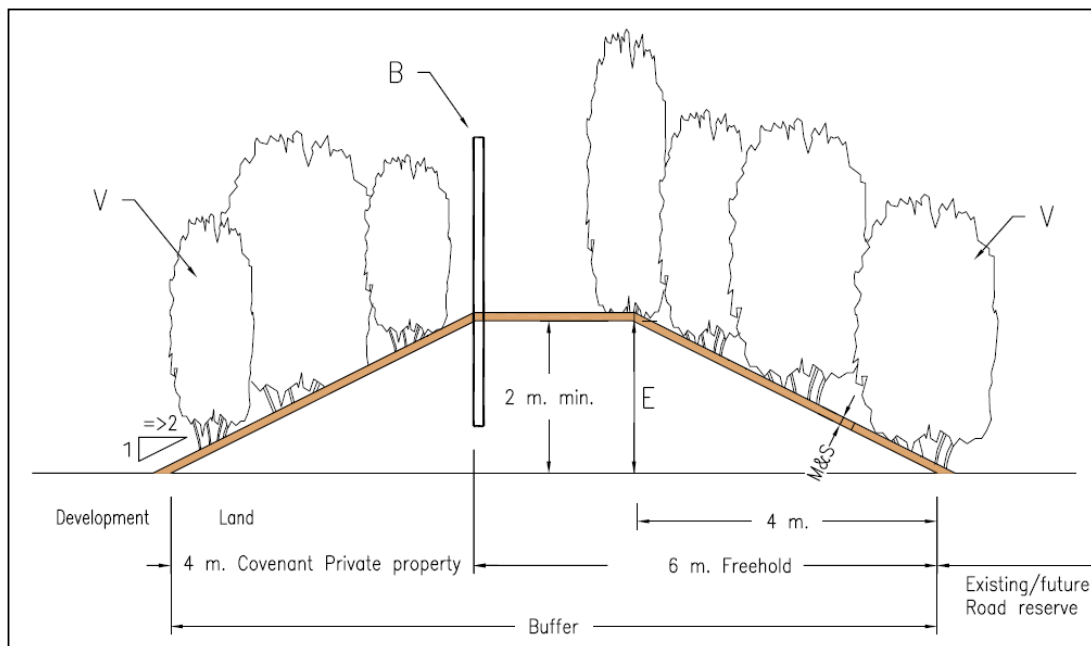


Figure 15.1: Typical Noise Mound (Extract from DMR Drawing PD85(C))

LGAQ / TMR Cost Sharing Agreement Significant Variations between 2000 'Blue Book' and Draft 2016.

Note: While the following attempts to capture the more significant changes between the two agreements, each Module needs to be read in its entirety to ensure the nuances underpinning that particular cost sharing arrangement are fully comprehended.

2000	2016	Details
Activity 1 – Traffic Facilities	N/A	<ul style="list-style-type: none"> The focus of this chapter in 2000 is road safety infrastructure. 2016 chose not to have a standalone module but to incorporate these matters into other applicable modules.
Activity 2 – Through Traffic and Auxiliary Lanes	Module 1 – Traffic Lanes	<p>Major Changes</p> <p>The 2000 version:</p> <ul style="list-style-type: none"> Focus is on road traffic lanes and traffic volume warrants to determine the number of lanes required; Should a LG require additional lanes, they were required to pay bring forward costs. <p>The 2016 draft:</p> <ul style="list-style-type: none"> Simplifies the demarcation between LG and TMR to just 'Traffic Lanes' and 'Permanent Parking Areas'. This departs from demarcating responsibility using varying pavement depths. Traffic lanes takes a broader view of the road pavement and sees it as a multi-modal facility that carries through traffic including cars, freight vehicles, buses, cycles and pedestrians; Traffic lanes are TMR responsibility; Permanent Parking Areas are areas of road pavement that are never used for through traffic but rather are used exclusively for local parking; Permanent Parking Areas are LG responsibility; In regional towns with wide shoulders used for car parking, 2016 departs from current practice in some TMR Districts by providing a 1.0 metre wide shoulder on the outside of the through traffic lane;
Activity 3 – Road Shoulders and Kerb and Channel	Module 2 – Road Shoulders	<p>Minor Changes</p> <p>The 2000 version:</p> <ul style="list-style-type: none"> Links road shoulders and longitudinal drainage (kerb and channel or table drains) to establish a demarcation between TMR and LG responsibility; Nominates shoulder widths of 3m and 1m as TMR responsibility. <p>The 2016 draft</p> <ul style="list-style-type: none"> Discusses only shoulders in this Module; Places all responsibility on to TMR to fund construction and maintenance of the shoulder; Does not nominate a width of shoulder; Assumes TMR will provide a shoulder of sufficient width to

		suit that road, its traffic volumes and cycle lane requirements.
Activity 4 – Acceleration and Deceleration Lanes		<p>Not included in Draft 2016.</p> <ul style="list-style-type: none"> • This activity mostly applies to the intersection on a SCR with a private development access; • Private accesses are covered already in the TMR Corridor Management Policy and Guidelines and are not repeated in the CSA.
Activity 5 - Parking	Module 3 - Parking	<p>Major Changes</p> <p>The 2000 version:</p> <ul style="list-style-type: none"> • Attempts to clarify the demarcation between TMR and LG responsibilities; • Has parking and shoulders intertwined and as such, there are caveats of when TMR will fund the construction / maintenance of shoulders that has traffic uses other than just parking; • Commits TMR to a 3m or greater shoulder width even where used solely for parking. <p>The draft 2016:</p> <ul style="list-style-type: none"> • Reinforces the simplistic view of ‘Permanent Parking Areas’ as per Module 1; • Assigns LG sole responsibility of these non-through traffic lanes.
Activity 6 - Bikeways	Module 4 – Cycle Lanes / Bikeways	<p>Minor Changes</p> <p>The draft 2016:</p> <ul style="list-style-type: none"> • Simplifies the respective responsibilities of TMR and LG and addresses PCNP funding; • Eliminates confusion as to who owns the PCNP facility and where maintenance funding comes from.
Activity 7 – Footways and Footpaths	Module 5 – Footways Footpaths Pedestrian Crossings Barriers and Refuges	<p>Major Changes</p> <p>The 2000 version:</p> <ul style="list-style-type: none"> • Is limited to footways and footpaths; • Assigns LG the responsibility to fill, grade, and finish the footway. <p>The draft 2016:</p> <ul style="list-style-type: none"> • Includes other pedestrian infrastructure including pedestrian crossings, barriers, refuges, special treatments of footpaths, and footway treatments as part of PTFP bus stop upgrades; • Has LG responsible for ensuring developers regulate footways as a condition of development; • Has TMR responsible for clearing vegetation, regulating levels and making the footway safe where pedestrian traffic warrants; • Changes the responsibility for longitudinal drainage from LG to TMR to ensure the integrity of pavement is maintained; • When kerb and channel is in place, has LG responsible for the

		<p>footway from back of kerb to property boundary rather than lip of channel;</p> <ul style="list-style-type: none"> • When table drains are in place, has TMR responsible for the drainage and LG responsible for the footway between the outer hinge point and the property boundary; • Assigns the cost of providing pedestrian crossings that do not meet warrants to the LG.
Activity 8 – Stormwater Drainage	Module 6 – Stormwater Drainage	<p>Minor Changes</p> <p>The 2000 version:</p> <ul style="list-style-type: none"> • Assigns >7 pages to explain the various demarcations regarding underground drainage in urban and rural situations. <p>The draft 2016:</p> <ul style="list-style-type: none"> • Attempts to simplify the cost sharing arrangement without too many structural changes; • Combines both surface drainage and sub-surface drainage; • Clarifies TMR’s responsibility to construct / maintain stand-alone / independent drainage systems in comparison to LG’s responsibility for a stormwater pipe network; • Also addresses recent issues where LG has allowed developers to fill low-lying areas and in doing so, force water to pond in the SCR corridor.
Activity 9 – Utility Services	Module 7 – Utility Services	<p>Major Change</p> <p>The 2000 version:</p> <ul style="list-style-type: none"> • States the LG should contribute to the costs of the main relocation when the main is nearing its serviceable life. <p>The draft 2016:</p> <ul style="list-style-type: none"> • Has TMR responsible for the full costs of the main replacement irrespective of age; • Has LG co-funding the works if: <ul style="list-style-type: none"> ○ The main has been laid in the wrong alignment; ○ If the LG requires an upgrade of the main capacity; ○ There are future plans by the LG to replace the main.
Activity 10 – Service Roads	Module 8 - Service Roads, Access Roads, Property Access and Unformed Roads	<p>Minor Changes</p> <p>The 2000 version:</p> <ul style="list-style-type: none"> • Limits discussion to service roads. <p>The draft 2016:</p> <ul style="list-style-type: none"> • Addresses other areas of potential misunderstanding including access roads, property access and unformed roads; • Again uses the back of kerb and the outer hinge point as demarcation between TMR and LG responsibility.
Activity 11 - Intersections	Module 9 - Intersections	<p>Minor Changes</p> <p>The draft 2016:</p> <ul style="list-style-type: none"> • Modifies the point of demarcation for LG roads intersecting with the SCR when the intersection has channelization. In this

		situation, the point of demarcation is the furthest edge of the traffic median from the intersection, rather than the Tangent Point.
Activity 12 – Bridges	Module 10 - Bridges	<p>Major Change</p> <p>The draft 2016:</p> <ul style="list-style-type: none"> • Has TMR responsible for all bridges (road and pedestrian) that span the SCR corridor or that take through traffic across a waterway or LG road; • Removes LG responsibility for barriers on bridges; • Restates that the maintenance and ownership of any standalone cycle or pedestrian bridge in the SCR corridor is the responsibility of the LG; • (Table 10.1) provides a comprehensive breakdown of responsibilities for all components of bridge structures.
Activity 13 – Pedestrian Footways on Bridges and Pedestrian Footbridges		All matters raised in 2000 are included in 2016 Module 10.
Activity 14 – Landscaping and Litter / Vegetation Control	Module 11 – Landscaping, vegetation, litter and graffiti Control	<p>Minor Changes</p> <p>The draft 2016:</p> <ul style="list-style-type: none"> • Tackles four areas of wastage being seen in some regions where LG and TMR maintenance officers are failing to work together; • Discusses improving efficiency of litter collection, dead animals and graffiti removal in rural areas.
Activity 15 – Road Lighting	Module 12 – Road Lighting	<p>Major Change</p> <p>The 2000 version:</p> <ul style="list-style-type: none"> • Sees TMR and LG share the costs of construction and operating costs 2/3 : 1/3; • Bases the cost breakdown on the premise that lighting for the road is spilling over to also light the footpath and as such LG should pay a share of these costs. <p>The draft 2016:</p> <ul style="list-style-type: none"> • Abolishes the sharing of costs; • Has TMR 100% responsible for road lighting; • Has LG 100% responsible for lighting installed specifically for the footways.
Activity 16 – Roadside Furniture and Facilities	Module 13 – Roadside Furniture and Facilities	<p>Minor Changes</p> <p>The draft 2016:</p> <ul style="list-style-type: none"> • Details the numerous items of roadside furniture and facilities to ensure there is no ambiguity by readers of the CSA.
Activity 17 – Signs and Road	Module 14 – Signs and Roadmarkings	Minor Changes

Markings		The draft 2016: <ul style="list-style-type: none"> • Provides a long list of signs that TMR and LG have responsibility for.
Activity 18 – Grade Separated Carriageways		The draft 2016 includes this within Module 10 – Bridges.
	Module 15 – Noise Attenuation	Minor changes The draft 2016: <ul style="list-style-type: none"> • Provides a separate chapter on noise barriers and earth mounds to clarify TMR’s position.
Maintenance Responsibility Plans		The draft 2016: <ul style="list-style-type: none"> • Includes all sketches / illustrations in the respective Module rather than as an Appendix to avoid confusion of the CSA reader.

Feedback on draft Cost-sharing MOU and Modules

General

Council welcomes the change in format (i.e. MOU supported by a series of Modules). In particular, the emphasis on each LG and relevant TMR District to collaboratively identify, agree and document cost-sharing arrangements that are relative to local circumstances. It is noted the document provides a framework to guide and support (not dictate) the two parties engaging and reaching agreement regarding cost-sharing arrangements for works within state-controlled road corridors.

'outer urban' – this needs some definition. In the context of the SEQ Region, parts of Ipswich could be considered 'outer urban'?

It is suggested the use of the term 'justified' throughout the document should be revisited. Council and TMR may have differing opinions on whether a piece of infrastructure is 'justified' or not.

Inset a comma between 'Planning' and 'Design' in the sub-heading titles throughout the document.

Where there are additional infrastructure requirements such as parking/bus bay/pedestrian control which relate to the provision of other State Agency infrastructure (or development) then regardless whether it is required by LG this obligation (funding and maintenance) should rest solely with TMR and not the LG. For example, for the provision of a State school and it is determined that there is a requirement for pedestrian control (e.g. median and kerb fencing), additional street lighting and on-street parking (bus and cars) then this should be funded and maintained by the State (TMR) for the respective corridor.

The current cost sharing agreement has informed the RMPC documents and these were also used to develop the responsibility plans/maps across the LGA. The responsibility plans have taken considerable years to finalise therefore the general comments is that these plans should be the basis of any future agreements and that the new cost sharing agreement must be reflective of these plans. Currently there are discrepancies between the responsibility plans and the new agreement. These discrepancies need to either be considered before the cost sharing agreement is finalised and the new agreement should only inform areas that the previous responsibility plans are currently silent or unclear therefore provide direction on these matters.

How does this MOU deal with ITS? Is TMR going to control/own these systems or does it also need to be spelt out as to what would be State and what would be LG?

Module 1

Sect 1.1 (last para) – 'the traffic lanes include an additional 1.0m'. This dimension may not be sufficient for cyclists and should be checked against Austroad standards.

'Figure 2' should be 'Figure 1.2'

Sect 1.1 (first para) – 'Includes National Highways but excludes Motorways' – therefore we assume TMR is 100% responsible for the construction and maintenance of all motorway corridors.

Sect 1.2 (para 2) - replace 'traffic lanes' with 'carriageway' otherwise this paragraph is confusing.

Sect 1.2 (para 3) – there needs to be a clear and agreed position with respect to future demand and the timing of this future demand between TMR and the LG.

Sect 1.3 (para 2) – permanent parking areas outside of traffic lanes nominated as a LG responsibility. This is not the case currently and creates an additional liability for Council.

Issues may arise for Council if the State have a planned reseal/rehab project on one of their roads. Council would need to find the funds to contribute to the proportion of work on the ‘permanent parking areas’ and this may not align with Council’s Capital Planning/10 year investment plan.

Need to confirm where on-road bus stops (i.e. marked bays) sit. Are they classed as Permanent Parking Areas too? Hence under LG control? Or through lanes? Taxi ranks? Uber bays? Electric car re-charging stations? Ride-share? Do the State want a role in these type of facilities?

What happens if the LG wants to change the Permanent Parking Area to a bicycle lane? The provision does not currently provide for this as it only allows LG to propose a shared path. However, if the Permanent Parking Area is under LG control, can’t we change it? Would it then need to be transferred to State Gov as it caters for ‘through traffic’? Document seems to cover when State want to change parking bays to a bicycle facility (i.e. Module 3 – scope), just not if LG want to change.

Given the above raised matters/issues, is there an exercise now required to map all SCR’s in each LG to clearly indicate the demarcation?

Module 2

Sect 2.3 - Throughout the document it states that TMR owns all assets within the SCR corridor. However, Council are in some instances required to pay 100% for the construction and 100% of the maintenance of these assets. Does this create a liability issue if something happens and how does Council justify spending ‘capital money’ on something that is not Council’s and can’t be capitalised.

Module 3

Sect 3.1 (para 1) – ‘which is generally provided to meet a locality amenity issue’. While this may be the case, it may also provide much more than this. For example, access to business/industry which have an impact on economics.

Sect 3.1 (para 2) – ‘serve no other purpose that providing parking for properties fronting the road’. This sentence is worded quite strongly and this is not the case for freight standing areas or roadside rest areas. These facilities/areas service the through traffic not the adjacent land uses. Also, in relation to the ‘permanent parking areas’ in some instances the actual sealed pavement is significantly wider than that which would be required for kerbside parking or property access.

Sect 3.2 (para 2) – generally LG should not be responsible for constructing and maintaining park’n’rides. Therefore, the wording may need amendment. For example, from ‘LG is to contribute to the additional costs’ to ‘LG may need to consider contributing to the additional costs’.

Sect 3.3 (para 1) – need to define ‘permanent parking areas’. Does this include taxi ranks, bus layovers? Does it also include future innovation such as Uber/ ride sharing parking bays and electronic car recharging parking bays? Do TMR want a role in these facilities?

Module 4

Sect 4.1(a) - It is the 'Principal' cycle network not the 'Priority' cycle network.

Sect 4.1(b) - LG can approach State to put in place a shared path on a SCR if no alternative exists or other options are too constrained. Construction and maintenance is then 100% LG responsibility. However, if bicycle facilities can't fit on a SCR, State gov can choose to construct/ contribute to a shared path along LG road. This agreement proposes that the cost to construct be jointly funded by State and LG and maintenance 100% by LG. This does not seem very fair. Construction costs should be 100% by State, especially if LG are 100% maintain. In addition, 'TMR may elect to construct or contribute to a shared path on a LG road' – This conflicts with the TMR cycling policy which says they need to positively provide for cyclists.

This module seems quite limited in regards to bicycle treatment options (e.g. only talks about shared paths or bicycle lanes). What about cycle tracks, protected bicycle lanes? Suggest broaden the terminology to be 'cycle facilities' so that it is all encompassing and allows for future innovation in the area.

Sect 4.3 (para 1) – 'Table 1' should be 'Table 4.1'

Module 5

Section 5.1 (para 2) – 'Footway' should be referred to as verge.

Section 5.2 (para 2) – Is very specific and not consistent with the level of detail in the rest of the document. It is suggested that after 'rural areas' you insert 'e.g. where...'

Section 5.2 (para 5) – If Council is required to fund the construction and maintenance of a special footpath treatment, the ongoing maintenance requirements shouldn't need agreement from DTMR.

Section 5.2 (last para) – 'Similarly TMR has a responsibility to erect vehicular barriers to protect pedestrians using the verge' –need to elaborate on what these are.

Section 5.3 (para 2) – refer to comments on Sect 2.3

Table 5.1 – The use of the term 'justified' throughout - Council and TMR may have differing opinions on whether a piece of infrastructure is 'justified' or not. There is no application for a full concrete verge. Need to define 'Outer Urban'.

Module 6

Sect 6.1 (par 6) – 'the flooding problem is accentuated by upstream development'. There should be no worsening by upstream development.

Figure 6.1 – The diagram provides a clear demarcation for what is LG responsibility, whereas the last para in Sect 6.1 says 'close co-operation' 'to ensure LG and TMR agree on the on-going maintenance and ownership'.

Sect 6.3 – Council disagrees that it is responsible for all drainage if it is an integrated system. TMR needs to be responsible for the inlets and water shed and debris for the roadway, therefore needs to have some maintenance responsibility.

Module 8

Sect 8.1 (para 1 & 2) – Council does not feel it is local government’s responsibility to ensure that property access to the SCR meets sound engineering and safety requirements. Remove reference to Local Government from paragraph 1 & 2.

Sect 8.2 (para 2) – As above, it is not local government’s responsibility to approve property access to the SCR. Remove reference to Local Government from paragraph 2.

Module 9

Sect 9.3 – refer to comments on Sect 2.3

Module 10

The description of the change in the summary document for Module 10 is misleading to what is actually proposed in the revised cost sharing document. This is particularly in regard to pedestrian bridges in SCR corridor.

The diagrams and the description for the responsibility do not match and needs clarification.

Sect 10.1 (last para) – Council disagrees with the exception of freestanding cycle and pedestrian bridges. We should avoid the situation where pedestrians/cyclists are not catered for as part of a road bridge which shifts the responsibility/cost to the LG.

Sect 10.2 - Would the responsibility to upgrade an at capacity existing 2 lane overpass to 4 lanes sit solely with Council (or a developer)?

Sect 10.3 (para 1) – ‘Table 10.2’ should be ‘Table 10.1’

Table 10.1 (line 3) – This contradicts elsewhere in the document. The responsibility should be TMR/LG respectively.

Sect 10.3 (last para) – Not sure if this aligns with previous info (refer to last para in 10.1).

Module 11

Sect 11.1 & Sect 11.3 are contradictory statements. This opening statement 11.1 acknowledges that the standard should be and expectations of the community however 11.3 states the intervention levels under the RMPC are based of affordable value for money. The current intervention levels are well below the expectations of the community therefore who is stating value for money and the expectation or inferred is LGA pick up the remainder.

Module 12

Sect 12.2 (last para) – Insert the word ‘to’ between ‘lighting’ and ‘meet’.

Sect 12.2 (last para) – There may be a need to add a comment here to suggest LG and TMR work together (similar to clause 4.2).

Module 13

Sect 13.1 – Unsure why the lists for roadside furniture have been separated.

Module 14

Sect 14.2 - Need more discussion on line marking responsibilities i.e. is DTMR responsible for all line marking in the corridor including 'permanent parking areas'. If not, who is responsible for maintaining a yellow line in a parking lane that restricts parking for safety/sight distance reasons? The signage responsibilities should be reworded to state that DTMR are responsible for all road signage within the corridor with the exceptions listed for Council responsibility. Etc should be removed from the list of Council signs.

Also, who would be responsible for maintaining clear zone signage particularly if it is a multi-panel sign with regulated parking signs?

Module 15

Sect 15.2 (Noise Mound – para 1) – 'Figure 10.1' should be 'Figure 15.1'



TMR/Local Government
**Cost Sharing
Arrangement**

October 2017



Queensland
Government



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Acknowledgements

Policies and practices related to cost-sharing arrangements between the Department of Transport and Main Roads (TMR) and local government have evolved over time through a long standing relationship that is based on trust and mutual understanding. In 2000, the then Department of Main Roads and the Local Government Association of Queensland (LGAQ) consolidated cost sharing policies and practices into a single, consistent, state-wide agreement. While the agreement has served both now TMR and local government well, in 2015, LGAQ and TMR agreed that a review was warranted.

This Cost Sharing Arrangement (CSA) is the result of a collaborative effort in undertaking this review and has involved staff from TMR and LGAQ, along with representatives from a select group of Queensland local governments. Following broad consultation across all local governments and TMR, this CSA, which builds upon the success of the previous agreement, confirms the collaborative approach for the establishment of cost sharing arrangements.

It is important to acknowledge and thank all involved in the development of this CSA.

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How to use this document

There are over 33,000 kilometres of state-controlled roads across Queensland and it is impossible for a State-wide arrangement to cover every single scenario. As such, this Cost Sharing Arrangement provides a framework for the determination of agreements between local governments and their respective TMR District office.

This document is comprised of two parts, as follows:

- **Part 1** – Memorandum of Understanding (MOU) – establishes guiding principles for the determination of cost sharing agreements
- **Part 2** – Cost Sharing Modules – contains modules that provide a starting point for sixteen (16) common activities where cost sharing agreements are typically established between TMR and local governments.

The MOU and the accompanying Modules have been designed to provide an overarching framework for the determination of cost sharing agreements at the local level. Both parts of this document are to be read together.

The the guidance provided in the Modules (Part 2) serves as a starting point for negotiation and discussion between TMR Districts and local governments. The determination of agreements is to occur in accordance with the principles and the outlined processes as detailed in Part 1. Finalised agreements are to be documented, with the demarcation of responsibilities of both TMR and the relevant local government mapped so that any ambiguity is identified and resolved early.



PART 1

Memorandum Of Understanding



Memorandum of Understanding for the determination of Cost-sharing Arrangements between the Department of Transport and Main Roads and Queensland's Local Governments

Preamble

Roads are critical in connecting land, transport, social, and environmental systems. While local roads are managed by local government and state-controlled roads by the Department of Transport and Main Roads (TMR), Queensland's road network must integrate seamlessly and efficiently to best serve communities and industry.

TMR and Queensland's Local Governments have a long standing history of collaboration and achievement in delivery of Queensland's road network. This Memorandum of Understanding (MOU) between TMR and the Local Government Association of Queensland (LGAQ), on behalf of Queensland local governments, supports the objectives of the:

- **Partners in Government Agreement** signed in October 2015, and
- collaborative approach adopted through the Roads and Transport Alliance partnership.

This MOU has been developed to guide and support cost-sharing practices that relate to the construction and maintenance of works within Queensland's state-controlled road corridors.



Neil Scales
Director-General
Transport and Main Roads



Greg Hallam
Chief Executive Officer
Local Government Association of Queensland

Dated this 16th day of October 2017

1. Introduction

Queensland is a geographically disperse state with approximately 186,500km of public roads. Local government has control and administration over some 153,000km, with the remainder being state-controlled, the management of which is vested in TMR. The efficient and effective management of this vast network requires the cooperation and open sharing of information between TMR and local government. It is this collaborative approach that provides a safe, efficient and integrated transport network that delivers for the community - the one-network approach.

The formation of the Roads and Transport Alliance in 2002 furthered TMR and local governments' commitment to fostering collaborative management practices, a key tenet of the one-network approach. This MOU builds upon this collaborative approach to provide a framework that supports TMR and local government in engaging and reaching agreement regarding cost-sharing arrangements for works within state-controlled road corridors.

2. Purpose of the MOU

The purpose of this MOU is to:

- promote cooperation and good practice in the interaction between TMR and local governments about road related business on state-controlled roads (SCRs) and those areas immediately adjacent to and under the control of local government (including local roads)
- ensure statewide consistency and equity when entering into cost sharing arrangements
- provide a framework for resolving issues of concern
- provide guidance on how costs associated to road related activities and functions should be determined between TMR and local governments.

3. Scope of the MOU

This MOU is a policy document. It does not override any Local, State or Commonwealth legislative responsibilities, nor does it amount to an admission of responsibility or liability for any individual work undertaken on the road network. Instead, it provides guidance for continued cooperation between TMR and local government in delivering a safe, efficient and integrated transport network.

This MOU contains guidelines in regard to:

- the principles of cost sharing arrangements
- the responsibilities of both parties - Local Government and TMR
- agreed process for issue resolution
- cost sharing modules for 16 common activities.

The scope of this MOU does not:

- apply to local government road corridors beyond their connection to the SCR network, stock routes, animals on roads or artesian water
- specify the standard for construction and/or maintenance
- cover non-road transport infrastructure (that is, marine, busway and light-rail)
- include the determination of the works required or their cost
- compromise other arrangements between local government and TMR in the areas of:
 - other funding arrangements (ie, Principal Cycle Network Plans)
 - engineering standards (ie, Road Planning and Design Manual)
 - maintenance intervention levels (ie, Road Maintenance Performance Contract), or
 - relationships (ie, the Roads and Transport Alliance).



4. Principles

To ensure statewide consistency and equity, a set of overarching principles have been established to guide both parties in establishing cost sharing arrangements.

When applying the principles, both parties should be aware of the funding constraints applicable to that particular situation, ensure any agreed funding commitment reflects cost efficient delivery, and give fair consideration to its effect on competing priorities.

In striving to achieve a one-network outcome, the following four principles should be applied when establishing a cost sharing arrangement.

4.1 Collaboration

TMR and local government each have their specific responsibilities in delivering infrastructure within state-controlled road corridors. Where these responsibilities intersect, a collaborative cost sharing approach is to be taken. Cost sharing arrangements should be based on the functionality of the corridor and the typical standard of service users should expect.

Negotiations on cost sharing should be based on developing a collaborative enduring relationship built on good faith, openness, responsiveness and communication.

4.2 Safe and integrated network

Any works must consider the operational needs of road users. It is important to ensure the road network is integrated and supports a productive economy and connected communities.

Safety is paramount. Sound traffic engineering practices should not be compromised through funding limitations. Both parties should take a one-network approach to delivering what is best for a safe transport network.

4.3 Planning

Generally, TMR and local government each take responsibility for the planning, construction, operation, maintenance and ownership of their respective projects.

Where TMR or local government works have an impact on the other party, consultation and negotiation of intended works, together with agreements on the proposed design standards, asset ownership and estimates of costs should be undertaken at the earliest opportunity. The decision making process is to recognise the rights, roles, responsibilities and standards of the other party.

4.4 Standards

The entity instigating and funding the construction of the capital works project specifies the standard. Consideration should also be given to an appropriate standard of maintenance required to maximise asset life and utilisation.

If one party requires a higher standard of construction, or maintenance, the party requesting the higher standard will be required to fund the difference in costs. Otherwise, where one party performs construction, maintenance or other work which impacts on infrastructure under the control of the other party, the functionality of any elements affected shall be reinstated to at least a similar standard as existed previously.

5. Responsibilities of TMR and Local Government

Traditionally, the road corridor consists of a pavement for vehicular traffic (usually located in the centre of the corridor) flanked by nature strips, which at times may be used for pedestrian traffic, cyclists, provision of public utility services, passage of stock and ancillary works and encroachments.

TMR is responsible for planning, providing and managing Queensland's state-controlled road network to create a single integrated transport network accessible to everyone. As steward of this network, TMR:

- manages SCRs in accordance with relevant legislation, policies, standards, codes of practice having regard to local government practice on adjacent local roads
- manages the movement of vehicular traffic in a safe and efficient manner onto, along, across and off the pavement of the state-controlled road network
- provides and maintains the associated infrastructure appropriate to that role
- manages state-controlled road corridors, including:
 - access to the road
 - ancillary works and encroachments
 - public utilities
 - other third party activities.
- works with local governments to undertake planning for both upgrades and new corridors for local and SCRs.

TMR operates within a limited budget and with competing priorities managed through the **Queensland Transport and Roads Investment Program** (QTRIP).

Local government has responsibility for a range of functions as defined under the **Local Government Act 2009** and other relevant legislation. Local government has responsibility to:

- govern their respective local government area in accordance with the Act
- coordinate and provide local government and community infrastructure, including road and transport infrastructure and services
- deliver community services, including non-transport related services such as water, sewerage, drainage, waste management and recreation
- Participate in planning for both upgrades and new corridors for local and SCRs.

Local governments deliver infrastructure and services to provide value for money within available budgets. At times, local governments seek to utilise the available space provided within state-controlled road corridors to deliver their requirements in a cost effective manner.



6. Consultation and engagement

6.1 Planning

TMR and local government recognise that forward planning is an essential part of the one-network approach. This includes the future needs of the wider transportation network, such as active and public transport.

Early engagement between TMR and local government is crucial to ensure that each organisation is fully informed of the other's works program. This enables opportunities to identify and coordinate activities, consider potential impacts and costs. It is also important that responsibility for ownership and maintenance of infrastructure is agreed early in the planning phase.

6.2 Communications

Under the Memorandum of Agreement for the Roads and Transport Alliance, TMR District Director's provide their respective Regional Roads and Transport Group's with formal briefings at the commencement of each program cycle (focusing on but not limited to) TMR's investment priorities for the region. TMR Districts and local governments (within that TMR District) should adopt an appropriate process, as deemed locally acceptable, to build upon this annual briefing cycle. Such adopted processes would seek to, among other things:

- share information on each party's works program (current and future years) that may have an impact on the other party's infrastructure in state-controlled road corridors
- identify and document infrastructure (of both parties) that will be impacted by planned works
- where necessary, establish new cost sharing arrangements and monitor any existing cost sharing arrangements established by the parties.

6.3 Agreements

An essential part of preconstruction planning activities is the determination of, and agreement on, the quantum and timing of monetary contributions. Consultation between the parties on technical aspects, responsibilities, funding expectations and asset ownership need to start early in the planning phase.

The agreement on which party funds construction, who is the asset owner and who funds the maintenance and lifecycle replacement should be finalised before the project progresses to the detailed designed phase. This agreement should be made in writing to prevent ambiguity later in the project.

6.4 Issue resolution

Where the individual funding responsibilities of TMR and local government cannot be clearly defined and/or agreed, alternative arrangements should be reached through negotiation. Issues are to be dealt with in an expeditious manner in the spirit of collaboration and the principles contained in this MOU.

Issues are to be resolved at the lowest possible level in a way that promotes ongoing efficient and cooperative business relations between both parties. At each level, the issue must be resolved or passed on to the next highest level within a reasonable timeframe. Issues may only pass to the next management level during the escalation process – as per the following table.

Escalation Stage	Personnel involved		Timeframe - Working days
	Department of Transport and Main Roads (TMR)	Local Government (LG)	
1	TMR staff member	LG staff member	5
2	TMR Manager	LG Manager	10
3	TMR Regional/District Director	LG General Manager/Director	10
4	TMR Director-General	LG CEO	30

7. Cost sharing modules for specific activities

This MOU is supported by a series of modules for cost sharing activities. These modules provide a starting point for discussions between TMR and local government. Each of the modules are intended to provide a baseline position from a policy perspective. The negotiated outcome may differ to the module provided.

8. Commencement and transitional arrangements

This MOU and its accompanying modules commences on the date of signing by both parties and replaces the previous Agreement between Local Government Association of Queensland and Department of Main Roads for **Cost Sharing based on responsibilities within State controlled roads** dated 7 March 2000.

This arrangement does not apply:

1. Retrospectively except where provided for in this arrangement.
2. To any project listed in the 2017-18 to 2020-21 Queensland Transport and Roads Investment Program.
3. To any existing arrangement or contract agreement about the delivery of maintenance or project cost sharing, including the 2018 Commonwealth Games, agreed to prior to the commencement of this MOU unless otherwise mutually agreed by both parties.

Due to the potential impact on project costs and existing budget allocations, the following transitional arrangements apply at the date of commencement:

- There is to be no transfer of maintenance responsibility of existing 'legacy' infrastructure in accordance with this arrangement without discussion and written agreement of both parties
- In the cases of new roads and road upgrades, application of the new modules will be straight forward and should be utilised in the planning phase of each project.

9. Review

This MOU will be reviewed five years from the date of commencement and, subject to agreement between LGAQ and TMR, shall operate for a further five year period.

10. Amendments

From time to time, the cost sharing modules for the various activities may need to be updated to accommodate changes in technology, materials, planning methodology and inter-governmental relations.

Amendments may be made at any time throughout the life of this MOU. Any amendments to the MOU or to a cost sharing module/s, including the addition/deletion of modules must be authorised by the Chief Executives of TMR and LGAQ.



PART 2

Cost Sharing Modules



OVERVIEW

As noted in Part 1, the Memorandum of Understanding (MOU) is accompanied by supporting modules that outline a starting position from a policy perspective. This section, Part 2, contains modules that provide a starting point for sixteen (16) common activities where cost sharing agreements are typically established between TMR and Local Governments.

GLOSSARY OF TERMS

AADT	Annual Average Daily Traffic
Access Road	A sealed pavement providing access from the SCR traffic lanes to private properties or a commercial property such as a roadside centre or service station.
Austrroads	The association of Australian and New Zealand road transport and traffic agencies whose purpose is to contribute to the achievement of improved road transport outcomes.
Auxiliary lane	A portion of the carriageway adjoining the through traffic lanes, used for speed change or for other purposes supplementary to through traffic movement. (Austrroads)
Bridge	A structure designed to carry a road or path over an obstacle by spanning it. (Austrroads)
Bus stop	A collector point for pedestrians along a public transport route that allows for boarding and alighting, that also includes a portion of the roadway for the stopping of a bus.
Carriageway	That portion of the road formation, including lanes, auxiliary lanes and shoulders that is set aside for the use of vehicles, either moving or stationary. (RPDM Chapter 7).
Construction	The delivery of either new infrastructure or the rehabilitation of existing infrastructure.
Clearway	A parking lane or section of carriageway that converts to a through traffic lane during peak periods.
Cycle lane	An on-road marked lane for the exclusive use of bicycles.
Cycle path	A dedicated facility for the exclusive use of cyclists that is considered off-road under the Australian road rules.
Cycle track	A physically separated bicycle only facility within an urban road corridor with clear cyclist priority at intersections.
Declaration	The outcome of the process for establishing what land area forms a state-controlled road (in accordance with sections 24 and 25 of the Transport Infrastructure Act 1994).
Driveways and Property Accesses	A sealed or unsealed access from the SCR carriageway to one or more properties.
Footpath	A strip of sealed path in the footway reserved for the movement of pedestrians, motorised wheelchairs, personal mobility devices and cyclists.
Footway	The area between the kerb and channel / table drain and the property boundary used for locating linear public utilities and pedestrian movements.
Instigator	The entity that proposes or requests the works.
Local Government road	See Local Government Act 2009 (Section 59).
Maintenance	Action necessary to maintain an asset in working order and/or to reduce its rate of deterioration.
Median	The central strip of the road not intended for use by traffic which separates opposing traffic flows.
MUTCD	Manual of Uniform Traffic Control Devices.



Noise barrier	A natural or artificial physical screen located between the source of the noise (road traffic) and a receptor (e.g. residence), which interrupts the path of the noise.
Outer urban areas	Areas on the outskirts of towns and cities, typically with larger rural residential allotments.
Parking area	A place set aside for the parking of vehicles. (Austroads)
Pavement	That portion of a road designed for the support of, and to form the running surface for, vehicular traffic. (Austroads)
Pedestrian crossing	A specially marked area giving legal rights to pedestrians crossing the road.
Pedestrian refuge	A median island, or a section of median, on wide or heavily trafficked roads, provided as a staging area for pedestrians crossing the road.
QTRIP	Queensland Transport and Roads Investment Program.
Rehabilitation	All actions necessary for restoring an asset as near as practicable to its original condition.
Replacement	When an asset has reached the end of its serviceable life and needs to be re-constructed.
Road corridor	A major area of travel between two points. It may include more than one major route and more than one form of transport. (Austroads)
Road Maintenance Performance Contract (RMPC)	A formal contract between TMR and service providers to undertake maintenance on the SCR.
RPDM	TMR Road Planning and Design Manual.
Rural area	Typically an area with a speed environment of 80 kms/hr or above.
Service road	A standalone sealed/unsealed road that runs parallel to the SCR and services properties along the SCR, so that each property does not require their own individual access to the main carriageway.
Shared path	A walking and cycling facility (sealed) with pedestrian priority that is considered off-road under the Australian road rules.
Shoulder	The portion of formed carriageway that is adjacent to the traffic lane and flush with the surface of the pavement. (Austroads)
State-controlled road (SCR)	A road or land, or part of a road or land declared under section 24 Transport Infrastructure Act 1994 .
Swale	An open vegetated drainage channel or shallow troughlike depression designed to carry, detain, partly treat and promote the filtration of stormwater run-off.
Table drain	A lined or unlined drain that is located adjacent to the carriageway in cutting.
TIDS	Transport Infrastructure Development Scheme.
Tangent Point (TP)	The point on the line where straight and curve meet tangentially.
Traffic	A generic term covering all vehicles, people and animals using a road. (Austroads)
Traffic lane	Road lanes being used by through traffic. Includes general traffic lanes, bus lanes, cycle lanes, auxiliary lanes, clearways, turning lanes, overtaking lanes, and deceleration and acceleration lanes.
Urban areas	Typically an area with a speed environment of 70 kms/hr or below.
Vehicle	Term encompassing motorised and wheeled road transport options, including cars, buses, freight vehicles, taxis, trams, bicycles, animal-drawn transport and motorised wheelchairs and bicycles with speed over 10 km/h. Excludes trains and other types of wheelchairs and wheeled recreational devices.
Warrant	A criterion, usually numerical, used to determine whether the construction of a traffic facility or the installation of a traffic control device may be justified. (Austroads).



MODULE 1:

TRAFFIC LANES

This module provides guidance as a starting point for the determination of agreements related to the management of traffic lanes. The determination of agreements is to occur in accordance with the overarching principles contained in Part 1 of this document.

1.1 Scope

This module sets out the responsibilities for the planning, design, construction, maintenance, rehabilitation and ownership of traffic lanes on the state-controlled road (SCR) corridors (including National Highways but excluding franchised Motorways).

The SCR corridor functions as a multi-modal transport conduit ensuring private vehicles, mass transit vehicles, freight vehicles, cyclists and pedestrians can move safely and efficiently between and through communities without adverse impact on local residents, businesses and other corridor users.

A traffic lane is the area of the carriageway that caters for through road traffic. Through traffic includes cars, taxis, buses, coaches, freight vehicles, cycles and other road-based transport.

Some parallel parking areas along urban roads can also operate as a traffic lane catering for through movements at certain times of the day e.g. clearway.

This module should be read in conjunction with the following modules:

- Road shoulders - Module 2
- Parking - Module 3
- Cycleways - Module 4.

1.2 Planning, Design, Construction and Rehabilitation

TMR as the instigator is responsible for funding the planning, design, construction, maintenance and rehabilitation of traffic lanes. Generally, TMR will construct, maintain, and rehabilitate the carriageway and depth of pavement that will service the forecast traffic volumes over the design life of the pavement.

As per the MOU, it is important that parties advise the scope of carriageway upgrade works to the other parties early in the planning phase, so that there is opportunity for parties to work together to deliver a better outcome.

1.3 Maintenance and Ownership

The costs of routine maintenance, including reseals, of the traffic lanes will be the responsibility of TMR. TMR contracts the maintenance of traffic lanes to 3rd parties and the intervention levels for maintenance are set out in those contracts.

Areas of a carriageway within the SCR corridor that do not cater for through traffic (that is, they are used solely for parking) are not considered traffic lanes and maintenance of these areas is the responsibility of Local Government.

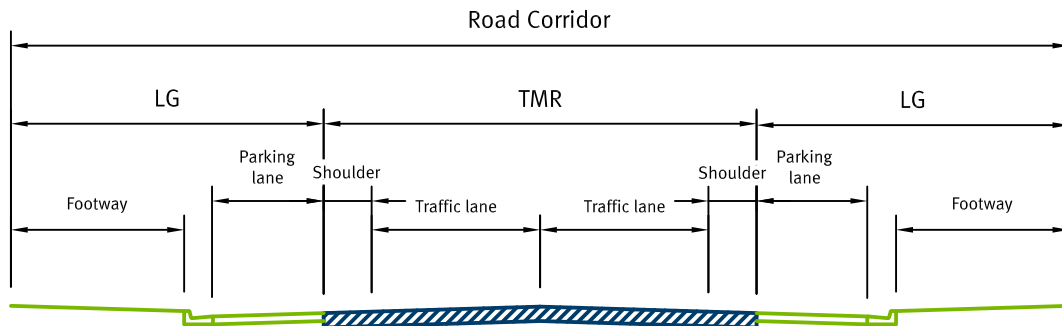
In locations where there are both through traffic lanes and areas used solely for parking, an agreement showing the limits of responsibility for maintenance (and rehabilitation) need to be prepared so that there is no ambiguity amongst field staff from both organisations. The agreement can also be used for planning and coordinating road maintenance and repairs between both TMR and Local Government.

All carriageway pavement in the SCR corridor is owned by TMR, irrespective of whether it is a traffic lane, shoulder, cycle lane or parking area.

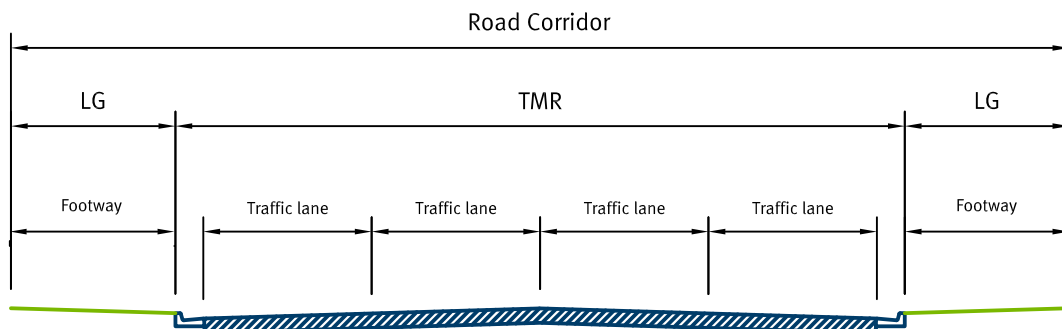
1.4 Illustrations

Examples of traffic lanes for typical carriageway configurations are shown in Figure 1.1

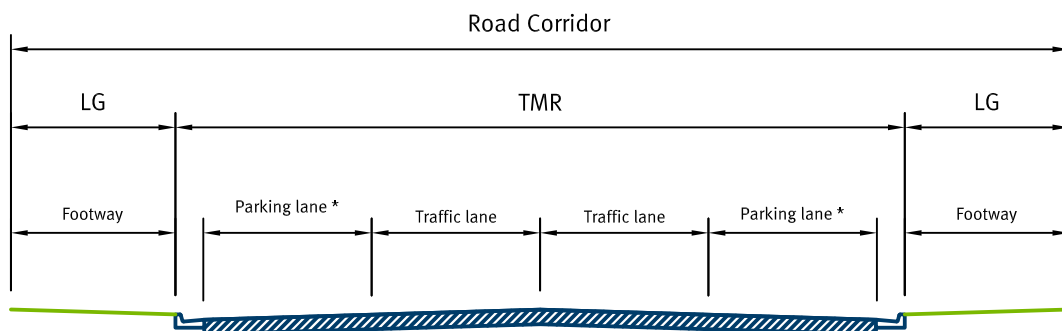
Figure 1.1: Responsibilities for Typical Carriageway Configurations



Road Corridor with Parking Lanes



Road Corridor with 4 Traffic Lanes



Road corridor with parking lane / Clearway.
*Parking lane used as clearway in peak periods

1.5 Summary of Cost Sharing Responsibilities

COST SHARING RESPONSIBILITY - TRAFFIC LANES						
<i>Item</i>	<i>Planning</i>	<i>Design</i>	<i>Funding of Construction</i>	<i>Funding of Rehabilitation</i>	<i>Funding of Maintenance</i>	<i>Ownership</i>
Traffic Lanes	TMR with early advice to Local Government	TMR	TMR	TMR	TMR	TMR

1.6 Photo Library

Photo examples of traffic lanes - these images are indicative only.



The edge line widening at the bus stop provides demarcation of traffic lanes that are the responsibility of TMR.



Because the left hand lane is used as a clearway during peak hours, TMR is responsible for the full width of the carriage lane.



This four lane urban arterial would see TMR responsible for all carriageway from channel to channel.



An example of deceleration and acceleration lanes at an intersection. TMR is responsible for the entire carriageway.



An example of auxiliary lanes at an intersection. TMR is responsible for the entire carriageway.



The edge line provides demarcation between the through traffic lane and the parking lane. Responsibilities for parking lanes are discussed in Module 3.



MODULE 2:

ROAD SHOULDERS

This module provides guidance as a starting point for the determination of agreements related to the management of road shoulders. The determination of agreements is to occur in accordance with the overarching principles contained in Part 1 of this document.

2.1 Scope

The road shoulder is an important component of the carriageway. Not only does a sealed shoulder provide structural protection to the pavement by providing lateral support to the pavement layers, it also reduces edge wear and moisture ingress into the pavement. It also provides safety to road users through increased separation of through and parked vehicles, wider recovery areas to reduce off-road crashes, as well as a sealed surface for cyclists and breakdowns.

This module should be read in conjunction with the following modules:

- Traffic lanes - Module 1
- Parking - Module 3
- Cycleways - Module 4.

2.2 Minimum shoulder widths

It is acknowledged that in non-urban areas across the SCR network, there is a diversity of shoulder widths. In each situation, the width of shoulder is determined following rigorous consideration by designers.

If the Local Government requests a wider shoulder than what TMR considers necessary, there needs to be an agreement as to who funds and maintains the additional width.

2.2.1 Minimum sealed shoulder width for structural purposes

From a structural perspective, ***Austrroads Guide to Road Design*** (Section 3, Table 4.7) details a minimum sealed shoulder width of 1.0 metre to ensure structural integrity of the pavement layers through lateral support and control of moisture.

2.2.2 Minimum sealed shoulder width for traffic function

From a traffic perspective, the width of the shoulder is dependent on a number of factors including AADT, functional classification of the road speed environment, on-street parking, provision for cycles, clearance to obstacles and the need for additional width for large vehicles. ***Austrroads*** and the ***RPDM Supplement*** detail the minimum widths.

2.3 Planning, Design, Construction and Rehabilitation

TMR is responsible for the planning, design, construction and rehabilitation of shoulders along SCRs.

Where a Local Government requires a wider shoulder than proposed, Local Government is to contribute to the additional costs of extending the carriageway. The cost of the shoulder pavement rehabilitation is to follow the same lines of demarcation as agreed between TMR and Local Government for maintenance.

2.4 Maintenance and Ownership

TMR is responsible for the costs of routine maintenance including reseals of all SCR sealed road shoulders.

TMR will be responsible for funding the costs of routine maintenance and rehabilitation of shoulders with Local Government responsible for funding the costs of maintenance and rehabilitation for those areas of carriageway that are outside the traffic lane/s, shoulder and cycle lane/s (where present).

In urban and outer urban areas with existing wide carriageways, some shoulders are wider than the minimum widths set out in relevant guidelines. Agreement needs to be reached between TMR and Local Government on the limits of the shoulder and how maintenance costs are shared. As a general guide, if the area is wide enough to provide parking for the neighbouring properties, the responsibility will lie with the Local Government, while if there is insufficient room for parking, TMR will be responsible. In these situations, an agreement should be prepared showing the limits of each organisation's responsibility to ensure field staff understand the demarcation. All carriageway in the SCR corridor is owned by TMR, irrespective of whether it is a traffic lane or shoulder.

2.5 Illustrations

Examples of road shoulders for typical carriageway configurations are shown in Figure 1.1 and Figure 3.1.

2.6 Summary of Cost Sharing Responsibilities

COST SHARING RESPONSIBILITY - SHOULDERS						
<i>Item</i>	<i>Planning</i>	<i>Design</i>	<i>Funding of Construction</i>	<i>Funding of Rehabilitation</i>	<i>Funding of Maintenance</i>	<i>Ownership</i>
Shoulder on SCR	TMR with early advice to Local Government	TMR	TMR	TMR	TMR	TMR

2.7 Photos

Photo examples of traffic lanes - these images are indicative only.



As shown in this photo, TMR is responsible for the traffic land and shoulder. Local Government is responsible for the parking area.



TMR has provided a shoulder that is appropriate to the road use.



MODULE 3:

PARKING

This module provides guidance as a starting point for the determination of agreements related to the management of parking. The determination of agreements is to occur in accordance with the overarching principles contained in Part 1 of this document.

3.1 Scope

TMR may allow for parking at appropriate locations along SCRs. In urban areas, carriageways typically consist of:

- Traffic lanes include bus stops, clearways, and so on – Module 1
- Shoulders – Module 2
- Cycleways – Module 4
- Other areas of carriageway that do not fulfil the function of through traffic lane or shoulder/cycle lane.

These 'other areas' are often used as parking areas and serve no purpose other than providing parking for residential and commercial properties fronting the SCR corridor. Parking includes line marked or informal, parallel angled or median bays, or standing areas for multi-combination vehicles including heavy, freight and car/caravan combinations.

As discussed in Module 1, parallel parking along urban arterials can sometimes operate as a clearway during peak periods. In these cases where the parking lane caters for through movements, albeit on a part-time basis, these lanes are considered to be traffic lanes and do not apply to this module.

Consequently, this module applies only to those 'other areas' of carriageway which are in addition to traffic lanes and shoulders/cycle lanes, and are used for parking purposes and other kerb-side uses including loading zones, taxi zones, disabled parking bays, ride share, electric charging stations, bike hire, etc.

It should be noted that the traffic lane definition includes bus stops (including indented bus bays) and as such are also excluded from this module.

3.2 Planning, Design, Construction and Rehabilitation

TMR is responsible for the planning, design, construction and rehabilitation of traffic lanes. For new SCR carriageways, TMR will fund the construction of the carriageway that is capable of taking both the existing traffic demand and that into the future.

- Where there is no future demand for additional traffic lanes, it is TMR's prerogative as to whether it will construct the carriageway wider than that required for the traffic lanes (plus shoulders/cycle lanes).
- Where TMR determines there is no traffic requirement for additional width of the carriageway but Local Government would like to retrofit a parking lane, Local Government is to contribute the added cost of constructing the additional carriageway width. Should this require a realignment of kerb and channel, alterations to public utilities and/or resumptions, Local Government will be responsible for these additional costs.
- Where the project involves the major upgrade or rehabilitation of an existing SCR carriageway and includes areas where parking is currently permitted, TMR is to contact Local Government at the inception of the project to determine the ongoing need for the parking. If deemed necessary by Local Government, TMR will enter into a cost sharing arrangement for the capital works so that the construction/rehabilitation of the entire carriageway can be undertaken at one time and in doing so, realise efficiencies for both organisations.
- The cost of pavement rehabilitation follows the same lines of demarcation with TMR funding rehabilitation of traffic lanes and shoulders/cycle lanes, and Local Government funding the cost of pavement rehabilitation in those 'other areas' of carriageway.

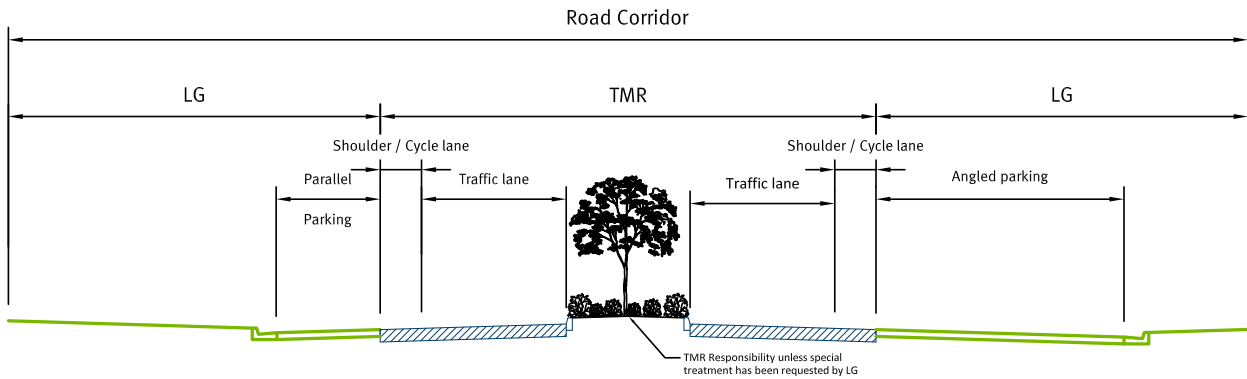
3.3 Maintenance and Ownership

The maintenance funding for these 'other areas' of carriageway typically being used solely for parking areas is the responsibility of Local Government. This includes both routine maintenance and reseals of the pavement. An agreement should be prepared showing the limits of each organisation's responsibility. Irrespective of whether Local Government contributes to the costs of construction, maintenance or rehabilitation, the entire carriageway within the SCR is owned by TMR. Local Government owns parking meter equipment including meters, sensors and regulatory signage.

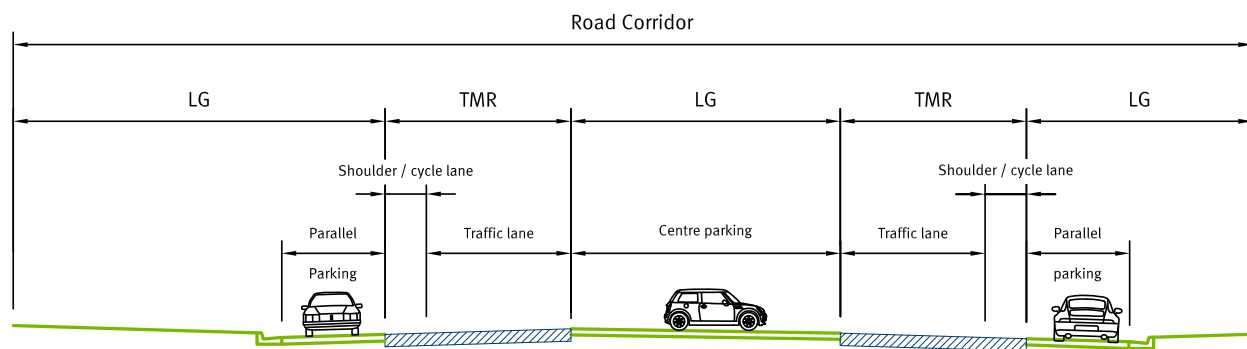
3.4 Illustrations

Examples of parking areas for typical carriageway configurations are shown in Figure 3.1.

Figure 3.1: Responsibilities for Typical Carriageway Parking Configurations



Typical carriageway configurations
Example 1



Typical carriageway configurations
Example 2

3.5 Summary of Cost Sharing Responsibilities

COST SHARING RESPONSIBILITY - PARKING						
Item	Planning	Design	Funding of Construction	Funding of Rehabilitation	Funding of Maintenance	Ownership
Parts of the carriageway other than traffic lanes, shoulders/cycle lanes that is typically used solely for parking	Joint	Joint	Local Government funds the construction of that area of carriageway that is not a traffic lane or associated shoulder/cycle lane.	Local Government funds the rehabilitation of that area of carriageway that is not a traffic lane or associated shoulder/cycle lane.	Local Government funds the maintenance of that area of carriageway that is not a traffic lane or associated shoulder/cycle lane.	TMR with the exception of parking meter equipment, in-ground sensors and signs.



3.6 Photo Library

Photo examples of parking – these images are indicative on Local Government is responsible for the carriageway outside the shoulder or cycle lane where the angled parking is provided.



Local Government is responsible for the carriageway outside the shoulder or cycle lane where the angled parking is provided.



Given this road has a cycle lane and centre parking, TMR is responsible for the traffic lanes and cycle lane with Local Government responsible for that part of the carriageway being used for parallel and centre parking.



Local Government is responsible for this vast area of carriageway from the outer edge of the cycle lane to the channel.



The photo illustrates the limits of asphalt overlay for the shoulder/cycle lane and the demarcation of TMR and Local Government responsibilities.



Given the minimum widths of shoulder or cycle lane, Local Government is responsible for a narrow section of parking lane from the outer edge of the shoulder/cycle lane to the channel. To avoid the inefficiencies of both TMR and Local Government undertaking rehabilitation or reseals, a cost sharing agreement should be negotiated so the entire carriageway works can be undertaken at the same time.



Local Government is responsible for the area of carriageway from the outer edge of the shoulder/cycle lane and the channel.



MODULE 4:

CYCLEWAYS

This module provides guidance as a starting point for the determination of agreements related to the management of cycleways. The determination of agreements is to occur in accordance with the overarching principles contained in Part 1 of this document.

4.1 Scope

Both Local Government and TMR have responsibilities to provide infrastructure that provides a safe environment for cyclists. These cycle facilities cater for a range of users including the recreational and commuter cyclist. Cycleways can be either on-road cycle lanes, cycle tracks, off-road shared paths or cycle paths. Due to the wide range of cycleways, there will be anomalies to the scenarios outlined in this module that will need to be negotiated.

This module needs to be read in conjunction with the following modules:

- Traffic lanes - Module 1
- Shoulders - Module 2
- Parking - Module 3
- Footways, Footpaths, and Shared Pathways - Module 5.

4.2 Planning, Design, Construction and Replacement

The construction standard for all cycle paths should comply with the *Austrroads Guide to Road Design - Part 6A Pedestrian and Cyclist Paths*, and *Part 3 Geometric Design Section 4.8 - Cycle Lanes*. TMR's suite of cycling design manuals and guidelines should also be taken into consideration.

Responsibilities for funding the construction of cycleways is generally the instigator - refer to Section 4.5. This includes all features associated with the cycle path, such as culverts over watercourses, line makings and signs.

It is essential that both Local Government and TMR plan cycle facilities using an integrated one-network approach, so that infrastructure is not duplicated.

The cost to maintain, rehabilitate and replace an off-road cycle path is the responsibility of the original instigator. If constructed through a grant, the provider of the grant is not the instigator.

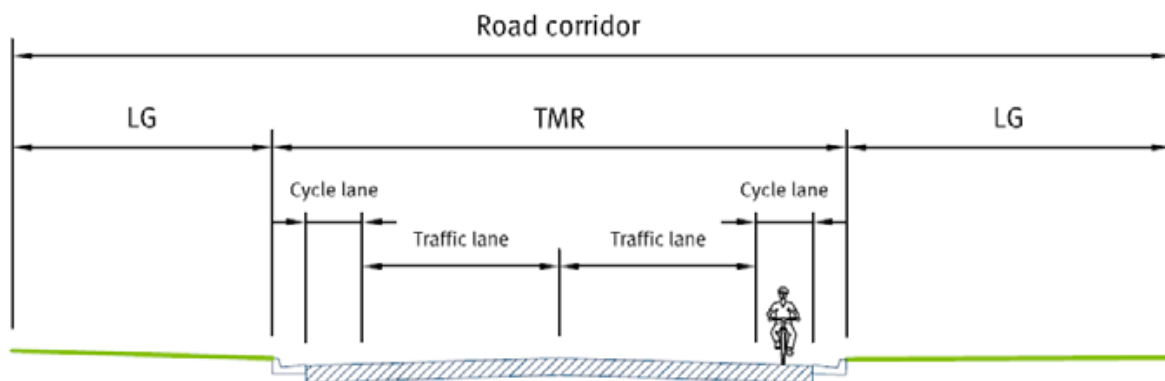
4.3 Maintenance and Ownership

Responsibilities for funding the maintenance of all cycle facilities and ownership are shown in Section 4.5.

4.4 Illustrations

Examples of cycle lanes for typical carriageway configuration are shown in Figure 4.1. In addition, Figure 1.1 and Figure 3.1 show the on-road cycle lane and shoulder as interchangeable and that where cycle lanes are provided, the limit of TMR responsibility is the width of the cycle lane rather than the shoulder. Figure 5.1 shows an off-road cycle path located in the footway.

Figure 4.1: Typical Configuration of Cycle Lanes on Carriageway



Typical Configuration of Cycle Lanes on Carriageway

4.5 Summary of Cost Sharing Responsibilities

COST SHARING RESPONSIBILITY – CYCLE FACILITIES						
Item	Planning	Design	Funding of Construction	Funding of Replacement	Funding of Maintenance	Ownership
Cycle lane or cycle track on SCR carriageway (TMR is the instigator)	TMR	TMR	TMR as part of road upgrade Usually located on the sealed shoulder	TMR	TMR	TMR with the exception of cycle equipment installed by LG
Off-road cycle path within SCR corridor (TMR is the instigator)	TMR	TMR	TMR	TMR	TMR	TMR
Alternative route along LG road or Crown Land (TMR is project instigator)	Joint	TMR (approved by LG)	TMR	By negotiation (and formal agreement)	By negotiation (and formal agreement)	By negotiation (and formal agreement)
Off-road cycle path within SCR corridor (LG is the project instigator)	Joint	LG and approved by TMR	LG	LG (Design approved by TMR)	LG	By formal agreement: LG - cycle pavement and cycle equipment TMR - land

4.6 Photo Library

Photo examples of cycle lanes and cycle paths – these images are indicative only.



TMR is responsible for the cycle lane and traffic lane. Local Government is responsible for the carriageway where centre parking and parallel parking is provided. (SCR)



An example of a cycle track with good definition.



TMR is responsible for the entire carriageway through the intersection. (SCR)



TMR is responsible for dedicated cycle paths within the SCR that have been instigated by TMR as part of an upgrade.



TMR is responsible for the on-road cycle lane.



Local Government is responsible for maintenance and rehabilitation of the footpath along the SCR corridor.



MODULE 5:

FOOTWAYS, FOOTPATHS AND SHARED PATHS

This module provides guidance as a starting point for the determination of agreements related to the management of footways, footpaths and shared paths. The determination of agreements is to occur in accordance with the overarching principles contained in Part 1 of this document.

5.1 Scope

This module establishes a negotiation starting point for activities associated with footways, footpaths and shared paths within the SCR corridor (but excluding franchised Motorways). It focuses on the safe off-road movement of pedestrians, cyclists and mobility aids linearly along the SCR corridor.

The typical demarcation of responsibilities for footways and footpaths/shared paths along SCRs are as follows:

- a) Where the carriageway includes kerb and channel in urban areas, Local Government has responsibility for the footway from the back of kerb to the property alignment, irrespective of whether there is a footpath or not. This includes Local Government being responsible for pedestrian ramps at road crossings.
- b) Where there is a footpath/shared path but no kerb and channel, Local Government has responsibility for the footway from outer edge of the table drain to the property alignment.
- c) In rural areas where there is no requirement for the provision of pedestrian facilities, TMR is responsible for the entire SCR area.

This module should be read in conjunction with the following modules:

- Cycleways - Module 4
- Surface Drainage - Module 6.

5.2 Planning, Design, Construction and Replacement

Rural Areas: Where there is light pedestrian traffic, TMR is usually responsible for management of vegetation along an unformed footway with no kerb and channel. Typically, this type of footway caters for the limited demand by residents living along the SCR and persons (including children) riding horses.

Outer Urban Areas: Local Government has a responsibility for imposing footway regulation and vegetation clearing along the frontage of any new subdivision or development fronting the SCR as a condition of the Development Application approval. Where it is apparent the cumulative pedestrian traffic from all subdivisions and developments along the SCR will be significant, the conditions of development should include a footpath strip in addition to formation correction of the footway.

A problem or difficulty can arise in developing outer urban areas where subdivisions are conditioned to provide footpath strips but subsequent developments are not constructed contiguous to one another. This creates a real safety issue for new residents and cooperation needs to occur between Local Government and TMR as to how to provide an interim linear footway around those adjacent parcels of land that are still to be developed/subdivided.

Urban Areas: Local Government may request special footpath treatments. It is important that the ongoing maintenance of these special treatments be discussed and agreed in the early stages of planning for the project. Should the construction costs be more than what TMR would normally pay for concrete or asphalt footpaths/shared paths, then Local Government is to meet the additional cost of construction.

The provision of refuges and barriers for crossing of the carriageway is the responsibility of TMR where the demand from pedestrians wanting to cross the SCR at a specific location is justified. For all other instances and particularly in the case of a new cycle path/pedestrian link initiated by Local Government, the construction costs are to be met by Local Government.

Where there is a high risk of conflict between pedestrians (particularly school children) and motor vehicles, TMR to consider safety measures such as speed limit review, fences and barriers.

5.3 Maintenance and Ownership

Section 5.5 outlines the respective cost sharing arrangements for the maintenance of footways, footpaths and shared paths.

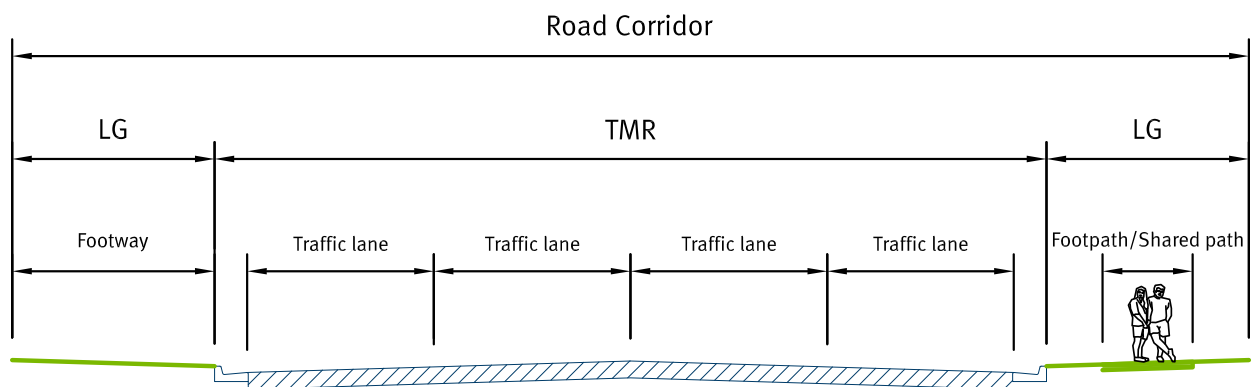
The original instigator of the infrastructure, whether that be TMR or Local Government, has the responsibility to replace footpaths and shared paths when the asset reaches the end of its serviceable life.

As with cycleways, Local Governments own the footpath pavement and any associated features, while TMR owns the land.

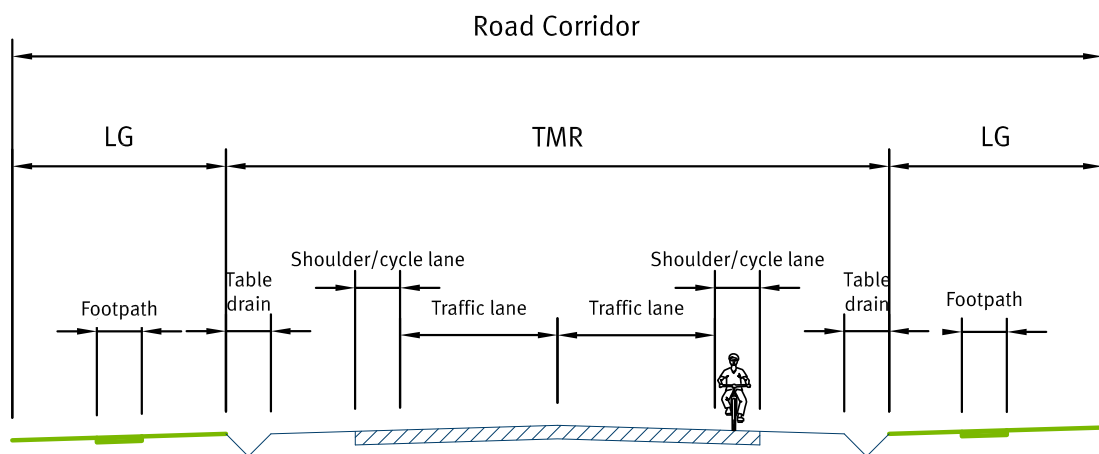
5.4 Illustrations

Examples of footways and footpaths showing the various responsibilities are shown in Figure 5.1 and Figures 1.1 and 3.1.

Figure 5.1: Typical Demarcations for Footways and Footpaths

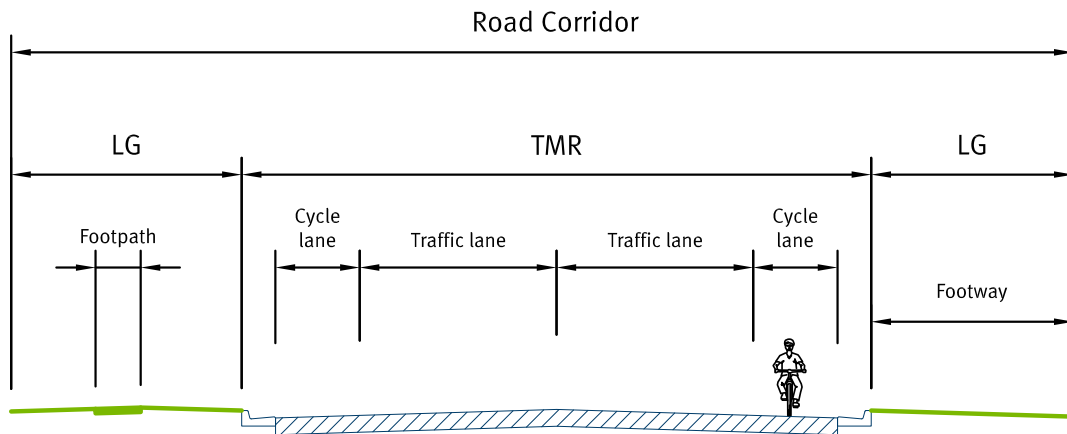


Footways / Footpaths Responsibilities Example 1

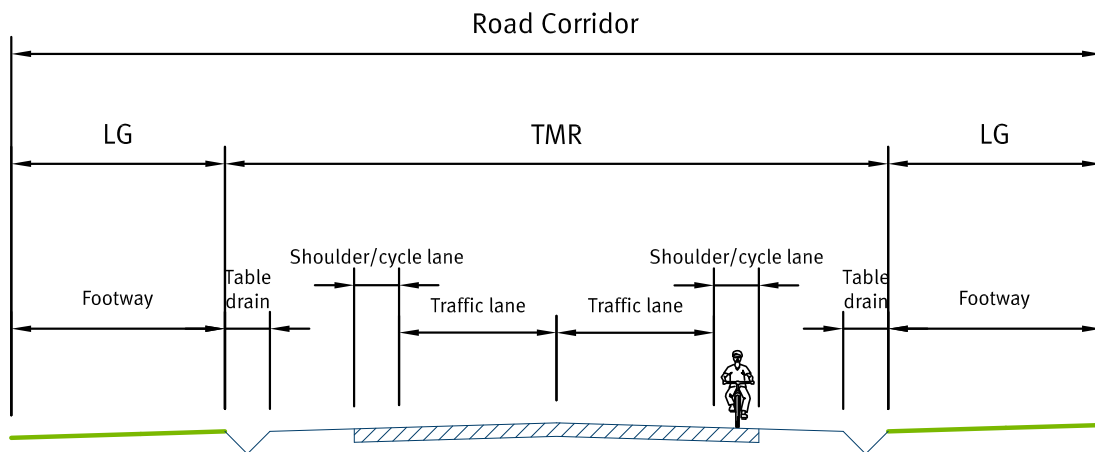


Footways / Footpaths Responsibilities Example 2

Figure 5.1: Typical Demarcations for Footways and Footpaths continued



Footways / Footpaths Responsibilities
Example 3



Footways / Footpaths Responsibilities
Example 4

5.5 Summary of Cost Sharing Responsibilities

COST SHARING RESPONSIBILITY - FOOTWAYS, FOOTPATHS AND SHARED PATHWAYS						
<i>Item</i>	<i>Planning</i>	<i>Design</i>	<i>Funding of Construction</i>	<i>Funding of Replacement</i>	<i>Funding of Maintenance</i>	<i>Ownership</i>
Footpath/ shared path with kerb and channel	Instigator of project based on consultation with other party	Instigator of project based on consultation with other party	Instigator of project based on consultation with other party	LG	LG	LG - pavement and associated features TMR - land within SCR
Footpath/ shared path with no kerb and channel	Instigator of project based on consultation with other party	Instigator of project based on consultation with other party	Instigator of project based on consultation with other party	LG	LG	LG - pavement and associated features TMR - land within SCR
Grassed footway with kerb and channel	N/A	N/A	N/A	N/A	LG	TMR
Grassed footway with table drain	N/A	N/A	N/A	N/A	TMR	TMR

5.6 Photo Library

Photo examples of footways, footpaths and shared pathways – these images are indicative only.



Local Government is responsible for the footpath from the back of the kerb and channel.



Local Government is responsible for the area (including footpath) from the back of kerb to the property alignment.



TMR is responsible from the carriageway to the back of the table drain. Local Government is responsible for the footpath from the back of kerb to the property alignment, including the footpath bridge structure.



Local Government is responsible for the area (including shared path) from the back of kerb to the property



Local Government is responsible for the full width footpath through the town centre.



MODULE 6:

SURFACE DRAINAGE (KERB AND CHANNEL/ TABLE DRAINS)

This module provides guidance as a starting point for the determination of agreements related to the management of surface drainage (kerb and channel/table drains). The determination of agreements is to occur in accordance with the overarching principles contained in Part 1 of this document.

6.1 Scope

This module sets out the responsibilities for kerb and channel and table drains within the SCR corridor. Both provide important surface drainage of the carriageway preventing:

- Ponding of water on the surface of the carriageway;
- Moisture ingress into the pavement, by eliminating ponding and in the case of table drains, lowering of the water table.

Kerb and channel and table drains may also drain private property and as such are part of the urban stormwater network.

In some locations where there is no underground longitudinal stormwater drainage, a grassed or concrete/rock lined table drain runs along the road, providing substantially more stormwater capacity than kerb and channel.

Both kerb and channel and table drains are linear and provide longitudinal drainage parallel to the carriageway. In most cases, this longitudinal drainage will discharge into a stormwater gully or road culvert which can be part of either a larger underground stormwater network or an independent stormwater drainage system.

In some urban locations with wider carriageways and/or unsealed shoulders, the kerb and channel is separated some distance from the line of demarcation previously established in Modules 1, 2 and 3, that being the outer edge of traffic lane plus shoulder/cycle lane. In these locations where the kerb and channel borders these 'other' areas (sealed or unsealed), the demarcation of responsibilities will need to be agreed between TMR and Local Government and a plan developed indicating responsibilities for ease of interpretation by field staff. As per Module 2 (Shoulders), if the area is wide enough for parking, the responsibility lies with the Local Government, while if there is insufficient room for parking, TMR is responsible.

Both kerb and channel and table drains can contribute to issues with property owners gaining access to their properties. There are a variety of means to reduce grade conflicts and to bridge deep drains. These structures include channel infills, slabs and pipe crossings.

Surface drainage also includes standalone underground drainage such as road culverts and gullies, manholes, inlets and outlets associated with intersection drainage.

There has in recent years been an increase in the number of swales, bunds, levees, and retaining walls in low-lying areas to protect either residential properties or SCR infrastructure. There needs to be close cooperation between Local Government and TMR during the planning phase of new road upgrades, or alternatively the assessment of Development Applications, to ensure both Local Government and TMR agree on the ongoing maintenance and replacement of these infrastructures.

This module should be read in conjunction with the following modules:

- Stormwater Drainage Networks - Module 7
- Parking - Module 3.

6.2 Planning, Design, Construction and Replacement

It is difficult for these guidelines to address the funding arrangements for every situation across Queensland. The funding arrangement will be dependent on the function of the stormwater asset. The following examples illustrate the general approach that should be adopted in these negotiations.



Where there is existing kerb and channel, the responsibility for planning design and construction of the replacement infrastructure lies with the instigator. This approach applies, even when both parties benefit from the kerb and channel – except for non-traffic lanes used for parking – refer to Module 3. For example with a major road upgrade requiring the existing kerb and channel to be replaced, responsibility would lie with TMR. Alternatively, a footpath upgrade requiring replacement of the existing kerb and channel would see Local Government responsible.

For road upgrades where there is no existing kerb and channel, TMR is responsible for planning, design, construction of surface drainage. Typically runoff from the SCR corridor would drain to kerb and channel in urban areas and table drains in outer urban and rural areas.

In locations where it is agreed the kerb and channel is mostly for surface drainage of the SCR corridor and the asset has reached its serviceable life, TMR is responsible for funding its replacement.

In locations where the kerb and channel is some distance from the outer edge of the shoulder/cycle lane and/or primarily for the drainage of private properties, Local Government is responsible for its replacement.

In locations where the upgrade of the SCR carriageway impacts on existing structures located in the kerb and channel or table drain (e.g. pipe crossings) to assist property owners gain access to their property, TMR is responsible for replacement of these at the time of upgrade.

For SCR carriageways not undergoing upgrade, the property owner is responsible for obtaining approval from TMR and for funding the construction/replacement of any structure necessary for access to a private property.

6.3 Maintenance and Ownership

TMR is responsible for the maintenance of:

- Kerb and channel outside urban areas. For urban areas, TMR is responsible for kerb and channel adjacent to traffic lanes (where there is no provision for parking);
- Table drains;
- Minor gullies, manholes, inlets, outlets associated with independent drainage of an intersection; and
- Independent pipe culvert crossing under the SCR carriageway.

Local Government is responsible for the maintenance of:

- Kerb and channel adjacent to lane used solely for parking;
- Kerb and channel damaged by landscaping that has been undertaken through a Local Government beautification program (for example, damage caused by tree growth and roots);
- Kerb and channel where it is some distance from the outer edge of the shoulder/cycle lane and/or its primary function is to drain private properties; and
- Integrated underground stormwater drainage networks.

Private Property Owners are responsible for the maintenance of:

- Pipe crossings, infill and slabs under driveways to private property.

Where there is kerb and channel adjacent to clearway traffic lanes or as a result of development (post this arrangement) the maintenance costs shall be shared 50/50 between TMR and local government.

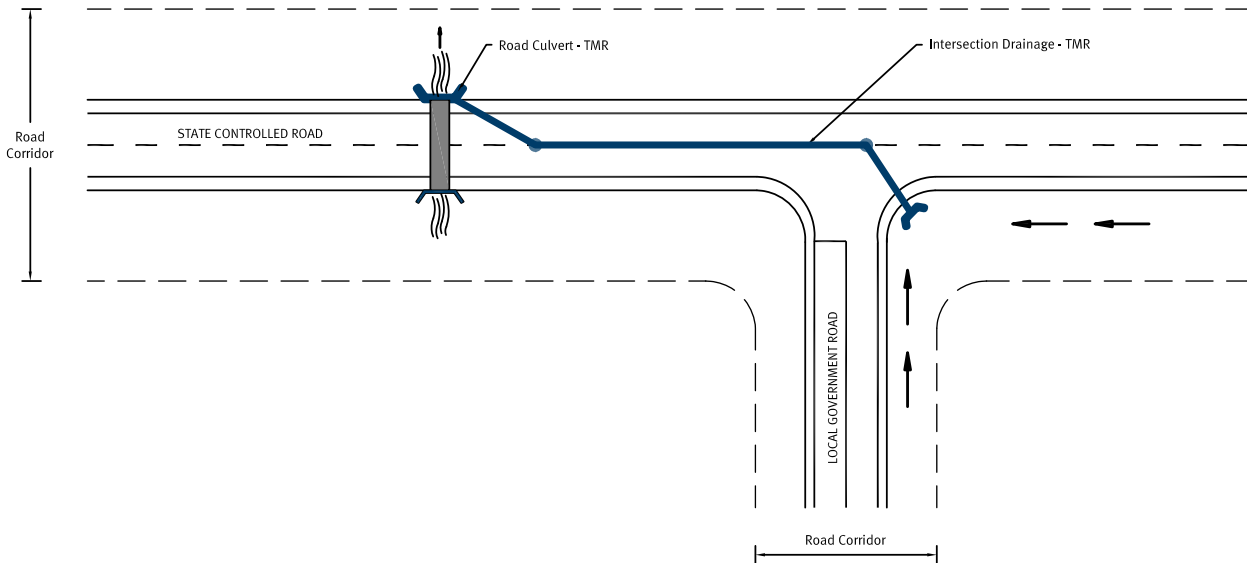
Maintenance includes sweeping of kerb and channel, cleaning of gully pits, grading of table drains and cleaning of underground drainage.

In regard to bunds/levees/retaining walls in low-lying areas where these measures protect private property from inundation or alternatively the carriageway, the maintenance of these areas is subject to negotiation between TMR and Local Government.

TMR owns kerb and channel, table drains and any independent localised drainage system draining the SCR corridor from surface stormwater.

6.4 Illustration

Figure 6.1: TMR's Responsibility for Road Culvert and Intersection Drainage



6.5 Summary of Cost Sharing Responsibilities

COST SHARING RESPONSIBILITY - CARRIAGEWAY DRAINAGE						
Item	Planning	Design	Funding of Construction	Funding of Replacement	Funding of Maintenance	Ownership
Outside Urban Areas						
Kerb and channel and table drains draining the SCR carriageway - All elements	TMR or LG - depends on the instigator of the project.	TMR or LG - depends on the instigator of the project.	TMR	TMR	TMR	TMR
Urban Areas						
Kerb and channel adjacent to lane used solely for parking	TMR or LG - depends on the instigator of the project.	TMR or LG - depends on the instigator of the project.	TMR or LG - depends on the instigator of the project.	LG	LG	TMR
Kerb and channel adjacent to traffic lanes (no provision for parking)	TMR	TMR	TMR	TMR	TMR	TMR
Kerb and channel adjacent to clearway traffic lanes	TMR	TMR	TMR	TMR	50%TMR / 50%LG (where a trafficable lane is used for parking and is sign-posted as a clear way during peak traffic periods)	TMR
Kerb and channel adjacent to traffic lanes (as a result of development constructed post this cost sharing arrangement)	TMR	TMR	TMR	TMR	50%TMR / 50%LG (where a upgrade to a SCR occurs as a result of development approved by LG)	TMR

6.6 Photo Library

Photo examples of surface drainage – these images are indicative only.



TMR is responsible for maintenance of the rock lined/concrete lined table drain.



Given there is room for parking next to the kerb and channel, Local Government is responsible for the replacement of the kerb and channel at the end of its serviceable life.



TMR is responsible for the stand-alone sub-surface drainage (gullies, manholes, inlets, outlets) of an intersection on the SCR where the sub-surface stormwater drainage is not connected to Local Government's stormwater drainage network.



Again, given there is room for parking next to the kerb and channel, Local Government is responsible for the replacement of the asset at the end of its serviceable life.



TMR is responsible for road culverts on SCR carriageways.



As there is insufficient space to park next to the kerb and channel, TMR is responsible for replacement of the kerb and channel at the end of its serviceable life.



MODULE 7:

STORMWATER DRAINAGE NETWORKS

This module provides guidance as a starting point for the determination of agreements related to the management of stormwater drainage networks. The determination of agreements is to occur in accordance with the overarching principles contained in Part 1 of this document.

7.1 Scope

This module sets out the responsibilities for sub-surface stormwater drainage within the SCR corridor. Sub-surface drainage includes:

- Integrated underground stormwater drainage networks;
- Independent underground stormwater drainage (i.e. a standalone intersection drainage not connected to a drainage network but still containing gully pits, stormwater manholes, pipework, inlet and outlet); and
- Pipe and box culverts (i.e. cross-road structures transferring stormwater runoff from one side of the carriageway to the opposite side).

Generally, TMR is responsible for surface drainage and any independent stand-alone stormwater drainage system in the SCR corridor. Local Government is responsible for the management of the urban stormwater drainage network, including the integrated sub-surface stormwater drainage systems. These can be either longitudinal stormwater drains along the SCR corridor or a transverse crossing of the SCR corridor by the stormwater drainage network.

As a condition of the Development Application approval, it is normally a requirement that the development provides no net worsening of flood levels up and downstream. Consequentially, the collection and treatment of stormwater run-off from upstream properties is important to TMR to enable it to manage stormwater drainage in the SCR corridor. To avoid such circumstances, TMR relies on Development Approvals to condition the instigator of the development.

Likewise TMR has a responsibility when upgrading a SCR road to ensure no net worsening of impacts on upstream and downstream properties.

The Lawful Point of Discharge is sometimes a contentious issue and any increased discharge onto or from the SCR corridor also needs to be agreed early in the planning phase between Local Government and TMR.

Stormwater infrastructure in the SCR corridor is classed as an Ancillary Works and Encroachment (AWE). As such, the construction, maintenance, operation and relocation of stormwater infrastructure is regulated by Division 2 of the **Transport Infrastructure Act 1994**. Consequently, when a Local Government would like to install stormwater drainage in a SCR corridor, it must obtain approval from TMR.

This module should be read in conjunction with the following module:

- Surface drainage – Module 6.

7.2 Planning, Design, Construction and Rehabilitation

TMR is responsible for funding the construction of:

- stand alone stormwater drainage infrastructure that drains the SCR corridor. This includes TMR constructing table drains and kerb and channel, intersection stormwater drainage, cross-road drainage structures; and
- any extension to a Local Government stormwater drainage network necessary to drain the SCR corridor.

Where a SCR upgrade requires alterations to existing Local Government stormwater infrastructure, TMR is to fund the full cost of replacement.

Local Government is responsible for funding the construction of sub-surface stormwater drainage networks. This includes the construction of relief drainage when capacity of the existing sub-surface stormwater network is exceeded.

Where Local Government needs to replace an aging stormwater infrastructure or provide relief drainage through the SCR corridor, Local Government is to fund the full cost of the replacement/relief drainage.

7.3 Maintenance and Ownership

Where instigated by TMR, the department is responsible for the maintenance of:

- SCR corridor drainage including kerb and channel, table drains, swales, open drains;
- Independent intersection stormwater drainage including gullies, manholes, minor pipework, inlets, outlets; and
- Independent cross-road structures including road culverts and bridges.

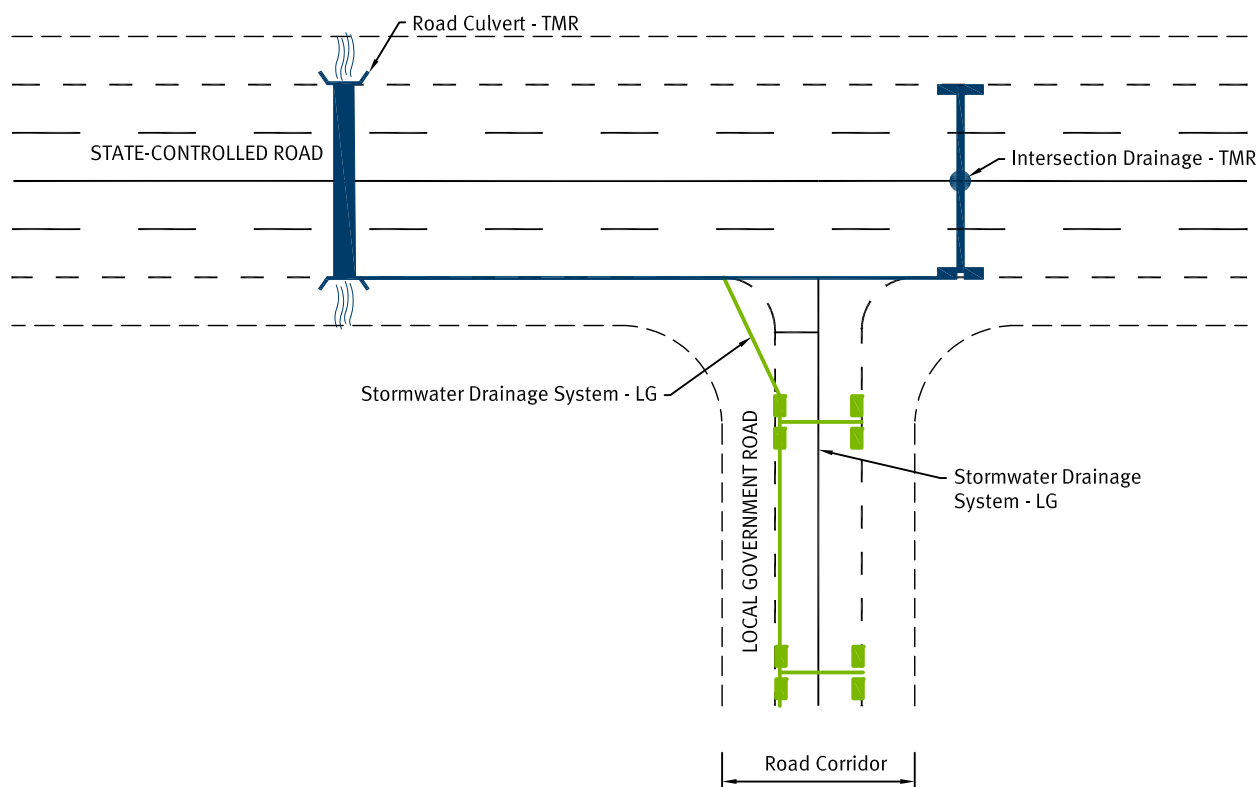
Local Government is responsible for the maintenance of:

- Integrated sub-surface stormwater networks including gullies, manholes, pipework, inlets, outlets, gross pollutant traps, etc.

Ownership of stormwater drainage infrastructure is as per the maintenance responsibilities.

7.4 Illustrations

Figure 7.1: Responsibilities when SCR Corridor Drainage Connects to a LG Stormwater Network.



7.5 Summary of Cost Sharing Responsibilities

COST SHARING RESPONSIBILITY - STORMWATER DRAINAGE NETWORKS						
<i>Item</i>	<i>Planning</i>	<i>Design</i>	<i>Funding of Construction</i>	<i>Funding of Rehabilitation and Replacement</i>	<i>Funding of Maintenance</i>	<i>Ownership</i>
TMR upgrade of SCR requiring new or upgraded stand-alone stormwater system to drain SCR corridor	TMR	TMR	TMR	TMR	TMR	TMR
LG upgrade or new integrated stormwater drainage network within SCR corridor Includes relief drainage and replacement of aging infrastructure	TMR	LG and approved by TMR	LG	LG	LG	LG
TMR upgrade of SCR requiring alterations to LG's integrated stormwater drainage network	Joint	TMR and approved by LG	TMR	LG	LG	LG
TMR upgrade of SCR with no major alteration but LG requires increased capacity of integrated drainage network within SCR corridor	Joint	Joint	LG contribution to TMR proportional to catchment areas of upstream areas to SCR	LG	LG	LG

7.6 Photo Library

Photo examples of stormwater drainage networks - these images are indicative only.



Given there is an existing sub-surface stormwater drainage network along this SCR and assuming that system drains more catchment than just the SCR corridor, TMR is responsible for upgrade of the SCR surface drainage only. This should include replacement of gullies, as well as new pipe connections to existing manholes.

Should the main longitudinal trunk drainage network require increased capacity, negotiations to establish a cost sharing arrangement will need to be held between TMR and Local Government.



Where instigated by TMR, TMR is responsible for the maintenance of swales.



MODULE 8:

UTILITY SERVICES

This module provides guidance as a starting point for the determination of agreements related to the management of utility services. The determination of agreements is to occur in accordance with the overarching principles contained in Part 1 of this document.

8.1 Scope

This module only applies to situations where Local Government owns the utility infrastructure. Typical examples of utilities owned by Local Governments and addressed in this module include trunk and reticulation mains for potable water, sewerage and in a few isolated cases, Local Government owned gas reticulation.

This module does not apply to commercial water entity businesses. For example, Queensland Urban Utilities, Unitywater and SunWater.

This module does not apply to stormwater drainage mains which are considered in Modules 6 and 7.

8.2 Planning, Design, Construction, Rehabilitation and Replacement

Alterations to public utilities is expensive and any costs charged by Local Governments to TMR projects results in those costs being ultimately funded by the tax-payer. The MOU outlines the responsibility of both parties to work together to find a low-cost solution.

Typically the instigator of service alterations pays. Some common examples follow.

8.2.1 Main Relocation/Alteration Initiated by TMR Upgrade to SCR

The requirement to relocate a main predominantly occurs when TMR undertakes an upgrade of the SCR. Key to this cost sharing arrangement is the early liaison between Local Government and TMR on how best to alleviate any relocation of the main and service connections. This may require potholing by Local Government and TMR to ascertain the exact location and depth of the

main. The early confirmation of exact location then allows the designers to develop solutions that avoid relocation where possible.

Where relocation cannot be avoided, there is no need to calculate the remaining life-expectancy of the main and service connections. Rather the following principles will apply:

- Local Government utility is to be fully transparent with TMR regarding a) any planned upgrades of the main and service connections; b) any deficiencies in its capacity and c) the true costs of any alterations necessary to the main and service connections as a result of SCR upgrades
- TMR is to pay the full cost of the alterations to the main and service connections, irrespective of its age, where the capacity remains unchanged
- Where Local Government has need for capacity increase of the existing main and service connections, Local Government shall contribute to the cost of replacement, in proportion to the increased size
- Where Local Government requests a parking lane as part of a TMR new road or upgrade, and the construction of the parking lane necessitates the relocation of utility infrastructure, Local Government is to pay the relocation costs – as per Module 3
- Where Local Government has planned future upgrades to the main and service connections (i.e. listed in publications such as Priority Infrastructure Plan, 10 year Financial Plan), TMR is to pay the bring forward costs of relocation
- In situations where the main is in the wrong location or at depth or alignment unknown, and where TMR through its design process has reasonably tried to locate the main so as to avoid relocation of the main, Local Government will be responsible for the full cost of relocation. This places an onus on Local Government to keep accurate mapping regarding the alignment and depth of its utilities, and to assist TMR in the field to accurately locate its assets.

8.2.2 Main Replacement Initiated by Local Government

On occasions, a main within a SCR corridor may burst, or due to its age, may require replacement by Local Government. In these cases, Local Government is responsible for the full cost of replacement.

Should the burst main damage assets in the SCR corridor, Local Government will be responsible for compensating TMR the costs of repairs.

8.2.3 New Main in State-controlled Road Corridor Initiated by Local Government

Where a Local Government utility wishes to install a new main along the SCR corridor, it has responsibility to liaise with and to obtain approval from TMR for the alignment and depth, and to install the service at the nominated alignment and depth.

8.3 Maintenance and Ownership

Local Government utility owns their respective services along the SCR and is responsible for maintenance and replacement when the service life of the asset is reached.

8.3.1 Local Government Infrastructure on TMR Bridges

Where Local Government infrastructure is attached to a bridge, the Local Government will be responsible for inspecting, maintaining and replacing the infrastructure. Where the Local Government infrastructure is damaged or deteriorates and the damage or deterioration is resulting in damage or potential damage/risk to the bridge, the Local Government is responsible for repairing the infrastructure.

Any maintenance, repair and replacement of Local Government infrastructure on a TMR bridge must be approved by TMR.

8.4 Summary of Cost Sharing Responsibilities

COST SHARING RESPONSIBILITY - LOCAL GOVERNMENT UTILITIES (EXCLUDES SUB-SURFACE STORMWATER DRAINAGE)						
<i>Item</i>	<i>Planning</i>	<i>Design</i>	<i>Funding of Construction</i>	<i>Funding of Rehabilitation and Replacement</i>	<i>Funding of Maintenance</i>	<i>Ownership</i>
Main relocation/ alteration initiated by TMR upgrade to SCR	Joint	Joint	TMR	LG	LG	LG
Main replacement initiated by Local Government	Joint	Joint	LG	LG	LG	LG
Installation of new main initiated by Local Government	Joint	Joint	LG	LG	LG	LG



MODULE 9:

SERVICE ROADS, ACCESS ROADS, PROPERTY ACCESS

This module provides guidance as a starting point for the determination of agreements related to the management of service roads, access roads and property access. The determination of agreements is to occur in accordance with the overarching principles contained in Part 1 of this document.

9.1 Scope

It is acknowledged that when TMR undertakes a road upgrade project, some properties and businesses could be affected and that not all existing accesses and movements can be retained. The removal of driveways and the reconfiguration of intersections with possible restrictions on turning movements is part of TMR's responsibility to ensure the SCR remains safe to all users.

This module addresses the cost sharing arrangement for the following common range of private accesses to the SCR:

- Service Roads are the responsibility of Local Government (as shown in Figure 9.1) unless declared as part of a SCR
- Access Road can be required as a condition of the Development Approval and remain the responsibility of the developer/proprietor to construct and Local Government or proprietor to maintain in a serviceable condition (see Figure 9.1)
- Driveways and Property Accesses see Figure 9.2.

On some occasions there can be a bridge structure along the service road. These bridges are addressed in the following module:

- Bridges - Module 11.

9.2 Planning Design Construction and Rehabilitation

Typically, the construction of a service road will occur during an upgrade of the SCR carriageway. As such, the construction of the service road is the responsibility of TMR, even if the service road is to be formally handed over to Local Government.

In regards to private access roads and driveways, it is essential that any access to the SCR be authorised by TMR including the access standard. Ongoing maintenance of this infrastructure will be the applicant's responsibility.

9.3 Maintenance

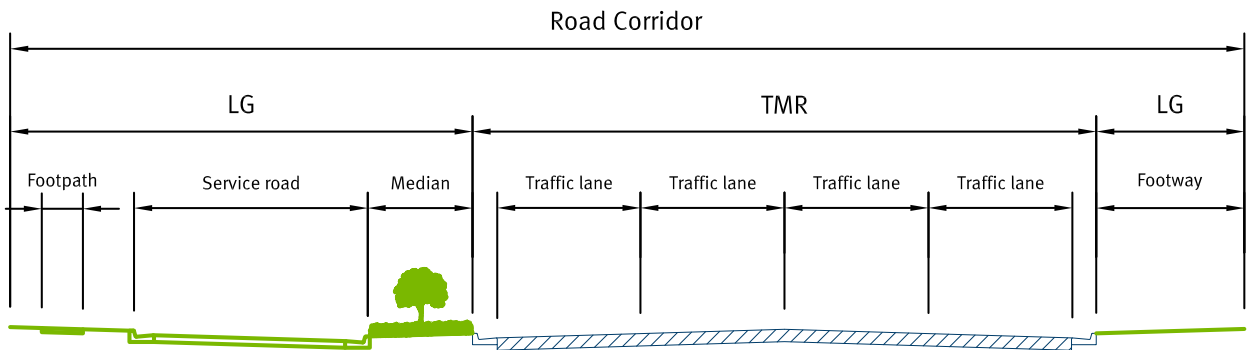
Although the authorisation for older property accesses and sometimes their respective maintenance has some historical arrangement, there is no requirement for Local Government and TMR to construct or maintain the access to properties.

For maintenance responsibilities, refer to Section 9.5.

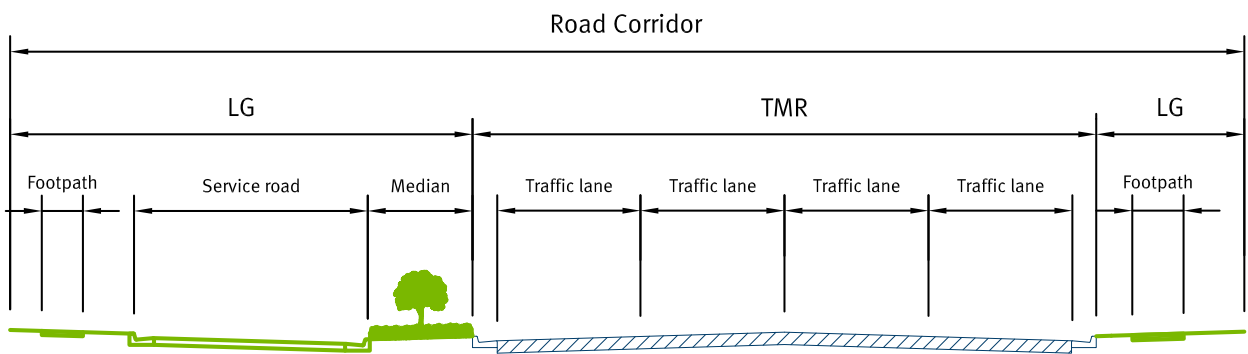
9.4 Illustrations

Examples of road cross sections showing the various responsibilities are illustrated in Figure 9.1

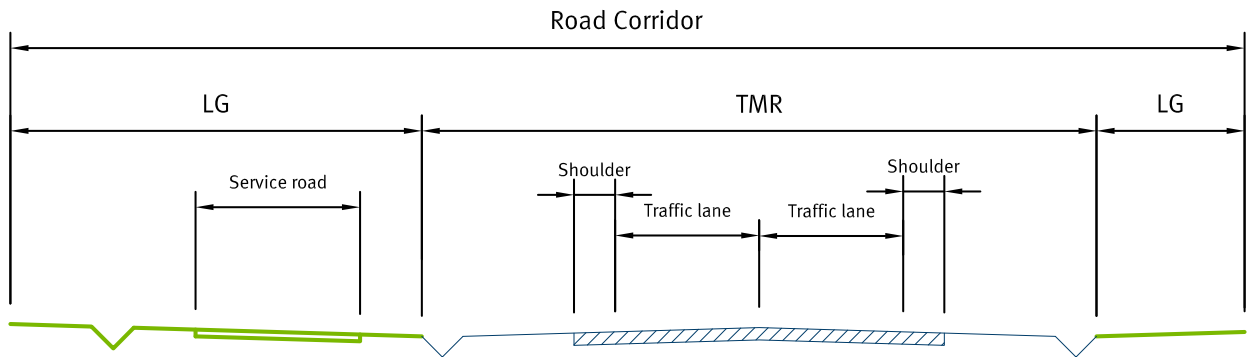
Figure 9.1: Responsibilities for Typical Service Road Configurations



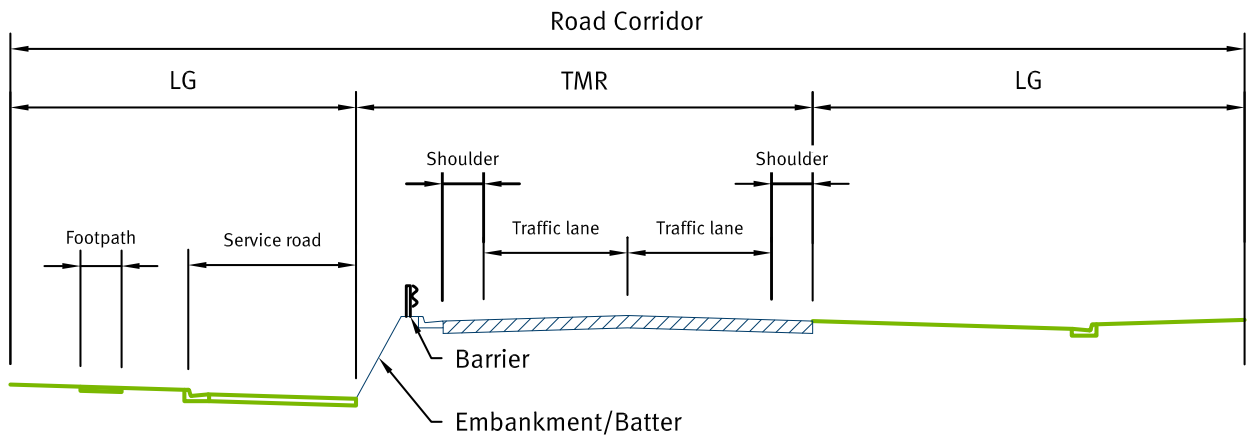
Service Roads, Access Road and Property Access
Example 1



Service Roads, Access Road and Property Access
Example 2

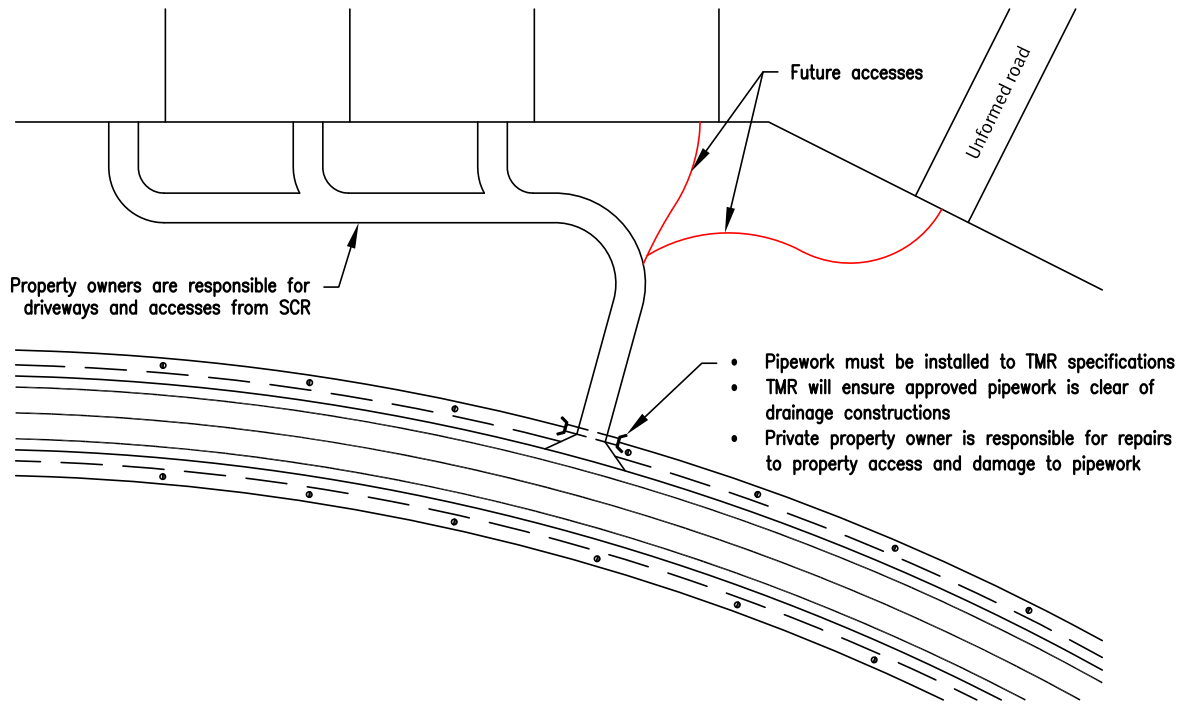


Service Roads, Access Road and Property Access
Example 3



Service Roads, Access Road and Property Access
Example 4

Figure 9.2: Multiple Property Accesses in Outer Urban and Rural Locations



9.5 Summary of Cost Sharing Responsibilities

COST SHARING RESPONSIBILITY FOR SERVICE ROADS, ACCESS ROADS, DRIVEWAYS AND PROPERTY ACCESSES						
Item	Planning	Design	Funding of Construction	Funding of Rehabilitation and Replacement	Funding of Maintenance	Ownership
Existing service road included in a SCR declaration	Existing - N/A	Existing - N/A	Existing - N/A	TMR	TMR	TMR
Existing service road not included in a SCR declaration	Existing - N/A	Existing - N/A	Existing - N/A	LG	LG	LG
Driveways and accesses (sealed and unsealed) from SCR carriageway to residential properties	Instigator to obtain approval from TMR	Instigator	Instigator	Property owner	Property owner	Constructed asset = property owner Land within SCR = TMR



9.6 Photo Library

Photo examples of service roads, access roads, driveways and property accesses - these images are indicative only.



TMR is responsible for the traffic lanes, shoulder and kerb on the main carriageway. Local Government is responsible for the service road and landscaped embankment.



The private property is responsible for maintenance and replacement of the driveway access.



TMR is responsible for the traffic lanes and the retaining wall/barrier structure. The responsibility of Local Government will start at the base of the structure and take in all of the service road.



TMR is responsible for the SCR carriageway. In this situation, a private business has been granted access to the SCR carriageway. The construction and maintenance of the access is to the responsibility of the service station.



MODULE 10:

INTERSECTIONS

This module provides guidance as a starting point for the determination of agreements related to the management of intersections. The determination of agreements is to occur in accordance with the overarching principles contained in Part 1 of this document.

10.1 Scope

This module addresses the situation where a Local Government road intersects with a SCR carriageway. The intersection can take many forms including:

- Conventional T-intersection (with or without auxiliary lanes and channelisation)=
- Y-junction (typically found in rural areas)
- Roundabout
- A signalised intersection (typically three or four leg).

10.2 Planning, Design, Construction and Rehabilitation

When upgrading the SCR, there is a responsibility for TMR to extend the works along Local Government roads to sufficiently address traffic engineering issues. This requirement is specified in the TMR **Road Planning and Design Manual**. Funding for these necessary improvements to Local Government roads when part of a SCR road upgrade project is the responsibility of TMR.

Where Local Government (including developers of subdivisions) provide a new or an upgrade to a Local Government road that intersects with the SCR carriageway, Local Government and/or developer is to meet the full cost of upgrading the SCR carriageway so that the intersection meets traffic engineering requirements, as set out in the TMR **Road Planning and Design Manual**.

The extent of pavement seal and line marking on a Local Government road approach to the intersection is to be agreed between Local Government and TMR. Should Local Government or TMR require additional work on the SCR or Local Government road, beyond what is reasonably expected, Local Government and TMR are to contribute respectively towards the cost of that additional work.

This module should be read in conjunction with the following module:

- Road lighting – Module 13
- Signs and road markings – Module 15.

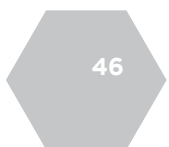
10.3 Maintenance and Ownership

Maintenance responsibilities for intersections will depend on the features of the intersection. Therefore, it is essential that each case be considered on its merits.

However to provide guidance, the following principles will apply:

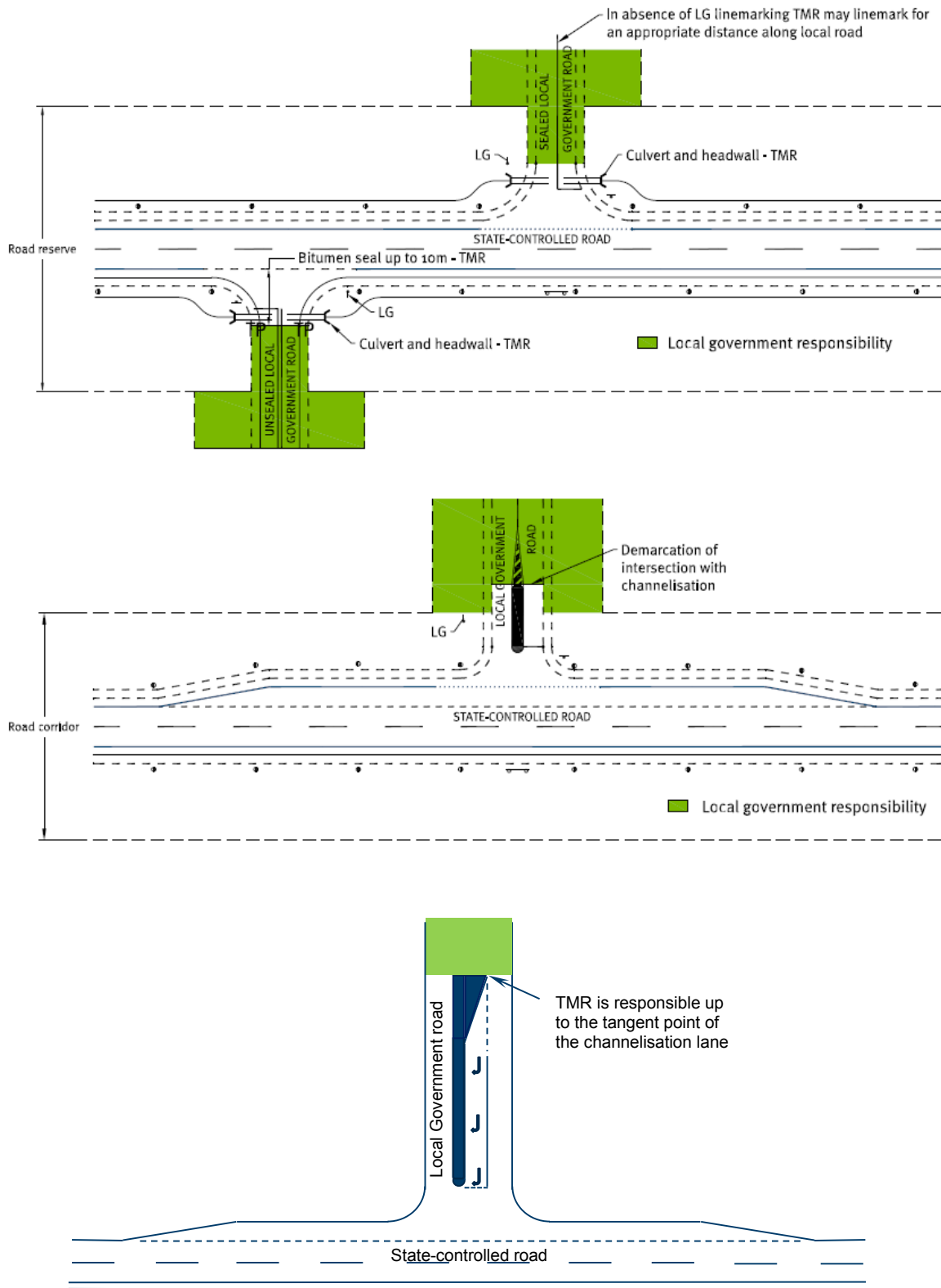
- For intersections where there is no channelisation extending down a sealed Local Government road, the demarcation will be the tangent point of the carriageway seal closest to the property alignment
- Where a Local Government road is unsealed, TMR is responsible for up to 10 metres of the sealed turnout from the SCR carriageway
- Where channelisation exists in a Local Government road, the demarcation between Local Government and TMR responsibilities will be the furthest face of the median as shown in Figure 10.1
- Where the median extends considerable length along a Local Government road and where channelisation exists, the demarcation will be the furthest tangent point of the channelisation lane from the intersection.

TMR owns all road infrastructure in the SCR corridor, with some exceptions as previously discussed where Local Government equipment is located in the corridor. Where the SCR is intersected by a Local Government road, the demarcation of ownership is the extension of the SCR property boundary. It is to be noted that this ownership can be different to the cost sharing arrangement for maintenance when channelisation exists at the intersection and that channelisation extends further along the Local Government road than the extension of the SCR property boundary.



10.4 Illustrations

Figure 10.1: Demarcation of Responsibilities at a SCR/Local Government Road Intersection



10.5 Summary of Cost Sharing Responsibilities

COST SHARING RESPONSIBILITY FOR INTERSECTIONS						
<i>Item</i>	<i>Planning</i>	<i>Design</i>	<i>Funding of Construction</i>	<i>Funding of Rehabilitation and Replacement</i>	<i>Funding of Maintenance</i>	<i>Ownership</i>
Intersection of LG road with SCR (LG or developer instigated)	Joint – Subject to final approval by TMR	Joint – Subject to final approval by TMR	LG or Developer	Joint as per demarcations in Figure 10.1	Joint as per demarcations in Figure 10.1	TMR
Intersection of LG road with SCR (TMR upgrade)	Joint – Subject to final approval by TMR	Joint – Subject to final approval by TMR	TMR	Joint as per demarcations in Figure 10.1	Joint as per demarcations in Figure 10.1	TMR

10.6 Photo Library

Photo examples of intersections – these images are indicative only.



TMR is responsible for the local road pavement, kerb and channel and median to the furthest point of the centre median from the intersection. Local Government is responsible for the footpaths/footways from the extension of the SCR property alignment.



This photo highlights the importance of TMR and Local Government agreeing on the demarcation of intersections.

In this case, the centre median continues along the local road. TMR's responsibility ends at the end of the central island as shown in Figure 10.1.



TMR is responsible for the local road pavement, kerb and channel and median to the furthest point of the centre median from the intersection. Local Government is responsible for road marking and pavement from that point on along the local road.



With no channelisation at this intersection, the demarcation of responsibilities should be the tangent point.

MODULE 11:

BRIDGES

This module provides guidance as a starting point for the determination of agreements related to the management of bridges. The determination of agreements is to occur in accordance with the overarching principles contained in Part 1 of this document.

11.1 Scope

This module covers all bridges in the SCRs excluding rail bridges. There are three typical grade separation situations namely:

- an overpass over the SCR corridor carrying a Local Government road
- an overpass over a Local Government road carrying a SCR
- a pedestrian/cycleway overbridge over the SCR corridor.

Figure 11.1 shows two typical at-grade bridge situations in a SCR corridor. These are:

- A free-standing shared cycle and/or pedestrian footbridge over a waterway within the SCR corridor
- A road bridge over a waterway within the SCR with a shared pedestrian/cycle footway on the same structure.

This module should be read in conjunction with the following modules:

- Utilities - Module 8
- Service Roads, Access Roads, Property Access - Module 9
- Landscaping Litter and Graffiti Control - Module 12.

11.2 Planning, Design, Construction and Rehabilitation

Bridges can be funded and constructed by either TMR, Local Government or a private developer. Of vital importance is early discussion and agreement between Local Government and TMR regarding the functionality of the structure, the structural design standards to be used, the long-term ownership of the structure, and the demarcation of bridge and surrounds maintenance.

While the instigator generally funds the construction or upgrade/extension of the bridge, this does not automatically award ownership and ongoing maintenance of the bridge to the instigator. While TMR, Local Government or others may fund the construction of a bridge or contribute funds to alterations, the ownership and future maintenance responsibility is governed by who is deemed to be the asset manager. Under the **Transport Infrastructure Act 1994**, a bridge is a road and therefore is required to be declared a state-controlled road if TMR wishes to retain the management responsibility for that asset.

11.2.1 Grade-separated road bridges

Generally, TMR will fund and construct bridges as part of a new interchange, to eliminate turning movements at an existing intersection or to reconnect local roads severed by a realignment of the SCR.

Local Government and developers will, on occasions, fund and construct a road bridge to connect new greenfield developments on either side of a major SCR.

11.2.2 Grade-separated footbridges and underpasses

Both Local Government and TMR fund and construct pedestrian and cycle footbridges and underpasses across SCR corridors, particularly when a grade-separated active transport connection will save local residents vehicular trips and improve safety for cyclists and pedestrians crossing a busy SCR carriageway.

11.2.3 At-grade bridges

TMR is responsible for the funding and construction of at-grade road bridges that form part of a SCR carriageway.

The funding and construction of service road at-grade bridges and freestanding footbridges for cycles and pedestrians can be either TMR or Local Government and is dependent on the demand for such a structure. Generally, where there is an existing footway provision on the existing road bridge, the funding and construction of a standalone footbridge is the responsibility of Local Government.

Section 11.5 outlines that the rehabilitation or replacement of a bridge that has reached the end of its serviceable life is the responsibility of the constructing authority, unless formal arrangements have been reached between Local Government and TMR regarding the transfer of these responsibilities.

11.3 Inspections, Maintenance and Ownership

Section 11.5 outlines the inspection, maintenance and rehabilitation responsibilities for road bridges and footbridges.

In order to alleviate the risk of catastrophic failure of a bridge over the SCR carriageway, TMR undertakes the inspection of all bridge structures, irrespective of the constructing authority or structure's owner, that go over a SCR. For example, if a Local Government bridge wholly or partly goes over a SCR, TMR accepts responsibility for inspecting that part of the Local Government bridge that is over the SCR. As noted in Section 11.5, TMR would be responsible for inspection, maintenance and ownership on a service road that is declared as a SCR. Similarly, the Local Government would be responsible for inspection, maintenance and ownership on a service road that is not declared a SCR. The only exception to this is if the service road bridge was over a SCR in which case TMR would inspect the bridge, while the Local Government would service, maintain and own the bridge.

Any capital improvements in the form of barriers or guardrails will be the responsibility of the authority responsible for the road pavement. All structural improvements must be authorised by TMR.

Where a bridge on a service road has an integrated footway for pedestrian and cycle movements and the service road has been formally handed over to Local Government, Local Government is responsible for preventative maintenance and replacement unless other arrangements have been negotiated.

Due to the unique nature of bridges and the significant costs involved, the ownership of the bridge remains with the instigator unless it has been formally handed over to another party by written agreement.

11.4 Illustrations

Figure 11.1: Typical Examples of At-grade Bridges within the SCR Corridor

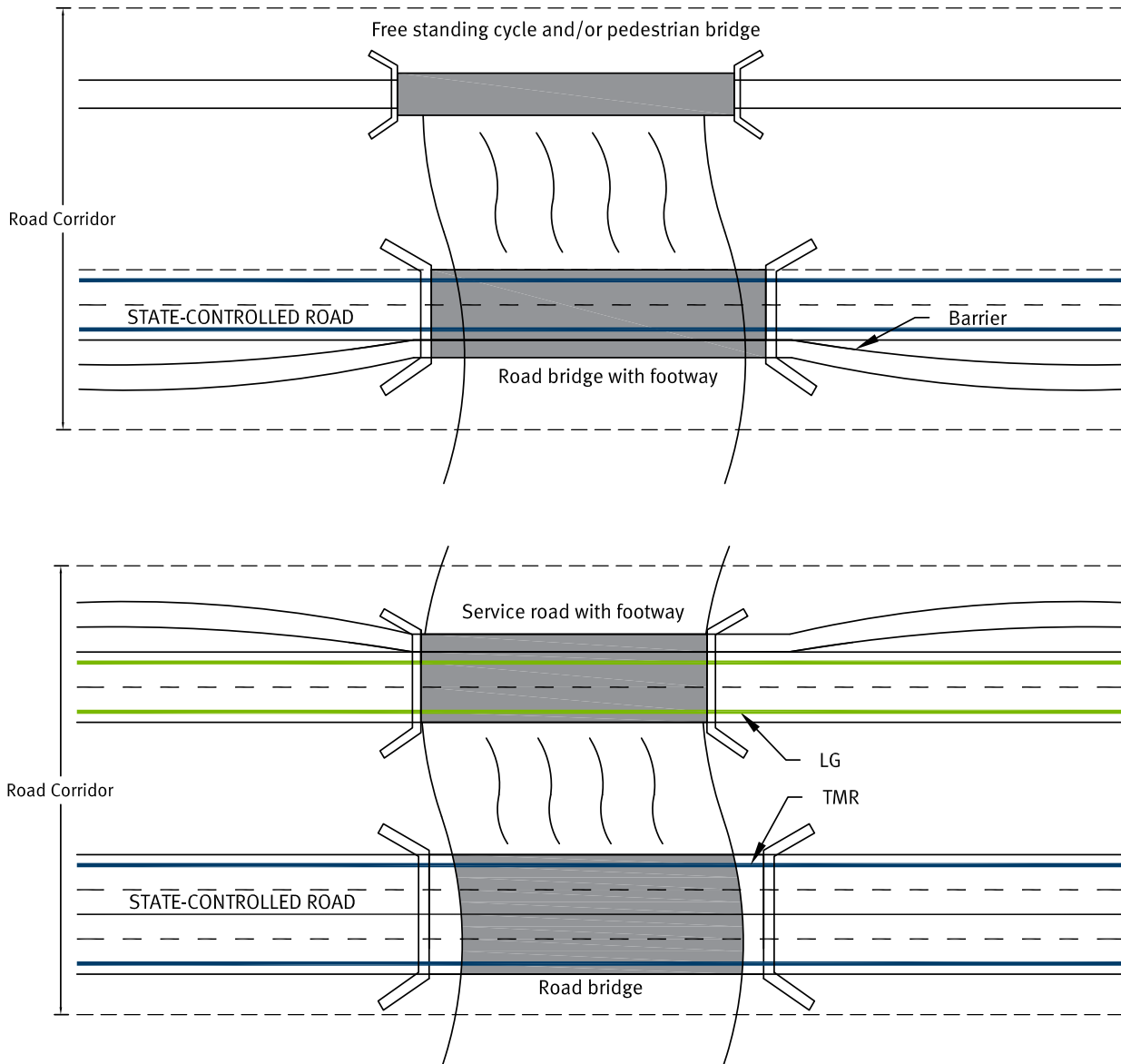
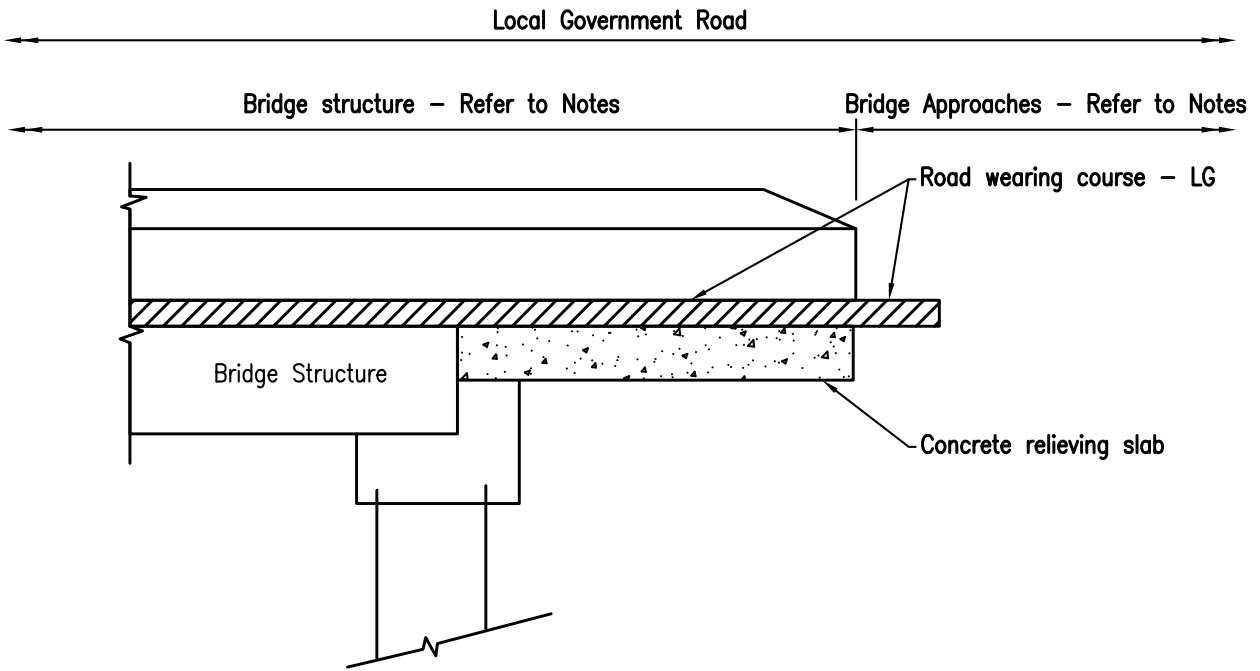
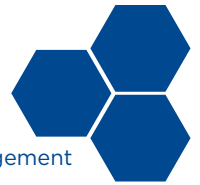


Figure 11.2: Responsibility for SCR Structures



NOTES:

1. Bridge structure is TMR responsibility where declared a state-controlled road (SCR) except where otherwise agreed.
For a SCR the concrete relieving slab barriers, safety railing and footway are included as a TMR responsibility.
1. LG is responsible for the road wearing surface and local road related features.
2. In certain circumstances the approaches to a bridge may be a SCR.



11.5 Summary of Cost Sharing Responsibilities

Please note, the following table applies to vehicular and pedestrian bridges on or over the SCR.

COST SHARING RESPONSIBILITY FOR BRIDGES							
<i>Item</i>	<i>Planning</i>	<i>Design</i>	<i>Funding of Construction</i>	<i>Funding of Structure Inspection</i>	<i>Funding of Structure Servicing and Maintenance</i>	<i>Funding of Rehabilitation and Replacement of Structure</i>	<i>Ownership</i>
<i>Bridges on Local Government roads within SCR (part of LG road network)</i>							
LG service road with <u>AT-GRADE</u> bridge - not part of SCR upgrade	LG (in consultation with TMR)	LG	LG	LG	LG	LG	LG
Bridge conveying LG road <u>OVER</u> LG service road - not part of SCR upgrade	LG (in consultation with TMR)	LG	LG	LG	LG	LG	LG
Bridge conveying LG road <u>OVER</u> SCR - not part of SCR upgrade	LG or developer (in consultation with TMR)	LG or developer (approved by TMR)	LG or developer	TMR	LG	LG	LG
LG service road with <u>AT-GRADE</u> bridge - part of SCR upgrade	LG/TMR jointly	TMR	TMR	LG	LG	LG	LG
Bridge conveying LG road <u>OVER</u> LG service road - part of SCR upgrade	LG/TMR jointly	TMR	TMR	LG	LG	LG	LG
Existing bridge conveying LG road <u>OVER</u> SCR - upgraded/extended as part of SCR upgrade - formally accepted by LG	LG/TMR jointly	TMR	TMR	TMR	LG	LG	LG
New bridge conveying LG road <u>OVER</u> SCR - built as part of SCR upgrade - formally accepted by LG	LG/TMR jointly	TMR	TMR	TMR	LG	LG	LG
<i>Bridges on TMR roads within SCR (declared as SCR)</i>							
SCR with <u>AT-GRADE</u> bridge	TMR	TMR	TMR	TMR	TMR	TMR	TMR
Bridge conveying SCR <u>OVER</u> SCR	TMR	TMR	TMR	TMR	TMR	TMR	TMR
Bridge conveying SCR <u>OVER</u> LG road	TMR	TMR	TMR	TMR	TMR	TMR	TMR
Existing bridge conveying LG road <u>OVER</u> SCR - formally accepted by TMR	LG/TMR jointly	TMR	TMR	TMR	TMR	TMR	TMR
New bridge conveying LG road <u>OVER</u> SCR - part of SCR upgrade - formally accepted by TMR	LG/TMR jointly	TMR	TMR	TMR	TMR	TMR	TMR

11.6 Photo Library

Photo examples of bridges - these images are indicative only.



In situations where a Local Government bridge goes over a SCR, TMR will inspect the bridge, while the Local Government is responsible for the servicing and maintenance of the bridge.



If TMR accepts ownership of a bridge on a Local Government road that goes over a SCR, TMR will accept servicing, maintenance and replacement responsibilities for the bridge. In these situations, the Local Government retains responsibility for the pavement, kerb and channel, pedestrian facilities and local road features (signs and markings).



MODULE 12:

LANDSCAPING, LITTER AND GRAFFITI CONTROL

This module provides guidance as a starting point for the determination of agreements related to the management of landscaping, litter and graffiti control. The determination of agreements is to occur in accordance with the overarching principles contained in Part 1 of this document.

12.1 Scope

This module includes the following range of services:

- Landscaping
 - Median and roundabout landscaping
 - Urban amenity improvements (say for a regional township)
 - Entrance statements
- Litter collection including dead animal removal
- Graffiti removal.

However, this module does not include activities that are covered by RMPC arrangements.

12.2 Planning Design Construction

The construction of new landscaping along the SCR can be funded and delivered by:

- TMR as part of a SCR road upgrade project
- Local Government as part of an urban amenity project
- Private developers as part of a new subdivision or development entrance statement.

During the planning phase for a SCR road upgrade and where Local Government will be required to undertake the maintenance role of landscaping (and litter collection and graffiti control), there needs to be early discussions between TMR and Local Government regarding the standard of landscaping. Both entities should have a say on the standard of vegetation and any associated infrastructure i.e. irrigation systems, garden bed

edgings, etc, so that annual maintenance costs can be kept to a minimum.

In regard to entry statements and with reference to TMR's *Road Landscape Manual*, developers will often provide a higher standard of landscaping at entrances to their development/subdivision as a short-term marketing strategy to enhance marketing and increase sales. It is essential that in these cases, there is an agreement in place up front as to the standard and maintenance of this landscaping post the sale of the development.

This module should be read in conjunction with the following modules:

- Footways, Footpaths and Shared Pathways - Module 5
- Bridges - Module 11
- Noise attenuation - Module 16.

12.3 Maintenance Responsibility

12.3.1 Standard of landscaping

It is recognised that there is a strong correlation between the standard of landscaping and the funding available for maintenance. As such, intervention standards as set out in TMR maintenance contracts are based on affordability and value for money.

Maintenance must be seen as a partnership where both Local Government and TMR work together to ensure the standard of landscaping generally reflects the community's expectation. This should minimise the variation in the standard of landscaping along the SCR and in surrounding Local Government roads.

12.3.2 Graffiti removal

Graffiti removal is based on the guiding principle that the responsible party is the owner of the road from which the graffiti can be seen. That is, if graffiti is directed at motorists on a local road, Local Government is responsible for its removal and likewise TMR is responsible for SCR's.

In cases where the graffiti cannot be seen by motorists, the owner of the infrastructure is responsible for its removal.

12.3.3 Efficiency

Stretching the maintenance dollar is essential and efficiencies in maintenance operations must be continuously sought. Rather than maintenance crews from both Local Government and TMR being mobilised to undertake works in the same location, it is recommended that agreement be reached between both entities, so that the most efficient, lowest-cost resources are used irrespective of maintenance responsibilities.

On highly trafficked roads, the cost of traffic control to provide a safe working environment for litter collection can be significant. While the demarcation of responsibilities is different for each SCR corridor, there are locations where both Local Government and TMR are undertaking maintenance in relative close proximity, with each incurring costs for their own traffic control. The opportunity to significantly save on traffic control costs could be achieved with better planning by both entities and in undertaking the work simultaneously.

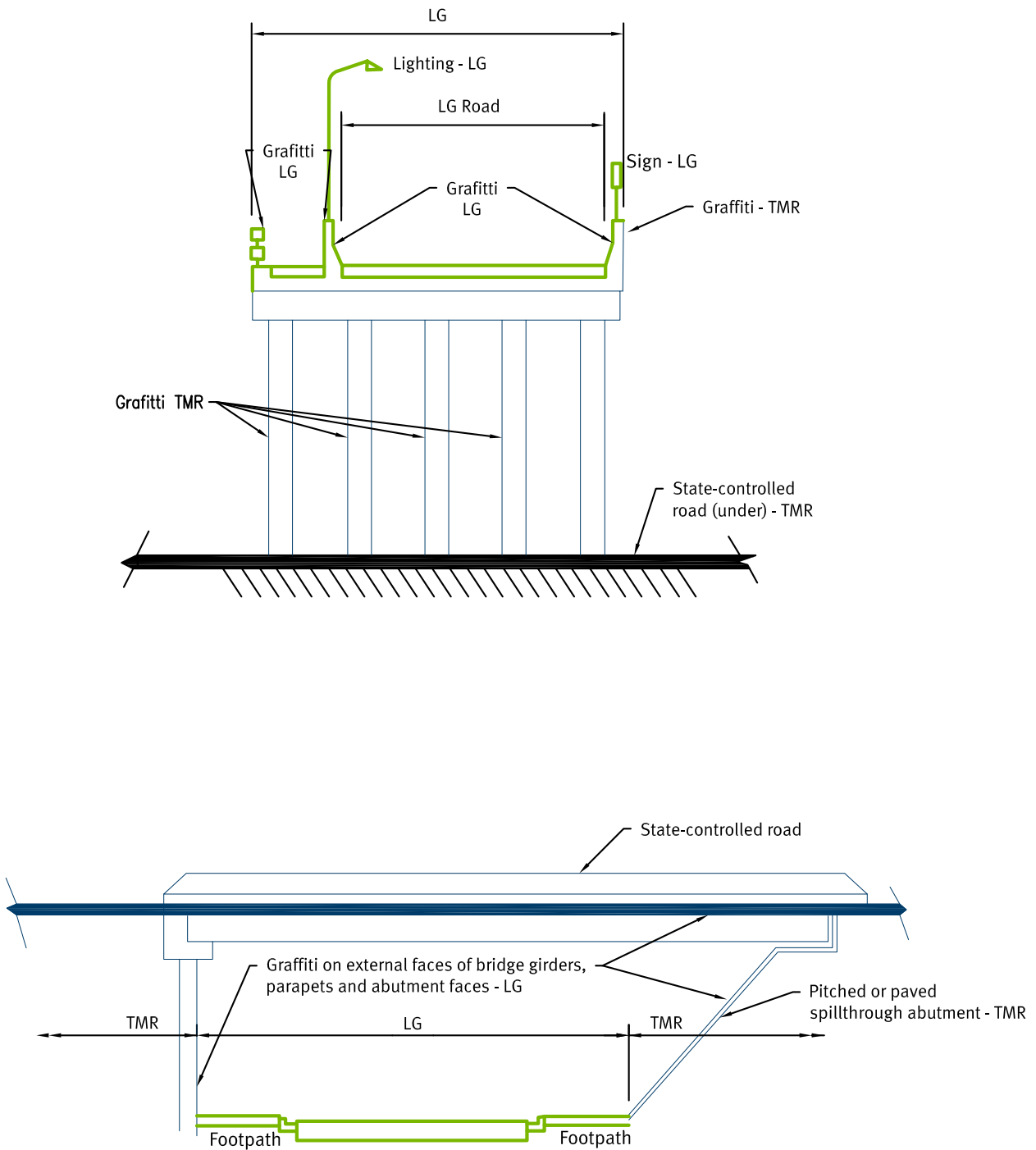
In the past, there have been issues with dead animal removal, which has seen staff from both Local Government and TMR being mobilised. This is a major issue in rural and remote townships where officers must travel significant distances to determine the organisation responsible for removing the animal. Agreement should be reached between Local Government and TMR so that the animal is removed by either crew irrespective of responsibility or specific location where the dead animal is located.

Graffiti is commonly applied to acoustic fencing and structures within the SCR corridor under both Local Government and TMR responsibility, requiring both organisations to dispatch their respective crews. Once again, agreement should be reached so that only one crew is mobilised to clean up graffiti covering both responsibilities.

Refer to Module 11 – Bridges and Module 16 – Noise Attenuation for specific areas of responsibility.

12.4 Illustrations

Figure 12.1: Responsibility for Graffiti Removal from SCR Structures



12.5 Summary of Cost Sharing Responsibilities

COST SHARING RESPONSIBILITY FOR LANDSCAPING, LITTER AND GRAFFITI CONTROL						
<i>Item</i>	<i>Planning</i>	<i>Design</i>	<i>Funding of Construction</i>	<i>Funding of Replacement</i>	<i>Funding of Maintenance</i>	<i>Ownership</i>
Landscaping within SCR corridor	TMR	TMR	TMR	N/A	TMR	TMR
Special entrance statements to subdivisions and towns	Developer or LG in consultation with TMR	Developer or LG in consultation with TMR	Developer or LG	Developer or LG	Developer or LG	Developer or LG unless agreement with TMR
Special landscaping requested by Local Government	LG in consultation with TMR	LG in consultation with TMR	LG	N/A	LG	LG unless agreement with TMR
Litter collection	N/A	N/A	N/A	N/A	Refer to Module 5 for areas of responsibility for footways	N/A
Graffiti removal	N/A	N/A	N/A	N/A	Refer to Module 16 for areas of responsibility for noise barriers	N/A

12.6 Photo Library

Photo examples of landscaping, litter control and graffiti – these images are indicative only.



Usually entrance statements to regional and rural towns are installed by Local Government within the SCR corridor. Such landscaping is maintained by Local Government.



Special treatments of footpaths in regional and rural towns is maintained by the instigator i.e. TMR or LG.



Main street beautification works in regional and rural towns is maintained by the instigator i.e. TMR or LG.



Entrance statements to private developments should be maintained by the developer for the duration of sales. There needs to be agreement between TMR, LG and the developer regarding the standard of landscaping post development.



MODULE 13:

ROAD LIGHTING

This module provides guidance as a starting point for the determination of agreements related to the management of road lighting. The determination of agreements is to occur in accordance with the overarching principles contained in Part 1 of this document.

13.1 Scope

Australian Standard AS 1158 specifies the following categories of lighting applicable to the SCR:

- Lighting for vehicular traffic using roads and public spaces - Category V
- Lighting for pedestrian areas along roads and public spaces - Category P.

This module should be read in conjunction with the following modules:

- Intersections - Module 10
- Signs and Road markings - Module 15.

13.2 Planning Design and Construction

TMR has a responsibility to provide route lighting to Category V standard to ensure the safe operation of road traffic using the SCR. This responsibility includes construction, maintenance and operating costs of lighting on motorways and construction and operating costs for lighting on all other SCRs where the warrants are met.

The warrants for road lighting are detailed in the TMR **Road Planning and Design Manual 2nd Edition Volume 6: Lighting**, and design standards in **AS 1158**.

Where the route lighting on the SCR does not meet the warrants, the responsibility and costs for the planning, design and construction is to be agreed between Local Government and TMR. It is the general position that the costs of such lighting is to be met by Local Government.

Similarly, Local Government has a responsibility of funding the construction and operating costs of lighting along its local road system to ensure the safe operation of those roads.

For upgrades of Local Government road intersections with the SCR, the constructing authority is responsible for the provision of overhead lighting sufficient for the operational safety associated with road features, irrespective of whether the lighting is located within the SCR or Local Government road corridor.

Where in urban areas, the footpath demand is high and there is inadequate spillage from road lighting, Local Government is to fund the installation of additional footpath lighting meet to Category P standards.

13.3 Operational Costs

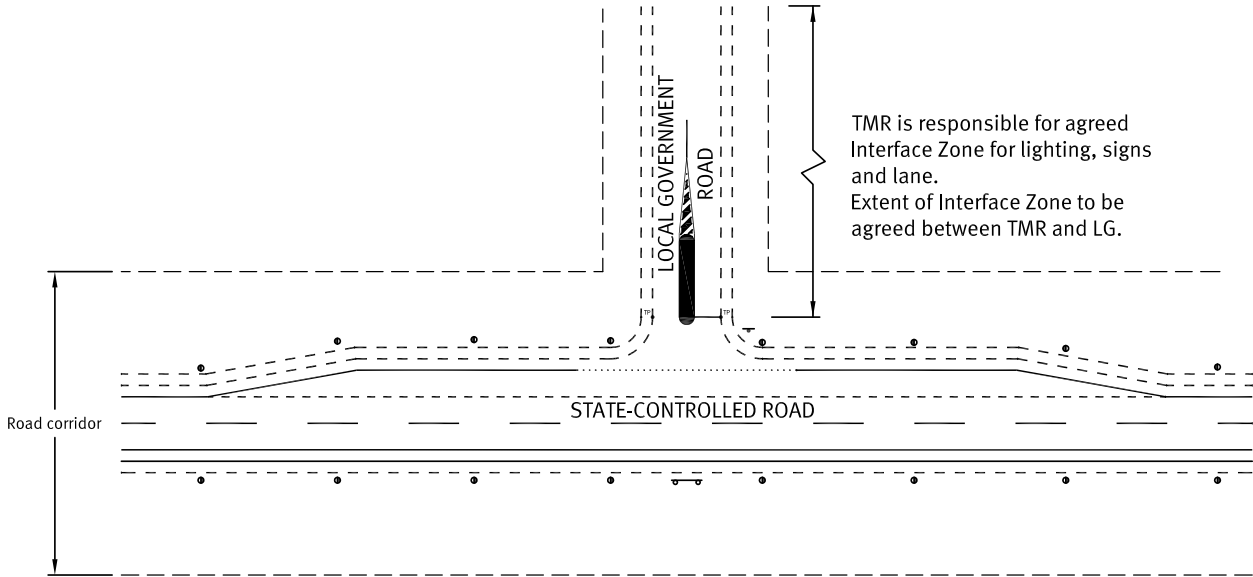
For SCR road upgrades, it is essential that during the planning phase, Local Government and TMR discuss and agree which organisation will meet the operational costs of road lighting.

Responsibility for funding operational costs will be as follows:

- Where the warrants are met, lighting of SCR carriageways will be the responsibility of TMR
- Where the warrants are not met, responsibility for lighting of the carriageways is to be agreed between Local Government and TMR and documented. It is the general position that the costs of such lighting is to be met by Local Government
- At intersections, the demarcation of responsibility will be as per Figure 13.1. This illustration raises the concept of an 'interface zone' extending back from the intersection along the Local Government road in which TMR will accept responsibility for road lighting, signs and road markings unless otherwise agreed. The interface zone is the area of the intersection that requires lighting to ensure the safe use and interaction with the road features. The limits of the zone need to be agreed and documented between Local Government and TMR so that maintenance responsibilities are clear. (Note: excludes the demarcation of pavement as detailed in Module 10)
- Any specific lighting of footpaths, footways, off-road cycle paths /shared path or service roads along the SCR will be the responsibility of Local Government.

13.4 Illustrations

Figure 13.1: Demarcation of Road Lighting Responsibilities at a SCR/Local Government Road Intersection.





13.5 Summary of Cost Sharing Responsibilities

COST SHARING RESPONSIBILITY FOR LIGHTING						
<i>Item</i>	<i>Planning</i>	<i>Design</i>	<i>Funding of Construction</i>	<i>Funding of Rehabilitation and Replacement</i>	<i>Funding of Operational Costs</i>	<i>Ownership</i>
SCR route upgrade in accordance with warrants	TMR	TMR	TMR	Part of Rate 2 charge	TMR	TMR
SCR route upgrade not in accordance with warrants	TMR	TMR	To be agreed (default is LG)	To be agreed (default is LG)	To be agreed (default is LG)	TMR
Intersection of SCR and LG road initiated by TMR	TMR in consultation with LG	TMR in consultation with LG	TMR	TMR	Shared TMR and LG	TMR
Intersection of SCR and LG road initiated by LG	LG in consultation with TMR	LG in consultation with TMR	LG	LG	Shared TMR and LG	TMR
Special lighting of footpaths, footways, cycle paths, shared paths, service roads.	LG	LG	LG	LG	LG	TMR

13.6 Photo Library

Photo examples of carriageway lighting – these images are indicative only.



In the case of a local road with an extensive length of road lighting, the interface zone is to be agreed between Local Government and TMR. The costs of operating road lighting within the zone is met by TMR.



In the case of urban arterials, TMR is to fund the costs of road lighting even though there will be some spillage from road lighting that illuminates the footpath for pedestrians.



MODULE 14:

ROADSIDE FURNITURE AND FACILITIES

This module provides guidance as a starting point for the determination of agreements related to the management of roadside furniture and facilities. The determination of agreements is to occur in accordance with the overarching principles contained in Part 1 of this document.

14.1 Scope

This module covers roadside furniture and roadside facilities excluding:

- Tourist information display boards
- Advertising signs
- Bus stations and interchanges.

14.2 Construction

14.2.1 Roadside Furniture

TMR is responsible for the provision of all roadside furniture along the SCR corridor that provides a safety function, for example safety barriers and pedestrian fences.

Other roadside furniture, such as signs, will be either TMR or Local Government, depending on the function of the asset/infrastructure.

14.2.2 Roadside Facilities

Examples of roadside facilities include safety ramps, picnic and vehicle rest areas, etc.

Historically, there is no simple arrangement regarding which entity undertakes improvements or maintains roadside facilities. Each facility has a history as to how it came into existence and who presently accepts responsibility for improvements and maintenance.

Funding of new bus stop furniture and facilities, including seating, shelters and concrete slabs, are the responsibility of TMR or Local Government, depending on the instigator of the facility.

14.3 Maintenance and replacement

Where the maintenance of the furniture and facilities is the responsibility of TMR, this is usually included in the third party maintenance contracts.

Where Local Government or a community service organisation is responsible for the management of the facility, that entity has responsibility for the maintenance.

For bus stop furniture and facilities, a formal agreement on the responsibilities for the maintenance and replacement of the furniture/facilities will need to be implemented prior to the construction of the works.



14.4 Summary of Cost Sharing Responsibilities

COST SHARING RESPONSIBILITIES FOR ROADSIDE FURNITURE AND FACILITIES						
<i>Item</i>	<i>Planning</i>	<i>Design</i>	<i>Funding of Construction</i>	<i>Funding of Replacement</i>	<i>Funding of Maintenance</i>	<i>Ownership</i>
Roadside furniture (safety) along SCR	TMR	TMR	TMR	TMR	TMR	TMR
Roadside furniture (non safety) along SCR	TMR (in consultation with LG if LG function)	TMR (in consultation with LG if LG function)	TMR or LG (depending on function)	TMR or LG (depending on function)	TMR or LG (depending on function)	TMR or LG (depending on function)
Bus stop furniture and facilities	Instigator	Instigator	Instigator	Instigator (unless another agreement has been made)	Instigator (unless another agreement has been made)	Instigator (unless another agreement has been made)
Roadside facilities (other than bus stops) within or adjacent to SCR corridor	TMR	TMR	TMR or LG	TMR or LG or private organisation	TMR or LG or private organisation	Dependant on whether within or adjacent SCR corridor and ownership has been accepted by TMR



MODULE 15:

SIGNS AND ROADMARKINGS

This module provides guidance as a starting point for the determination of agreements related to the management of signs and roadmarkings. The determination of agreements is to occur in accordance with the overarching principles contained in Part 1 of this document.

15.1 Scope

15.1.1 Road Signs

The **Manual of Uniform Traffic Control Devices (MUTCD)**, outlines the various signage that is commonly found in a SCR corridor. The MUTCD broadly categorises these signs as:

- Regulatory signs
- Warning signs
- Guide signs
- Temporary signs
- Hazard markers.

This module is to be read in conjunction with the following modules:

- Intersections - Module 10
- Road Lighting - Module 13 ('interface zone' = the necessary level of signs/road markings to ensure the operational safety).

15.1.2 Road Markings

Road markings are essential for the safe operation of traffic using the SCR. They provide for traffic separation, demarcation of traffic lanes including turning lanes, the safe operation of signalised and unsignalised intersections, the location of pedestrian crossings, approved regulatory parking and other kerbside management areas.

The effective management of kerbside also requires road marking to identify parking bays, loading zones, bus zones and no standing areas at intersections.

15.2 Planning, Design and Construction

TMR is responsible for the installation of road signs and road marking along the SCR and at intersections with Local Government roads to ensure the entry and exit from a SCR carriageway is performed in a safe and efficient manner. At these intersections, TMR is also responsible for road signs and road marking in the 'interface zone'. This is the area of the intersection where specific road features are required on Local Government road for the safe use and interaction of the two roads. The limits of the zone need to be agreed and documented between Local Government and TMR so that maintenance responsibilities are clear.

It should be noted that this 'interface zone' for signs and road marking may be different to the demarcation of pavement responsibilities outlined in Module 10 - Intersections.

TMR is responsible for all road signs and road markings in the SCR corridor with the exception of the following signs that are the responsibility of Local Government:

- Community facility signs i.e. churches, libraries, sporting facilities etc
- Local street name signs
- Local government borders and local government welcome signs
- Regulated parking signs
- Clearways (Note 50/50 cost sharing between Local Government and TMR).

Local Government is responsible for the installation of road signs and road marking on local roads. Local Government is also responsible for kerbside management signs and road marking (e.g. parking bays, loading zones, no standing zones. etc) for those 'other' areas of carriageway as discussed in Module 3.

15.3 Maintenance and Ownership

Local Government and TMR are responsible for maintaining their respective signs and road marking along the SCR corridor. At intersections with a Local Government road, TMR will also maintain the road signs and road marking a distance down Local Government road as per the agreed 'interface zone'.



15.4 Summary of Cost Sharing Responsibilities

COST SHARING RESPONSIBILITY FOR SIGNS AND ROAD MARKING						
<i>Item</i>	<i>Planning</i>	<i>Design</i>	<i>Funding of Construction</i>	<i>Funding of Replacement</i>	<i>Funding of Maintenance</i>	<i>Ownership</i>
Signs and road markings in SCR corridor (excl LG signs)	TMR	TMR	TMR	TMR	TMR	TMR
LG signs and road marking in SCR corridor e.g. kerbside management.	LG in consultation with TMR	LG in consultation with TMR	LG in consultation with TMR	LG in consultation with TMR	LG in consultation with TMR	TMR/LG
TMR signs and road markings in 'interface zone' along LG road	TMR in consultation with LG	TMR in consultation with LG	TMR	TMR	TMR	TMR



MODULE 16:

NOISE ATTENUATION

This module provides guidance as a starting point for the determination of agreements related to the management of noise attenuation. The determination of agreements is to occur in accordance with the overarching principles contained in Part 1 of this document.

16.1 Scope

A noise barrier is a natural or artificial physical screen located between the source of the noise (road traffic) and a receptor (e.g. residence), which interrupts the path of the noise. A noise barrier includes:

- earth mound
- earth mound and noise fence
- noise fence.

16.2 Planning Design Construction and Replacement

TMR's *Transport Noise Management Code of Practice Volume 1 - Road Traffic Noise (November 2013)* details the Department's position on noise attenuation measures.

TMR will be responsible for the planning, design, construction and replacement of noise barriers that have been installed as part of a SCR upgrade, unless an alternative agreement has been made.

Where a private developer has been required by TMR to provide noise attenuation for a new subdivision or development fronting the SCR corridor, the developer is to liaise with TMR during the planning and design phase.

While contentious and expensive, the cost and responsibility of replacing the noise barrier at the end of its serviceable life is the responsibility of the owner of the land upon which it is located (unless an alternative agreement has been made). Given that the usual practice is to locate the barrier on private property, this means the homeowner will be responsible for replacement.

16.3 Ownership

Noise fences that have been installed by TMR as part of a SCR road upgrade project and are located within the SCR corridor are owned by TMR, unless an alternative agreement has been made. Noise fences installed by a developer on private property are owned by the property owner.

For noise mounds that have been constructed as part of a private property development and are outside the SCR, the ownership of the mound shall lie with the property owner or Local Government (as per the *Transport Noise Management Code of Practice*). This will need to be negotiated and agreed to as part of the development application.

16.4 Maintenance

16.4.1 Noise Fence

Where the noise fence has been installed by TMR as part of a SCR road upgrade project and is located within the SCR corridor, maintenance of the noise fence will be the responsibility of TMR, unless an alternative agreement has been made.

Where the noise fence has been installed by a developer on private property, the property owner is responsible for the maintenance of the facility.

Where the size, access or location of the required noise fence makes it unreasonable for the property owner to maintain the noise fence, the developer may negotiate with TMR to place the noise fence within the SCR. In this situation, TMR will accept responsibility for ownership and maintenance of the noise fence using the developer's contribution as explained in the *Transport Noise Management Code of Practice*. Any such agreements must be documented and retained by TMR.

16.4.2 Noise Mound

For noise mounds outside of the SCR, which are constructed as part of an SCR upgrade, maintenance will be the responsibility of the property owner or Local Government (as per the *Transport Noise Management Code of Practice*). This will need to be negotiated and agreed to as part of the development application.



16.4.3 Developer provided noise fences and mounds in the SCR

Developers' noise barriers may only be permitted within the SCR in limited situations.

Where the size, access or location of the required noise fence/mound makes it unreasonable for the property owner to maintain the noise fence/mound, the developer may negotiate with TMR to place the noise fence/mound within the SCR. In this situation, TMR will accept responsibility for ownership and maintenance of the noise fence/mound using the developer's contribution as explained in the **Transport Noise Management Code of Practice**. Any such agreements must be documented and retained by TMR.

Noise fences that have been installed by TMR as part of a SCR road upgrade project and are located within the SCR corridor are owned by TMR, unless an alternative agreement has been made. Noise fences installed by a developer on private property are owned by the property owner.

16.5 Graffiti Removal

It is the responsibility of the property owner to remove graffiti that faces the property owner's land, while the removal of graffiti facing the road corridor is the responsibility of the road's owner (which in the case of a SCR, is TMR).

16.6 Illustrations

The various locations for noise attenuation infrastructure are shown in Figure 16.1.

Figure 16.1: Various Locations for Noise Attenuation

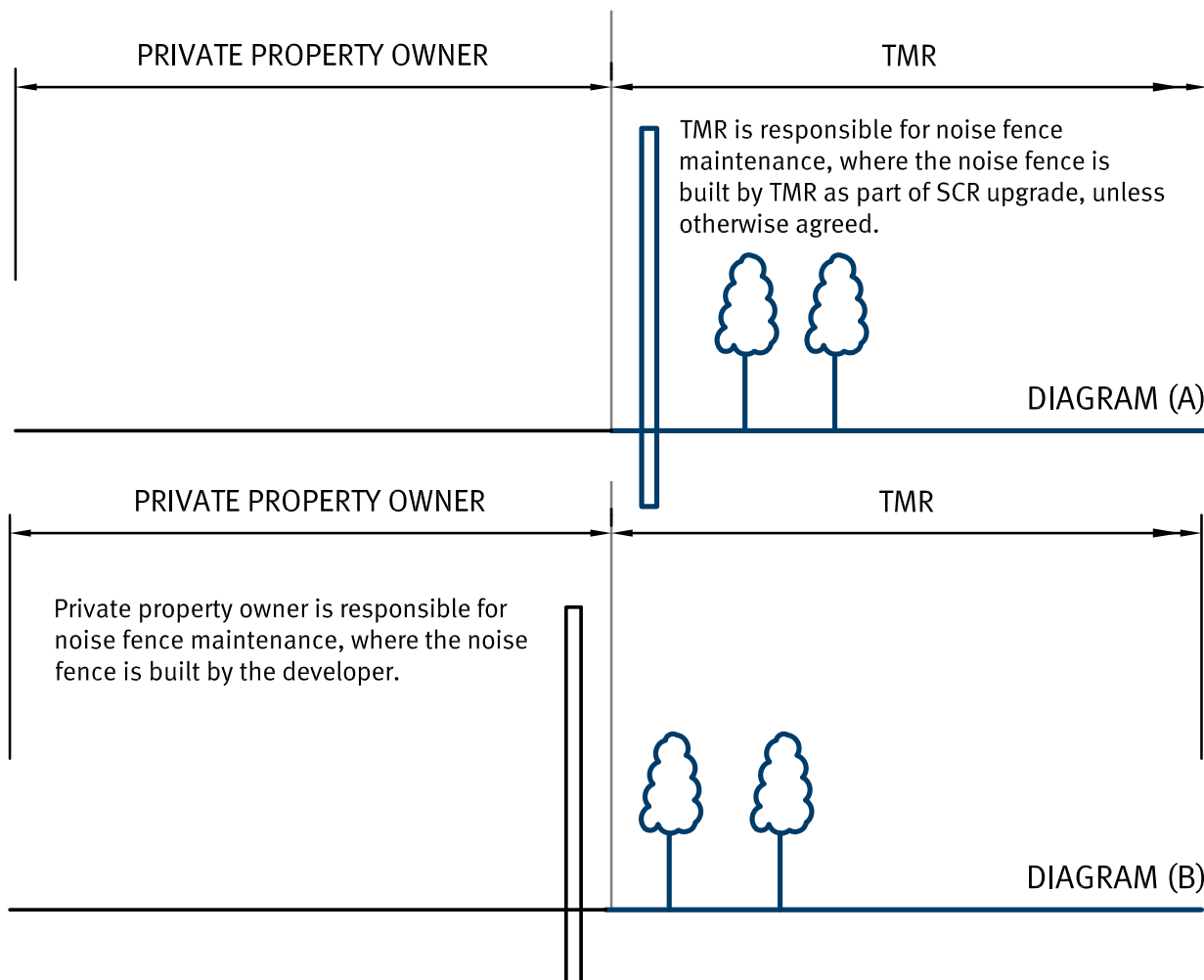


Figure 16.1 continued: Various Locations for Noise Attenuation continued

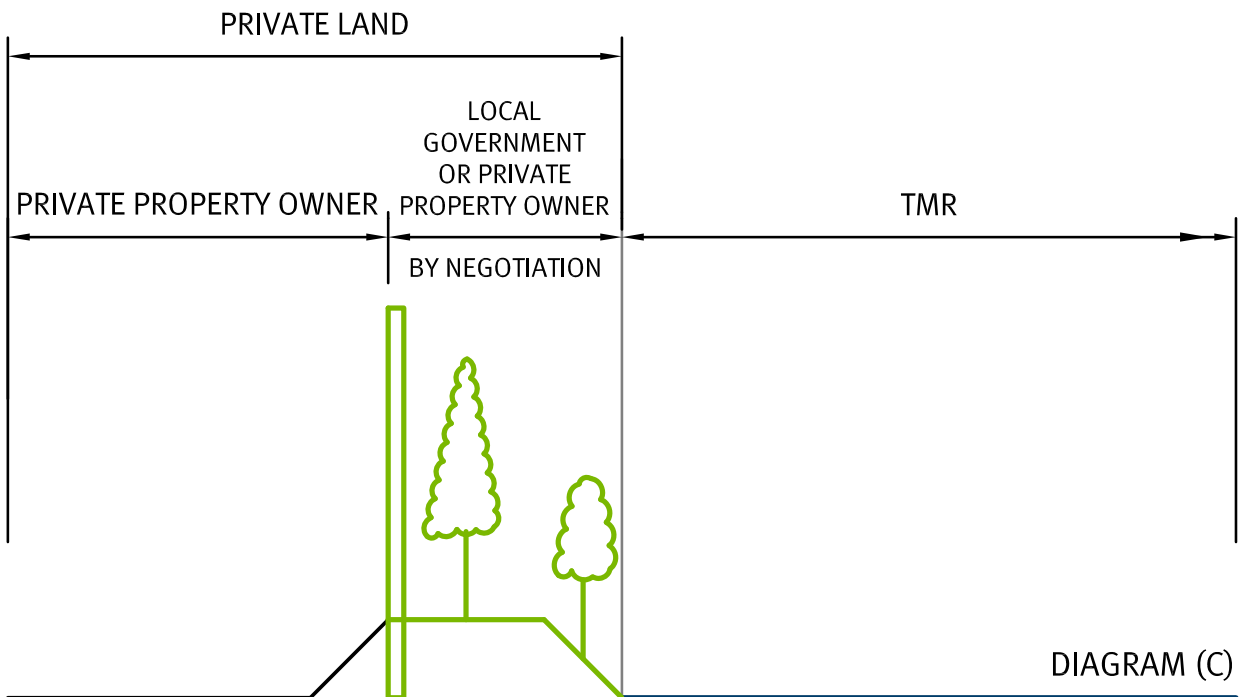


DIAGRAM (C)

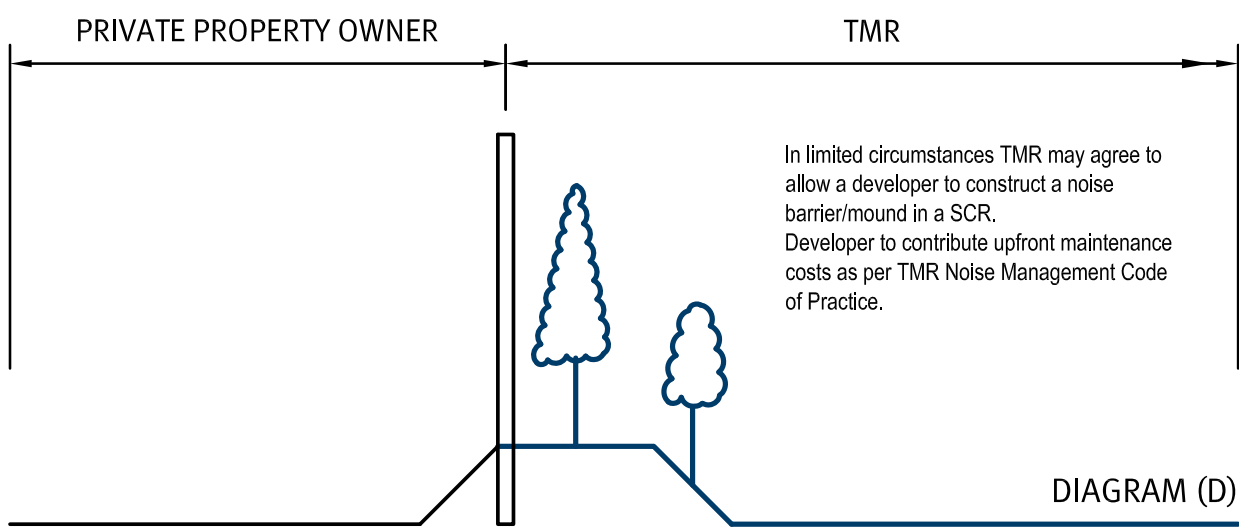


DIAGRAM (D)

16.7 Summary of Cost Sharing Responsibilities

COST SHARING RESPONSIBILITY FOR NOISE ATTENUATION INFRASTRUCTURE						
<i>Item</i>	<i>Planning</i>	<i>Design</i>	<i>Funding of Construction</i>	<i>Funding of Replacement</i>	<i>Funding of Maintenance</i>	<i>Ownership</i>
Noise fence/mound provided by TMR as part of SCR upgrade - in SCR	TMR	TMR	TMR	TMR	TMR	TMR (unless another agreement has been made)
Noise fence/mound provided by developers (on private land)	Developer	Developer and approved by TMR	Developer	Negotiated between private property owner and LG (as per Transport Noise Management Code of Practice)	Negotiated between private property owner and LG (as per Transport Noise Management Code of Practice)	Negotiated between private property owner and LG (as per Transport Noise Management Code of Practice)
Noise fence/mound provided by developer - in SCR (Only allowed when developer contribution for maintenance has been made.)	Developer / Local Government	Developer and approved by TMR	Developer	TMR	TMR	TMR

16.8 Photo Library

Photo examples of noise attenuation infrastructure.



TMR is responsible for the maintenance (including graffiti removal) of all noise barriers shown in the photos.

Responsibility for the replacement of the structure is dependent on who owns the land on which the existing noise barrier is located.





Infrastructure and Emergency Management Committee	
Mtg Date: 21.05.18	OAR: Yes
Authorisation: Bryce Hines	

MP:MP

H:\Departmental\Committee Reports\0518 MP Update to Isolated Community & Recovery Sub Plans.docx

4 May 2018

MEMORANDUM

TO: ACTING SPORT RECREATION AND NATURAL RESOURCES MANAGER

FROM: PRINCIPAL OFFICER (EMERGENCY MANAGEMENT)

RE: UPDATE TO THE LOCAL DISASTER MANAGEMENT RECOVERY AND ISOLATED COMMUNITY SUB PLANS

INTRODUCTION:

This is a report by the Principal Officer (Emergency Management) dated 4 May 2018 concerning review of the Local Disaster Management Isolated Community Sub Plans

BACKGROUND:

Council maintains a number of sub plans, which are supplementary documents to the Local Disaster Management Plan to support the coordination of disaster events. The development of these plans is guided by ten guidelines issued pursuant to the Disaster Management Act 2003.

In mid-2017, Queensland Fire and Emergency Services (QFES) announced that they would revise the existing ten guidelines, and as a result issued on the 19 January 2018 a single consolidated document titled the *Queensland Prevention, Preparedness, Response and Recovery Disaster Management Guideline*. QFES advised the revised guideline would have an implementation time, of May 2018 (Attachment A).

The Emergency Management team commenced a body of works to ensure that Council was able to implement the revisions by the transition deadline of May 2018.

REVISED SUB PLANS

Isolated Community Sub Plans

The risk of physical isolation following a disaster event can occur throughout the City resulting in residents being affected. The arrangements to support these residents is generally dealt with through the Local Disaster Management Plan itself. However in the instance where a whole community has a history of physical isolation and the risk of that isolation still exists (for example there has been so significant change in infrastructure for access/egress) isolated community sub plans are prepared and maintained (Attachments B – I).

Recovery Sub Plan




The purpose of the Recovery Sub Plan is to provide a framework in the provision recovery assistance to affected members of the public during and post a disaster event (Attachment J).

CONCLUSION:

As result of the release of the Queensland Prevention, Preparedness, Response and Recovery Disaster Management Guideline, a statutory instrument of the Disaster Management Act 2003, a number of the City of Ipswich sub plans have been revised.

ATTACHMENTS:

Name of Attachment	Attachment
Release of Queensland Prevention, Preparedness, Response and Recovery Disaster Management Guideline.	 Attachment A
Isolated Communities Sub Plan (Brassall and North Ipswich)	 Attachment B
Isolated Communities Sub Plan (Bundamba)	 Attachment C
Isolated Communities Sub Plan (Karalee)	 Attachment D
Isolated Communities Sub Plan (Leichhardt and One Mile)	 Attachment E
Isolated Communities Sub Plan (Marburg)	 Attachment F
Isolated Communities Sub Plan (Moores Pocket)	 Attachment G

Isolated Communities Sub Plan (Pine Mountain)	 Attachment H
Isolated Communities Sub Plan (Rosewood)	 Attachment I
Recovery Sub Plan	 Attachment J

RECOMMENDATION:

- A. That the Local Disaster Management Sub Plans, as detailed in Attachments B through to J, of the report by the Principal Officer (Emergency Management) dated 4 May 2018, be adopted.
- B. That the Local Disaster Management Sub Plans as detailed in Attachments B through to J, of the report by the Principal Officer (Emergency Management) dated 4 May 2018, be provided to the Local Disaster Management Group for review.
- C. That the Chief Operating Officer (Works, Parks and Recreation), in consultation with the Mayor and the Chairperson of Infrastructure and Emergency Management Committee, be authorised to make any minor amendments deemed necessary on the basis of comment received from the Local Disaster Management Group.

Matthew Pinder
PRINCIPAL OFFICER (EMERGENCY MANAGEMENT)

I concur with the recommendation contained in this report.

Kaye Cavanagh
ACTING SPORT RECREATION AND NATURAL RESOURCES MANAGER

I concur with the recommendation contained in this report.

Bryce Hines
ACTING CHIEF OPERATING OFFICER (WORKS, PARKS AND RECREATION)



Ph: 3635 2468
Our Ref: 00249-2018



Office of the
Commissioner

**Queensland Fire and
Emergency Services**

Dear Disaster Management Stakeholder

As you are aware, Queensland Fire and Emergency Services (QFES) undertook a recraft of Disaster Management (DM) Guidelines on behalf of DM stakeholders.

The approach taken was to recraft an all-inclusive, single source DM Guideline which aligns its chapters to the four phases of Prevention, Preparedness, Response and Recovery (PPRR).

I wish to thank stakeholders who provided feedback and I am pleased to provide you with the final recrafted PPRR DM Guideline.

The Guideline is supported by a robust toolkit, providing manuals, reference guides, forms, templates, maps, diagrams, handbooks and links to related publications to assist DM stakeholders. These toolkit items are continuing to be developed and will be progressively rolled out prior to the Guideline implementation in May 2018.

Concurrently, the www.disaster.qld.gov.au website has been refreshed to provide an interactive and usable platform for the recrafted DM Guideline, with improved navigation, search function and homepage. A fact sheet and user tutorial are attached to assist with navigating the new website and the Guideline.

As this timing sees the state preparing for the severe weather season, training and support in relation to changes in the Guideline will be provided in early 2018. Full adoption of any changes in the Guideline will not be expected before **May 2018**.

I would like to take this opportunity to acknowledge the efforts of the local, district and state members of the content development working groups who have contributed to the development of the PPRR DM Guideline.

Should you require any further information in relation to Guideline recraft, please contact Ms Coralie Muddle, A/Principal Program Officer, DM Guidelines Unit, QFES on telephone (07) 3635 2468 or email coralie.muddle@qfes.qld.gov.au.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'K. Carroll', is written over a light blue horizontal line.

Katarina Carroll APM
Commissioner

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City of Ipswich

Local Disaster Management Sub Plan

Isolated Communities (Brassall and North Ipswich)

A3980083: May 2018



Approval and Endorsement

Sub Plan approval and endorsement information – inserted post approval and endorsement.



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PART 1: ADMINISTRATION AND GOVERNANCE

1.1. Authority to Plan

This plan is prepared by Ipswich City Council under the auspices of the Local Disaster Management Plan (LDMP) for the City of Ipswich under the provisions of Section 57(1) of the Disaster Management Act 2003.

1.2. Sub Plan Principles

This sub plan has been prepared as subordinate to the LDMP. Accordingly this sub plan must be read in conjunction with the LDMP. With the exception of pertinent information, reference to existing statements, definitions and acronyms will be excluded from this document.

1.3. Planning and Review Cycle

This plan will be reviewed at least annually¹ with relevant amendments made and distributed as needed. The review process will be in accordance with the state guidelines. Minor amendments that do not materially affect the plan are able to be authorised by the Principal Officer (Emergency Management).

It is acknowledged that feedback from stakeholders is essential. Proposals for amendments or inclusions can be addressed in writing to:

Post Chief Executive Officer
Attention: Emergency Management
Ipswich City Council
PO Box 191, Ipswich QLD 4305

Email council@ipswich.qld.gov.au

¹ Section 59, Disaster Management Act 2003, Reviewing and Renewing (the) Plan

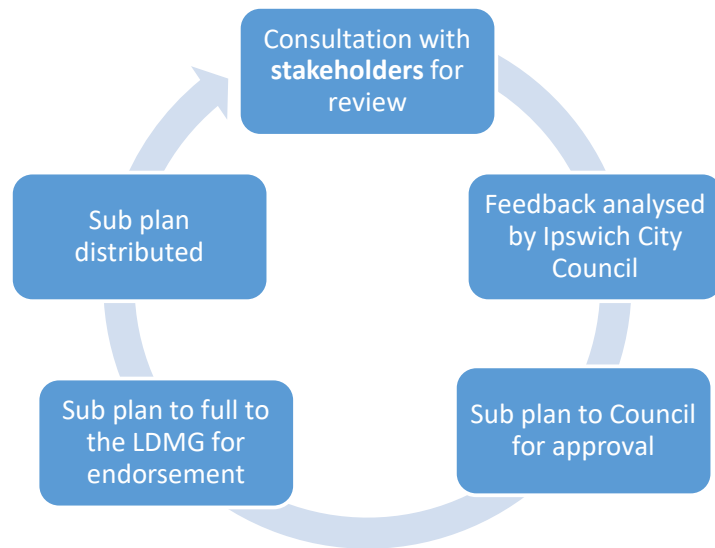


Figure 1 – Sub Plan Review Cycle

1.4. Amendment Register

Document version history is maintained through Council’s internal electronic document management system. The below table outlines amendments minor and inconsequential amendments.

Vers.	Date	Comment
3.00	May 2018	Approved and endorsed version

Table 1 – Amendment Register

1.5. Purpose of the Sub Plan

The purpose of this sub plan is to provide a pro-active approach to enhancing community resilience within the potentially isolated communities of Brassall, North Ipswich and its surrounding areas.

1.6. Key objectives

- Identification of preparatory initiatives for the physical isolation of the community.
- Enhance response for the physical isolation of the community.

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The risk of physical isolation following a disaster event can occur throughout the City resulting in residents being affected. The arrangements to support these residents is generally dealt with through the Local Disaster Management Plan itself. However in the instance where a whole community has a history of physical isolation and the risk of that isolation still exists (for example there has been so significant change in infrastructure for access/egress) isolated community sub plans are prepared and maintained. It is important to note these plans are supplementary



documents to local disaster management plan and the functional sub plans. Accordingly they are not intended to be the sole source of information for disaster operations and disaster recovery activities.

The emergency risk assessment for the City of Ipswich identifies that Brassall, North Ipswich and surrounding communities are at risk of isolation from flood. Whilst this plan has been prepared on that basis, an all-hazards approach has been applied wherever possible.

PART 2: COMMUNITY PROFILE

2.1. Locality

For planning purposes the Brassall and North Ipswich isolated communities clusters the suburbs of **Brassall, North Ipswich and Tivoli** which have the potential to be impacted by the Bremer River, the Mihi Creek and the Tivoli Creek.

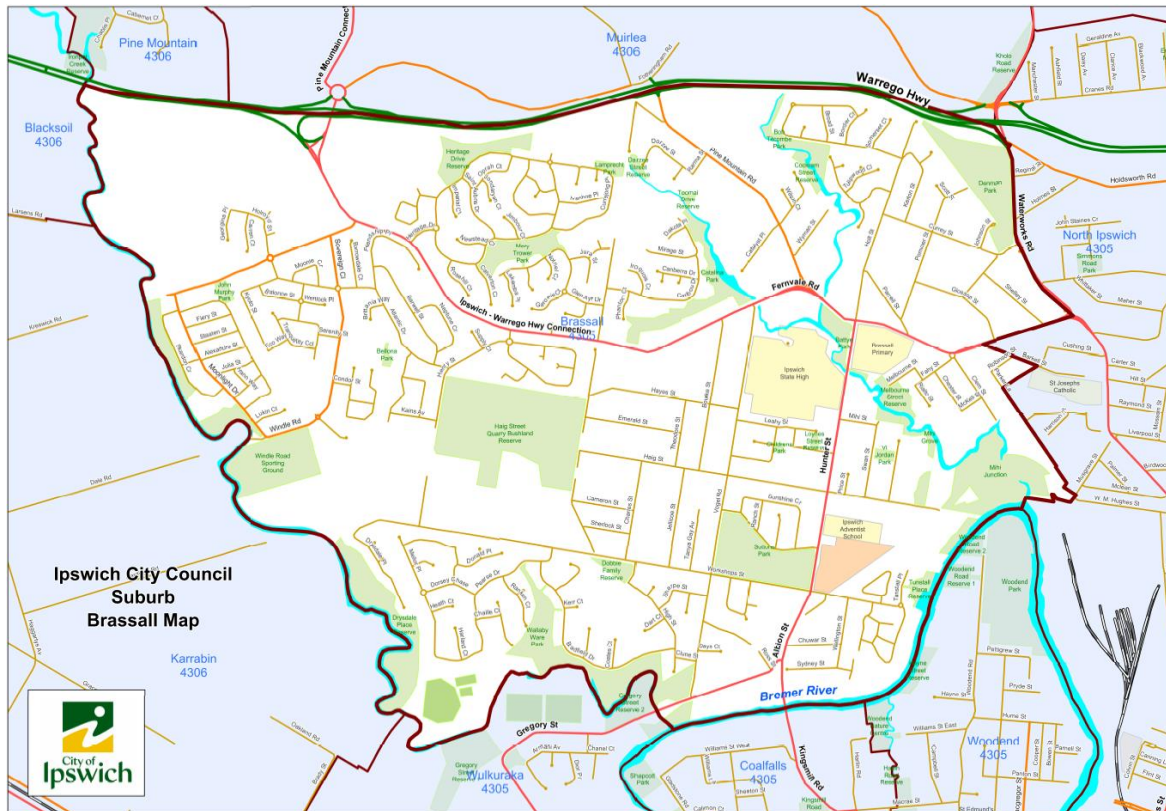


Figure 2 – Brassall Community Boundary

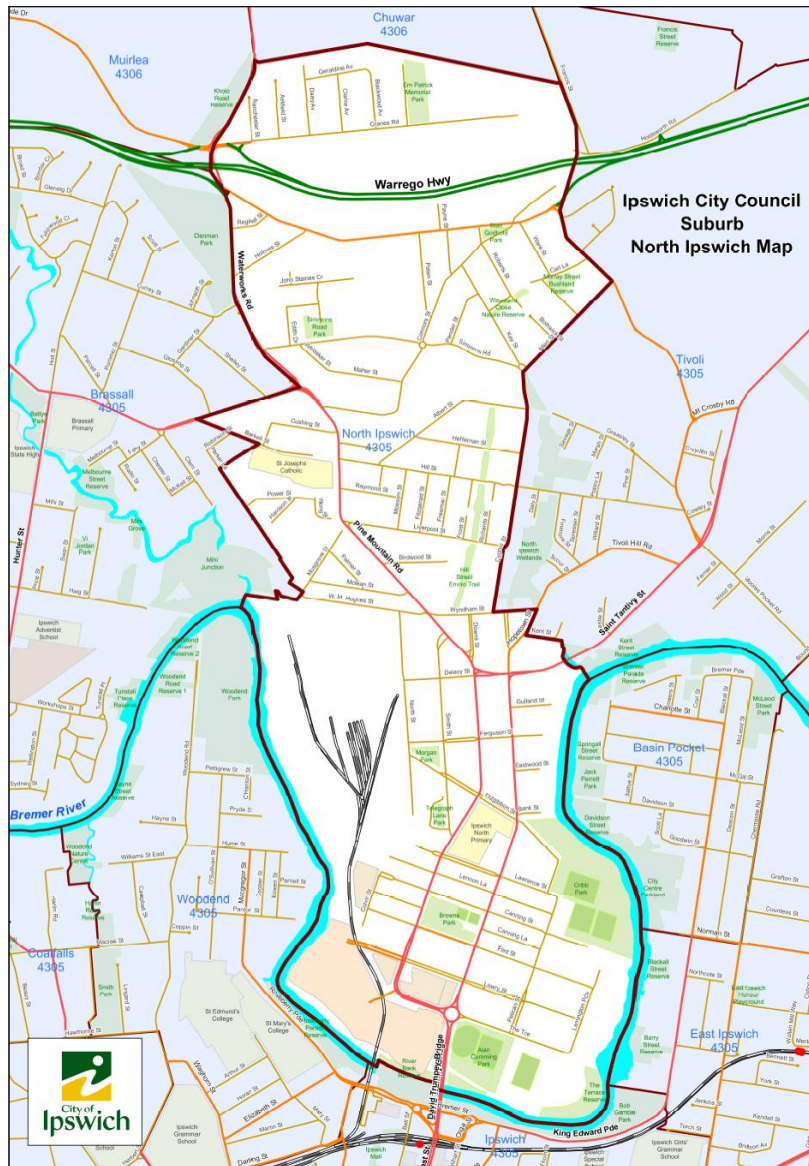


Figure 3 – North Ipswich Community Boundary

2.2. Population

The Brassall and North Ipswich community has an approximate population of 15,564.²

	0-19 years	20-49 years	50 and over
Male	2,133	3,125	2,302
Female	2,179	3,199	2,626
Total	,312	6,324	4,928

Table 2 – Population Data

² Profile ID – Community Profile (2016) <http://profile.id.com.au/ipswich/five-year-age-groups>

2.3. Educational Institutions

Located within the Brassall and North Ipswich community are the following educational institutions:

Institution	Contact Number	Address	Lat/Long
Aussie Kindies Early Learning	07 3812 9372	33 Lawrence St, North Ipswich QLD 4305	-27.604820, 152.764605
Brassall Child Care Centre	07 3201 8831	4 Clem St, Brassall QLD 4305	-27.589883, 152.752222
Brassall Early Learning Centre	07 3201 5094	30A Workshops St, Brassall QLD 4305	-27.598489, 152.744609
Brassall State School	07 3813 4333	132 Pine Mountain Rd, Brassall QLD 4305	-27.588903, 152.748052
Bush Kidz Daycare	07 3813 0975	68 Hunter St, Brassall QLD 4305	-27.597176, 152.746694
Earlybird Childhood and Learning Centre	07 3201 5366	99 Haig Street, Brassall QLD 4305	
Ipswich Adventist School	07 3201 6233	56 Hunter St, Brassall QLD 4305	-27.596152, 152.746512
Ipswich Kiddie Care	07 3812 1234	10 Wyndham St, North Ipswich QLD 4305	-27.594945, 152.762835
Ipswich North State School	07 3813 5888	Cnr Downs St & Fitzgibbon St, North Ipswich QLD 4305	-27.601904, 152.763198
Ipswich State High School	07 3813 4488	1 Hunter St, Brassall QLD 4305	-27.590087, 152.745044
North Ipswich Child Care Centre	07 3281 0351	84 Hill St, Tivoli QLD 4305	-27.591581, 152.768763
St Joseph's Primary School	07 3201 6188	42 Pine Mountain Rd, North Ipswich QLD 4305	-27.590767, 152.757281
Tivoli State School	07 3813 7444	108 Mount Crosby Rd, Tivoli QLD 4305	-27.583257, 152.777242

Table 3 – Educational Institutions

2.4. Aged and Vulnerable Persons Facilities

Located within the Brassall and North Ipswich community are the following aged and vulnerable person facilities:

Facility	Contact Number	Address	Lat/Long
Brassall Village Retirement Living	07 3201 8355	9 Charles St, Brassall QLD 4305	-27.594459, 152.737546
Bremer Waters Over 55's Lifestyle Resort	07 3813 5002	102A Moores Pocket Rd, Tivoli QLD 4305	-27.598702, 152.780361
Bundaleer Lodge Nursing Home	07 3201 8772	100 Holdsworth Rd, North Ipswich QLD 4305	-27.581867, 152.763264
Gainsborough Downs Home Village	07 3201 7288	1380 Warrego Hwy, Brassall QLD 4305	-27.580612, 152.716889
Sunnycove	1800 867 368	56A Moores Pocket Rd, Tivoli QLD 4305	-27.597002, 152.776337

Table 4 – Aged and Vulnerable Persons Facilities

2.5. Vet Surgeries

Located within the Brassall and North Ipswich community are the following vet surgeries:

Facility	Contact Number	Address	Lat/Long
Brassall Veterinary Surgery	07 3201 6464	17 Hunter St, Brassall QLD 4305	-27.593246, 152.745901
Pine Mountain Veterinary	07 3201 8862	24 Fernvale Rd, Brassall QLD 4305	-27.588090, 152.741768
Ipswich Family Veterinary Clinic	07 3202 1554	9 Pine Mountain Rd, North Ipswich QLD 4305	-27.595798, 152.761765

Table 5 – Vet Surgeries

2.6. Public Transport

The Brassall and North Ipswich community is serviced by the following public transport arrangements:

- Bus Services
- Taxi Services

2.7. Emergency Services

The following table details the emergency services that are located within the Brassall and North Ipswich community. Services may be provided from other locations to the Brassall and North Ipswich community and these are not listed in the below table.

Facility	Contact Number	Address	Lat/Long
Brassall Fire Station	000	Cnr Diamantina Blvd & Sovereign Cl, Brassall QLD 4305	-27.585142, 152.724663
North Ipswich Neighbourhood Police Beat	07 3201 5297	26 Hill St, North Ipswich QLD 4305	-27.590561, 152.761125

Table 6 – Emergency Service Facilities

2.8. Medical Facilities

The following table details the medical service providers that are located within the Brassall and North Ipswich community. Services may be provided from other locations to the Brassall and North Ipswich community and these are not listed in the below table.

Facility	Contact Number	Address	Lat/Long
Brassall Medical Clinic	07 3201 6766	19 Albion St, Brassall QLD 4305	-27.598623, 152.745347
Riverlink Family Practise	07 3812 8231	Riverlink Shopping Centre, Cnr The Terrace & Downs St, North Ipswich QLD 4305	
Riverlink Medical and Dental Centre	07 3413 6666	Riverlink Shopping Centre, Cnr The Terrace & Downs St, North Ipswich QLD 4305	-27.605620, 152.757975

Table 7 – Medical Facilities

PART 3: RISK PROFILE

3.1. Risk Assessment

Risk management forms the foundations of disaster and emergency plans for the City of Ipswich. Council adopts the Queensland Emergency Risk Management Framework. For more information regarding risk assessment refer to the Local Disaster Management Plan.

3.2. Potential Isolation Areas

Within the Brassall and North Ipswich community the following areas are potentially vulnerable to isolation as a result of flood. The areas are based off historical flood lines of 1974 and 2011 events.

Road	Suburb
Albion Street	Brassall
Backhouse Court	Brassall
Bottomley Street	Brassall
Bradfield Drive	Brassall
Clem Street	Brassall
Coates Court	Brassall
Collins Street	Brassall
Haig Street	Brassall
Holt Street	Brassall
Hunter Street	Brassall
Ipswich Warrego Highway Connection Road	Brassall
Kenworth Street	Brassall
Leahy Street	Brassall
Mckell Street	Brassall
Melbourne Street	Brassall
Mellor Place	Brassall
Mihi Street	Brassall
Parcell Street	Brassall
Parker Lane	Brassall
Pathway	Brassall
Pine Mountain Road	Brassall
Pommer Street	Brassall
Price Street	Brassall
Ranken Court	Brassall
Robinson Street	Brassall
Rowan Drive	Brassall
Swan Street	Brassall
Sydney Street	Brassall
Tunstall Place	Brassall
Vogel Road	Brassall



Road	Suburb
Workshops Street	Brassall
Bank Street	North Ipswich
Canning Street	North Ipswich
Colvin Street	North Ipswich
Cyprus Street	North Ipswich
Delacy Street	North Ipswich
Ferguson Street	North Ipswich
Fitzgibbon Street	North Ipswich
Flint Street	North Ipswich
Gulland Street	North Ipswich
Hopetown Street	North Ipswich
Kent Street	North Ipswich
Lamington Parade	North Ipswich
Lennon Lane	North Ipswich
Lowry Street	North Ipswich
Norma Brown Street	North Ipswich
North Street	North Ipswich
Pelican Street	North Ipswich
Pine Street	North Ipswich
Telegraph Lane	North Ipswich
Telegraph Street	North Ipswich
The Terrace	North Ipswich
Wyndham Street	North Ipswich

Table 8 – Potentially Isolated Areas



PART 4: PUBLIC INFORMATION AND WARNINGS

The Public Information and Warnings Sub Plan and Council Public Information and Warnings Manual detail Council's overall communication and warning strategy. It is however recognised that this community has particular needs related to communications.

4.1. Lead Times

Flood modelling and predication is a highly complex and subjective art that relies on a range of variables and assumptions. Factors that can affect the occurrence of inundation include location, intensity and length of the rainfall; current soil and ground moisture levels; overland water flow conditions; overland flow rates; current riverine and creek levels. Council possess predictive software that its Engineers (Floodplain Management) use to provide educated predictions based on real time data and conditions. This in itself is not 100% accurate. **The information of flooding provided below is extremely generalised and does not supplement or replace the knowledge and skill of Council Engineers. It is provided as highly generalised, non-contextualised information and process tool.**

The possible and highly indicative timeframes for effect on the community are as follows:

- Overland flows and gullies – 0 to 1 hour
- Local Creeks – 2 to 4 hours
- Bremer River – 12 to 24 hours
- Brisbane River – 48 to 72 hours

4.2. General Communication Strategies

Council employs the following communication strategies generally:

- Emergency Alert
- Emergency Broadcast
- Social Media
- Media Release
- Media Broadcast
- Website Publication

4.3. Community Specific Communication Strategies

Creek systems present unique challenges in determining lead time. Predictive modelling is far less accurate than that of riverine flood modelling. Council still however invests heavily in flood studies to improve this based on current industry best practice.

4.3.1. Door-Knocking

Council works in partnership with the Ipswich City SES Unit to undertake door knocking in areas during events, where it is anticipated they will be directly affected by inundation. The aim is to



encourage residents to remain aware of their situation. At this time contact details of residents are obtained.

4.3.2. My Ipswich Alerts (Early Warning Network)

Council has engaged the Early Warning Network to provide opt-in severe and dangerous weather warnings to residents, community groups and businesses within the City.

As part of this arrangement Council is able to send custom notifications and warnings to residents that have opted in, based on their residential address or location of their mobile device. The mobile device located must have the smart phone app installed and location services switched on.

PART 5: EVACUATION

5.1. General Evacuation Information

The Evacuation Process Sub Plan and Evacuation Centre Sub Plan outline the detailed considerations and general strategies for evacuations. The below information is summarised to provide context to the more detailed information provided.

Evacuation is a risk management strategy used to mitigate the effects of an emergency on the community. It involves the movement of people to a safer location and their return. Evacuations, if unplanned, may cause greater adverse impacts than the disaster itself, including the potential to overwhelm agencies undertaking response and recovery actions. Shelter in place should be considered as an alternative where possible.



Figure 4 – Types of Evacuation

Mandatory evacuations may be ordered under the following acts:

- Disaster Management Act 2003
- Fire and Emergency Services Act 1990
- Public Safety Preservation Act 1986

It is the responsibility of the primary agency to order and control the evacuation process and overview the associated planning.

5.2. Evacuation Process

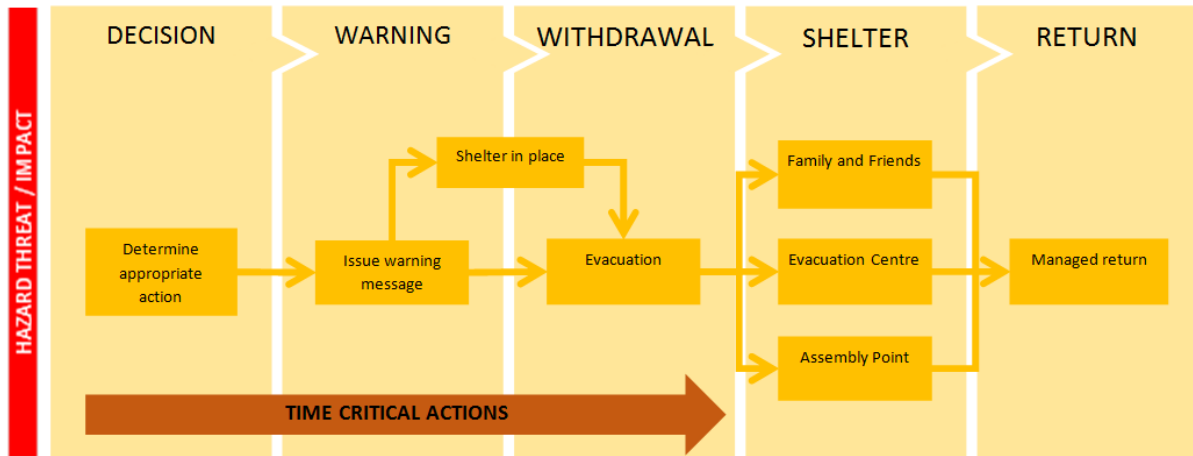


Figure 5 – Evacuation Process

5.3. Specific Evacuation and Isolation Information

The below table provides specific information related to the community.

Evacuation Coordinator	Officer in Charge Ipswich Police Station 37 Ellenborough St, Ipswich QLD 4305 Lat/Long: -27.615727, 152.757266
Assembly Area <i>within the Isolated Community</i>	<u>OPTION 1</u> St Joseph's Primary School Assemble at: Oval 42 Pine Mountain Rd, North Ipswich QLD 4305 Lat/Long: -27.590634, 152.756436
<i>Meeting point for movement to other locations.</i>	<u>OPTION 2</u> Sutton Park Assemble at: Grass area Cnr of Vogel Rd & Workshops St, Brassall QLD 4305 Lat/Long: -27.597260, 152.741432
	<u>OPTION 3</u> Ipswich North State School Assemble at: Oval Cnr Downs St & Fitzgibbon St, North Ipswich QLD 4305 Lat/Long: -27.602558, 152.762739
Emergency Shelter <i>within the Isolated Community</i>	<u>OPTION 1</u> St Joseph's Primary School 42 Pine Mountain Rd, North Ipswich QLD 4305 Lat/Long: -27.590767, 152.757281
<i>Meeting point for movement to other locations.</i>	<u>OPTION 2</u> Ipswich North State School Assemble at: Oval Cnr Downs St & Fitzgibbon St, North Ipswich QLD 4305 Lat/Long: -27.601904, 152.763198
Neighbourhood Safer Places (NSP)	Queensland Fire and Emergency Services have not identified a need and/or location for a neighbourhood safer place in this community.



Primary Evacuation Centre	<p>Ipswich Showgrounds Salisbury Rd, Ipswich QLD 4305 Lat/Long: -27.628809, 152.758960</p> <p><i>This is the primary evacuation centre, dependent on the hazard and impacts, other evacuation centres may be established.</i></p>
Helicopter Landing Zones within the Isolated Community	<p>St Joseph's Primary School Oval 42 Pine Mountain Rd, North Ipswich QLD 4305 Lat/Long: -27.590634, 152.756436</p>
Major Roads or Routes for Access/Egress	<ul style="list-style-type: none"> • Mt Crosby Rd impacted from Lumbye Pl to Hutchins St. • Pine Mountain Rd impacted from Clem St to Bourke St. • Albion St/Kingsmill Rd heavily impacted.
Potential Transport (persons) Providers located within the Isolated Community	<p><u>Courtesy Buses</u> Ipswich Jets Leagues Club 15 Downs St, North Ipswich QLD 4305 07 3202 1887 Lat/Long: -27.606802, 152.760919</p> <p>Club Services Ipswich 5A Lowry St, North Ipswich QLD 4305 07 3812 3366 Lat/Long: -27.607138, 152.759685</p>
Potential Cold Storage Providers located within the Isolated Community	<p>Coles Supermarket Riverlink Shopping Centre, Cnr The Terrace & Downs Street, North Ipswich QLD 4305 07 3281 3496 Lat/Long: -27.607854, 152.758720</p> <p>Woolworths Supermarket 68 Hunter Street, Brassall QLD 4305 07 3819 7114 Lat/Long: -27.597347, 152.746646</p>
Potential Supply Providers located within the Isolated Community	<p>Coles Supermarket Riverlink Shopping Centre, Cnr The Terrace & Downs Street, North Ipswich QLD 4305 07 3281 3496 Lat/Long: -27.607854, 152.758720</p> <p>Woolworths Supermarket 68 Hunter Street, Brassall QLD 4305 07 3819 7114 Lat/Long: -27.597347, 152.746646</p>
Potential Security Providers located within the Isolated Community	N/A

Table 9 – Specific Evacuation Information



PART 6: ANNEXURES

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6.2. Annexure 2 – Contacts

Organisation/Person	Contact Details	Availability
Ipswich City Council	07 3810 6666 council@ipswich.qld.gov.au	Public
Ipswich City Council – Division 5 Councillor Wayne Wendt	07 3281 8700 wayne.wendt@ipswich.qld.gov.au div5office@ipswich.qld.gov.au	Public
Ipswich City Council – Division 6 Councillor Cheryl Bromage	07 3810 6556 cbromage@ipswich.qld.gov.au div6office@ipswich.qld.gov.au	Public
Queensland Police Service – Public Contact	131 444 www.policelink.qld.gov.au	Public
Queensland Police Service – Ipswich Police Station	Officer in Charge Ipswich Police Station 37 Ellenborough St, Ipswich QLD 4305	Restricted
State Emergency Service	132 500 www.132500.qld.gov.au	Public

Other Public Emergency Contact Information is maintained in the front cover of the Local Disaster Management Plan which is located on Council’s website www.ipswich.qld.gov.au/emergency.

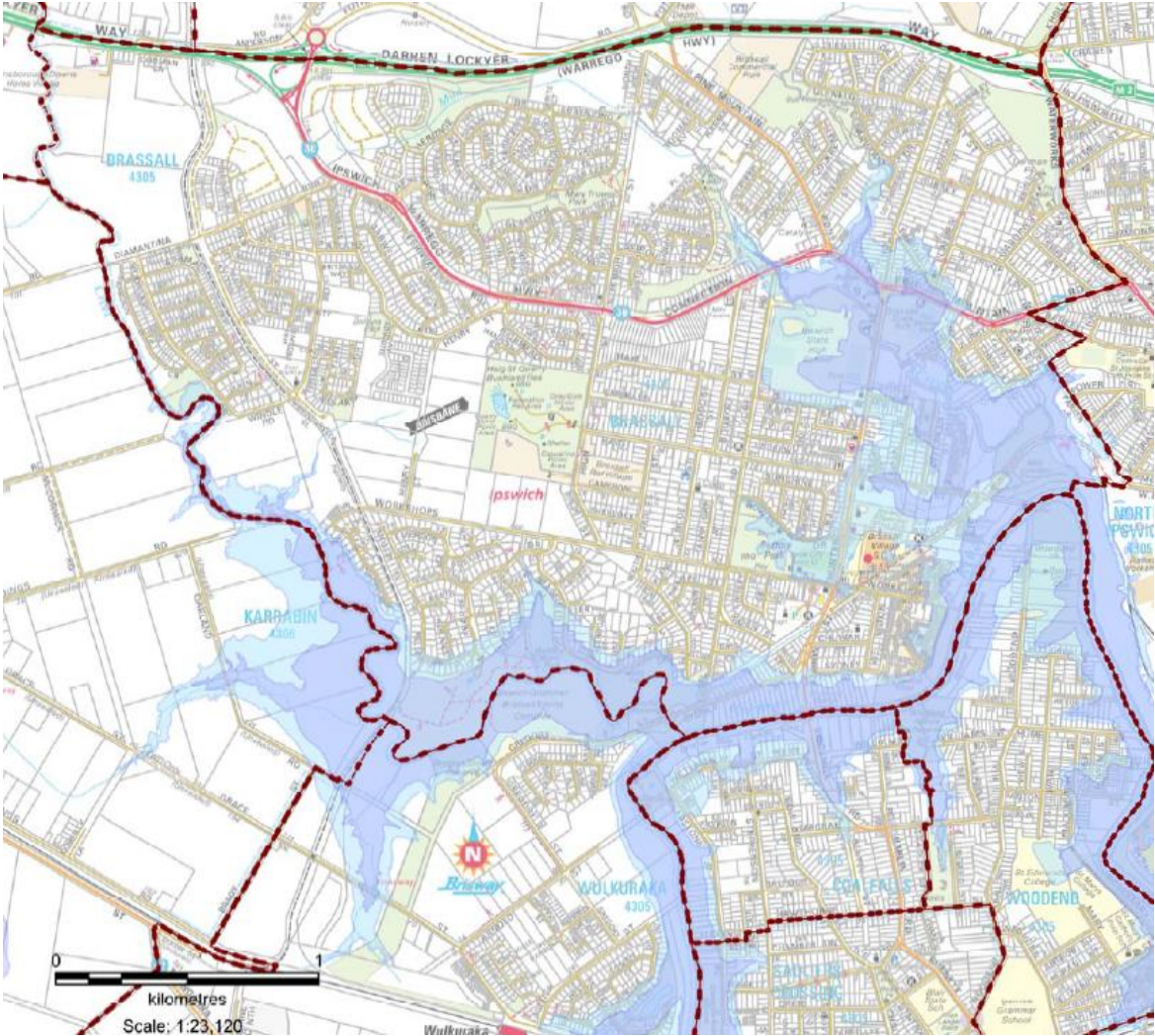
Community Support Contact Information is maintained through Council’s partnership with My Community Directory. Listings on the community directory are provided as a free service to the Ipswich public by service providers primarily located within the Ipswich region. Inclusion in these directories does not imply Ipswich City Council endorses, promotes or guarantees the products and, or services provided.

To view the directory visit: <https://www.mycommunitydirectory.com.au/Queensland/ipswich>

Operational Contact Information, including Local Disaster Management Group data is maintained within Council’s internal systems.

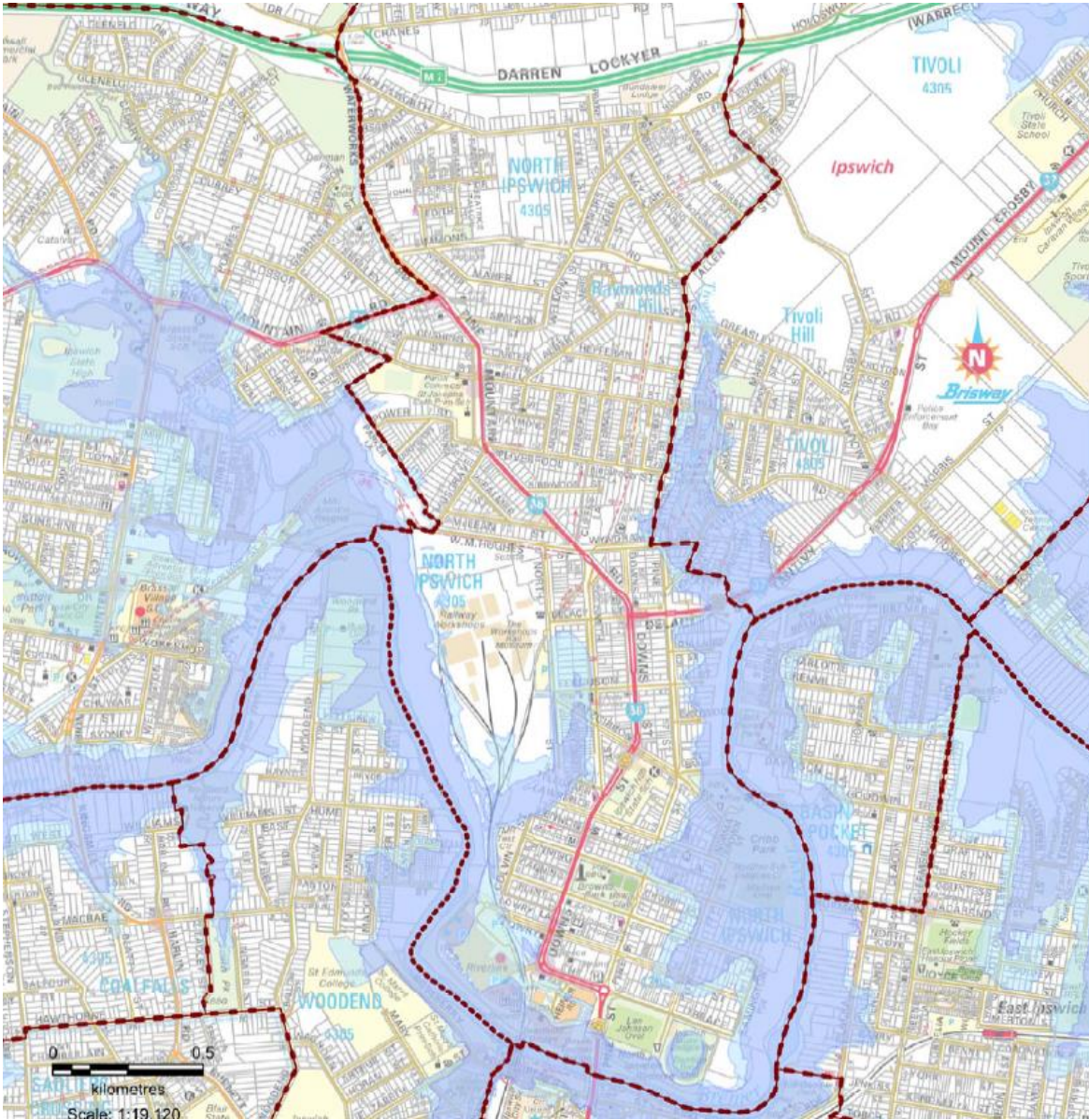


6.3. Annexure 3 – Brassall (1974 and 2011 Flood Lines)

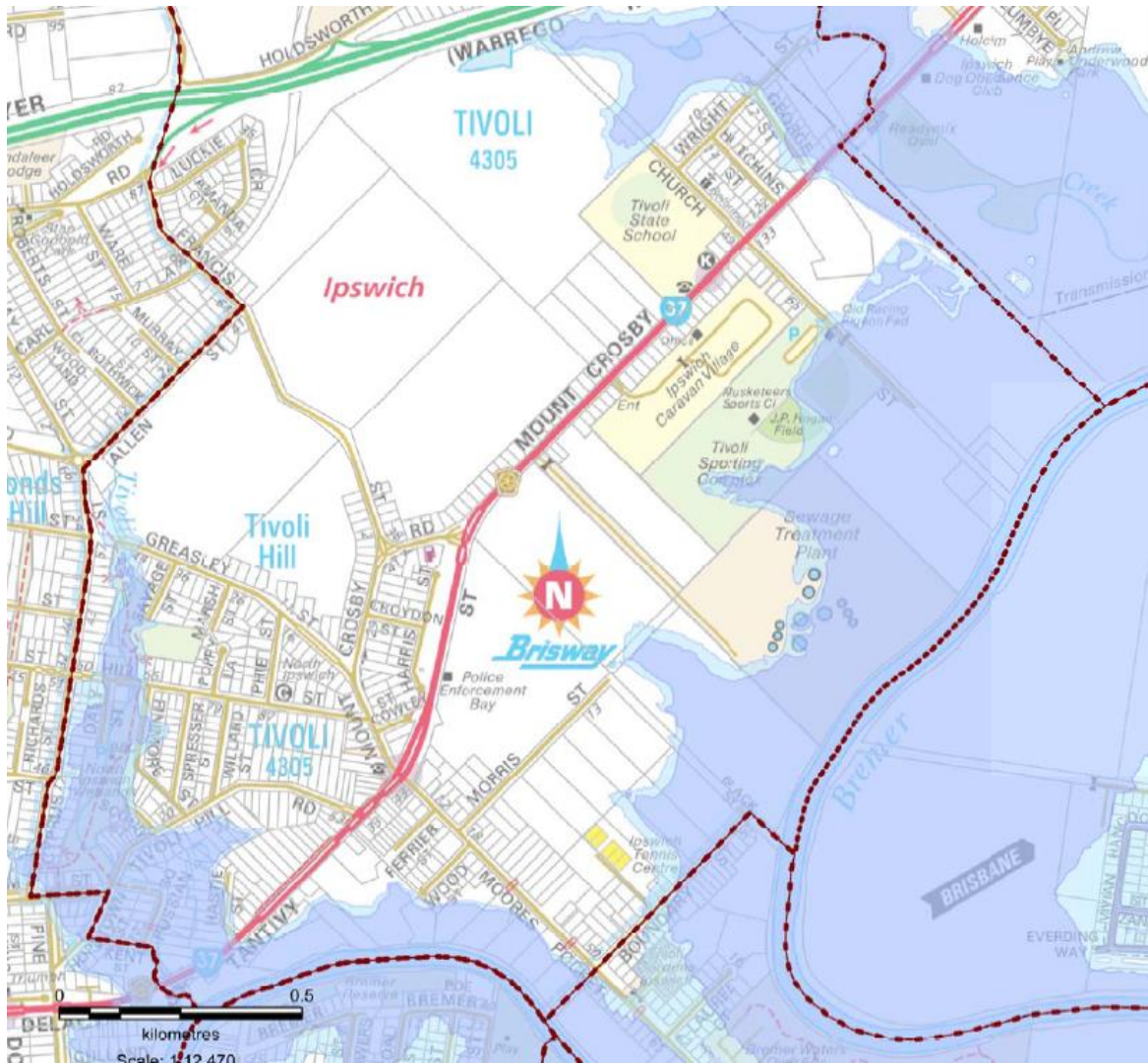




6.4. Annexure 4 – North Ipswich (1974 and 2011 Flood Lines)



6.5. Annexure 5 – Tivoli (1974 and 2011 Flood Lines)





City of Ipswich

Local Disaster Management Sub Plan

Isolated Communities (Bundamba)

A3931782: May 2018



Approval and Endorsement

Sub Plan approval and endorsement information – inserted post approval and endorsement.



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Attention: Emergency Management
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Email council@ipswich.qld.gov.au

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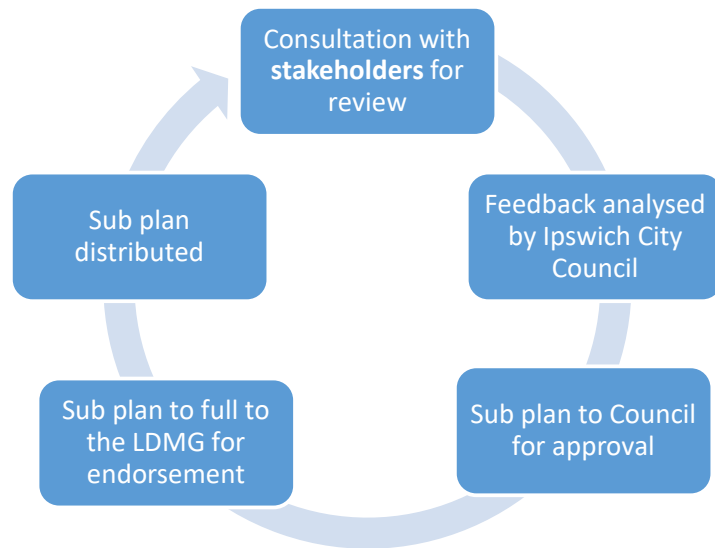


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- Identification of preparatory initiatives for the physical isolation of the community.
- Enhance response for the physical isolation of the community.

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The risk of physical isolation following a disaster event can occur throughout the City resulting in residents being affected. The arrangements to support these residents is generally dealt with through the Local Disaster Management Plan itself. However in the instance where a whole community has a history of physical isolation and the risk of that isolation still exists (for example there has been so significant change in infrastructure for access/egress) isolated community sub plans are prepared and maintained. It is important to note these plans are supplementary documents to local disaster management plan and the functional sub plans. Accordingly they are



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The emergency risk assessment for the City of Ipswich identifies that Bundamba and surrounding communities are at risk of isolation from flood. Whilst this plan has been prepared on that basis, an all-hazards approach has been applied wherever possible.

PART 2: COMMUNITY PROFILE

2.1 Locality

For planning purposes the Bundamba isolated community clusters the suburbs of **Bundamba**, **North Booval** and **Booval** which have the potential to be impacted by the Bremer River and Bundamba Creek.

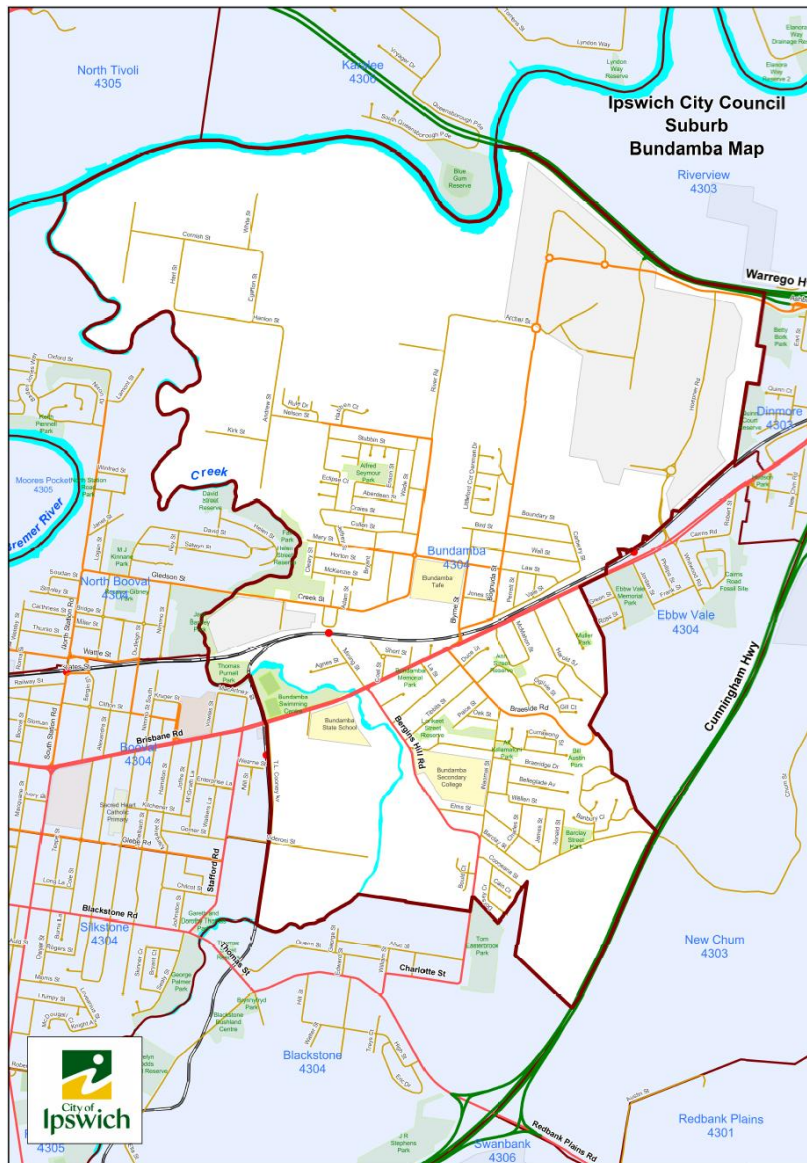


Figure 2 – Bundamba Community Boundary

2.2 Population

The Bundamba community has an approximate population of 8,905.²

	0-19 years	20-49 years	50 and over
Male	1,226	1,920	1,389
Female	1,071	1,874	1,411
Total	2,297	3,794	2,800

Table 2 – Population Data

2.3 Educational Institutions

Located within the Bundamba community are the following educational institutions:

Institution	Contact Number	Address	Lat/Long
Bindarra Daycare	07 3282 4011	18 Cole St, Booval QLD 4304	-27.615840, 152.791242
Bremer Institute Of TAFE	07 3817 3000	Cnr Mary St & Byrne St, Bundamba QLD 4304	-27.604512, 152.810830
Bundamba Child Care Centre	07 3282 4023	1 Adam St, Booval QLD 4304	-27.605825, 152.806181
Bundamba State School	07 3816 6666	221 Brisbane Rd, Bundamba QLD 4304	-27.612192, 152.805212
Bundamba State Secondary College	07 3816 6333	15A Naomi St, Bundamba QLD 4304	-27.614009, 152.813634
Byrneville House Child Care Centre	07 3282 6648	8 Byrne St, Bundamba QLD 4304	-27.606565, 152.811738
C&K Jacaranda Street Community Preschool & Kindergarten	07 3281 7173	114 Jacaranda St, North Booval QLD 4304	-27.607719, 152.785299
Goodstart Early Learning	07 3282 6552	8 Stafford St, Booval QLD 4304	-27.613546, 152.799967
Sacred Heart Primary School	07 3282 1976	25 Cothill Rd, Booval QLD 4304	-27.615816, 152.793567
The Bremer Community Child Care Centre	07 3816 3296	4 Mary St, North Booval QLD 4304	-27.626024, 152.799358

Table 3 – Educational Institutions

² Profile ID – Community Profile (2011) <http://profile.id.com.au/ipswich/five-year-age-groups>

2.4 Aged and Vulnerable Persons Facilities

Located within the Bundamba community are the following aged and vulnerable person facilities:

Facility	Contact Number	Address	Lat/Long
Christine Court Assisted Living	07 3816 2533	13-21 Christine Ct, North Booval QLD 4304	-27.604234, 152.795275
Oxford Crest Bundamba	07 3869 6688 07 3869 6699	9 Lindsay St, Bundamba QLD 4304	-27.611862, 152.809754
Thomas Henry House	07 3282 4904	8 Wearne St, Booval QLD 4304	-27.614090, 152.800853

Table 4 – Aged and Vulnerable Persons Facilities

2.5 Vet Surgeries

Located within the Bundamba community are the following vet surgeries:

Facility	Contact Number	Address	Lat/Long
Booval Veterinary Hospital	07 3282 6722	12 South Station Rd, Booval QLD 4304	-27.610121, 152.790043
Little Critters Veterinary Care	07 3816 0210	19 Mining St, Bundamba QLD 4304	-27.608301, 152.805726

Table 5 – Vet Surgeries

2.6 Public Transport

The Bundamba community is serviced by the following public transport arrangements:

- Rail Services
- Bus Services
- Taxi Services

2.7 Emergency Services

The following table details the emergency services that are located within the Bundamba community. Services may be provided from other locations to the Bundamba community and these are not listed in the below table.

Facility	Contact Number	Address	Lat/Long
Booval Police Station	000	2 Cothill Rd, Booval QLD 4304	-27.613998, 152.793898
Bundamba Fire Station	000	61 Brisbane Rd, Bundamba QLD 4304	-27.607440, 152.814478

Table 6 – Emergency Service Facilities

2.8 Medical Facilities

The following table details the medical service providers that are located within the Bundamba community. Services may be provided from other locations to the Bundamba community and these are not listed in the below table.

Facility	Contact Number	Address	Lat/Long
Booval Fair Medical and Therapy Centre	07 3143 5955	59/139 Brisbane Rd, Booval QLD 4304	-27.6159, 152.7900
Booval Medical Centre	07 3281 1177	123 Brisbane Rd, Booval QLD 4304	-27.614631, 152.788488
Piaggio Medical Services	07 3463 9181	32 South Station Rd, Booval QLD 4304	-27.612064, 152.789522
Station Road Medical Centre	07 3816 1155	50 South Station Rd, Booval QLD 4304	-27.613305, 152.789562
UFS Medical Centre	07 3282 1288	42 Station Rd, Booval QLD 4304	-27.612984, 152.789570

Table 7 – Medical Facilities

PART 3: RISK PROFILE

3.1 Risk Assessment

Risk management forms the foundations of disaster and emergency plans for the City of Ipswich. Council adopts the Queensland Emergency Risk Management Framework. For more information regarding risk assessment refer to the Local Disaster Management Plan.

3.2 Potential Isolation Areas

The following areas are potentially vulnerable to isolation as a result of flood. The areas are based off historical flood lines of 1974 and 2011 events.

Road	Suburb
Bergin Street	Booval
Brisbane Road	Booval
Macartney Street	Booval
Mill Street	Booval
Ross Llewellyn Drive	Booval
Stafford Street	Booval
Vowles Street	Booval
Wattle Street	Booval
Wearne Street	Booval
Yates Street	Booval
Agnes Street	Bundamba
Andrew Street	Bundamba
Archer Street	Bundamba
Ashburn Road	Bundamba
Barclay Street	Bundamba
Bergins Hill Road	Bundamba
Bognuda Street	Bundamba
Boyce Street	Bundamba
Brisbane Road	Bundamba
Cleary Street	Bundamba
Coal Street	Bundamba
Cornish Street	Bundamba
Creek Street	Bundamba
Egerton Street	Bundamba
Elizabeth Street	Bundamba
Elms Street	Bundamba
Hanlon Street	Bundamba
Hart Street	Bundamba
Hawkins Crescent	Bundamba
Herbert Street	Bundamba
Horton Street	Bundamba
Keith Street	Bundamba
Kirk Street	Bundamba
Lane Street	Bundamba
Lindsay Street	Bundamba
Mary Street	Bundamba
Mckenzie Street	Bundamba
Mining Street	Bundamba



Road	Suburb
River Road	Bundamba
Short Street	Bundamba
T L Cooney Avenue	Bundamba
Thompson Street	Bundamba
Tibbits Street	Bundamba
Videroni Street	Bundamba
Warrego Highway	Bundamba
White Street	Bundamba
Wickham Street	Bundamba
Alexandra Street	North Booval
Baden Jones Way	North Booval
Bergin Street	North Booval
Beth Street	North Booval
Bickle Place	North Booval
Bridge Street	North Booval
Christine Street	North Booval
David Street	North Booval
Diane Court	North Booval
Dudleigh Street	North Booval
Elaine Street	North Booval
Everding Way	North Booval
Gledson Street	North Booval
Heit Court	North Booval
Helen Street	North Booval
Jacaranda Street	North Booval
Janet Street	North Booval
Lamont Street	North Booval
Logan Street	North Booval
Merrell Street	North Booval
Miller Street	North Booval
Nixon Drive	North Booval
North Station Road	North Booval
Oxford Street	North Booval
Roy Street	North Booval
Selwyn Street	North Booval
Tuggerah Street	North Booval
Vivian Hancock Drive	North Booval

Table 8 – Potential Isolation Areas

PART 4: PUBLIC INFORMATION AND WARNINGS

The Public Information and Warnings Sub Plan and Council's Public Information and Warnings Manual detail Council's overall communication and warning strategy. It is however recognised that this community has particular needs related to communications.

4.1 Lead Times

Flood modelling and predication is a highly complex and subjective art that relies on a range of variables and assumptions. Factors that can affect the occurrence of inundation include location, intensity and length of the rainfall; current soil and ground moisture levels; overland water flow conditions; overland flow rates; current riverine and creek levels. Council possess predictive software that its Engineers (Floodplain Management) use to provide educated predictions based on real time data and conditions. This in itself is not 100% accurate. **The information of flooding provided below is extremely generalised and does not supplement or replace the knowledge, and skill of trained personnel. It is provided as highly generalised, non-contextualised information and process tool.**

The possible and highly indicative timeframes for effect on the community are as follows:

- Overland flows and gullies – 0 to 1 hour
- Local Creeks – 2 to 4 hours
- Bremer River – 12 to 24 hours
- Brisbane River – 48 to 72 hours

4.2 General Communication Strategies

Council employs the following communication strategies generally:

- Emergency Alert
- Emergency Broadcast
- Social Media
- Media Release
- Media Broadcast
- Website Publication

4.3 Community Specific Communication Strategies

Creek systems present unique challenges in determining lead time. Predictive modelling is far less accurate than that of riverine flood modelling. Council still however invests heavily in flood studies to improve this based on current industry best practice.

4.3.1 Door-Knocking

Council works in partnership with the Ipswich City SES Unit to undertake door knocking in areas during events, where it is anticipated they will be directly affected by inundation. The aim is to



encourage residents to remain aware of their situation. At this time contact details of residents are obtained.

4.3.2 My Ipswich Alerts (Early Warning Network)

Council has engaged the Early Warning Network to provide opt-in severe and dangerous weather warnings to residents, community groups and businesses within the City.

As part of this arrangement Council is able to send custom notifications and warnings to residents that have opted in, based on their residential address or location of their mobile device. The mobile device located must have the smart phone app installed and location services switched on.

PART 5: EVACUATION

5.1 General Evacuation Information

The Evacuation Process Sub Plan and Evacuation Centre Sub Plan outline the detailed considerations and general strategies for evacuations. The below information is summarised to provide context to the more detailed information provided.

Evacuation is a risk management strategy used to mitigate the effects of an emergency on the community. It involves the movement of people to a safer location and their return. Evacuations, if unplanned, may cause greater adverse impacts than the disaster itself, including the potential to overwhelm agencies undertaking response and recovery actions. Shelter in place should be considered as an alternative where possible.



Figure 3 – Types of Evacuation

Mandatory evacuations may be ordered under the following acts:

- Disaster Management Act 2003
- Fire and Emergency Services Act 1990
- Public Safety Preservation Act 1986

It is the responsibility of the primary agency to order and control the evacuation process and overview the associated planning.

5.2 Evacuation Process

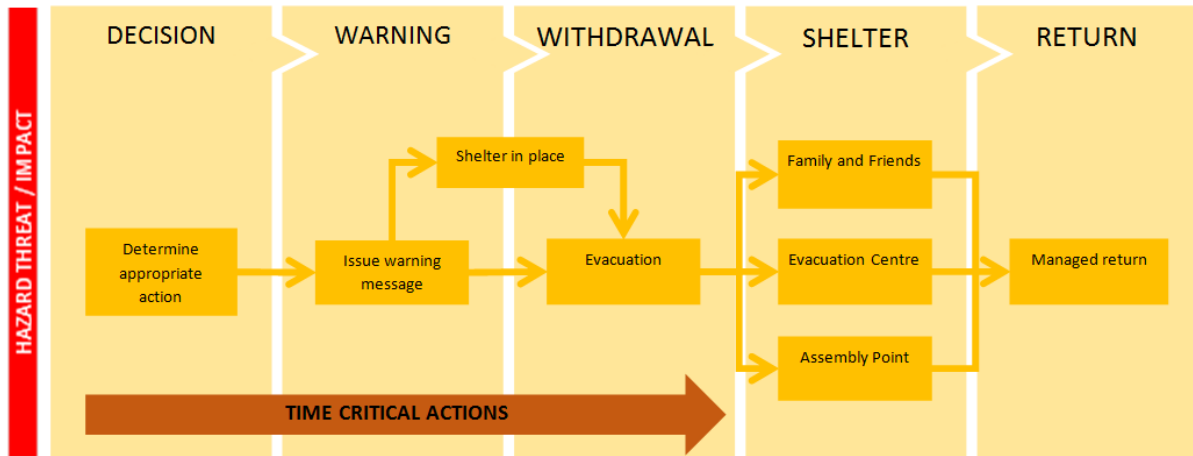


Figure 4 – Evacuation Process

5.3 Specific Evacuation and Isolation Information

The below table provides specific information related to the community.

Evacuation Coordinator	Officer in Charge Booval Police Station 2 Cothill Rd, Booval, Qld 4304 Lat/Long: -27.614047, 152.793799
Assembly Area <i>within the Isolated Community</i>	<u>OPTION 1</u> South West TAFE, Bundamba Campus Assemble at: Car Park Cnr Mary St & Byrne St, Bundamba QLD 4304 Lat/Long: -27.604947, 152.809852
<i>Meeting point for movement to other locations.</i>	<u>OPTION 2</u> Silkstone State School Assemble at: Oval Blackstone Rd, Silkstone QLD 4304 Lat/Long: -27.620389, 152.783903
	<u>OPTION 3</u> CitiSwich Business Park, Assemble at: Car Park 100 Hoepner Rd, Bundamba QLD 4304 Lat/Long: -27.599298, 152.825720
Emergency Shelter <i>within the Isolated Community</i>	<u>OPTION 1</u> South West TAFE, Bundamba Campus Cnr Mary St & Byrne St, Bundamba QLD 4304 Lat/Long: -27.604512, 152.810830
<i>Meeting point for movement to other locations.</i>	<u>OPTION 2</u> Silkstone State School Blackstone Rd, Silkstone QLD 4304 Lat/Long: -27.618989, 152.784343
Neighbourhood Safer Places (NSP)	Queensland Fire and Emergency Services have not identified a need and/or location for a neighbourhood safer place in this community.
Primary Evacuation Centre	Ipswich Showgrounds (Greyhound Track)



	Salisbury Rd, Ipswich QLD 4305 Lat/Long: -27.628809, 152.758960
	<i>This is the primary evacuation centre, dependent on the hazard and impacts, other evacuation centres may be established.</i>
Helicopter Landing Zones within the Isolated Community	Silkstone State School Oval Blackstone Rd, Silkstone QLD 4304 Lat/Long: -27.620389, 152.783903
Major Roads or Routes for Access/Egress	<ul style="list-style-type: none">• Brisbane Rd impacted around Ipswich Racecourse.• Blackstone Rd impacted at Creek Street.• Gledson St heavily impacted.• South Station Rd impacted at North Booval.
Potential Transport (persons) Providers located within the Isolated Community	<u>Private Bus Provider</u> Sunshine Buses 16 Coal St, Bundamba QLD 4304 07 3282 5400 Lat/Long: -27.608184, 152.806646 <u>Courtesy Buses</u> CODI PO Box 654, Ipswich QLD 4305 07 3282 7877 CODI parks their buses at Lifeline on Jacaranda St. Lat/Long: -27.605398, 152.780970
Potential Cold Storage Providers located within the Isolated Community	<u>ALDI</u> 22 South Station Rd, Booval QLD 4304 13 25 34 Lat/Long: -27.611269, 152.789820 <u>Woolworths Supermarket</u> Booval Fair Shopping Centre, Cnr Brisbane Rd & South Station Rd, Booval QLD 4304 07 3819 7111 Lat/Long: -27.616598, 152.790057 <u>South West TAFE Catering Block</u> Cnr Mary St & Byrne St, Bundamba QLD 4304 1300 914 754 Lat/Long: -27.604512, 152.810830 <u>Supa IGA</u> 76 Naomai St, Bundamba QLD 4304 07 3333 2424 Lat/Long: -27.621044, 152.812198
Potential Supply Providers located within the Isolated Community	<u>ALDI</u> 22 South Station Rd, Booval QLD 4304 13 25 34 Lat/Long: -27.611269, 152.789820 <u>Woolworths Supermarket</u> Booval Fair Shopping Centre, Cnr Brisbane Rd & South Station Rd, Booval QLD 4304 07 3819 7111 Lat/Long: -27.616598, 152.790057



	<u>Supa IGA</u> 76 Naomai St, Bundamba QLD 4304 07 3333 2424 Lat/Long: -27.621044, 152.812198
Potential Security Providers located within the Isolated Community	N/A

Table 9 – Specific Evacuation Information

5.4 Livestock & Race Horses

In the Bundamba community it has been identified that a number of the population have livestock. To complicate matters further, many do not have access to properties in close proximity or the ability to move the livestock long distances should an evacuation be required. Livestock has the potential to cause havoc if left to their own devices; deceased livestock poses a risk of disease to other livestock, and to neglect livestock unnecessarily is inhumane.

Council has entered into a Memorandum of Understanding (MoU) with Seqwater for short term secure holding for a limited number of livestock. More information on this MoU can be located in **Document ID: A3794632**. The MoU contains maps, contact procedures and relevant indemnity forms required to be completed by users.

Livestock and racehorse owners are responsible for all transport to and from the holding area, in the event that it is opened for use.



PART 6: ANNEXURES

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6.2 Annexure 2 – Contacts

Organisation/Person	Contact Details
Ipswich City Council	07 3810 6666 council@ipswich.qld.gov.au
Ipswich City Council – Division 4 Councillor Kylie Stoneman	07 3816 2444 kylie.Stoneman@ipswich.qld.gov.au div4office@ipswich.qld.gov.au
Queensland Police Service – Public Contact	131 444 www.policelink.qld.gov.au
Queensland Police Service – Booval Police Station	Officer in Charge Booval Police Station 2 Cothill Rd, Booval QLD 4304
State Emergency Service	132 500 www.132500.qld.gov.au

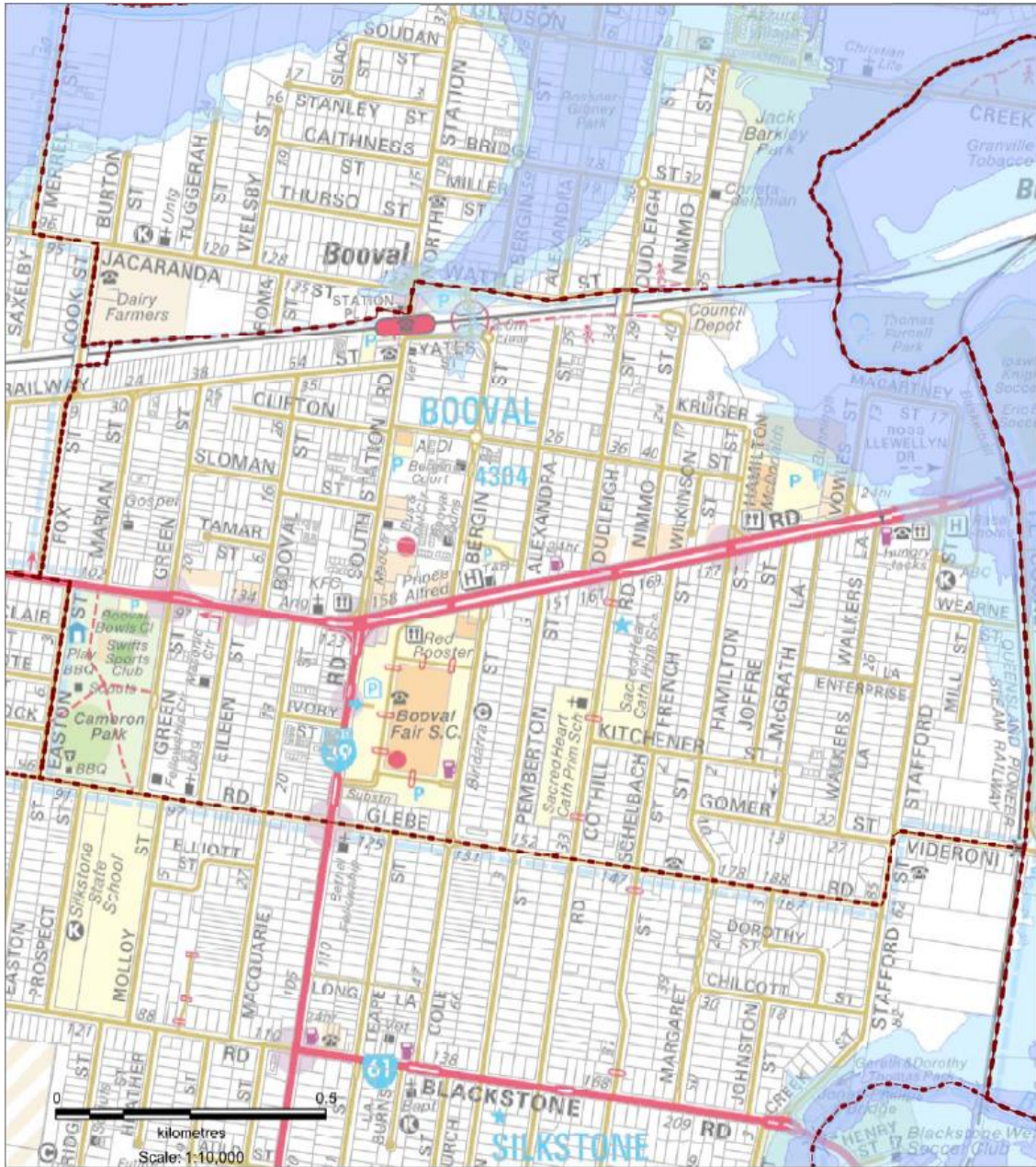
Other Public Emergency Contact Information is maintained in the front cover of the Local Disaster Management Plan which is located on Council's website www.ipswich.qld.gov.au/emergency.

Community Support Contact Information is maintained through Council's partnership with My Community Directory. Listings on the community directory are provided as a free service to the Ipswich public by service providers primarily located within the Ipswich region. Inclusion in these directories does not imply Ipswich City Council endorses, promotes or guarantees the products and/or services provided.

To view the directory visit: <https://www.mycommunitydirectory.com.au/Queensland/ipswich>

Operational Contact Information, including Local Disaster Management Group data is maintained within Council's internal systems.

6.3 Annexure 3 – Booval (1974 and 2011 Flood Lines)

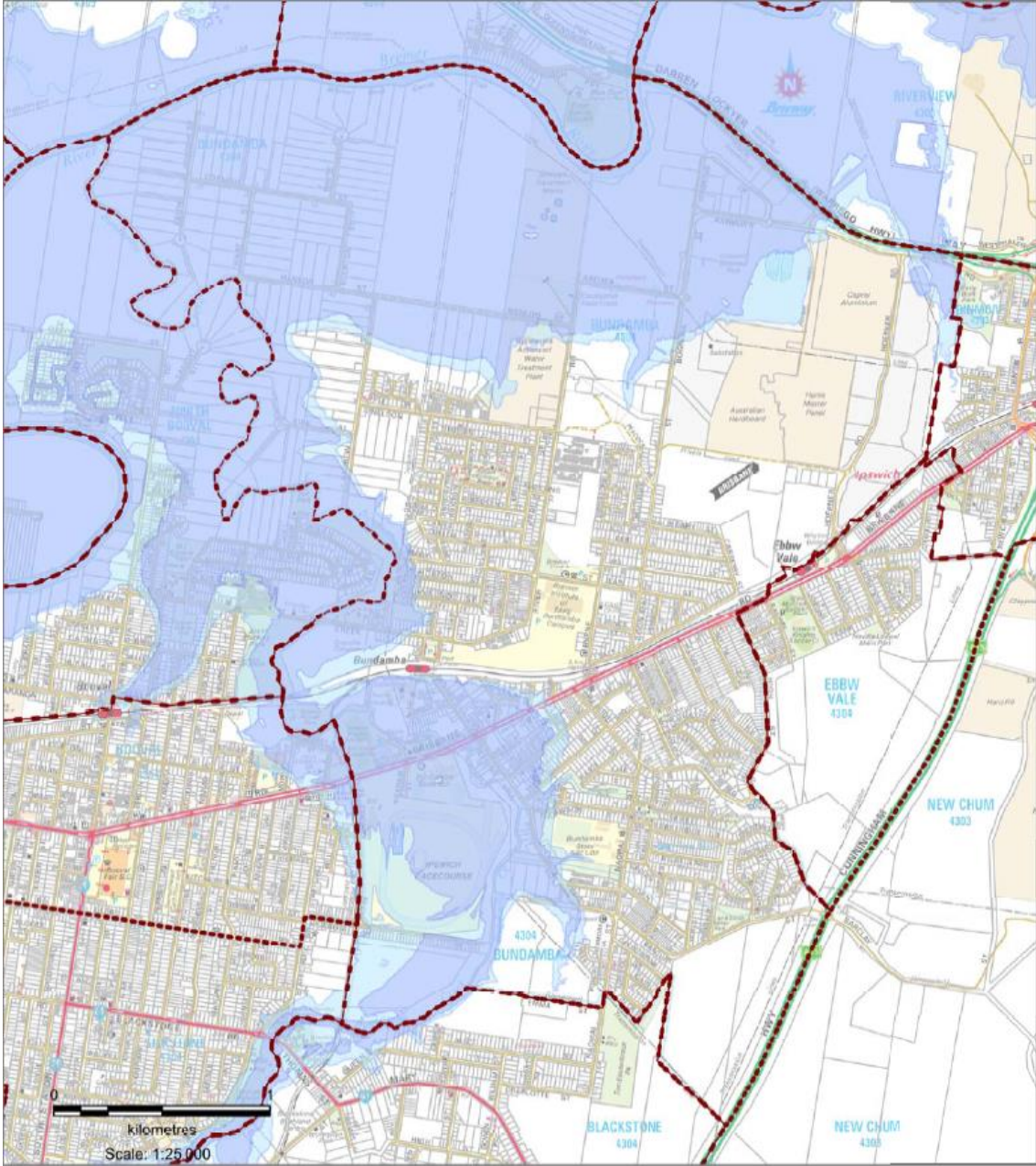


Legend:

- Suburb Boundary
- 1974 Flood Boundary
- 2011 Flood Boundary



6.4 Annexure 4 – Bundamba (1974 and 2011 Flood Lines)

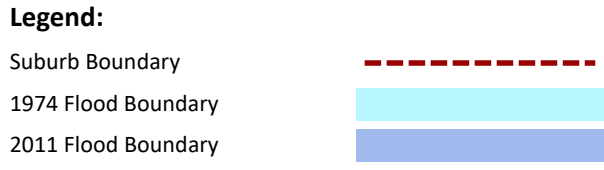
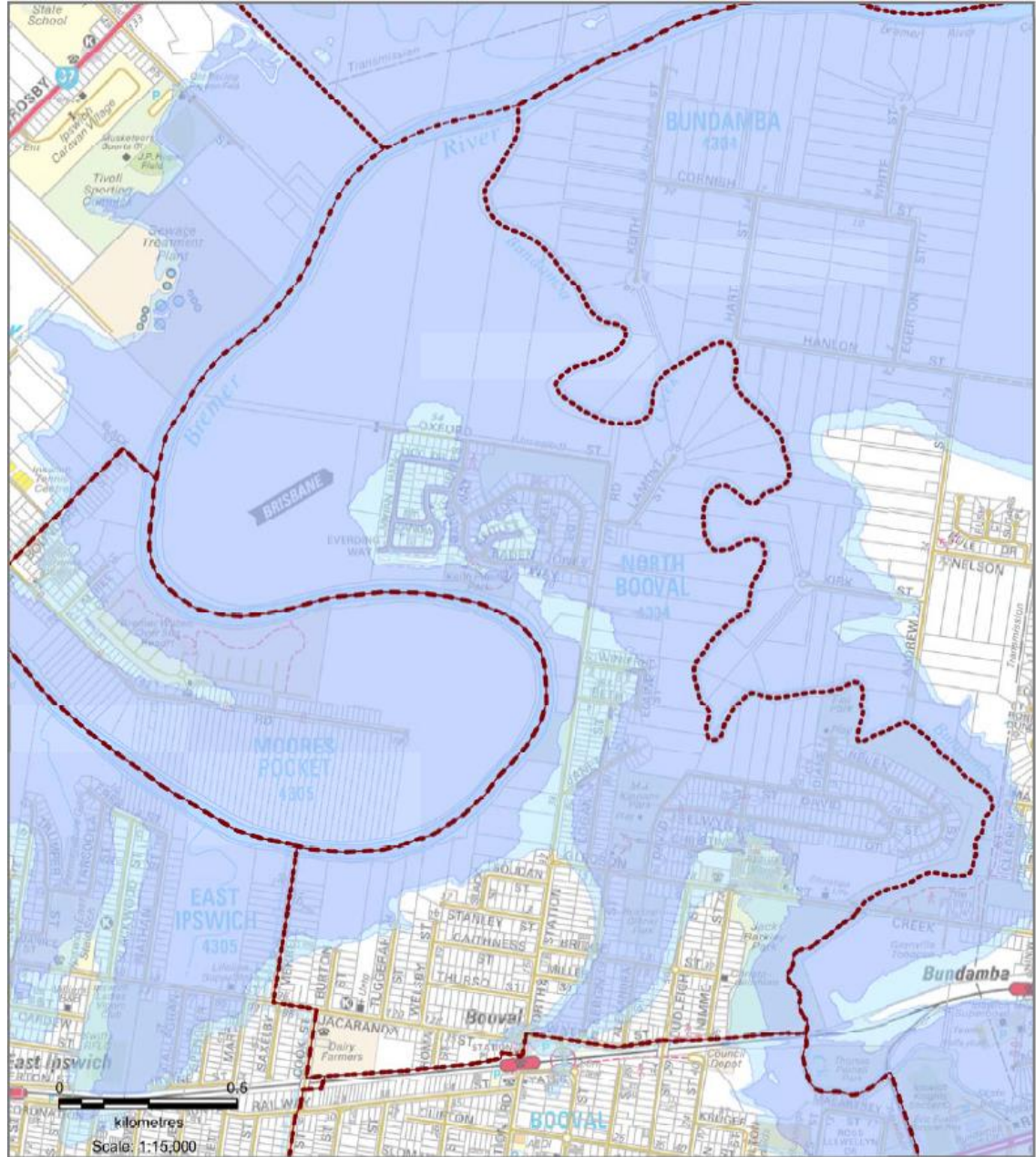


Legend:

- Suburb Boundary 
- 1974 Flood Boundary 
- 2011 Flood Boundary 



6.5 Annexure 5 – North Booval (1974 and 2011 Flood Lines)





City of Ipswich

Local Disaster Management Sub Plan

Isolated Communities (Karalee)

A3980085: May 2018



Approval and Endorsement

Sub Plan approval and endorsement information – inserted post approval and endorsement.



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PART 1: ADMINISTRATION AND GOVERNANCE

1.1 Authority to Plan

This plan is prepared by Ipswich City Council under the auspices of the Local Disaster Management Plan (LDMP) for the City of Ipswich under the provisions of Section 57(1) of the Disaster Management Act 2003.

1.2 Sub Plan Principles

This sub plan has been prepared as subordinate to the LDMP. Accordingly this sub plan must be read in conjunction with the LDMP. With the exception of pertinent information, reference to existing statements, definitions and acronyms will be excluded from this document.

1.3 Planning and Review Cycle

This plan will be reviewed at least annually¹ with relevant amendments made and distributed as needed. The review process will be in accordance with the state guidelines. Minor amendments that do not materially affect the plan are able to be authorised by the Principal Officer (Emergency Management).

It is acknowledged that feedback from stakeholders is essential. Proposals for amendments or inclusions can be addressed in writing to:

Post Chief Executive Officer
Attention: Emergency Management
Ipswich City Council
PO Box 191, Ipswich QLD 4305

Email council@ipswich.qld.gov.au

¹ Section 59, Disaster Management Act 2003, Reviewing and Renewing (the) Plan

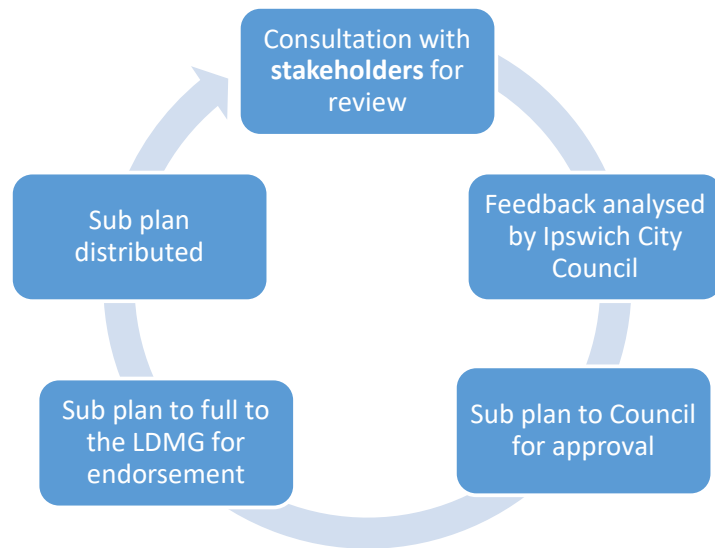


Figure 1 – Sub Plan Review Cycle

1.4 Amendment Register

Document version history is maintained through Council’s internal electronic document management system. The below table outlines amendments minor and inconsequential amendments.

Vers.	Date	Comment
3.00	May 2018	Approved and endorsed version

Table 1 – Amendment Register

1.5 Purpose of the Sub Plan

The purpose of this sub plan is to provide a pro-active approach to enhancing community resilience within the potentially isolated community of Karalee and its surrounding areas.

1.6 Key objectives

- Identification of preparatory initiatives for the physical isolation of the community.
- Enhance response for the physical isolation of the community.

1.7 Context

The risk of physical isolation following a disaster event can occur throughout the City resulting in residents being affected. The arrangements to support these residents is generally dealt with through the Local Disaster Management Plan itself. However in the instance where a whole community has a history of physical isolation and the risk of that isolation still exists (for example there has been so significant change in infrastructure for access/egress) isolated community sub plans are prepared and maintained. It is important to note these plans are supplementary documents to local disaster management plan and the functional sub plans. Accordingly they are



not intended to be the sole source of information for disaster operations and disaster recovery activities.

The emergency risk assessment for the City of Ipswich identifies that Karalee and surrounding communities are at risk of isolation from flood. Whilst this plan has been prepared on that basis, an all-hazards approach has been applied wherever possible.

PART 2: COMMUNITY PROFILE

2.1 Locality

For planning purposes the Karalee isolated community clusters the suburbs of **Karalee & Barellan Point** which have the potential to be impacted by the Bremer and Brisbane River.

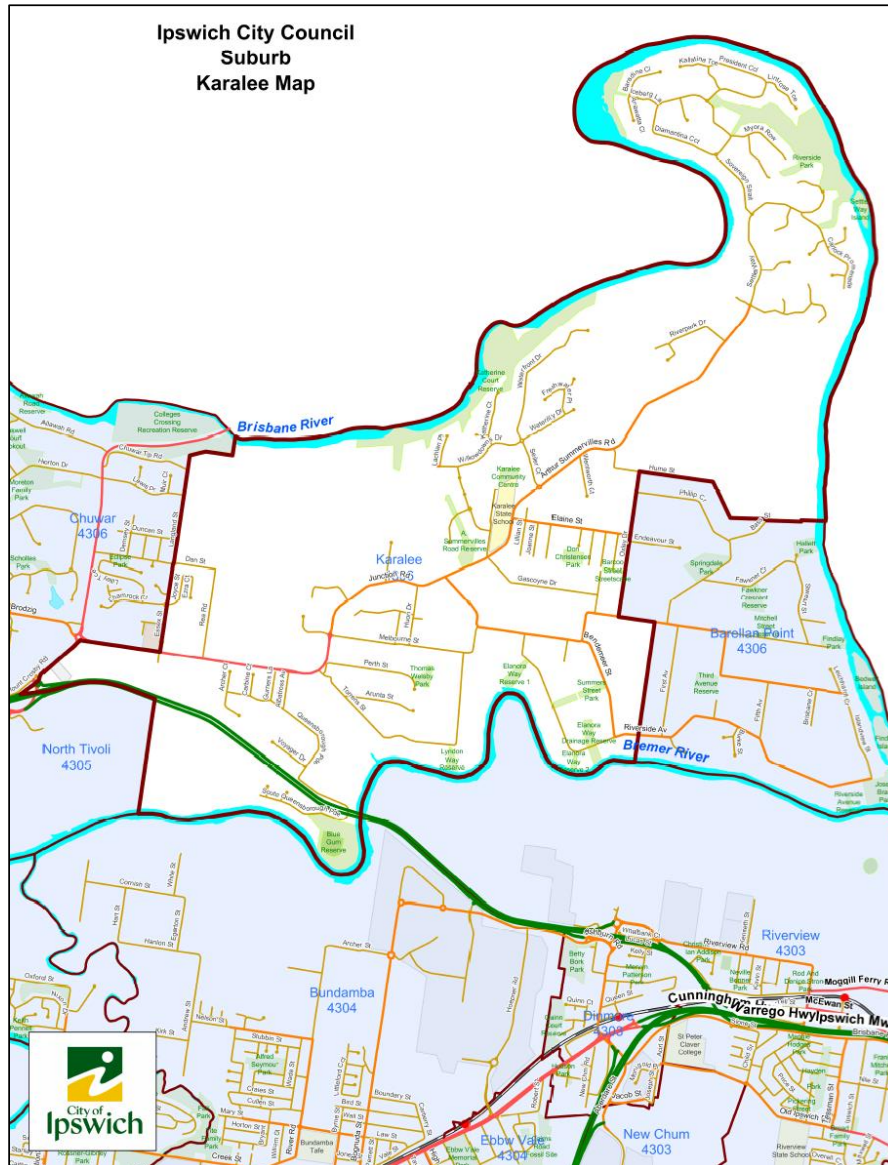


Figure 2 – Karalee Community Boundary

2.2 Population

The Karalee community has an approximate population of 5,504.²

	0-19 years	20-49 years	50 and over
Male	853	1034	889
Female	815	1079	831
Total	1668	2113	1720

Table 2 – Population Data

2.3 Educational Institutions

Located within the Karalee community are the following educational institutions:

Institution	Contact Number	Address	Lat/Long
Karalee Kindergarten and Early Years Learning	07 3294 7200	32-36 Arthur Summervilles Rd, Karalee QLD 4306	-27.565027, 152.825408
Karalee Community Kindergarten	07 3294 6699	56 Harold Summervilles Rd, Karalee QLD 4306	-27.560108, 152.825258
Karalee State School	07 3294 5333	77 Arthur Summervilles Rd, Karalee QLD 4306	-27.562178, 152.825132
123 4Kids	07 3294 7455	229-231 Junction Rd, Karalee QLD 4306	-27.570744, 152.811438

Table 3 – Educational Institutions

2.4 Aged and Vulnerable Persons Facilities

There are no aged or vulnerable persons facilities located within the Karalee community.

2.5 Vet Surgeries

Located within the Karalee community are the following vet surgeries:

Facility	Contact Number	Address	Lat/Long
Karalee Karana Veterinary Surgery	07 3282 7888	304 Mt Crosby Rd, Karalee QLD 4306	-27.569696, 152.793019
Karalee Village Vet Clinic	07 3282 9009	Karalee Shopping Village, 17/39-51 Junction Rd, Karalee QLD 4306	-27.570640, 152.798315

Table 4 – Vet Surgeries

² Profile ID – Community Profile (2011) <http://profile.id.com.au/ipswich/five-year-age-groups>

2.6 Public Transport

The Karalee community is serviced by the following public transport arrangements:

- Bus Services
- Taxi Services

2.7 Emergency Services

The following table details the emergency services that are located within the Karalee community. However, due to the probable impact to Junction Road during a flooding event these services will be unable to reach the Karalee community. Services may be provided from other locations to the Karalee community and these are not listed in the below table.

Facility	Contact Number	Address	Lat/Long
Karana Downs Fire Station	000	2 College Rd, Karana Downs QLD 4306	-27.552411, 152.806920
Karana Downs Police Station	000	6 College Rd, Karana Downs QLD 4306	-27.552331, 152.807341

Table 5 – Emergency Service Facilities

2.8 Medical Facilities

The following table details the medical service providers that are located within the Karalee community. However, due to the probable impact to Junction Road during a flooding event these services will be unable to reach the Karalee community. Services may be provided from other locations to the Karalee community and these are not listed in the below table.

Facility	Contact Number	Address	Lat/Long
Health Matters Karalee	07 3812 3133	Karalee Shopping Village, 17/39-51 Junction Rd, Karalee QLD 4306	-27.571185, 152.797976

Table 6 – Medical Facilities

PART 3: RISK PROFILE

3.1 Risk Assessment

Risk management forms the foundations of disaster and emergency plans for the City of Ipswich. Council adopts the Queensland Emergency Risk Management Framework. For more information regarding risk assessment refer to the Local Disaster Management Plan.

3.2 Potential Isolation Areas

Within the Karalee community the following areas are particularly vulnerable to flood. The 'at risk' areas are based off historical flood lines of 1974 and 2011 events.

Road	Suburb
Brisbane Crescent	Barellan Point
Burke Street	Barellan Point
Cook Street	Barellan Point
Endeavour Street	Barellan Point
Fawkner Crescent	Barellan Point
Fifth Avenue	Barellan Point
Findlay Drive	Barellan Point
First Avenue	Barellan Point
Fourth Avenue	Barellan Point
Hartog Street	Barellan Point
Islandview Street	Barellan Point
Junction Road	Barellan Point
Logan Crescent	Barellan Point
Northy Street	Barellan Point
Phillip Crescent	Barellan Point
Riverside Avenue	Barellan Point
Riverside Court	Barellan Point
Stuart Street	Barellan Point
Tasman Court	Barellan Point
Third Avenue	Barellan Point
Albatross Avenue	Karalee
Arthur Summervilles Road	Karalee
Barcoo Street	Karalee
Bendemeer Street	Karalee
Carlock Promenade	Karalee
Diamantina Circle	Karalee
Dock Street	Karalee
Elaine Street	Karalee
Elanora Way	Karalee
Fleet Street	Karalee



Road	Suburb
Freshwater Place	Karalee
Gascoyne Drive	Karalee
Gayundah Street	Karalee
Huon Drive	Karalee
Keimarie Street	Karalee
Krait Street	Karalee
Lyndon Way	Karalee
Marilyn Street	Karalee
Queensborough Parade	Karalee
Riverpark Drive	Karalee
Ronan Lane	Karalee
South Queensborough Parade	Karalee
Stuart Court	Karalee
Torrens Street	Karalee
Venus Court	Karalee
Voyager Drive	Karalee
Warrego Highway	Karalee
Yarra Court	Karalee
Riverside Drive	Muirlea

Table 7 – Potential Isolation Areas

PART 4: PUBLIC INFORMATION AND WARNINGS

The Public Information and Warnings Sub Plan and Council's Public Information and Warnings Manual detail Council's overall communication and warning strategy. It is however recognised that this community has particular needs related to communications.

4.1 Lead Times

Flood modelling and predication is a highly complex and subjective art that relies on a range of variables and assumptions. Factors that can affect the occurrence of inundation include location, intensity and length of the rainfall; current soil and ground moisture levels; overland water flow conditions; overland flow rates; current riverine and creek levels. Council possess predictive software that its Engineers (Floodplain Management) use to provide educated predictions based on real time data and conditions. This in itself is not 100% accurate. **The information of flooding provided below is extremely generalised and does not supplement or replace the knowledge, and skill of trained personnel. It is provided as highly generalised, non-contextualised information and process tool.**

The **possible and highly indicative timeframes** for effect on the community are as follows:

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4.2 General Communication Strategies

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5.1 General Evacuation Information

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Evacuation is a risk management strategy used to mitigate the effects of an emergency on the community. It involves the movement of people to a safer location and their return. Evacuations, if unplanned, may cause greater adverse impacts than the disaster itself, including the potential to overwhelm agencies undertaking response and recovery actions. Shelter in place should be considered as an alternative where possible.



Figure 3 – Types of Evacuation

Mandatory evacuations may be ordered under the following acts:

- Disaster Management Act 2003
- Fire and Emergency Services Act 1990
- Public Safety Preservation Act 1986

It is the responsibility of the primary agency to order and control the evacuation process and overview the associated planning.

5.2 Evacuation Process

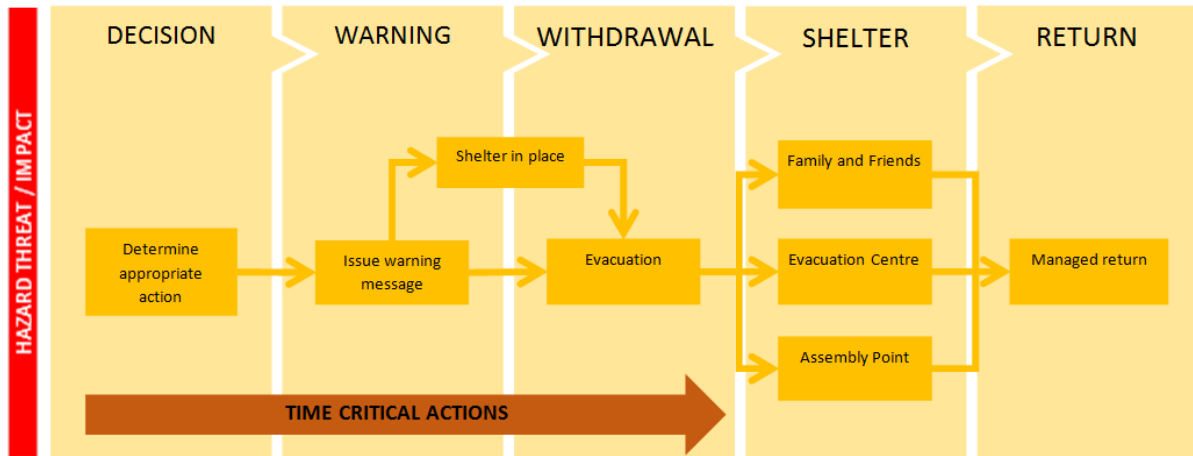


Figure 4 – Evacuation Process

5.3 Specific Evacuation and Isolation Information

The below table provides specific information related to the community.

Evacuation Coordinator	Officer in Charge Karana Downs Police Station 8 College Rd, Karana Downs QLD 4306 Lat/Long: -27.552537, 152.807436
Assembly Area <i>within the Isolated Community</i>	Karalee State School Assemble at: Oval 77 Arthur Summervilles Rd, Karalee QLD 4306 Lat/Long: -27.560949, 152.825183
<i>Meeting point for movement to other locations.</i>	
Emergency Shelter <i>within the Isolated Community</i>	Karalee State School 77 Arthur Summervilles Rd, Karalee QLD 4306 Lat/Long: -27.562178, 152.825132
<i>Meeting point for movement to other locations.</i>	
Neighbourhood Safer Places (NSP)	Queensland Fire and Emergency Services have not identified a need and/or location for a neighbourhood safer place in this community.
Primary Evacuation Centre	Ipswich Showgrounds (Greyhound Track) Salisbury Rd, Ipswich QLD 4305 Lat/Long: -27.628809, 152.758960
	<i>This is the primary evacuation centre, dependent on the hazard and impacts, other evacuation centres may be established.</i>
Helicopter Landing Zones <i>within the Isolated Community</i>	Karalee State School Oval 77 Arthur Summervilles Rd, Karalee QLD 4306 Lat/Long: -27.560949, 152.825183



Major Roads or Routes for Access/Egress

- Junction Rd *heavily impacted*.

Potential Transport (persons) Providers located within the Isolated Community

Private Bus Provider
Southern Cross Transit
251 Mount Crosby Rd, Karalee QLD 4306
07 3812 2520
Lat/Long: -27.573225, 152.791515

NOTE: During a flooding event these services will be unable to reach the Karalee community, due to the probable impact to Junction Road.

Potential Cold Storage Providers located within the Isolated Community

Woolworths Karalee
Karalee Shopping Village,
39-51 Junction Road, Karalee QLD 4306
07 3819 7123
Lat/Long: -27.570521, 152.798577

NOTE: During a flooding event these services will be unable to reach the Karalee community, due to the probable impact to Junction Road.

Potential Supply Providers located within the Isolated Community

Woolworths Karalee
Karalee Shopping Village,
39-51 Junction Road, Karalee QLD 4306
07 3819 7123
Lat/Long: -27.570521, 152.798577

NOTE: During a flooding event these services will be unable to reach the Karalee community, due to the probable impact to Junction Road.

Potential Security Providers located within the Isolated Community

N/A

Table 8 – Specific Evacuation Information



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6.2 Annexure 2 – Contacts

Organisation/Person	Contact Details
Ipswich City Council	07 3810 6666 council@ipswich.qld.gov.au
Ipswich City Council – Division 5 Councillor Wayne Wendt	07 3281 8700 wayne.wendt@ipswich.qld.gov.au div5office@ipswich.qld.gov.au
Queensland Police Service – Public Contact	131 444 www.policelink.qld.gov.au
Queensland Police Service – Karana Downs Police Station	Officer in Charge Karana Downs Police Station 8 College Road, Karana Downs QLD 4306
State Emergency Service	132 500 www.132500.qld.gov.au

Other Public Emergency Contact Information is maintained in the front cover of the Local Disaster Management Plan which is located on Council's website www.ipswich.qld.gov.au/emergency.

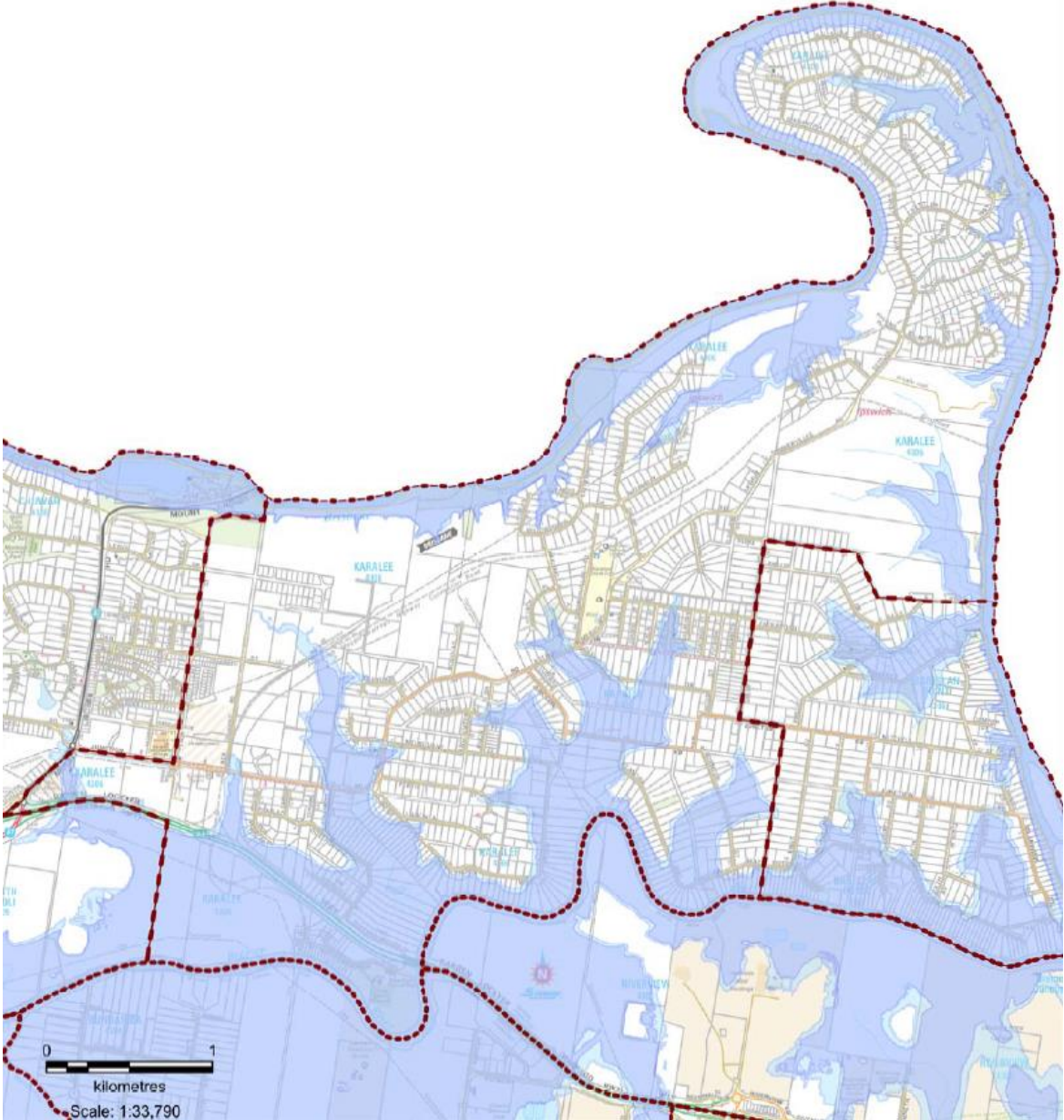
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To view the directory visit: <https://www.mycommunitydirectory.com.au/Queensland/ipswich>

Operational Contact Information, including Local Disaster Management Group data is maintained within Council's internal systems.



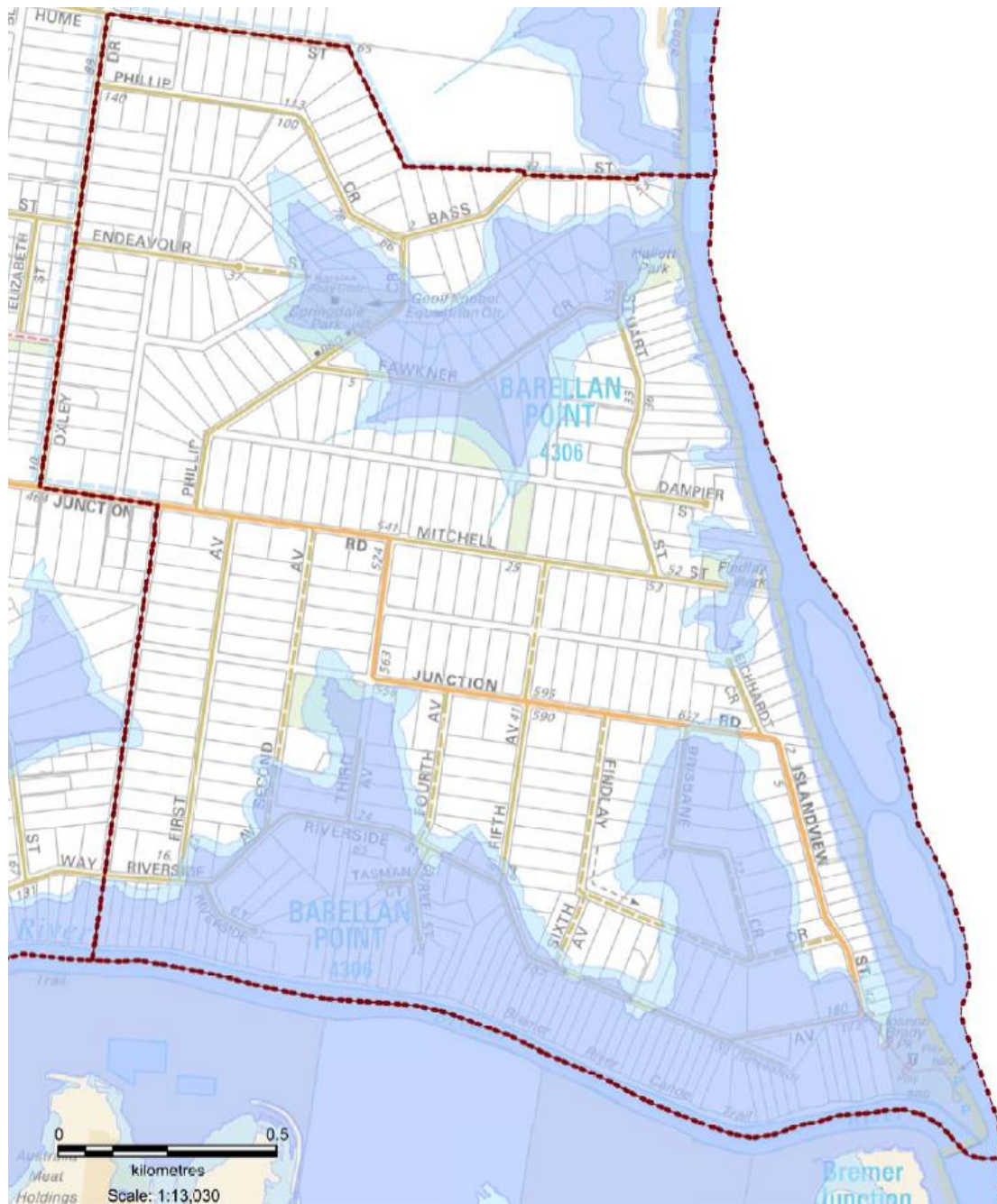
6.3 Annexure 3 – Karalee (1974 and 2011 Flood Lines)



Legend:

- Suburb Boundary
- 1974 Flood Boundary
- 2011 Flood Boundary

6.4 Annexure 4 – Barellan Point (1974 and 2011 Flood Lines)



Legend:

- Suburb Boundary
- 1974 Flood Boundary
- 2011 Flood Boundary



City of Ipswich

Local Disaster Management Sub Plan

Isolated Communities (Leichhardt and One Mile)

A3980086: May 2018



Not For Distribution

This sub plan is a restricted document and not for distribution without the express written authorisation of the Local Disaster Coordinator, Ipswich City Council or delegate.

Recipients must take reasonable steps to ensure that the confidentiality of restricted operational information is maintained, this includes annexures such as the Local Disaster Management Group member personal information.

Recipients must not intentionally access files, registers or any other document that contains restricted operational information unless it is necessary for their duties. Where access is necessary, recipients must not disclose operational information to an unauthorised person.



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PART 1: ADMINISTRATION AND GOVERNANCE

1.1 Authority to Plan

This plan is prepared by Ipswich City Council under the auspices of the Local Disaster Management Plan (LDMP) for the City of Ipswich under the provisions of Section 57(1) of the Disaster Management Act 2003.

1.2 Sub Plan Principles

This sub plan has been prepared as subordinate to the LDMP. Accordingly this sub plan must be read in conjunction with the LDMP. With the exception of pertinent information, reference to existing statements, definitions and acronyms will be excluded from this document.

1.3 Planning and Review Cycle

This plan will be reviewed at least annually¹ with relevant amendments made and distributed as needed. The review process will be in accordance with the state guidelines. Minor amendments that do not materially affect the plan are able to be authorised by the Principal Officer (Emergency Management).

It is acknowledged that feedback from stakeholders is essential. Proposals for amendments or inclusions can be addressed in writing to:

Post Chief Executive Officer
Attention: Emergency Management
Ipswich City Council
PO Box 191, Ipswich QLD 4305

Email council@ipswich.qld.gov.au

¹ Section 59, Disaster Management Act 2003, Reviewing and Renewing (the) Plan

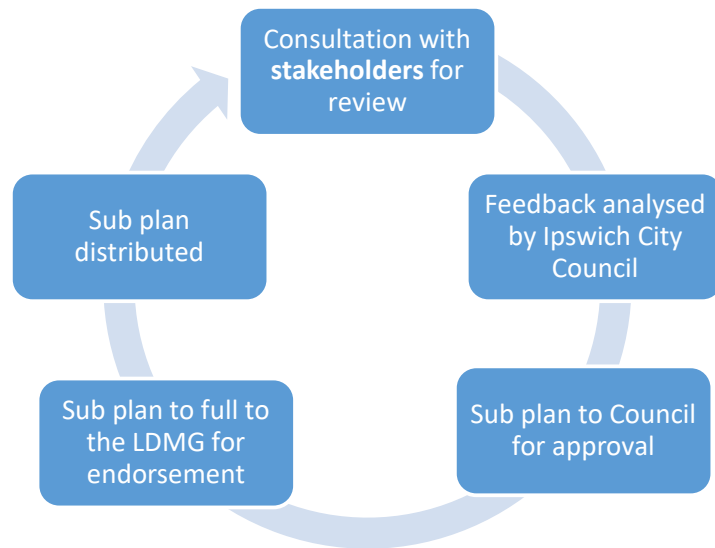


Figure 1 – Sub Plan Review Cycle

1.4 Amendment Register

Document version history is maintained through Council’s internal electronic document management system. The below table outlines amendments minor and inconsequential amendments.

Vers.	Date	Comment
3.00	May 2018	Approved and endorsed version

Table 1 – Amendment Register

1.5 Purpose of the Sub Plan

The purpose of this sub plan is to provide a pro-active approach to enhancing community resilience within the potentially isolated community of Leichhardt, One Mile and its surrounding areas.

1.6 Key Objectives

- Identification of preparatory initiatives for the physical isolation of the community.
- Enhance response for the physical isolation of the community.

1.7 Context

The risk of physical isolation following a disaster event can occur throughout the City resulting in residents being affected. The arrangements to support these residents is generally dealt with through the Local Disaster Management Plan itself. However in the instance where a whole community has a history of physical isolation and the risk of that isolation still exists (for example there has been so significant change in infrastructure for access/egress) isolated community sub plans are prepared and maintained. It is important to note these plans are supplementary



documents to local disaster management plan and the functional sub plans. Accordingly they are not intended to be the sole source of information for disaster operations and disaster recovery activities.

The emergency risk assessment for the City of Ipswich identifies that the Leichardt, One Mile and surrounding communities are at risk of isolation from flood. Whilst this plan has been prepared on that basis, an all-hazards approach has been applied wherever possible.

PART 2: COMMUNITY PROFILE

2.1 Locality

For planning purposes the Bundamba isolated community clusters the suburbs of **Leichhardt** and **One Mile** which have the potential to be impacted by the Bremer River.

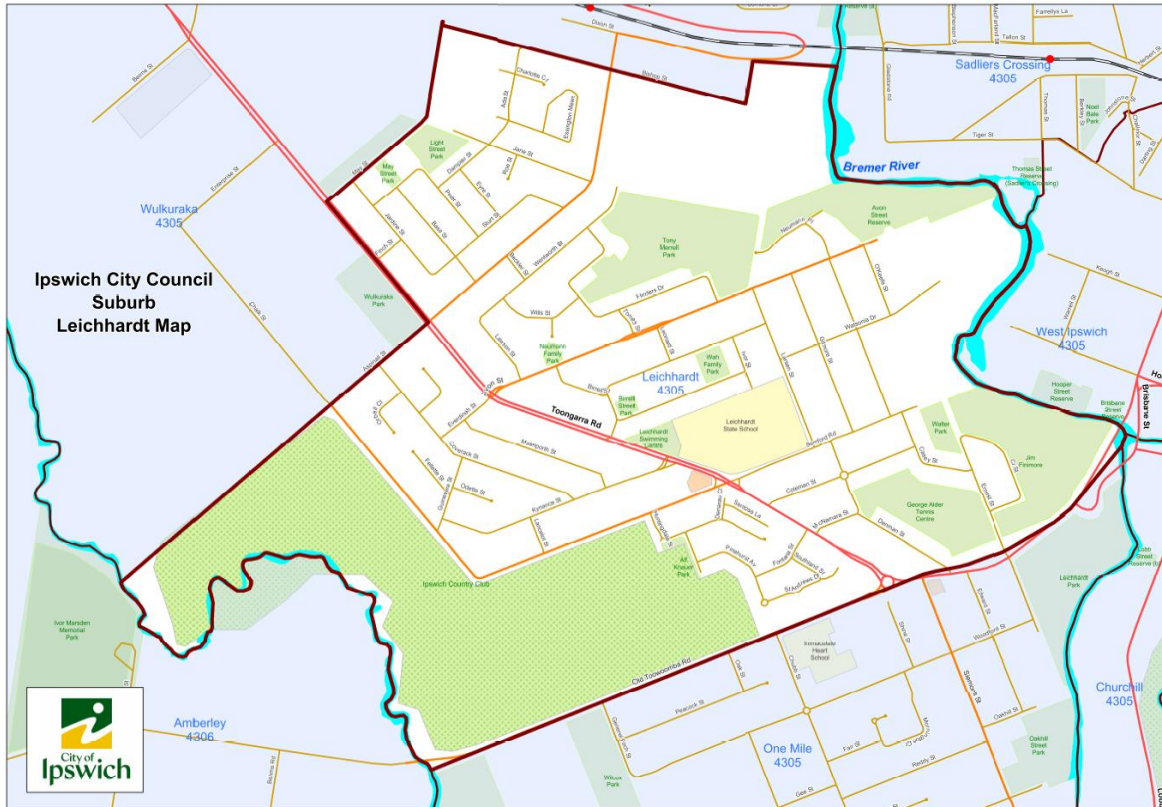


Figure 2 – Leichhardt Community Boundary

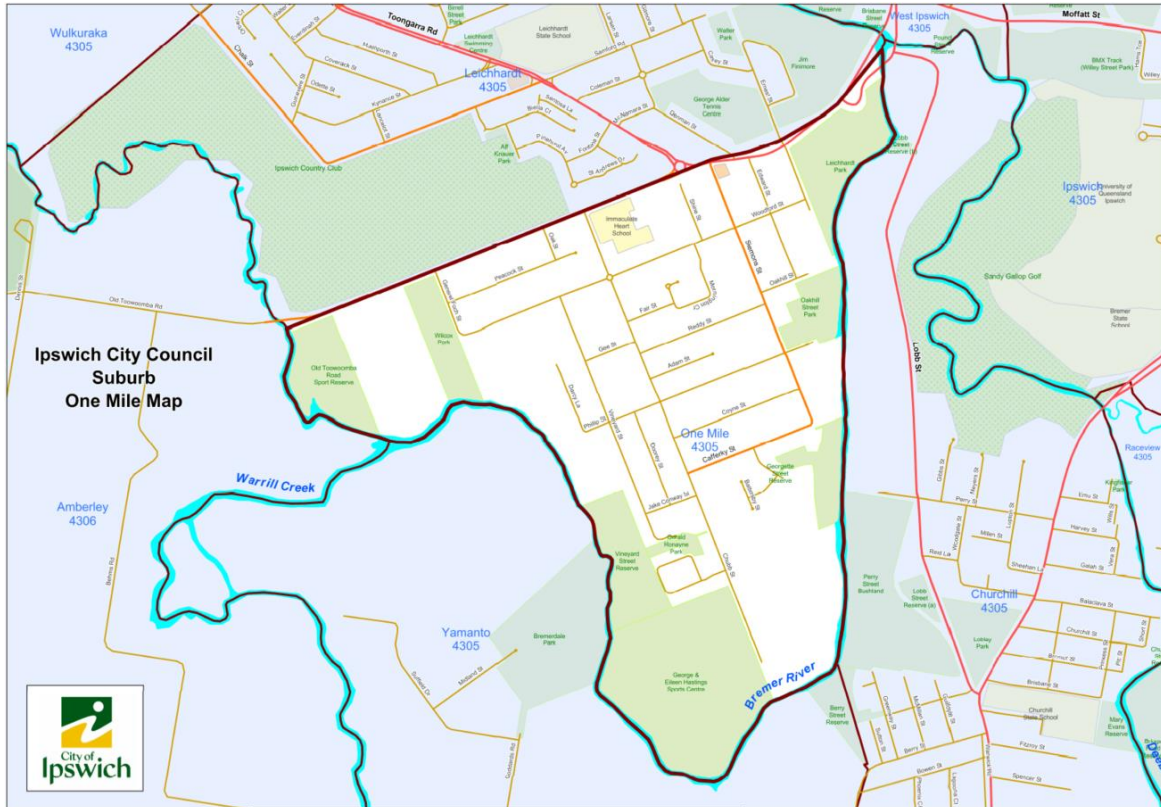


Figure 3 – One Mile Community Boundary

2.2 Population

The Leichhardt and One Mile community has an approximate population of 8,905.²

	0-19 years	20-49 years	50 and over
Male	1,260	1,485	930
Female	1,158	1,656	1,137
Total	2,418	3,141	2,067

Table 2 – Population Data

² Profile ID – Community Profile (2016) <http://profile.id.com.au/ipswich/five-year-age-groups>

2.3 Educational Institutions

Located within the Leichhardt and One Mile community are the following educational institutions:

Institution	Contact Number	Address	Lat/Long
Ally's Kindy at One Mile	07 3282 8888	68 Woodford St, One Mile QLD 4305	-27.631168, 152.737962
Immaculate Heart Catholic Primary School	07 3812 1077	22-24 Old Toowoomba Rd, Leichhardt QLD 4305	-27.629070, 152.738339
Ipswich Early Education Centre & Pre-School	07 3282 9300	1 Samford Rd, Leichhardt QLD 4305	-27.625115, 152.737481
Leichhardt State School	07 3813 3222	72 Samford Rd, Leichhardt QLD 4305	-27.623727, 152.737180

Table 3 – Educational Institutions

2.4 Aged and Vulnerable Persons Facilities

There are no aged or vulnerable persons facilities located within the Leichhardt and One Mile community.

2.5 Vet Surgeries

There are no vet surgeries located with the Leichhardt and One Mile community.

2.6 Public Transport

The Leichhardt and One Mile community is serviced by the following public transport arrangements:

- Rail Services
- Bus Services
- Taxi Services

2.7 Emergency Services

The following table details the emergency services that are located within the Leichhardt and One Mile community. Services may be provided from other locations to the Leichhardt and One Mile community and these are not listed in the below table.

Facility	Contact Number	Address	Lat/Long
Leichhardt Neighbourhood Police Beat	07 3282 7913	21 Toongarra Rd, Leichhardt QLD 4305	-27.624031, 152.733668

Table 4 – Emergency Service Facilities

2.8 Medical Facilities

There are no known medical facilities located within the Leichhardt and One Mile community.

PART 3: RISK PROFILE

3.1 Risk Assessment

Risk management forms the foundations of disaster and emergency plans for the City of Ipswich. Council adopts the Queensland Emergency Risk Management Framework. For more information regarding risk assessment refer to the Local Disaster Management Plan.

3.2 Potential Isolation Areas

The following areas are potentially vulnerable to isolation as a result of flood. The areas are based off historical flood lines of 1974 and 2011 events.

Road	Suburb
Aspinall Street	Leichhardt
Avon Street	Leichhardt
Casey Street	Leichhardt
Chalk Street	Leichhardt
Crescent Street	Leichhardt
Denman Street	Leichhardt
Ernest Street	Leichhardt
Guinevere Street	Leichhardt
Jane Street	Leichhardt
Neumann Place	Leichhardt
Old Toowoomba Road	Leichhardt
Samford Road	Leichhardt
Battersby Street	One Mile
Cafferky Street	One Mile
Chubb Street	One Mile
Darcy Lane	One Mile
Doorey Street	One Mile
General Foch Street	One Mile
Georgette Street	One Mile
Jack Conway Street	One Mile
Lobb Street	One Mile
Mcgreavy Street	One Mile
Mundt Place	One Mile
Oakhill Street	One Mile
Phillip Street	One Mile
Reddy Street	One Mile
Ronayne Circle	One Mile
Siemons Street	One Mile
Vineyard Street	One Mile
Woodford Street	One Mile

Table 5 – Potential Isolation Areas

PART 4: PUBLIC INFORMATION AND WARNINGS

The Public Information and Warnings Sub Plan and Council's Public Information and Warnings Manual detail Council's overall communication and warning strategy. It is however recognised that this community has particular needs related to communications.

4.1 Lead Times

Flood modelling and predication is a highly complex and subjective art that relies on a range of variables and assumptions. Factors that can affect the occurrence of inundation include location, intensity and length of the rainfall; current soil and ground moisture levels; overland water flow conditions; overland flow rates; current riverine and creek levels. Council possess predictive software that its Engineers (Floodplain Management) use to provide educated predictions based on real time data and conditions. This in itself is not 100% accurate. **The information of flooding provided below is extremely generalised and does not supplement or replace the knowledge and skill of trained personnel. It is provided as highly generalised, non-contextualised information and process tool.**

The possible and highly indicative timeframes for effect on the community are as follows:

- Overland flows and gullies – 0 to 1 hour
- Local Creeks – 2 to 4 hours
- Bremer River – 12 to 24 hours
- Brisbane River – 48 to 72 hours

4.2 General Communication Strategies

Council employs the following communication strategies generally:

- Emergency Alert
- Emergency Broadcast
- Social Media
- Media Release
- Media Broadcast
- Website Publication

4.3 Community Specific Communication Strategies

Creek systems present unique challenges in determining lead time. Predictive modelling is far less accurate than that of riverine flood modelling. Council still however invests heavily in flood studies to improve this based on current industry best practice.

4.3.1 Door-Knocking

Council works in partnership with the Ipswich City SES Unit to undertake door knocking in areas during events, where it is anticipated they will be directly affected by inundation. The aim is to



encourage residents to remain aware of their situation. At this time contact details of residents are obtained.

4.3.2 My Ipswich Alerts (Early Warning Network)

Council has engaged the Early Warning Network to provide opt-in severe and dangerous weather warnings to residents, community groups and businesses within the City.

As part of this arrangement Council is able to send custom notifications and warnings to residents that have opted in, based on their residential address or location of their mobile device. The mobile device located must have the smart phone app installed and location services switched on.

PART 5: EVACUATION

5.1 General Evacuation Information

The Evacuation Process Sub Plan and Evacuation Centre Sub Plan outline the detailed considerations and general strategies for evacuations. The below information is summarised to provide context to the more detailed information provided.

Evacuation is a risk management strategy used to mitigate the effects of an emergency on the community. It involves the movement of people to a safer location and their return. Evacuations, if unplanned, may cause greater adverse impacts than the disaster itself, including the potential to overwhelm agencies undertaking response and recovery actions. Shelter in place should be considered as an alternative where possible.



Figure 4 – Types of Evacuation

Mandatory evacuations may be ordered under the following acts:

- Disaster Management Act 2003
- Fire and Emergency Services Act 1990
- Public Safety Preservation Act 1986

It is the responsibility of the primary agency to order and control the evacuation process and overview the associated planning.



5.2 Evacuation Process

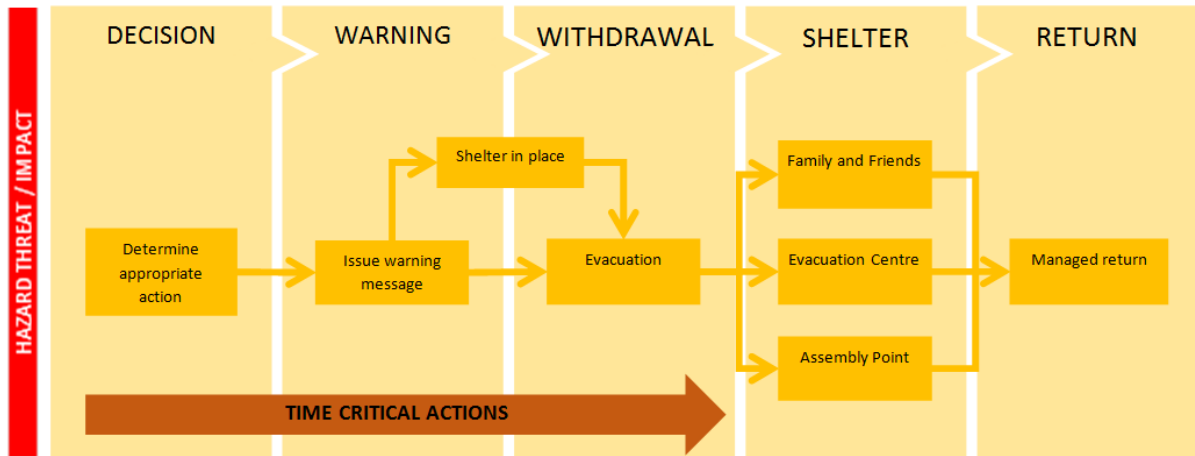


Figure 5 – Evacuation Process

5.3 Specific Evacuation and Isolation Information

The below table provides specific information related to the community.

Evacuation Coordinator	Officer in Charge Leichhardt Neighbourhood Police Beat 21 Toongarra Rd, Leichhardt QLD 4305 Lat/Long: -27.623923, 152.733698
Assembly Area <i>within the Isolated Community</i>	<u>OPTION 1</u> Leichhardt State School Assemble at: Oval 72 Samford Rd, Leichhardt QLD 4305 Lat/Long: -27.623685, 152.737153
<i>Meeting point for movement to other locations.</i>	<u>OPTION 2</u> Immaculate Heart Catholic Primary School Assemble at: Car Park 22-24 Old Toowoomba Rd, Leichhardt QLD 4305 Lat/Long: -27.629133, 152.738275



Emergency Shelter *within the Isolated Community*

Meeting point for movement to other locations.

OPTION 1

Leichhardt State School
72 Samford Rd, Leichhardt QLD 4305
Lat/Long: -27.623685, 152.737153

OPTION 2

Immaculate Heart Catholic Primary School
22-24 Old Toowoomba Rd, Leichhardt QLD 4305
Lat/Long: -27.629133, 152.738275

OPTION 3

Ipswich Country Club
1a Samford Rd, Leichhardt QLD 4305
Lat/Long: -27.627443, 152.732424

Neighbourhood Safer Places (NSP) Queensland Fire and Emergency Services have not identified a need and/or location for a neighbourhood safer place in this community.

Primary Evacuation Centre Ipswich Showgrounds (Greyhound Track)
Salisbury Rd, Ipswich QLD 4305
Lat/Long: -27.628809, 152.758960

This is the primary evacuation centre, dependent on the hazard and impacts, other evacuation centres may be established.

Helicopter Landing Zones *within the Isolated Community* Leichhardt State School Oval
72 Samford Rd, Leichhardt QLD 4305
Lat/Long: -27.623685, 152.737153

Major Roads or Routes for Access/Egress

- Old Toowoomba Road *impacted around Jim Finimore Sportsground.*

Potential Transport (persons) Providers *located within the Isolated Community* Private Bus Provider
Amberley Rosewood Bus Company
4 Ernest St, One Mile QLD 4305
07 3281 2551
Lat/Long: -27.628162, 152.744487

Potential Cold Storage Providers *located within the Isolated Community* Ipswich Country Club
1a Samford Rd, Leichhardt QLD 4305
07 3812 0488
Lat/Long: -27.615893, 152.790340

Potential Supply Providers *located within the Isolated Community* One Mile 5 Star
8 Old Toowoomba Rd, One Mile QLD 4305
07 3281 5312

Lucky Seven Express
70 Samford Rd, Leichhardt QLD 4305
07 3202 2033

Potential Security Providers *located within the Isolated Community* N/A

Table 6 – Specific Evacuation Information



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6.2 Annexure 2 – Contacts

Organisation/Person	Contact Details
Ipswich City Council	07 3810 6666 council@ipswich.qld.gov.au
Ipswich City Council – Division 8 Councillor Charlie Pisasale	07 3282 9600 cpisasale@ipswich.qld.gov.au div8office@ipswich.qld.gov.au
Queensland Police Service – Public Contact	131 444 www.policelink.qld.gov.au
Queensland Police Service – Leichhardt Police Beat	Officer in Charge Leichhardt Neighbourhood Police Beat 21 Toongarra Rd, Leichhardt QLD 4305
State Emergency Service	132 500 www.132500.qld.gov.au

Other Public Emergency Contact Information is maintained in the front cover of the Local Disaster Management Plan which is located on Council's website www.ipswich.qld.gov.au/emergency.

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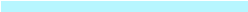
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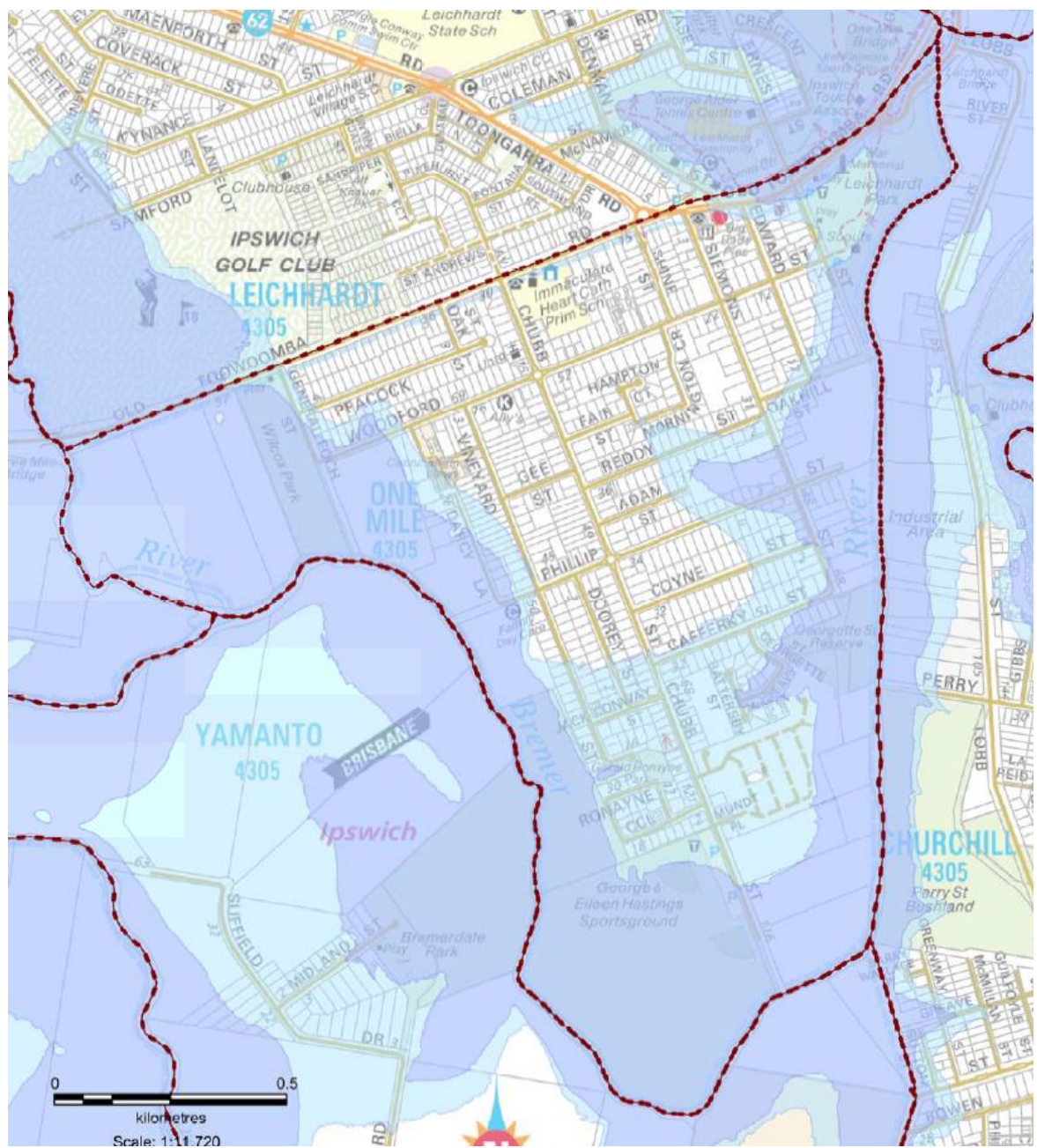
6.3 Annexure 3 – Leichhardt (1974 and 2011 Flood Lines)






- Legend:**
- Suburb Boundary 
 - 1974 Flood Boundary 
 - 2011 Flood Boundary 



6.4 Annexure 4 – One Mile (1974 and 2011 Flood Lines)



- Legend:**
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 - 1974 Flood Boundary 
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City of Ipswich

Local Disaster Management Sub Plan

Isolated Communities (Marburg)

A3980087: May 2018



Approval and Endorsement

Sub Plan approval and endorsement information – inserted post approval and endorsement.



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PART 1: ADMINISTRATION AND GOVERNANCE

1.1 Sub Plan Distribution and Information Privacy

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Recipients must take reasonable steps to ensure that the confidentiality of restricted operational information is maintained, this includes annexures.

1.2 Authority to Plan

This plan is prepared by Ipswich City Council under the auspices of the Local Disaster Management Plan (LDMP) for the City of Ipswich under the provisions of Section 57(1) of the Disaster Management Act 2003.

1.3 Sub Plan Principles

This sub plan has been prepared as subordinate to the LDMP. Accordingly this sub plan must be read in conjunction with the LDMP. With the exception of pertinent information, reference to existing statements, definitions and acronyms will be excluded from this document.

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This plan will be reviewed at least annually¹ with relevant amendments made and distributed as needed. The review process will be in accordance with the state guidelines. Minor amendments that do not materially affect the plan are able to be authorised by the Principal Officer (Emergency Management).

It is acknowledged that feedback from stakeholders is essential. Proposals for amendments or inclusions can be addressed in writing to:

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Attention: Emergency Management
Ipswich City Council
PO Box 191, Ipswich QLD 4305

Email council@ipswich.qld.gov.au

¹ Section 59, Disaster Management Act 2003, Reviewing and Renewing (the) Plan

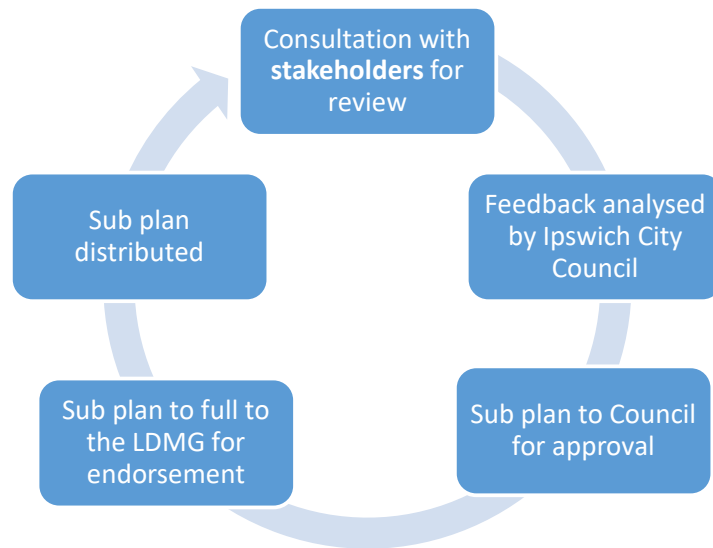


Figure 1 – Sub Plan Review Cycle

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Table 1 – Amendment Register

1.6 Purpose of the Sub Plan

The purpose of this sub plan is to provide a pro-active approach to enhancing community resilience within the potentially isolated community of Marburg and its surrounding areas.

1.7 Key objectives

- Identification of preparatory initiatives for the physical isolation of the community.
- Enhance response for the physical isolation of the community.

1.8 Context

The risk of physical isolation following a disaster event can occur throughout the City resulting in residents being affected. The arrangements to support these residents is generally dealt with through the Local Disaster Management Plan itself. However in the instance where a whole community has a history of physical isolation and the risk of that isolation still exists (for example there has been so significant change in infrastructure for access/egress) isolated community sub plans are prepared and maintained. It is important to note these plans are supplementary documents to local disaster management plan and the functional sub plans. Accordingly they are



not intended to be the sole source of information for disaster operations and disaster recovery activities.

The emergency risk assessment for the City of Ipswich identifies that Marburg and surrounding communities are at risk of isolation from flood. Whilst this plan has been prepared on that basis, an all-hazards approach has been applied wherever possible.

PART 2: COMMUNITY PROFILE

2.1 Locality

For planning purposes the Marburg Isolated Community only includes the township of **Marburg** which have the potential to be impacted by the Marburg Detention Basin and Black Snake Creek.

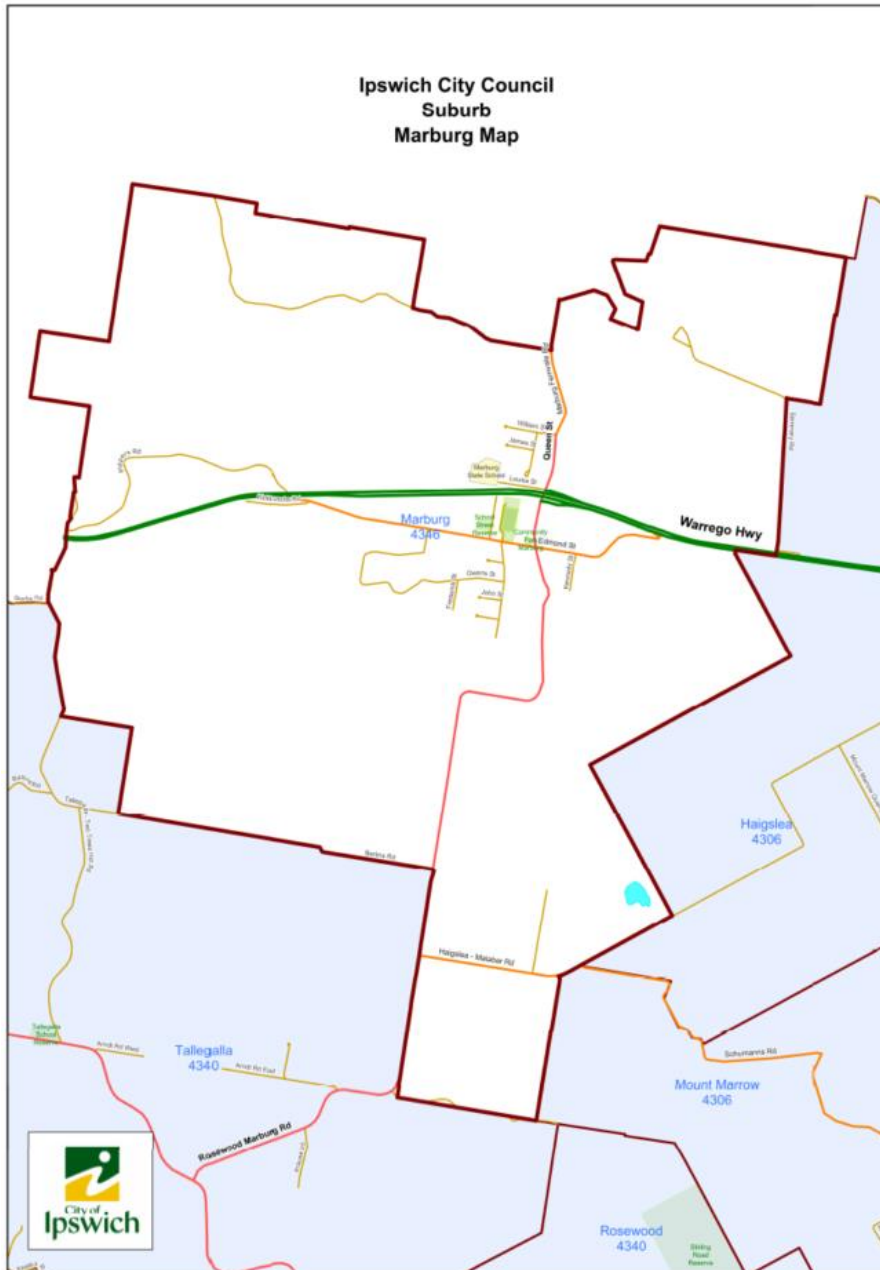


Figure 2 – Marburg Community Boundary

2.2 Population

The Marburg community has an approximate population of 593². The surrounding area comprises a population of 1,594³. The data available does not allow for this data to be split by gender or age.

2.3 Educational Institutions

Located within the Marburg community are the following educational institutions:

Institution	Contact Number	Address	Lat/Long
Marburg State School	07 5464 4218	Louisa St, Marburg QLD 4346	-27.562204, 152.593937

Table 2 – Educational Institutions

2.4 Aged and Vulnerable Persons Facilities

Located within the Marburg community are the following aged and vulnerable person facilities:

Facility	Contact Number	Address	Lat/Long
Marburg Church of Christ	07 5464 4717	122/127 Queen St, Marburg QLD 4346	-27.567507, 152.597019

Table 3 – Aged and Vulnerable Persons Facilities

2.5 Vet Surgeries

Located within the Marburg community are the following vet surgeries:

Facility	Contact Number	Address	Lat/Long
Animal Angels Wellness and Fertility Clinic	07 5464 4984	159 Edmond St, Marburg QLD 4346	-27.565352, 152.589000
WestVETS – Marburg Animal Hospital & Equine Reproduction Centre	07 5464 4422	Warrego Highway Marburg QLD 4346	

Table 4 – Vet Surgeries

2.6 Public Transport

The Marburg community is serviced by the following public transport arrangements:

- Bus Services
- Taxi Services

² Atlas ID – Social Atlas SA1 3128202 and 3128204 <https://atlas.id.com.au/ipswich#>

³ Atlas ID – Social Atlas SA1 3128202; 3128204; 3128222 & 3128217 <https://atlas.id.com.au/ipswich#>

2.7 Emergency Services

The following table details the emergency services that are located within the Marburg community. Services may be provided from other locations to the Marburg community and these are not listed in the below table.

Institution/Service	Contact Number	Address	Lat/Long
Marburg Police Station	000	113 Queen St, Marburg QLD 4346	-27.565296, 152.596635
Marburg Rural Fire Brigade	000	166 Edmond St, Marburg QLD 4346	-27.565796, 152.595660
Marburg SES Group	132 500	M Verrenkamp Rd, Marburg QLD 4346	-27.563559, 152.594517

Table 5 – Emergency Service Facilities

2.8 Medical Facilities

The following table details the medical service providers that are located within the Marburg community. Services may be provided from other locations to the Marburg community and these are not listed in the below table.

Institution/Service	Contact Number	Address	Lat/Long
Marburg Medical	07 5464 4500	102 Edmond St, Marburg QLD 4346	-27.565989, 152.592936

Table 6 – Medical Facilities

PART 3: RISK PROFILE

3.1 Risk Assessment

Risk management forms the foundations of disaster and emergency plans for the City of Ipswich. Council adopts the Queensland Emergency Risk Management Framework. For more information regarding risk assessment refer to the Local Disaster Management Plan.

3.2 Possible Isolation Areas

Within the Marburg community the following areas are particularly vulnerable to flood. The 'at risk' areas are based off historical flood lines of 1974 and 2011 events.

Road	Suburb
Butlers Road	Marburg
Dance Street	Marburg
Edmond Street	Marburg
Edward Street	Marburg
George Street	Marburg
Haigslea Malabar Road	Marburg
Ida Street	Marburg
John Street	Marburg
Kennedy Street	Marburg
Lawrence Street	Marburg
Louisa Street	Marburg
Main Street	Marburg
Marburg Fernvale Road	Marburg
Marburg Quarry Road	Marburg
Moriarty Lane	Marburg
Owens Street	Marburg
Queen Street	Marburg
Roderick Street	Marburg
Rosewood Marburg Road	Marburg

Table 7 – Possible Isolation Areas



PART 4: PUBLIC INFORMATION AND WARNINGS

The Public Information and Warnings Sub Plan and Council's Public Information and Warnings Manual detail Council's overall communication and warning strategy. It is however recognised that this community has particular needs related to communications.

4.1 Lead Times

Flood modelling and predication is a highly complex and subjective art that relies on a range of variables and assumptions. Factors that can affect the occurrence of inundation include location, intensity and length of the rainfall; current soil and ground moisture levels; overland water flow conditions; overland flow rates; current riverine and creek levels. Council possess predictive software that its Engineers (Floodplain Management) use to provide educated predictions based on real time data and conditions. This in itself is not 100% accurate. **The information of flooding provided below is extremely generalised and does not supplement or replace the knowledge, and skill of trained personnel. It is provided as highly generalised, non-contextualised information and process tool.**

The possible and highly indicative timeframes for effect on the community are as follows:

- Overland flows and gullies – 0 to 1 hour
- Local Creeks – 2 to 4 hours
- Bremer River – 12 to 24 hours
- Brisbane River – 48 to 72 hours

4.2 General Communication Strategies

Council employs the following communication strategies generally:

- Emergency Alert
- Emergency Broadcast
- Social Media
- Media Release
- Media Broadcast
- Website Publication

4.3 Community Specific Communication Strategies

Creek systems present unique challenges in determining lead time. Predictive modelling is far less accurate than that of riverine flood modelling. Council still however invests heavily in flood studies to improve this based on current industry best practice.

4.3.1 Door-Knocking

Council works in partnership with the Ipswich City SES Unit to undertake door knocking in areas during events, where it is anticipated they will be directly affected by inundation. The aim is to



encourage residents to remain aware of their situation. At this time contact details of residents are obtained.

4.3.2 My Ipswich Alerts (Early Warning Network)

Council has engaged the Early Warning Network to provide opt-in severe and dangerous weather warnings to residents, community groups and businesses within the City.

As part of this arrangement Council is able to send custom notifications and warnings to residents that have opted in, based on their residential address or location of their mobile device. The mobile device located must have the smart phone app installed and location services switched on.

PART 5: EVACUATION

5.1 General Evacuation Information

The Evacuation Process Sub Plan and Evacuation Centre Sub Plan outline the detailed considerations and general strategies for evacuations. The below information is summarised to provide context to the more detailed information provided.

Evacuation is a risk management strategy used to mitigate the effects of an emergency on the community. It involves the movement of people to a safer location and their return. Evacuations, if unplanned, may cause greater adverse impacts than the disaster itself, including the potential to overwhelm agencies undertaking response and recovery actions. Shelter in place should be considered as an alternative where possible.



Figure 3 – Types of Evacuation

Mandatory evacuations may be ordered under the following acts:

- Disaster Management Act 2003
- Fire and Emergency Services Act 1990
- Public Safety Preservation Act 1986

It is the responsibility of the primary agency to order and control the evacuation process and overview the associated planning.

5.2 Evacuation Process

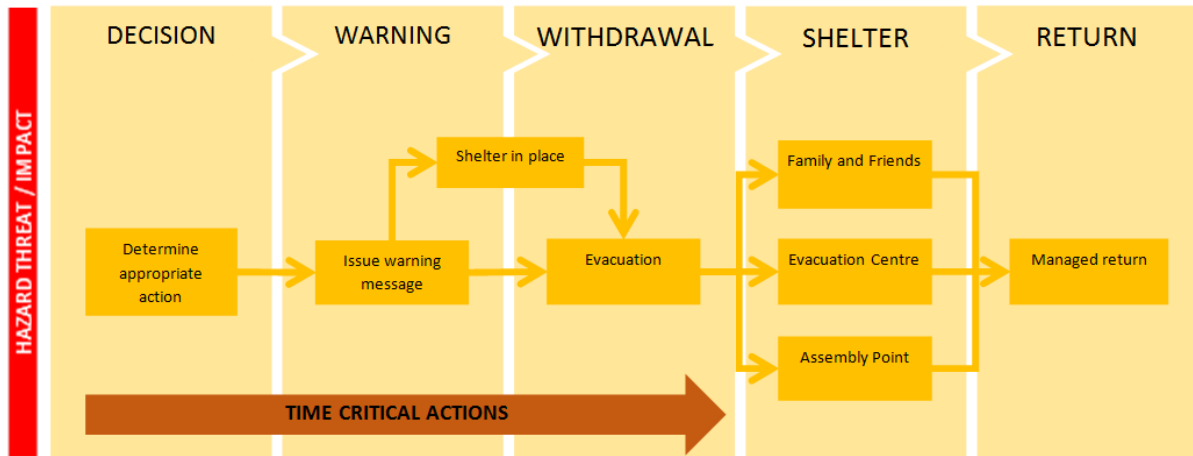


Figure 4 – Evacuation Process

5.3 Specific Evacuation and Isolation Information

The below table provides specific information related to the community.

Evacuation Coordinator	Officer in Charge Marburg Police Station 111 Queen Street, Marburg QLD 4346 Lat/Long: -27.565296, 152.596635
Assembly Area <i>within the Isolated Community</i>	<u>OPTION 1</u> Marburg State School Assemble at: Oval Louisa St, Marburg QLD 4346 Lat/Long: -27.562170, 152.593403
<i>Meeting point for movement to other locations.</i>	<u>OPTION 2</u> School Street Reserve Assemble at: South-East Corner School St, Marburg QLD 4346 Lat/Long: -27.565122, 152.593344
Emergency Shelter <i>within the Isolated Community</i>	Marburg State School Assemble at: Oval Louisa St, Marburg QLD 4346 Lat/Long: -27.562170, 152.593403
<i>Meeting point for movement to other locations.</i>	
Neighbourhood Safer Places (NSP)	Queensland Fire and Emergency Services have not identified a need and/or location for a neighbourhood safer place in this community.



Primary Evacuation Centre Ipswich Showgrounds (Greyhound Track)
Salisbury Rd, Ipswich QLD 4305
Lat/Long: -27.628809, 152.758960

This is the primary evacuation centre, dependent on the hazard and impacts, other evacuation centres may be established.

Helicopter Landing Zones within the Isolated Community Marburg State School Oval
Louisa St, Marburg QLD 4346
Lat/Long: -27.562170, 152.593403

Major Roads or Routes for Access/Egress

- Queen St heavily impacted.
- Edmond St impacted between Kennedy St and M Verrenkamp Rd.
- Rosewood Marburg Rd impacted around Marburg Quarry Rd.

Potential Transport (persons) Providers located within the Isolated Community N/A

Potential Cold Storage Providers located within the Isolated Community Marburg Pub
69 Edmond St, Marburg QLD 4346
07 5464 4230
Lat/Long: -27.566072, 152.596635

Potential Supply Providers located within the Isolated Community N/A

Potential Security Providers located within the Isolated Community N/A

Table 8 – Specific Evacuation Information

5.4 Livestock

In the Marburg community it has been identified that there is a number of the population that have livestock. However, it is understood that the majority of the owners have access to properties in close proximity or have the ability to move the livestock to a suitable location should an evacuation be required. Livestock has the potential to cause havoc if left to their own devices; deceased livestock possess a risk of disease to other livestock and to neglect unnecessarily is inhumane.

Livestock owners are responsible for the safe transportation of their own stock.



PART 6: ANNEXURES

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6.2 Annexure 2 – Contacts

Organisation/Person	Contact Details
Ipswich City Council	07 3810 6666 council@ipswich.qld.gov.au
Ipswich City Council – Division 10 Councillor David Pahlke	07 3810 7888 0419 812 146 dpahlke@ipswich.qld.gov.au div10office@ipswich.qld.gov.au
Queensland Police Service – Public Contact	131 444 www.policelink.qld.gov.au
Queensland Police Service – Marburg Police Station	Officer in Charge Marburg Police Station 111 Queen Street, Marburg QLD 4346
State Emergency Service	132 500 www.132500.qld.gov.au

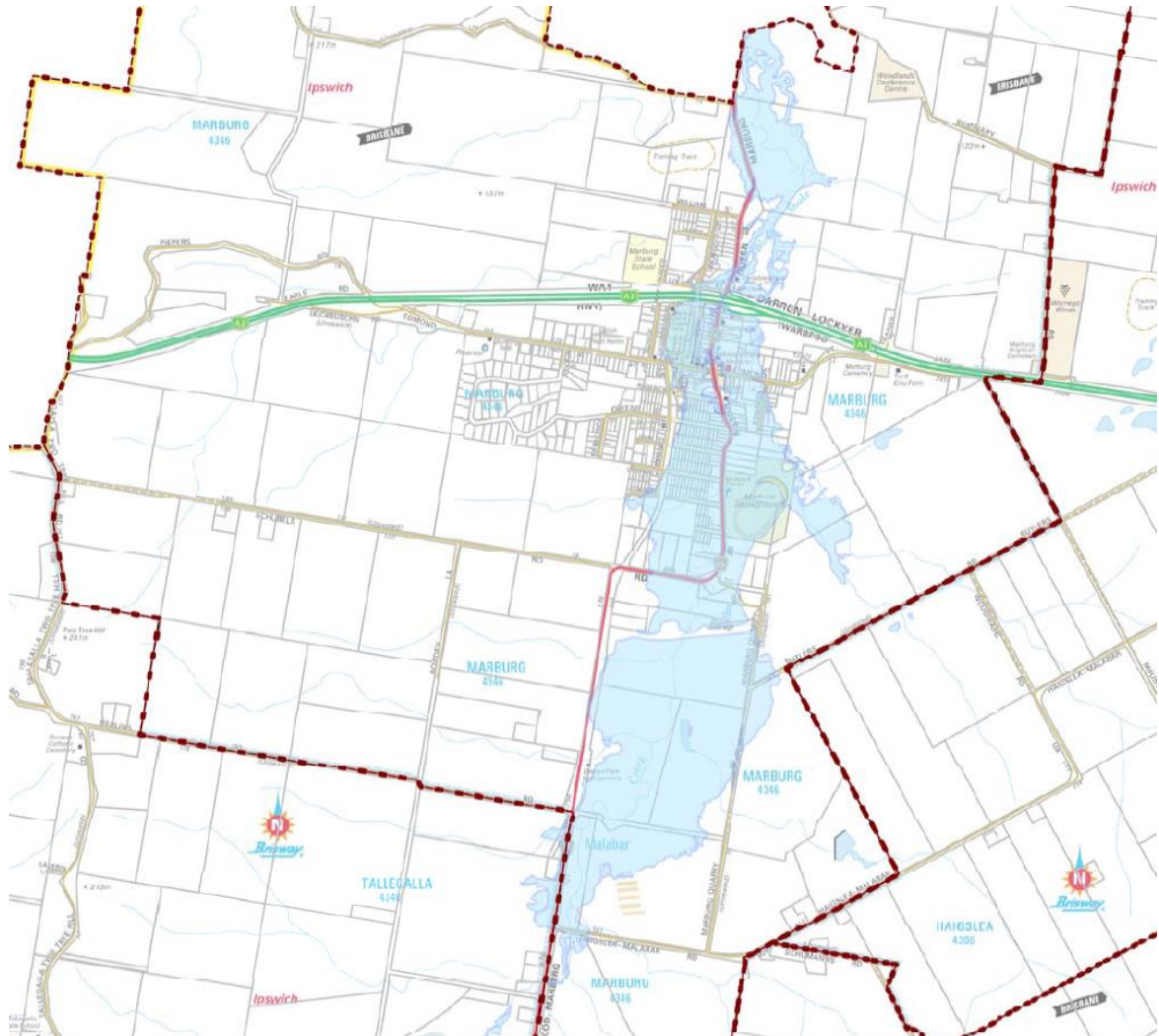
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Community Support Contact Information is maintained through Council’s partnership with My Community Directory. Listings on the community directory are provided as a free service to the Ipswich public by service providers primarily located within the Ipswich region. Inclusion in these directories does not imply Ipswich City Council endorses, promotes or guarantees the products and, or services provided.

To view the directory visit: <https://www.mycommunitydirectory.com.au/Queensland/ipswich>

Operational Contact Information, including Local Disaster Management Group data is maintained within Council’s internal systems.

6.3 Annexure 3 – Marburg (2011 Flood Lines)





City of Ipswich

Local Disaster Management Sub Plan

Isolated Communities (Moores Pocket)

A3980088: May 2018



Approval and Endorsement

Sub Plan approval and endorsement information – inserted post approval and endorsement.



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PART 1: ADMINISTRATION AND GOVERNANCE

1.1 Authority to Plan

This plan is prepared by Ipswich City Council under the auspices of the Local Disaster Management Plan (LDMP) for the City of Ipswich under the provisions of Section 57(1) of the Disaster Management Act 2003.

1.2 Sub Plan Principles

This sub plan has been prepared as subordinate to the LDMP. Accordingly this sub plan must be read in conjunction with the LDMP. With the exception of pertinent information, reference to existing statements, definitions and acronyms will be excluded from this document.

1.3 Planning and Review Cycle

This plan will be reviewed at least annually¹ with relevant amendments made and distributed as needed. The review process will be in accordance with the state guidelines. Minor amendments that do not materially affect the plan are able to be authorised by the Principal Officer (Emergency Management).

It is acknowledged that feedback from stakeholders is essential. Proposals for amendments or inclusions can be addressed in writing to:

Post Chief Executive Officer
Attention: Emergency Management
Ipswich City Council
PO Box 191, Ipswich QLD 4305

Email council@ipswich.qld.gov.au

¹ Section 59, Disaster Management Act 2003, Reviewing and Renewing (the) Plan

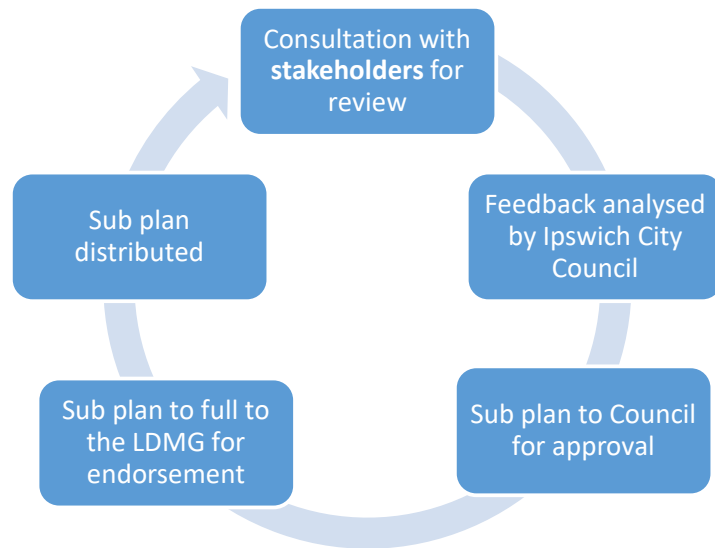


Figure 1 – Sub Plan Review Cycle

1.4 Amendment Register

Document version history is maintained through Council’s internal electronic document management system. The below table outlines amendments minor and inconsequential amendments.

Vers.	Date	Comment
3.00	May 2018	Approved and endorsed version

Table 1 – Amendment Register

1.5 Purpose of the Sub Plan

The purpose of this sub plan is to provide a pro-active approach to enhancing community resilience within the potentially isolated community of Moores Pocket and its surrounding areas.

1.6 Key objectives

- Identification of preparatory initiatives for the physical isolation of the community.
- Enhance response for the physical isolation of the community.

1.7 Context

The risk of physical isolation following a disaster event can occur throughout the City resulting in residents being affected. The arrangements to support these residents is generally dealt with through the Local Disaster Management Plan itself. However in the instance where a whole community has a history of physical isolation and the risk of that isolation still exists (for example there has been so significant change in infrastructure for access/egress) isolated community sub plans are prepared and maintained. It is important to note these plans are supplementary documents to local disaster management plan and the functional sub plans. Accordingly they are



not intended to be the sole source of information for disaster operations and disaster recovery activities.

The emergency risk assessment for the City of Ipswich identifies that Moores Pocket and surrounding communities are at risk of isolation from flood. Whilst this plan has been prepared on that basis, an all-hazards approach has been applied wherever possible.

PART 2: COMMUNITY PROFILE

2.1 Locality

For planning purposes the Moores Pocket Isolated community includes only the suburb **Moores Pocket** which may have the potential to be impacted by the Bremer River.

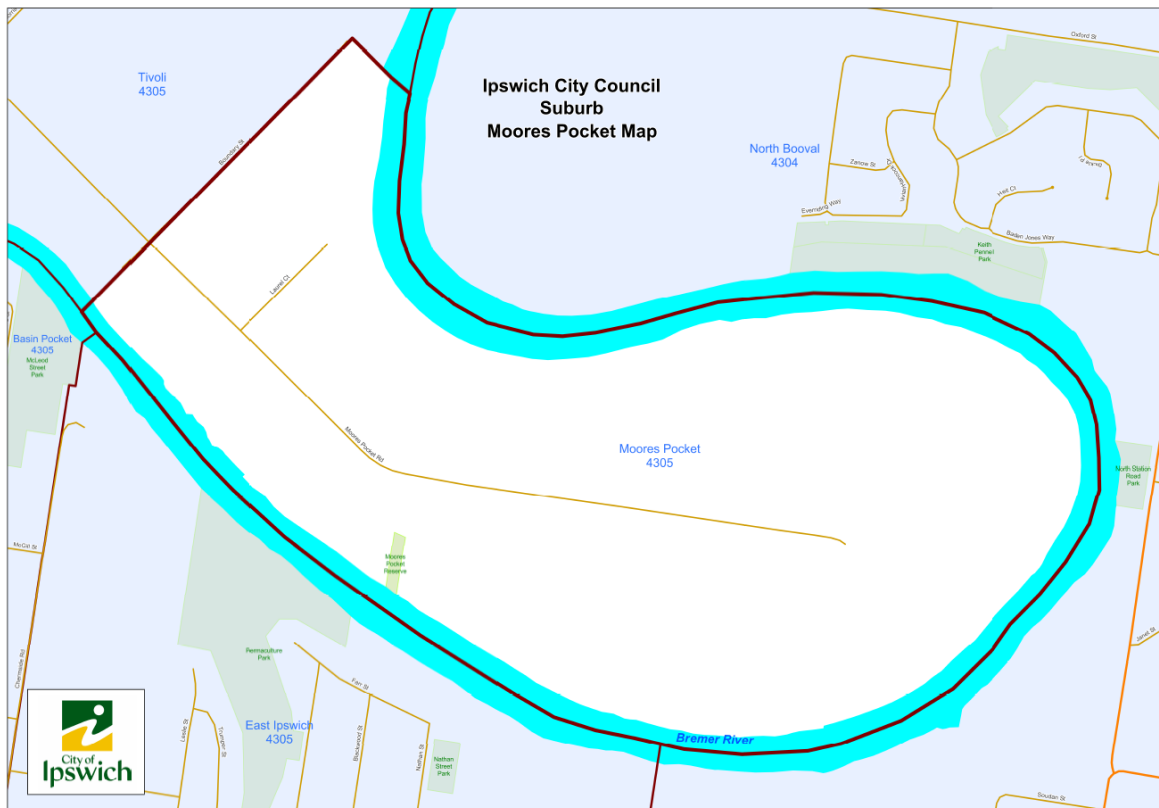


Figure 2 – Moores Pocket Community Boundary

2.2 Population

The Moores Pocket community has an approximate population of 964.²

2.3 Educational Institutions

There are no educational institutions located within the Moores Pocket community.

2.4 Aged and Vulnerable Persons Facilities

Located within the Moores Pocket community are the following aged and vulnerable person facilities:

² Social Atlas – (2016) <https://atlas.id.com.au/ipswich#> SA1 3129219 & S3129209



Facility	Contact Number	Address	Lat/Long
Bremer Waters	07 3813 5000	102A Moores Pocket Rd, Tivoli QLD 4305	-27.599997, 152.780186
Eureka Tivoli Gardens Ipswich	07 3202 3599	56 Moores Pocket Rd, Moores Pocket QLD 4305	-27.596774, 152.776738

Table 2 – Aged and Vulnerable Persons Facilities

2.5 Vet Surgeries

There are no vet surgeries located within the Moores Pocket community.

2.6 Public Transport

The Moores Pocket community is serviced by the following public transport arrangements:

- Bus Services
- Taxi Services



2.7 Emergency Services

The following table details the emergency services that are located within the Moores Pocket community. Services may be provided from other locations to the Moores Pocket community and these are not listed in the below table.

Facility	Contact Number	Address	Lat/Long
North Ipswich Neighbourhood Police Beat	07 3201 5297	26 Hill St, North Ipswich QLD 4305	-27.590561, 152.761125

Table 3 – Emergency Service Facilities

2.8 Medical Facilities

There are no medical facilities located within the Moores Pocket community.



PART 3: RISK PROFILE

3.1 Risk Assessment

Risk management forms the foundations of disaster and emergency plans for the City of Ipswich. Council adopts the Queensland Emergency Risk Management Framework. For more information regarding risk assessment refer to the Local Disaster Management Plan.

3.2 Potential Isolation Areas

Within the Moores Pocket community the following areas are particularly vulnerable to flood. The 'at risk' areas are based off historical flood lines of 1974 and 2011 events.

Road	Suburb
Black Street	Moores Pocket
Boundary Street	Moores Pocket
Laurel Court	Moores Pocket
Moores Pocket Road	Moores Pocket

Table 4 - High Risk Areas

PART 4: PUBLIC INFORMATION AND WARNINGS

The Public Information and Warnings Sub Plan and Council's Public Information and Warnings Manual detail Council's overall communication and warning strategy. It is however recognised that this community has particular needs related to communications.

4.1 Lead Times

Flood modelling and predication is a highly complex and subjective art that relies on a range of variables and assumptions. Factors that can affect the occurrence of inundation include location, intensity and length of the rainfall; current soil and ground moisture levels; overland water flow conditions; overland flow rates; current riverine and creek levels. Council possess predictive software that its Engineers (Floodplain Management) use to provide educated predictions based on real time data and conditions. This in itself is not 100% accurate. **The information of flooding provided below is extremely generalised and does not supplement or replace the knowledge, and skill of trained personnel. It is provided as highly generalised, non-contextualised information and process tool.**

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- Overland flows and gullies – 0 to 1 hour
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Council employs the following communication strategies generally:

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Creek systems present unique challenges in determining lead time. Predictive modelling is far less accurate than that of riverine flood modelling. Council still however invests heavily in flood studies to improve this based on current industry best practice.

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Council works in partnership with the Ipswich City SES Unit to undertake door knocking in areas during events, where it is anticipated they will be directly affected by inundation. The aim is to



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4.3.2 My Ipswich Alerts (Early Warning Network)

Council has engaged the Early Warning Network to provide opt-in severe and dangerous weather warnings to residents, community groups and businesses within the City.

As part of this arrangement Council is able to send custom notifications and warnings to residents that have opted in, based on their residential address or location of their mobile device. The mobile device located must have the smart phone app installed and location services switched on.

PART 5: EVACUATION

5.1 General Evacuation Information

The Evacuation Process Sub Plan and Evacuation Centre Sub Plan outline the detailed considerations and general strategies for evacuations. The below information is summarised to provide context to the more detailed information provided.

Evacuation is a risk management strategy used to mitigate the effects of an emergency on the community. It involves the movement of people to a safer location and their return. Evacuations, if unplanned, may cause greater adverse impacts than the disaster itself, including the potential to overwhelm agencies undertaking response and recovery actions. Shelter in place should be considered as an alternative where possible.



Figure 3 – Types of Evacuation

Mandatory evacuations may be ordered under the following acts:

- Disaster Management Act 2003
- Fire and Emergency Services Act 1990
- Public Safety Preservation Act 1986

It is the responsibility of the primary agency to order and control the evacuation process and overview the associated planning.

5.2 Evacuation Process

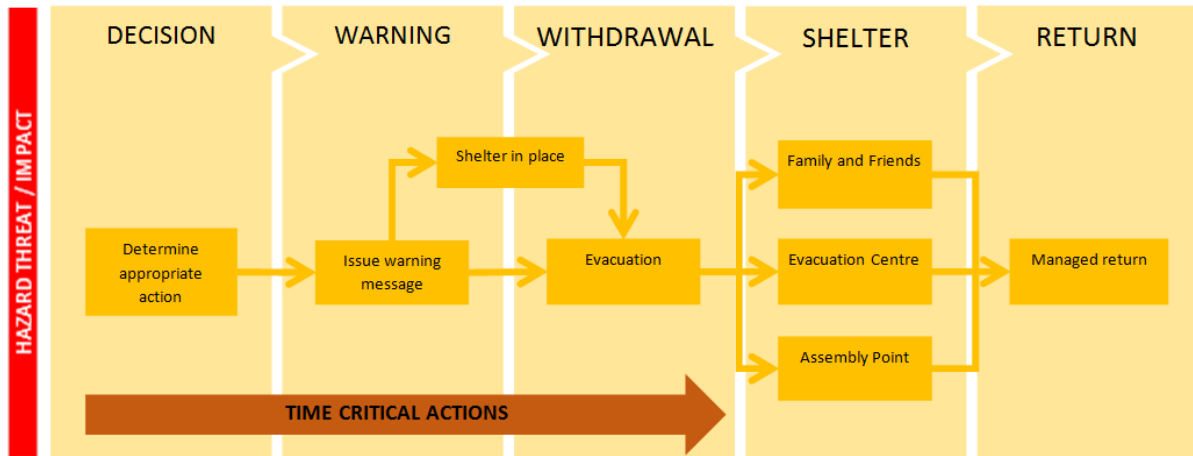


Figure 4 – Evacuation Process

5.3 Specific Evacuation and Isolation Information

The below table provides specific information related to the community.

Evacuation Coordinator	Officer in Charge Ipswich Police Station 37 Ellenborough St, Ipswich QLD 4305 Lat/Long: -27.615727, 152.757266
Assembly Area within the Isolated Community	Tivoli State School Assemble at: Car Oval 108 Mount Crosby Rd, Tivoli QLD 4305 Lat/Long: -27.582899, 152.777584
<i>Meeting point for movement to other locations.</i>	
Emergency Shelter within the Isolated Community	Tivoli State School 108 Mount Crosby Rd, Tivoli QLD 4305 Lat/Long: -27.582899, 152.777584
<i>Meeting point for movement to other locations.</i>	
Neighbourhood Safer Places (NSP)	Queensland Fire and Emergency Services have not identified a need and/or location for a neighbourhood safer place in this community.
Primary Evacuation Centre	Ipswich Showgrounds (Greyhound Track) Salisbury Rd, Ipswich QLD 4305 Lat/Long: -27.628809, 152.758960
	<i>This is the primary evacuation centre, dependent on the hazard and impacts, other evacuation centres may be established.</i>
Helicopter Landing Zones within the Isolated Community	Tivoli State School Oval 108 Mount Crosby Rd, Tivoli QLD 4305 Lat/Long: -27.582461, 152.776280
Major Roads or Routes for Access/Egress	<ul style="list-style-type: none"> Moores Pocket Rd impacted from Boundary St.
Potential Transport (persons) Providers located within the Isolated Community	
Potential Cold Storage Providers located within the Isolated	N/A



Community

Potential Supply Providers located within the Isolated Community	N/A
---	-----

Potential Security Providers located within the Isolated Community	N/A
---	-----

Community

Table 5 - Specific Evacuation Information



PART 6: ANNEXURES

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6.2 Annexure 2 – Contacts

Organisation/Person	Contact Details
Ipswich City Council	07 3810 6666 council@ipswich.qld.gov.au
Ipswich City Council – Division 5 Councillor Wayne Wendt	07 3281 8700 wayne.wendt@ipswich.qld.gov.au div5office@ipswich.qld.gov.au
Queensland Police Service – Public Contact	131 444 www.policelink.qld.gov.au
Queensland Police Service – Ipswich Police Station	Officer in Charge Ipswich Police Station 37 Ellenborough St, Ipswich QLD 4305
State Emergency Service	132 500 www.132500.qld.gov.au

Other Public Emergency Contact Information is maintained in the front cover of the Local Disaster Management Plan which is located on Council's website www.ipswich.qld.gov.au/emergency.

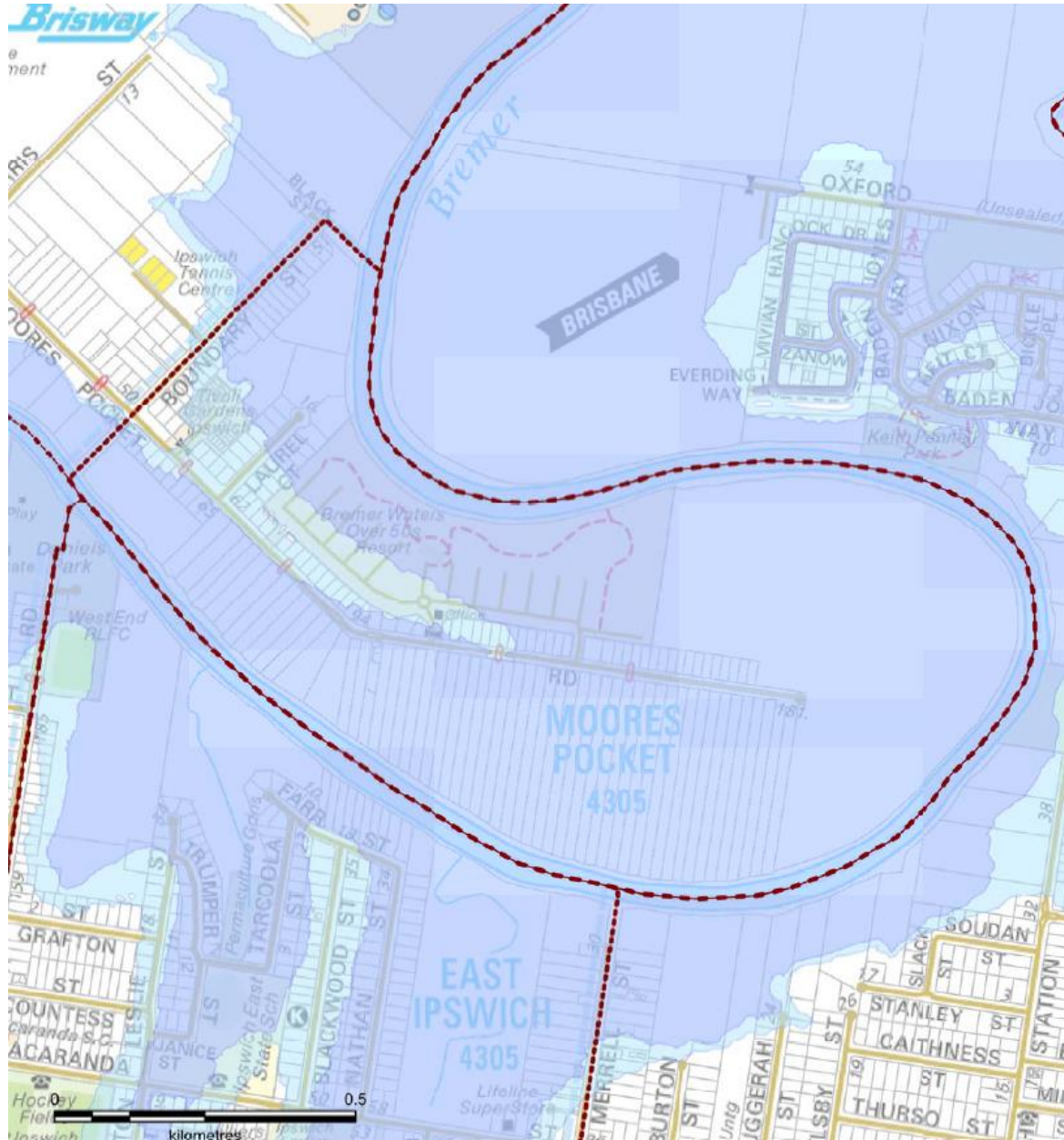
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Operational Contact Information, including Local Disaster Management Group data is maintained within Council's internal systems.



6.3 Annexure 3 – Moores Pocket (1974 and 2011 Flood Lines)



Legend:

- Suburb Boundary 
- 1974 Flood Boundary 
- 2011 Flood Boundary 



City of Ipswich

Local Disaster Management Sub Plan

Isolated Communities (Pine Mountain)

A3980089: May 2018



Approval and Endorsement

Sub Plan approval and endorsement information – inserted post approval and endorsement.



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PART 1: ADMINISTRATION AND GOVERNANCE

1.1 Authority to Plan

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This plan will be reviewed at least annually¹ with relevant amendments made and distributed as needed. The review process will be in accordance with the state guidelines. Minor amendments that do not materially affect the plan are able to be authorised by the Principal Officer (Emergency Management).

It is acknowledged that feedback from stakeholders is essential. Proposals for amendments or inclusions can be addressed in writing to:

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Attention: Emergency Management
Ipswich City Council
PO Box 191, Ipswich QLD 4305

Email council@ipswich.qld.gov.au

¹ Section 59, Disaster Management Act 2003, Reviewing and Renewing (the) Plan

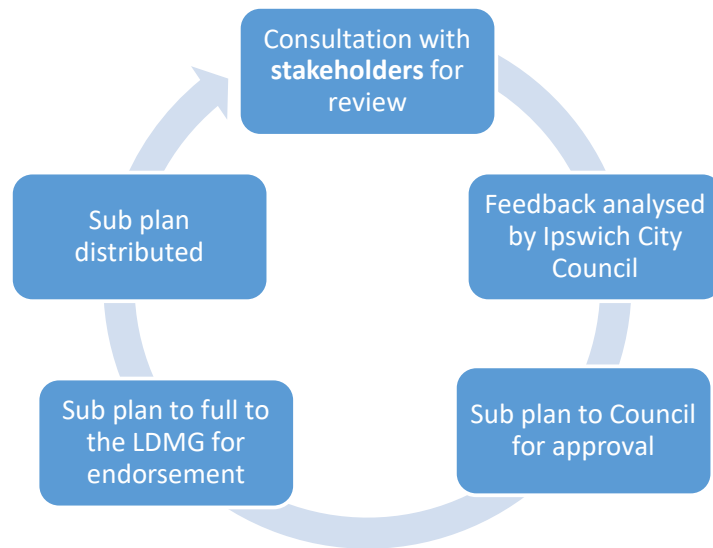


Figure 1 – Sub Plan Review Cycle

1.4 Amendment Register

Document version history is maintained through Council’s internal electronic document management system. The below table outlines amendments minor and inconsequential amendments.

Vers.	Date	Comment
3.00	May 2018	Approved and endorsed version

Table 1 – Amendment Register

1.5 Purpose of the Sub Plan

The purpose of this sub plan is to provide a pro-active approach to enhancing community resilience within the potentially isolated community of Pine Mountain and its surrounding areas.

1.6 Key Objectives

- Identification of preparatory initiatives for the physical isolation of the community.
- Enhance response for the physical isolation of the community.

1.7 Context

The risk of physical isolation following a disaster event can occur throughout the City resulting in residents being affected. The arrangements to support these residents is generally dealt with through the Local Disaster Management Plan itself. However in the instance where a whole community has a history of physical isolation and the risk of that isolation still exists (for example there has been so significant change in infrastructure for access/egress) isolated community sub plans are prepared and maintained. It is important to note these plans are supplementary documents to local disaster management plan and the functional sub plans. Accordingly they are



not intended to be the sole source of information for disaster operations and disaster recovery activities.

The emergency risk assessment for the City of Ipswich identifies that Pine Mountain and surrounding communities are at risk of isolation from flood. Whilst this plan has been prepared on that basis, an all-hazards approach has been applied wherever possible.

PART 2: COMMUNITY PROFILE

2.1 Locality

For planning purposes the Pine Mountain isolated community includes only the suburb of **Pine Mountain**.

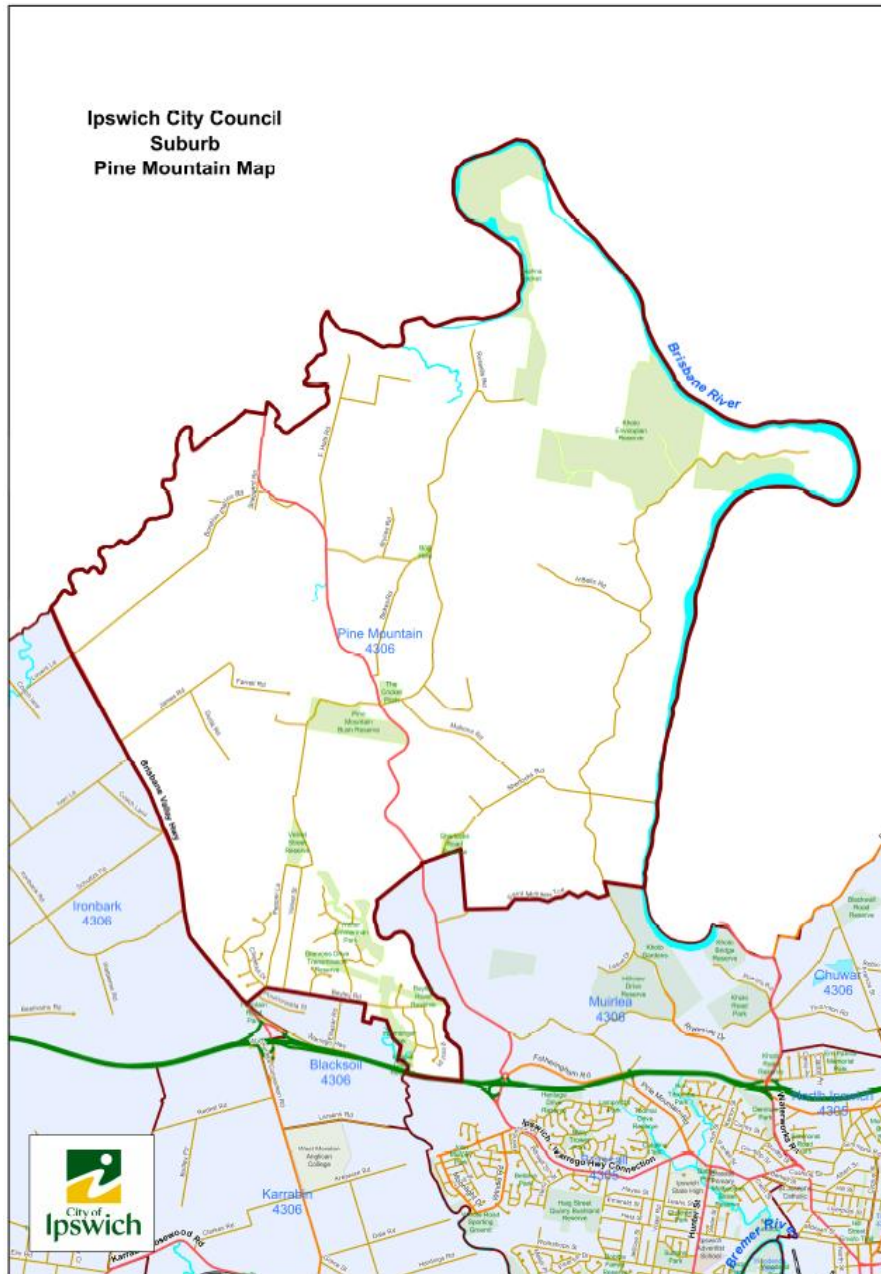


Figure 2 – Pine Mountain Community Boundary

2.2 Population

The ‘Ipswich North’ statistical area has an approximate population of 4,600.²

Ipswich - North encompasses the suburbs and localities of Muirlea and Pine Mountain, the City of Ipswich part of the locality of Chuwar, and small parts of the localities of Blacksoil, North Ipswich and Tivoli.

	0-19 years	20-49 years	50 and over
Male	720	848	685
Female	685	906	645
Total	1,405	1,754	1,330

Table 2 – Population Data

2.3 Educational Institutions

There are no known educational institutions located within the Pine Mountain community.

2.4 Aged and Vulnerable Persons Facilities

Located within the Pine Mountain community are the following aged and vulnerable person facilities:

Facility	Contact Number	Address	Lat/Long
Fairhaven Care Centres	07 3201 6373	89 Bayley Rd, Pine Mountain QLD 4306	-27.572332, 152.709044

Table 3 – Aged and Vulnerable Persons Facilities

2.5 Vet Surgeries

Located within the Pine Mountain community is the following vet surgery:

Facility	Contact Number	Address	Lat/Long
Pine Mountain Vet Clinic	07 3201 8862	24 Fernvale Road Brassall QLD 4305	

Table 4 – Vet Surgeries

2.6 Public Transport

The Pine Mountain community is serviced by the following public transport arrangements:

- Bus Services
- Taxi Services

² Profile ID – Community Profile (2016) <http://profile.id.com.au/ipswich/five-year-age-groups>. Note due to non-disclosures in Census reporting the age population data does not equal total population data.



2.7 Emergency Services

The following table details the emergency services that are located within the Pine Mountain community. Services may be provided from other locations to the Pine Mountain community and these are not listed in the below table.

Facility	Contact Number	Address	Lat/Long
Pine Mountain Rural Fire Brigade	000	11-21 Russells Rd, Pine Mountain QLD 4306	-27.543520, 152.713719

Table 5 – Emergency Service Facilities

2.8 Medical Facilities

There are no medical service providers that are located within the Pine Mountain community.



PART 3: RISK PROFILE

3.1 Risk Assessment

Risk management forms the foundations of disaster and emergency plans for the City of Ipswich. Council adopts the Queensland Emergency Risk Management Framework. For more information regarding risk assessment refer to the Local Disaster Management Plan.

3.2 Potential Isolation Areas

Within the Pine Mountain community the following areas are particularly vulnerable to flood. The 'at risk' areas are based off historical flood lines of 1974 and 2011 events.

Road	Suburb
Bryces Road	Pine Mountain
Drapers Road East	Pine Mountain
H Bells Road	Pine Mountain
Sherlocks Road	Pine Mountain

Table 6 – Potential Isolation Areas

3.3 Fire Risk

Pine Mountain has also been identified as having an elevated fire risk when compared to the rest of the City. Response to Fire incidents is led by Queensland Fire and Emergency Services.

PART 4: PUBLIC INFORMATION AND WARNINGS

The Public Information and Warnings Sub Plan and Council's Public Information and Warnings Manual detail Council's overall communication and warning strategy. It is however recognised that this community has particular needs related to communications.

4.1 Lead Times

Flood modelling and predication is a highly complex and subjective art that relies on a range of variables and assumptions. Factors that can affect the occurrence of inundation include location, intensity and length of the rainfall; current soil and ground moisture levels; overland water flow conditions; overland flow rates; current riverine and creek levels. Council possess predictive software that its Engineers (Floodplain Management) use to provide educated predictions based on real time data and conditions. This in itself is not 100% accurate. **The information of flooding provided below is extremely generalised and does not supplement or replace the knowledge, and skill of trained personnel. It is provided as highly generalised, non-contextualised information and process tool.**

The **possible and highly indicative timeframes** for effect on the community are as follows:

- Overland flows and gullies – 0 to 1 hour
- Local Creeks – 2 to 4 hours
- Bremer River – 12 to 24 hours
- Brisbane River – 48 to 72 hours

4.2 General Communication Strategies

Council employs the following communication strategies generally:

- Emergency Alert
- Emergency Broadcast
- Social Media
- Media Release
- Media Broadcast
- Website Publication

4.3 Community Specific Communication Strategies

Creek systems present unique challenges in determining lead time. Predictive modelling is far less accurate than that of riverine flood modelling. Council still however invests heavily in flood studies to improve this based on current industry best practice.

4.3.1 Door-Knocking

Council works in partnership with the Ipswich City SES Unit to undertake door knocking in areas during events, where it is anticipated they will be directly affected by inundation. The aim is to



encourage residents to remain aware of their situation. At this time contact details of residents are obtained.

4.3.2 My Ipswich Alerts (Early Warning Network)

Council has engaged the Early Warning Network to provide opt-in severe and dangerous weather warnings to residents, community groups and businesses within the City.

As part of this arrangement Council is able to send custom notifications and warnings to residents that have opted in, based on their residential address or location of their mobile device. The mobile device located must have the smart phone app installed and location services switched on.

PART 5: EVACUATION

5.1 General Evacuation Information

The Evacuation Process Sub Plan and Evacuation Centre Sub Plan outline the detailed considerations and general strategies for evacuations. The below information is summarised to provide context to the more detailed information provided.

Evacuation is a risk management strategy used to mitigate the effects of an emergency on the community. It involves the movement of people to a safer location and their return. Evacuations, if unplanned, may cause greater adverse impacts than the disaster itself, including the potential to overwhelm agencies undertaking response and recovery actions. Shelter in place should be considered as an alternative where possible.



Figure 3 – Types of Evacuation

Mandatory evacuations may be ordered under the following acts:

- Disaster Management Act 2003
- Fire and Emergency Services Act 1990
- Public Safety Preservation Act 1986

It is the responsibility of the primary agency to order and control the evacuation process and overview the associated planning.

5.2 Evacuation Process

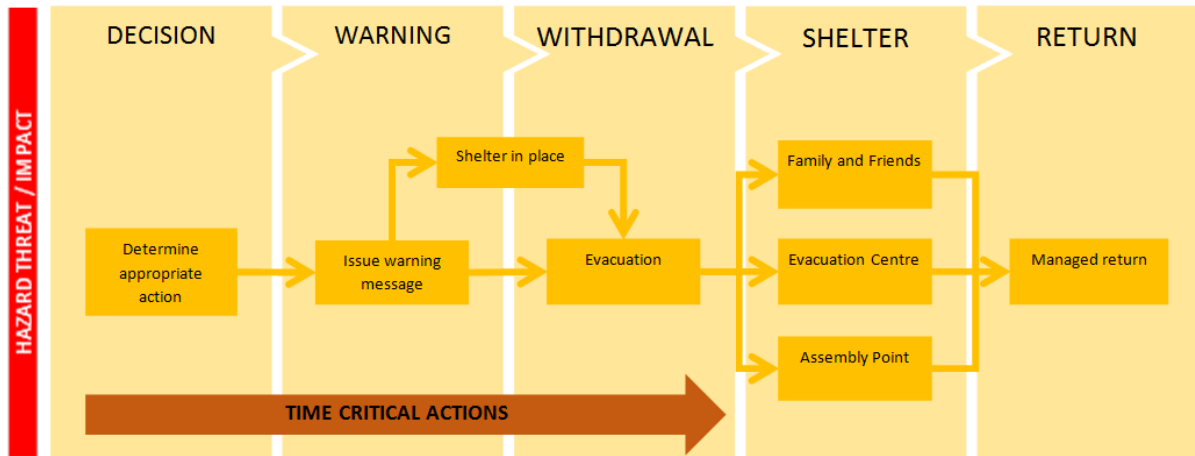


Figure 4 – Evacuation Process

5.3 Specific Evacuation and Isolation Information

The below table provides specific information related to the community.

Evacuation Coordinator	Officer in Charge Karana Downs Police Station 6-8 College Road, Karana Downs QLD 4306 Lat/Long: -27.552537, 152.807436
Assembly Area <i>within the Isolated Community</i>	TBA depending on the location of the fire.
<i>Meeting point for movement to other locations.</i>	<p><u>OPTION 1</u> Pine Mountain Cricket Ground Assemble at: Cricket Pitch Cnr of Russells Rd and Pine Mountain Rd, Pine Mountain QLD 4306 Lat/Long: -27.543451, 152.712780</p> <p><u>OPTION 2</u> Kholo Botanical Gardens Assemble at: Main Building 243 Riverside Dr, Pine Mountain QLD 4306 Lat/Long: -27.566160, 152.740263</p> <p><u>OPTION 3</u> Kholo Reservoir Site Assemble at: Reservoir Riverside Dr, Pine Mountain QLD 4306 Lat/Long: -27.575353, 152.747614</p>



Emergency Shelter <i>within the Isolated Community</i>	N/A
<i>Meeting point for movement to other locations.</i>	
Neighbourhood Safer Places (NSP)	Queensland Fire and Emergency Services have not identified a need and/or location for a neighbourhood safer place in this community.
Primary Evacuation Centre	Ipswich Showgrounds Salisbury Rd, Ipswich QLD 4305 Lat/Long: -27.628809, 152.758960 <i>This is the primary evacuation centre, dependent on the hazard and impacts, other evacuation centres may be established.</i>
Helicopter Landing Zones <i>within the Isolated Community</i>	Pine Mountain Cricket Ground Cnr of Russells Rd and Pine Mountain Rd, Pine Mountain QLD 4306 Lat/Long: -27.543451, 152.712780
Major Roads or Routes for Access/Egress	Brisbane Valley Highway Riverside Drive Pine Mountain Road Warrego Highway
Potential Transport (persons) Providers <i>located within the Isolated Community</i>	N/A
Potential Cold Storage Providers <i>located within the Isolated Community</i>	N/A
Potential Supply Providers <i>located within the Isolated Community</i>	N/A
Potential Security Providers <i>located within the Isolated Community</i>	N/A

Table 7 – Specific Evacuation Information



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6.2 Annexure 2 – Contacts

Organisation/Person	Contact Details
Ipswich City Council	07 3810 6666 council@ipswich.qld.gov.au
Ipswich City Council – Division 10 Councillor David Pahlke JP C Dec	07 3810 7888 0419 705 376 dpahlke@ipswich.qld.gov.au div10office@ipswich.qld.gov.au
Queensland Police Service – Public Contact	131 444 www.policelink.qld.gov.au
Queensland Police Service – Karana Downs Police Station	Officer in Charge Karana Downs Police Station 6 College Road, Karana Downs
State Emergency Service	132 500 www.132500.qld.gov.au

Other Public Emergency Contact Information is maintained in the front cover of the Local Disaster Management Plan which is located on Council’s website www.ipswich.qld.gov.au/emergency.

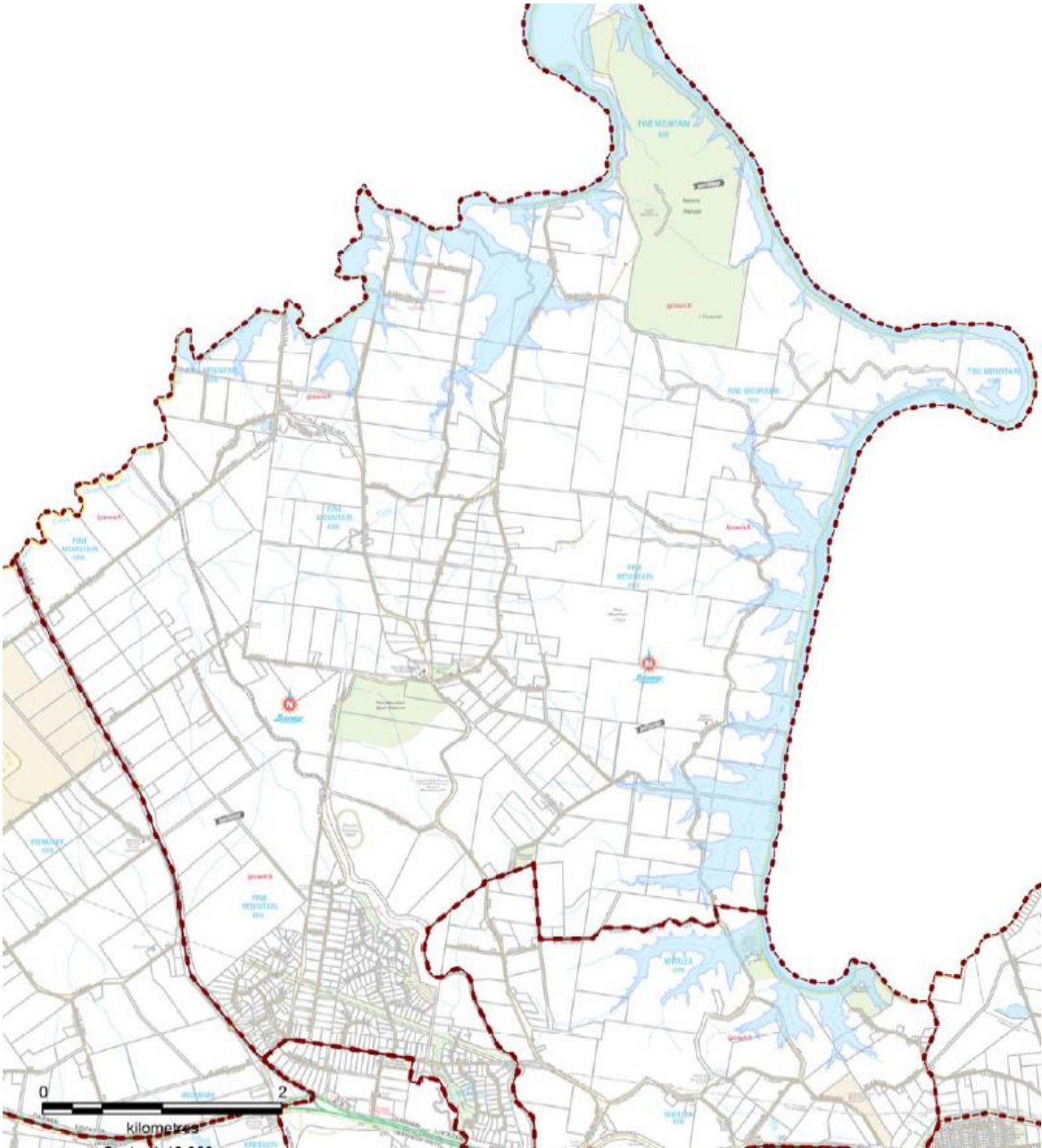
Community Support Contact Information is maintained through Council’s partnership with My Community Directory. Listings on the community directory are provided as a free service to the Ipswich public by service providers primarily located within the Ipswich region. Inclusion in these directories does not imply Ipswich City Council endorses, promotes or guarantees the products and, or services provided.




To view the directory visit: <https://www.mycommunitydirectory.com.au/Queensland/ipswich>

Operational Contact Information, including Local Disaster Management Group data is maintained within Council’s internal systems.



6.3 Annexure 3 – Pine Mountain (1974 and 2011 Flood Lines)



- Legend:**
- Suburb Boundary 
 - 1974 Flood Boundary 
 - 2011 Flood Boundary 



City of Ipswich

Local Disaster Management Sub Plan

Isolated Communities (Rosewood)

A3980090: May 2018



Approval and Endorsement

Sub Plan approval and endorsement information – inserted post approval and endorsement.



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PART 1: ADMINISTRATION AND GOVERNANCE

1.1 Authority to Plan

This plan is prepared by Ipswich City Council under the auspices of the Local Disaster Management Plan (LDMP) for the City of Ipswich under the provisions of Section 57(1) of the Disaster Management Act 2003.

1.2 Sub Plan Principles

This sub plan has been prepared as subordinate to the LDMP. Accordingly this sub plan must be read in conjunction with the LDMP. With the exception of pertinent information, reference to existing statements, definitions and acronyms will be excluded from this document.

1.3 Planning and Review Cycle

This plan will be reviewed at least annually¹ with relevant amendments made and distributed as needed. The review process will be in accordance with the state guidelines. Minor amendments that do not materially affect the plan are able to be authorised by the Principal Officer (Emergency Management).

It is acknowledged that feedback from stakeholders is essential. Proposals for amendments or inclusions can be addressed in writing to:

Post Chief Executive Officer
 Attention: Emergency Management
 Ipswich City Council
 PO Box 191, Ipswich QLD 4305

Email council@ipswich.qld.gov.au

¹ Section 59, Disaster Management Act 2003, Reviewing and Renewing (the) Plan

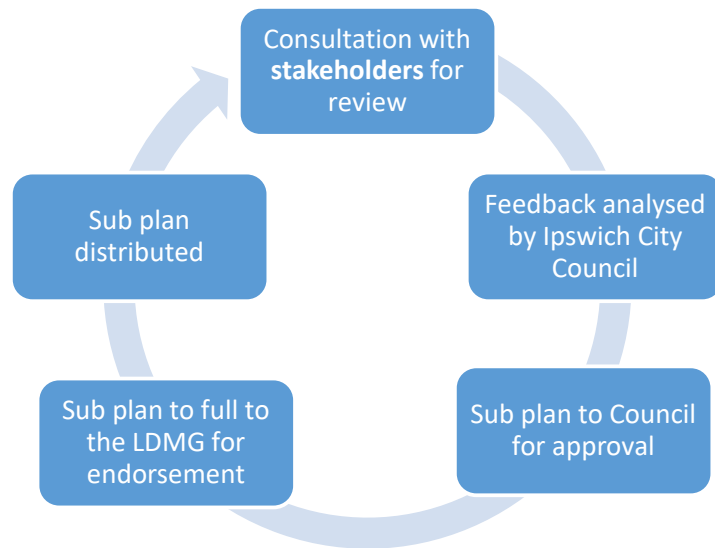


Figure 1 – Sub Plan Review Cycle

1.4 Amendment Register

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Table 1 – Amendment Register

1.5 Purpose of the Sub Plan

The purpose of this sub plan is to provide a pro-active approach to enhancing community resilience within the potentially isolated community of Rosewood and its surrounding areas.

1.6 Key objectives

- Identification of preparatory initiatives for the physical isolation of the community.
- Enhance response for the physical isolation of the community.

1.7 Context

The risk of physical isolation following a disaster event can occur throughout the City resulting in residents being affected. The arrangements to support these residents is generally dealt with through the Local Disaster Management Plan itself. However in the instance where a whole community has a history of physical isolation and the risk of that isolation still exists (for example there has been so significant change in infrastructure for access/egress) isolated community sub plans are prepared and maintained. It is important to note these plans are supplementary documents to local disaster management plan and the functional sub plans. Accordingly they are



not intended to be the sole source of information for disaster operations and disaster recovery activities.

The emergency risk assessment for the City of Ipswich identifies that Rosewood and surrounding communities are at risk of isolation from flood. Whilst this plan has been prepared on that basis, an all-hazards approach has been applied wherever possible.

PART 2: COMMUNITY PROFILE

2.1 Locality

For planning purposes the Rosewood isolated community clusters the suburbs of **Rosewood** which have the potential to be impacted by the Bremer River and Western Creek.

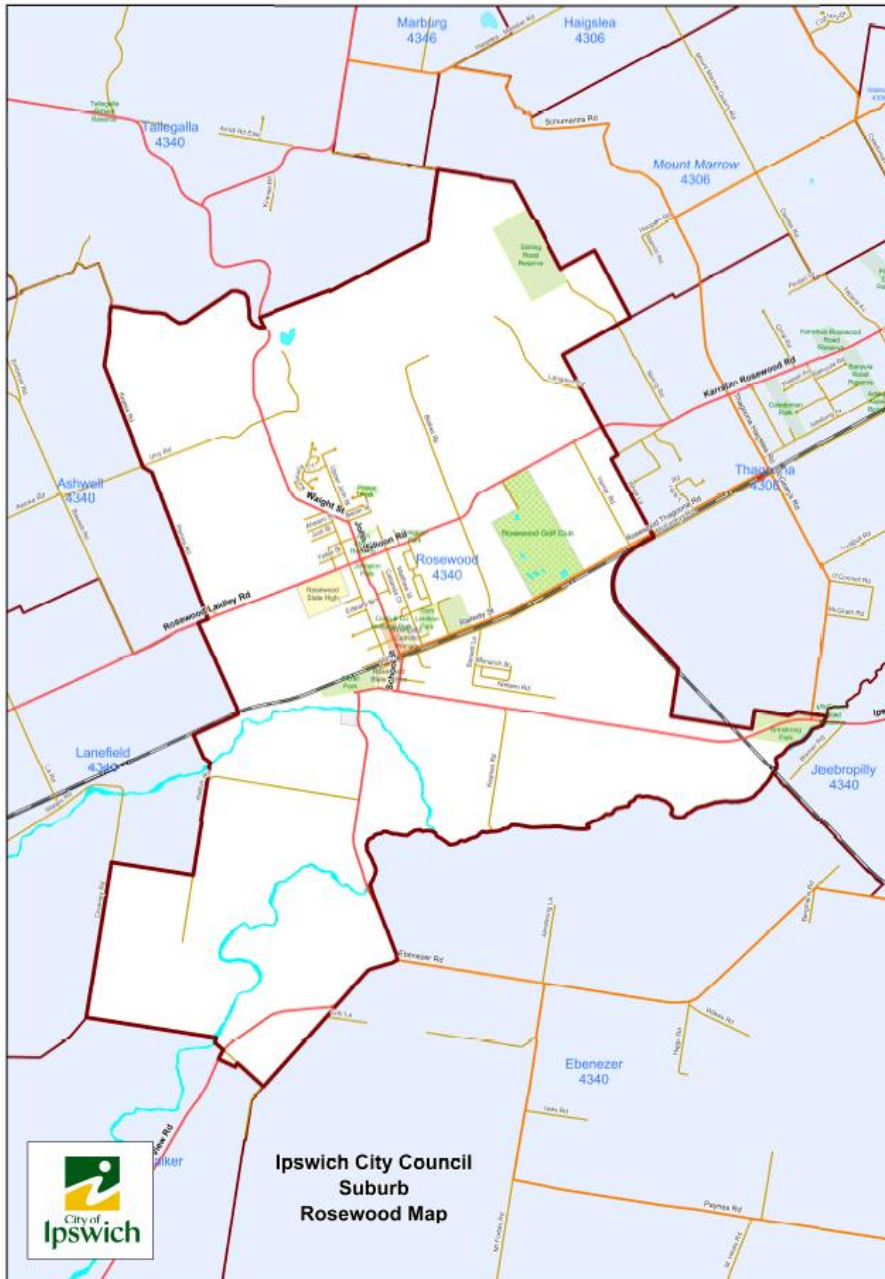


Figure 2 – Rosewood Community Boundary

2.2 Population

The Rosewood community has an approximate population of 11,818.²

	0-19 years	20-49 years	50 and over
Male	1,510	2,364	2,149
Female	1,505	2,124	2,166
Total	3,015	4,488	4,315

Table 2 – Population Data

2.3 Educational Institutions

Located within the Rosewood community are the following educational institutions:

Institution	Contact Number	Address	Lat/Long
C&K Rosewood District Kindergarten & Preschool	07 5464 1302	54 John St, Rosewood QLD 4340	-27.639056, 152.591732
Rosewood Early Education Centre	07 5464 2033	80 John St, Rosewood QLD 4340	-27.636428, 152.590428
Rosewood State School	07 5461 9333	17 School St, Rosewood QLD 4340	-27.643864, 152.593238
Rosewood State High School	07 5461 9400	46 Lanefield Rd, Rosewood QLD 4340	-27.635825, 152.586490
St Brigid's School	07 5464 1563	12 Matthew St, Rosewood QLD 4340	-27.640567, 152.595178

Table 3 – Educational Institutions

2.4 Aged and Vulnerable Persons Facilities

Located within the Rosewood community are the following aged and vulnerable person facilities:

Facility	Contact Number	Address	Lat/Long
Cabanda Care	07 5464 2392	59 John St, Rosewood QLD 4340	-27.635807, 152.591574

Table 4 – Aged and Vulnerable Persons Facilities

2.5 Vet Surgeries

Located within the Rosewood community are the following vet surgeries:

Facility	Contact Number	Address	Lat/Long
Rosewood Veterinary Service	07 5464 1607	14 Walloon Rd, Rosewood QLD 4340	-27.633414, 152.592761

Table 5 – Vet Surgeries

² Profile ID – Community Profile (2016) <https://profile.id.com.au/ipswich/five-year-age-groups?WebID=270>

2.6 Public Transport

The Rosewood community is serviced by the following public transport arrangements:

- Rail Services
- Bus Services
- Taxi Services

2.7 Emergency Services

The following table details the emergency services that are located within the Rosewood community. Services may be provided from other locations to the Rosewood community and these are not listed in the below table.

Facility	Contact Number	Address	Lat/Long
Rosewood Ambulance Station	000	70 John St, Rosewood QLD 4340	-27.637754, 152.591410
Rosewood Fire Station	000	70 John St, Rosewood QLD 4340	-27.637754, 152.591410
Rosewood Police Station	000	1 John St, Rosewood QLD 4340	-27.642207, 152.593907
Rosewood SES Group	132 500	21 Ipswich Rosewood Rd, Rosewood QLD 4340	-27.645011, 152.591403

Table 6 – Emergency Service Facilities

2.8 Medical Facilities

The following table details the medical service providers that are located within the Rosewood community. Services may be provided from other locations to the Rosewood community and these are not listed in the below table.

Facility	Contact Number	Address	Lat/Long
The Lockyer Doctors	07 5468 0100	Shop 5, 40-46 John St, Rosewood QLD 4340	-27.640059, 152.592274
Rosewood General Practice	07 5464 1277	14 John St, Rosewood QLD 4340	-27.641708, 152.593234

Table 7 – Medical Facilities

PART 3: RISK PROFILE

3.1 Risk Assessment

Risk management forms the foundations of disaster and emergency plans for the City of Ipswich. Council adopts the Queensland Emergency Risk Management Framework. For more information regarding risk assessment refer to the Local Disaster Management Plan.

3.2 Potential Isolation Areas

The following areas are potentially vulnerable to isolation as a result of flood. The areas are based off historical flood lines of 1974 and 2011 events.

Road	Suburb
Coveney Road	Rosewood
Ipswich Rosewood Road	Rosewood
Keanes Road	Rosewood
Madden Lane	Rosewood
Nielsen Road	Rosewood
Old Grandchester Road	Rosewood
Perrins Road	Rosewood
Railway Street	Rosewood
Reillys Road	Rosewood
Rosewood Laidley Road	Rosewood
Rosewood Warrill View Road	Rosewood
School Street	Rosewood
Strongs Road	Rosewood

Table 8 – Potential Isolation Areas

PART 4: PUBLIC INFORMATION AND WARNINGS

The Public Information and Warnings Sub Plan and Council's Public Information and Warnings Manual detail Council's overall communication and warning strategy. It is however recognised that this community has particular needs related to communications.

4.1 Lead Times

Flood modelling and predication is a highly complex and subjective art that relies on a range of variables and assumptions. Factors that can affect the occurrence of inundation include location, intensity and length of the rainfall; current soil and ground moisture levels; overland water flow conditions; overland flow rates; current riverine and creek levels. Council possess predictive software that its Engineers (Floodplain Management) use to provide educated predictions based on real time data and conditions. This in itself is not 100% accurate. **The information of flooding provided below is extremely generalised and does not supplement or replace the knowledge, and skill of trained personnel. It is provided as highly generalised, non-contextualised information and process tool.**

The possible and highly indicative timeframes for effect on the community are as follows:

- Overland flows and gullies – 0 to 1 hour
- Local Creeks – 2 to 4 hours
- Bremer River – 12 to 24 hours
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4.2 General Communication Strategies

Council employs the following communication strategies generally:

- Emergency Alert
- Emergency Broadcast
- Social Media
- Media Release
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4.3 Community Specific Communication Strategies

Creek systems present unique challenges in determining lead time. Predictive modelling is far less accurate than that of riverine flood modelling. Council still however invests heavily in flood studies to improve this based on current industry best practice.

4.3.1 Door-Knocking

Council works in partnership with the Ipswich City SES Unit to undertake door knocking in areas during events, where it is anticipated they will be directly affected by inundation. The aim is to



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4.3.2 My Ipswich Alerts (Early Warning Network)

Council has engaged the Early Warning Network to provide opt-in severe and dangerous weather warnings to residents, community groups and businesses within the City.

As part of this arrangement Council is able to send custom notifications and warnings to residents that have opted in, based on their residential address or location of their mobile device. The mobile device located must have the smart phone app installed and location services switched on.

PART 5: EVACUATION

5.1 General Evacuation Information

The Evacuation Process Sub Plan and Evacuation Centre Sub Plan outline the detailed considerations and general strategies for evacuations. The below information is summarised to provide context to the more detailed information provided.

Evacuation is a risk management strategy used to mitigate the effects of an emergency on the community. It involves the movement of people to a safer location and their return. Evacuations, if unplanned, may cause greater adverse impacts than the disaster itself, including the potential to overwhelm agencies undertaking response and recovery actions. Shelter in place should be considered as an alternative where possible.



Figure 3 – Types of Evacuation

Mandatory evacuations may be ordered under the following acts:

- Disaster Management Act 2003
- Fire and Emergency Services Act 1990
- Public Safety Preservation Act 1986

It is the responsibility of the primary agency to order and control the evacuation process and overview the associated planning.

5.2 Evacuation Process

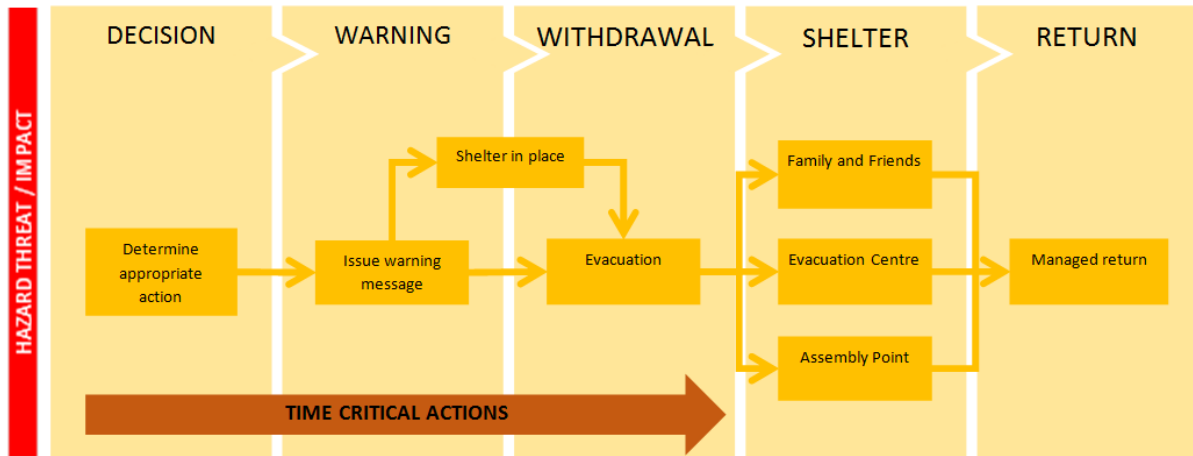


Figure 4 – Evacuation Process

5.3 Specific Evacuation and Isolation Information

The below table provides specific information related to the community.

Evacuation Coordinator	Officer in Charge Rosewood Police Station John St, Rosewood QLD 4340 Lat/Long: -27.642207, 152.593907
Assembly Area within the Isolated Community	Rosewood State High School Assemble at: Oval 46 Lanefield Rd, Rosewood QLD 4340 Lat/Long: -27.636281, 152.587858
<i>Meeting point for movement to other locations.</i>	
Emergency Shelter within the Isolated Community	<u>OPTION 1</u> Rosewood State School School St, Rosewood QLD 4340 Lat/Long: -27.643864, 152.593238
<i>Meeting point for movement to other locations.</i>	
	<u>OPTION 2</u> Rosewood State High School 46 Lanefield Rd, Rosewood QLD 4340 Lat/Long: -27.636100, 152.586451
Neighbourhood Safer Places (NSP)	Queensland Fire and Emergency Services have not identified a need and/or location for a neighbourhood safer place in this community.



Primary Evacuation Centre	Ipswich Showgrounds (Greyhound Track) Salisbury Rd, Ipswich QLD 4305 Lat/Long: -27.628809, 152.758960
	<i>This is the primary evacuation centre, dependent on the hazard and impacts, other evacuation centres may be established.</i>
Helicopter Landing Zones within the Isolated Community	Rosewood State High School Oval 46 Lanefield Rd, Rosewood QLD 4340 Lat/Long: -27.637792, 152.586622
Major Roads or Routes for Access/Egress	<ul style="list-style-type: none"> • Ipswich Rosewood Rd heavily impacted. • Rosewood Warrill View Rd heavily impacted. • Rosewood Laidley Rd heavily impacted.
Potential Transport (persons) Providers located within the Isolated Community	N/A
Potential Cold Storage Providers located within the Isolated Community	Drakes Rosewood 42-44 John St, Rosewood QLD 4340 07 5461 6000 Lat/Long: -27.640100, 152.592273
Potential Supply Providers located within the Isolated Community	IGA SUPA Rosewood 42-44 John Street, Rosewood QLD 4340 07 5461 6000 Lat/Long: -27.640100, 152.592273
Potential Security Providers located within the Isolated Community	N/A

Table 9 – Specific Evacuation Information

5.4 Livestock

In the Rosewood community it has been identified that there is a number of the population that have livestock. However, it is understood that the majority of the owners have access to properties in close proximity or have the ability to move the livestock to a suitable location should an evacuation be required. Livestock has the potential to cause havoc if left to their own devices; deceased livestock possess a risk of disease to other livestock and to neglect unnecessarily is inhumane.

However, there is a facility to accommodate livestock at the Rosewood State High School Grounds. Fencing tape to enclose livestock can be accessed through local product stores within Rosewood if required and livestock owners are responsible for all transport to and from the facility.



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6.2 Annexure 2 – Contacts

Organisation/Person	Contact Details
Ipswich City Council	07 3810 6666 council@ipswich.qld.gov.au
Ipswich City Council – Division 10 Councillor David Pahlke – JP C Dec	07 3810 7888 0419 705 376 dpahlke@ipswich.qld.gov.au div10office@ipswich.qld.gov.au
Queensland Police Service – Public Contact	131 444 www.policelink.qld.gov.au
Queensland Police Service – Rosewood Police Station	Officer in Charge Rosewood Police Station John St, Rosewood QLD 4340
State Emergency Service	132 500 www.132500.qld.gov.au

Other Public Emergency Contact Information is maintained in the front cover of the Local Disaster Management Plan which is located on Council's website www.ipswich.qld.gov.au/emergency.

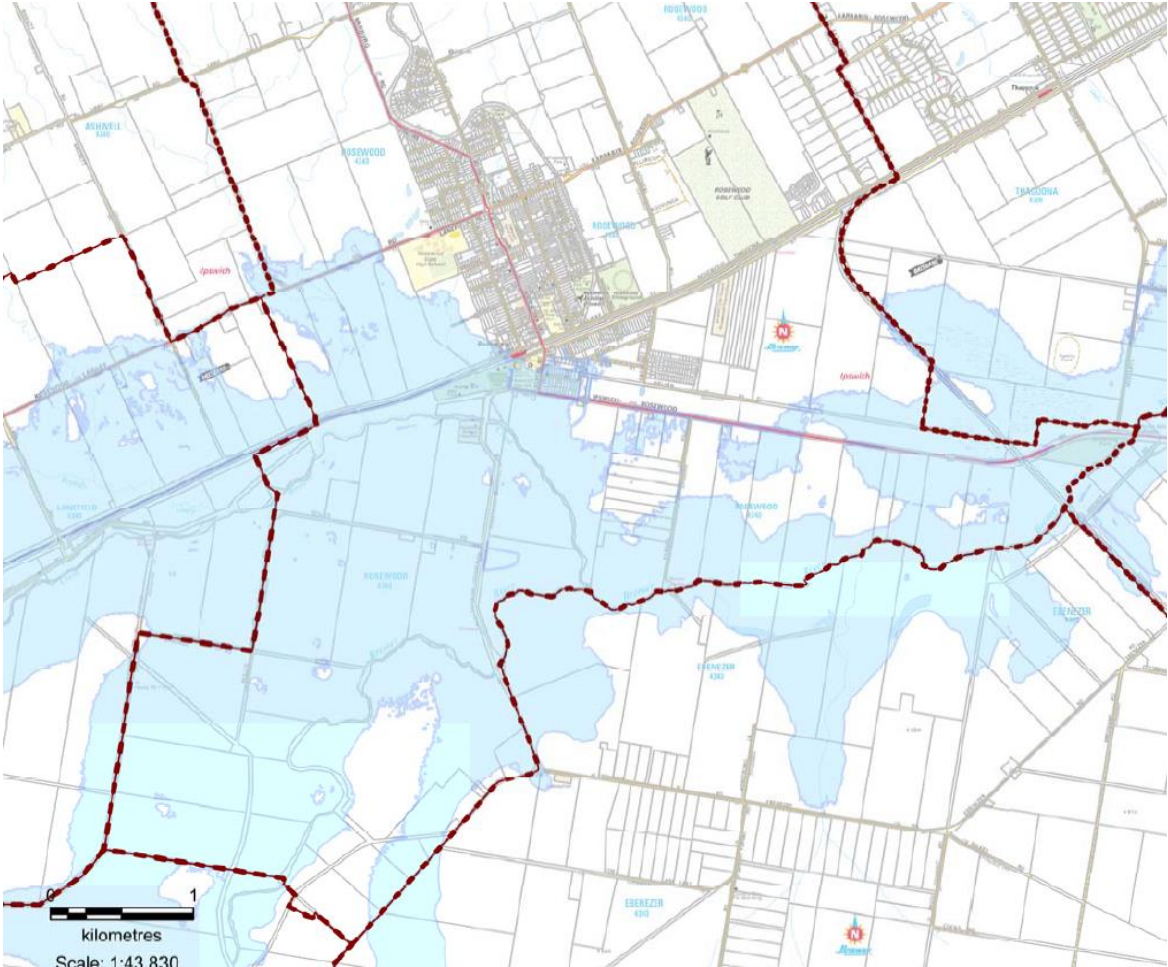
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To view the directory visit: <https://www.mycommunitydirectory.com.au/Queensland/ipswich>

Operational Contact Information, including Local Disaster Management Group data is maintained within Council's internal systems.



6.3 Annexure 3 – Rosewood (2011 Flood Lines)





City of Ipswich
Local Disaster Management Sub Plan

Recovery

A3980096: May 2018



Approval and Endorsement
Approval and Endorsement Information



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PART 1: ADMINISTRATION AND GOVERNANCE

1.1. Authority to Plan

This plan is prepared by Ipswich City Council under the auspices of the Local Disaster Management Plan (LDMP) for the City of Ipswich under the provisions of Section 57(1) of the Disaster Management Act 2003.

1.2. Sub Plan Principles

This sub plan has been prepared as subordinate to the LDMP. Accordingly this sub plan must be read in conjunction with the LDMP. With the exception of pertinent information, reference to existing statements, definitions and acronyms will be excluded from this document.

1.3. Planning and Review Cycle

This plan will be reviewed at least annually¹ with relevant amendments made and distributed as needed. The review process will be in accordance with the state guidelines. Minor amendments that do not materially affect the plan are able to be authorised by the Principal Officer (Emergency Management).

It is acknowledged that feedback from stakeholders is essential. Proposals for amendments or inclusions can be addressed in writing to:

Post Chief Executive Officer
Attention: Emergency Management
Ipswich City Council
PO Box 191, Ipswich QLD 4305

Email council@ipswich.qld.gov.au

¹ Section 59, Disaster Management Act 2003, Reviewing and Renewing (the) Plan

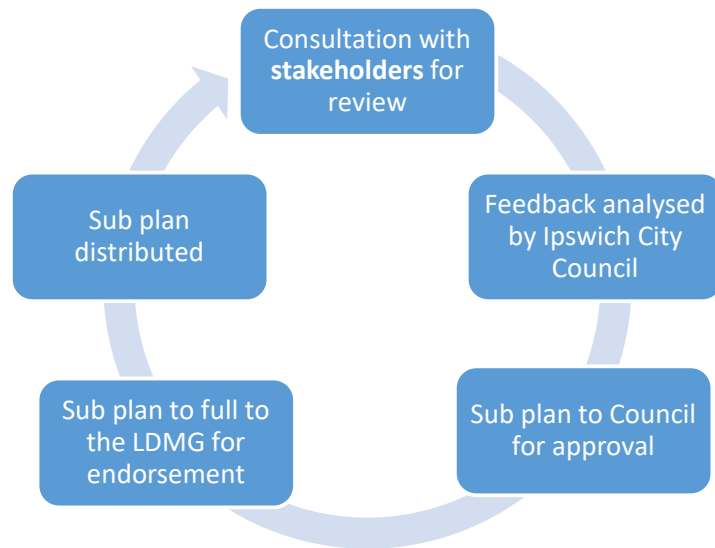


Figure 1 – Sub Plan Review Cycle

1.4. Amendment Register

Document version history is maintained through Council’s internal electronic document management system. The below table outlines amendments minor and inconsequential amendments.

Vers.	Date	Comment
2.00	May 2018	Approved and endorsed version

Table 1 – Amendment Register

1.5. Purpose of the Sub Plan

The purpose of the Recovery Sub Plan is to provide a framework in the provision recovery assistance to affected members of the public during and post a disaster event. It may be utilised by all members, deputies and advisors of the Local Disaster Management Group (LDMG) and the organisations that they represent and / or any partnering agencies involved to assist in the preparation and dissemination of information and warnings.

Each disaster event is unique and adaptations to this material may be required.

PART 2: RECOVERY OVERVIEW

Disaster recovery is the coordinated process of supporting disaster-affected communities' psychosocial (emotional and social), and physical well-being; reconstruction of physical infrastructure; and economic and environmental restoration (including regeneration of the natural environment, associated infrastructure and heritage sites and structures, and the management of pollution and contamination).²

Recovering from an event includes the following:

- Providing relief measures to assist persons affected by the event who do not have resources to provide for their own personal wellbeing;
- Restoring essential infrastructure in the area/s affected by the event;
- Restoring the environment in areas affected by the event;
- Providing personal support to individuals affected by the event, including temporary hospital accommodation, emergency medical supplies, material assistance and counselling services;
- Supporting community development activities to restore capacity and resilience.

2.1. Recovery Principles

The National Principles for Disaster Recovery, as detailed in the *Australian Disaster Resilience Handbook Collection – Community Recovery* are detailed below.

The key principles of recovery are:

- Understand the context;
- Recognise complexity;
- Use community-led approaches;
- Coordinate all activities;
- Communicate effectively;
- Acknowledge and build capacity

2.1.1. Understand Context

Successful recovery is based on an understanding of the community context. Recovery should:

- acknowledge existing strengths and capacity including past experiences;
- appreciate the risks and stressors faced by the community
- be respectful of and sensitive to the culture and diversity of the community
- support those who may be facing vulnerability

² Queensland Government: *Queensland Recovery Plan, 2017*

- recognise the importance of the environment to people and to their recovery
- be acknowledged as requiring a long-term, sustained effort as needed by the community, and
- acknowledge the impact upon the community may extend beyond the geography

2.1.2. Recognise Complexity

Successful recovery acknowledges the complex and dynamic nature of events and communities that are impacted by events. Recovery should recognise that:

- disasters lead to a range of effects and impacts that require a variety of approaches; they can also leave long-term legacies
- information on impacts is limited at first and changes over time
- affected individuals and the community have diverse needs, wants and expectations, which can evolve rapidly
- responsive and flexible action is crucial to address immediate needs
- existing community knowledge and values may challenge the assumptions of those outside of the community
- conflicting knowledge, values and priorities among individuals, the community and organisations may create tensions
- emergencies create stressful environments where grief or blame may also affect those involved
- over time, appropriate support for individuals and communities, from within and outside, can cultivate hope and individual collective growth.

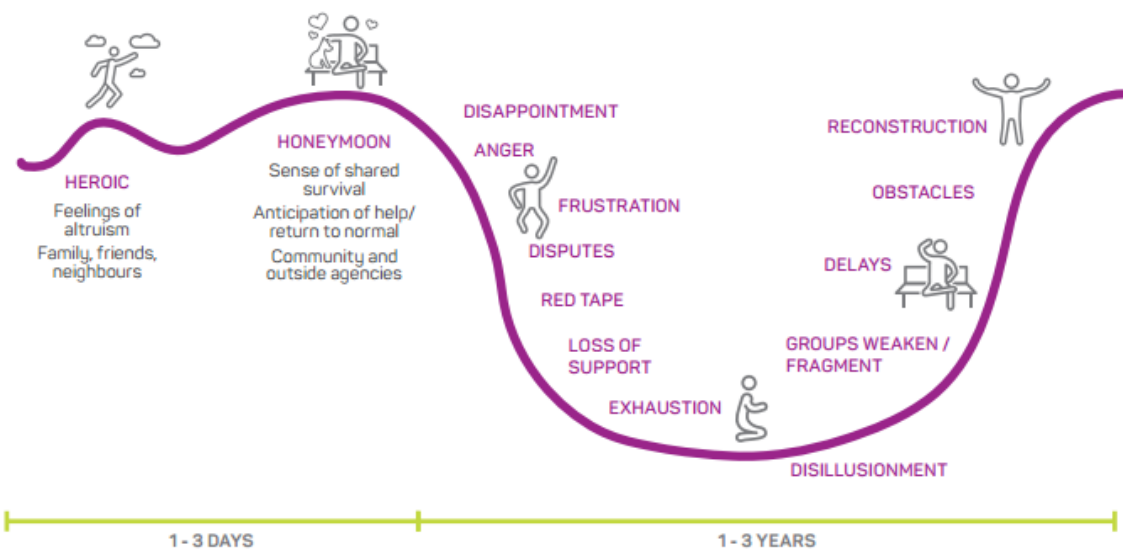


Figure 2 – Different phases that individuals and communities might experience post disaster³

³ Australian Disaster Resilience Handbook Collection, Community Recovery, 2018 (Source: Adapted Cohen and Ahearn 1980 and Dewolfe 2000)

2.1.3. Use Community-Led Approaches

Successful recovery is responsive and flexible, engaging communities and empowering them to move forward. Recovery should:

- assist and enable individuals, families and the community to actively participate in their own recovery
- recognise that individuals and the community may need different levels of support at various times
- be guided by the communities' priorities
- channel effort through pre-identified and existing community assets, including local knowledge, existing community strengths and resilience
- build collaborative partnerships between the community and those involved in the recovery process
- recognise that new community leaders often emerge during and after a disaster, who may not hold formal positions of authority
- recognise that different communities may choose different paths to recovery.

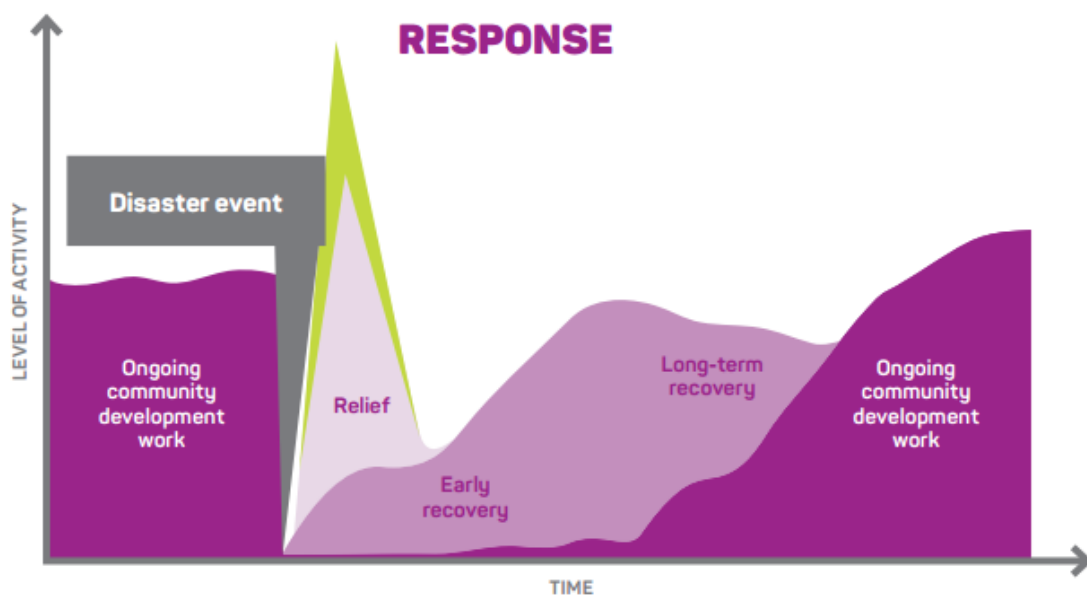


Figure 3 – Effect of Disaster on Ongoing Community Development and Interface with Relief and Recovery⁴

2.1.4. Coordinate All Activities

Successful recovery requires a planned, coordinated and adaptive approach based on continuing assessment of impacts and needs. Recovery should:

- have clearly articulated and shared goals based on desired outcomes
- be flexible, taking into account changes in community needs or stakeholder expectations

⁴ Australian Disaster Resilience Handbook Collection, Community Recovery, 2018 (Credit Sally Mckay)

- be guided by those with experience and expertise, using skilled, authentic and capable community leadership
- be at the pace desired by the community, and seek to collaborate and reconcile different interests and time frames
- reflect well-developed community planning and information gathering before, during and after a disaster
- have clear decision-making and reporting structures and sound governance, which are transparent and accessible to the community
- demonstrate an understanding of the roles, responsibilities and authority of organisations involved and coordinate across agencies to ensure minimal service provision disruption
- be part of an emergency management approach that integrates with response operations and contributes to future prevention and preparedness

2.1.5. Communicate Effectively

Successful recovery is built on effective communication with affected communities and other stakeholders. Recovery should:

- recognise that communication should be two-way, and that input and feedback should be encouraged
- ensure that information is accessible to audiences in diverse situations, addresses a variety of communication needs, and is provided through a range of communication channels and networks
- establish mechanisms for coordinated and consistent communications between all service providers, organisations and individuals and the community
- ensure that all communication is relevant, timely, clear, accurate, targeted, credible and consistent
- identify trusted sources of information and repeat key recovery messages to enable greater community confidence and receptivity

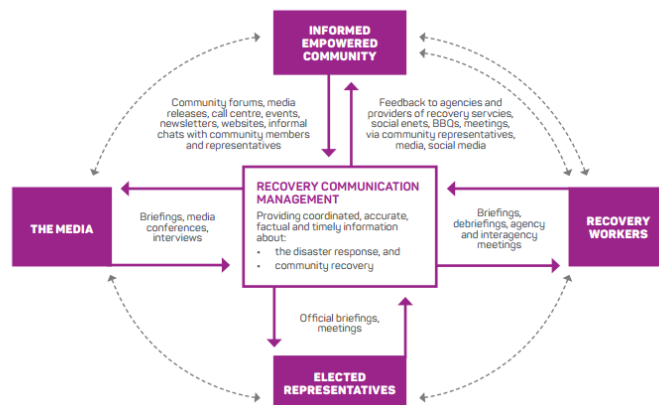


Figure 4 – Recovery Communication Management, Communication with the Various Stakeholders⁵

⁵ Australian Disaster Resilience Handbook Collection, Community Recovery, 2018

2.1.6. Acknowledge and Build Capacity

Successful recovery recognises, supports and builds on community, business, individual and organisational capacity. Recovery should:

- assess capability and capacity requirements before, during and after a disaster
- support the development of self-reliance, preparation and disaster mitigation
- quickly identify and mobilise community skills, strengths and resources • develop networks and partnerships to strengthen capacity, capability and resilience
- provide opportunities to share, transfer and develop knowledge, skills and training
- recognise that resources can be provided by a range of partners and from community networks
- acknowledge that existing resources may be stretched, and that additional resources may be sought
- understand that additional resources may only be available for a limited period, and that sustainability may need to be addressed
- understand when and how to step back, while continuing to support individuals and the community as a whole to be more self-sufficient when they are ready
- be evaluated to provide learning for future disaster and improved resilience.

2.2. Recovery Functions⁶

Effective recovery requires an integrated, multi-disciplinary approach which is a coordinated effort by all organisations involved. As recovery is a complex and potentially protracted process, to assist with overall and effective coordination, aspects of recovery are conceptually grouped into five inter-related functions applicable in an all hazards environment.



Figure 5 – Five functions of recovery

⁶ Section 6.2, Prevention, Preparedness, Response and Recovery Disaster Management Guidelines, 2018

2.3. Phases of Recovery

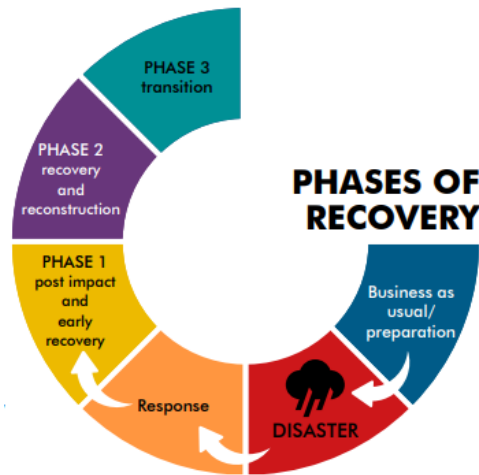


Figure 6 – Phases of Recovery

Phase 1: Post impact and early recovery	Phase 2: Recovery and Reconstruction	Phase 3: Transition
Includes: Immediate short-term recovery	Includes: Medium-term recovery	Includes: Long-term recovery
This phase occurs at the same time as response. It involves addressing and supporting the immediate needs of individuals, businesses and the community affected by the event. In this phase, the objectives are to understand the effect of the event, and to begin planning to support response and recovery.	In the recovery and restoration phase, methodical steps are taken to reconstruct and enhance all disaster-affected communities, functions and infrastructure.	In the transition phase, recovery and reconstruction is progressively handed over to agencies or organisations— including government, community-based or industry-led sectors. This phase ends when all recovery and reconstruction responsibilities are back to being managed as business as us

Table 2 – Definitions of the Phases of Recovery

2.4. Functional Lead Agency Role⁷

The Queensland Recovery Plan has appointed functional lead agencies for leading recovery under each of the functions at a State level, they are

Function of Recovery	Functional Lead Organisation
Human and Social	Department of Communities, Disability Services and Seniors
Economic	Department of State Development, Manufacturing, Infrastructure and Planning
Environmental	Department of Environment and Science
Building	Department of Housing and Public Works
Roads and Transport	Department of Transport and Main Roads

Table 3 – Functional Lead Organisations for Recovery

⁷ Section 6.2 of the Prevention, Preparedness, Response and Recovery Disaster Management Guidelines, 2018

PART 3: CITY OF IPSWICH RECOVERY ARRANGEMENTS



This section related to the arrangements locally, to see find more information about state-wide implications, view the Queensland Recovery Plan online at <http://disaster.qld.gov.au>

3.1.1. Management of Recovery Generally

Following the impact of an event the LDMG has the responsibility for acting on behalf of the community they serve and leading recovery efforts, accordingly recovery in the City of Ipswich will ordinarily be managed through the LDMG.

Should the need be identified by the Chairperson of the LDMG or the Local Disaster Coordinator, a Local Recovery Group may be formed as a subordinate sub group to the LDMG. This will be assessed on the following factors:

- scale of the disaster
- outstanding issues and impacts that require a coordinated, multi-agency approach
- significance of disruption of the community's connectedness
- the community does not have the capability to recover independently
- people will be unable to return to their properties in the long term
- reconstruction or other impacts, such as contamination.

3.1.2. Local Recovery Group

An example of the structure that the City of Ipswich Local Recovery Group may take if formed, including suggestions for supporting agencies, can be found in *Annexure 2 – Local Recovery Group Example Structure*.

This group will be supported and assisted by the Local Disaster Management Group. The Local Recovery Group should include representatives from relevant organisations, who will inform and assist in recovery operations according to their area of expertise.

The Local Recovery Group may contain sub-groups responsible for each functional element of recovery and will be chaired by a Councillor, nominated by the Chairperson of the LDMG.

3.1.3. Local Recovery Coordinator

A Local Recovery Coordinator, may be appointed at the time should the need be identified as a result of an event. This need is identified upon recommendation and endorsement by the Chairperson of the LDMG or the Local Disaster Coordinator.

To ensure clarity, the Local Recovery Coordinator is a subordinate role to the Local Disaster Coordinator.



3.1.4. Key Roles During Recovery⁸

The LDMG or the LDMG through the Local Recovery Group, if established has the following key roles:

- coordinating community recovery activities through information sharing and collective decision making.
- Establishing the priority of projects in the recovery plan through community consultation.
- Implementing and monitoring the progress of recovery and reconstruction activities and reviewing the recovery plan.
- Ensuring the community is kept well informed on the progress of the recovery plan.

3.1.5. Ipswich District Level Responsibilities

Where local capacity to respond has been exceeded, assistance may be requested from the District Disaster Management Group. Accordingly at a district level, functional lead agencies for each of the recovery functions may also establish groups to support ongoing recovery planning and preparedness.

The emphasis of community led recovery lends itself to the notion that the local level is the entry point for recovery. The district provides resources to the local level based on impact assessments and agreed service delivery arrangements, ensuring that the required resources are available and prioritised accordingly.

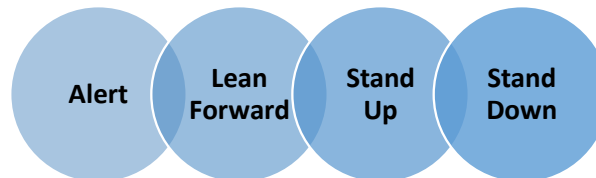
The Ipswich District Disaster Management Group has formed the Ipswich District Human Social Recovery Group as a standing sub group.

⁸ Local Recovery Planning Manual, 2018, a supplementary document to the Queensland PPRR Guideline

PART 4: RECOVERY IN ACTION

4.1. Triggers for Recovery

The Ipswich City Council Local Disaster Management Plan details the disaster operations level of activation as:



Recovery considerations should occur simultaneously to those of disaster operations and will be managed on this way within the City of Ipswich.

The transition from response operations to recovery operations will be influenced by the nature of the disaster and therefore requires a degree of flexibility. For example, transition from response to recovery in large scale or geographically dispersed events may be staged, with response and recovery operations being undertaken concurrently⁹.

4.2. Disaster Event Specific Recovery Planning

Disaster specific recovery plans are developed in partnership with stakeholders, through a planning group, and include:

- short, medium and long-term recovery priorities
- consideration of local capability
- restoration of key infrastructure and services, rebuilding and rehabilitation • metrics for tracking progress to support accountability
- consideration of funding arrangements
- integration across all functional recovery areas
- mechanisms to engage community members in their own recovery
- anticipated end of recovery activities and the expected transition to community activities and a new normal.

Templates for disaster specific recovery plans for state and local have been developed at a State level and the template is available at *Annexure 3 – Disaster Event Specific Recovery Planning Template*.

⁹ Queensland Recovery Plan, 2017



4.3. Impact and Needs Assessments

Immediately after an event there is a need to identify what the impact has been, and what needs to be done to ensure the safety of life and property and return the community to normal.

A post disaster survey and assessment can provide information regarding the degree of disruption experiences, as well as the services and needs required by individuals and communities affected by an event. This information can be used to set priorities and make decisions relating to response and the transition to recovery.

This includes providing services such as:


- The immediate provision of shelter, food, and clothing;
- The restoration of affected utilities and communications;
- Clearance of debris and other hazards resulting from an event.

There are two types of assessments that can be conducted concurrently:

- Impact assessments; and
- Needs assessments.

Impact assessments examine the ways in which the event has affected the community. The information gathered can include:

- The geographical extent of the area impacts;
- Human effects and casualties, including:
 - Dead, injured and missing;
 - Numbers of evacuees or displaced and where they have moved to.
- Damage including:
 - Details of the numbers of properties impacted and the type of structural damage including whether or not they are habitable;
 - Critical infrastructure and lifelines such as power, water, transport, and communications;
 - Impacts on agriculture and food supply chains;
 - Impacts to key economic resources such as businesses and industrial premises;
 - Details of key public buildings damaged or destroyed.
- Identification of secondary hazards that may pose a threat in the immediate future;
- Environmental health and sanitation threats;
- Availability of food supplies;
- The capacity of local government and emergency management structures to manage the local response and recovery;
- Government, community and other organisations operating in the area and their activities.



Needs assessments deal with the type, amount and priorities of assistance needed by an affected community after a disaster or emergency. Their purpose is to identify:

- Needs of the affected community to save and sustain life and reduce the risk of further damage and provide an indication of their urgency;
- Needs that can be met from within the affected community and those that can only be met with outside assistance;
- Specialised needs of the affected community for recovery, the resources available to meet those needs from within the community and the external assistance that may be needed.

4.4. Getting Resources and Information to the Community

4.4.1. Recovery Hubs¹⁰

Recovery hubs are established by the State Government support the relief and early recovery process of disaster affected individuals, households and communities by:


- providing direct provision of government and non-government information and services in one easy to access location
- accelerating the administration of government processes and services
- engaging recovery workers who understand the context of the disaster and the effects on individuals, households and communities.

The LDMG will work with the State Government and non-government organisations to ensure that relevant information and services are accessible at a Recovery Hub, where the need to establish one or more has been established.

Examples of assistance that may be available include:

- information and referral (e.g. welfare referrals, other local services, what assistance is available)
- disaster-specific advice, (e.g. safe clean up, managing health concerns; how to cope and insurance advice)
- psychological and emotional support (e.g. psychological first aid, personal support, counselling and mental health services)
- financial support (e.g. personal financial hardship assistance, financial counselling or Centrelink –income support)
- offers of assistance (e.g. referrals to material goods and donations)
- practical support services (e.g. access to advocacy, translation services)
- resources to assist vulnerable individuals and groups (e.g. young children and adolescents, domestic and family violence).

¹⁰ Queensland Recovery Plan, 2017



A Recovery Hub can take many forms (mobile or static) depending on the type and volume of needs, availability and size of premises, geographic characteristics and the scale of the impact.

4.4.2. Outreach¹¹

“Outreach”, means visiting disaster affected persons at their disaster affected residence and/or temporary accommodation to provide one or more of the below service responses:

- to deliver psychological first aid
- to proactively assess the need for personal hardship assistance and/or to contribute to a general community needs assessment
- to provide information and resource materials to affected people
- to provide face-to-face service for persons identified in a referral as ‘at risk’ or unable to attend a Recovery Hub for one reason or another to make referrals where required.

This service usually commences as soon as the affected area is accessible.

4.4.3. Community Recovery Referral and Information Centres¹²

Community Recovery Referral and Information Centres (CRRIC) may be established once the multi-agency Community Recovery Hubs have closed. The sole purpose of a CRRIC is to enable disaster affected community members to access recovery information, advice and referrals.

¹¹ Queensland Recovery Plan, 2017

¹² Queensland Recovery Plan, 2017

PART 5: RECOVERY FUNCTIONS

5.1. Human Social Recovery

Human-social recovery includes the coordinated process of supporting affected communities in the provision of:¹³

- access to timely information
- assistance to reconnect with families, friends and community networks
- enabling people to manage their own recovery through access to information and a range of services and practical assistance measures, including financial support for those individuals and households who are most vulnerable and do not have the means to finance their own recovery
- engagement and access to emotional, psychological and mental health support at individual, family and community levels (psychosocial support)
- assistance for people to maintain a sense of equilibrium in their life, come to terms with what has happened and move forward into a new and possibly changed reality.

5.1.1. Community Context

The ever-increasing numbers of new residents coming to reside in Ipswich are accommodated within a network of distinct communities. Each community has their own sense of character and role to play within the broader city context. Ipswich residents express their community pride through their enthusiasm for celebrating culture and actively contributing to the advancement of their city.

The Local Disaster Management Plan provides an overview of the community context including population and demographic data.

5.1.2. Vulnerable Populations

The City of Ipswich is home to a diverse and growing population. Due to the diversity of the City, the population includes several demographics with identified vulnerabilities. *Table 4 – Groups at Higher Risk of Vulnerability* outlines some demographic groups that should be considered.

Groups Potentially At Risk or Vulnerable
<ul style="list-style-type: none">• People who are aged (particularly the frail)• Children and youth• People with disabilities (mental and physical)• People who are economically disadvantaged and have limited resources to meet essential needs• People from culturally and linguistically diverse (CALD) backgrounds• Indigenous Australians• People who are socially isolated• People who are physically isolated• People who are seriously ill

¹³ Section 6.2.1 of the Prevention, Preparedness, Response and Recovery Disaster Management Guidelines, 2018



Groups Potentially At Risk or Vulnerable

- People who are dependent on technology-based life support systems
- Single parent families
- Workers at risk from machinery/equipment failure
- People with limited psychosocial coping capacity
- People who are homeless, at risk of homelessness, or inadequately accommodated
- People on holiday and travelling (particularly those in tent and caravan facilities)
- Visitors from overseas
- People living close to areas of hazard (e.g. floodplains, chemical processing plants, areas of potential landslips)
- People affected by the impact of a hazard (e.g. people who are trapped, people made homeless)
- Large families

Table 4 – Groups at Higher Risk of Vulnerability

An example of some of the different groups that may be considered to be more vulnerable to the impacts of a disaster are outlined in *Figure 7 – Vulnerable Population Statistics*.

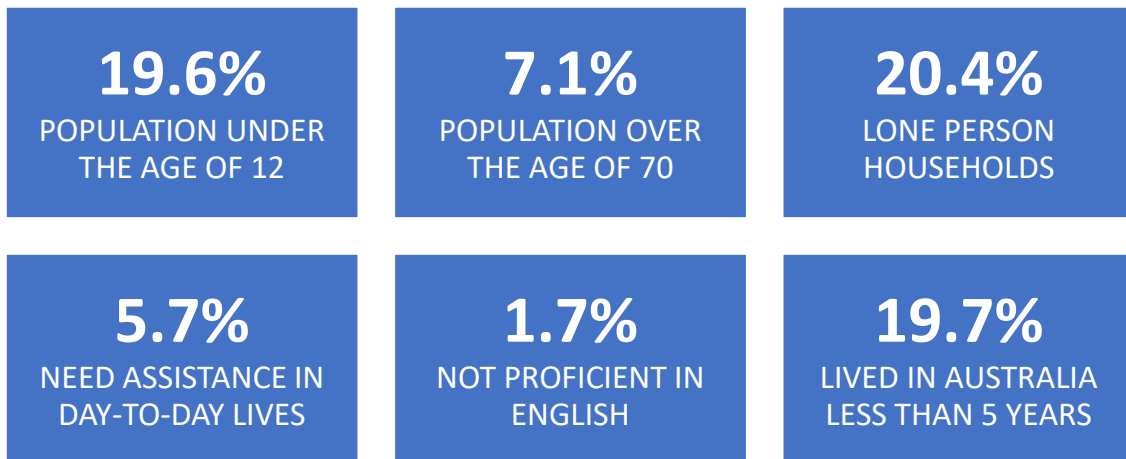


Figure 7 – Vulnerable Population Statistics¹⁴

5.1.3. Social Recovery Activities¹⁵

Individuals and communities have inherent strengths, assets and resources, which should be recognised, valued and used in all aspects of emergency management practice. Social recovery processes seek to support communities by building upon those strengths, and by viewing people as survivors in charge of their own lives, not as victims.

Table 5 – Social Recovery Activities: Myths and Assumptions versus Actual Needs provides an overview of possible recovery activities and services (with a focus on psychosocial needs, which include aspects of the built, natural and economic environments) and compares them with the myths and assumptions that are often made about what people need after a disaster.

¹⁴ Profile ID (2016), Accessed 4 May 2018 (1 & 2) <https://profile.id.com.au/ipswich/service-age-groups> (3) <https://profile.id.com.au/ipswich/overseas-arrivals> (4) <https://profile.id.com.au/ipswich/assistance> (5) <https://profile.id.com.au/ipswich/speaks-english> (6) <https://profile.id.com.au/ipswich/household-size>

¹⁵ Australian Disaster Resilience Handbook Collection, Community Recovery, 2018, pp22 - 24



Myths and Assumptions of Needs <i>(unsubstantiated)</i>	Actual Needs <i>Based on experience and evidence from previous emergencies, recovery services should address a range of needs of affected individuals and communities and continue on from relief services to:</i>	
<p>People need protecting from reality.</p> <p>Too much information is unhelpful.</p>	<p>Provide timely and accurate information.</p>	<ul style="list-style-type: none"> • Through a variety of community communication channels, which can include social media, broad media, newsletters, community and spiritual leaders, places where communities ordinarily congregate, sporting and community groups. • Information can be provided about: <ul style="list-style-type: none"> • The extent of impact of the emergency; • What is happening and being done by agencies; • Future disaster risk mitigation, such as cleaning up hazards, planning for mould and rot after floods, self-care techniques; • Potential health and sanitation issues; • Potential longer-term emerging issues and likely future effects and how to mitigate; • The relief and recovery activities and services that exist and how to access them, such as evacuation centres, recovery one stop shops and outreach services.
	<p>Reconnect people with their families, friends and community networks.</p>	<ul style="list-style-type: none"> • Through registering through Register.Find.Reunite; • By assisting with repatriation for interstate and international emergencies, and registration through outreach visits; • By minimising the duration of isolation experienced as a result of the emergency (timely reconnection of affected people to existing community networks); • By minimising dislocation of community members by assisting people to stay as close to their affected properties as possible; • By providing access to relevant local community services, as well as the new relief and recovery activities and services; • By providing choices through a coordinated service system and referral to appropriate services as required.
<p>Disaster-affected people need someone to ‘make it better’.</p> <p>Disaster-affected people cannot look after themselves.</p>	<p>Empower people to manage their own recovery and to access practical assistance.</p>	<ul style="list-style-type: none"> • By providing ongoing access to basic needs through local distribution of material aid or cash grants, water, food, clothing, personal requirements, requirements for pets, livestock; • By maintaining safety and ongoing access to emergency and transitional shelter; • Through assistance in interim and longer-term accommodation requirements; • Through ready access to recovery activities and services; • Through access to grants and financial assistance through cash programming, personal hardship grants, income support, emergency appeals; • Through employment programs, such as clean-up programs; • Through legal services, insurance, financial counselling, building advice, primary industry or business assistance.



Myths and Assumptions of Needs <i>(unsubstantiated)</i>	Actual Needs <i>Based on experience and evidence from previous emergencies, recovery services should address a range of needs of affected individuals and communities and continue on from relief services to:</i>	
<p>Counselling is required for disaster-affected people.</p> <p>All disaster-affected people have a need for specialised mental health services.</p>	<p>Provide engagement and emotional support at individual, family and community levels (psychosocial support).</p>	<ul style="list-style-type: none"> • Through empathetic listening and establishing what individuals want and need; • Through calm engagement (to lower anxiety); • Through openness, honesty, sensitivity; • Through non-judgmental assistance; • By developing greater understanding about human responses to emergencies and techniques for self and family care; • By recognising and acknowledging the impact on individuals and communities; • Through psychosocial support – group and community activities can include ceremonies, neighbourhood barbeques, school activities, community recovery planning forums, spiritual events, social sporting events, planning for remembrance activities, virtual forums: all these types of social engagement provide opportunities for people to tell their experiences, address the issues arising from the disaster, build a greater sense of future safety; they suit community needs and stages of healing; • Through special programs for young people.
<p>Affected people and communities need to go back to 'normal' quickly.</p> <p>Disaster-affected communities never recover.</p>	<p>Assist people to maintain a balance, come to terms with their reality and move forward into a new, changed reality.</p>	<ul style="list-style-type: none"> • Recovery services can encompass raising community awareness and promote tolerance, community education and community development initiatives that address a range of issues such as: • Preparedness and disaster risk reduction activities that assist in building community resilience towards future disasters and develop future protection actions; • Recognition that recovery is a long-term (years), complex and exhausting process for affected individuals, and that their world views may change in small or large ways; • Education and advice during the reconstruction phase regarding ways to improve resilience of buildings and infrastructure to withstand future disasters; • Health promotion activities; • Livelihoods programs that assist in re-establishing household income and/or developing new, more sustainable financial opportunities; • Adaptive change processes that support future socioeconomic opportunities.

Table 5 – Social Recovery Activities: Myths and Assumptions versus Actual Needs

5.1.4. Community Recovery Assistance

There are many options for assistance available to the community, from various government and non-government organisations. The names of these organisations, including links to useful information for use in recovery situations can be found by visiting My Community Directory located at <https://www.ipswich.qld.gov.au/community/community-directory>.



5.2. Economic Recovery

Economic recovery aims to:¹⁶

- address the impacts on key economic assets, employment issues and the capacity of local businesses to operate
- minimise the effects on individuals and businesses
- facilitate financial assistance, access to funds and loans and employer subsidies, and assist with contract arrangements
- facilitate links with job providers and employment agencies to source labour, re-establish supply chains and undertake joint marketing activities
- support small to medium enterprises in their recovery
- identify options for improvement or adjustment from current business operations
- align economic reconstruction priorities with infrastructure development programs and activities where possible.

5.2.1. Economic Context

The City of Ipswich is a connected community, full of ideas, energy and innovation. Leading the way means embracing new ways of working, new ways of learning and new ways of living.¹⁷

The strength of the Ipswich economy is based on businesses, investments and the relationships fostered with businesses. Employment statistics for Ipswich indicate that there are currently a large number of jobs within the Manufacturing, Retail, Trade, Health Care, and Social Assistance sectors. The Health Care, Social Assistance and Retail Trade sectors are forecast to provide future employment and growth opportunities.¹⁸

Advance Ipswich has established a number of strategies to help the City achieve the competitive advantages of the Ipswich economy to provide jobs for the growing population and prosperity for the city through business diversification, adapting and responding to technological advances and creating an attractive economic environment for business investment¹⁹.

Strategy 1	Strategy 2	Strategy 3
<ul style="list-style-type: none">•Build partnerships and develop programs to widely promote investment opportunities and support business development in the City	<ul style="list-style-type: none">•Provide a full spectrum of life-long learning opportunities, from early learning through to schooling, vocational training and tertiary education that aligns skills and education with emerging employment opportunities	<ul style="list-style-type: none">•Develop the Ipswich City Centre as the regional capital of the Western Corridor of SEQ and as an important regional employment centre.

¹⁶ Section 6.2.2 of the Prevention, Preparedness, Response and Recovery Disaster Management Guidelines, 2018

¹⁷ Ipswich City Council, *Office of Economic Development Brochure*
https://www.ipswich.qld.gov.au/_data/assets/pdf_file/0004/92209/OED-About-Us-Brochure.pdf

¹⁸ Ipswich City Council: *Annual Report 2015-2016*

¹⁹ Ipswich City Council, *Advance Ipswich*, p42



Strategy 4	Strategy 5	Strategy 6
<ul style="list-style-type: none"> Strengthen the local digital economy 	<ul style="list-style-type: none"> Support the growth and operation of RAAF Base Amberley and associated aerospace and defence supports industries. 	<ul style="list-style-type: none"> Diversify the local economy.

Figure 8 – Advance Ipswich Strengthening our Local Economy and Building Prosperity²⁰

Figure 9 – City of Ipswich Local Economy provides a snapshot of figures relating to employment within the LGA.



Figure 9 – City of Ipswich Local Economy²¹

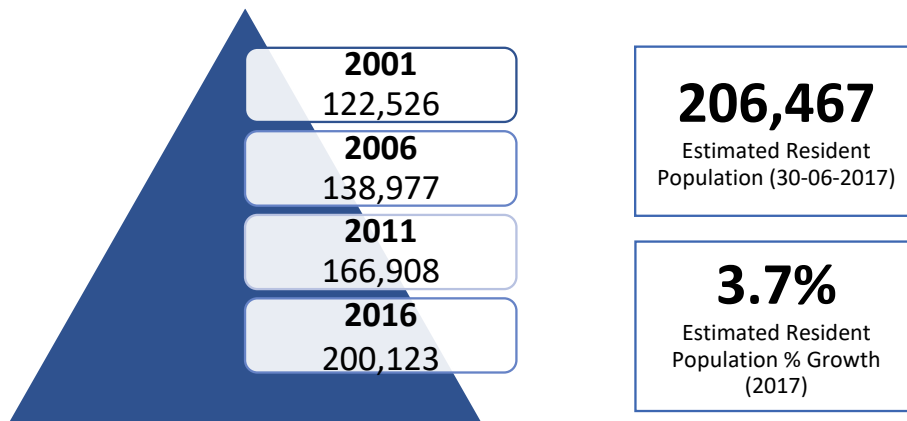


Figure 10 – Population Growth by Census Year²²

²⁰ Ipswich City Council, *Advance Ipswich*, pp42-44

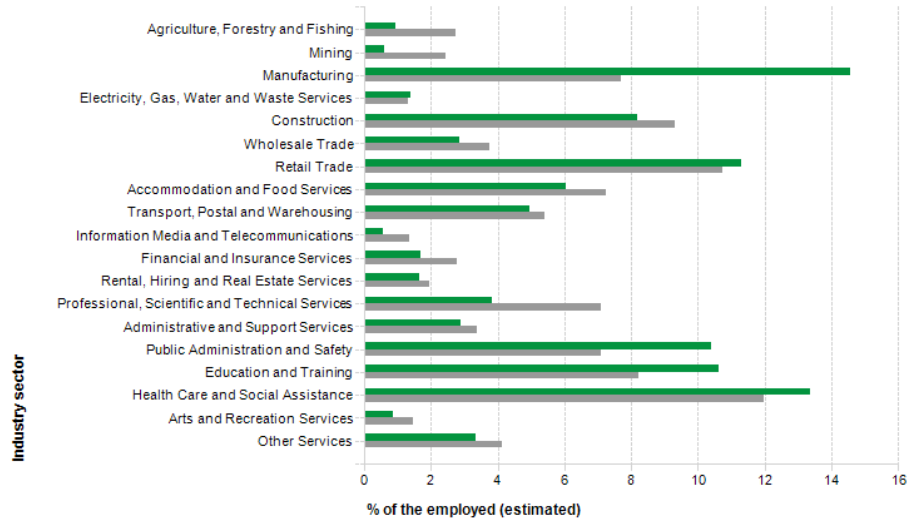
²¹ Economy ID (2016), Accessed 4 May 2018 (1&2) <https://economy.id.com.au/ipswich/gross-product> (3) <https://economy.id.com.au/ipswich/employment-by-industry> (4) <https://economy.id.com.au/ipswich/number-of-businesses-by-industry> (5) <https://economy.id.com.au/ipswich/employment-by-industry> (6) <https://economy.id.com.au/ipswich/labourforce-key-statistics>

²² Profile ID (2016), Accessed 4 May 2018, <https://profile.id.com.au/ipswich/population>



Employment (total) by industry 2015/16

■ City of Ipswich ■ Queensland



Source: National Institute of Economic and Industry Research (NIEIR) ©2016
 Compiled and presented in economy.id by .id the population experts



Figure 11 – Employment % (total) by Industry 2015-16²³

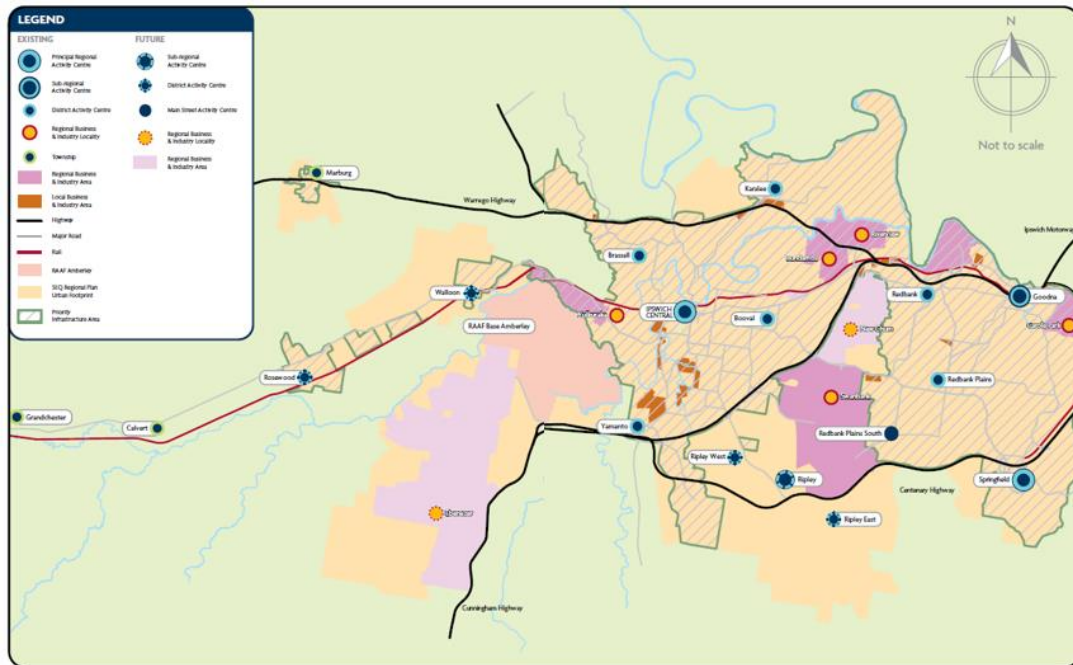


Figure 12 – Strategic Land Use Map²⁴

²³ Economy ID, Accessed 4 May 2018, <https://economy.id.com.au/ipswich/employment-by-industry>

²⁴ Ipswich City Council: *iGo City of Ipswich Transport Plan*

5.2.2. Economic Impacts Post-Event

The economic effects of emergencies and disasters can be devastating and widespread. When disasters strike, houses, businesses and community infrastructure may be damaged or destroyed, and people’s livelihoods may be temporarily and sometimes permanently disrupted. Physical damage is the most visible economic impact. However, the less visible impacts such as lost income, through disruption of trade, are just as significant and the consequences often last longer than the physical damage (for example, bankruptcy and business closure). The flow-on effects through a community can be pervasive and long term.²⁵

Table 6 – Impacts of Emergencies at the Household and Business/Industry Levels outlines some of the impacts that may be experienced by households and businesses following an event.

Household	Business / Industry
Loss of employment and income (loss of livelihood)	Loss of supply chain networks
Loss of household assets	Loss or damage to business assets
Increased costs due to short supplies of goods and services	Loss of employees due to business closure and migration of skilled staff
Instability or loss of social networks	Infrastructure damaged or devastated
Lack of childcare and school facilities	Damage to or loss of natural resources

Table 6 – Impacts of Emergencies at the Household and Business/Industry Levels²⁶

5.2.3. Measuring Economic Impacts

In order to understand the economic and financial impacts of a disaster on a community, we need to be able to measure the consequences quantitatively and/or qualitatively.²⁷ This process is referred to as an economic impact assessment.

Economic impact assessments attempt to quantify, in a common unit (dollars), all impacts (both costs and benefits) possible. Importantly, economic impact assessments apply not only to goods and services that are traditionally traded in the market place, but also to the value attributed to social and environmental assets.²⁸

5.2.4. Direct and Indirect Impacts²⁹

For recovery management purposes it is useful to evaluate the direct and indirect economic impacts of an event on a community.

Direct impacts result from the physical destruction (or damage to buildings, infrastructure, vehicles and crops, etc.) of direct contact with the event.

²⁵ Australian Disaster Resilience Handbook Collection, Community Recovery, 2018, p103

²⁶ Australian Disaster Resilience Handbook Collection, Community Recovery, 2018, p103

²⁷ Australian Disaster Resilience Handbook Collection, Community Recovery, 2018, p103

²⁸ Australian Disaster Resilience Handbook Collection, Community Recovery, 2018, p107

²⁹ Australian Disaster Resilience Handbook Collection, Community Recovery, 2018, pp 104 - 107



Indirect impacts are due to the consequences of the damage or destruction, but are not due to the direct impact.

Examples of direct and indirect economic impacts due to an event are shown below.

Sector/Area of Impact	Examples of Direct Economic Effects	Examples of Indirect Economic Effects
Residents and households	<ul style="list-style-type: none"> • Structural (roofs, walls etc.) • Contents (furniture, floor coverings etc.) • External (swimming pools, gardens etc.) • Death and injury. 	<ul style="list-style-type: none"> • Additional costs (alternative accommodation and transport, heating, drying-out costs, medical costs etc.)
Public Infrastructure, Community Facilities and Natural Environment	<ul style="list-style-type: none"> • Damage to or loss of roads, bridges, dams, sports grounds and facilities, schools, halls, parks, waterways, or bushland. 	<ul style="list-style-type: none"> • Transport (traffic delays, extra operating costs etc.) • Loss of computer-controlled systems. • Loss of other lifelines (electricity etc.)
Business Enterprises and Supply Networks	<ul style="list-style-type: none"> • Infrastructure damage or loss: structural damage to buildings such as shops, factories, plants, sheds, barns, warehouses, hotels etc. This includes damage to foundations, walls, floors, roofs, doors, in-built furniture, windows etc. • Asset damage or loss: farm equipment, food, records, product stock (finished manufactures products, works in progress and input materials), crops, pastures, livestock, motor vehicles, fences or irrigation infrastructure, contents damage to fixtures and fittings (carpets etc.), furniture, office equipment. • Virtual business interruption. 	<ul style="list-style-type: none"> • Impact on production (manufacturing, agriculture, services etc.) • Impact on income/trade/sales/value added (tourism operators, retail traders etc.) • Increased costs (freight, inputs, agistment etc.) • Loss of supply chain networks. • Increased work (construction industry). • Opportunity to renew struggling business.
Government	<ul style="list-style-type: none"> • Loss of ratepayer base: for example, if rates are waived as a gesture of goodwill or if properties have lost their homes and/or businesses. • In high-profile disasters state and federal governments may outlay greater funding. Where this is for building substantial infrastructure, the impacts for local/state/federal governments include project management and maintenance costs. 	<ul style="list-style-type: none"> • Costs of implementation of royal commission recommendations. • Increased demand on government services (education, health etc.) • Loss of business continuity (state government may provide case management involving significant resources to be redeployed immediately for long periods). • Loss of tax revenue. • Cost of engaging extra resources and/or backfilling positions.

Table 7 – Examples of Direct and Indirect Economic Effects by Sector³⁰

5.2.5. Intangible Impacts³¹

The economic impacts of an event are typically divided into tangible and intangible impacts. Tangible impacts are generally easier than intangible impacts to assign a dollar value to because

³⁰ Australian Disaster Resilience Handbook Collection, Community Recovery, 2018, pp 104 - 107

³¹ Australian Disaster Resilience Handbook Collection, Community Recovery, 2018, pp 106 - 107

they are traded in the market place. With tangible impacts the practitioner must choose to justify whether to record the replacement or depreciated value.

Tangible and Intangible Impacts:

- Tangible impacts – the loss of things that have a monetary (replacement) value (for example, buildings, livestock, infrastructure);
- Intangible impacts – the loss of things that cannot be bought and sold (for example, lives and injuries, environment, memorabilia).

Evidence suggests that intangible costs are substantial. Although most cannot be quantified, in many cases they have an economic impact that should not be ignored. Examples of intangible economic impacts are show below.

Sector / Area of Impact	Intangible Economic Impact Examples
Residents and Households	<ul style="list-style-type: none"> Loss of personal memorabilia. Inconvenience and disruption, especially to schooling and social life. Stress-induced ill health and mortality. Pets – loss, injury, stress. Quality of life. Dislocation.
Public Infrastructure, community Infrastructure and Natural Environment	<ul style="list-style-type: none"> Health impacts (deferral of procedures, reduced quality of care etc.) Death and injury, spread of diseases. Loss of items of cultural significance. Environmental impacts. Heritage loses. Lack of access to education, health, defence, art galleries and museums etc.
Business Enterprises and Supply Networks	<ul style="list-style-type: none"> Loss of confidence (investment and individual decision making). Loss of future contracts. Los of, and inability to attract, experienced and skilled staff. Loss of access to transient (backpacker) casual labour.
Government	<ul style="list-style-type: none"> Managing perceptions and expectations, including public confidence in the recovery.

Table 8 – Examples of Intangible Economic Effects³²

³² Australian Disaster Resilience Handbook Collection, Community Recovery, 2018, pp 104 - 107

5.3. Environmental Recovery

Environmental recovery aims to:³³

- identify and monitor actual and potential impacts on the environment from natural and human-made disasters
- coordinate and prioritise the rehabilitation of impacted (or at risk) land, aquatic and marine ecosystems, wildlife, natural resources, cultural heritage values and built heritage places to maximise efficiency of resource allocation
- identify, advocate and pursue cross-sector recovery solutions that will achieve multiple objectives, including reducing future impacts on the environment, through the use of natural safeguards and environmentally resilient design
- coordinate and prioritise the rehabilitation of riparian and coastal land
- monitor potential water quality issues
- monitor and advise on other public health matters such as food safety, communicable diseases and mosquito control
- ensure the recovery actions for mining and other high risk industries are environmentally safe
- support the timely repair of water and sewage infrastructure.

5.3.1. Environmental Context

The City of Ipswich has one of the most diverse ranges of natural vegetation types in south east Queensland including rainforest, dry vine forest, open forests, woodlands, heathlands, wetlands and grasslands. Living within these environments are in excess of 100 known significant flora and fauna species.

Ipswich City Council through its Advance Ipswich plan articulates a goal that important areas of native habitat and vegetation are conserved, the city's important waterways are protected and their water quality enhances and the city responds appropriately to climate change and uses resources prudently.

The strategies to support this goal is:

- Secure and protect important areas of native habitat and vegetation
- Develop and implement an integrated approach to the planning and management of nature conservation matters in partnership with the community, private land owners and government agencies
- Protect and manage waterways to achieve enhanced environmental, ecological and water quality outcomes.
- Enhance urban greening.
- Use resources efficiently and sustainably.
- Improve environmental awareness, education and compliance.

³³ Section 6.2.3 of the Prevention, Preparedness, Response and Recovery Disaster Management Guidelines, 2018

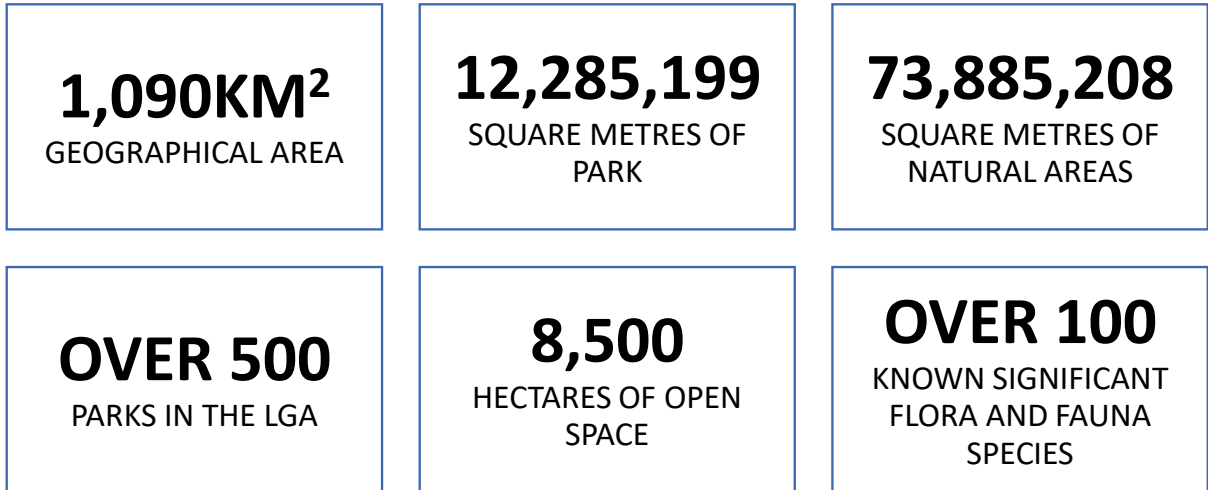


Figure 13 – Natural Environment Figures³⁴

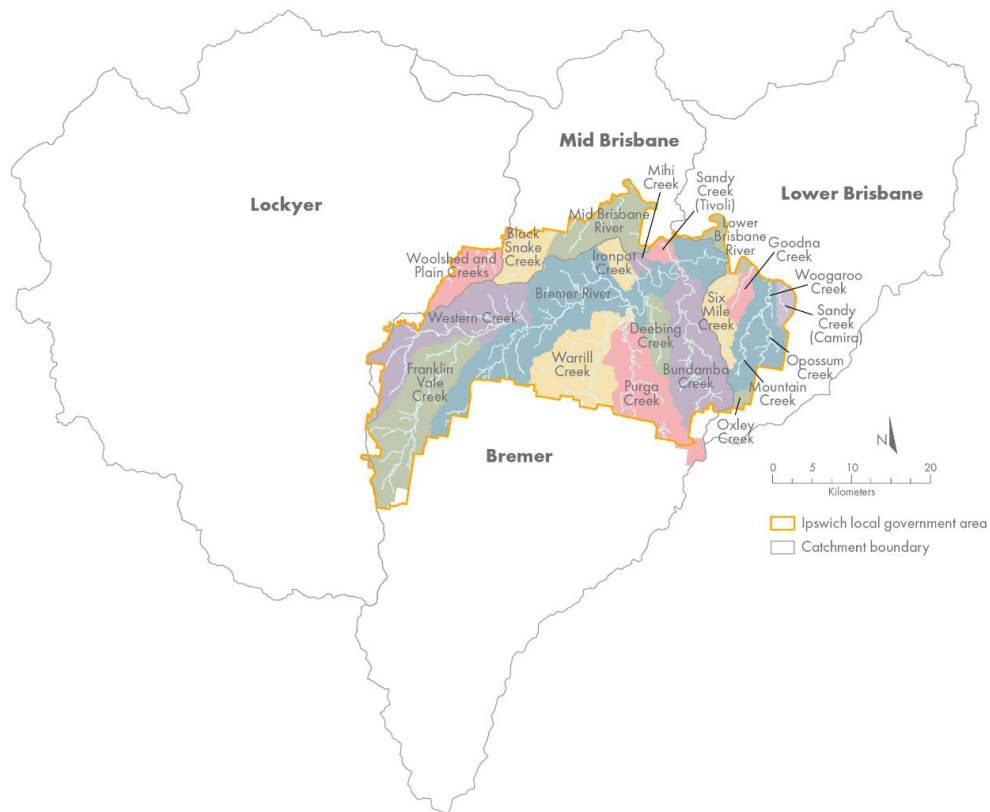


Figure 14 – Catchments for the City of Ipswich and Surrounds

³⁴ Ipswich City Council, Accessed 4 May 2018 (1) https://www.ipswich.qld.gov.au/about_ipswich (2 & 3) https://www.ipswich.qld.gov.au/_data/assets/pdf_file/0009/89550/ICC-Annual-Report-2016-2017.pdf p.3 (4, 5 & 6) https://www.ipswich.qld.gov.au/about_ipswich/parks_reserves_precincts

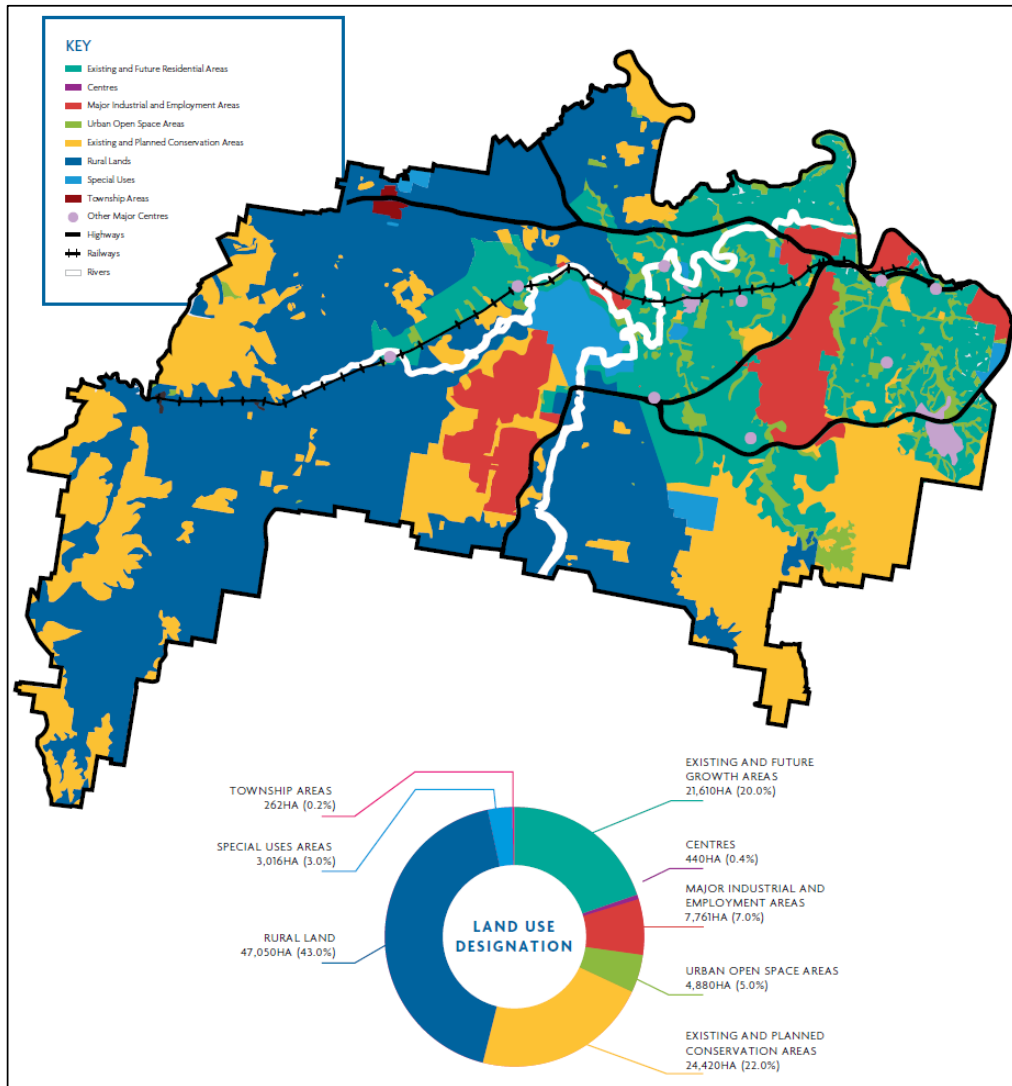


Figure 15 – Land Use Designation³⁵

5.3.2. Environmental Impacts Post-Event

Emergencies and disasters can have serious effects on the natural environment and on the ability of communities to function in the immediate and longer term. Impacts from emergencies or disaster can be immediate and/or have long-term effects; for example, the interruption of breeding cycles during a disaster can have long-term effects on population numbers. Responses therefore need to consider immediate and longer-term actions required to recover the natural environment.

³⁵ City of Ipswich: *Advance Ipswich*

Response and recovery actions have the potential to assist in the recovery of the natural environment. A healthy and functioning environment is critical because it underpins the economy and society.

The effects of disaster on the natural environment may be in terms of the following ecosystem components:

- Air
- Water
- Land and soil (and organic matter)
- Plants and animals

Some examples of potential risks that may need to be considered in terms of the above components are listed in *Table 9 – Example Impacts of Disaster on the Natural Environment*. The impacts of a disaster will be specific to the impacted community and so the natural environment needs to be carefully considered in the given context.

Component of the Natural Environment	Aspects of this component relevant to Disaster Management	Some examples of effects
Air	<ul style="list-style-type: none"> • Particulates • Chemicals • Biological aerosols • Radiation 	<p>Immediate: asthma cases.</p> <p>Longer term: deposition of particulates residues on assets.</p> <p>Dust from wind erosion – denuded landscape (fire, drought).</p> <p>Heatwave deaths.</p> <p>Deaths from bushfire smoke affecting air quality.</p>
Water: Surface water; Ground water; Marine; Artificial storages.	<p><u>Quality:</u></p> <ul style="list-style-type: none"> • Biological contamination; • Particulate contamination; • Chemical contamination; • Dissolved oxygen levels/ quality • Radiation <p><u>Quantity:</u></p> <ul style="list-style-type: none"> • Changed river flows • Changed groundwater storage • Flow regimes <p>Marine:</p> <ul style="list-style-type: none"> • Biological contamination / introduced pests 	<p>Loss of capacity (drinking water etc.).</p> <p>Behaviour changes as it moves through the environment.</p> <p>Quality and quantity supporting:</p> <ul style="list-style-type: none"> • Production systems; • Recreational water; • Ecosystems.
Land and soil: Landscapes Rocks Soil Geo-heritage	<p>Loss and movement:</p> <ul style="list-style-type: none"> • Erosion • Deposition. <p><u>Quality and condition:</u></p> <ul style="list-style-type: none"> • Contamination; • Changes to soil – acidification / 	<p>Signification erosion after a fire or flood, earthquake or cyclone can change the course of waterways, reduce the productivity of farmland and create erosion risks for infrastructure both up and downstream.</p> <p>All of this will have impacts on flora and fauna.</p>



Component of the Natural Environment	Aspects of this component relevant to Disaster Management	Some examples of effects
	<ul style="list-style-type: none"> structure change / compaction; • Damage to landforms and landscapes. 	Potential impacts also include natural, cultural and geo-heritage sites.
Plants and animals	<ul style="list-style-type: none"> • Loss of species and populations (biodiversity), especially threatened species • Change in abundance of species • Predators • Competitors • Changes in recruitment (whether seedlings can survive) • Loss of habitat • Disease • Pollination 	<p>Increased interaction between wildlife and humans due to animals being disorientated, displaced (vehicle collisions, kangaroos/rabbits grazing in gardens, noisy birds concentrated in civic areas, foxes coming into yards and killing domestic animals / stirring up pets).</p> <p>Introduced predators concentrate on the native species and livestock remaining in the landscape (advantaged by no harbour for wildlife), can wipe out threatened species, impact on farm production/survival.</p> <p>Rabbits compete with native wildlife for scarce food resources, impact on regeneration of plants, impact on pasture/crop production.</p> <p>Weeds are first to establish on bare ground and can outcompete native plants and agriculture/pasture plants.</p> <p>Birds may move out of the area, reducing pollination activity and/or allowing insect activity to get out of balance.</p> <p>Sea-grass disturbance or removal from sediment deposition/chemical outfall can change fish population dynamics (fishing industries affected), increase beach erosion and deposit seaweed on beaches.</p>

Table 9 – Example Impacts of Disaster on the Natural Environment³⁶

5.3.3. Recovery in the Natural Environment

The impact of a disaster on the natural environment can have a profound impact on community recovery, including economic functioning. Recovery management is increasingly expected to take account of sustainability concerns in policy and activities.

The natural environment is a complex area where ill-considered treatments may cause further damage. The consequences of acting or not acting need to be considered. After a disaster, there may be action that is unavoidable in order to make repairs to infrastructure. Prior to implementation of any recovery treatments, a recovery plan that considers environmental risk management needs to be prepared.

When working to provide programs and activities to recover the natural environment, some key questions can inform a course of action. Figure 16 – Key Questions to assist with Determination of Recovery Actions for the Natural Environment illustrates these questions.

³⁶ Australian Disaster Resilience Handbook Collection, Community Recovery, 2018, p.116

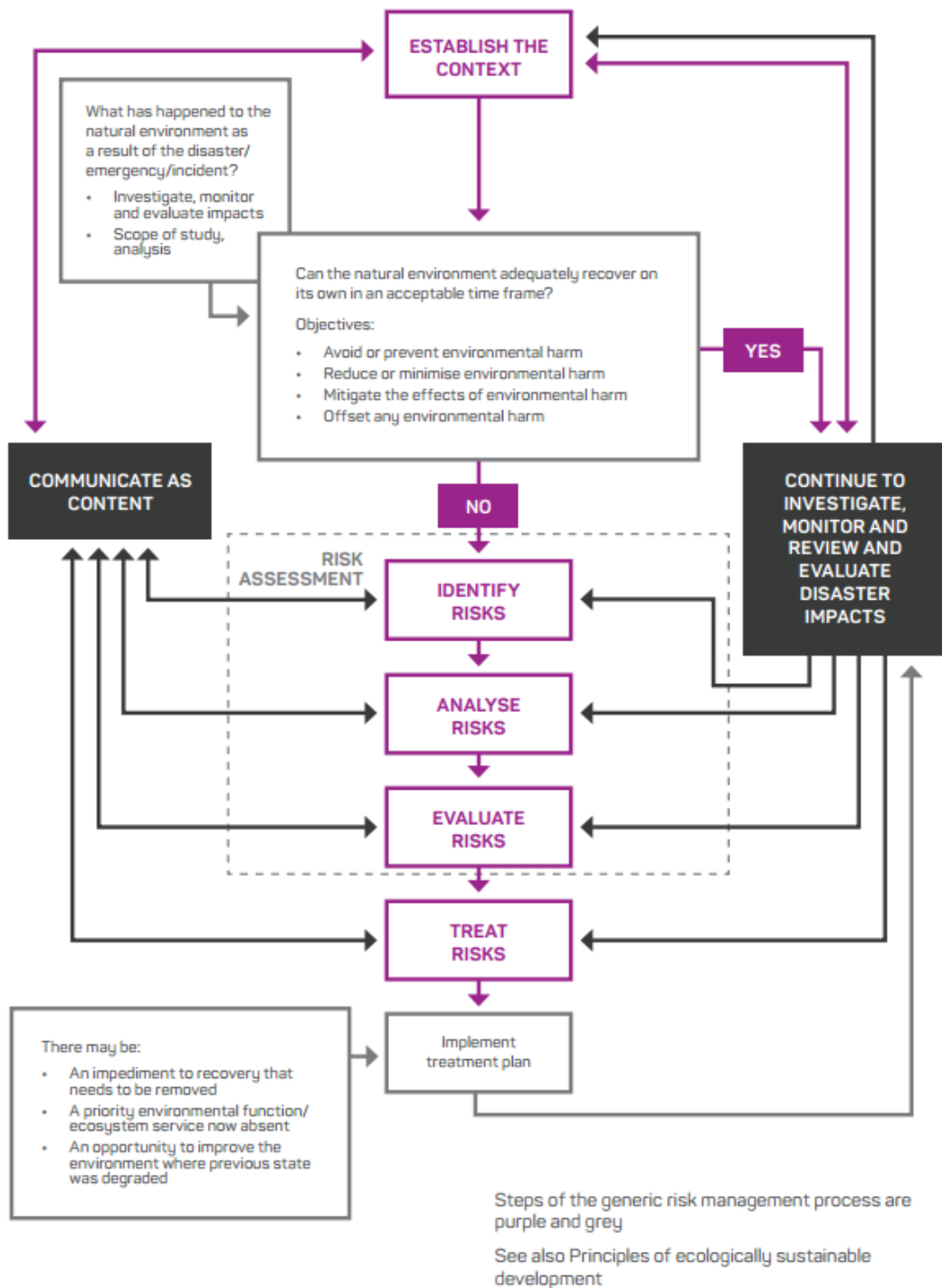


Figure 16 – Key Questions to assist with Determination of Recovery Actions for the Natural Environment³⁷

³⁷ Australian Disaster Resilience Handbook Collection, Community Recovery, 2018, p.122



5.4. Building Recovery

Building recovery aims to³⁸:

- assess damage to buildings across the impacted areas to gather information about the extent and severity of damage as well as insurance losses to assist recovery efforts and monitor recovery progress
- facilitate immediate, short term and longer term temporary accommodation solutions for displaced community members and the incoming government response and recovery workforce
- assess damage and coordinate the demolition, securing, clean-up, repair and restoration of government owned buildings and facilities 6 Recovery Queensland Prevention, Preparedness, Response and Recovery Disaster Management Guideline 75
- provide information and advice to impacted homeowners and community members regarding how to clean-up, move back in and organise the assessment, repair or rebuilding of their homes and properties
- provide advice and support about timely safety inspections and reconnection of utilities by providers
- provide advice and coordinate the clean-up and disposal of hazardous building material and debris from public areas
- facilitate longer term temporary accommodation solutions for community members who have been permanently displaced and do not have the means to re-establish their own housing needs without significant assistance
- provide information and advice to the building industry supply chain (contractors, subcontractors and suppliers) regarding rebuilding materials, skills and trades, codes required for repair, rectification and rebuilding work.

5.4.1. Building Context

Ipswich strives to plan and develop a vibrant and sustainable city that accommodates the needs of a diverse and growing population³⁹. To support achieving this goal, the following strategies exist:

- Develop a compact, sustainable, mixed use urban form that supports community and economic development.
- Provide adequate land and infrastructure to support community development and economic activity.
- Conserve the city's heritage.

An overview of the existing buildings and infrastructure within the City of Ipswich is shown in **Figure 17 – Building and Infrastructure Figures**.

³⁸ Section 6.2.4 of the Prevention, Preparedness, Response and Recovery Disaster Management Guidelines, 2018

³⁹ Ipswich City Council, *Advance Ipswich*

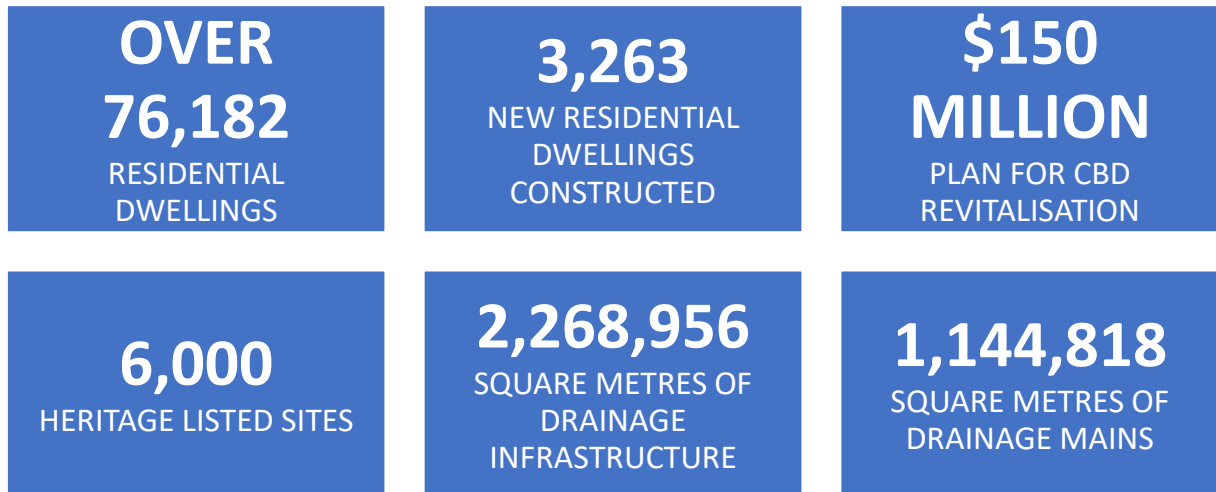


Figure 17 – Building and Infrastructure Figures⁴⁰

5.4.2. Key Recovery Aspects – Built Environment⁴¹

There are several key aspects of recovery in the built environment that should be considered.

5.4.2.1. Make Safe

Each step in recovery is complex. Unless carefully managed, this complexity can compromise safety and security. Throughout recovery, therefore, it is important to maintain normal safety measures and procedures (for example, electrical isolation procedures, ensuring that only appropriately qualified people perform work).

5.4.2.2. Provide Essential Services On-Site

Recovery operations make extra demands on the already impaired infrastructure. Some aspects that must be considered as support for recovery workers include:

- Utilities and staging areas for receiving deliveries and assembling components;
- Accommodation;
- Power for tools, computers etc.;
- Essential services (water, food, shelter, latrines, sanitation);
- Psychological first aid (support) where the environment may lead to exposure to stressful situations;
- Medical first aid;
- Fuel for vehicles and fixed plant;
- Communications.

Energy supplies, such as electricity, gas and liquid fuels, will be restored to the distribution systems in a systematic manner, taking into account pre-determined priorities and agreements. Some households may be self-sufficient and have a reduced reliance on external supplies.

⁴⁰ Ipswich City Council, Accessed 4 May 2018 (1) Planning and Development Annual Report Card 2017 (2 - 6) https://www.ipswich.qld.gov.au/_data/assets/pdf_file/0009/89550/ICC-Annual-Report-2016-2017.pdf

⁴¹ Australian Disaster Resilience Handbook Collection, Community Recovery, 2018, pp 98 - 101



5.4.2.3. Clean Up

A significant volume of damaged material must be removed prior to the construction of new facilities. In many cases this operation must be performed to restore amenity to the community.

Clean up operations may include:

- **Removal of debris and other matter;**
- **Handling, safety and regulation;**
- **Site-specific issues.**

5.4.2.4. Collecting Information for Damage/Needs Assessment

Collection of information from the community is required at a number of times during recovery and by many agencies and companies participating in the recovery. This information is used to monitor the demands on the services needed in the recovery. However, the community can be inundated by requests for information and become resentful of it.

5.4.2.5. Reconstruction

Reconstruction activities carry complications beyond regular building and development activities. Impacted communities, regulations and systems in flux, and relationships between organisations all have a bearing on how the reconstruction takes place. Planning for and implementation and monitoring of reconstruction are affected by the environment in which they take place.

5.4.2.6. Monitor and Review

The needs of a recovering community change all the time. Monitoring is necessary to ensure that the recovery effort is still addressing their needs.



5.5. Roads and Transport Recovery

Roads and Transport recovery aims to:⁴²

- restore transport networks or identify alternative networks
- engage directly with industry and the community on the recovery and reconstruction phases following a disaster.

5.5.1. Roads and Transport Context

Under the Local Government Act, Ipswich City Council has control over all roads in the local government area, with the exception of State-controlled roads and public thoroughfare easements.⁴³



The Department of Transport and Main Roads (DTMR) is responsible for all State-controlled roads.

Ipswich City Council's goal is to provide a transport system is safe and reliable and provides for the sustainable movement of people and goods for all travel modes.⁴⁴ This strategic theme features in the Advance Ipswich plan and manifests as in the iGo City of Ipswich Transport Plan.

Ipswich City Council is responsible for a large Council-owned road network incorporating infrastructure for public transport, private vehicles, and pedestrian access across the City. Some key figures around road infrastructure in Ipswich are shown in Figure 18 – Council-Owned Road Infrastructure.

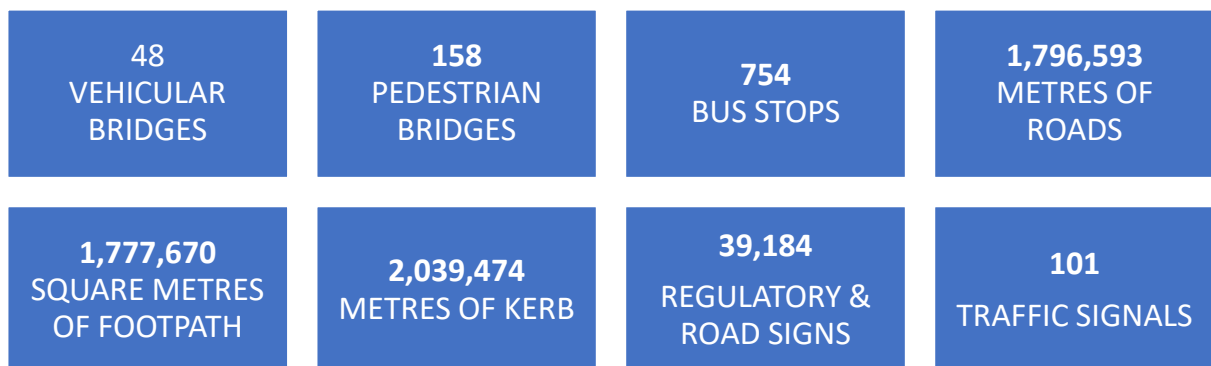


Figure 18 – Council-Owned Road Infrastructure⁴⁵

⁴² Section 6.2.5 of the Prevention, Preparedness, Response and Recovery Disaster Management Guidelines, 2018

⁴³ Queensland Government: *Local Government Act 2009 (Current as at 1 March 2017)*

⁴⁴ Ipswich City Council, *iGo Transport Plan*, https://www.ipswich.qld.gov.au/about_council/corporate_publications/igo

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⁴⁵ Ipswich City Council, Accessed 4 May 2018 (1) Planning and Development Annual Report Card 2017 (2 - 6)
https://www.ipswich.qld.gov.au/data/assets/pdf_file/0009/89550/ICC-Annual-Report-2016-2017.pdf

6.2. Annexure 2 – Local Recovery Group Example Structure⁴⁶

The below represents an example of the structure that the City of Ipswich Local Recovery Group may take, including suggestions for different agencies and organisations that may assist with different aspects of recovery.

City of Ipswich Local Disaster Management Group				
LOCAL RECOVERY GROUP				
	Chairperson	Local Recovery Coordinator	Administrative Support	Local Recovery Group Membership
Composition	Elected representative of the City of Ipswich	As nominated	Provided from the relevant Council Lead Department	Determined by the City of Ipswich LDMG at the time.

City of Ipswich Local Recovery Group					
SUB COMMITTEES					
Function					
Ipswich City Council Lead Department	Arts, Social Development and Community Engagement Department	Economic Development and Marketing Department	Works Parks and Recreation Department	Works Parks and Recreation Department	Infrastructure Services Department
State & Federal Government	Department of Education and Training DEEDI Queensland Health QPS DERM Centrelink	Department of Premier and Cabinet DCCSDS LGAQ Queensland Treasury DTMR QPS QRA Tourism Queensland DERM	DTMR DLGP DCCSDS SEQWater QPS QFES Department of Sustainability, Environment, Water, Population and Communities GBRMPA	DLGP DPC DCCSDS DEEDI LGAQ DERM QPS QRA DOTARS	DLGP DPC DCCSDS DEEDI LGAQ DERM QPS QRA DOTARS
Potential Non-Government / Business Members	ADRA Australian Red Cross Lifeline Salvation Army St Vincent de Paul	Insurance Council of Australia Insurance companies Chamber of commerce	Regional Natural Resource Management bodies Environment and conservation organisations	Insurance Council of Queensland Utility owners / operators Private infrastructure	Queensland Building Services Authority Insurance Council of Queensland Utility owners /

⁴⁶ Queensland Government: *Queensland Recovery Guidelines*



	<p>Local community and welfare groups RSPCA</p>	<p>Primary producer groups Industry representatives Tourism operators</p>	<p>Wildlife and animal protection organisations Traditional owners River Improvement Trusts Rural and primary producers Extractive industries Water and waste service providers Commercial and tourism Research and tertiary organisations Environmental and technical advisors Chemical and hazardous substance advisors</p>	<p>owners Transport operators Energen Telstra QUU</p>	<p>operators Private infrastructure owners Transport operators Energen Telstra QUU</p>
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6.3. Annexure 3 – Disaster Event Specific Recovery Planning Template

1. Cover Page
2. Message from the Mayor/LDMG Chair or District Disaster Coordinator/District Recovery Coordinator
3. Table of Contents
4. Section One – Introduction
 - a. Aim –*State the aim of the recovery plan.*
 - b. Scope *State the scope of the recovery plan:*
 - i. Timing of plan
 - ii. Audience
 - iii. Exclusions
 - iv. Acknowledge that the recovery plan is dynamic and can be updated as required.
 - c. Disaster background – *Provide a brief account of the development of the disaster. Where relevant include meteorological information. Extent of known damage Provide details of the damage and disruption to communities, businesses, environment and infrastructure.*
 - d. Impacted regions – *List the areas activated for Natural Disaster Relief and Recovery Arrangements/impacted by the disaster.*
5. Section Two – Recovery
 - a. Governance Framework – *Include information on governance arrangements to deliver and coordinate recovery operations through the plan, including key positions, recovery groups established and the relationship with other recovery groups at different levels within the state.*
 - b. Reporting – *Document that recovery progress of key recovery tasks will be monitored against key metrics through regular recovery status reporting. Indicate the frequency of reporting and mechanism to release reports to the public and other disaster management groups.*
 - c. Resourcing Advise – *Possible sources of funding to deliver recovery activities.*
 - d. Concept of operations – *Advise the broad timings for recovery operations.*
 - e. Assistance to communities – *It may be appropriate to advise of business as usual and extraordinary assistance that may be provided to support individuals, families and communities in their psychosocial recovery.*



6. Annexures

- a. *Annexure A – Key Tasks: Identify key tasks necessary to achieve successful recovery outcomes in the areas impacted by the disaster. A table can be used to document:*
 - i. *Task*
 - ii. *Description*
 - iii. *Lead agency*
 - iv. *Key milestones and outcomes*
 - v. *Estimated completion date*
- b. *Annexure B – Key Metrics: Identify key metrics agreed by the recovery group/s. A table can be used to document:*
 - i. *Task*
 - ii. *Metric*
 - iii. *Measure*
 - iv. *Description*
- c. *Annexure C – List of Abbreviations List all abbreviations evident in the recovery plan.*



6.4. Annexure 4 – Community Recovery Checklists

The Australian Disaster Resilience Institute, through its Handbook Collection provides a Community Recovery Checklist that is considered best practice. This checklist is the basis for commencing recovery operations.

Australian Disaster resilience Institute states:

This supporting document provides a range of community recovery checklists corresponding to sections within the Community Recovery Handbook. The checklists address a range of recovery aspects including relief and recovery roles, evaluation, outreach and consideration for the built, natural and social environments.

<https://knowledge.aidr.org.au/media/5456/toolkit-community-recovery-checklists.pdf>