
Appendix 15



TOWNSVILLE CITY PLAN 2014 – FLOOD HAZARD OVERLAY CODE

Performance Outcomes/Acceptable Outcomes		Our Response
For assessable development		
<p>PO1: Development in medium and high hazard areas is designed and located to minimise susceptibility to and potential impacts of flooding</p>	<p>AO1.1: Where the development is located within an area shown on Overlay Map OM-06.1 or 06.2 as medium hazard – further investigation area, new buildings containing habitable rooms:</p> <ul style="list-style-type: none"> a) are sited on a part of the site which is outside the medium hazard – further investigation area; or b) are sited on the highest part of the site. <p>OR</p> <p>AO1.2: Where development is located within hazard area shown on Overlay Map OM-06.1 or 6.2:</p> <ul style="list-style-type: none"> a) floor levels of all habitable rooms are a minimum of 300mm above the defined flood level; b) floor levels of all non-habitable rooms (other than class 10 buildings) are above the defined flood event; c) car parking spaces associated with non-residential development are located outside the high hazard areas identified on Overlay Map OM06.1 or 6.2; and d) underground car parks are designed to prevent the intrusion of flood waters by the incorporation of a bound or similar barrier with a minimum height of 300mm above the defined flood level. 	<p>R1: Complies Whilst the subject site is located within a low hazard area. Extensive bulk earthworks have occurred to develop the industrial subdivision resulting in the lots being above the defined Q100 (1% AEP) flood level. Therefore, the proposed development is not anticipated to be impacted by flooding.</p>
<p>PO2: Development in high hazard areas does not significantly impede the flow of flood waters through the site or worsen flood flows external to the site.</p>	<p>AO2.1: Development in high hazard areas do not involve:</p> <ul style="list-style-type: none"> a) filling with a height greater than 150mm; or b) block or solid walls or solid fences; or 	<p>R2: Complies There is no high hazard flood mapped for the site. Extensive bulk earthworks have occurred to develop the industrial subdivision resulting in the lots being above the defined Q100 (1% AEP) flood level. Therefore, the proposed</p>



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	<p>c) garden beds or other structures with a height more than 150mm; or</p> <p>d) the planning of dense shrub hedges.</p>	development is not anticipated to be impacted by flooding.
<p>PO3: Development does not intensify use in high hazard areas, in order to avoid risks to people and property.</p>	<p>AO3.1: New Buildings are located outside High Hazard Areas identified on Overlay Map OM-06.1 or 06.2.</p>	<p>R3: Complies There is no high hazard flood mapped for the site. Extensive bulk earthworks have occurred to develop the industrial subdivision resulting in the lots being above the defined Q100 (1% AEP) flood level. Therefore, the proposed development is not anticipated to be impacted by flooding</p>
	<p>AO3.2: New lots or roads are not created within High Hazard Areas identified on Overlay Map OM-06.1 or 06.2.</p>	
	<p>AO3.3: Sites for non-permanent accommodation such as tents, cabins or caravans (whether intended for short or long-term accommodation) are located outside the High Hazard Areas identified on Overlay Map OM-06.1 or 06.2.</p>	
<p>PO4: Siting and layout of development maintains the safety of people and property in medium hazard areas.</p>	<p>On existing lots</p> <p>AO4.1: Floor levels for residential buildings are 300mm above the defined flood level.</p>	<p>R4: Complies Extensive bulk earthworks have occurred to development the industrial subdivision resulting in the lots being above the defined Q100 (1% AEP) flood level. Therefore, the proposed development to maintain the safety of people and property in the mapped medium hazard areas.</p>
	<p>AO4.2: Floor levels of non-residential buildings (other than class 10 buildings) are above the defined flood level.</p>	
	<p>AO4.3: Underground car parks are designed to prevent the intrusion of flood waters by the incorporation of a bund or similar barrier with a minimum height of 300mm above the defined flood level.</p>	
	<p>AO4.4: Development for non-permanent accommodation such as tents, cabins or caravans (whether intended for short or long-term accommodation) are located outside the Medium Hazard Areas identified on Overlay Map OM-6.1 or 06.2.</p>	
	<p>Where reconfiguring a lot</p> <p>AO4.5: Where reconfiguring a lot, new lots contain designated building envelopes (whether or not for residential purposes) outside the Medium Hazard Areas identified on Overlay Map OM006.2 or 06.2 and those building envelopes are</p>	



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	<p>of a sufficient size to accommodate buildings associated with the development.</p> <p>AO4.6: In new subdivisions, arterial, sub-arterial or major collector roads are located above the 2% AEP flood level.</p> <p>AO4.7: Reconfiguration of lots does not involve cul-de-sacs or dead end streets within Medium Hazard Areas identified on Overlay Map OM-06.1 or 06.2.</p>	
<p>PO5: Signage is provided within high and medium hazard areas to alert residents and visitors to the flood hazard.</p>	<p>AO5: Signage is provided on-site (regardless of whether land will be public or private ownership) to indicate depth at key hazard points, such as floodway crossings, entrances to low-lying reserves or car parks.</p>	<p>R5: Not Applicable The proposed development will not involve key hazard point. The proposed development can achieve access via Heleen Downs Road and Penelope Road.</p>
<p>PO6: Development within high and medium hazard areas ensures any changes to the depth, duration, velocity of flood waters are contained within the site.</p>		<p>R6: Complies There is no high hazard flood mapped for the site. Extensive bulk earthworks have occurred to develop the industrial subdivision resulting in the lots being above the defined Q100 (1% AEP) flood level. Therefore, the proposed development is not anticipated to be impacted by flooding. Therefore, the proposed development is anticipated to be consistent with the flood modeling undertaken to support the wider CBIP Western Precinct development.</p>
<p>PO7: Development within high and medium hazard areas does not directly, indirectly or cumulatively worsen flood characteristics outside the development site, having regard to:</p> <ul style="list-style-type: none"> a) increased scour and erosion; or b) loss of flood storage; or c) loss of or changes to flow paths; or d) flow acceleration or retardation; or e) reduction in flood warning times. 		<p>R7: Complies There is no high hazard flood mapped for the site. Extensive bulk earthworks have occurred to develop the industrial subdivision resulting in the lots being above the defined Q100 (1% AEP) flood level. Therefore, the proposed development is not anticipated to be impacted by flooding. Therefore, the proposed development is anticipated to result in the directly, indirectly, or cumulatively worsen flood characteristics outside of the proposed site, including increased erosion, loss of flood storage, flow acceleration or retardation, or reduction in flood warning times.</p>



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P08: Facilities with a role in emergency management and vulnerable community services are able to function effectively during and immediately after flood events.	A08: The development is provided with the level of flood immunity set out in Table 8.2.6.3(b).	R8: Not applicable The proposed development does not involve emergency management or vulnerable community services.
P09: Public safety and the environment are not adversely affected by the detrimental impacts of flooding on hazardous materials manufactured or stored in bulk.	A09.1: Development does not involve the manufacture or storage of hazardous materials within a High Flood Hazard Area identified on Overlay Map OM-06.1 or 06.2.	R9: Complies The proposed development does not involve the manufacturing or storage of any hazardous materials in a high hazard area. The fuel storage areas and above ground tanks will have a RL above the 0.2% AEP flood event.
	A09.2: Within the Low or Medium Flood Hazard Area identified on Overlay Map OM-06.1 or 06.2, structures used for the manufacture or storage of hazardous materials in bulk are designed to prevent the intrusion of flood waters up to at least a 0.2% AEP flood event.	