9.4.2 Engineering works and services code

9.4.2.1 Application

This code applies to:

- (1) accepted development subject to requirements and assessable development identified as requiring assessment against the Engineering works and services code in the tables of assessment in Part 5 of this Planning Scheme; and
- (2) all impact assessable development not specifically identified in the categories of development and assessment tables in Part 5 of this Planning Scheme.

When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3, in Part 5.

9.4.2.2 Purpose

The purpose of the Engineering works and services code is to ensure that development is provided with an appropriate level of infrastructure and services that are sustainable, safe and consistent with the setting in which the development is located.

The purpose of the code will be achieved through the following overall outcomes:

- (1) Appropriate infrastructure and services are provided to support land use and development in a manner that avoids adverse effects on the environment and community wellbeing;
- (2) Infrastructure and services meet the current and future needs of the community, whilst being safe and not increasing hazards;
- (3) Infrastructure and services do not negatively impact the amenity of the locality;
- (4) Infrastructure and services are well placed to ensure they are convenient for users and for maintenance;
- (5) Infrastructure and services are well integrated with surrounding infrastructure and service networks;
- (6) Development over or near infrastructure does not compromise or interfere with its effective operation or level of service;
- (7) Infrastructure and services do not cause unacceptable off-site impacts on the natural environment or adjacent properties;
- (8) Infrastructure is provided at minimum cost to the community for the life of the infrastructure and has a suitable design life, is easy and cost effective to maintain and replace; and
- (9) The site is suitable for the provision of infrastructure and services.

9.4.2.3 Assessment benchmarks

Table 9.4.2.1 – Engineering works and services code:

- Assessment benchmarks for assessable development and
- Requirements for accepted development

Performance outcomes	Acceptable outcomes			
Infrastructure services				
PO 1 Development is provided with a water supply that is adequate for the current and future needs of the intended uses.	AO 1.1 Development is connected to the reticulated water supply infrastructure network and is designed and constructed in accordance with Schedule 6: Engineering works and services planning scheme policy.			
PO 2 Development has a safe and effective means of sewerage treatment and disposal for the level of demand generated.	AO 2.1 Development is connected to the reticulated sewerage infrastructure network and is designed and constructed in accordance with Schedule 6: Engineering works and services planning scheme policy.			
PO 3 Development is provided with an appropriate energy supply approved by and installed in accordance with the standards of the relevant energy regulatory authority.	 AO 3.1 (a) Development is connected to the reticulated electricity infrastructure network; or (b) An alternative energy supply is provided in accordance with the standards of the relevant regulatory authority. 			
PO 4 Development is connected to appropriate telecommunications infrastructure.	AO 4.1 Development is connected to telecommunication infrastructure in accordance with the standards of the relevant regulatory authority.			
PO 5 Development provides safe and sufficient lighting and signage.	AO 5.1 Street lighting must comply with <i>d</i> Australian Standard 1158 Set:2010 Lighting for Roads and Public Spaces AO 5.2 Road signage is provided in accordance with Schedule 6: Engineering works and services planning scheme policy.			
PO 6 Development has a safe and effective means of sewerage treatment and disposal for the level of demand generated.	AO 6.1 Where a connection to the reticulated sewerage infrastructure network is not available, sufficient area is to be provided on the development site for an appropriately sized on-site effluent treatment and disposal system to meet the needs of the development.			

Table 9.4.2.1 – Engineering works and services code:

- Assessment benchmarks for assessable development and
- Requirements for accepted development

Performance outcomes			Acceptable outcomes		
Protection against natural hazards					
PO 7 Essential services maintain their function during the occurrence of natural hazards.		ervices maintain their function during nce of natural hazards.	AO 7.1 Components of the systems that deliver electricity supply, gas supply, water supply, sewerage and telecommunications services, that will be adversely affected by the inundation by or infiltration of floodwater are:		
			 (a) located above the 1 in 100-year Annual recurrence interval (ARI) flood level; or (b) designed and constructed to exclude inundation of floodwater during the 1 per cent AEP; or (c) designed to resist the hydrostatic and hydrodynamic forces that result from output inundation 		
Roa	ds and	access	Such inditidation.		
		400033	AO 9 1		
PO 8 Roads and access are designed and constructed to ensure that:		access are designed and to ensure that:	AO 8.1 Roads are designed and constructed in accordance with Schedule 6: Engineering works and services planning scheme policy.		
(a) (b)	the al safe a road p	ignment of new roads provides for and efficient movement of traffic; and pavement surfaces:			
	(i) (ii)	are durable enough to carry estimated wheel loads of travelling and parked vehicles; and provide for the safe passage of			
	(iii)	vehicles, pedestrians and cyclists; and provide for the discharge of stormwater run-off from			
	(iv)	preserve all-weather access; and			
(c)	c) kerb and channel:				
	(i)	controls vehicle movement by delineating the carriageway for all users; and			
	(ii)	conveys road pavement runoff to stormwater drainage; and			
(d)	(d) verges and footnaths provide:				
(-)	(i)	safe access for pedestrians clear			
	. /	of obstructions; and			
	(ii)	an access area for vehicles onto			
	(iii)	properties; and a corridor allocated for public utilities; and			
	(iv)	additional amenity for minor roads.			

Table 9.4.2.1 – Engineering works and services code:

- Assessment benchmarks for assessable development and
- Requirements for accepted development

Perfo	rmance outcomes	Acceptable outcomes		
Stormwater drainage				
PO 9		AO 9.1		
Stormwater drainage systems or networks have the capacity to control stormwater flows so that:		All stormwater runoff from surfaces that are constructed, altered or otherwise affected by development on an allotment is discharged to a		
(a)	overland runoff is directed to areas where there is no damage to property or hazards	lawful point of discharge.		
(b)	for motorists; and runoff is directed to a lawful point of discharge through controlled outlet structures; and	AO 9.2 Development does not require the use of stormwater pumps in order to achieve a lawful point of discharge.		
(c)	development retains the existing hydrological regime (surface and groundwater cycle and flow) to protect vegetation and habitats in and adjoining watercourses.	AO 9.3 Stormwater drainage is designed and constructed in accordance with Schedule 6: Engineering works and services planning scheme policy.		
		AO 9.4 Where the stormwater drainage system includes an underground pipe drain system, runoff from roofs and paved areas is to be connected directly to the pipe drain system.		

Performance outcomes	Acceptable outcomes				
Infrastructure services					
PO 1 Development is provided with a water supply that is adequate and safe for the current and future needs of the intended uses.	AO 1.1 Where a connection to the reticulated water supply is not available, a water supply is to be provided to the development that is:				
	suitable for human consumption in accordance with the National Health and Medical Research Council's Australian Drinking Water Guidelines, 2011 as updated from time to time; and sized and designed to meet the water usage requirements of the development.				
Location of underground services					
PO 2 The location of underground services does not impede future development.	AO 2.1 Where underground services cross another person's land to service the development, the services are to be located parallel to and within 2 metres of an allotment boundary				
	AO 2.2 Services are not located over a part of a lot that may in future be a suitable location for a development.				
Stormwater drainage					
PO 3 Stormwater drainage systems or networks have the capacity to control the quantity and quality of stormwater flows so that:	AO 3.1 Where stormwater pumps are proposed to be used to achieve a lawful point of discharge, evidence is provided to Council that all other options have been exhausted.				
 (a) overland runoff is directed to areas where there is no damage to property or hazards for motorists; and 	AO 3.2 Stormwater pumping systems must be designed				
 (b) runoff is directed to a lawful point of discharge through controlled outlet structures; and 	in accordance with Schedule 6: Engineering works and services planning scheme policy.				
 (c) development retains the existing hydrological regime (surface and groundwater cycle and flow) to protect vegetation and habitats in and adjoining watercourses. 					

Table 9.4.2.2 – Engineering works and services code:• Assessment benchmarks for assessable development only