

POLICY REGISTER

POLICY TITLE: STORMWATER DRAINAGE SYSTEMS

FILE REFERENCE NO. : S8/2, R8/237 DATE ADOPTED : March 29, 1995

MINUTE NO. : 36912

EXPIRY DATE :

OBJECTIVES

- 1. To minimise damage to the City roads and infrastructure and improve road safety and limit inconvenience and delays to motorists and others during heavy storms and flooding.
- 2. To minimise property damage, inconvenience and disruption, due to storm events and thereby limit any legal liability for any damage caused.
- 3. To provide a methodology for the design and installation of drainage structure.
- 4. To minimise stormwater pollution in the City's drainage system.

POLICY STATEMENT

- 1. A Major Minor Drainage System shall be implemented by the methods adopted in the Broken Hill City Council Standard Drainage Code.
- 2. The combined Major and Minor Drainage System shall be able to contain the discharge from a storm of 100 year frequency. The Major drainage system will utilise existing streams, drainage reserves and easements, public roads and parks. Where directed onto private property, protection against damage shall be provided and consent of the owner obtained preferably by acquisition of a drainage easement.
- 3. The storm frequency for the design of the Major system may be lowered if the magnitude of surcharge from the Major system is liable to cause only minimum property damage such as minor erosion. The design frequency is not to be less than 20 years in this situation.
- 4. The Minor drainage systems shall be the basic drainage network, consisting of gutters, underground culverts and smaller open channels. The Minor system will contain the discharge from storms of five (5) years frequency. A frequency of not less than one (1) year may be used in special situations such as parks, where there is no probability of public inconvenience through surcharge. The Council may require a higher design storm frequency for design of the Minor system where surcharge will cause severe disruption to public convenience eg. Major shopping areas and transport routes. The selection of the design frequency in these circumstances will depend on:-
 - (a) Magnitude of surcharge
 - (b) Benefit cost analysis of disruptions incurred

The design frequency in this situation would be a maximum of 20 years.

- 5. All surcharge from the Minor systems will be directed into the Major drainage system. The flow path of the surcharge shall be shown on the drainage plans as well as the estimated magnitude.
- 6. The use of methods to retain the flow of stormwater or increase permeability are to be encouraged, this includes storage by using channels with high roughness values (eg. grass surfaces).
- 7. Structures on main roads must be designed in accordance with the R.T.A. Standards. Consideration will be given to a reduction of design storm frequencies for structures on Local Roads where traffic volumes are low and the risk of damage by scour and upstream ponding is minimal.

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- 8. Where proposed development is liable to increase the magnitude of runoff for a particular storm frequency then the downstream system must be analysed and measures taken to prevent any increased damage.
- 9. An environmental impact statement shall be submitted with all designs involving open channels in the Major system.
- 10. All drainage designs will be examined to ensure that safety, environment and maintenance factors are considered. No particular requirements have been specified because of the individual nature of most drainage works. Action in accordance with the guidelines detailed in Australian Rainfall and Runoff will be satisfactory.
- 11. This Policy is not intended to inhibit innovative and new design methods. Any such designs will be considered in accordance with the provisions of the Drainage Policy.
- 12. Stormwater pollution must, within budgeting constraints, be maintained at an acceptable level. Point source pollution is to be discouraged.