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Schedule 4A IDAS code for development applications for prescribed tidal work

section 16

Part 1 Preliminary

1 Application of code

This code applies for the assessment of a development application for prescribed tidal work for which a local government is the assessment manager.

2 Purpose of code

The purpose of this code is to ensure prescribed tidal work for which it applies—

(a) is compatible with the character and amenity of its surrounding area; and

(b) is designed and constructed in a way to ensure it is structurally sound; and

(c) is safe for use; and

(d) is adequately serviced with infrastructure, including, for example, infrastructure for the supply of water or the discharge of sewage; and

(e) involves only minimal use of tidal water in a canal, for a non-maritime purpose; and

(f) does not cause a significant adverse affect to any of the following—

(i) existing public access to any foreshores or any tidal water;

(ii) navigable access to, or navigable egress from, any non-tidal work lot;

(iii) the natural features of any tidal water, including, for example, the water quality and bed and banks of the tidal water;

(iv) the structural integrity, operation or maintenance of any existing structure.

3 Definitions

In this code—

Australian Standard includes a standard jointly made or published by Standards Australia and Standards New Zealand.

axle load means the load applied through the axle of a vehicle.

bed and banks, of tidal water, means land over which the tidal water ordinarily flows or that is ordinarily covered by the tidal water, whether permanently or intermittently; but does not include adjacent land that is from time to time covered by floodwater.

concentrated live load, in relation to a structure, means a live load that is not uniformly distributed over the structure.

dead load, of prescribed tidal work, means the total load applied to the work by—

(a) the structural components of the work; and

(b) anything permanently on or attached to the work, including, for example, a partition or machinery permanently fixed to the work.

distributed live load, in relation to a structure or a part of a structure, means a live load that is uniformly distributed over the structure or the part.

extended side boundary, of a lot connected to prescribed tidal work, means a notional boundary worked out by extending a side boundary of the lot into tidal water—

(a) in a continuing straight line; or

(b) if extending the side boundary into tidal water in a continuing straight line would reduce the unimpeded

navigable access to, or egress from, an adjoining lot to less than 3m or cause a significant adverse affect to navigational safety—at an angle that ensures—

(i) the unimpeded navigable access to, or egress from, any adjoining lot is not reduced to less than 3m; and

(ii) no significant adverse affect is caused to navigational safety.

factor of safety, of a retaining wall, revetment or seawall, means the number worked out by dividing the total forces of the retaining wall, revetment or seawall that resist overturning or sliding by the total forces of the retaining wall, revetment or seawall that cause overturning or sliding.

foreshore means the part of the shore between the low water mark and highest astronomical tide.

foundation support, for a bridge, means anything that can be used to support the bridge, including, for example, an anchor, footing or pile.

group use, of a structure, means use of the structure other than individual use of the structure.

highest astronomical tide means the highest level of the tides that can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions.

independent deck means a structure that—

(a) consists only of a deck and components to structurally support the deck; and

(b) is not connected with another structure that is tidal work.

Examples of a deck that is connected with another structure that is tidal work—

- the deck of a jetty
- the deck of a pontoon

individual use, of a structure, means use of the structure—

(a) that is by persons from only 1 residence, place of business or parcel of vacant land; and

(b) that is not by a group of persons in the course of activities of an association, society, body or other entity.

Examples of associations, societies, bodies or other entities for paragraph (b)—

sporting or recreational club, youth group, youth organisation, scout or guide group, school or university, environmental education group

kilonewton means a unit of force equal to 1000 newtons.

kN means kilonewton.

kPa means kilopascal.

lighting standard means each of the following Australian Standards—

(a) AS/NZS 1158.6:2004—Lighting for roads and public spaces—Luminaries;

(b) AS/NZS 1158.3.1:1999—Road lighting—Pedestrian area (category P) lighting—Performance and installation design requirements;

(c) AS 4282-1997—Control of the obtrusive effects of outdoor lighting.

live load, in relation to a structure, means the total load applied to the structure by anything temporarily on or attached to the structure.

load means weight, force or pressure.

lot includes a parcel of unallocated State land.

major wharf means a wharf the construction of which—

(a) has significantly disturbed, or will significantly disturb, the substrate, flora or fauna in the locality within which the wharf is located; or

(b) has caused, or will cause, a significant isolation of parts of land or tidal water in the locality within which the wharf is located, including, for example, the bed and banks of tidal water.

marine plant see the *Fisheries Act 1994*, section 8.

minor wharf means a wharf that is not a major wharf.

non-private purpose means a purpose other than a private purpose.

non-tidal work lot means a lot that is not, and never was, the subject of any of the following—

(a) a development approval for prescribed tidal work;

(b) a development approval for tidal works that are not prescribed tidal work;

(c) a deemed approval.

pontoon means a structure consisting of the following components—

(a) a flotation unit;

(b) an access walkway for the flotation unit;

(c) a system for mooring the flotation unit and access walkway;

(d) an abutment.

private boat ramp means a boat ramp used for a private purpose.

private slip way means a slip way used for a private purpose.

probable solution, for achieving a specific outcome stated in the table, column 1, means the probable solution stated in the table, column 2 opposite the specific outcome.

relevant engineering standard, for prescribed tidal work, means a standard, practice, principle, procedure or other requirement accepted in the engineering industry as being an appropriate standard, practice, principle, procedure or requirement for the design or construction of work of that type.

relevant loading matter, for prescribed tidal work, means each of the following matters, to the extent they affect the load that can be reasonably expected to be applied to the work at any time—

(a) the purpose or activity for which the work is intended to be used;

(b) the dead load of the work;

(c) the maximum number of people likely to use the work at any time;

(d) the maximum number of vehicles likely to be on or moored at the work at any time;

(e) the types of vehicles likely to be on or moored at the work;

(f) the height or velocity of waves likely to occur in the tidal water under, within or over which the work is located;

(g) any other thing that may be relevant to the load applied to the work at any time, including, for example, environmental factors.

relevant planning scheme, for prescribed tidal work, means the local government planning scheme applying to the lot connected to the work.

relevant planning scheme standard, in relation to achieving a specific outcome for prescribed tidal work, means a standard—

(a) stated in the relevant planning scheme for the work; and

(b) relevant to achieving the specific outcome.

revetment means a wall constructed along the bottom of an embankment to—

(a) protect the embankment from erosion; and

(b) keep in place the materials that are landward of the wall.

roofed means covered with a permanent or temporary attachment.

Examples of temporary attachments—

tarpaulin, umbrella, wind sail

s 6(2) solution see section 5 of this code.

seawall means a wall constructed along a shoreline to—

(a) prevent the encroachment, by wave action, of the sea past the shoreline; and

(b) keep in place the materials that are landward of the wall.

shore abutment means a solid wall or other structure constructed adjacent to a shoreline to counteract any force applied to the shore by a bridge, independent deck or other structure located on the shore.

side boundary, of a lot, means a boundary of the lot that meets tidal water but is not a waterfront boundary of the lot.

specific outcome means an outcome stated in the table, column 1.

stormwater outlet means a pipe that is the exit for an artificial passage for stormwater or floodwater.

vegetation does not include marine plants.

vehicle includes a boat or other vessel.

waterfront boundary, of a lot, means a boundary of the lot fronting tidal water.

4 When lot connected to prescribed tidal work

For this code, a lot is connected to prescribed tidal work if—

(a) the work is attached to the lot; or

(b) the work is not attached to the lot but is constructed for use in association with the lot.

Example for paragraph (b)—

a mooring pile near, but not attached to, a lot used for mooring vessels by persons who live on the lot

5 References to s 6(2) solution in probable solution

In the table, a reference to the words 's 6(2) solution', in brackets, before a probable solution is a reference to the requirement, under section 6(2) of this code, that the probable solution must be complied with to achieve the specific outcome stated opposite the solution.

Part 2 Compliance with code

6 How to comply with code

(1) This code is complied with for prescribed tidal work if each specific outcome applying to the work is achieved.

(2) A specific outcome mentioned in item 12.10, 13.1, 13.2, 15.1, 15.2, 16.1, 16.2, 16.4, 17.1, 18.1, 18.2, 18.3, 18.4, 19.1, 19.2, 19.3 or 20.1 of the table is achieved only if the probable solution for achieving the outcome is complied with.

(3) A probable solution for achieving a specific outcome, other than a specific outcome mentioned in subsection (2), provides a guide for how the outcome may be achieved.

7 Relationship between particular specific outcomes and probable solutions

(1) This section applies if there is an inconsistency or overlap between—

(a) a specific outcome (a ***general specific outcome***) mentioned in any item in the table from item 12.1 to item 12.10, inclusive; and

(b) a specific outcome (a ***direct specific outcome***) mentioned in any item in the table from item 13.1 to item 20.1, inclusive.

(2) The direct specific outcome prevails to the extent of the inconsistency or overlap.

(3) Subsection (4) applies if the probable solution for the general specific outcome includes an Australian Standard that is more stringent than a stated direct standard included in the probable solution for the direct specific outcome.

(4) The probable solution for the direct specific outcome is taken to include the Australian Standard instead of the stated direct standard.

Example for subsection (4)—

An Australian Standard mentioned in the probable solution in item 12.1 of the table includes a requirement about the minimum load a boardwalk or independent deck must be able to support and the minimum load is higher than the minimum load stated, for the boardwalk or deck, in paragraph (a) of the probable solution in item 15.1 of the table. Paragraph (a) of the probable solution in item 15.1 is taken to refer to the minimum load stated in the Australian Standard.

(5) In this section—

stated direct standard, included in the probable solution for a direct specific outcome, means a standard stated in the probable solution, other than a relevant planning scheme standard.

Part 3 Specific outcomes and probable solutions

Table

Column 1	Column 2
Specific outcome	**A probable solution**
Character and amenity (generally)—prescribed tidal work in a canal	
1.1 Prescribed tidal work in a canal and for a private purpose is compatible with its location, having regard to the following— (a) the character and amenity of the work's immediate surroundings and the locality within which the work is located; (b) if the relevant planning scheme states the desired character or amenity for the work's immediate surroundings or the locality within which the work is located—the stated desired character or amenity.	The design and construction of the prescribed tidal work is consistent with the following standards— (a) subject to paragraph (c), prescribed tidal work does not extend past the side boundary or extended side boundary of the lot connected to the work; (b) subject to paragraph (c), prescribed tidal work is not roofed; (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a) or (b)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a) or (b); (d) any other relevant planning scheme standard that is not inconsistent with the standards mentioned in paragraphs (a) to (c).

Column 1	Column 2
Specific outcome	**A probable solution**
1.2 Prescribed tidal work in a canal and for a non-private purpose is compatible with its location, having regard to the following— (a) the character and amenity of the work's immediate surroundings and the locality within which the work is located; (b) if the relevant planning scheme states the desired character or amenity for the work's immediate surroundings or the locality within which the work is located—the stated desired character or amenity.	The design and construction of the prescribed tidal work is consistent with the following standards— (a) subject to paragraph (c), prescribed tidal work used for a commercial purpose does not extend past the side boundary or extended side boundary of the lot connected to the work; (b) subject to paragraph (c), prescribed tidal work is not roofed unless it is the main access to land; (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a) or (b)—the relevant planning scheme standard, to the extent it is more stringent than the standard stated in paragraph (a) or (b); (d) any other relevant planning scheme standard that is not inconsistent with the standards mentioned in paragraphs (a) to (c).

Column 1	Column 2
Specific outcome	**A probable solution**
Character and amenity (generally)—prescribed tidal work not in a canal	
2.1 Prescribed tidal work not in a canal and for a private purpose is compatible with its location, having regard to the following— (a) the character and amenity of the work's immediate surroundings and the locality within which the work is located; (b) if the relevant planning scheme states the desired character or amenity for the work's immediate surroundings or the locality within which the work is located—the stated desired character or amenity.	The design and construction of the prescribed tidal work is consistent with the following standards— (a) subject to paragraph (e), prescribed tidal work does not extend past the side boundary or extended side boundary of the lot connected to the work; (b) subject to paragraph (e), prescribed tidal work is the only work of its type along the edge of the tidal water fronting the lot connected to the work; (c) subject to paragraph (e), prescribed tidal work that is a boardwalk or independent deck is not roofed; (d) subject to paragraph (e), prescribed tidal work other than a boardwalk or deck is not roofed unless it is the main access to land; (e) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a), (b), (c) or (d)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a), (b), (c) or (d); (f) any other relevant planning scheme standard that is not inconsistent with the standards mentioned in paragraphs (a) to (e).

Column 1	Column 2
Specific outcome	**A probable solution**
2.2 Prescribed tidal work not in a canal and for a non-private purpose is compatible with its location, having regard to the following— (a) the character and amenity of the work's immediate surroundings and the locality within which the work is located; (b) if the relevant planning scheme states the desired character or amenity for the work's immediate surroundings or the locality within which the work is located—the stated desired character or amenity.	The design and construction of the prescribed tidal work is consistent with the following standards— (a) subject to paragraph (c), prescribed tidal work used for a commercial purpose does not extend past the side boundary or extended side boundary of the lot connected to the work; (b) subject to paragraph (c), prescribed tidal work used for a commercial purpose is not roofed unless it is the main access to land; (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a) or (b)—the relevant planning scheme standard, to the extent the standard is more stringent than the standard mentioned in paragraph (a) or (b); (d) any other relevant planning scheme standard that is not inconsistent with the standards mentioned in paragraphs (a) to (c).

Column 1	Column 2
Specific outcome	**A probable solution**
Character and amenity (height, scale and size)	
3.1 Prescribed tidal work is of a height, scale and size to ensure the work is compatible with the character and amenity of its location, having regard to the following— (a) the height, scale and size of the natural features of the work's immediate surroundings and the locality within which the work is located; (b) the height, scale and size of the existing buildings or other structures in the work's immediate surroundings and the locality within which the work is located; (c) if the relevant planning scheme states the desired height, scale or size of buildings or other structures in the work's immediate surroundings or the locality within which the work is located—the stated desired height, scale or size.	The height, scale and size of the prescribed tidal work is consistent with each relevant planning scheme standard.

Column 1	Column 2
Specific outcome	**A probable solution**
Character and amenity (materials and colours)	
4.1 The materials used for, and the colours of, prescribed tidal work are compatible with the character and amenity of the work's location, having regard to the following— (a) the natural features of the work's immediate surroundings and the locality within which the work is located; (b) the existing buildings or other structures in the work's immediate surroundings and the locality within which the work is located; (c) if the relevant planning scheme states the desired materials to be used for, or desired colours of, buildings or other structures in the work's immediate surroundings or the locality within which the work is located—the stated desired materials or colours.	The materials used for, and colours of, the prescribed tidal work are consistent with each relevant planning scheme standard.

Column 1	Column 2
Specific outcome	**A probable solution**
Lighting	
5.1 Lighting, other than an aid to navigation, for prescribed tidal work is installed in a way to ensure the security and safe use of the work without causing significant adverse effects on the amenity of the locality within which the work is located.	The lighting for the prescribed tidal work, other than an aid to navigation, is consistent with the following standards— (a) subject to paragraph (c), lighting for prescribed tidal work is hooded and directed downwards; (b) subject to paragraph (c), each lighting standard, to the extent relevant; (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a) or (b)—the relevant planning scheme standard, to the extent the standard is more stringent than the standard mentioned in paragraph (a) or (b); (d) any other relevant planning scheme standard that is not inconsistent with the standards mentioned in paragraphs (a) to (c).

Column 1	Column 2
Specific outcome	**A probable solution**
Signage	
6.1 A sign erected or otherwise placed in position for prescribed tidal work, other than a sign erected or placed for safety reasons or under an Act— (a) is compatible with the character and amenity of the work's immediate surroundings and the locality within which the work is located; and (b) is not a dominant feature of the work, unless the dominance is for safety reasons.	A sign erected or otherwise placed in position for prescribed tidal work, other than a sign erected or placed for safety reasons or under an Act, is consistent with the following standards— (a) subject to paragraph (c), a sign erected or placed in position for identifying prescribed tidal work, or the owner of the work, is the only sign erected or placed in position for identifying the work or owner; (b) subject to paragraph (c), a sign erected or otherwise placed in position for prescribed tidal work is integrated into the design and construction of the work; (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a); (d) any other relevant planning scheme standard that is not inconsistent with the standards mentioned in paragraphs (a), (b) and (c).

Column 1	Column 2
Specific outcome	**A probable solution**
Earthwork and vegetation	
7.1 Excavation and filling for prescribed tidal work— (a) is carried out only to the extent reasonably necessary for the work; and (b) does not have a significant adverse effect on— (i) the natural features of the tidal water under, within or over which the work is located; or (ii) the level of the surface of the land under the tidal water under, within or over which the work is located, or any foreshores near the work.	The earthwork and filling for the prescribed tidal work is consistent with each relevant planning scheme standard.
7.2 The location of prescribed tidal work ensures vegetation is cleared or disturbed only to the extent reasonably necessary for the work.	The vegetation in the tidal water, under within or over which the prescribed tidal work is located, or on land under the tidal water, is cleared or disturbed in a way consistent with each relevant planning scheme standard.
7.3 Any vegetation damaged, destroyed or removed by prescribed tidal work under, within or over tidal water other than an artificial waterway, is replaced with appropriate vegetation.	Vegetation affected by the prescribed tidal work is dealt with in a way consistent with the following standards— (a) subject to paragraph (b), vegetation damaged, destroyed or removed by prescribed tidal work is replaced with native vegetation for the locality within which the work is located, to the extent it is reasonably practicable to replace the vegetation with native vegetation;

Column 1	Column 2
Specific outcome	**A probable solution**
	(b) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a); (c) any other relevant planning scheme standard that is not inconsistent with the standards mentioned in paragraphs (a) and (b).
Public access—availability	
8.1 Prescribed tidal work does not have a significant adverse effect on the availability of public access to foreshores, including public access proposed in the relevant planning scheme.	The design and construction of the prescribed tidal work is consistent with the following standards— (a) subject to paragraph (b), prescribed tidal work does not involve the erection or placement of any physical barrier preventing existing access, along a public accessway, to the foreshores near the work; (b) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a); (c) any other relevant planning scheme standard that is not inconsistent with the standards mentioned in paragraphs (a) and (b).
Public access—safety	
9.1 The location and design of prescribed tidal work does not adversely affect the safety of members of the public accessing the foreshores.	Public access to foreshores near the prescribed tidal work is consistent with each relevant planning scheme standard.

Column 1	Column 2
Specific outcome	**A probable solution**
Navigable access to, or egress from, non-tidal work lots	
10.1 Prescribed tidal work does not adversely affect navigable access to, or navigable egress from, any non-tidal work lot.	The design and construction of the prescribed tidal work is consistent with the following standards— (a) subject to paragraph (b), if the lot connected to prescribed tidal work (the ***connected lot***) adjoins a non-tidal work lot, the work does not extend past the connected lot's side boundary, or extended side boundary, adjoining the non-tidal work lot; (b) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a).
Infrastructure, including, access, parking, sewerage and water services	
11.1 Prescribed tidal work has appropriate infrastructure, including, in particular, road access, parking facilities, sewerage services and water services, having regard to— (a) the nature and scale of the work; and (b) the number of people that may be on or at the work at any time; and (c) the number of vehicles that may be on or moored at the work at any time; and (d) the protection of any foreshores near the work and the vegetation and marine plants on the foreshores.	The infrastructure for prescribed tidal work is consistent with each relevant planning scheme standard.

Column 1	Column 2
Specific outcome	**A probable solution**
Design, construction and safety—all prescribed tidal work	
12.1 Prescribed tidal work is designed and constructed in a way to ensure it is structurally sound, having regard to the following— (a) relevant engineering standards; (b) the location of the work; (c) the purpose for which the work is to be used; (d) the impact of flooding, tidal influences and hydrodynamic changes.	The design and construction of the prescribed tidal work is consistent with the following standards— (a) subject to paragraph (b), each Australian Standard relevant to the design or construction of structures, to the extent requirements stated in the Standard apply to the design or construction of prescribed tidal work; (b) if a relevant planning scheme standard is more stringent than any standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a).
12.2 Prescribed tidal work does not adversely affect the structural integrity of any existing revetment or seawall or another existing structure.	The design and construction of the prescribed tidal work is consistent with the following standards— (a) subject to paragraph (b), prescribed tidal work, including any shore abutment, piling or other structure connected with the work— (i) does not place an additional load on any existing revetment or seawall or another existing structure; or (ii) can be structurally supported by an existing revetment or seawall or another existing structure; (b) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a).

Column 1	Column 2
Specific outcome	**A probable solution**
12.3 Prescribed tidal work is designed and constructed in a way to ensure it does not adversely affect the stability of the bed and banks of any tidal water.	The design and construction of the prescribed tidal work is consistent with the following standards— (a) subject to paragraph (b), prescribed tidal work does not cause, by changing the flow of water, the removal of, or disturbance to, the sediment on the bed and banks of any tidal water; (b) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a).
12.4 Prescribed tidal work is designed and constructed using materials having a long life in marine environments, having regard to their ability to resist the following— (a) attack by marine organisms; (b) corrosion; (c) deterioration resulting from abrasion or immersion in seawater.	The design and construction of the prescribed tidal work is consistent with the following standards— (a) subject to paragraph (b), each Australian Standard relevant to the materials that should be used, or the measures that should be taken to treat materials used, for structures, to the extent the requirements stated in the Standard apply to structures located in a marine environment; (b) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a).

Column 1	Column 2
Specific outcome	**A probable solution**
12.5 Prescribed tidal work is designed and constructed in a way to ensure it does not adversely affect the operation or maintenance of any existing stormwater outlet.	The design and construction of the prescribed tidal work is consistent with the following standards— (a) subject to paragraph (c), vessels moored at prescribed tidal work do not impede the discharge of stormwater; (b) subject to paragraph (c), prescribed tidal work does not restrict access to any stormwater outlet; (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a) or (b)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a) or (b).
12.6 Prescribed tidal work is designed and constructed in a way to ensure it does not adversely affect the water quality of any tidal water, including, in particular, as a result of— (a) release, into the tidal water, of materials used in the construction of the work; or (b) disturbance to the sediment on the bed and banks of the tidal water; or (c) exposure to acid sulphate soils.	The design and construction of the prescribed tidal work is consistent with the following standards— (a) subject to paragraph (b), each Australian Standard relevant to the design or construction of structures under, within or over tidal water, to the extent the requirements stated in the Standard are directed at maintaining the water quality of tidal water; (b) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a).

Column 1	Column 2
Specific outcome	**A probable solution**
12.7 Prescribed tidal work is designed and constructed in a way to ensure it is safe for persons standing or walking on the work.	The design and construction of the prescribed tidal work is consistent with the following standards— (a) subject to paragraph (c), any surface of prescribed tidal work on which a person may stand or walk is— (i) not slippery; and (ii) does not have any feature that may cause the person to trip or fall; (b) subject to paragraph (c), any part of prescribed tidal work that is unsafe for persons standing or walking on the work is surrounded by adequate barriers to deter persons from entering the part; (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a) or (b)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a) or (b).
12.8 Appropriate measures are taken for prescribed tidal work for a non-private purpose to ensure an unsupportable live load is not applied to the work by persons or vehicles.	The design and construction of the prescribed tidal work is consistent with the following standards— (a) subject to paragraph (b), prescribed tidal work has erected or placed in position on or near the work, a sign that— (i) is visible at all times; and (ii) states the maximum live load that may be applied to the work, in terms of the maximum number of persons that may be on the work at any given time or the maximum number of vehicles of a particular type that may be on or moored at the work at any given time;

Column 1	Column 2
Specific outcome	**A probable solution**
	(b) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a).
12.9 Prescribed tidal work, other than a boardwalk or an independent deck for a private purpose, is designed and constructed in a way that ensures the use of tidal water in a canal for a non-maritime purpose is minimised.	The design and construction of the prescribed tidal work is consistent with each relevant planning scheme standard.
12.10 Prescribed tidal work that is a boardwalk or an independent deck and for a private purpose, is designed and constructed in a way that ensures the use of tidal water in a canal for a non-maritime purpose is minimised.	(s 6(2) solution) The design and construction of the boardwalk or deck is consistent with the following standards— (a) subject to paragraph (c), a boardwalk or independent deck does not extend more than 3m from the waterfront boundary of the lot connected to the boardwalk or deck; (b) subject to paragraph (c), a boardwalk or independent deck is at least 3m inside of the side boundary or extended side boundary of the lot connected to the boardwalk or deck; (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a) or (b)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a) or (b).

Column 1	Column 2
Specific outcome	**A probable solution**
Design, construction and safety—boat ramps and slip ways for private purpose	
13.1 Prescribed tidal work that is a private boat ramp or private slip way is designed and constructed in a way to ensure it is structurally sound while also ensuring the top of each wall at the edge of the boat ramp or slip way is level with the surface of the land on which the boat ramp or slip way is located.	(s 6(2) solution) The design and construction of the boat ramp or slip way is consistent with the following standards— (a) subject to paragraph (c), the walls at the edge of a boat ramp or slip way penetrate into the earth at least 600mm below the surface of the land on which the boat ramp or slip way is located; (b) subject to paragraph (c), the surface of a boat ramp or slip way is no more than 200mm above the surface of the land on which it is located; (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a) or (b)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a) or (b).
13.2 Prescribed tidal work that is a private boat ramp or private slip way is designed and constructed in a way to ensure the safe movement of vehicles or persons over the boat ramp or slip way.	(s 6(2) solution) The design and construction of the boat ramp or slip way is consistent with the following standards— (a) subject to paragraph (d), the upper surface of a boat ramp or slip way has a width of no less than 3.6m; (b) subject to paragraph (d), the whole upper surface of a boat ramp or slip way is treated to prevent it from becoming slippery by using any of the following methods— (i) forming grooves over the surface, as close as possible to 40mm wide, 20mm deep and 150mm apart, and at an angle as close as possible to 70° to the centre-line of the boat ramp or slip way;

Column 1	Column 2
Specific outcome	**A probable solution**
	(ii) covering the surface with a substance ordinarily used on slippery surfaces to prevent skidding; (iii) making, through a physical act, the surface coarse before it sets, including, for example, by raking the surface; (c) subject to paragraph (d), the upper surface of a boat ramp or slip way for which a winch is not used to hoist or haul vessels onto the boat ramp or slip way is at a gradient of not steeper than— (i) if the surface is treated by using a method mentioned in paragraph (b)(i) or (ii)—1:8; or (ii) otherwise—1:10; (d) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a), (b) or (c)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a), (b) or (c).
Design, construction and safety—bridges	
14.1 Prescribed tidal work that is a bridge does not adversely affect existing public use of any tidal water, including, for example, use of the tidal water for canoeing, swimming or other recreational activities.	The design and construction of the bridge, including any abutment connected with the bridge, is consistent with the following standards— (a) subject to paragraph (b), the clearance levels under a bridge are high enough to allow continued public use of any tidal water over which it is constructed; (b) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a).

Column 1	Column 2
Specific outcome	**A probable solution**
14.2 Prescribed tidal work that is a bridge does not adversely affect the flow of water under the bridge.	The design and construction of the bridge is consistent with the following standards— (a) subject to paragraph (b)— (i) if a bridge can be adequately supported without erecting or placing a foundation support in tidal water—no foundation support to support the bridge is erected or placed in the tidal water; or (ii) otherwise—only the minimum number of foundation supports required to support the bridge is used; (b) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a).
Design, construction and safety—boardwalks and independent decks	
15.1 Prescribed tidal work that is a boardwalk or an independent deck and for a private purpose is designed and constructed in a way to ensure it is able to support its intended loads, having regard to its relevant loading matters.	(s 6(2) solution) The design and construction of the boardwalk or deck is consistent with the following standards— (a) subject to paragraph (d), a boardwalk or independent deck accessible to vehicular traffic is able to support at least a live load of 3.0kPa plus an axle load of 10kN; (b) subject to paragraph (d), a boardwalk or independent deck that is not accessible to vehicular traffic and that is for individual use is able to support at least a live load of 2.0kPa; (c) subject to paragraph (d), a boardwalk or independent deck that is not accessible to vehicular traffic and that is for group use is able to support at least a live load of 3.0kPa;

Column 1	Column 2
Specific outcome	**A probable solution**
	(d) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a), (b) or (c)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a), (b) or (c).
15.2 Prescribed tidal work that is a boardwalk or an independent deck and for a non-private purpose is designed and constructed in a way to ensure it is able to support its intended loads, having regard to its relevant loading matters.	(s 6(2) solution) The design or construction of the boardwalk or deck is consistent with the following standards— (a) subject to paragraph (c), a boardwalk or independent deck accessible to vehicular traffic is able to support at least the following— (i) a distributed live load of 5.0kPa; (ii) a concentrated live load of 4.5kN; (iii) the load of the largest vehicle capable of being on the boardwalk or deck; (b) subject to paragraph (c), a boardwalk or independent deck not accessible to vehicular traffic is able to support at least the following— (i) a distributed live load of 5.0kPa; (ii) a concentrated live load of 4.5kN; (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a) or (b)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a) or (b).

Column 1	Column 2
Specific outcome	**A probable solution**
15.3 Prescribed tidal work that is a boardwalk or an independent deck does not prevent or hinder remedial work being undertaken on any bank of tidal water or for any existing retaining wall, revetment or seawall or another existing structure.	The design and construction of the boardwalk or deck is consistent with the following standards— (a) subject to paragraph (b), a boardwalk or independent deck either— (i) can be easily dismantled and reassembled; or (ii) does not restrict the movement of machinery ordinarily used for remedial work to any bank of tidal water or any existing retaining wall, revetment or seawall or other existing structure; (b) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a).
Design, construction and safety—jetties and piers	
16.1 Prescribed tidal work that is a jetty or pier and for a private purpose is designed and constructed in a way to ensure it is able to support its intended loads, having regard to its relevant loading matters.	(s 6(2) solution) The design and construction of the jetty or pier is consistent with the following standards— (a) subject to paragraph (d), a jetty or pier accessible to vehicular traffic is able to support at least a live load of 3.0kPa plus an axle load of 10kN; (b) subject to paragraph (d), a jetty or pier that is not accessible to vehicular traffic and that is for individual use is able to support at least a live load of 2.0kPa; (c) subject to paragraph (d), a jetty or pier that is not accessible to vehicular traffic and that is for group use is able to support at least a live load of 3.0kPa;

Column 1	Column 2
Specific outcome	**A probable solution**
	(d) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a), (b) or (c)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a), (b) or (c).
16.2 Prescribed tidal work that is a jetty or pier and for a non-private purpose is designed and constructed in a way to ensure it is able to support its intended loads, having regard to its relevant loading matters.	(s 6(2) solution) The design and construction of the jetty or pier is consistent with the following standards— (a) subject to paragraph (c), a jetty or pier accessible to vehicular traffic is able to support at least the following— (i) a distributed live load of 5.0kPa; (ii) a concentrated live load of 4.5kN; (iii) the load of the largest vehicle capable of being on or moored at the jetty or pier; (b) subject to paragraph (c), a jetty or pier not accessible to vehicular traffic is able to support at least the following— (i) a distributed live load of 5.0kPa; (ii) a concentrated live load of 4.5kN; (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a) or (b)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a) or (b).

Column 1	Column 2
Specific outcome	**A probable solution**
16.3 Prescribed tidal work that is a jetty or a pier is designed and constructed in a way to ensure it remains above water at all times.	The design and construction of the jetty or pier is consistent with the following standards— (a) subject to paragraph (b), either— (i) the level of the deck of a jetty or pier is at least 300mm above the water at highest astronomical tide; or (ii) piles or other markers indicate the presence of the jetty or pier when it is inundated; (b) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a).
16.4 Prescribed tidal work that is a jetty or pier and for a private purpose is designed and constructed in a way to ensure it is of a size suitable for maritime use while still minimising the amount of tidal water occupied by it.	(s 6(2) solution) The design and construction of the jetty or pier is consistent with the following standards— (a) subject to paragraph (b), all parts of the deck of a jetty or pier have a width of at least 900mm and not more than 3m; (b) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a).

Column 1	Column 2
Specific outcome	**A probable solution**
Design, construction and safety—pipelines and other underground services	
17.1 The design and construction of prescribed tidal work that is a pipeline, or another underground service used instead of a pipeline, does not adversely affect the ability of vessels to be anchored near the work.	(s 6(2) solution) The design and construction of the pipeline or underground service is consistent with the following standards— (a) subject to paragraph (b), a pipeline or other underground service is installed at least 1.2m below the surface of land, after it is installed; (b) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a).
Design, construction and safety—pontoons	
18.1 Prescribed tidal work that is a pontoon, for a private purpose, and not used only for rowing, is designed and constructed in a way to ensure it is able to support its intended loads, having regard to its relevant loading matters.	(s 6(2) solution) The design and construction of the pontoon is consistent with the following standards— (a) subject to paragraph (c), a pontoon for individual use is able to support at least a live load of 1.5kPa; (b) subject to paragraph (c), a pontoon for group use is able to support at least a live load of 2.0kPa; (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a) or (b)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a) or (b).

Column 1	Column 2
Specific outcome	**A probable solution**
18.2 Prescribed tidal work that is a pontoon, for a non-private purpose, and not used only for rowing, is designed and constructed in a way to ensure it is able to support its intended loads, having regard to its relevant loading matters.	(s 6(2) solution) The design and construction of the pontoon is consistent with the following standards— (a) subject to paragraph (c), a pontoon open for use by the general public or used for a commercial purpose is able to support at least the following— (i) a distributed live load of 3.0kPa; (ii) a concentrated live load of 4.5kN; (b) subject to paragraph (c), a pontoon other than a pontoon mentioned in paragraph (a) is able to support at least the following— (i) a distributed live load of 2.0kPa; (ii) a concentrated live load of 4.5kN; (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a) or (b)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a) or (b).

Column 1	Column 2
Specific outcome	**A probable solution**
18.3 Prescribed tidal work that is a pontoon and used only for rowing is designed and constructed in a way to ensure— (a) it is able to support its intended loads, having regard to its relevant loading matters; and (b) it is safe for persons using the pontoon to launch and retrieve rowing vessels.	(s 6(2) solution) The design and construction of the pontoon is consistent with the following standards— (a) subject to paragraph (c), the access walkway of a pontoon used only for rowing is able to support at least a live load of 3.0kPa; (b) the flotation unit of a pontoon used only for rowing is able to support at least a live load of 1.5kPa; (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a) or (b)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a) or (b).
18.4 Prescribed tidal work that is a pontoon is designed and constructed in a way to ensure any load applied to the pontoon by a person or thing on the pontoon does not cause the pontoon to tip over or tilt to a degree causing the person or thing to fall off the pontoon.	(s 6(2) solution) The design and construction of the pontoon is consistent with the following standards— (a) subject to paragraph (f), a pontoon's access walkway extends at least 500mm onto the pontoon's flotation unit; (b) subject to paragraph (f), a pontoon's access walkway is constructed with a material that has a non-slippery surface; (c) for a pontoon used only for rowing—subject to paragraph (f), at least 75mm of the height of the pontoon's flotation unit remains above the water over which it is constructed if a distributed live load is applied to half of the surface of the pontoon's flotation unit and all of the surface of the pontoon's access walkways;

Column 1	Column 2
Specific outcome	**A probable solution**
	(d) for a pontoon other than a pontoon mentioned in paragraph (c)—subject to paragraph (f), the top surface of the pontoon's flotation unit remains above the water over which it is constructed if a distributed live load of 1.5kPa is applied to half of the surface of the pontoon's flotation unit and all of the surface of the pontoon's access walkways; (e) subject to paragraph (f), the whole base of the pontoon's flotation unit remains in contact with the water over which it is constructed at all times and tilts no more than 15° at any time; (f) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a), (b), (c), (d) or (e)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a), (b), (c), (d) or (e).
18.5 Prescribed tidal work that is a pontoon is designed and constructed in a way to ensure it remains above the water at all times.	The design and construction of the pontoon is consistent with the following standards— (a) subject to paragraph (b), the pontoon's abutment is located no less than 300mm above the water at high water mark; (b) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a).

Column 1	Column 2
Specific outcome	**A probable solution**
18.6 Prescribed tidal work that is a pontoon is designed and constructed in a way to ensure the pontoon's flotation unit will rise and fall to allow for changes in tidal water levels.	The design and construction of the pontoon is consistent with the following standards— (a) for a pontoon located in an area prone to flooding—subject to paragraph (c), the pontoon's flotation unit is moored by piles; (b) for a pontoon other than a pontoon mentioned in paragraph (a)—subject to paragraph (c), the pontoon's flotation unit is— (i) attached, through the pontoon's system for mooring the unit, to concrete anchors in the bank landward of the pontoon; or (ii) moored by piles; (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a) or (b)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a) or (b).
Design, construction and safety—retaining walls, revetments and seawalls	
19.1 Prescribed tidal work that is a retaining wall, revetment or seawall, is designed and constructed in a way to ensure it is able to support its intended loads, having regard to its relevant loading matters.	(s 6(2) solution) The design and construction of the retaining wall, revetment or seawall is consistent with the following standards— (a) subject to paragraph (b), a retaining wall, revetment or seawall is able to support at least a distributed live load of 3.0kPa; (b) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a).

Column 1	Column 2
Specific outcome	**A probable solution**
19.2 Prescribed tidal work that is a retaining wall, revetment or seawall, is designed and constructed in a way to ensure it can withstand— (a) any tendency of overturning or sliding; and (b) any other effects of waves or changes in water levels on the retaining wall, revetment or seawall.	(s 6(2) solution) The design and construction of the retaining wall, revetment or seawall is consistent with the following standards— (a) subject to paragraph (c), a retaining wall, revetment or seawall has a factor of safety of no less than 1.5; (b) subject to paragraph (c), a retaining wall, revetment or seawall is able to withstand the effect of waves, or waves and water levels, resulting from a storm or other natural event of a magnitude that has a 2% or lower probability of occurring in any calendar year; (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a) or (b)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a) or (b).

Column 1	Column 2
Specific outcome	**A probable solution**
19.3 Prescribed tidal work that is a retaining wall, revetment or seawall not founded upon rock, is designed and constructed to protect the seaward side of retaining wall, revetment or seawall from erosion.	(s 6(2) solution) The design and construction of the retaining wall, revetment or seawall is consistent with the following standards— (a) subject to paragraph (c), a retaining wall, revetment or seawall provides for a sub-layer or enough filter material to ensure it is reasonably likely to remain in place for at least 50 years; (b) subject to paragraph (c), the bottom edge of the base of a retaining wall, revetment or seawall is reasonably likely to prevent any adverse effects from potential erosion of the soil under the retaining wall, revetment or seawall for at least 50 years; (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a) or (b)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a) or (b).
19.4 Prescribed tidal work that is a retaining wall, revetment or seawall, is not adversely affected by hydrostatic pressure behind the retaining wall, revetment or seawall.	The design and construction of the retaining wall, revetment or seawall is consistent with the following standards— (a) subject to paragraph (b), a retaining wall, revetment or seawall provides for drainage holes, and suitable filter material behind the holes, to relieve any hydrostatic pressure behind the retaining wall, revetment or seawall; (b) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a).

Column 1	Column 2
Specific outcome	**A probable solution**
Design, construction and safety—wharves	
20.1 Prescribed tidal work that is a wharf is designed and constructed in a way to ensure it is able to support its intended loads, having regard to its relevant loading matters.	(s 6(2) solution) The design and construction of the wharf is consistent with the following standards— (a) subject to paragraph (c), a major wharf, or a minor wharf accessible to vehicular traffic, is able to support at least the following— (i) a distributed live load of 5.0kPa; (ii) a concentrated live load of 13kN; or (b) subject to paragraph (c), a minor wharf not accessible to vehicular traffic is able to support at least the following— (i) a distributed live load of 5.0kPa; or (ii) a concentrated live load of 4.5kN; or (c) if a relevant planning scheme standard is more stringent than the standard mentioned in paragraph (a) or (b)—the relevant planning scheme standard, to the extent it is more stringent than the standard mentioned in paragraph (a) or (b).