

8.2.7 Infrastructure overlay code

8.2.7.1 Application

This code applies to accepted development subject to requirements and assessable development:

- (a) in the proximity of, or potentially affecting infrastructure;
- (b) in the proximity of, or potentially affecting infrastructure identified in the SPP interactive mapping system (plan making); and
- (c) identified as requiring assessment against the Infrastructure overlay code by the tables of assessment in Part 5 (Tables of assessment).

8.2.7.2 Purpose and overall outcomes

The purpose of the Infrastructure overlay code is to ensure that development is compatible with, and does not adversely affect the viability, integrity, operation and maintenance of, the following existing and planned infrastructure and facilities within the region:

- gas pipelines;
- major electricity infrastructure and electricity substations;
- wastewater treatment plants;
- waste management facilities;
- State controlled roads;
- railways (including cane railways); and
- stock routes.

8.2.7.3 Overall Outcomes

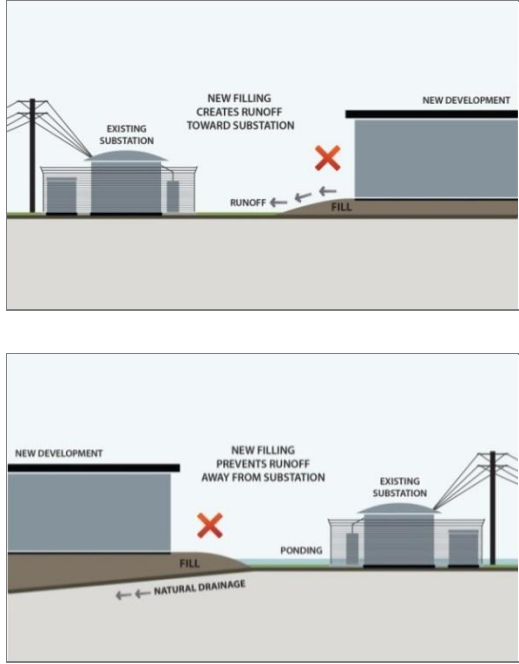
The purpose of the code will be achieved through the following overall outcomes:

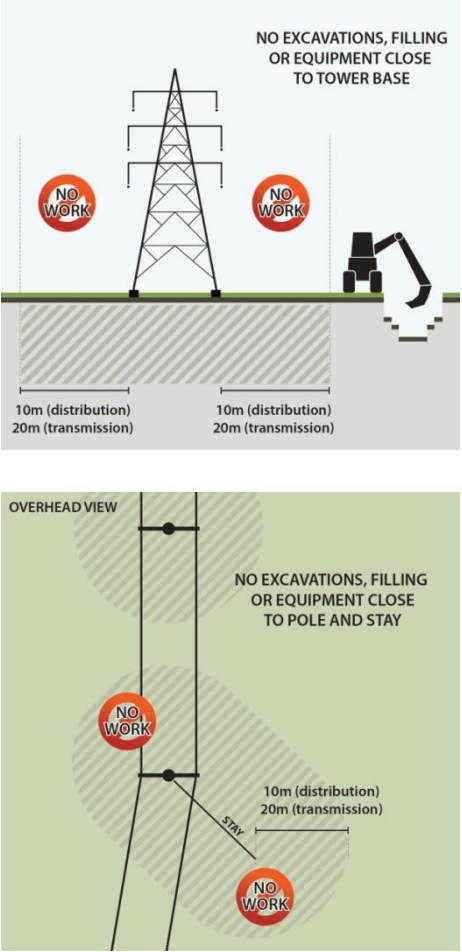
- development over or near major electricity and existing and planned infrastructure facilities, networks and corridors are protected from incompatible development;
- development in proximity to existing and planned infrastructure facilities, networks and corridors is appropriately located, designed, constructed and operated to:
 - avoid compromising the integrity, operational efficiency and maintenance of infrastructure and facilities;
 - protect the amenity, health and safety of people and property; and
 - the number of people exposed to the potential adverse impacts emanating from existing and planned infrastructure facilities, networks and corridors are minimised.

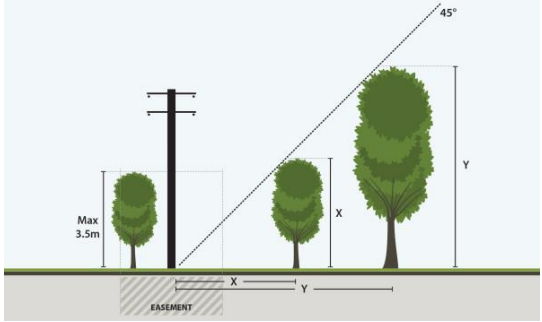
8.2.7.4 Assessment benchmarks

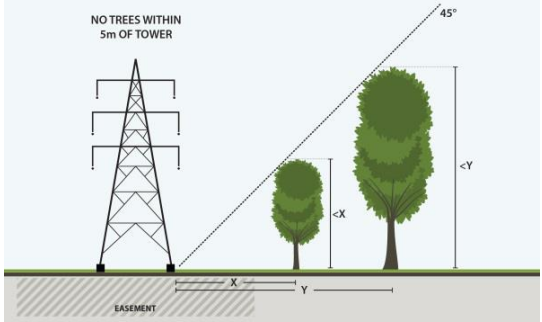
Table 8.2.7.4.1: Benchmarks for accepted development subject to requirements and assessable development

INFRASTRUCTURE OVERLAY CODE	
for development in the proximity of, or potentially affecting infrastructure.	
PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES
Gas pipelines	
PO 1 Separation Development provides and maintains adequate separation between habitable buildings and a gas pipeline corridor so as to minimise the risk of harm to people and property. Note: 'Dial Before You Dig' maintains mapping of all flow, trunk and transmission gas lines for public reference. Note: MinesOnline Mapping System website available at Note: Refer to GeoResGlobe for spatial mining and exploration data: https://georesglobe.information.qld.gov.au/	AO 1.1 Buildings are not constructed within 100 m on either side of gas or oil pipeline corridors. Note: Should a lesser setback distance be proposed, it is recommended that applicants consult with the relevant gas pipeline manager prior to the lodgement of any development application to help determine how compliance with the performance outcome can be achieved.
PO 2 Construction and operation Development, including uses and works, is constructed and operated to avoid: (a) compromising the viability of the gas pipeline corridor; or (b) damaging or adversely affecting the existing or future operation of major gas pipelines and the supply of gas.	AO 2.1 No acceptable outcome provided.
Bulk water supply infrastructure	
PO 3 Buffers Development within a water supply infrastructure buffer is located, designed and constructed to: (a) protect the integrity of the water supply infrastructure; (b) maintain adequate access for any required maintenance or upgrading work to the water supply infrastructure.	AO 3.1 Development does not involve works within a water supply infrastructure buffer.
Major electricity infrastructure and electricity substations	
PO 4 Access Earthworks do not restrict access to and along major electricity infrastructure corridors by the electricity providers, using their normal vehicles and equipment.	AO 4.1 Earthworks do not alter levels along the boundaries of or within existing or proposed easements by more than 100 mm and do not cause the worsening of inundation of electricity infrastructure.

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES
PO 5 Erosion There is no worsening of flooding, drainage or erosion conditions affecting the bulk supply or linear infrastructure.	AO 5.1 No acceptable outcome is nominated.  Note: The figures above illustrate the concept.
PO 6 Separation Development maintains a safe clearance from all powerlines. Vegetated buffers adjoining an electricity transmission line easement are maintained to provide: (a) a visual buffer to the easement; and (b) a separation distance from the easement.	AO 6.1 Development maintains the clearances required under schedules 4 and 5 of the <i>Electrical Safety Regulation 2013</i> or the current relevant standards.
PO 7 Earthworks Any earthworks are undertaken in a way which: (a) ensures the stability of the land on or adjoining substations and major electricity infrastructure; (b) does not otherwise impact on the safety and reliability of the electricity infrastructure; and does not restrict the placement or use of the electricity provider's equipment.	AO 7.1 No earthworks are undertaken: (a) for overhead transmission infrastructure, within 20 m of a transmission tower, pole or stay; or (b) for overhead distribution infrastructure, within 10 m of a tower, pole or stay; or (c) for transmission substations, within 50 m of a property boundary shared with the substation; or (d) for distribution substations, within 10 m of a property boundary shared with the substation.

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES
	 Note: The figures above illustrate the concept. AO 7.2 No earthworks are undertaken, or other loading or displacement of earth caused, within the easement of an underground power line.
PO 8 Other services Other services and infrastructure works (such as stormwater, sewerage, water and the like) do not impact the safety and reliability of substations or major electricity infrastructure.	AO 8.1 Underground services are not located within: (a) 20 m of a tower, pole, stay for transmission infrastructure; or, (b) 10 m of a tower, pole or stay for distribution infrastructure; or, (c) any easement that is currently vacant but is designated for community infrastructure for major electricity infrastructure; or, (d) 10 m of a substation property boundary. AO 8.2 No valve pits occur within: (a) for transmission infrastructure, 60 m of a tower, pole or stay; or, (b) for distribution infrastructure, 10 m of a tower, pole or stay; or,

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES
	AO 8.3 Pipelines with cathodic protection systems, comply with <i>Part 13 of Electrical Safety Regulation 2013</i> or the current relevant standard. AO 8.4 Underground services traversing an easement, cross at right angles to the overhead or underground lines. AO 8.5 Trenches for services are backfilled to be compacted in 150 mm layers to at least 95% modified dry density compaction ratio. AO 8.6 Trenches under construction are not left open overnight.
PO 9 Vegetation Vegetation does not pose a risk to the safety or reliability of electricity infrastructure.	AO 9.1 Where vegetation is planted within an easement of an overhead power line or, where there is no easement, it should be planted so that: (a) it is not within the area of influence of a power line (not within 5 m on either side of the area directly below the conductors); (b) or within 20 m of a power line structure, pole or stay; and (c) has a mature height of no more than 3.5 m. AO9.2 Vegetation planted within an underground powerline easement does not have a mature root system greater than 150 mm in depth and is not located within 1 m of the area directly above the powerline AO9.3 Vegetation adjoining easements complies with the clearance dimensions illustrated in the figure below. 

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES
	 AO 9.4 Planting complies with (as relevant to the infrastructure concerned): • Energex's <i>Safe Tree Guidelines</i>; or, • Ergon's <i>Plant Smart</i> brochures (https://www.ergon.com.au/network/safety/home-safety/trees-and-powerlines/plant-smart); or, • Powerlink's <i>Screening Your Home From Powerlines</i> information sheet (https://www.powerlink.com.au/easements)
PO 10 Noise emissions Development avoids noise nuisance from substations.	AO 10.1 Noise emissions do not exceed 5dB(A) above background noise level at the fascia of a building measured in accordance with <i>AS 1055 Acoustics – Description Measurement of Environmental Noise – General Procedures</i>. AO 10.2 For reconfiguring a lot, lots are of sufficient size and depth to ensure buildings likely to be established on the site are not exposed to noise emissions greater than 5dB(A) above background noise level at the fascia of a building, measured in accordance with <i>AS 1055 Acoustics – Description Measurement of Environmental Noise – General Procedures</i>, without the use of acoustic fences or other screening devices.
WASTEWATER TREATMENT PLANTS	
PO 11 Separation Residential activities and other sensitive land uses are not adversely affected by odour emissions from existing or planned wastewater treatment plants.	AO 11.1 A sensitive land use involving a residential activity is not located or intensified within a wastewater treatment plant buffer. AO 11.2 A sensitive land use (other than a residential activity) located within a wastewater treatment plant buffer demonstrates that occupants and users will not be adversely affected by odour emissions from activities associated with the wastewater treatment plant.

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES
	AO 11.3 Reconfiguring a lot within a wastewater treatment plant buffer:- (a) does not result in the creation of additional lots used or capable of being used for residential purposes; (b) where rearranging boundaries, does not worsen the existing situation with respect to the distance between available house sites and the wastewater treatment plant. Note: Buffer distances are identified in Schedule 8 Separation distances. Sensitive land uses are defined in the State Planning Policy.
WASTE MANAGEMENT FACILITIES	
PO 12 Noise emissions Residential activities and other sensitive land uses are not adversely affected by noise emissions from existing or planned waste management facilities.	AO12.1 A sensitive land use involving a residential activity is not located or intensified within a waste management facility buffer. AO12.2 A sensitive land use (other than a residential activity) located within a waste management facility buffer:- (a) incorporates appropriate measures to minimise noise impacts; and (b) demonstrates that occupants and users will not be adversely affected by noise emissions from activities associated with the waste management facility. AO12.3 Reconfiguring a lot within a waste management facility buffer:- (a) does not result in the creation of additional lots used or capable of being used for residential purposes; (b) where rearranging boundaries, does not worsen the existing situation with respect to the distance between available house sites and the waste management facility. Note: Buffer distances are identified in Schedule 8 Separation distances. Note: Sensitive land uses are defined in the State Planning Policy.
STATE-CONTROLLED ROADS	
PO 13 Transport noise corridors Noise sensitive developments (residential, educational and community) must ensure that road traffic noise levels are appropriately managed to achieve acceptable levels of amenity within the development.	AO 13.1 Buildings within transport noise corridors will be constructed in conformance with <i>Queensland Development Code MP 4.4</i>.

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES
RAILWAYS	
PO 14 Rail corridors Development adjacent to rail corridors does not prejudice the safety, speed and intended role of existing and future rail corridors. Note: Noise and vibration-sensitive developments (residential, educational and community) must ensure that noise and vibration levels resulting from rail activities are appropriately managed to achieve acceptable levels of amenity within the development.	AO 14.1 The design and construction of the development abutting a railway corridor ensure that the efficient function, operation and maintenance of railway services is maintained and that there are no adverse impacts on the corridor or on railway operations.
STOCK ROUTES	
PO 15 Stock routes Protect stock routes from any development that would compromise the network's primary use.	AO 15.1 The use of lots fronting the stock route network (including lot access) has no adverse impact on the operational efficiency or safety of the stock route.