7.2.5 Regional infrastructure overlay code

7.2.5.1 Application

This code applies to development where the code is identified as applicable in the categories of development and assessment for the Regional infrastructure overlay and applies to any areas identified on Regional infrastructure corridor overlay map OM6.

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

7.2.5.2 Purpose

(1) The purpose of the Regional infrastructure overlay code is to:

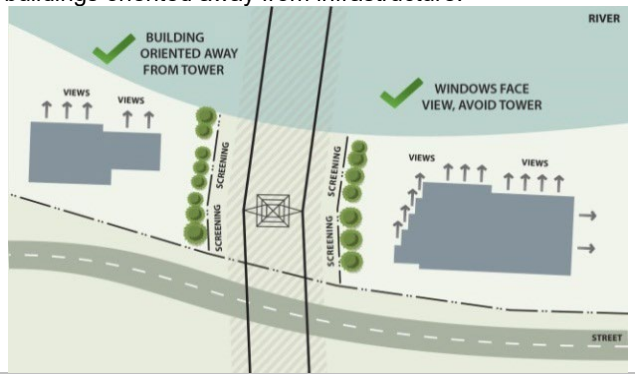
- (a) protect regionally significant infrastructure including the Tabletop en-route or secondary radar, Very high frequency communication facilities and Satelilite ground station aviation facilities from nearby development that is sensitive to, or creates a risk for the infrastructure; and
- (b) protect nearby development from the potential impacts of the regionally significant infrastructure.

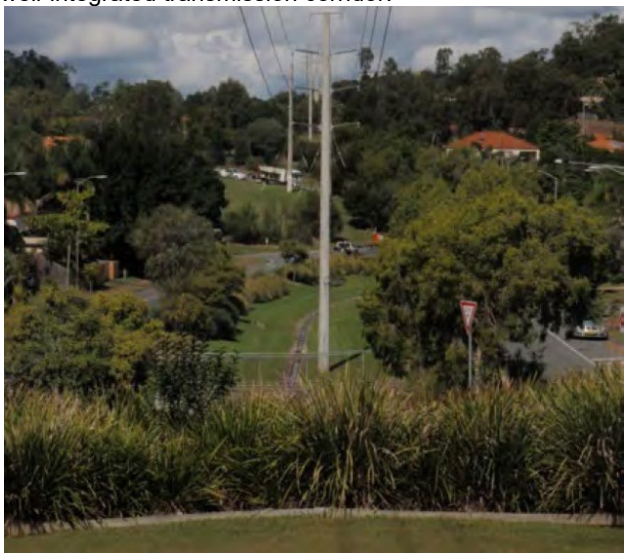
(2) The purpose of the code will be achieved through the following overall outcomes:

- (a) effective separation and interface treatment is provided to major infrastructure sites and corridors to avoid risk to people and property and to minimise noise, odour and visual impacts;
- (b) easy access is provided to and along major infrastructure sites and corridors;
- (c) development does not compromise the safe and efficient operation, maintenance or expansion of major infrastructure;
- (d) existing and planned regional infrastructure facilities and corridors are protected from encroachment by sensitive land uses or incompatible development;
- (e) development does not create any threat to the provision of a safe and reliable supply of services and infrastructure to all users, and avoids any potential interference with the ongoing operation, maintenance and augmentation of the services and infrastructure;
- (f) development does not increase the potential for safety concerns, nuisance and complaints and minimises the need for measures to be introduced in the operation of the infrastructure to reduce potential impacts on surrounding areas; and
- (g) development minimises overlooking of and visual exposure to the infrastructure sites and corridors.

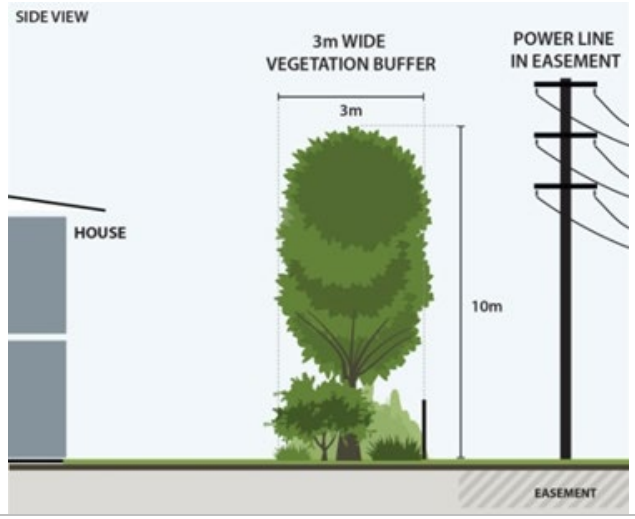
7.2.5.3 Specific benchmarks for assessment

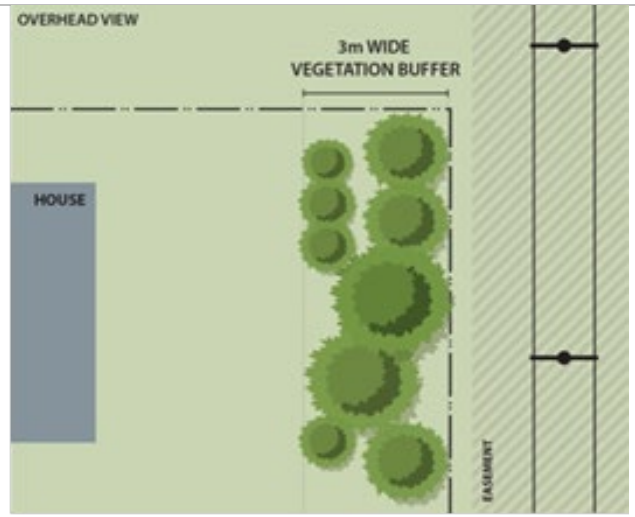
Table 7.2.5.3 — Assessable development

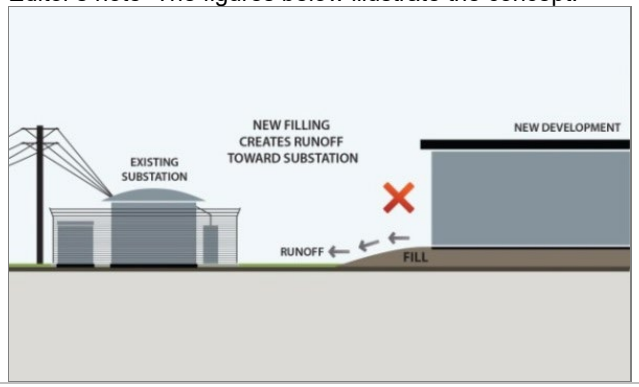
Performance outcomes	Acceptable outcomes	Applicant's response
General		
PO1 Development does not increase risk to community health or safety, or the operation and reliability of major regional infrastructure.	No acceptable outcome is nominated.	
PO2 Development involving a sensitive land use is sufficiently separated from major infrastructure to: (a) ensure community safety; (b) minimise the likelihood of nuisance or complaint; and (c) is located, designed and constructed to protect the integrity of the major infrastructure; and (d) maintains adequate access for any required maintenance or upgrading of the major infrastructure.	**AO2** Sensitive land uses maintain a setback of at least: (a) 50m from a transmission substation; (b) 20m from any other substation; (c) 40m from a Powerlink high voltage corridor; (d) 20m from bulk water storage infrastructure; (e) 30m from a transmission line equal or greater than 66kV (identified as a major electricity infrastructure on OM6).	
PO3 Other than where they are separated from the infrastructure by a road, buildings are oriented to avoid direct overlooking of major infrastructure or corridors.	No acceptable outcome is nominated. Editor's note–The figure below provides an illustration of buildings oriented away from infrastructure.  	

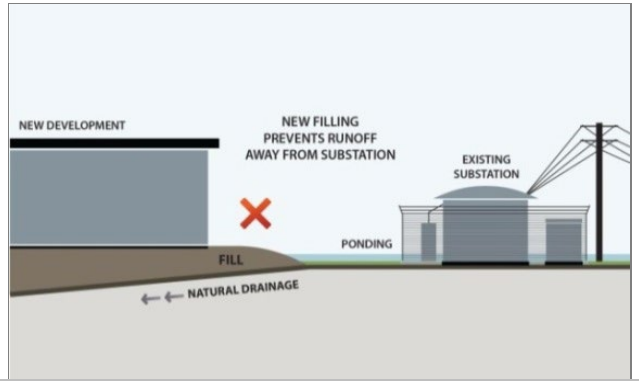
PO4 Major infrastructure within private land is protected by easement in favour of the service provider.	**AO4** Existing easements are maintained and where none currently exist, new easements are created which are sufficient for the provider's requirements.	
PO5 Where in the building restriction area, development (including any associated permanent or temporary structures landscaping) does not obstruct a clear line of sight between the Tabletop en-route or secondary radar, Very high frequency communication facilities and Satelilite ground station aviation facilities and associated communication satellites.	**AO5** Where in the building restriction area, development (including any associated permanent or temporary structures landscaping) does not exceed 12m in building height.	
Electricity infrastructure (including substations)		
PO6 Where major electricity infrastructure is located within public open space, the dimensions and characteristics of the open space area are sufficient to accommodate the electricity easement, in combination with compatible recreational facilities and landscaping, so that: (a) it has an open and expansive character, with landscape design which assists in breaking up the linear and vertical dominance of the infrastructure; (b) landscaping is located outside the easement area and substantively screens and softens the appearance of poles, towers or other structures; and (c) recreational facilities and landscaping are compatible with the electricity infrastructure, having regard to safety, height, the conductivity of materials and access to the electricity infrastructure by the electricity provider.	No acceptable outcome is nominated. Editor's note–The figures below provide an example of a well-integrated transmission corridor. 	

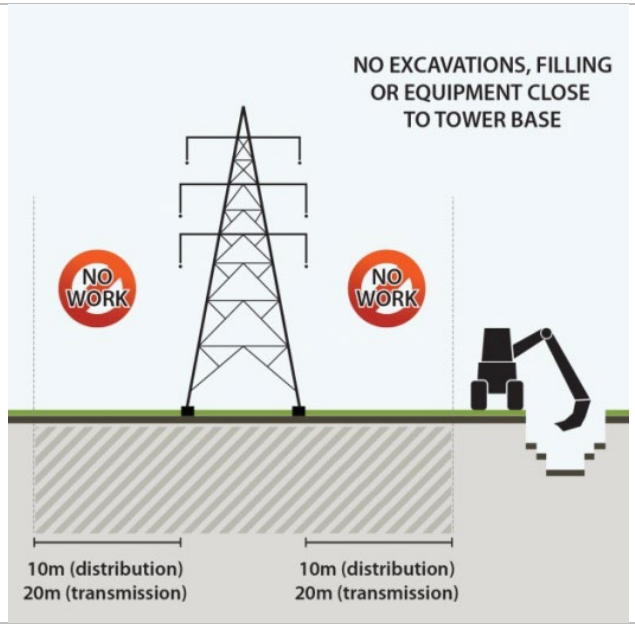
	 Editor's note–Refer also to the Landscaping code.	
PO7 Where major electricity infrastructure is located in a road: (a) an attractive, functional and safe streetscape is achieved; (b) street furniture, planting and lighting are compatible with the electricity infrastructure, having regard to safety, height and the conductivity of materials; (c) the reserve has sufficient width to accommodate significant landscaping which assists in screening and softening poles, towers or other structures and equipment from nearby sensitive land uses; (d) the clearances required under schedules 4 and 5 of the *Electrical Safety Regulations 2002* can be achieved; and (e) convenient access to the infrastructure by the electricity provider is maintained.	No acceptable outcome is nominated.	

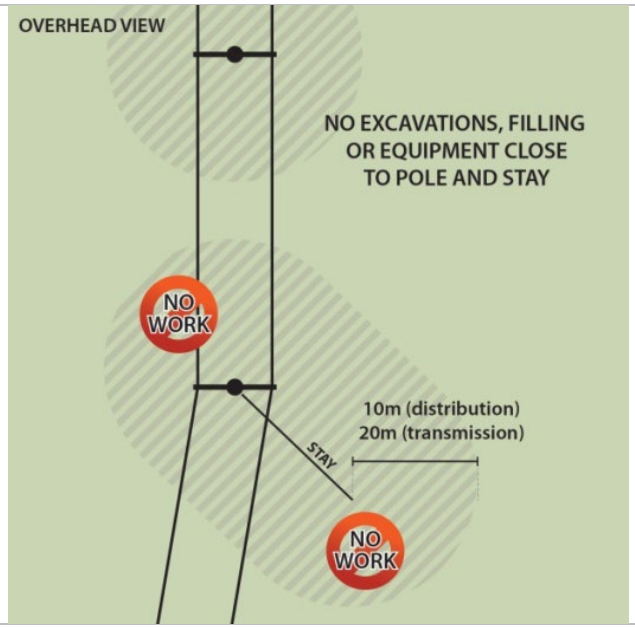
PO8 Development avoids potential noise nuisance from electricity substations.	**AO8** Noise emissions do not exceed 5db(A) above background noise level at the facia of a building measured in accordance with AS 1055 Acoustics – description and measurement of environmental noise.	
PO9 There is sufficient space within the site to establish landscaping which substantively assists in screening and softening poles, towers or other structures and equipment associated with major electricity infrastructure and substations.	**AO9** A minimum 3m wide densely planted landscaped buffer is provided along the boundary adjoining the major electricity infrastructure, including provision for advanced trees and shrubs that will grow to a minimum height of 10m. Editor's note–The figures below provide an example but are not drawn to scale. Applicants may find guidance in Powerlink's "Screening your home from powerlines – A guide for planting trees and shrubs outside of easements to screen powerlines". Applicants should also note that vegetation will need to maintain statutory clearances (refer Ergon's Standard for Vegetation Management and Standard for Vegetation Clearance Profile).  	

	 Editor's note–Refer also to the Landscaping code.	
Reconfiguring a lot		
PO10 Reconfiguration of lots does not compromise or adversely impact upon the efficiency, functionality and integrity of major infrastructure and services networks.	No acceptable outcome is nominated.	
PO11 Lot reconfiguration integrates major infrastructure sites and corridors within the overall layout. Layout and design: (a) ensures land of sufficient size and suitability is allocated to accommodate the existing and future major infrastructure networks; (b) as far as possible, minimises the likely visual prominence of major infrastructure; and (c) provides for an interface to surrounding uses that minimises the potential for nuisance (including noise and odour), health and safety concerns.	No acceptable outcome is nominated.	

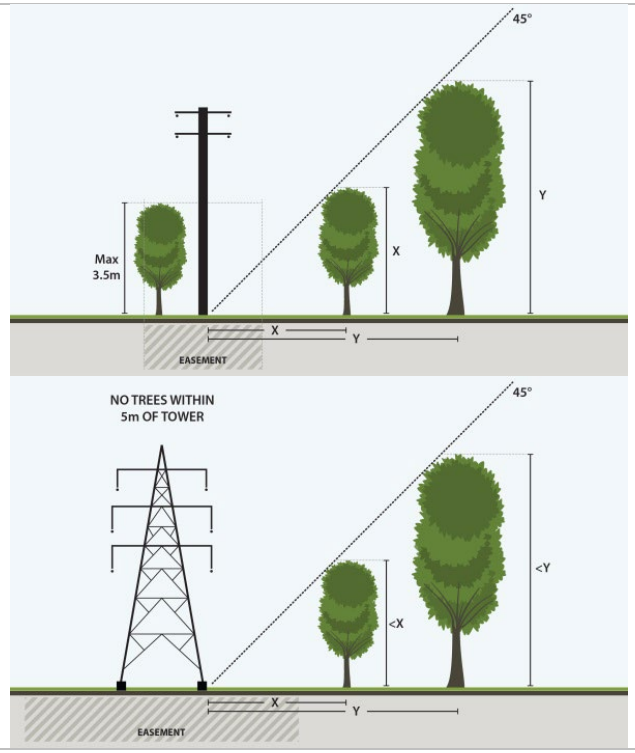
Editor's note–Applicants should consult with the infrastructure providers early in the planning process to determine relevant infrastructure requirements.		
PO12 Where the reconfiguration involves major electricity infrastructure corridor, the corridor is incorporated within a useable public open space network wherever possible.	No acceptable outcome is nominated.	
Operational works		
PO13 Development within a bulk water storage area is located, designed and constructed to: (a) protect the integrity of the water supply infrastructure; and (b) maintains adequate access for any required maintenance or upgrading work to the water supply infrastructure.	**AO13** Development does not involve works within a bulk water storage infrastructure corridor.	
PO14 Earthworks do not restrict access to major electricity infrastructure by the electricity providers, using their normal vehicles and equipment.	No acceptable outcome is nominated.	
PO15 There is no worsening of flooding, drainage or erosion conditions affecting regional infrastructure.	No acceptable outcome is nominated. Editor's note–The figures below illustrate the concept.  	

		
PO16 Development maintains the clearances required under schedules 4 and 5 of the *Electrical Safety Regulations 2002.*	No acceptable outcome is nominated.	
PO17 Earthworks are undertaken in a way which: (a) ensures stability of the land on or adjoining electricity infrastructure; (b) does not otherwise impact on the safety and reliability of the electricity infrastructure; and (c) does not restrict the placement or use of the electricity provider's equipment.	**AO17.1** No earthworks are undertaken: (a) for overhead transmission infrastructure, within 20m of a transmission tower or pole; or (b) for overhead distribution infrastructure, within 10m of a tower, pole or stay; or (c) for substations, within 10m of a property boundary shared with the substation. Editor's note–The figures below illustrate the concept.	


NO EXCAVATIONS, FILLING
OR EQUIPMENT CLOSE
TO TOWER BASE
NO
WORK
NO
WORK
10m (distribution)
20m (transmission)
10m (distribution)
20m (transmission)

		
	AO17.2 No earthworks are undertaken, or other loading or displacement of earth caused, within the easement of an underground power line.	
PO18 Other services and infrastructure works (such as stormwater, sewerage, water and the like) do not impact on the safety and reliability of electricity infrastructure.	**AO18.1** Underground services are not located within 20m of a tower, pole, stay or substation boundary.	
	AO18.2 No valve pits occur within: (a) for transmission infrastructure, 60m of a tower, pole or stay; or (b) for distribution infrastructure, 20m of a tower, pole or stay	

	AO18.3 Pipelines with cathodic protection systems, comply with part 11 of the *Electrical Safety Regulation 2013*.	
	AO18.4 Underground services traversing an easement, cross at right angles to the overhead or underground lines.	
	AO18.5 Trenches for services are backfilled to be compacted in 150mm layers to at least 95% modified dry density compaction ratio.	
	AO18.6 Trenches under construction are not left open overnight.	
PO19 Vegetation does not pose a risk to the safety or reliability of electricity infrastructure.	**AO19.1** Vegetation planted within an easement of an overhead powerline or, where there is no easement, the area of influence of a powerline has a mature height of no more than 3.5 metres.	
	AO19.2 Vegetation planted within an underground powerline easement does not have a mature root system in >150mm depth and is not located directly over the powerline.	
	AO19.3 Vegetation adjoining easements complies with the clearance dimensions illustrated in the figure below.	

		
	AO19.4 Planting complies with (as relevant to the infrastructure concerned): (a) Energex's *Safe Tree Guidelines;* or (b) Ergon's *Plant Smart* brochures; or (c) Powerlink's *Screening Your Home from Powerlines* information sheet and Property and Easements / Landowner information sheets). Editor's note–Further information can be found on the websites of the abovementioned infrastructure providers.	