

WHAT IS ON-SITE DETENTION?

On-site detention (OSD) is a temporary water storage facility created either as a depression in a paved/landscaped area, an underground tank or a combination of both. This facility detains a volume of water for a short duration during intense storms whilst slowly releasing a portion of this water through a small stormwater outlet.

OSD forms part of an overall site drainage system including gutters, pipes, pits, grates, kerbs, walls, graded surfaces and overland flow paths which assist in directing stormwater runoff to the OSD facility. The design of such drainage systems **needs to be prepared by a suitably qualified civil engineer in accordance with the Wollongong DCP 2009.**

Developers and designers are encouraged to use principles of good aesthetics and landscaping. Long term viability and maintenance of the OSD facility must also be considered.

WHY HAVE ON SITE DETENTION?

The aim of providing on-site detention for new developments or redevelopments is to delay and reduce the stormwater flows (or discharge) from the site to predevelopment levels, thus reducing flood risks caused by stormwater runoff. OSD has been introduced to ensure that no increase in stormwater flows occur from such developments within the local Council area.

DO I NEED ON-SITE STORMWATER DETENTION FOR MY DEVELOPMENT?

OSD requirements generally apply to all types of development and redevelopment. A list of developments to which OSD applies is shown below –

- Subdivisions
- Single dwellings, extensions, additions and improvements
- All commercial, industrial and special use developments and buildings
- Townhouses, villas, home units, duplexes
- Dual occupancies
- Tennis courts;
- Roads, car parks and other sealed areas
- Public buildings

A list of developments to which OSD does not apply is shown below –

- Development that increases the impervious surface area of a site by less than 100 m². No more than one such application for exclusion shall be permitted on a particular site.
- Development that lies within the 5 year ARI (ie, 1 in 20 year) flood extents, irrespective of its location in the catchment. (ARI is the Average recurrence interval)
- Subdivisions of existing dual occupancies where no increase in the impervious surface area is proposed.
- Boundary adjustments and consolidations of allotments where no additional lots are created.
- Change of use where no increase in the impervious surface area is proposed.
- Building additions or internal alterations where they lie within the footprint (plan area) of the existing dwelling.
- New developments in subdivisions where OSD has already been provided for the entire subdivision.
- Buildings in rural/non urban areas,
- Developments that occur within the Concessional OSD Zones as shown on the plans found within the relevant chapter of Wollongong DCP 2009.

Note: The designer shall ensure that runoff from these developments can be conveyed through intervening properties to 'receiving waters' (ie, established drainage network) without adverse impact on flooding of the downstream properties. OSD will be required for these developments where this condition has not been satisfied.

Written justification must be provided with any development application where the development is not proposing OSD.

ALTERNATIVE SYSTEMS TO OSD

Where environmental conditions allow, innovative designs or alternative methods of reducing runoff from development sites are encouraged.

Innovative designs should consider how OSD systems can be incorporated into the existing topography and enhance the existing floodplain environment. Natural systems can be replicated and used to provide additional storage over a site, promoting infiltration where possible. Where development is occurring near watercourses, riparian vegetation should be retained and enhanced.

Alternative methods of controlling peak discharges from a site include –

- On-site retention (eg in rainwater tanks, gutter systems, underground permeable storage, aquifer).
- Stormwater reuse (eg for cleaning/irrigation purposes).
- Semi-permeable/porous surfaces.

The proposed use of alternative systems shall be accompanied by a detailed dynamic storage analysis of how the required control of discharge at all points within the catchment will be achieved.

INFORMATION TO BE SUBMITTED WITH YOUR APPLICATION (where on-site detention is required)

For Development Application (DA) lodgement –

- Stormwater Concept Plan (SCP) including an OSD system.
- The permissible site discharge (PSD l/sec) and the site storage requirement (SSR m³) values for the subject site.
- Refer to the relevant chapter in Wollongong DCP 2009 for additional requirements.

For Construction Certificate (CC) or combined Development Application; and Construction Certificate (DA/CC) lodgement –

- Detailed stormwater plan including an OSD system.
- The permissible site discharge (PSD l/sec) and the site storage requirement (SSR m³) values for the subject site.
- Construction plans and details of the OSD system.
- Maintenance schedule of the OSD system.
- Plan of the OSD identification plaque.
- Refer to the relevant chapter in Wollongong DCP 2009 for additional requirements.

Prior to the issue of the final Occupation Certificate (OC) or Subdivisional Certificate (SC) –

- Work-as-executed plans.
- Certificate of Hydraulic Compliance for the OSD system.
- Structural Certificate for components of the OSD system (where applicable).
- Registered documents including the Positive Covenant and Restriction on Use.
- Registered Final plan (linen plan).

Further information on the provision of on-site detention for new developments can be sourced from the Wollongong DCP 2009, which is available on Council's website www.wollongong.nsw.gov.au.

Disclaimers

This Fact Sheet was believed to be correct at the date of its publication.

This Fact Sheet is for general information purposes only and should not be relied upon for legal advice.