
STORMWATER MANAGEMENT PROCEDURE FOR NEW DEVELOPMENT

(OPERATIONAL PROCEDURE)

1. PURPOSE

This Procedure:

- Provides a framework for council to condition and manage stormwater in new developments, within the context of the Tasmanian Planning Scheme.
- Defines the approach and measures adopted by council to ensure that stormwater runoff generated by new developments is of an acceptable quality, does not exacerbate flooding, can be accommodated by the council stormwater system, and will not adversely impact the future capacity of the system.

2. BACKGROUND

The Tasmanian Planning Scheme - Clarence (TPSC) does not contain specific provisions requiring development to connect to the council stormwater system nor does it include provisions to manage changes to stormwater quality and stormwater quantity arising from development.

In contrast, the Interim Planning Schemes for Southern Councils included a Stormwater Management Code, which was used to assess impacts on the council stormwater system through the assessments of applications for planning permits and to attach conditions to planning permits to manage stormwater impacts. There is no equivalent code in the TPSC.

The TPSC includes Clause 6.11.2, which is a broad head of power to allow conditions to be applied to planning permits regarding erosion and stormwater volume and quality controls. No additional guidance is provided in the TPSC on what these controls are or how changes in stormwater behaviour resulting from new development are to be assessed or conditioned.

Tasmanian local government practitioners have developed the Tasmanian Stormwater Standards for New Developments to provide guidance around these controls and achieve a consistent state-wide approach to managing stormwater under the Tasmanian Planning Scheme, and to help improve stormwater management while allowing for sustainable

development. This document is currently in draft format.

When the draft Tasmanian Stormwater Standards for New Developments document is finalised, it is intended this Procedure be amended and operational with the Tasmanian Stormwater Standards for New Developments. Until such time, the purpose of this Procedure is to specify the levels of service in relation to stormwater management for new developments.

The *Urban Drainage Act 2013* provides council with the power to regulate impacts on the council stormwater system through Section 14(1) which requires the General Manager's consent to connect to or interfere with a public stormwater system. All changes to stormwater behaviour resulting from development have an impact on the council stormwater system and therefore interfere with the operation of the system.

This Procedure provides a framework for council to:

- Ensure that buildings, works, subdivisions and stormwater drainage systems generate stormwater of a quality and quantity that enables protection of natural assets, infrastructure, and properties.
- Ensure pollutant types and/or loadings are managed appropriately to protect natural values, infrastructure, and properties.
- Manage inundation and flood risk to new developments and existing urban areas.
- Ensure surface flow paths convey floodwaters within suitable velocity/depth limits and do not pose a risk to human life or properties.
- Fulfil the requirements of the relevant policies, strategies, and Acts in relation to stormwater management.
- Provide developers and designers with clarity for meeting permit requirements and contributing to best practice stormwater management.
- Ensure public stormwater systems can be managed and maintained appropriately, without causing unnecessary burden to the wider community.

3. SCOPE

This Procedure has been prepared to ensure stormwater management and the protection of the council stormwater system is appropriately considered and applied to new developments.

This Procedure does not apply to existing development.

4. DEFINITIONS

The following definitions apply to this Procedure:

Annual Exceedance Probability (AEP)	The chance of a flood of a given size, or larger, occurring in any one year, usually expressed as a percentage.
Council	Means the Clarence City Council.
Council Stormwater System	Has the same meaning as a public stormwater system under the <i>Urban Drainage Act 2013</i> .
Major Stormwater System	The part of the overall drainage system that controls stormwater flows greater than those controlled by the minor drainage system. This system usually includes overland flow paths, rivulets, creeks etc.
Minor Stormwater System	The minor drainage system is usually a pipeline with sufficient capacity to contain the nuisance flows. These pipelines prevent stormwater damage to properties and also limit the frequency and quantity of surface flows to an agreed level of service.
Suitably Qualified Person	A professional engineer currently practising with relevant CPEng or RPEng or NER or RPEQ accreditation, or a person who in respect to the type of work to be undertaken can adequately demonstrate relevant academic qualification, suitable professional competency, and an appropriate level of professional indemnity and public liability insurance.

5. RELATED DOCUMENTS

The legislation and documents listed below form the framework to give effect to this Procedure:

LEGISLATIVE (ACTS, REGULATIONS AND STANDARDS)

- Australian Rainfall and Runoff (www.arr.org.au)
- Australian Runoff Quality
- Australian Standard AS/NZS3500.3:2015 Plumbing and Drainage
- *Building Act 2016*
- *Land Use Planning and Approvals Act 1993*
- *Local Government (Highways) Act 1982*
- Local Highways Standard Requirements By-Lay No 2. Of 2014
- Plumbing Regulations 2016
- Regional Land Use Strategies
- *Roads and Jetties Act 1935*
- State Policy on Water Quality Management 1997
- Tasmanian Planning Scheme
- Tasmanian State Stormwater Strategy 2010
- Tasmanian Stormwater Standards for New Developments (draft format)
- *Urban Drainage Act 2013*

COUNCIL POLICY, PLANS, PROCEDURES AND GUIDELINES

- Council Strategic Plan 2021 - 2031
- Council Asset Management Plans

- Council Risk Management Policy
- Council Stormwater System Management Plan 2019

6. RESPONSIBILITIES

Council, as planning authority, is responsible for assessing and determining applications for planning permits in accordance with the requirements of the Tasmanian Planning Scheme and the *Land Use Planning and Approvals Act 1993* and for recognising the State Policy on Water Quality Management 1997.

Council is also responsible for managing the council stormwater system and protecting those stormwater assets in accordance with the requirements of the *Urban Drainage Act 2013*.

MANAGERS AND SUPERVISORS

- General Manager's consent under Section 14 of the *Urban Drainage Act 2013* has been delegated to relevant council officers as per the applicable legislation.

WORKERS

Workers are required to:

- Familiarise themselves with and comply with this Procedure.
- Raise any issues in relation to this Procedure to their Manager or Supervisor.

7. PROCEDURE

COMPLIANCE WITH INDUSTRY STANDARDS

Stormwater design in new developments is to be in accordance with the current versions of the industry standard documents Australian Rainfall and Runoff (Engineers Australia, 2019), Australian Runoff Quality, and the draft and finalised Tasmanian Stormwater Standards for New Developments.

STORMWATER SYSTEM DESIGN REQUIREMENTS

- The major stormwater drainage system in new developments shall be designed for the safe conveyance of the 1% AEP storm event with an allowance for climate change. Existing waterways are to be maintained and enhanced where possible.
- The allowance for climate change shall be in accordance with the Australian Rainfall and Runoff Data Hub, scenario RCP 8.5, for the year 2090.
- The minor stormwater drainage system in new developments shall be designed in accordance with the following levels of service:
 - 2% AEP for light industrial and general industrial zones.
 - 5% AEP for all other zones.

STORMWATER QUALITY MANAGEMENT REQUIREMENTS

- The following development is exempt from the Stormwater Quality Management Requirements:
 - A single dwelling on a single lot that will be connected to the existing public stormwater system; or
 - New impervious area is less than 500m²; or
 - A subdivision creating new lots greater than 5,000m² in area, and with new roads and footpaths less than 500m² in area; or
 - A subdivision which is solely for the purpose of creating road reserve, public open space, public infrastructure, littoral or riparian reserve or minor boundary adjustments.
- All other new developments must incorporate water sensitive urban design principles for the treatment and disposal of stormwater to meet the Water Quality Treatment Target set by council as follows:

Target Level	Water Quality Treatment Target
1	Site specific requirements at discretion of council (for example sites with, or draining to, areas with environmental values, potentially contaminating activities etc).
2	<p>90% reduction in the average annual load of litter/gross pollutants based on typical urban stormwater concentrations; AND</p> <p>80% reduction in the average annual load of total suspended solids (TSS) based on typical urban stormwater TSS concentrations; AND</p> <p>45% reduction in the average annual load of total phosphorus (TP) based on typical urban stormwater TP concentrations; AND</p> <p>45% reduction in the average annual load of total nitrogen (TN) based on typical urban stormwater TN concentrations.</p>

- Stormwater quality treatment may be offset via a cost contribution, at the discretion of council. Cost contributions are to be assessed by council on a case-by-case basis depending on the amount of treatment required for the development, and the location, until additional guidance is provided in Tasmanian Stormwater Standards for New Developments.
- If a staged development occurs within a 5-year period, treatment will be required for the total development prior to proceeding with more than 50% of the total development.
- For staged developments, the developer shall maintain all the Water Sensitive Urban Design (WSUD) treatment elements until the completion and sealing of the survey diagram for the final stage of the subdivision. Prior to council taking over all the WSUD treatment elements, the developer is required to demonstrate to council by providing evidence or documentation, to the satisfaction of council’s Group Manager Engineering Services, that all the WSUD treatment elements are in a working condition as designed. The developer is also required to replace all consumable parts, such as filters and cartridges, no more than one month before council taking over these WSUD treatment elements.

STORMWATER DISPOSAL METHOD REQUIREMENTS

- Stormwater must be disposed of by gravity to the council stormwater system where possible.
- Where not possible, stormwater may be disposed of on-site with soakage devices (having regard to the planning zoning of the site, site suitability, the system design and water sensitive urban design principles), collected for re-use, or disposed of to the public stormwater infrastructure via a pump system. A report by a Suitably Qualified Person must be provided demonstrating that the site is suitable for on-site soakage, re-use or pumping, and that the proposed system is designed, and will be maintained and managed, to minimise the risk of failure to the satisfaction of the Group Manager Engineering Services.
- Where stormwater is discharged directly to a watercourse, rivulet or creek the impacts of increased water velocity or volume must be mitigated by adequate capacity energy dissipation to the satisfaction of the Group Manager Engineering Services.

STORMWATER QUANTITY MANAGEMENT REQUIREMENTS

- The following development is exempt from the Stormwater Quantity Management Requirements:
 - Development that does not result in any increase in the impervious area for site, and no change of use of the site; or
 - Development that discharges stormwater to the downstream parts of the council stormwater system, which have been demonstrated to the satisfaction of the Group Manager Engineering Services, to have sufficient capacity to cater for the fully developed catchment (including the development).
- Any increase in stormwater runoff must be accommodated within:
 - An existing public stormwater system to the satisfaction of council; or
 - Public infrastructure upgraded by the developer as part of the development construction to the satisfaction of council; or

- On-site detention designed to offset the increase in stormwater runoff caused by the development, to the satisfaction of the Group Manager Engineering Services.
- For developments requiring Onsite Stormwater Detention (OSD), where the additional impervious surface proposed is less than 250m², the following standard minimum OSD capacities can be used. Development that results in an additional impervious area of greater than 250m² must have OSD designed by a suitably qualified person and approved by the Group Manager Engineering Services:

Additional Impervious Surface Proposed	On Site Detention Required
40 to 65m ²	A minimum of 1.8m ³ (1,800 litres)
65m ² to 100m ²	2.5m ³ (2,500 litres)
100m ² to 150m ²	3.0m ³ (3,000 litres)
150m ² to 200m ²	3.5m ³ (3,500 litres)
200m ² to 250m ²	A minimum of 4.0m ³ (4,000 litres)
Over 250m ²	Development specific design required

- The maintenance of all OSD systems is the sole responsibility of the property owner or body corporate.

8. IMPLEMENTATION AND COMMUNICATION

The Group Manager Engineers Services is responsible for the implementation of this Procedure.

This Procedure will be communicated via:

- Council’s website
- Internal circulation to staff

9. REPORTING

No additional reporting is required.

10. ADMINISTRATIVE ARRANGEMENTS

TABLE OF AMENDMENTS

No.	Date	Brief Details

APPROVAL

GM APPROVAL DATE	31 August 2021
REVIEW	Every 3 years <u>and</u> following any changes in relevant legislation or standards.
RESPONSIBLE POSITION	Group Manager Engineering Services
ECM REFERENCE	