8 Overlays

8.1 Preliminary

- 1. Overlays identify areas within the planning scheme that reflect distinct themes that may include all or one of the following:
 - a. sensitive to the effects of development;
 - b. constrain land or development;
 - c. subject to valuable resources;
 - d. present opportunities for development.
- 2. Overlays are mapped and those maps are included in Schedule 2.
- 3. The changed category of development or category of assessment, if applicable, for development affected by an overlay are in Part 5.
- 4. Some overlays may be included for information purposes only. This may result in no change to the category of development or category of assessment or no additional assessment benchmarks for assessable development or additional requirements for accepted development.
- 5. Overlay specific assessment benchmarks and additional requirements for accepted development may be contained in one or more of the following:
 - a. a map for an overlay;
 - b. a zone code contained in Part 6;
 - c. a local plan code contained in Part 7;
 - d. an overlay code contained in Part 8;
 - e. a development code contained in Part 9.
- 6. Where development is proposed on premises partly affected by an overlay, the overlay specific assessment benchmarks and additional requirements for accepted development only relate to the part of the premises affected by the overlay.
- 7. The following overlays for the planning scheme with a code are:
 - a. Coastal hazard;
 - b. Flood hazard.
- 8. The following overlays for the planning scheme without an overlay code(s) are:
 - a. Acid sulphate soils;
 - b. Active transport;
 - c. Building heights;
 - d. Bushfire hazard;
 - e. Centre walking distances;
 - f. Community activities and neighbourhood hubs;

- g. Environmental areas;
- h. Environmental offset receiving areas;
- i. Extractive resources;
- j. Heritage and landscape character;
- k. Infrastructure buffers;
- I. Landslide hazard;
- m. Overland flow path;
- n. Riparian and wetland setbacks;
- o. Road hierarchy;
- p. Rural residential lot sizes;
- q. Scenic amenity;
- r. Stormwater catchments.
- 9. The following overlay for the planning scheme is for information purposes only:
 - a. Transport noise corridors.

Editor's note - Interested persons may obtain details about the transport noise corridor and the levels of noise from the local government or Department of Housing and Public Works.

Note - Not all overlay have overlay codes or use overlays to change categories of development or categories of assessment, and this is reflected in Part 5, section 5.10 Categories of development and assessment - Overlays and Part 8, section 8.2 Overlay codes. For those overlays that do not contain overlay codes, and are not used solely for information purposes, any additional assessment benchmarks or requirements for accepted development, for the part of the premises affected by an overlay may be contained within the relevant zone, local plan and development codes.

8.2 Overlay codes

8.2.1 Coastal hazard overlay code

8.2.1.1 Application - Coastal hazard overlay

- 1. This code applies to development within the mapped extent of the Coastal hazard overlay, if that development is identified as:
 - a. accepted development subject to requirements or assessable development, and this code is listed as an applicable code in the assessment benchmarks for assessable development and requirements for accepted development column of a table of assessment (Part 5.10);
 - b. assessable development impact assessment.
- 2. The Coastal hazard overlay code applies to land in the Coastal planning area or the Erosion Prone Area identified on a Coastal hazard overlay map. The Coastal planning area includes land in the following sub-categories:
 - a. High risk storm tide inundation area;
 - b. Medium risk storm tide inundation area;
 - c. Balance coastal planning area.
- 3. When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3, in Part 5.

Editor's note - The Coastal Hazard Overlay (Erosion Prone Area) shows erosion prone areas based on mapping dated 21 January 2015. On 8 July 2015, the State Government declared new erosion prone areas based on a projected sea level rise of 0.8 metre by 2100.

Although the majority of erosion prone areas are shown in the Coastal Hazard Overlay, the SPP mapping prevails over the planning scheme to the extent of any inconsistencies. Applicants are required to check the SPP Interactive Mapping System to determine whether a property is in an Erosion Prone Area. The SPP Interim development assessment requirements for Natural hazards, risk and resilience apply to properties included in an Erosion Prone Area on the SPP Interactive Mapping System but not on the Coastal Hazard Overlay (Erosion Prone Area).

Moreton Bay Regional Council will complete a localised Erosion Prone Area study in due course and will accordingly update the Moreton Bay Regional Council Planning Scheme.

8.2.1.2 Purpose - Coastal hazard overlay

- 1. The purpose of the Coastal hazard overlay code is to:
 - a. identify whether an area is subject to a coastal hazard;
 - b. minimise the risk to life, property, community, economic development and the environment from the coastal hazard by:

- i. limiting development in an area of intolerable risk of coastal hazard to avoid the risk of the coastal hazard;
- ii. managing development in an area of tolerable risk of coastal hazard to mitigate the risk of the coastal hazard;
- c. ensure that development does not increase the potential for adverse impacts on the premises or other premises, public lands, watercourses, roads or infrastructure without appropriate mitigation.
- 2. The purpose of the Coastal hazard overlay code will be achieved through the following overall outcomes:
 - a. Development in the Erosion Prone Area manages and mitigates the tolerable risk of the coastal hazard by ensuring that:
 - i. a material change of use is only for a use which:
 - A. avoids the coastal erosion risk; or
 - B. manages the coastal erosion risk through a strategy of planned retreat; or
 - C. mitigates the coastal erosion risk if there are no adverse local drainage impacts, flooding and coastal impacts on other premises, public land, watercourses, roads or infrastructure or impacts on natural riverine and coastal processes or flood warning times;
 - ii. reconfiguring a lot for boundary realignment only occurs if the tolerable risk of coastal hazard to people, property and infrastructure located on the premises and other premises is not increased and where practicable the tolerable risk of coastal hazard for future occupants is mitigated;
 - iii. reconfiguring a lot for creating lots by subdividing another lot is only for the purposes of Park or Permanent plantation unless all resultant lots provide the required minimum lot size outside the Erosion Prone Area;
 - iv. building work complies with the flood planning level, engineering design and resilient materials requirements;
 - v. earthworks are avoided as far as practicable and are only for the purpose of mitigating the coastal hazard or where associated with a previous approval;
 - b. Development in the High risk storm tide inundation area included in the Limited development zone avoids the extremely unacceptable intolerable risk of the coastal hazard by ensuring that:
 - i. a material change of use is only for the following uses if the intolerable risk of coastal hazard to people, property and infrastructure located on the premises and other premises is avoided:
 - A. Outdoor sport and recreation⁽⁵⁵⁾; or
 - B. Park⁽⁵⁷⁾; or
 - C. Permanent plantation⁽⁵⁹⁾; or
 - D. Cropping⁽¹⁹⁾ (where involving forestry for wood production);
 - ii. reconfiguring a lot for boundary realignment only occurs if the intolerable risk of coastal hazard to people, property and infrastructure located on the premises and other premises is not increased and where practicable the intolerable risk of coastal hazard for future occupants is mitigated;

- iii. reconfiguring a lot for creating lots by subdividing another lot is only for the purposes of Park or Permanent plantation or ensures that lots have sufficient area outside of the zone for development consistent in the adjoining zone and precinct;
- iv. building work is less than 50m² in area and associated with a use in paragraph (i);
- v. earthworks do not occur except where associated with a previous approval.
- c. Development in the High risk storm tide inundation area not included in the Limited development zone, avoids the unacceptable intolerable risk of the coastal hazard by ensuring that:
 - i. a material change of use is only for the following uses if consistent with the overall outcomes of the applicable zone and precinct and the intolerable risk of coastal hazard to people, property and infrastructure located on the premises and other premises is avoided:
 - A. Dwelling house⁽²²⁾; or
 - B. Outdoor sport and recreation⁽⁵⁵⁾; or
 - C. Park⁽⁵⁷⁾; or
 - D. Permanent plantation⁽⁵⁹⁾; or
 - E. Cropping⁽¹⁹⁾ (where involving forestry for wood production); or
 - F. Tourist park⁽⁸⁴⁾; or
 - G. Home based business⁽³⁵⁾;
 - ii. reconfiguring a lot for boundary realignment only occurs if the intolerable risk of coastal hazard to people, property and infrastructure located on the premises and other premises is not increased and where practicable the intolerable risk of coastal hazard for future occupants is mitigated;
 - iii. reconfiguring a lot for creating lots by subdividing another lot is only for the following:
 - A. if in the Rural zone, where consistent with the overall outcomes of the applicable zone and precinct; or
 - B. if in the Rural residential zone, residential lots provide the required minimum lot size outside the Erosion Prone Area, High risk storm tide inundation area or Medium risk storm tide inundation area of the Coastal planning area; or
 - C. if in any other zone, for the purposes of Park or Permanent plantation;
 - iv. building work complies with the flood planning level, engineering design and resilient materials requirements;
 - v. earthworks do not occur except where associated with a previous approval.
- d. Development in the Medium risk storm tide inundation area manages and mitigates the tolerable risk of the coastal hazard by ensuring that:
 - i. a material change of use is only for uses consistent with the overall outcomes of the applicable zone and precinct if the use is not a vulnerable land use (flood and coastal) and the risk to people, property and infrastructure located on the premises and other premises is avoided or mitigated;
 - ii. reconfiguring a lot for boundary realignment only occurs if the risk of coastal hazard to people, property and infrastructure located on the premises and other premises is not increased and where practicable the risk of coastal hazard for future occupants is mitigated;

- iii. reconfiguring a lot for creating lots by subdividing another lot is only for the following:
 - A. in the Rural zone, where consistent with the overall outcomes of the applicable zone and precinct; or
 - B. in the Centre zone, Industry zone, or Recreation and open space zone, where not for the purpose of a vulnerable use (flood and coastal) and consistent with the overall outcomes of the applicable zone and precinct; or
 - C. in the Rural residential zone, where the minimum lot size for each rural residential lot is provided outside the High risk storm tide inundation area or Medium risk storm tide inundation area; or
 - D. in all other zones, where:
 - i. all resultant lots are located outside the High risk storm tide inundation area or Medium risk storm tide inundation area other than those for the purposes of Park or Permanent plantation; or
 - ii. for a lot on a building format plan under the *Land Title Act 1994* which is subject to a community titles scheme under the *Body Corporate and Community Management Act 1997* and is associated with a material of use.
- iv. building work complies with the flood planning level, engineering design and resilient materials requirements;
- v. earthworks only occur if:
 - A. in the General residential zone, Centre zone, Community facilities zone, Recreation and open space zone, Industry zone, Township zone or Emerging community zone;
 - B. filling raises the ground level to as a minimum the Year 2100 Highest Astronomical Tide level ;
 - C. there are no adverse local drainage impacts, flooding and coastal impacts on other premises, public land, watercourses, roads or infrastructure or impacts on natural riverine and coastal processes or flood warning times.
- e. Development in the Balance coastal planning area manages and mitigates the tolerable risk of the coastal hazard by ensuring that:
 - a material change of use is only for uses consistent with the overall outcomes of the applicable zone and precinct if the risk to people, property and infrastructure located on the premises and other premises is avoided or mitigated;
 - ii. reconfiguring a lot is consistent with the overall outcomes of the applicable zone and precinct;
 - iii. building work complies with the flood planning level and resilient material requirements;
 - iv. earthworks only occur if:
 - A. in the General residential zone, Centre zone, Community facilities zone, Recreation and open space zone, Industry zone, Township zone or Emerging community zone;

- B. filling raises the ground level to as a minimum the Defined flood event;
- C. there are no adverse local drainage impacts, flooding and coastal impacts on other premises, public land, watercourses, roads or infrastructure or impacts on natural riverine and coastal processes or flood warning times.
- f. Development in the Coastal planning area:
 - i. supports and does not unduly burden the disaster management response and recovery capacity and capabilities during and after a significant coastal hazard event;
 - ii. provides for efficient evacuation of on-site persons and facilitates direct and simple access for evacuation personnel and resources during a coastal hazard event, while ensuring development does not hinder or place additional complexities upon evacuation activities for other premises;
 - iii. avoids isolation of persons during a coastal hazard event up to and including the Defined Flood Event;
 - adopts siting, built form, layout, and access (including evacuation access) arrangements that respond to the risk of the coastal hazard and minimise risk to personal safety in all coastal hazard events up to and including the Defined Flood Event;
 - v. is resilient to a coastal hazard event by ensuring the siting and design of development accounts for the potential risks to property associated with the coastal hazard event;
 - vi. directly, indirectly and cumulatively avoids an increase in the severity of a coastal hazard event and potential for damage on the premises or to other premises;
 - vii. involving essential community infrastructure remains functional during and immediately after a coastal hazard event up to and including the Defined Flood Event;
 - viii. ensures that essential building services or services essential for the development are designed, located and operated to minimise the risk of the coastal hazard to people, damage to property, disruption to building function and the re-establishment time after a coastal hazard event;
 - ix. avoids the accidental release of hazardous materials as a result of a coastal hazard event;
 - x. maintains natural processes and the protective function of landforms and vegetation;
 - xi. does not impact adversely on the ability for future coastal hazard mitigation measures to be implemented on other premises.

8.2.1.3 Requirements for assessment

If development is to be categorised as accepted development subject to requirements it must comply with the requirements for accepted development set out in Part A, Table 8.2.1.1. Where development does not meet a requirement for accepted development (RAD) within Part A, Table 8.2.1.1, the category of development changes to assessable development under the rules outlined in section 5.3.3. (1), and assessment is against the corresponding performance outcome (PO) identified in the table below. This only occurs whenever a RAD is not met, and is therefore limited to the subject matter of the RADs that are not complied with. To remove any doubt, for those RADs that are complied with, there is no need for assessment against the corresponding PO.

Requirements for accepted development (RAD)	Corresponding performance outcomes
RAD1	PO8 (if in the Balance coastal planning area) PO13 (if not in the Balance coastal planning area)

RAD2 (for MCU or building work for dwelling house)	PO3
RAD2 (for all other development)	PO8 (if in the Balance coastal planning area) PO13 (if not in the Balance coastal planning area)
RAD3	PO8 (if in the Balance coastal planning area) PO14 (if not in the Balance coastal planning area)
RAD4 (for MCU or building work for dwelling house)	PO3
RAD4 (for all other development)	PO8 (if in the Balance coastal planning area)PO14 (if not in the Balance coastal planning area)
RAD5	PO6
RAD5 (for all other development)	PO8 (if in the Balance coastal planning area) PO13 (if not in the Balance coastal planning area)
RAD6	PO28
RAD7	PO31
RAD8 (for MCU or building work for dwelling house)	P07
RAD8 (for all other development)	PO18 (if not in the Balance coastal planning area)
RAD9	PO14
RAD10	PO13

Part A – Requirements for accepted development subject to requirements - Coastal hazard overlay

Requirer	Requirements for accepted development		
	Section A – If for accepted development subject to requirements for material change of use in an existing building and not in the Erosion Prone Area		
RAD1	Development ensures that new building materials utilised as a consequence of the change of use for habitable and non-habitable rooms below the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals' have a high water resistance. Note - The Queensland Government Fact Sheet 'Rebuilding after a flood' provides information about water resilient products and building techniques. Available at http://www.hpw.qld.gov.au/SiteCollectionDocuments/WaterResilient ProductsAndBuildingTechniquesForRebuildingAfterAFlood.pdf		
	Section B – If for accepted development subject to requirements other than a material change of use in an existing building and not in the Erosion Prone Area		
RAD2	Development ensures that a habitable floor level that is the subject of the development is located, designed and constructed to the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'.		

RAD3	Development for a non-residential building ensures that a finished floor level the subject of the development is located, designed and constructed to the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'.
RAD4	Development ensures that building materials for non-habitable rooms below the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals' have a high water resistance.
	Note - The Queensland Government Fact Sheet 'Rebuilding after a flood' provides information about water resilient products and building techniques. Available at http://www.hpw.qld.gov.au/SiteCollectionDocuments/WaterResilient http://www.hpw.qld.gov.au/SiteCollectionDocuments/WaterResilient http://www.hpw.qld.gov.au/SiteCollectionDocuments/WaterResilient http://www.hpw.qld.gov.au/SiteCollectionDocuments/WaterResilient http://www.hpw.qld.gov.au/SiteCollectionDocuments/WaterResilient http://www.hpw.qld.gov.au/SiteCollectionDocuments/WaterResilient
RAD5	Development on land below the Flood planning level involving earthworks complies with the requirements of Table 8.2.1.4 'Fill requirements' and does not increase the potential for erosion, scour or flood damage either on the premises or on other premises, public land, watercourses, roads or infrastructure or elsewhere in the floodplain.
	Note - Prior to development occurring, an investigation into the potential impacts of earthworks should be undertaken by a suitably qualified person so that a prospective developer can satisfy themselves the development meets this SAO. Guidance on the matters to be addressed is provided in Planning scheme policy - Flood hazard, Coastal hazard and Overland flow.
RAD6	Development that involves hazardous chemicals ensures the hazardous chemicals are located and stored at or above the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'.
RAD7	Development for a Park ensures works are provided in accordance with the requirements set out in Appendix B of the Planning scheme policy - Integrated design.
RAD8	Development ensures that an essential electrical service is located above the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'.
	Note - An essential electrical service includes services defined as utilities and customer dedicated substation in Mandatory Part 3.5 – Construction of buildings in flood hazard areas of the Queensland Development Code.
RAD9	Development for an Advertising device is located, designed and constructed to resist the hydrostatic and hydrodynamic forces as a result of inundation by the Defined Flood Event.
Section (C – If for accepted development subject to requirements in the Erosion Prone Area only
RAD10	Development is located outside the Erosion Prone Area, or otherwise does not extend any further seaward than existing immediately adjacent buildings.

Part B – Criteria for assessable development – Coastal hazard overlay

Where development is listed as assessable development - code assessment in the Table of Assessment, the assessment benchmarks for that development are set out in Part B, Table 8.2.1.2 as well as the applicable purpose statement and overall outcomes.

Where development is assessable development - impact assessment, the assessment benchmarks are the applicable provisions within the entire planning scheme.

Table 8.2.1.2 Assessable development - Coastal hazard overlay

Performance outcomes	Examples that achieve aspects of the Performance Outcomes

Material change of use or building work for a dwell	ing house ⁽²²⁾
 PO1 Development in the High risk storm tide inundation area included in the Limited development zone for: a. a material change of use and associated building work for a dwelling house⁽²²⁾ does not occur; b. building work not associated with a material change of use for a dwelling house⁽²²⁾ only occurs for an existing lawful use. 	No example provided.
PO2 Development in the Erosion Prone Area is sited to protect people and property from coastal processes and minimise the need for additional coastal protection works to mitigate the erosion risk.	E2 Development is located outside the Erosion Prone Area, or otherwise does not extend any further seaward than existing immediately adjacent buildings.
PO3 Development is resilient to a coastal hazard event by ensuring the design and built form account for the potential risks of the coastal hazard event (including storm tide inundation, wave action and coastal erosion). Note - New buildings not on land already filled to the flood planning level will require a structural engineering design capable of withstanding the nature of the hazard(s) to which the building will be subject, to be supported by a report (or multiple reports) prepared by a Registered Professional Engineer Queensland that identifies the coastal hazard and the structural approach to be utilised. Information on the risk of a coastal hazard for premises in the Coastal planning area is available on Council's Flood Check website via https://www.moretonbay.qld.gov.au/floodcheck/. Note - Reporting to be prepared in accordance with Planning scheme policy – Flood hazard, Coastal hazard and Overland flow.	 E3.1 Development is in accordance with the following: a. a site based coastal engineering report from a suitably qualified Registered Professional Engineer Queensland which identifies the coastal hazard and the structural approach to be utilised for the building work; b. a structural engineering design which ensures that the building work and any associated earthworks are capable of withstanding the nature of the coastal hazard event to which the building will be subject. Note - New buildings not on land already filled to the flood planning level will require a structural engineering design capable of withstanding the nature of the hazard(s) to which the building will be subject, to be supported by a report (or multiple reports) prepared by a Registered Professional Engineer Queensland that identifies the coastal hazard and the structural approach to be utilised. Information on the risk of a coastal hazard for premises in the Coastal planning area is available on Council's Flood Check website via https://www.moretonbay.qld.gov.au/floodcheck/. E3.2 Development ensures that a habitable floor is located, designed and constructed to at least the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'.

	E3.3
	Development ensures that building work for a non-habitable room below the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals' has a high water resistance. Note - The Queensland Government Fact Sheet 'Rebuilding after a flood' provides information about water resilient products and building techniques. Available at http://www.hpw.qld.gov.au/SiteCollectionDocuments/WaterResilient ProductsAndBuildingTechniquesForRebuildingAfterAFlood.pdf Development involving building work in the High risk storm tide inundation area or Medium risk storm tide inundation area E3.4 Development ensures that a fence is at least 50% permeable.
PO4 Development ensures that where earthworks alone cannot ensure the development achieves the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals', a building is designed and constructed using pier and pole construction to achieve the required storm tide immunity in the Defined Flood Event.	No example provided.
PO5	E5
Development maintains a functional and attractive relationship with the adjacent street frontage. Note - This is particularly relevant for commercial uses in centres with a strong 'town-centre' pedestrian realm that also may be affected by flood, or for residential uses to maintain an attractive presentation to the street.	 Development for a residential dwelling where pier and pole construction is utilised: a. uses screening around the understorey of the dwelling to ensure the understorey is not visible from the street; b. allows for the flow of flood water through the understorey.
PO6	No example provided.
Development does not increase the potential for erosion, scour or flood damage either on the premises or on other premises, public land, watercourses, roads or infrastructure or elsewhere in the floodplain.	

Note - To demonstrate achievement of the performance subcome		
Note - To demonstrate achievement of the performance outcome, an engineering report is to be prepared by a suitably qualified person. Guidance on the matters to be addressed in the report is provided in the Planning scheme policy - Flood hazard, Coastal hazard and Overland flow.		
P07	E7	
Development ensures that an essential electrical service is located to achieve the required storm tide immunity in the Defined Flood Event and maintain public safety at all times. Note - An essential electrical service includes services defined as utilities and customer dedicated substation ⁽⁸⁰⁾ in <i>Mandatory Part</i> 3.5 – <i>Construction of buildings in flood hazard areas of the Queensland Development Code</i> .	Development ensures that an essential electrical service is located above the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'. Note - An essential electrical service includes services defined as utilities and customer dedicated substation ⁽⁸⁰⁾ in <i>Mandatory Part 3.5</i> <i>– Construction of buildings in flood hazard areas</i> of the <i>Queensland</i> <i>Development Code</i> .	
Material change of use or building work for all other land uses (other than a dwelling house ⁽²²⁾) in the Balance area		
PO8	Development involving building work for a residential use	
Development is resilient to a coastal hazard event by	E8.1	
ensuring design and built form account for the potential risks of flooding.	Development ensures that a habitable floor is located, designed and constructed to at least the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'.	
	E8.2	
	Development ensures that building work for a non-habitable room below the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals' has a high water resistance. Note - The Queensland Government Fact Sheet 'Rebuilding after a flood' provides information about water resilient products and building	
	Incode provides information about water resilient products and building techniques. Available at http://www.hpw.qld.gov.au/SiteCollectionDocuments/WaterResilient ProductsAndBuildingTechniquesForRebuildingAfterAFlood.pdf Development involving building work for a non-residential	
	use	
	E8.3	
	Development ensures that the finished floor level is located, designed and constructed to at least the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable	

PO9 Development ensures that a use which requires an interface with the public realm (including a commercial and residential use) maintains a functional and attractive relationship with the adjacent street frontage. Note - This is particularly relevant for commercial uses in centres with a strong 'town-centre' pedestrian realm that also may be affected by flood, or for residential uses to maintain an attractive presentation to the street.	floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'. E8.4 Development ensures that a non-habitable room below the flood planning level in TTable 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals' has a high water resistance. E9.1 Development for a residential use where pier and pole construction is utilised: a. uses screening around the understorey of the dwelling; b. allows for the flow of flood water through the understorey. E9.2 Development for a commercial building or structure maintains an active street frontage through: a. providing clear pedestrian access from any adjacent footpath to the floor level of the commercial activity; b. providing a retail or food and beverage use, if consistent with the overall outcomes of the applicable zone and precinct, which interface with and overlook the street; or
	 c. urban design treatments which screen the understorey of the building from view from the adjacent street frontage but must not impede storm tide flow.
PO10	E10.1
Development ensures that public safety and risk to the environment are not adversely affected by a detrimental impact of floodwaters up to the Defined Flood Event on a hazardous chemical located or stored on the premises.	Development ensures that a hazardous chemical is located or stored at least above the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'. Note - Refer to the <i>Work Health and Safety Act 2011</i> and associated Regulation and Guidelines, the <i>Environmental Protection Act 1994</i> and the relevant building assessment provisions under the <i>Building Act 1975</i> for requirements related to the manufacture and storage of hazardous substances.

8 Overlays

PO	11	No example provided.
Dev	velopment is:	
a.	limited in the High risk storm tide inundation area to avoid the intolerable risk of the coastal hazard;	
b.	managed in the Erosion Prone Area and Medium risk storm tide inundation area to mitigate the tolerable risk of the coastal hazard.	
out tole	te - The overall outcomes of this code identify the development comes which are intended so as to avoid the intolerable or erable risk of the coastal hazard applicable to the premises in relevant sub-categories of the Coastal planning area.	
PO	12	No example provided.
	velopment maintains personal safety at all times, h that:	
a.	a vulnerable land use (flood and coastal) is not located in the Erosion Prone Area, High risk storm tide inundation area or the Medium risk storm tide inundation area;	
b.	new buildings are not located in the High risk storm tide inundation area included in the Limited development zone;	
C.	evacuation capability from the development or other premises is not hindered or made more complicated and there is no significant additional burden placed on emergency services personnel;	
d.	the isolation of persons in the Defined Flood Event is avoided.	
PO	13	E13
	velopment in the Erosion Prone Area only occurs a lot zoned for urban purposes in a manner that:	Development:
a. b.	 accommodates natural coastal processes, including climate change and sea level rise; achieves the following: avoids coastal erosion risks; or 	 a. constitutes or includes temporary or relocatable structures, and these structures and the ongoing use of the premises are subject to the natural processes affecting the site; or b. installs and maintains coastal protection works to mitigate adverse impacts to people and property from
	 ii. manages coastal erosion risks through a strategy of planned retreat; or iii. mitigates coastal erosion risks if there are no adverse local drainage impacts, flooding and coastal impacts on other premises, public land, watercourses, roads or infrastructure or impacts on natural riverine 	 coastal erosion within the premises in a manner which accommodates natural coastal processes without detrimental impacts on other premises; or c. is located, designed and constructed to withstand the expected coastal erosion impacts.

and coastal processes or flood warning times. Note - To demonstrate achievement of the performance outcome, an engineering report is to be prepared by a suitably qualified person. Guidance on the matters to be addressed in the report is provided in the Planning scheme policy - Flood hazard, Coastal hazard and Overland flow.	
P014	E14.1
Development is resilient to a coastal hazard event by ensuring design and built form account for the potential risks of the coastal event (including storm tide inundation, wave action and coastal erosion). Note - New buildings not on land already filled to the flood planning level will require a structural engineering design capable of withstanding the nature of the hazard(s) to which the building will be subject, to be supported a report (or multiple reports) prepared by a Registered Professional Engineer Queensland that identifies the coastal hazard and the structural approach to be utilised. Information on the risk of a coastal hazard for premises in the Coastal planning area is available on Council's Flood Check website via https://www.moretonbay.qld.gov.au/floodcheck/. Note - Reporting to be prepared in accordance with Planning scheme policy - Flood hazard, Coastal hazard and Overland flow.	 Development in the Erosion Prone Area, High risk storm tide inundation area and Medium risk storm tide inundation area is in accordance with the following: a. a site based coastal engineering report from a suitably qualified Registered Professional Engineer Queensland which identifies the coastal hazard and the structural approach to be utilised for the building work; b. a structural engineering design which ensures that the building work and any associated earthworks are capable of withstanding the nature of the coastal hazard event to which the building will be subject. Note - New buildings not on land already filled to the flood planning level will require a structural engineering design capable of withstanding the nature of the hazard(s) to which the building will be subject. Note - New buildings not on land already filled to the flood planning level will require a structural engineering design capable of withstanding the nature of the hazard(s) to which the building will be subject. Note - New buildings not on land already filled to the flood planning level will require a structural engineering design capable of withstanding the nature of the hazard(s) to which the building will be subject. Note - New buildings not on land already filled to the flood planning the nature of the hazard(s) to which the building will be subject. Note - New building reports) prepared by a Registered Professional Engineer Queensland that identifies the coastal hazard and the structural approach to be utilised. Information on the risk of a coastal hazard (coastal planning area is available on Council's Flood Check website via https://www.moretonbay.qld.gov.au/floodcheck/. Development involving building work for a residential use E14.2 Development ensures that a habitable floor is located, designed and constructed to at least the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (non-residential develo

	Development ensures that the finished floor level is located, designed and constructed to at least the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'. Development involving building work for all uses E14.4 Development ensures that a fence is at least 50% permeable. E14.5 Development ensures that building work for a non-habitable room located below the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals' has a high water resistance. Note - The Queensland Government Fact Sheet 'Rebuilding after a flood' provides information about water resilient products and building techniques. Available at http://www.hgw.dd.gov.au/SiteCollectionDocuments/WaterResilient ProductsAndBuildingTechniquesForRebuildingAfterAFlood.pdf
PO15 Development ensures that where earthworks alone cannot ensure the development achieves the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals', a building is designed and constructed using pier and pole construction to achieve the required storm tide immunity in the Defined Flood Event.	No example provided.
 PO16 Development does not: a. directly, indirectly and cumulatively cause any increase in water flow velocity or level; b. does not increase the potential for erosion, scour or flood damage either on-site or on a surrounding property, public land, watercourse, road or infrastructure or elsewhere in the floodplain. 	No example provided.

Note - To demonstrate achievement of the performance outcome, an engineering report is to be prepared by a suitably qualified person. Guidance on the matters to be addressed in the report is provided in Planning scheme policy - Flood hazard, Coastal hazard and Overland flow.	
PO17 Development supports, and does not unduly burden, disaster management responses and recovery capacity and capabilities for a coastal hazard event up to and including the Defined Flood Event.	No example provided.
PO18 Development has access which, having regard to the hydraulic hazard, provides for safe vehicular and pedestrian movement and emergency services access.	No example provided.
PO19 Development ensures that a use which requires an interface with the public realm (including a commercial and residential use) maintains a functional and attractive relationship with the adjacent street frontage. Note - This is particularly relevant for commercial uses in centres with a strong 'town-centre' pedestrian realm that also may be affected by flood, or for residential uses to maintain an attractive presentation to the street.	 E19.1 Development for a residential dwelling where pier and pole construction is utilised: a. uses screening around the understorey of the dwelling that is a minimum of 50% permeable to ensure the understorey is not visible from the street; b. allows for the flow of storm tide water through the understorey.
	 E19.2 Development for a commercial building and structure maintains an active street frontage through: a. providing clear pedestrian access from any adjacent footpath to the floor level of the commercial activity; b. providing a retail or food and beverage use, if consistent with the overall outcomes of the applicable zone and precinct, which interfaces with and overlooks the street; or c. urban design treatments which screen the understorey of the building from view from the adjacent street frontage but do not impede storm tide flow.
Reconfiguring a lot (boundary realignment)	
PO20	E20.1
Development is designed to: a. ensure personal safety at all times;	Development ensures that the development footprint is located in an area other than a High risk storm tide inundation area or Erosion Prone Area.

an per pro	floo prei infra not infra prei occ te - To c engine rson. G	increase the potential for erosion, scour or d damage either on the premises or other mises, public land, watercourses, roads or astructure or elsewhere in the floodplain; increase the risk to people, property and astructure located on the premises and other mises and where applicable the risk for future upants is mitigated. demonstrate achievement of the performance outcome, ering report is to be prepared by a suitably qualified uidance on the matters to be addressed in the report is n the Planning scheme policy - Flood hazard, Coastal d Overland flow.	E20.2 Development ensures that the entry points into the development are located to provide a safe and clear evacuation route path.
Rec	config	juring a lot (other than by boundary realigr	nment)
PO	21		No example provided.
tole to th	rable ne pre	nent is compatible with the intolerable or level of risk of the coastal hazard applicable mises such that reconfiguring a lot for creating abdividing another lot:	
a. b.	of P resu size in th	the Erosion Prone Area, is only for the purpose Park or Permanent plantation unless all ultant lots provide the required minimum lot e outside the Erosion Prone Area; the High risk storm tide inundation area, is only he purposes of Park or Permanent plantation ess:	
	i. ii.	in the Rural residential zone where the minimum lot size for each rural residential lot is provided outside the High risk storm tide inundation area; or in the Rural zone; or	
C.	occ area	urs in the Medium risk storm tide inundation	
	i. ii.	in the Centre zone, Industry zone, or Recreation and open space zone, where not for the purpose of a vulnerable use (flood and coastal); or if in the Rural residential zone, where the minimum lot size for each rural residential lot is provided outside the Medium risk storm tide inundation area; or in the Rural zone; or	
	iii. iv.	in the Rural zone; or in any other zone, where:	
		 A. all resultant lots are located outside the Medium risk storm tide inundation area other than those for the purposes of Park or Permanent plantation; or B. for a lot on a building format plan under the Land Title Act 1994 which 	

oute tole	 is subject to a community titles scheme under the Body Corporate and Community Management Act 1997 and is associated with a material of use; or in the Balance coastal planning area, where consistent with the overall outcomes of the applicable zone and precinct. the overall outcomes of this code identify the development comes which are intended so as to avoid the intolerable or brable risk of the coastal hazard applicable to the premises in relevant sub-categories of the Coastal planning area. 	
PO2		If the ground level is to be filled to the Flood planning level as permitted by Table 8.2.1.4 'Fill requirements'
	elopment is designed to ensure personal safety at mes such that:	E22.1
a. b.	storm tide immunity up to the Flood planning level is achieved; the road layout avoids isolation in a coastal	Development ensures that finished ground level for all additional lots, excluding a Park, ⁽⁵⁷⁾ complies with the requirements of Table 8.2.1.4 'Fill requirements'.
0	hazard event and does not impede evacuation;	E22.2
	c. signage is utilised to ensure that community members have a clear understanding of the nature of the risk of storm tide inundation in the area.	 Development ensures that the road and pathway layout: a. ensures residents are not physically isolated from an adjacent storm tide inundation free urban area; b. provides a safe and clear evacuation route path by: i. locating entry points into the development above the requirements set out in Appendix C of Planning scheme policy - Integrated design and avoiding cul-de-sac or other non-permeable
		layouts; ii. direct and simple routes to a main carriageway.
		Note - 'Pathway' in this instance relates to pedestrian and non-pedestrian routes internal to a development site that are not specifically roads – for example, pedestrian pathways within a hotel ⁽³⁷⁾ development or internal roads in a large townhouse development.
		Note - It is important to ensure that new reconfigurations are not isolated from other urban areas in the event of a flood.
		E22.3 Development ensures that a new road and development access are provided in accordance with the requirements set out in Appendix C of Planning scheme policy - Integrated design.

	E22.4
	Development ensures that:
	 a. signage is provided on a road or pathway indicating the position and path of all safe evacuation routes off the premises; and
	b. if the premises contains or is within 100m of an area subject to the Defined Flood Event, hazard warning signage and depth indicators are provided at each key hazard point, such as at a waterway crossing or an entrance to a low-lying reserve.
	Note - 'Pathway' in this instance relates to pedestrian and non-pedestrian routes internal to a development site that are not specifically roads – for example, pedestrian pathways within a hotel ⁽³⁷⁾ development or internal roads in a large townhouse development.
	<i>If the ground level is to be filled other than as permitted by Table 8.2.1.4 'Fill requirements'</i>
	No example provided.
PO23	If in the Balance coastal planning area
 Development ensures that infrastructure (excluding a road): a. is located outside of the Erosion Prone Area, High risk storm tide inundation area and Medium risk storm tide inundation area; or b. is otherwise located in the Erosion Prone Area, High risk storm tide inundation area or Medium risk storm tide inundation area to function during and after all coastal hazard events up to and including the Defined Flood Event. 	 E23 Development ensures that: a. any component of infrastructure which is likely to fail to function or may result in contamination when inundated by storm tide is located above the Flood planning level; or b. infrastructure is designed, located and constructed to resist the hydrostatic and hydrodynamic forces as a result of inundation by the Defined Flood Event. <i>If in the Erosion Prone Area, High risk storm tide inundation</i>
	area or Medium risk storm tide inundation area
	No example provided.
reconfiguring a lot	
PO24	No example provided.
Development ensures that filling complies with the requirements of Table 8.2.1.4 'Fill requirements'.	
PO25	No example provided.
Development does not:	
a. directly, indirectly and cumulatively cause any increase in water flow velocity or level;	

8 Overlays

 b. increase the potential for erosion, scour or flood damage either on the premises or other premises, public land, watercourses, roads or infrastructure or elsewhere in the floodplain; c. change the timing of the flood wave or impact on flood warning times. Note - To demonstrate achievement of the performance outcome, an engineering report is to be prepared by a suitably qualified person. Guidance on the matters to be addressed in the report is provided in the Planning scheme policy - Flood Hazard, Coastal Hazard and Overland Flow. 	
Additional criteria for development involving hazar	dous chemicals
PO26	No example provided.
Development ensures that hazardous chemicals are not located or stored in the Erosion Prone Area or High risk storm tide inundation area.	
PO27	E27
Development in the Medium risk storm tide inundation area and Balance coastal planning area ensures that public safety and risk to the environment are not adversely affected by a detrimental impact of a coastal hazard event on a hazardous chemical located or stored on the premises.	Development ensures that a hazardous chemical is located or stored at least above the flood planning level in Table 8.2.1.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'. Note - Refer to the <i>Work Health and Safety Act 2011</i> and associated Regulation and Guidelines, the <i>Environmental Protection Act 1994</i> and the relevant building assessment provisions under the <i>Building Act 1975</i> for requirements related to the manufacture and storage of hazardous substances.
Additional criteria for development for community	infrastructure
PO28 Development involving community infrastructure is not located in the Erosion Prone Area or High risk storm tide inundation area.	No example provided.
PO29	No example provided.
Development for community infrastructure in the Medium risk storm tide inundation area or the Balance coastal planning area:a. remains functional to serve community needs during and immediately after the Defined Flood Event;	

b.	is designed, sited and operated to avoid adverse impacts on the community or the environment due to the impacts of storm tide inundation on infrastructure, facilities or access and egress routes;	
C.	retains essential site access during the Defined Flood Event;	
d.	is able to remain functional even when other infrastructure or services may be compromised in the Defined Flood Event.	
Add	itional criteria for development for a Park ⁽⁵⁷⁾	
PO30		E30
Development for a Park ⁽⁵⁷⁾ ensures that the design and layout responds to the nature of the coastal hazard affecting the premises in order to:		Development for a Park ⁽⁵⁷⁾ ensures works are provided in accordance with the requirements set out in Appendix B of Planning scheme policy - Integrated design.
a.	maximise public benefit and enjoyment;	
b.	minimise impacts on the asset life and integrity of park ⁽⁵⁷⁾ structures;	
C.	minimise maintenance and replacement costs.	

Table 8.2.1.3 Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals

Coastal planning area	Defined freeboard	Flood planning level
Land in the Coastal planning area which is outside the Erosion Prone Area.	300mm	Defined Flood Event + 300mm
Land in the Coastal planning area which is in the Erosion Prone Area.	500mm	Defined Flood Event + 500mm

Note - If the premises is subject to another overlay which states a flood planning level, the flood planning level that provides the highest level of immunity applies.

Table 8.2.1.4 Fill requirements

Coastal planning area	Fill level
Land in the Erosion Prone Area.	No filling permitted.
Land in the High risk storm tide inundation area included in the Limited development zone.	No filling permitted.
Land in the High risk storm tide inundation area not included in the Limited development zone.	No filling permitted. Note - In isolated areas of High risk storm tide inundation and storm tide maximum flow velocity is less than 0.5 metres per second, filling may be permitted.

Coastal planning area	Fill level
Land in the Medium risk storm tide inundation area.	Filling permitted - Development Footprint as a minimum to the Year 2100 Highest Astronomical Tide level.
Land in the Balance area of the Coastal planning area.	Filling required - Development Footprint as a minimum to the Defined Flood Event.

Note - The Year 2100 Highest Astronomical Tide level is available on Council's Flood Check website via https://www.moretonbay.qld.gov.au/floodcheck/.

8.2.2 Flood hazard overlay code

8.2.2.1 Application - Flood hazard overlay

- 1. This code applies to development within the mapped extent of the Flood hazard overlay, if that development is identified as:
 - a. accepted development subject to requirements or assessable development, and this code is listed as an applicable code in the assessment benchmarks for assessable development and requirements for accepted development column of a table of assessment (Part 5.10);
 - b. Aaaassessable development impact assessment.
- 2. The Flood hazard overlay code applies to land in the Flood planning area identified on a Flood hazard overlay map and includes land in the Flood planning area in the following sub-categories:
 - a. High risk area;
 - b. Medium risk area;
 - c. Balance flood planning area.
- 3. When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3, in Part 5.

8.2.2.2 Purpose - Flood hazard overlay

- 1. The purpose of the Flood hazard overlay code is to:
 - a. identify whether an area is subject to a flood hazard;
 - b. minimise the risk to life, property, community, economic development and the environment from the flood hazard by:
 - i. limiting development in an area of extremely unacceptable intolerable risk of flood hazard to avoid the risk of the flood hazard;
 - ii. managing development in an area of unacceptable intolerable risk and tolerable risk of flood hazard to mitigate the risk of the flood hazard;
 - c. ensure that development does not increase the potential for adverse impacts on the premises or other premises, public lands, watercourses, roads or infrastructure without appropriate mitigation.
- 2. The purpose of the Flood hazard overlay code will be achieved through the following overall outcomes:
 - a. Development in the High risk flood hazard area included in the Limited development zone, avoids the extremely unacceptable intolerable risk of the flood hazard by ensuring that:
 - i. a material change of use is only for the following uses if the intolerable risk of flood hazard to people, property and infrastructure located on the premises and other premises is avoided:
 - A. Outdoor sport and recreation⁽⁵⁵⁾; or
 - B. Park⁽⁵⁷⁾; or
 - C. Permanent plantation⁽⁵⁹⁾; or
 - D. Cropping⁽¹⁹⁾ (where involving forestry for wood production);

- ii. reconfiguring a lot for boundary realignment only occurs if the intolerable risk of flood hazard to people, property and infrastructure located on the premises and other premises is not increased and where practicable the intolerable risk of flood hazard for future occupants is mitigated;
- iii. reconfiguring a lot for creating lots by subdividing another lot only occurs for the purposes of Park or Permanent plantation or ensures that lots have sufficient area outside of the zone for development consistent in the adjoining zone and precinct;
- iv. building work is less than 50m² in area and associated with a use in paragraph (i).
- v. earthworks do not occur except where associated with a previous approval..
- b. Development in the High risk area not included in the Limited development zone, manages and mitigates the unacceptable intolerable risk of the flood hazard by ensuring that:
 - i. a material change of use is only for the following uses if consistent with the overall outcomes of the applicable zone and precinct and the intolerable risk of flood hazard to people, property and infrastructure located on the premises and other premises is avoided:
 - A. Dwelling house⁽²²⁾; or
 - B. Outdoor sport and recreation⁽⁵⁵⁾; or
 - C. Park⁽⁵⁷⁾; or
 - D. Permanent plantation⁽⁵⁹⁾; or
 - E. Cropping⁽¹⁹⁾ (where involving forestry for wood production); or
 - F. Tourist park⁽⁸⁴⁾; or
 - G. Home based business⁽³⁵⁾;
 - ii. reconfiguring a lot for boundary realignment only occurs if the intolerable risk of flood hazard to people, property and infrastructure located on the premises and other premises is not increased and where practicable the intolerable risk of flood hazard for future occupants is mitigated;
 - iii. reconfiguring a lot for creating lots by subdividing another lot is only for the following:
 - A. in the Rural zone, where consistent with the overall outcomes of the applicable zone and precinct; or
 - B. in the Rural residential zone, residential lots provide the required minimum lot size outside the High or Medium risk area of the Flood planning area; or
 - C. in any other zone, for the purposes of Park⁽⁵⁷⁾ or Permanent plantation⁽⁵⁹⁾;
 - iv. building work complies with the flood planning level, engineering design and resilient materials requirements;
 - v. earthworks do not occur except where associated with a previous approval;
- c. Development in the Medium risk area manages and mitigates the tolerable risk of flood hazard by ensuring that:
 - i. a material change of use is only for the following uses if consistent with the overall outcomes of the applicable zone and precinct and the risk to people, property and infrastructure located on the premises and other premises is avoided or mitigated:

- A. Dwelling house⁽²²⁾; or
- B. Outdoor sport and recreation⁽⁵⁵⁾; or
- C. Park⁽⁵⁷⁾; or
- D. Permanent plantation⁽⁵⁹⁾; or
- E. Cropping⁽¹⁹⁾ (where involving forestry for wood production); or
- F. Tourist park⁽⁸⁴⁾; or
- G. Home based business⁽³⁵⁾; or
- H. Non-residential uses where not involving a vulnerable land use (flood and coastal).
- ii. reconfiguring a lot for boundary realignment only occurs if the risk of flood hazard to people, property and infrastructure located on the premises and other premises is not increased and where practicable the risk of flood hazard for future occupants is mitigated;
- iii. reconfiguring a lot for creating lots by subdividing another lot is only for the following:
 - A. in the Rural zone, Centre zone, Industry zone, Recreation and open space zone, or Township zone, where not for a residential purpose or vulnerable use (flood and coastal) and consistent with the overall outcomes of the existing zone and precinct;
 - B. in the Rural residential zone, where the minimum lot size for each rural residential lot is provided outside the High risk or Medium risk area;
 - C. in any other zone, where all resultant lots are located outside the High risk or Medium risk area other than those for the purposes of Park⁽⁵⁷⁾ or Permanent plantation⁽⁵⁹⁾.
- iv. building work complies with the flood planning level, engineering design and resilient materials requirements;
- v. earthworks do not occur except where associated with a previous approval.
- d. Development of premises subject to a drainage master plan manages and mitigates the risk of flood hazard and any coastal hazard in this area, such that:

Note - The premises subject to a drainage master plan are the premises included in the General residential zone - Next generation neighbourhood precinct or General residential zone - Urban neighbourhood precinct located in a drainage master plan area identified on Figures 8.2.2.1 - 8.2.2.10.

- i. a drainage master plan for the relevant Drainage investigation area demonstrates that the development:
 - A. adequately addresses the significant existing and future flood hazards and any coastal hazards affecting the Drainage investigation area without cost to the local government;
 - B. adequately addresses the significant infrastructure limitations of the Drainage investigation area without cost to the local government;
 - C. does not result in adverse local drainage impacts, flooding impacts on other premises, public land, watercourses, roads or infrastructure, or impacts on natural riverine and coastal processes or flood warning times;
- ii. where it is demonstrated by an approved drainage master plan that the risk to people, property and infrastructure located on the premises and other premises is avoided or mitigated:

- A. a material change of use is limited to uses consistent with the overall outcomes of the applicable zone and precinct and complies with the approved Drainage master plan;
- B. reconfiguring a lot is consistent with the overall outcomes of the applicable zone and precinct and complies with the approved Drainage master plan;
- C. building work complies with the approved drainage master plan;
- D. earthworks comply with the approved drainage master plan.
- e. Development in the Balance flood planning area manages and mitigates the tolerable risk of the flood hazard by ensuring that:
 - i. a material change of use is only for uses consistent with the overall outcomes of the applicable zone and precinct if the risk to people, property and infrastructure located on the premises and other premises is avoided or mitigated;
 - ii. reconfiguring a lot is consistent with the overall outcomes of the applicable zone and precinct;
 - iii. building work complies with the flood planning level and resilient materials requirements;
 - iv. earthworks only occur, if:
 - A. filling raises the ground level as a minimum to the Defined Flood Event;
 - B. there are no adverse local drainage impacts, flooding and coastal impacts on other premises, public land, watercourses, roads or infrastructure or impacts on natural riverine and coastal processes or flood warning times.

Note - The 1% AEP 2014 is available on Council's Flood Check website via https://www.moretonbay.qld.gov.au/floodcheck/.

- f. Development in the Flood planning area:
 - i. supports, and does not unduly burden the disaster management response and recovery capacity and capabilities during and after significant flood events;
 - ii. provides for efficient evacuation of on-site persons and facilitates direct and simple access for evacuation personnel and resources during flood events, while ensuring development does not hinder or place additional complexities upon evacuation activities for other premises;
 - iii. avoids isolation of persons for flood events up to and including the Defined Flood Event;
 - provides for siting, built form, layout, and access (including evacuation access) which responds to the risk of the flood hazard and minimises risk to personal safety in all flood hazard events up to and including the Defined Flood Event;
 - v. is resilient to flood events by ensuring the siting and design of development accounts for the potential risks to property associated with flood hazards;
 - vi. directly, indirectly and cumulatively avoids an increase in the severity of flood hazards and potential for damage on the premises or to other premises or elsewhere in the floodplain;
 - vii. involving essential community infrastructure remains functional during and immediately after a flood event up to and including the Defined Flood Event;
 - viii. avoids the accidental release of hazardous materials as a result of a flood event;

- ix. maintains natural processes and the protective function of landforms and vegetation;
- x. does not impact adversely on the ability for future flood hazard mitigation measures to be implemented on other premises.

8.2.2.3 Requirements for assessment

If development is to be categorised as accepted development subject to requirements it must comply with the requirements for accepted development set out in Part A, Table 8.2.2.1. Where development does not meet a requirement for accepted development (RAD) within Part A Table 8.2.2.1, the category of development changes to assessable development under the rules outlined in section 5.3.3. (1), and assessment is against the corresponding performance outcome (PO) identified in the table below. This only occurs whenever a RAD is not met, and is therefore limited to the subject matter of the RADs that are not complied with. To remove any doubt, for those RADs that are complied with, there is no need for assessment against the corresponding PO.

Requirements for accepted development (RAD)	Corresponding performance outcomes
RAD1	PO5 (if in the Balance flood planning area)
	PO11 (if in the High risk area or Medium risk area)
RAD2 (for MCU or building work for dwelling house)	PO2
RAD2 (for all other development)	PO5 (if in the Balance flood planning area)
	PO11 (if in the High risk area or Medium risk area)
RAD3	PO5 (if in the Balance flood planning area)
	PO11 (if in the High risk area or Medium risk area)
RAD4 (for MCU or building work for dwelling house)	PO2
RAD4 (for all other development)	PO5 (if in the Balance flood planning area)
	PO11 (if in the High risk area or Medium risk area)
RAD5 (for MCU or building work for dwelling house)	PO5
RAD5 (for all other development)	PO6 (if in the Balance flood planning area)
	PO13 (if not in the Balance flood planning area)
RAD6	PO24
RAD7	PO29
RAD8	PO11

Part A - Requirements for accepted development subject to requirements - Flood hazard overlay

Table 8.2.2.1 Requirements for accepted development - Flood hazard overlay

Requirements for accepted development

Section A – If for accepted development subject to requirements for material change of use in an existing building

RAD1	Development ensures that new building materials utilised as a consequence of the change of use for habitable and non-habitable rooms below the flood planning level in Table 8.2.2.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals' have a high water resistance. Note - The Queensland Government Fact Sheet 'Rebuilding after a flood' provides information about water resilient products and building techniques. Available at http://www.hpw.qld.gov.au/SiteCollectionDocuments/WaterResilient ProductsAndBuildingTechniquesForRebuildingAfterAFlood.pdf
	B – If for accepted development subject to requirements other than a material change of use in an building
RAD2	Development ensures that a habitable floor level that is the subject of the development is located, designed and constructed to the flood planning level in Table 8.2.2.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'.
RAD3	Development ensures that a finished floor level the subject of the development is located, designed and constructed to the flood planning level in Table 8.2.2.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'.
RAD4	Development ensures that building materials for non-habitable rooms below the flood planning level in Table 8.2.2.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals' have a high water resistance. Note - The Queensland Government Fact Sheet 'Rebuilding after a flood' provides information about water resilient products and building techniques. Available at http://www.hpw.gld.gov.au/SiteCollectionDocuments/WaterResilient ProductsAndBuildingTechniquesForRebuildingAfterAFlood.pdf
RAD5	Development on land below the level of the Defined Flood Event involving earthworks complies with the requirements of Table 8.2.2.4 'Fill Requirements' and does not increase the potential for erosion, scour or flood damage either on the premises or on other premises, public land, watercourses, roads or infrastructure or elsewhere in the floodplain. Note - Prior to development occurring, an investigation into the potential impacts of earthworks should be undertaken by a suitably qualified person so that a prospective developer can satisfy themselves the development meets this RAD. Guidance on the matters to be addressed is provided in Planning scheme policy - Flood hazard, Coastal hazard and Overland flow.
RAD6	Development that involves a hazardous chemical ensures the hazardous chemical is located and stored at or above the flood planning level in Table 8.2.2.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'.
RAD7	Development for a Park ensures works are provided in accordance with the requirements set out in Appendix B of the Planning scheme policy - Integrated design.
RAD8	Development for an Advertising device is located, designed and constructed to resist the hydrostatic and hydrodynamic forces as a result of inundation by the Defined Flood Event.

Part B - Criteria for assessable development - Flood hazard overlay

Where development is listed as assessable development - code assessment in the Table of Assessment, the assessment benchmarks for that development are set out in Part B, Table 8.2.2.2 as well as the applicable purpose statement and overall outcomes.

Where development is assessable development - impact assessment, the assessment benchmarks are the applicable provisions within the entire planning scheme.

Performance outcomes	Examples that achieve aspects of the Performance Outcomes		
Material change of use or building work for a dwelling house ⁽²²⁾			
 PO1 Development in the High risk flood hazard area included in the Limited development zone for: a. a material change of use and associated building work for a Dwelling house⁽²²⁾ does not occur; b. building work not associated with a material change of use for a Dwelling house⁽²²⁾ only occurs for an existing lawful use. 	No example provided.		
PO2 Development is resilient to flood events by ensuring design and built form account for the potential risks of flooding. Note - New buildings within the High risk area or Medium risk area will require a structural engineering design capable of withstanding the nature of the hazard(s) to which the building will be subject consistent with the requirements of the relevant building assessment provisions, to be supported by a report (or multiple reports) prepared by a Registered Professional Engineer Queensland that identifies the flood hazard and the structural approach to be utilised. Information on the flood hazard for individual sites is available on Council's Floodcheck website via https://www.moretonbay.qld.gov.au/floodcheck/. Note - Reporting to be prepared in accordance with Planning scheme policy - Flood hazard, Coastal hazard and Overland flow.	 E2.1 Development ensures that a habitable floor is located, designed and constructed to at least the flood planning level in Table 8.2.2.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'. Note - The highset 'Queenslander' style house is a resilient low-density housing solution. Higher density residential development should also ensure only non-habitable rooms (e.g. garages) are located on the ground floor. Note - New buildings within the High risk area or Medium risk area will require a structural engineering design capable of withstanding the nature of the hazard(s) to which the building will be subject consistent with the requirements of the relevant building assessment provisions, to be supported by a report (or multiple reports) prepared by a Registered Professional Engineer Queensland that identifies the flood hazard and the structural approach to be utilised. Information on the flood hazard for individual sites is available on Council's Floodcheck website via https://www.moretonbay.qld.gov.au/floodcheck/. Note - Reporting to be prepared in accordance with Planning scheme policy - Flood hazard, Coastal hazard and Overland flow. E2.2 Development ensures that building work for non-habitable rooms below the flood planning level in Table 8.2.2.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals' has a high water resistance. Note - The Queensland Government Fact Sheet 'Rebuilding after a flood' provides information about water resilient products and building techniques. Available at http://www.how.udo.gov.au/SiteCollectionDocuments/WaterResilient ProductsAndBuildingTechniquesForRebuildingAfterAFlood.pdf 		

Table 8.2.2.2 Assessable development - Flood hazard overlay

	Development in the High risk area or Medium risk area
	E2.3
	Development ensures that a fence is at least 50% permeable.
PO3	E3
Development maintains a functional and attractive relationship with the adjacent street frontage. Note - This is particularly relevant for commercial uses in centres with a strong 'town-centre' pedestrian realm that also may be affected by flood, or for residential uses to maintain an attractive presentation to the street.	 Development for a residential dwelling where pier and pole construction is utilised: a. uses screening around the understorey of the dwelling to ensure the understorey is not visible from the street; b. allows for the flow of flood water through the understorey
PO4 Development does not increase the potential for erosion, scour or flood damage either on the premises or on other premises, public land, watercourses, roads or infrastructure or elsewhere in the floodplain. Note - To demonstrate achievement of the performance outcome, an engineering report is to be prepared by a suitably qualified person. Guidance on the matters to be addressed in the report is provided in Planning scheme policy - Flood hazard, Coastal hazard and Overland flow.	If in the High risk area or Medium risk area of the Flood planning area
	E4.1 Earthworks do not occur in the High risk area or Medium risk area of the Flood planning area.
	If in the Balance flood planning area
	No example provided.
For material change of use or building work (excluding house) in the Balance flood planning area	g material change of use or building work for a dwelling
P05	Development involving building work for a residential use
Development is resilient to a flood hazard event by	E5.1
ensuring design and built form account for the potential risks of flooding.	Development ensures that a habitable floor is located, designed and constructed to at least the flood planning level in Table 8.2.2.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'.
	Development involving building work for a non-residential use
	E5.2
	Development ensures that the finished floor level is located, designed and constructed to at least the flood planning level in Table 8.2.2.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'.

	E5.3
	Development ensures that a non-habitable room below the flood planning level in Table 8.2.2.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals' has a high water resistance. Note - The Queensland Government Fact Sheet 'Rebuilding after a flood' provides information about water resilient products and building techniques. Available at http://www.hpw.qld.gov.au/SiteCollectionDocuments/WaterResilient ProductsAndBuildingTechniquesForRebuildingAfterAFlood.pdf
PO6	No example provided.
Development ensures earthworks complies with the requirements of Table 8.2.2.4 'Fill Requirements' and does not:	
 a. directly, indirectly and cumulatively cause any increase in water flow velocity or level; 	
 b. increase the potential for erosion, scour or flood damage either on the premises or other premises, public land, watercourses, roads or infrastructure or elsewhere in the floodplain; 	
c. change the timing of the flood wave or impact on flood warning times.	
Note - To demonstrate achievement of the performance outcome, an engineering report is to be prepared by a suitably qualified person. Guidance on the matters to be addressed in the report is provided in Planning scheme policy - Flood hazard, Coastal hazard and Overland flow.	
P07	E7.1
Development ensures that a use which requires an interface with the public realm, including a commercial and residential use, maintains a functional and attractive relationship with the adjacent street frontage. Note - This is particularly relevant for commercial uses in centres with a strong 'town-centre' pedestrian realm that also may be affected by flood, or for residential uses to maintain an attractive presentation to the street.	 Development for a residential use where pier and pole construction is utilised: a. uses screening around the understorey of the dwelling that is a minimum of 50% permeable to ensure the understorey is not visible from the street; b. allows for the flow of flood water through the understorey.
	E7.2
	Development for a commercial building or structure maintains an active street frontage through:
	a. providing clear pedestrian access from any adjacent footpath to the floor level of the commercial activity;

		 b. providing a retail or food and beverage use, if consistent with the overall outcomes of the applicable zone and precinct, which interfaces with and overlooks the street; c. urban design treatments which screen the understorey of the building from view from the adjacent street frontage must not impede flood flow.
PO	}	E8
envi impa	elopment ensures that public safety and risk to the ronment are not adversely affected by a detrimental act of floodwaters up to the Defined Flood Event on izardous chemical located or stored on the premises.	Development ensures that a hazardous chemical is located or stored at least above the flood planning level in Table 8.2.2.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'.
		Note - Refer to the <i>Work Health and Safety Act 2011</i> and associated Regulation and Guidelines, the <i>Environmental Protection Act 1994</i> and the relevant building assessment provisions under the <i>Building Act 1975</i> for requirements related to the manufacture and storage of hazardous substances.
For	all other material change of use or building work	
POS)	No example provided.
Dev	elopment is:	
a.	limited in the High risk flood hazard area included in the Limited development zone to avoid the extremely unacceptable intolerable risk of the flood hazard;	
b.	managed in the High risk flood hazard area not included in the Limited development zone to mitigate the unacceptable intolerable risk of the flood hazard;	
C.	managed in the other sub-categories of the Flood planning area to mitigate the tolerable risk of the flood hazard.	
outo into	e - The overall outcomes of this code identify the development comes which are intended so as to avoid or mitigate the lerable or tolerable risk of the flood hazard applicable to the mises in the relevant sub-categories of the Flood planning area.	
PO1	0	No example provided.
Dev that	elopment maintains personal safety at all times, such	
a.	a vulnerable land use (flood and coastal) is not located in the High risk flood hazard area or Medium risk flood hazard area;	

b. c.	 new buildings are not located in the High risk flood hazard area included in the Limited development zone; a residential accommodation building is located in the following: Balance flood planning area; or the Medium risk area where located in the Medium risk storm tide inundation area of the Coastal hazard overlay or Balance coastal planning area of the Coastal hazard overlay ; 	
d. e.	evacuation capability from the development or other premises is not hindered or made more complicated and there is no significant additional burden placed on emergency services personnel; the isolation of persons in the Defined Flood Event is avoided.	
PO1	1	Development involving building work for a residential use
Development is resilient to a flood hazard event by ensuring design and built form account for the potential risks of the flood hazard event. Note - New buildings within the High risk or Medium risk area will require a structural engineering design capable of withstanding the nature of the hazard(s) to which the building will be subject consistent with the requirements of the relevant building assessment provisions, to be supported by a report (or multiple reports) prepared by a Registered Professional Engineer Queensland that identifies the flood hazard and the structural approach to be utilised. Information on the flood hazard for individual sites is available onCouncil's Floodcheck website via https://www.moretonbay.qld.gov.au/floodcheck/. Note - Reporting to be prepared in accordance with Planning scheme policy - Flood hazard, Coastal hazard and Overland flow.		E11.1 Development ensures that a habitable floor is located, designed and constructed to at least the flood planning level in Table 8.2.2.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'. Note - New buildings within the High risk area or Medium risk area will require a structural engineering design capable of withstanding the nature of the hazard(s) to which the building will be subject consistent with the requirements of the relevant building assessment provisions, to be supported by a report (or multiple reports) prepared by a Registered Professional Engineer Queensland that identifies the flood hazard and the structural approach to be utilised. Information on the flood hazard for individual sites is available on Council's Floodcheck website via https://www.moretonbay.qld.gov.au/floodcheck/. Note - Reporting to be prepared in accordance with Planning scheme policy - Flood hazard, Coastal hazard and Overland flow.
		Development involving building work for a non-residential use E11.2 Development ensures that the finished floor level is located, designed and constructed to at least the flood planning level in Table 8.2.2.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'.

	Note - New buildings within the High risk area or Medium risk area will require a structural engineering design capable of withstanding the nature of the hazard(s) to which the building will be subject consistent with the requirements of the relevant building assessment provisions, to be supported by a report (or multiple reports) prepared by a Registered Professional Engineer Queensland that identifies the flood hazard and the structural approach to be utilised. Information on the flood hazard for individual sites is available on Council's Floodcheck website via https://www.moretonbay.qld.gov.au/floodcheck/. Note - Reporting to be prepared in accordance with Planning scheme policy - Flood hazard, Coastal hazard and Overland flow.
	Development involving building work for all uses
	E11.3
	Development ensures that a fence is at least 50% permeable.
	E11.4
	Development ensures that building work for non-habitable rooms below the flood planning level in Table 8.2.2.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals' has a high water resistance.
	flood' provides information about water resilient products and building techniques. Available at http://www.hpw.qld.gov.au/SiteCollectionDocuments/WaterResilient ProductsAndBuildingTechniquesForRebuildingAfterAFlood.pdf
P012	No example provided.
Development ensures that where earthworks alone cannot ensure the development achieves the flood planning level in Table 8.2.2.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals', a building is designed and constructed using pier and pole construction to achieve the required flood immunity in the Defined Flood Event.	
PO13	No example provided.
Development ensures that earthworks complies with the requirements of Table 8.2.2.4 'Fill Requirements' and does not:	
a. directly, indirectly and cumulatively cause any increase in water flow velocity or level;	

 b. increase the potential for erosion, scour or flood damage either on the premises or on other premises, public land, watercourses, roads or infrastructure or elsewhere in the floodplain; c. change the timing of the flood wave or impact on flood warning times. Note - To demonstrate achievement of the performance outcome, an engineering report is to be prepared by a suitably qualified person. Guidance on the matters to be addressed in the report is provided in Planning scheme policy - Flood hazard, Coastal hazard and Overland flow. PO14 Development supports and does not unduly burden, disaster management responses and recovery capacity and capabilities for a flood hazard event up to and including the Defined Flood Event. PO15 Development has access which, having regard to the hydraulic hazard, provides for safe vehicular and pedestrian movement and emergency services access. 	No example provided. No example provided.
PO16 Development ensures that a use which requires an interface with the public realm, including a commercial and residential use, maintains a functional and attractive relationship with the adjacent street frontage. Note - This is particularly relevant for commercial uses in centres with a strong 'town-centre' pedestrian realm that also may be affected by flood, or for residential uses to maintain an attractive presentation to the street.	 E16.1 Development for a residential dwelling where pier and pole construction is utilised: a. uses screening around the understorey of the dwelling that is a minimum of 50% permeable to ensure the understorey is not visible from the street; b. allows for the flow of flood water through the understorey. E16.2 Development for a commercial building or structure maintains an active street frontage through: a. providing clear pedestrian access from any adjacent footpath to the floor level of the commercial activity; b. providing a retail or food and beverage use, if consistent with the overall outcomes of the applicable zone and precinct, which interfaces with and overlooks the street; c. urban design treatments which screen the understorey of the building from view from the adjacent street frontage but do not impede flood flow.

 a. ensure personal safety at all times; b. not increase the potential for erosion, scour or flood damage either on the premises or other premises, public land, watercourses, roads or infrastructure or elsewhere in the floodplain; c. not increase the risk to people, property and infrastructure located on the premises and other premises and where applicable the risk for future occupants is mitigated. located in an area other than a High risk area. E17.2 Development ensures that the entry points into the development are located to provide a safe and development areal located to provide a safe and develop			configuring a lot (boundary realignment)	Rec
 a. ensure personal safety at all times; b. not increase the potential for erosion, scour or flood damage either on the premises or other premises, public land, watercourses, roads or infrastructure or elsewhere in the floodplain; c. not increase the risk to people, property and infrastructure located on the premises and other premises and where applicable the risk for future occupants is mitigated. F17.2 Development are located to provide a safe and or evacuation route path. <i>If in the Drainage investigation area</i> E17.3 Development occurs in accordance with a drainage plan for the Drainage investigation area. P018 No example provided. No example provided. No example provided. In the High risk area, is only for the purposes of Park or Permanent plantation unless: i. in the Rural residential zone where; the minimum lot size for each rural residential lot is provided outside the High risk area; or ii. in the Rural zone; or b. in the Medium risk area, is only for the purposes of 		E17.1	17	P01
 a in the Rural residentiation on the premises or other premises, public land, watercourses, roads or infrastructure or elsewhere in the floodplain; c. not increase the risk to people, property and infrastructure located on the premises and other premises and where applicable the risk for future occupants is mitigated. <i>If in the Drainage investigation area</i> E17.3 Development accordance with a drainage plan for the Drainage investigation area. Reconfiguring a lot (other than boundary realignment) PO18 Development is compatible with the intolerable or tolerable level of risk of the flood hazard applicable to the premises such that reconfiguring a lot for creating lots by subdividing another lot: a. in the High risk area, is only for the purposes of Park or Permanent plantation unless: i. in the Rural residential zone where; the minimum lot size for each rural residential lot is provided outside the High risk area; or ii. in the Rural zone; or b. in the Medium risk area, is only for the purposes of 	otprint is	Development ensures that the development footprin located in an area other than a High risk area.		
premises and where applicable the risk for future occupants is mitigated. If in the Drainage investigation area E17.3 E17.3 Development occurs in accordance with a drainage plan for the Drainage investigation area. Reconfiguring a lot (other than boundary realignment) P018 No example provided. Development is compatible with the intolerable or tolerable level of risk of the flood hazard applicable to the premises such that reconfiguring a lot for creating lots by subdividing another lot: No example provided. a. in the High risk area, is only for the purposes of Park or Permanent plantation unless: i. i. in the Rural residential zone where; the minimum lot size for each rural residential lot is provided outside the High risk area; or ii. b. in the Medium risk area, is only for the purposes of		Development ensures that the entry points into the development are located to provide a safe and clear	damage either on the premises or other premises, public land, watercourses, roads or infrastructure or elsewhere in the floodplain; not increase the risk to people, property and	 b. not increase the potential for erosion, scour damage either on the premises or other propublic land, watercourses, roads or infrastr or elsewhere in the floodplain; c. not increase the risk to people, property ar
Reconfiguring a lot (other than boundary realignment) P018 Development is compatible with the intolerable or tolerable level of risk of the flood hazard applicable to the premises such that reconfiguring a lot for creating lots by subdividing another lot: a. in the High risk area, is only for the purposes of Park or Permanent plantation unless: i. in the Rural residential zone where; the minimum lot size for each rural residential lot is provided outside the High risk area; or ii. in the Rural zone; or		If in the Drainage investigation area	premises and where applicable the risk for future	
Plan for the Drainage investigation area. Reconfiguring a lot (other than boundary realignment) P018 Development is compatible with the intolerable or tolerable level of risk of the flood hazard applicable to the premises such that reconfiguring a lot for creating lots by subdividing another lot: a. in the High risk area, is only for the purposes of Park or Permanent plantation unless: i. in the Rural residential zone where; the minimum lot size for each rural residential lot is provided outside the High risk area; or ii. in the Rural zone; or b. in the Medium risk area, is only for the purposes of		E17.3	occupants is mitigated.	
PO18 No example provided. Development is compatible with the intolerable or tolerable level of risk of the flood hazard applicable to the premises such that reconfiguring a lot for creating lots by subdividing another lot: No example provided. a. in the High risk area, is only for the purposes of Park or Permanent plantation unless: i. in the Rural residential zone where; the minimum lot size for each rural residential lot is provided outside the High risk area; or ii. in the Rural zone; or b. in the Medium risk area, is only for the purposes of b.	ge master	Development occurs in accordance with a drainage mapped plan for the Drainage investigation area.		
 Development is compatible with the intolerable or tolerable level of risk of the flood hazard applicable to the premises such that reconfiguring a lot for creating lots by subdividing another lot: a. in the High risk area, is only for the purposes of Park or Permanent plantation unless: i. in the Rural residential zone where; the minimum lot size for each rural residential lot is provided outside the High risk area; or ii. in the Rural zone; or b. in the Medium risk area, is only for the purposes of 		it)	configuring a lot (other than boundary realignmer	Rec
 tolerable level of risk of the flood hazard applicable to the premises such that reconfiguring a lot for creating lots by subdividing another lot: a. in the High risk area, is only for the purposes of Park or Permanent plantation unless: i. in the Rural residential zone where; the minimum lot size for each rural residential lot is provided outside the High risk area; or ii. in the Rural zone; or b. in the Medium risk area, is only for the purposes of 		No example provided.	18	P01
 Park or Permanent plantation unless: i. in the Rural residential zone where; the minimum lot size for each rural residential lot is provided outside the High risk area; or ii. in the Rural zone; or b. in the Medium risk area, is only for the purposes of 			rable level of risk of the flood hazard applicable to premises such that reconfiguring a lot for creating	toler the p
 minimum lot size for each rural residential lot is provided outside the High risk area; or ii. in the Rural zone; or b. in the Medium risk area, is only for the purposes of 				a.
b. in the Medium risk area, is only for the purposes of			minimum lot size for each rural residential lot	
			ii. in the Rural zone; or	
				b.
 in the Centre zone, Industry zone, Recreation and open space zone, or Township zone, where not for a residential purpose or vulnerable use (flood and coastal); or 			and open space zone, or Township zone, where not for a residential purpose or	
ii. in the Rural zone; or			ii. in the Rural zone; or	

 iii. in the Rural residential zone, where the minimum lot size for each rural reside is provided outside the Medium risk a iv. in any other zone, where all resultant 	ntial lot rea; or
located outside the High risk or Mediu area other than those for the purposes or Permanent plantation; or	ım risk
c. In the Balance flood planning area, is cons with the overall outcomes of the applicable and precinct.	
Note - The overall outcomes of this code identify the develo outcomes which are intended so as to avoid or mitigate the intolerable or tolerable level of risk applicable to premises i High risk area, Medium risk area and Low risk area of the F planning area.	n the
PO19 Development is designed to ensure personal sat	If the ground level is to be filled to the Flood planning level as permitted by Table 8.2.2.4 'Fill Requirements'
all times such that:	E19.1
a. flood immunity up to the Flood planning lev achieved;b. the road layout avoids isolation in a flood here and immediately and immediately and immediately and immediately and immediately achieved.	all additional lots (excluding a Park ⁽⁵⁷⁾) complies with the requirements of Table 8.2.2.4 'Fill Requirements'.
event and does not impede evacuation;	E19.2
 signage is utilised to ensure that communit members have a clear understanding of the 	
of the flood risk in the area.	a. ensures residents are not physically isolated from an adjacent flood-free urban area;
	b. provides a safe and clear evacuation route path by:
	 i. locating entry points into the development above the requirements set out in Appendix C of the Planning scheme policy - Integrated design and avoiding cul-de-sac or other non-permeable layouts;
	ii. direct and simple routes to a main carriageway.
	Note - 'Pathway' in this instance relates to pedestrian and non-pedestrian routes internal to a development site that are not specifically roads – for example, pedestrian pathways within a hotel ⁽³⁷⁾ development or internal roads in a large townhouse development.
	Note - It is important to ensure that new reconfigurations are not isolated from other urban areas in the event of a flood.

Development in a greenfield area protects a flood conveyance area by providing an easement or reserve over the area of the premises up to the Defined Flood Event. E19.4 Development ensures that a new road and development access are provided in accordance with the requirements set out in Appendix C of the Planning scheme policy - Integrated design. E19.5 Development ensures that: a. signage is provided on a road or pathway indicating the position and path of all safe evacuation routes off the premises; b. if the premises contains or is within 100m of a waterway, hazard warning signage and depth indicators are provided at each key hazard point, such as at a waterway crossing or an entrance to a low-lying reserve. Note -Pathway in this instance relates to pedestrian and non-pedestrian routes internal to a development site that are not specifically roads - for example, pedestrian pathways within a hotel ¹³⁷ the s2.2.4 'Fill Requirements' every to the site of pedestrian and non-pedestrian routes internal to a development site that are not specifically roads - for example, pedestrian pathways within a hotel ¹³⁷ the example provided. PO20 If the ground level is to be filled other than as permitted by Table 8.2.2.4 'Fill Requirements' No example provided. E20 Development ensures that: a. any component of infrastructure which is likely to fail to function or may result in contamination when		F40.0
Development ensures that a new road and development access are provided in accordance with the requirements set out in Appendix C of the Planning scheme policy - Integrated design. E19.5 Development ensures that: a. signage is provided on a road or pathway indicating the position and path of all safe evacuation routes off the premises; b. if the premises contains or is within 100m of a waterway, hazard warning signage and depth indicators are provided at each key hazard point, such as at a waterway crossing or an entrance to a low-lying reserve. Note - Pathway in this instance relates to pedestrian and non-pedestrian routes internal to a development test that are not non-specifically roads - for example, pedestrian pathways within a hotel ¹⁰⁷ development or internal roads in a large townhouse development. Note access are provided. If the ground level is to be filled other than as permitted by Table 8.2.2.4 'Fill Requirements' No example provided. If in the Balance flood planning area Development ensures that infrastructure (excluding a road): a. any component of infrastructure which is likely to fail to function or may result in contamination when		conveyance area by providing an easement or reserve over the area of the premises up to the Defined Flood
F19.5 Development ensures that: a. signage is provided on a road or pathway indicating the position and path of all safe evacuation routes off the premises; b. if the premises contains or is within 100m of a waterway, hazard warning signage and depth indicators are provided at each key hazard point, such as at a waterway crossing or an entrance to a low-lying reserve. Note - 'Pathway' in this instance relates to pedestrian and non-pedestrian routes indext are not specifically roads – for example, pedestrian pathways within a hotel ⁶⁷⁷ development or internal to a development is that are not specifically roads – for example, pedestrian pathways within a hotel ⁶⁷⁷ development or internal roads in a large townhouse development. F020 If the ground level is to be filled other than as permitted by Table 8.2.2.4 'Fill Requirements' No example provided. E20 Development ensures that infrastructure (excluding a road): a. any component of infrastructure which is likely to fail to function or may result in contamination when it to function or may result in contamination when		Development ensures that a new road and development access are provided in accordance with the requirements set out in Appendix C of the Planning scheme policy -
the position and path of all safe evacuation routes off the premises; b. if the premises; b. if the premises contains or is within 100m of a waterway, hazard warning signage and depth indicators are provided at each key hazard point, such as at a waterway crossing or an entrance to a low-lying reserve. Note - 'Pathway' in this instance relates to pedestrian and non-pedestrian routes internal to a development site that are not specifically roads – for example, pedestrian pathways within a hotel ³⁷) development or internal roads in a large townhouse development. If the ground level is to be filled other than as permitted by Table 8.2.2.4 'Fill Requirements' No example provided. PO20 If in the Balance flood planning area Development ensures that infrastructure (excluding a road): E20 a. is located outside of the High risk flood hazard area; or any component of infrastructure which is likely to fail to function or may result in contamination when		E19.5
PO20 If the ground level is to be filled other than as permitted by Table 8.2.2.4 'Fill Requirements' No example provided. If in the Balance flood planning area PO20 If in the Balance flood planning area Development ensures that infrastructure (excluding a road): a. is located outside of the High risk flood hazard area; or a. is located outside of the High risk flood hazard area; or a. any component of infrastructure which is likely to fail to function or may result in contamination when		the position and path of all safe evacuation routes
non-pedestrian routes internal to a development site that are not specifically roads – for example, pedestrian pathways within a hotel ⁽³⁷⁾ development or internal roads in a large townhouse development.If the ground level is to be filled other than as permitted by Table 8.2.2.4 'Fill Requirements'PO20If in the Balance flood planning areaDevelopment ensures that infrastructure (excluding a road):E20 Development ensures that infrastructure (excluding a and Medium risk flood hazard area; ora.is located outside of the High risk flood hazard area; ora.a.and Medium risk flood hazard area; ora.		waterway, hazard warning signage and depth indicators are provided at each key hazard point, such as at a waterway crossing or an entrance to a
by Table 8.2.2.4 'Fill Requirements' No example provided. PO20 If in the Balance flood planning area Development ensures that infrastructure (excluding a road): If in the Balance flood planning area a. is located outside of the High risk flood hazard area and Medium risk flood hazard area; or Development of infrastructure which is likely to fail to function or may result in contamination when		non-pedestrian routes internal to a development site that are not specifically roads – for example, pedestrian pathways within a hotel ⁽³⁷⁾ development or internal roads in a large townhouse
PO20 If in the Balance flood planning area Development ensures that infrastructure (excluding a road): E20 a. is located outside of the High risk flood hazard area and Medium risk flood hazard area; or Development ensures that: a. any component of infrastructure which is likely to fail to function or may result in contamination when		
Development ensures that infrastructure (excluding a road): E20 a. is located outside of the High risk flood hazard area and Medium risk flood hazard area; or Development ensures that: a. any component of infrastructure which is likely to fail to function or may result in contamination when		No example provided.
 road): a. is located outside of the High risk flood hazard area and Medium risk flood hazard area; or bevelopment ensures that: a. any component of infrastructure which is likely to fail to function or may result in contamination when 	PO20	If in the Balance flood planning area
 area or Medium risk flood hazard area to function during and after all flood hazard events up to and including the Defined Flood Event. b. infrastructure is designed, located and constructed to resist the hydrostatic and hydrodynamic forces as a result of inundation by the Defined Flood Event. 	 road): a. is located outside of the High risk flood hazard area and Medium risk flood hazard area; or b. is otherwise located in the High risk flood hazard area or Medium risk flood hazard area to function during and after all flood hazard events up to and 	 Development ensures that: a. any component of infrastructure which is likely to fail to function or may result in contamination when inundated by flood is located above the Flood planning level; or b. infrastructure is designed, located and constructed to resist the hydrostatic and hydrodynamic forces
If in the High risk area or Medium risk area		If in the High risk area or Medium risk area
		No example provided.

PO	21	If in the Balance flood planning area
Rec	onfiguring a lot does not result in:	E21
a.	directly, indirectly and cumulatively cause any increase in water flow velocity or level;	All earthworks are undertaken outside of the Defined Flood Event, or where required to regularise allotment shape,
b.	increase the potential for erosion, scour or flood damage either on the premises or other premises, public land, watercourses, roads or infrastructure	earthworks are undertaken in accordance with Planning scheme policy – Flood hazard, Coastal hazard and Overland flow.
	or elsewhere in the floodplain;	If in the High risk area or Medium risk area
C.	change the timing of the flood wave or impact on flood warning times	No example provided.
d.	adverse impacts on the local drainage and the flood conveyance of a waterway;	
e.	increased flood inundation of surrounding properties;	
f.	any reduction in the flood storage capacity of the floodplain and any clearing of native vegetation.	
an per pro	e - To demonstrate achievement of the performance outcome, engineering report is to be prepared by a suitably qualified son. Guidance on the matters to be addressed in the report is vided in Planning scheme policy - Flood hazard, Coastal hazard I Overland flow.	

PO2	22	No example provided.
requ	elopment ensures that works complies with the uirements of Table 8.2.2.4 'Fill Requirements' and s not:	
a. b. c. d. e. f.	directly, indirectly and cumulatively cause any increase in water flow velocity or level; increase the potential for erosion, scour or flood damage either on the premises or other premises, public land, watercourses, roads or infrastructure or elsewhere in the floodplain; change the timing of the flood wave or impact on flood warning times; adverse impacts on the local drainage and the flood conveyance of a waterway; increased flood inundation of surrounding properties; any reduction in the flood storage capacity of the	
an e Gui in tł	floodplain and any clearing of native vegetation. e - To demonstrate achievement of the performance outcome, engineering report is to be prepared by a suitably qualified person. dance on the matters to be addressed in the report is provided ne Planning scheme policy Flood Hazard, Coastal Hazard and erland Flow.	

8 Overlays

Additional criteria for development involving hazardo	ous chemicals	
PO23	No example provided.	
Development ensures that hazardous chemicals are not located or stored in the High risk flood hazard area.		
PO24	E24	
Development not in the High risk area ensures that public safety and risk to the environment are not adversely affected by a detrimental impact of floodwaters up to the Defined Flood Event on a hazardous chemical located or stored on the premises.	Development ensures that a hazardous chemical is located or stored at least above the flood planning level in Table 8.2.2.3 'Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals'.	
	Note - Refer to the <i>Work Health and Safety Act 2011</i> and associated Regulation and Guidelines, the <i>Environmental Protection Act 1994</i> and the relevant building assessment provisions under the <i>Building Act 1975</i> for requirements related to the manufacture and storage of hazardous substances.	
Additional criteria for development for community in	frastructure	
PO25	No example provided.	
Development for community infrastructure is not located in the High risk flood hazard area or Medium risk flood hazard area.		
PO26	No example provided.	
Development for community infrastructure not located in the High risk area or Medium risk area:		
a. remains functional to serve community needs during and immediately after the Defined Flood Event;		
 is designed, sited and operated to avoid adverse impacts on the community or the environment due to the impacts of flood inundation on infrastructure, facilities or access and egress routes; 		
c. retains essential site access during the Defined Flood Event;		
d. is able to remain functional even when other infrastructure or services may be compromised in the Defined Flood Event.		
Additional criteria for development of premises subject to a drainage master plan		
P027	If the Council has an adopted drainage master plan for the Drainage master plan area	
Development of premises included in the General residential zone – Next generation neighbourhood	E27.1	
precinct or General residential zone – Urban		

investigation area identified on Figures 8.2.2.1 to 8.2.2.10 is supported by drainage works and specific building design responses to mitigate the risk posed by the flood hazard. Note - Planning scheme policy - Flood hazard, Coastal hazard and Overland flow provides direction on the preparation of a drainage master plan, or similar, for the Drainage Investigation Area.	 a. undertakes identified works, internal and external, or transfers land as required to mitigate the impact of the flood hazard and any coastal hazard; b. is designed to mitigate the impact of the flood hazard and any coastal hazard in accordance with the design standards identified in the drainage master plan in the Planning scheme policy - Flood hazard, Coastal hazard and Overland flow.
	If the Council does not have an adopted drainage master plan for the Drainage investigation area
	E27.2
	Development:
	 occurs in accordance with a drainage master plan prepared by an applicant and approved by the Council;
	 undertakes identified works, internal and external, or transfers land as required to mitigate the impact of the flood hazard and any coastal hazard;
	c. is designed to mitigate the impact of the flood hazard and any coastal hazard in accordance with the design standards identified in the approved drainage master plan.
	Note - Planning scheme policy - Flood hazard, Coastal hazard and Overland flow provides direction on the preparation of a drainage master plan.
PO28	E28
Development of premises included in General residential zone – Next generation neighbourhood precinct or General residential zone – Urban neighbourhood precinct located in a Drainage investigation area identified on Figures 8.2.2.1 to 8.2.2.10 must ensure that the land is filled:	No example provided.
a. where there is an adopted drainage master plan, in accordance with the levels in the drainage master plan;	
 where there is no adopted drainage master plan, in accordance with the fill requirements in Table 8.2.2.4 'Fill Requirements' or such that the filling of the land does not: 	

E29			
Additional criteria for material change of use for Permanent plantation ⁽⁵⁹⁾ or Cropping ⁽¹⁹⁾ (where involving forestry for wood production)			
No example provided.			

Table 8.2.2.3 Flood planning level for a habitable floor (residential development) and a non-habitable floor (non-residential development) and levels for hazardous chemicals

Flood planning area	Defined freeboard	Flood planning level
Flood planning area (east of the Bruce Highway and inside the Erosion Prone Area in the Coastal hazard overlay)	500mm	Defined Flood Event + 500mm
Flood planning area (east of the Bruce Highway and outside the Erosion Prone Area in the Coastal hazard overlay)	300mm	Defined Flood Event + 300mm

Flood planning area	Defined freeboard	Flood planning level
Flood planning area (west of the Bruce Highway)	750mm	Defined Flood Event + 750mm

Note - If the premise is subject to another overlay which states a flood planning level, the flood planning level that provides the highest level of immunity applies.

Table 8.2.2.4 Fill Requirements

Flood planning area	Fill level
Land in the High risk area included in the Limited development zone.	No filling permitted.
Land in the High risk area not included in the Limited development zone.	No filling permitted.
Land in the Medium risk area and not located in a Drainage investigation area.	No filling permitted.
Land located in a Drainage investigation area identified on Figures 8.2.2.1 to 8.2.2.10.	Filling in accordance with the relevant adopted Drainage master plan.
Land in the Balance flood planning area.	Filling permitted - Development Footprint as a minimum to the Defined Flood Event.

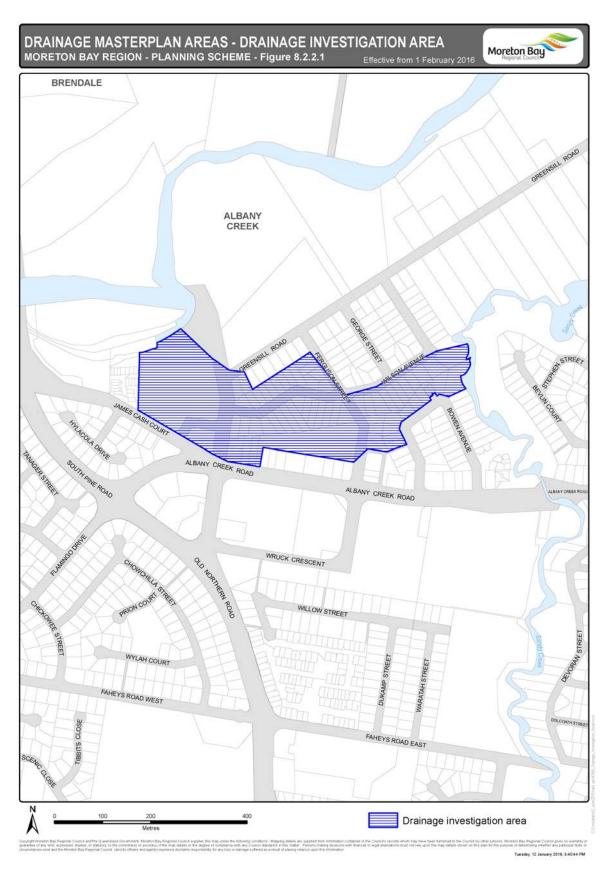


Figure 8.2.2.1 - Albany Creek



Figure 8.2.2.2 - Clontarf

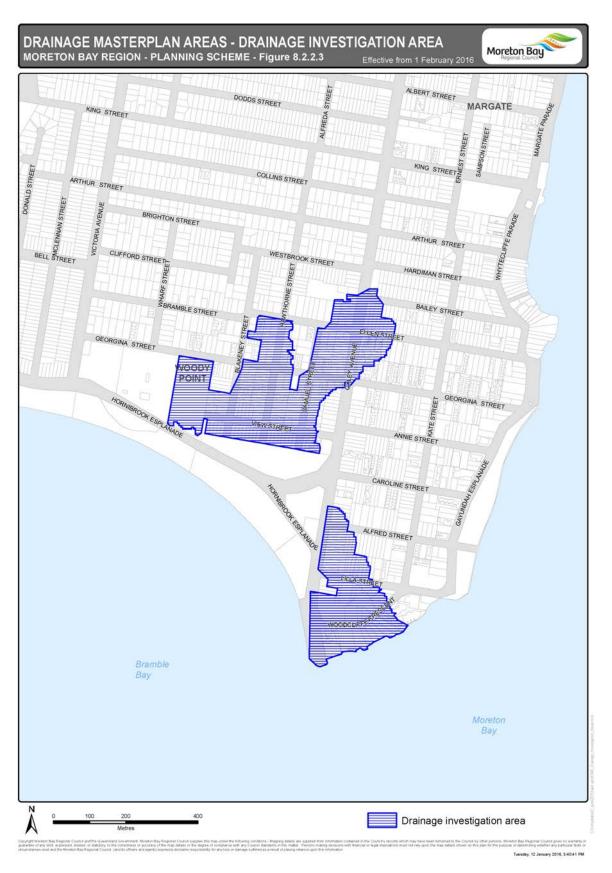


Figure 8.2.2.3 - Woody Point

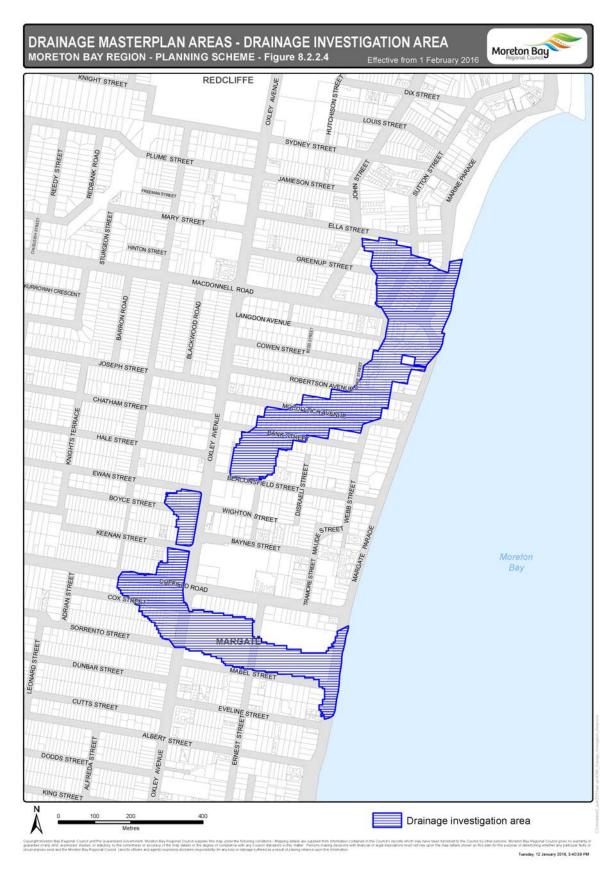


Figure 8.2.2.4 - Margate

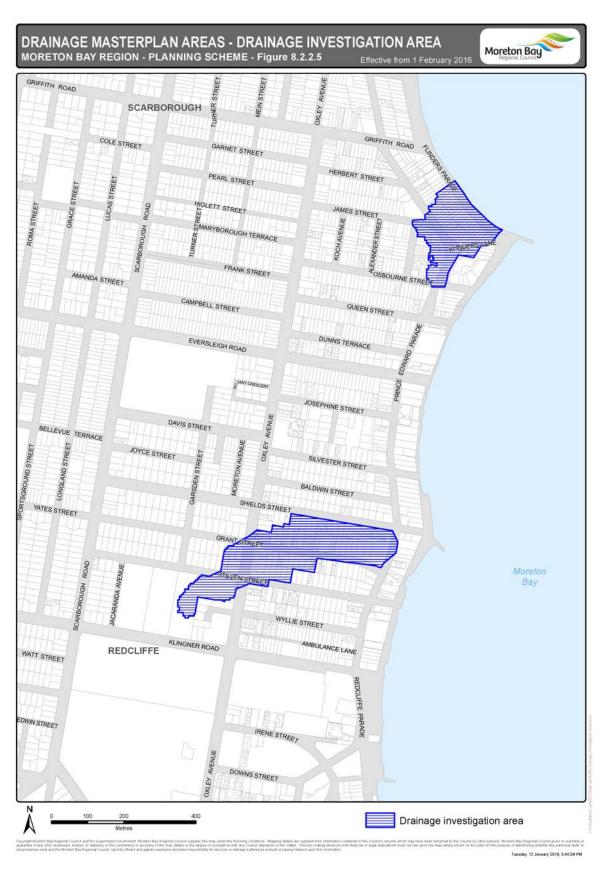


Figure 8.2.2.5 - Redcliffe - Scarborough

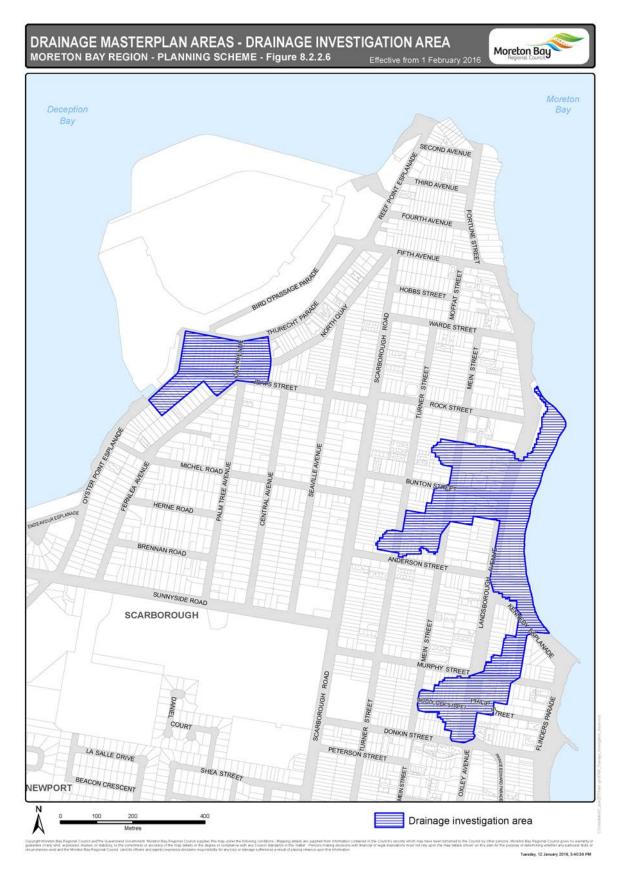


Figure 8.2.2.6 - Scarborough



Figure 8.2.2.7 - Rothwell

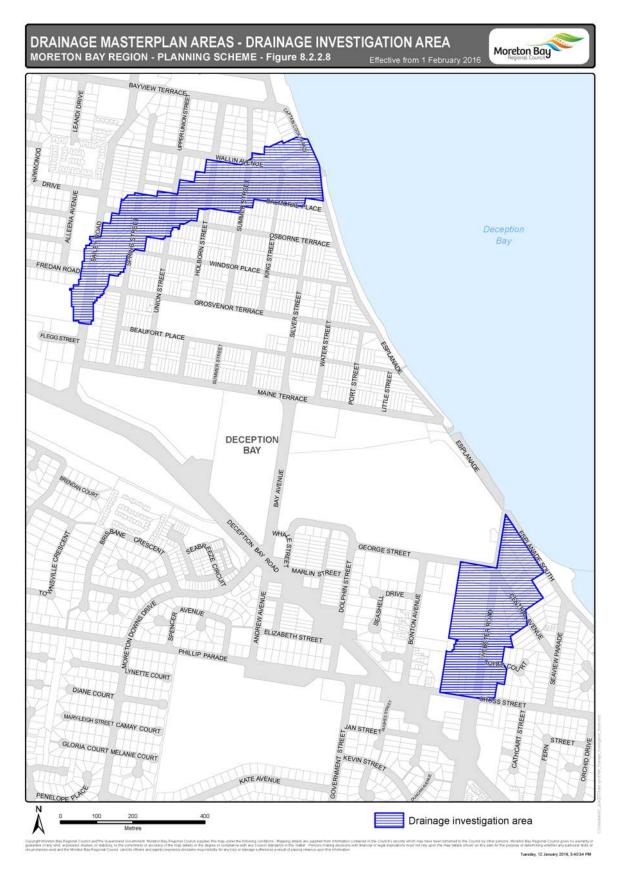


Figure 8.2.2.8 - Deception Bay

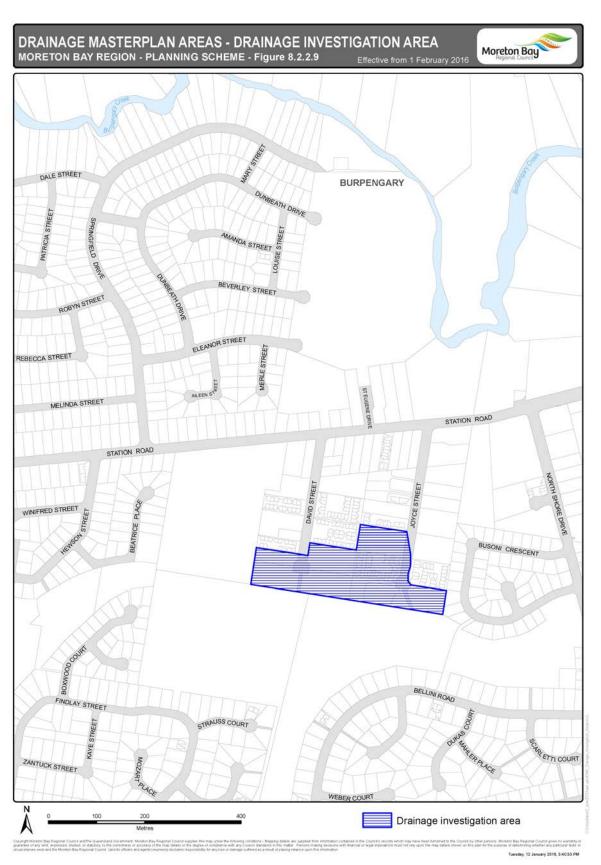


Figure 8.2.2.9 - Burpengary

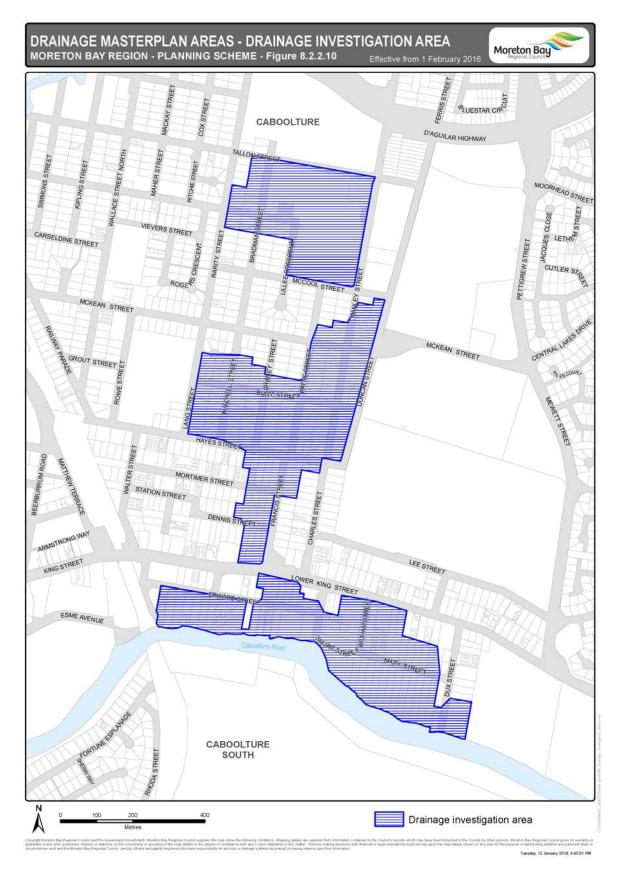


Figure 8.2.2.10 - Caboolture