

# VC154 Integrated Water Management – Breakdown of Changes

Prepared by InSite Water and Organica Engineering



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## SUMMARY OF MAIN CHANGES:

- SPPF update to clause 19.03-3S (Integrated Water Management) amalgamating, editing and rewording several other SPPF clauses.
- VPP new clause 53.18 (Stormwater Management in Urban Development) serving as a General Requirement and Performance Standard to a list of development types however a detailed list of exemptions have been provided (see below).

## LEGEND:

- XXXXX New Text
- XXXXX New Text which was Previously Stated as a part of Old Text (related to below)
- XXXXX Previous Text Integrated as Part of New Text
- XXXXX Previous Text Not Directly Integrated/Reflected in New Text (essentially deleted)
- XXXXX Comments/Other

## SPPF

Change	Previous	New
1	<p>Deleting Clause 14.02-1S (Catchment management and planning) to delete the policy guidelines and insert new policy documents.</p> <p><b>14.02 Water</b>  <b>14.02-1S Catchment planning and management (31/7/18 VC148)</b></p> <p><b>Policy guidelines</b>                      Consider as relevant:</p> <ul style="list-style-type: none"> <li>• Any regional catchment strategy approved under the Catchment and Land Protection Act 1994 and plan or strategy including any regional river health and wetland strategy.</li> <li>• Any applicable implementation strategy approved by a catchment management authority or waterway management authority.</li> <li>• Any special area or management plan under the Heritage Rivers Act 1992.</li> <li>• Any action statement or management plan prepared under the Flora and Fauna Guarantee Act 1988.</li> <li>• Any special area plan approved under the Catchment and Land Protection Act 1994.</li> </ul> <p><b>Policy documents</b>                      Consider as relevant:</p> <ul style="list-style-type: none"> <li>• State Environment Protection Policy (Waters of Victoria)</li> <li>• Murray River Regional Environmental Plan No 2 (REP2) of New South Wales</li> <li>• Planning permit applications in open, potable water supply catchment areas (Department of Sustainability and Environment, 2012)</li> </ul>	<p><b>14.02 Water</b>  <b>14.02-1S Catchment planning and management (26/10/18 VC154)</b></p> <p><b>Policy guidelines</b>  <b>[Removed]</b></p> <p><b>Policy documents</b>                      Consider as relevant:</p> <ul style="list-style-type: none"> <li>• Any regional catchment strategy and related plans approved under the Catchment and Land Protection Act 1994</li> <li>• State Environment Protection Policy (Waters of Victoria)</li> <li>• Murray River Regional Environmental Plan No 2 (REP2) of New South Wales</li> <li>• Planning permit applications in open, potable water supply catchment</li> </ul>

Change	Previous	New	
		<p>areas (Department of Sustainability and Environment, 2012)</p> <ul style="list-style-type: none"> <li>Any applicable implementation strategy approved by a catchment management authority or waterway management authority</li> <li>Any special area or management plan under the Heritage Rivers Act 1992</li> <li>Any action statement or management plan prepared under the Flora and Fauna Guarantee Act 1988</li> <li>Urban Stormwater - Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999)</li> </ul>	
2	<p>Deleting Clause 14.02-3S (Water conservation) and integrating these policy statements into a new Clause 19.03-3S (Integrated water management).</p>	<p><b>14.02 Water</b>  <b>14.02-3S Water Conservation (31/7/18 VC148)</b></p> <p><b>Objective</b>  To ensure that water resources are managed in a sustainable way.</p> <p><b>Strategies</b>  Reduce pressure on Victoria’s drinking water supplies by using alternative water sources such as rainwater tanks, stormwater and recycled water by governments, developers and households.</p> <p>Ensure the development of new urban areas and green spaces takes advantage of any opportunities for effluent recycling.</p> <p>Protect areas with potential to recycle water for forestry, agriculture or other uses that can use treated effluent of an appropriate quality.</p>	<p><b>19.03 Development Infrastructure</b>  <b>19.03-3S Integrated Water Management (26/10/18 VC154)</b></p> <p><b>Objective</b>  To sustainably manage water supply, water resources, wastewater, drainage and stormwater through an integrated water management approach.</p> <p><b>Strategies</b>  Plan and coordinate integrated water management, bringing together stormwater, wastewater, drainage, water supply, water treatment and re-use, to:</p> <ul style="list-style-type: none"> <li>Take into account the catchment context.</li> <li>Protect downstream environments, waterways and bays.</li> <li>Manage and use potable water efficiently.</li> <li>Reduce pressure on Victoria's drinking water supplies.</li> <li>Minimise drainage, water or wastewater infrastructure and operational costs.</li> <li>Minimise flood risks.</li> <li>Provide urban environments that are more resilient to the effects of climate change.</li> </ul> <p>Integrate water into the landscape to facilitate cooling, local habitat improvements and provision of attractive and enjoyable spaces for community use.</p> <p>Facilitate use of alternative water sources such as rainwater, stormwater, recycled water and run-off from irrigated farmland.</p>
3	<p>Amending Clause 19.03-3S (Water supply, sewerage and drainage) to update and broaden water, drainage and stormwater policies to integrated water management policies.</p>	<p><b>19.03 Development Infrastructure</b>  <b>19.03-3S Water supply, sewerage and drainage (31/7/18 VC154)</b></p> <p><b>Objective</b>  To plan for the provision of water supply, sewerage and drainage services that efficiently and effectively meet state and community needs and protect the environment.</p> <p><b>Strategies</b>  Improve alignment between urban water management and planning by adopting an integrated water management approach.</p> <p>Ensure water quality in water supply catchments is protected from possible contamination by urban, industrial and agricultural land uses.</p>	<p>Integrate water into the landscape to facilitate cooling, local habitat improvements and provision of attractive and enjoyable spaces for community use.</p> <p>Facilitate use of alternative water sources such as rainwater, stormwater, recycled water and run-off from irrigated farmland.</p>

Change	Previous	New
	<p>Provide for sewerage at the time of subdivision, or ensure lots created by the subdivision are capable of adequately treating and retaining all domestic wastewater within the boundaries of each lot.</p> <p>Plan urban stormwater drainage systems to:</p> <ul style="list-style-type: none"> <li>• Coordinate with adjacent municipalities and take into account the catchment context.</li> <li>• Include measures to reduce peak flows and assist screening, filtering and treatment of stormwater, to enhance flood protection and minimise impacts on water quality in receiving waters.</li> <li>• Prevent, where practicable, the intrusion of litter.</li> </ul> <p>Encourage the reuse of wastewater including urban run-off, treated sewage effluent and run-off from irrigated farmland where appropriate.</p> <p>Protect significant water, sewerage and drainage assets from encroaching sensitive and incompatible uses.</p> <p>Minimise the potential impacts of water, sewerage and drainage assets on the environment.</p> <p><b>Policy guidelines</b> Consider as relevant:</p> <ul style="list-style-type: none"> <li>• Any applicable Environment Protection Authority guidelines.</li> </ul> <p><b>Policy documents</b> Consider as relevant:</p> <ul style="list-style-type: none"> <li>• State Environment Protection Policy (Waters of Victoria)</li> <li>• Urban Stormwater Best Practice Environmental Management Guidelines (CSIRO, 1999 as amended)</li> <li>• Guidelines for Environmental Management: Code of Practice - Onsite Wastewater Management (Publication 891.4, Environment Protection Authority, 2016)</li> <li>• Planning Permit Applications in Open, Potable Water Supply Catchment Areas (Department of Sustainability and Environment, 2012)</li> </ul>	<p>Ensure that development protects and improves the health of water bodies including creeks, rivers, wetlands, estuaries and bays by:</p> <ul style="list-style-type: none"> <li>• Minimising stormwater quality and quantity related impacts.</li> <li>• Filtering sediment and waste from stormwater prior to discharge from a site.</li> <li>• Managing industrial and commercial toxicants in an appropriate way.</li> <li>• Requiring appropriate measures to mitigate litter, sediment and other discharges from construction sites.</li> </ul> <p>Manage stormwater quality and quantity through a mix of on-site measures and developer contributions at a scale that will provide greatest net community benefit.</p> <p>Provide for sewerage at the time of subdivision or ensure lots created by the subdivision are capable of adequately treating and retaining all domestic wastewater within the boundaries of each lot.</p> <p>Ensure land is set aside for water management infrastructure at the subdivision design stage.</p> <p>Minimise the potential impacts of water, sewerage and drainage assets on the environment.</p> <p>Protect significant water, sewerage and drainage assets from encroaching sensitive and incompatible uses.</p> <p>Protect areas with potential to recycle water for forestry, agriculture or other uses that can use treated effluent of an appropriate quality.</p> <p><b>Policy documents</b> Consider as relevant:</p> <ul style="list-style-type: none"> <li>• State Environment Protection Policy (Waters of Victoria)</li> <li>• <a href="#">Water for Victoria - Water Plan (Victorian Government, 2016)</a></li> <li>• Urban Stormwater - Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999)</li> <li>• Guidelines for Environmental Management: Code of Practice - Onsite Wastewater Management (Publication 891.4, Environment Protection Authority, 2016)</li> </ul>

Change		Previous	New
4	Deleting Clause 19.03-4S (Stormwater) and integrating this policy into the new Clause 19.03-3S (Integrated water management), with consequential renumbering throughout Clause 19.03.	<p><b>19.03 Development Infrastructure</b>  <b>19.03-4S Stormwater (31/7/18 VC148)</b></p> <p><b>Objective</b>  To reduce the impact of stormwater on bays, water bodies and catchments.</p> <p><b>Strategies</b>  Manage stormwater quality through a mix of on-site measures and developer contributions.  Mitigate stormwater pollution from construction sites.</p> <p>Ensure stormwater and groundwater entering wetlands do not have a detrimental effect on wetlands and estuaries.</p> <p>Incorporate water-sensitive urban design techniques into developments to:</p> <ul style="list-style-type: none"> <li>• Protect and enhance natural water systems.</li> <li>• Integrate stormwater treatment into the landscape.</li> <li>• Protect quality of water.</li> <li>• Reduce run-off and peak flows.</li> <li>• Minimise drainage and infrastructure costs.</li> </ul> <p><b>Policy documents</b>  Consider as relevant:</p> <ul style="list-style-type: none"> <li>• Urban Stormwater Best Practice Environmental Management Guidelines (CSIRO, 1999)</li> </ul>	<ul style="list-style-type: none"> <li>• Planning Permit Applications in Open, Potable Water Supply Catchment Areas (Department of Sustainability and Environment, 2012)</li> </ul>
5	Renaming the regional sub-clause sections at Clause 19.03-3R to 'Integrated water management – Hume' and 'Integrated water management – Loddon Mallee South'	[Regional]	[Regional]

Change	Previous	New
<p>6 Inserting a new particular provision at Clause 53.18 for 'Stormwater management in urban development'.</p>	<p>[None]</p>	<p><b>53 General Requirements and Performance Standards</b>  <b>53.18 Stormwater Management in Urban Development</b>  <b>(26/10/18 VC154)</b></p> <p><b>Purpose</b>            To ensure that stormwater in urban development, including retention and reuse, is managed to mitigate the impacts of stormwater on the environment, property and public safety, and to provide cooling, local habitat and amenity benefits.</p> <p><b>53.18-1 Application</b>            This clause applies to an application under a provision of a zone to subdivide land, construct a building, or construct or carry out works, other than the following applications:</p> <ul style="list-style-type: none"> <li>• An application under a provision of the Farming Zone, Green Wedge Zone, Green Wedge A Zone, Low Density Residential Zone, Public Conservation and Resource Zone, Road Zone, Rural Activity Zone, Rural Conservation Zone, Rural Living Zone, Urban Floodway Zone or Urban Growth Zone.</li> <li>• A VicSmart application.</li> <li>• An application to subdivide land in a residential zone for residential purposes.</li> <li>• An application to construct or extend a dwelling, fence or residential building in a residential zone.</li> <li>• An application for development associated with the use of land for agriculture or earth and energy resources industry.</li> <li>• An application to construct a building or construct or carry out works associated with one dwelling on a lot.</li> <li>• An application to alter, extend or make structural changes to an existing building provided the gross floor area of the building is not increased by more than 50 square metres.</li> <li>• An application to construct a building with a gross floor area not exceeding 50 square metres.</li> <li>• An application to construct or carry out works with an area not exceeding 50 square metres.</li> <li>• An application to subdivide land into lots each containing an existing building or car parking space.</li> </ul>

Change	Previous	New
		<ul style="list-style-type: none"> <li>• An application to construct a building or to construct or carry out works on a lot if all of the following requirements are met: <ul style="list-style-type: none"> <li>○ The lot was created in accordance with a permit granted under this planning scheme.</li> <li>○ The application for that permit was assessed against the requirements of this clause.</li> </ul> </li> <li>• An application for land affected by a development plan or incorporated plan that was approved or incorporated in this planning scheme before the approval date of Amendment VC154.</li> <li>• An application lodged before the approval date of Amendment VC154.</li> <li>• An application for an amendment of a permit under section 72 of the Act, if the original permit application was lodged before the approval date of Amendment VC154.</li> </ul> <p><b>53.18-2 Operation</b> The provisions of this clause contain:</p> <ul style="list-style-type: none"> <li>• <b>Objectives.</b> An objective describes the desired outcome to be achieved in the completed development.</li> <li>• <b>Standards.</b> A standard contains the requirements to meet the objective. A standard should normally be met. However, if the responsible authority is satisfied that an application for an alternative solution meets the objective, the alternative solution may be considered.</li> </ul> <p><b>53.18-3 Requirements</b> An application to subdivide land:</p> <ul style="list-style-type: none"> <li>• Must meet all of the objectives of Clauses 53.18-4 and 53.18-6.</li> <li>• Should meet all of the standards of Clauses 53.18-4 and 53.18-6.</li> </ul> <p>An application to construct a building or construct or carry out works:</p> <ul style="list-style-type: none"> <li>• Must meet all of the objectives of Clauses 53.18-5 and 53.18-6.</li> <li>• Should meet all of the standards of Clauses 53.18-5 and 53.18-6.</li> </ul> <p>An application must be accompanied by details of the proposed stormwater management system, including drainage works and retention, detention and discharges of stormwater to the drainage system.</p>

Change	Previous	New
		<p><b>53.18-4 Stormwater management objectives for subdivision</b></p> <p>To minimise damage to properties and inconvenience to the public from stormwater.</p> <p>To ensure that the street operates adequately during major storm events and provides for public safety.</p> <p>To minimise increases in stormwater and protect the environmental values and physical characteristics of receiving waters from degradation by stormwater.</p> <p>To encourage stormwater management that maximises the retention and reuse of stormwater.</p> <p>To encourage stormwater management that contributes to cooling, local habitat improvements and provision of attractive and enjoyable spaces.</p> <p><b>Standard W1</b></p> <p>The stormwater management system should be:</p> <ul style="list-style-type: none"> <li>• Designed and managed in accordance with the requirements and to the satisfaction of the relevant drainage authority.</li> <li>• Designed and managed in accordance with the requirements and to the satisfaction of the water authority where reuse of stormwater is proposed.</li> <li>• Designed to meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater - Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999).</li> <li>• Designed to ensure that flows downstream of the subdivision site are restricted to pre-development levels unless increased flows are approved by the relevant drainage authority and there are no detrimental downstream impacts.</li> <li>• Designed to contribute to cooling, improving local habitat and providing attractive and enjoyable spaces.</li> </ul> <p>The stormwater management system should be integrated with the overall development plan including the street and public open space networks and landscape design.</p>

Change	Previous	New
		<p>For all storm events up to and including the 20% Average Exceedence Probability (AEP) standard:</p> <ul style="list-style-type: none"> <li>• Stormwater flows should be contained within the drainage system to the requirements of the relevant authority.</li> <li>• Ponding on roads should not occur for longer than 1 hour after the cessation of rainfall.</li> </ul> <p>For storm events greater than 20% AEP and up to and including 1% AEP standard:</p> <ul style="list-style-type: none"> <li>• Provision must be made for the safe and effective passage of stormwater flows.</li> <li>• All new lots should be free from inundation or to a lesser standard of flood protection where agreed by the relevant floodplain management authority.</li> <li>• Ensure that streets, footpaths and cycle paths that are subject to flooding meet the safety criteria <math>v_{ave} &lt; 0.35 \text{ m}^2/\text{s}</math> (where, <math>d_a</math> = average depth in metres and <math>V_{ave}</math> = average velocity in metres per second).</li> </ul> <p>The design of the local drainage network should:</p> <ul style="list-style-type: none"> <li>• Ensure stormwater is retarded to a standard required by the responsible drainage authority.</li> <li>• Ensure every lot is provided with drainage to a standard acceptable to the relevant drainage authority. Wherever possible, stormwater should be directed to the front of the lot and discharged into the street drainage system or legal point of discharge.</li> <li>• Ensure that inlet and outlet structures take into account the effects of obstructions and debris build up. Any surcharge drainage pit should discharge into an overland flow in a safe and predetermined manner.</li> <li>• Include water sensitive urban design features to manage stormwater in streets and public open space. Where such features are provided, an application must describe maintenance responsibilities, requirements and costs.</li> </ul> <p>Any flood mitigation works must be designed and constructed in accordance with the requirements of the relevant floodplain management authority.</p>



Change	Previous	New
		<p><b>53.18-5 Stormwater management objectives for buildings and works</b>  To encourage stormwater management that maximises the retention and reuse of stormwater.</p> <p>To encourage development that reduces the impact of stormwater on the drainage system and filters sediment and waste from stormwater prior to discharge from the site.</p> <p>To encourage stormwater management that contributes to cooling, local habitat improvements and provision of attractive and enjoyable spaces.</p> <p>To ensure that industrial and commercial chemical pollutants and other toxicants do not enter the stormwater system.</p> <p><b>Standard W2</b>  The stormwater management system should be designed to:</p> <ul style="list-style-type: none"> <li>• Meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater - Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999).</li> <li>• Minimise the impact of chemical pollutants and other toxicants including by, but not limited to, bunding and covering or roofing of storage, loading and work areas.</li> <li>• Contribute to cooling, improving local habitat and providing attractive and enjoyable spaces.</li> </ul> <p><b>53.18-6 Site management objectives</b>  To protect drainage infrastructure and receiving waters from sedimentation and contamination.</p> <p>To protect the site and surrounding area from environmental degradation prior to and during construction of subdivision works.</p> <p><b>Standard W3</b>  An application should describe how the site will be managed prior to and during the construction period and may set out requirements for managing:</p> <ul style="list-style-type: none"> <li>• Erosion and sediment.</li> <li>• Stormwater.</li> </ul>

Change	Previous	New
		<ul style="list-style-type: none"> <li>Litter, concrete and other construction wastes.</li> <li>Chemical contamination.</li> </ul> <p><b>53.18-7 Decision guidelines</b> Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:</p> <ul style="list-style-type: none"> <li>Any relevant water and stormwater management objective, policy or statement set out in this planning scheme.</li> <li>The capacity of the site to incorporate stormwater retention and reuse and other water sensitive urban design features.</li> <li>Whether the development has utilised alternative water sources and/or incorporated water sensitive urban design.</li> <li>Whether stormwater discharge from the site will adversely affect water quality entering the drainage system.</li> <li>The capacity of the drainage network to accommodate additional stormwater.</li> <li>Whether the stormwater treatment areas can be effectively maintained.</li> <li>Whether the owner has entered into an agreement to contribute to off-site stormwater management in lieu of providing an on-site stormwater management system.</li> </ul>
<p>7 Amending Clause 55 (Two or more dwellings on a lot and residential buildings) to provide transitional provisions for residential development applications to be assessed against the Clause 55 provisions as they existed before the approval date of Amendment VC154.</p>	<p><b>55 Two or More Dwellings on a Lot and Residential Buildings (31/7/18 VC148)</b></p> <p>[None – ‘Transitional provisions’ did not exist See old cl 55.03-4 Permeability and stormwater management objectives (15/7/13 VC100) [below]]</p>	<p><b>55 Two or More Dwellings on a Lot and Residential Building (26/10/18 VC154)</b></p> <p><b>Transitional provisions</b> Clause 55.03-4 of this planning scheme [Permeability and stormwater management objectives], as in force immediately before the approval date of Amendment VC154, continues to apply to:</p> <ul style="list-style-type: none"> <li>An application for a planning permit lodged before that date.</li> <li>An application for an amendment of a permit under section 72 of the [Planning and Environment Act 1987 (Vic)], if the original permit application was lodged before that date.</li> </ul> <p>[Explanation: New cl 55.03-4 only applies to new permit applications and not old applications, as well as, excludes s 72 amendments pre 26/10/18]</p>

Change		Previous	New
8	Amending Clause 55.03-4 (Permeability) to rename the standard 'Permeability and stormwater management' and amend the standard to include a new stormwater purpose, requirements and decision guidelines.	<p><b>55 Two or More Dwellings on a Lot and Residential Buildings</b>  <b>55.03 Site Layout and Building Mass</b>  <b>55.03-4 Permeability objectives</b>  <b>(15/7/13 VC100)</b></p> <p>To reduce the impact of increased stormwater run-off on the drainage system.</p> <p>To facilitate on-site stormwater infiltration.</p> <p><b>Standard B9</b>  The site area covered by the pervious surfaces should be at least:</p> <ul style="list-style-type: none"> <li>• The minimum area specified in a schedule to the zone, or</li> <li>• If no minimum is specified in a schedule to the zone, 20 percent of the site.</li> </ul> <p><b>Decision guidelines</b>  Before deciding on an application, the responsible authority must consider:</p> <ul style="list-style-type: none"> <li>• The design response.</li> <li>• The existing site coverage and any constraints imposed by existing development.</li> <li>• The capacity of the drainage network to accommodate additional stormwater.</li> <li>• The capacity of the site to absorb run-off.</li> <li>• The practicality of achieving the minimum site coverage of pervious surfaces, particularly on lots of less than 300 square metres.</li> </ul>	<p><b>55 Two or More Dwellings on a Lot and Residential Buildings</b>  <b>55.03 Site Layout and Building Mass</b>  <b>55.03-4 Permeability and stormwater management objectives</b>  <b>(26/10/18 VC154)</b></p> <p>To reduce the impact of increased stormwater run-off on the drainage system.</p> <p>To facilitate on-site stormwater infiltration.</p> <p>To encourage stormwater management that maximises the retention and reuse of stormwater.</p> <p><b>Standard B9</b>  The site area covered by the pervious surfaces should be at least:</p> <ul style="list-style-type: none"> <li>• The minimum area specified in a schedule to the zone, or</li> <li>• If no minimum is specified in a schedule to the zone, 20 percent of the site.</li> </ul> <p>The stormwater management system should be designed to:</p> <ul style="list-style-type: none"> <li>• Meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater - Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999).</li> <li>• Contribute to cooling, improving local habitat and providing attractive and enjoyable spaces.</li> </ul> <p><b>Decision guidelines</b>  Before deciding on an application, the responsible authority must consider:</p> <ul style="list-style-type: none"> <li>• The design response.</li> <li>• The capacity of the site to incorporate stormwater retention and reuse.</li> <li>• The existing site coverage and any constraints imposed by existing development.</li> <li>• The capacity of the drainage network to accommodate additional stormwater.</li> <li>• The capacity of the site to absorb run-off.</li> <li>• The practicality of achieving the minimum site coverage of pervious surfaces, particularly on lots of less than 300 square metres.</li> </ul>

Change		Previous	New
9	Amending Clause 55.07 (Apartment developments), Clause 56.07 (Integrated water management) and Clause 58.03 (Site layout) to generally align with the new particular provision.	<p><b>55 Two or More Dwellings on a Lot and Residential Buildings</b>  <b>55.07 Apartment Developments</b>  <b>55.07-5 Integrated water and stormwater management objectives (13/4/17 VC136)</b></p> <p>To encourage the use of alternative water sources such as rainwater, stormwater and recycled water.</p> <p>To facilitate stormwater collection, utilisation and infiltration within the development.</p> <p>To encourage development that reduces the impact of stormwater run-off on the drainage system and filters sediment and waste from stormwater prior to discharge from the site.</p> <p><b>Standard B39</b>  Buildings should be designed to collect rainwater for non-drinking purposes such as flushing toilets, laundry appliances and garden use.</p> <p>Buildings should be connected to a non-potable dual pipe reticulated water supply, where available from the water authority.</p> <p>The stormwater management system should be:</p> <ul style="list-style-type: none"> <li>Designed to meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater – Best Practice Environmental Management Guidelines (Victorian Stormwater Committee 1999) as amended.</li> <li>Designed to maximise infiltration of stormwater, water and drainage of residual flows into permeable surfaces, tree pits and treatment areas.</li> </ul> <p><b>Decision guidelines</b>  Before deciding on an application, the responsible authority must consider:</p> <ul style="list-style-type: none"> <li>Any relevant water and stormwater management objective, policy or statement set out in this scheme.</li> </ul>	<p>• Whether the owner has entered into an agreement to contribute to off-site stormwater management in lieu of providing an on-site stormwater management system.</p> <p><b>55 Two or More Dwellings on a Lot and Residential Buildings</b>  <b>55.07 Apartment Developments</b>  <b>55.07-5 Integrated water and stormwater management objectives (26/10/18 VC154)</b></p> <p>To encourage the use of alternative water sources such as rainwater, stormwater and recycled water.</p> <p>To facilitate stormwater collection, utilisation and infiltration within the development.</p> <p>To encourage development that reduces the impact of stormwater run-off on the drainage system and filters sediment and waste from stormwater prior to discharge from the site.</p> <p><b>Standard B39</b>  Buildings should be designed to collect rainwater for non-drinking purposes such as flushing toilets, laundry appliances and garden use.</p> <p>Buildings should be connected to a non-potable dual pipe reticulated water supply, where available from the water authority.</p> <p>The stormwater management system should be:</p> <ul style="list-style-type: none"> <li>Designed to meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater - Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999).</li> <li>Designed to maximise infiltration of stormwater, water and drainage of residual flows into permeable surfaces, tree pits and treatment areas.</li> </ul> <p><b>Decision guidelines</b>  Before deciding on an application, the responsible authority must consider:</p> <ul style="list-style-type: none"> <li>Any relevant water and stormwater management objective, policy or statement set out in this scheme.</li> </ul>

Change	Previous	New
	<ul style="list-style-type: none"> <li>• The design response.</li> <li>• Whether the development has utilised alternative water sources and/or incorporated water sensitive urban design.</li> <li>• Whether discharge from the site to the stormwater will adversely affect water quality entering the drainage system.</li> <li>• The capacity of the drainage network to accommodate additional stormwater.</li> <li>• Whether the stormwater treatment areas can be effectively maintained.</li> </ul> <p><b>56 Residential Subdivision</b>  <b>56.07 Integrated Water Management</b>  <b>56.07-4 Urban run-off management objectives (9/10/06 VC 42)</b></p> <p>To minimise damage to properties and inconvenience to residents from urban run-off.</p> <p>To ensure that the street operates adequately during major storm events and provides for public safety.</p> <p>To minimise increases in stormwater run-off and protect the environmental values and physical characteristics of receiving waters from degradation by urban run-off.</p> <p><b>Standard C25</b>  The urban stormwater management system must be:</p> <ul style="list-style-type: none"> <li>• Designed and managed in accordance with the requirements and to the satisfaction of the relevant drainage authority.</li> </ul>	<ul style="list-style-type: none"> <li>• The design response.</li> <li>• Whether the development has utilised alternative water sources and/or incorporated water sensitive urban design.</li> <li>• Whether stormwater discharge from the site will adversely affect water quality entering the drainage system.</li> <li>• The capacity of the drainage network to accommodate additional stormwater.</li> <li>• Whether the stormwater treatment areas can be effectively maintained.</li> <li>• Whether the owner has entered into an agreement to contribute to off-site stormwater management in lieu of providing an on-site stormwater management system.</li> </ul> <p><b>56 Residential Subdivision</b>  <b>56.07 Integrated Water Management</b>  <b>56.07-4 Stormwater Management Objectives (26/10/18 VC154)</b></p> <p>To minimise damage to properties and inconvenience to residents from stormwater.</p> <p>To ensure that the street operates adequately during major storm events and provides for public safety.</p> <p>To minimise increases in stormwater and protect the environmental values and physical characteristics of receiving waters from degradation by stormwater.</p> <p>To encourage stormwater management that maximises the retention and reuse of stormwater.</p> <p>To encourage stormwater management that contributes to cooling, local habitat improvements and provision of attractive and enjoyable spaces.</p> <p><b>Standard C25</b>  The stormwater management system must be:</p> <ul style="list-style-type: none"> <li>• Designed and managed in accordance with the requirements and to the satisfaction of the relevant drainage authority.</li> </ul>

Change	Previous	New
	<ul style="list-style-type: none"> <li>Designed and managed in accordance with the requirements and to the satisfaction of the water authority where reuse of urban run-off is proposed.</li> <li>Designed to meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater – Best Practice Environmental Management Guidelines (Victorian Stormwater Committee 1999) as amended.</li> <li>Designed to ensure that flows downstream of the subdivision site are restricted to pre-development levels unless increased flows are approved by the relevant drainage authority and there are no detrimental downstream impacts.</li> </ul> <p>The stormwater management system should be integrated with the overall development plan including the street and public open space networks and landscape design.</p> <p>For all storm events up to and including the 20% Average Exceedence Probability (AEP) standard:</p> <ul style="list-style-type: none"> <li>Stormwater flows should be contained within the drainage system to the requirements of the relevant authority.</li> <li>Ponding on roads should not occur for longer than 1 hour after the cessation of rainfall.</li> </ul> <p>For storm events greater than 20% AEP and up to and including 1% AEP standard:</p> <ul style="list-style-type: none"> <li>Provision must be made for the safe and effective passage of stormwater flows.</li> <li>All new lots should be free from inundation or to a lesser standard of flood protection where agreed by the relevant floodplain management authority.</li> <li>Ensure that streets, footpaths and cycle paths that are subject to flooding meet the safety criteria <math>d_a V_{ave} &lt; 0.35 \text{ m}^2/\text{s}</math> (where, <math>d_a</math> = average depth in metres and <math>V_{ave}</math> = average velocity in metres per second).</li> </ul> <p>The design of the local drainage network should:</p> <ul style="list-style-type: none"> <li>Ensure run-off is retarded to a standard required by the responsible drainage authority.</li> <li>Ensure every lot is provided with drainage to a standard acceptable</li> </ul>	<ul style="list-style-type: none"> <li>Designed and managed in accordance with the requirements and to the satisfaction of the water authority where reuse of stormwater is proposed.</li> <li>Designed to meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater - Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999).</li> <li>Designed to ensure that flows downstream of the subdivision site are restricted to pre-development levels unless increased flows are approved by the relevant drainage authority and there are no detrimental downstream impacts.</li> <li>Designed to contribute to cooling, improving local habitat and providing attractive and enjoyable spaces.</li> </ul> <p>The stormwater management system should be integrated with the overall development plan including the street and public open space networks and landscape design.</p> <p>For all storm events up to and including the 20% Average Exceedence Probability (AEP) standard:</p> <ul style="list-style-type: none"> <li>Stormwater flows should be contained within the drainage system to the requirements of the relevant authority.</li> <li>Ponding on roads should not occur for longer than 1 hour after the cessation of rainfall.</li> </ul> <p>For storm events greater than 20% AEP and up to and including 1% AEP standard:</p> <ul style="list-style-type: none"> <li>Provision must be made for the safe and effective passage of stormwater flows.</li> <li>All new lots should be free from inundation or to a lesser standard of flood protection where agreed by the relevant floodplain management authority.</li> <li>Ensure that streets, footpaths and cycle paths that are subject to flooding meet the safety criteria <math>d_a V_{ave} &lt; 0.35 \text{ m}^2/\text{s}</math> (where, <math>d_a</math> = average depth in metres and <math>V_{ave}</math> = average velocity in metres per second).</li> </ul> <p>The design of the local drainage network should:</p> <ul style="list-style-type: none"> <li>Ensure stormwater is retarded to a standard required by the</li> </ul>

Change	Previous	New
	<p>to the relevant drainage authority. Wherever possible, run-off should be directed to the front of the lot and discharged into the street drainage system or legal point of discharge.</p> <ul style="list-style-type: none"> <li>• Ensure that inlet and outlet structures take into account the effects of obstructions and debris build up. Any surcharge drainage pit should discharge into an overland flow in a safe and predetermined manner.</li> <li>• Include water sensitive urban design features to manage run-off in streets and public open space. Where such features are provided, an application must describe maintenance responsibilities, requirements and costs.</li> </ul> <p>Any flood mitigation works must be designed and constructed in accordance with the requirements of the relevant floodplain management authority.</p> <p><b>58 Apartment Developments</b>  <b>58.03 Site Layout</b>  <b>58.03-8 Integrated water and stormwater management objectives (13/4/17 VC 136)</b></p> <p>To encourage the use of alternative water sources such as rainwater, stormwater and recycled water.</p> <p>To facilitate stormwater collection, utilisation and infiltration within the development.</p> <p>To encourage development that reduces the impact of stormwater run-off on the drainage system and filters sediment and waste from stormwater prior to discharge from the site.</p> <p><b>Standard D13</b>  Buildings should be designed to collect rainwater for non-drinking purposes such as flushing toilets, laundry appliances and garden use.</p> <p>Buildings should be connected to a non-potable dual pipe reticulated water supply, where available from the water authority.</p>	<p>responsible drainage authority.</p> <ul style="list-style-type: none"> <li>• Ensure every lot is provided with drainage to a standard acceptable to the relevant drainage authority. Wherever possible, stormwater should be directed to the front of the lot and discharged into the street drainage system or legal point of discharge.</li> <li>• Ensure that inlet and outlet structures take into account the effects of obstructions and debris build up. Any surcharge drainage pit should discharge into an overland flow in a safe and predetermined manner.</li> <li>• Include water sensitive urban design features to manage stormwater in streets and public open space. Where such features are provided, an application must describe maintenance responsibilities, requirements and costs.</li> </ul> <p>Any flood mitigation works must be designed and constructed in accordance with the requirements of the relevant floodplain management authority.</p> <p><b>58 Apartment Developments</b>  <b>58.03 Site Layout</b>  <b>58.03-8 Integrated water and stormwater management objectives (26/10/18 VC154)</b></p> <p>To encourage the use of alternative water sources such as rainwater, stormwater and recycled water.</p> <p>To facilitate stormwater collection, utilisation and infiltration within the development.</p> <p>To encourage development that reduces the impact of stormwater run-off on the drainage system and filters sediment and waste from stormwater prior to discharge from the site.</p> <p><b>Standard D13</b>  Buildings should be designed to collect rainwater for non-drinking purposes such as flushing toilets, laundry appliances and garden use.</p> <p>Buildings should be connected to a non-potable dual pipe reticulated</p>



Change		Previous	New
		<p>The stormwater management system should be:</p> <ul style="list-style-type: none"> <li>• Designed to meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater – Best Practice Environmental Management Guidelines (Victorian Stormwater Committee 1999) as amended.</li> <li>• Designed to maximise infiltration of stormwater, water and drainage of residual flows into permeable surfaces, tree pits and treatment areas.</li> </ul> <p><b>Decision guidelines</b> Before deciding on an application, the responsible authority must consider:</p> <ul style="list-style-type: none"> <li>• Any relevant water and stormwater management objective, policy or statement set out in this scheme.</li> <li>• The design response.</li> <li>• Whether the development has utilised alternative water sources and/or incorporated water sensitive urban design.</li> <li>• Whether discharge from the site to the stormwater will adversely affect water quality entering the drainage system.</li> <li>• The capacity of the drainage network to accommodate additional stormwater.</li> <li>• Whether the stormwater treatment areas can be effectively maintained.</li> </ul>	<p>water supply, where available from the water authority.</p> <p>The stormwater management system should be:</p> <ul style="list-style-type: none"> <li>• Designed to meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater - Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999).</li> <li>• Designed to maximise infiltration of stormwater, water and drainage of residual flows into permeable surfaces, tree pits and treatment areas.</li> </ul> <p><b>Decision guidelines</b> Before deciding on an application, the responsible authority must consider:</p> <ul style="list-style-type: none"> <li>• Any relevant water and stormwater management objective, policy or statement set out in this scheme.</li> <li>• The design response.</li> <li>• Whether the development has utilised alternative water sources and/or incorporated water sensitive urban design.</li> <li>• Whether stormwater discharge from the site will adversely affect water quality entering the drainage system.</li> <li>• The capacity of the drainage network to accommodate additional stormwater.</li> <li>• Whether the stormwater treatment areas can be effectively maintained.</li> <li>• Whether the owner has entered into an agreement to contribute to off-site stormwater management in lieu of providing an on-site stormwater management system.</li> </ul>
10	Amending Clause 73.01 (General terms) to insert a new general term and definition for 'stormwater'.	[None]	<p><b>73.01 General terms</b></p> <p><b>Stormwater:</b> The net increase in run-off from urban development due to water not being able to seep into the ground because of impervious surfaces, such as roofs and roads.</p>



**Further changes/inclusions pertaining to VC154 26/10/18 unrelated to IWM:**

Deletion of sub-cl 19.06-6S regarding 'waste and resource recovery' and recreated as sub-cl 19.03-5S

**Note also VC 155 26/10/18**

cl 55.07-1 Energy efficiency objectives, buildings should be sited and designed to ensure that the performance of existing rooftop solar energy facilities on dwellings on adjoining lots in a General Residential Zone, Neighbourhood Residential Zone or Township Zone are not unreasonably reduced. The existing rooftop solar energy facility must exist at the date the application is lodged.