

# **STORMWATER DISPOSAL**

### SURFACE WATER AND WATER FROM STRUCTURES ON YOUR PROPERTY

The following information is provided to help residents be aware of (and proactive about) stormwater drainage systems and surface water requirements or procedures on their property. If all residents are fully prepared ahead of major rain events, it will make us, as a region, better equipped to cope.

#### **Council's Stormwater System**

Council's stormwater system has been designed to accept water from surrounding hillslopes, private properties, roads and parkland, and ultimately discharge it to the ocean. The system includes roads, kerbing, stormwater pits and pipes, open natural channels, concrete lined drains, headwalls, culverts, detention basins (often parks also perform this function) and wetlands.

#### **Property owner's responsibility**

It is the property owner's responsibility to ensure that their stormwater system is correctly installed via a legal stormwater connection, to the stormwater system. To achieve this stormwater must be directed to specified, defined and agreed Lawful Points of Discharge.

#### Lawful points of discharge include:

- Where lots drain to the road frontage, it is required that the roof water is piped to the kerb and channel fronting your property. For this solution a kerb adapter must be used; or
- Lots that do not drain toward a road must be directed to a pit at the low point of the lot and piped to a Council controlled drainage easement or reserve.

#### **Overland flow**

Overland surface water flow between private properties usually occurs when the natural contours of the land are sloping from one lot to the next. In Cairns overland flows between properties are a common occurrence in older areas where Council development requirements did not cover this issue.

An upstream property owner cannot be held liable merely because surface water flows naturally from his / her land on to the lower land of a neighbour. However, if the flow has been intensified, by directing, channelizing or piping it, it then becomes the responsibility of the property owner who has made the change.

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In the case of natural flows it is the responsibility of a downstream property owner to manage and protect the lawfully constructed buildings on their property. This can be achieved by installing private inter-allotment drainage which is then directed to a lawful point of discharge, such as the kerb and channel at the front of the property or to a drainage easement. Flows are not permitted to be unnaturally concentrated and directed into neighbouring properties.

#### **Roof water**

Roof water pipes are connected to a building's gutters and will carry the property's water to the lawful point of discharge. Typically, this will be the kerb and channel in the road at the front of the property, alternately it can be directed to a pit on site and piped to a lawful point of discharge.

All roof water infrastructure and tank overflow which is located on Council's verge/footpath, such as underground stormwater pipes which connect from the property line to Council's kerb and channel, remain the property of the homeowner who is responsible for the maintenance up to and including, the connection point (i.e. kerb adaptors and surrounding concrete kerb). Refer to examples of kerb connections that Council will and will not accept attached to this fact sheet.

Flow from roof water pipes cannot be directed in a way that causes water to pool and become stagnant. Building applications are issued with a





decision notice and/or approved plan which outlines what the builder / owner / developer must do for stormwater drainage on the property (i.e. connect to kerb, install inter-allotment drainage etc.)

#### **Easements**

A drainage easement is an arrangement where the property owner must allow Council to use a portion of their property for conveying water. In older areas of Cairns it was common for developers to use easements rather than construct dedicated drainage.

Easements are legal agreements and the owner of the property must abide by the conditions of the agreement. This commonly involves a restriction from building within the easement and a requirement to keep the easement free from anything that will block the flow of water.

#### **Localised flooding**

Local flooding occurs for a variety of reasons in Cairns. It can occur when:

- Flow paths, pipes or inlets are blocked. Property owners may be liable for damages if any fill, structure or fence on your property blocks or concentrates natural flows and increases the flood levels or frequency to a neighbour's property. Dumping grass and tree clippings into drains (including drainage easements) may also cause blockages during heavy rain.
- Natural topography does not allow the area to drain. Cairns City is very flat and prone to flooding in areas. There are some areas that will flood when a high tide and heavy rainfall occur at the same time. In this case the height of the tide prevents the drains from emptying.
- In heavy events the full width of the road has been designed to act as part of the drainage network. In these events the road corridor can be submerged for short periods of time until the piped system can accommodate the flows.

#### **Ground water**

Ground water is the responsibility of individual property owners and should be controlled by the installation of appropriate private drainage. Where sloping blocks have been excavated to obtain a flat yard or building site, seepage drains should be constructed to redirect water to a stormwater drainage system. Residents should liaise with neighbours to address such issues. If possible, drainage easements should be created to direct water to an existing Council stormwater system.

#### **Buildings currently under construction**

Complaints about buildings under construction that are subject to a current building approval should, in the first instance, be referred to the building certifier. The details for the building certifier are available by calling Council's Customer Service Centre on the phone number provided below.

The individual builder remains responsible for all stormwater installations until the building agreement is finalised or has lapsed. In the event of a complaint, the building certifier has enforcement powers and must take appropriate action under relevant legislation.

#### **Disputes between neighbours**

Council only has powers at the planning phase and does not have any legal ability to get involved in the circumstances where fences, walls, swimming pools, landscaping, garden beds, buildings, structures and the like which have already been erected and are interfering with the path of stormwater.

Problems with overland stormwater flow between neighbouring properties are generally a civil matter to be resolved between the respective owners. Council has limited powers to intervene.

Landowners are encouraged to talk to their neighbours about the problem and to seek a mutually suitable solution. If this is not possible without a third party, the services of a mediator may also be sought through the Queensland Civil and Administrative Tribunal (www.qcat.qld.gov.au).

Finally, if one or both parties feel that the situation cannot be resolved through mediation, and that a property has suffered or been exposed to potential damage, legal advice about the feasibility of taking civil action against the party creating the problem can be sought.

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1300 69 22 47

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#### DEPARTMENT OF JUSTICE

Street address:Postal address:State Law BuildingGPO Box 14950 Ann StreetBRISBANE QLD 4001BRISBANE QLD 4000Phone 13 QGOV (13 74 68)Email mailbox@justice.qld.gov.auWebsite https://www.justice.qld.gov.au/

## Key points to remember for installing/maintaining stormwater pipes & kerb connections

Correctly installing and maintaining stormwater connections is not only a property owner's legal responsibility but is key in ensuring the protection and safety of their own, and surrounding, property, personnel and infrastructure.

Meeting the installation criteria ensures that the stormwater pipes and connections will perform as desired, operating at the levels required while working in with surrounding infrastructure. Properly maintaining the stormwater pipes and connections ensures that it will operate to the correct level of performance for its entire design life.

Some key points to remember when installing/maintaining stormwater pipes & kerb connections include:

- Pipes are to be located a minimum of 100mm below ground level 1 metre back from kerb
- Ensure pipe joins are properly sealed to prevent root intrusion
- Install a kerb adaptor when connecting stormwater to kerb & channel
- Repair kerb with concrete where no kerb adaptor is used
- Ensure that pipe and connection are located at the approved legal discharge point
- Stormwater is not to connect to the sewer
- Pipe condition to be maintained and kept to satisfactory level (ie. Broken pipes are the property owner's responsibility to repair)

 Ensure stormwater pipes and connections do not interfere with or damage existing services or infrastructure

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• Pipes to have minimum grade of 0.5%

Refer to Standard Drawing S1035 (attached) for general layout for pipe to kerb and connection.

#### Checklist

- Underground services and infrastructure have been located. Dial Before you dig is recommended (1100.com.au)
- Council requirements for stormwater kerb & channel connections and viewed the standard drawings
- Stormwater pipe has 100mm of cover to the ground surface 1 metre back from the back of the kerb

#### **Further information**

For further information, please contact Cairns Regional Council's Customer Service Centre on **1300 69 22 47.** 

Note: Document updated August 2021





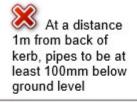
Do use a concrete saw to cut the kerb and use the appropriate kerb adaptor to connect to the kerb





Do ensure all pipe joins are properly sealed to prevent root intrusion

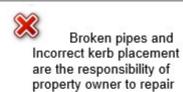
**FACT SHEET** 















Multiple connections are allowed but kerb adaptors must be used





Incorrect disposal to footpath and kerb. Damage to kerb and footpath damage pose risks to pedestrians





No kerb adaptor and risk of pipe damage and no kerb repair.





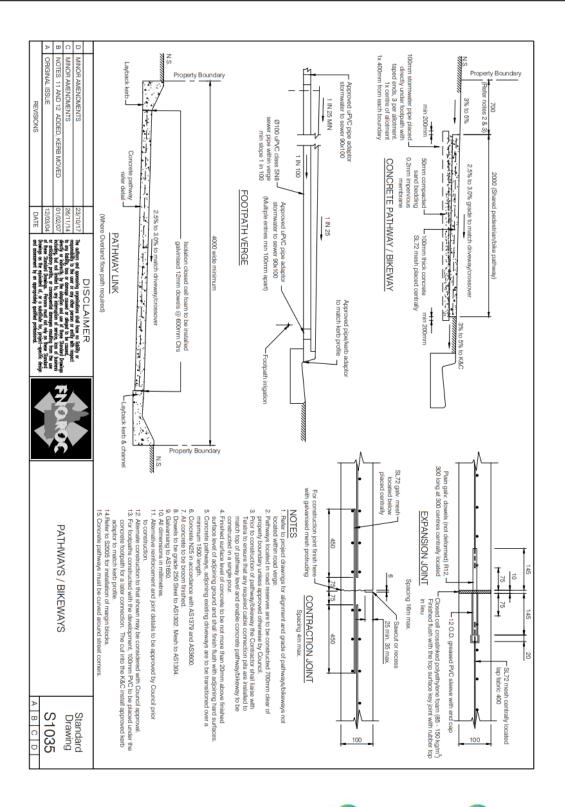
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# STANDARD DRAWING S1035 – GENERAL LAYOUT FOR STORMWATER PIPE & CONNECTION UNDER FOOTPATH

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