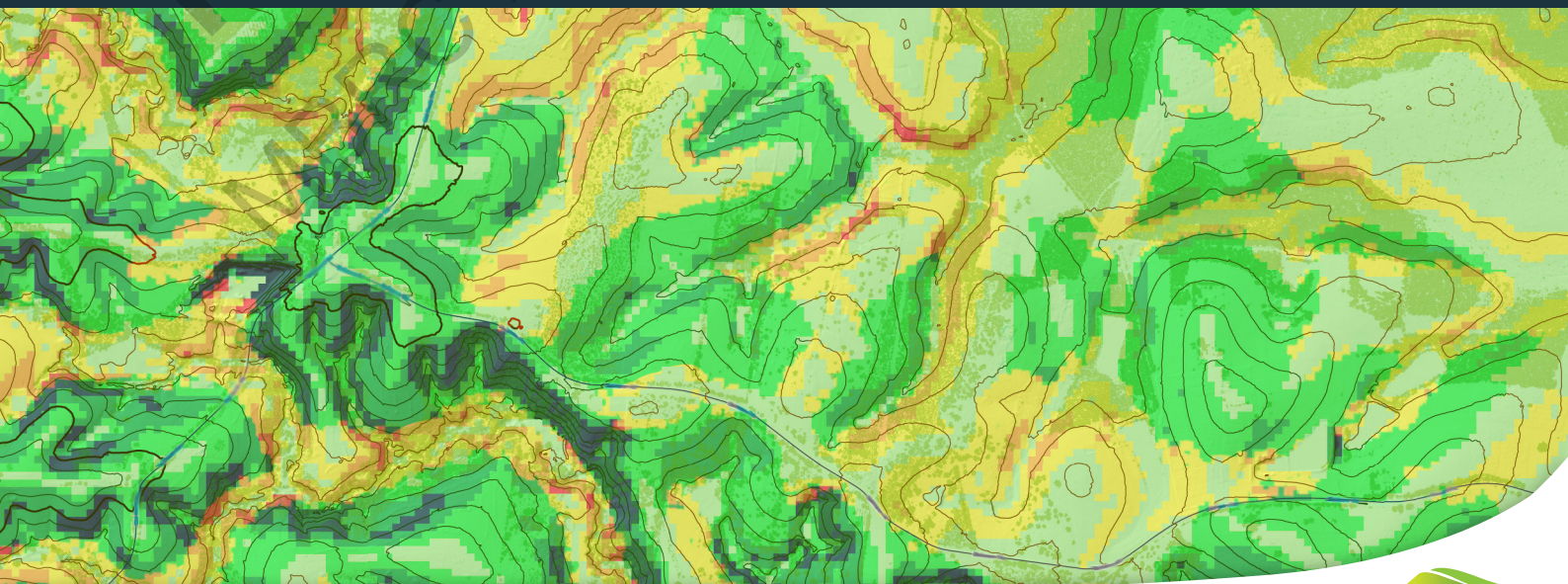


Planning Scheme Policy Landslide Hazard



Planning scheme policy – Landslide hazard

Adoption

Moreton Bay Regional Council adopted this planning scheme policy on 24 November 2015.

Commencement

This planning scheme policy will take effect from 1 February 2016.

1. Introduction

This policy supports the Moreton Bay Regional Council Planning Scheme and has been made by Council in accordance with Chapter 3, Part 4, Division 2 and Part 5, Division 1 of the *Sustainable Planning Act 2009*.

1.1 Purpose

The purpose of this planning scheme policy is to provide detailed technical guidance for the preparation of a Geotechnical Report required to support a development application that is in a landslide hazard area; being land with a slope of 15% or greater (refer to Overlay map – Landslide hazard area).

This policy has been prepared in accordance with the State Planning Policy (July 2014) and associated State Planning Policy guideline - Natural hazards, risk and resilience (July 2014).

Where the information required by this policy is not supplied when the development application is made, they will be the subject of an information request under the Integrated Development Assessment System (IDAS).

1.2 Application

This planning scheme policy applies to self-assessable and assessable development in the Landslide hazard area identified on Overlay map – Landslide hazard.

1.3 Interpretation

Terms used in this planning scheme policy are defined in Schedule 1 – Definitions of the planning scheme. Where a term is not defined in Schedule 1, section 1.3 Interpretation of the planning scheme applies.

2. Landslide hazard mapping

Land potentially susceptible to landslide hazard is identified on Overlay map – Landslide hazard and can be found in Schedule 2 Mapping, Overlay Map – Landslide hazard (OM-01 – OM-76 LSH). Landslide hazard areas identified on the overlay map reflects land with slopes of 15% and greater.

Where a site has been identified as potentially being subject to landslide hazard, a site-specific Geotechnical Report must be prepared. The report is to include a geotechnical assessment to determine whether or not the site has landslide potential (refer to section 3 below for assessment requirements). Where the assessment determines a landslide potential exists, the Geotechnical Report is to include a management plan identify strategies to mitigate and manage any potential risk associated with the proposed development (refer to section 4 below for management plan requirements).

The Geotechnical Report must be lodged with the development application.

3. Geotechnical Assessment

A site-specific geotechnical assessment must be prepared by a Registered Professional Engineer, specialising in geotechnical engineering, to analyse whether the site is subject to landslide hazard. This assessment is to address:-

1. the site's physical, environmental and visual suitability for the proposed development, including a site analysis, which identifies –
 - a. contour lines to AHD (1 metre vertical intervals);
 - b. existing vegetation;
 - c. geological information including, site geology and a history of landslide events in the region;
 - d. an accurate assessment and mapping of the extent of land on the site that has a slope of:
 - i. 15 to 20%;
 - ii. 20 to 25%; and
 - iii. above 25%.
 - e. the impact on the landslide characteristics due to clearing (e.g Bushfire Asset Protection Zones);
 - f. the impact on the landslide characteristics due to the addition of water from new effluent disposal areas;
 - g. the impact of diverting stormwater runoff to areas which may not be subject to stormwater flows.
2. the main indicators of landslide risk; and
3. the landslide risk to nearby land and adjoining properties as a result of the proposed development.

4. Potential Landslide Hazard Management

Where the site-specific geotechnical assessment determines a site is subject to landslide hazard, the Geotechnical Report is to identify strategies to mitigate and manage any potential risk associated with proposed development.

The report is to–

1. include an assessment of the impact that the proposed development would have on the stability of the site, nearby land and access to the site;
2. demonstrate how the proposed development will not increase the landslide risk to existing and future development on the site or nearby land; and
3. include completed Form A – Geotechnical declaration and verification, contained in Appendix 1.

The report is to also include:-

1. the recommended measures to reduce the risk to life and property (on and adjacent to the site) and to ensure the long term stability of the site and proposed development;
2. the recommended measures to limit the necessity for cutting and filling, retaining walls and vegetation clearing;
3. the design, siting and method of construction of buildings, structures and infrastructure (e.g. foundations, driveways, retaining walls, swimming pools and dams) including recommended design outcomes that are responsive to the site's physical and environmental characteristics and any visual characteristics;
4. recommendations on the design and construction of infrastructure proposed to be handed over to Council, or any other service provider (Council will not accept infrastructure which is subject to settlement or subsidence due to unstable land).
5. recommendations for the establishment and management of on-site effluent and stormwater disposal;
6. recommendations for the removal of existing vegetation and proposed revegetation;
7. recommendations for the management of any other changes to the natural surface or groundwater drainage systems; and
8. site maintenance and other management practices to ensure long-term site stability.

The level of detail required for a particular development application should be determined in consultation with Council's Development Services Department. Any report addressing landslide hazards or management must be prepared and signed by a Registered Professional Engineer specialising in geotechnical engineering.

5. Reference list and supporting tools

1. State Planning Policy, July 2014. *Department of State Development, Infrastructure and Planning.*
2. State Planning Policy - state interest guideline. Natural hazards, risk and resilience, August 2014. *Department of State Development, Infrastructure and Planning.*
3. AGS (2007c). Practice Note Guidelines for Landslide Risk Management Australian Geomechanics Society. *Australian Geomechanics*, Vol 42, No1. <http://australiangeomechanics.org/admin/wp-content/uploads/2010/11/LRM2007-c.pdf>

Historic Version
MBRC Planning Scheme Version 2

Appendix 1

Form A - Geotechnical Declaration and Verification Development Application (Pages 33 – 34)
<http://australiangeomechanics.org/admin/wp-content/uploads/2010/11/LRM2007-c.pdf>

Historic Version
MBRC Planning Scheme Version 2

FORM	A	Geotechnical Declaration and Verification Development Application	
Office Use Only			Regulator: Moreton Bay Regional Council
<p>To be submitted with a development application. If this form is not submitted with the geotechnical report the report will be refused. This form is essential to verify that the geotechnical report has been prepared in accordance with the Moreton Bay Regional Council Geotechnical Development Control Plan where prepared and approved and that the author of the geotechnical report is a geotechnical engineer or engineering geologist. Alternatively, where a geotechnical report has been prepared for subdivision or is greater than two years old or by a professional person not recognised by as a geotechnical engineer or engineer geologist, then this form may be used as technical verification of the geotechnical report if signed by a geotechnical engineer or engineering geologist.</p>			
Section 1		Related Application	
<i>Reference</i>	What is the Council development application number?		
<i>DA Site Address</i>			
<i>DA Applicant</i>			
Section 2		Geotechnical Report	
<i>Details</i>	Title:		
	Author's Company/ Organisation Name:		Report Reference No:
	Author:		Dated: / /
Section 3		Checklist	
<p>Geotechnical Requirements (Tick as appropriate, either Yes or No)</p> <p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/></p> <p>Yes No</p> <p><input checked="" type="checkbox"/> <input type="checkbox"/></p> <p><input checked="" type="checkbox"/> <input type="checkbox"/></p> <p><input checked="" type="checkbox"/> <input type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/></p> <p><input type="checkbox"/> <input type="checkbox"/></p>		<p>The following checklist covers the minimum requirements to be addressed in a geotechnical report. This checklist is to accompany the report. Each item is to be cross-referenced to the section or page of the geotechnical report which addresses that item.</p> <p>A review of readily available history of slope instability in the site or related land as per <Add reference></p> <p>An assessment of the risk posed by all reasonably identifiable geotechnical hazards as per <Add reference></p> <p>Plans and sections of the site and related land as per <Add reference></p> <p>Presentation of a geological model as per <Add reference></p> <p>Photographs and/or drawings of the site as per <Add reference></p> <p>A conclusion as to whether the site is suitable for the development proposed to be carried out either conditionally or unconditionally as per <Add reference></p> <p>If any items above are ticked No, an explanation is to be included in the report to justify why. <Add reference></p> <hr/> <p>Subject to recommendations and conditions relevant to:</p> <p>selection and construction of footing systems,</p> <p>earthworks,</p> <p>surface and sub surface drainage,</p> <p>recommendations for the selection of structural systems consistent with the geotechnical assessment of the risk,</p> <p>any conditions that may be required for the ongoing mitigation and maintenance of the site and the proposal, from a geotechnical viewpoint,</p> <p>highlighting and detailing the inspection regime to provide the <PCA> and builder with adequate notification for all necessary inspections.</p> <p>State Design life adopted: Years</p>	

Note: <Add reference>: Add in the relevant section or page number of the listed geotechnical report which addresses each item.

FORM	A	<h2 style="margin: 0;">Geotechnical Declaration and Verification Development Application</h2>
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Section 4 **List of Drawings referenced in Geotechnical Report**

Design Documents	Description	Plan or Document No.	Revision or Version No.	Date	Author

Section 5 **Declaration**

<p>Declaration (Tick all that apply)</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p><input type="checkbox"/> N/A <input type="checkbox"/></p> <p><input type="checkbox"/> N/A <input type="checkbox"/></p> <p><input type="checkbox"/> No <input type="checkbox"/></p> <p><input type="checkbox"/> No <input type="checkbox"/></p>	<p>I am a geotechnical engineer or engineering geologist as defined by the Moreton Bay Regional Council Development Control Plan and on behalf of the company below, I:</p> <p>am aware that the geotechnical report I have either prepared or am technically verifying (referenced above) is to be submitted in a support of a development application for the proposed development site (referenced above) and its findings will be relied upon by Moreton Bay Regional Council in determining the development application.</p> <p>prepared the geotechnical report referenced above in accordance with the AGS (2007c) as amended and the Moreton Bay Regional Council Development Control Plan where one has been prepared and approved.</p> <p>am willing to technically verify that the Geotechnical Report referenced above has been prepared in accordance with the AGS (2007c) as amended and the Moreton Bay Regional Council Geotechnical Development Control Plan where one has been prepared and approved.</p> <p>am willing to technically verify that the geotechnical report prepared for the development application for the site confirms the land will achieve the level of tolerable risk of slope instability in accordance with the AGS (2007c) and as a result of the considerations described in the Moreton Bay Regional Council Geotechnical Development Control Plan where prepared and approved, and taking into account the total development and site disturbances proposed.</p> <p>am willing to technically verify that the geotechnical report prepared for the site and related land being greater than two years old confirms the land will achieve the level of tolerable risk of slope instability in accordance with the AGS (2007c) and as a result of the considerations described in the Moreton Bay Regional Council Geotechnical Development Control Plan where prepared and approved, and taking into account the total development and site disturbances proposed.</p>
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Section 6 **Geotechnical Engineer or Engineering Geologist Details**

Company/ Organisation Name			
Name (Company Representative)	Surname:	Mr /Mrs /Other:	
	Given Names:		
	Chartered Professional Status:	Registration No:	
Signature			Dated: / /

Reference: AGS (2007c) "Practice Note Guidelines for Landslide Risk Management". Australian Geomechanics Society, Australian Geomechanics, V42, .N1, March 2007.