# Erosion management information sheet



### Why is erosion management necessary?

Slope instability including erosion, landslide or other slope degradation processes have the potential to cause injury or death as well as significant damage to property. Natural slopes within the City of Merri-bek are generally stable. However, hillside development including changes to the natural slope gradient, fill placement and surface water drainage can significantly increase the risk of slope instability. Preservation of the natural slope conditions is a fundamental principle of planning and development controls in hillside areas.

Development on hillsides should seek to:

- Preserve the natural slope gradient as much as possible by minimising earthworks; and
- Preserve the soil moisture condition by retaining vegetation and by implementing drainage measures to limit surface water infiltration into the slope.

### Landslide hazard in Merri-bek

Following concerns regarding inappropriate development leading to slope instability, Council commissioned an assessment of landslide hazards in the municipality by expert geotechnical practitioners. Their reports are available to view and download on the Merri-bek City Council website, <a href="www.merri-bek.vic.gov.au">www.merri-bek.vic.gov.au</a>.

Approximately 2,400 properties in the municipality have been identified as being susceptible to erosion, landslip or other slope degradation processes if subjected to inappropriate hillside development. These properties are shown in the map attached to this information sheet.

### What is the Erosion Management Overlay?

The Erosion Management Overlay (EMO) is a statewide planning control containing permit triggers, permit exemptions, exemptions from notice and review and general application requirements. The Schedule to the EMO establishes objectives, exemptions and application requirements specific to the Merri-bek Planning Scheme.

The EMO identifies land that based primarily on its slope angle and underlying soil or rock type is susceptible to erosion, landslide or other land degradation processes. Identification of these properties will ensure risk to life and property from slope instability is considered in the planning permit process.

The purpose of the EMO is to ensure that development in all susceptible areas is undertaken such that the risk to life and property from slope instability remains acceptable. Assessment of slope stability and associated risk requires the expertise of a geotechnical practitioner familiar with slope stability and landslide risk assessment.

The buildings and/or works that are controlled by the EMO include but are not limited to the construction of any building, pools, large water features, large watering systems, driveways, parking areas, retaining walls, removal of large trees, fencing or earthworks that require excavation greater than 1 metre in depth or the installation of large water tanks.

The Schedule to the EMO includes a list of exemptions from requiring a permit that relate primarily to very minor building works, vegetation removal or works which will not significantly modify the natural slope conditions.

### Planning permit process

The following steps outline the fast track procedure to obtain a planning permit for development on

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www.merri-bek.vic.gov.au

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Merri-bek City Council 9240 1111

Engineers Australia 03 9329 8188

Consult Australia 03 8699 7700)

properties included only within the EMO. Further information or agreements may be required depending on the type of application, or other planning overlays that may apply to the property and the risk of slope instability.

- Prepare plans for your application. The plans must have dimensions and be drawn to scale and show the details of all buildings or other things proposed.
- 2. Your application also needs a current copy of the Certificate of Title (not more than 3 months old)
- 3. Organise a pre application meeting with one of Council's urban planning officers.
- 4. Lodge your planning application.
- 5. A permit may be issued with conditions as outlined below.
- 6. Complete and submit the Geotechnical Declaration and Certification form.
- 7. Plans are endorsed.

If your permit does not qualify for the fast track process, contact the Planning Officer handling your application to discuss the process with them.

### What is a geotechnical assessment?

A geotechnical assessment is a basic requirement for assessing slope stability and related hazards. A geotechnical assessment might be thought of as a 'health check' for the ground on which a proposed development will be constructed.

The purposes of the geotechnical assessment are to:

- Identify hazards relating to landslide or slope instability on the site and whether these hazards could present a risk to life or property.
- Assess whether the proposed development could contribute to future slope instability or landslide.
- Where hazards are identified, nominate whether further investigation or assessment is required in the form of a landslide risk assessment.
- Provide recommendations on how to develop the site in such a way so as to manage slope instability related risks.

In some cases, a geotechnical assessment will identify slope instability and related hazards, which present a risk to life, property or both. Where this is the case, the geotechnical assessment must either recommend appropriate measures to mitigate the hazard or recommend that a more detailed landslide risk assessment is undertaken and provided to Council.

A geotechnical assessment must be performed by a chartered geotechnical practitioner. The geotechnical practitioner should visit the site of the proposed

development and review the proposed development plans and all relevant associated documents.

The Australian Geomechanics Society provides a checklist to aid geotechnical practitioners in undertaking geotechnical assessments. The geotechnical practitioner should use this checklist. A copy of the checklist is available on the Merri-bek City Council website, <a href="https://www.Merri-bek.vic.gov.au">www.Merri-bek.vic.gov.au</a>.

### Where can expert geotechnical advice be obtained?

There are minimum professional requirements that a chartered geotechnical practitioner must meet. The geotechnical practitioner must:

- Be a degree qualified geotechnical engineer or engineering geologist.
- Be a member of an applicable professional institution.
- Have achieved chartered status as CPEng, CPGeo or RPGeo.
- Have experience in the identification and management of slope stability problems and landslide as a core competence.
- Be familiar with the requirements of the Merribek City Council Erosion Management Overlay and the Victoria Planning Provisions (planning system).

The geotechnical practitioner must also be familiar with the Australian Geomechanics Society Landslide Risk Management Guidelines (AGS 2007).

Some questions to ask a geotechnical practitioner include:

- What qualifications do you hold? You should ensure that the practitioner holds the qualifications listed above.
- What experience do you have working in this area? Ideally the practitioner will have experience working in Merri-bek and reports they have produced will have been accepted by Council for other planning permit applications.
- Are you familiar with the soils and rocks on my site? The practitioner should be familiar with the geotechnical characteristics of the soils in the area and on the subject site.
- What type of insurance do you carry? The practitioner should carry professional indemnity insurance.
- Can I see a sample report? Ask the practitioner for an example of their work and check that it has a section specifically addressing slope stability.

Assist the geotechnical practitioner by providing them with the following information:

- Known history of earthworks or slope instability on the site.
- Plans of the proposed development and all associated relevant documents. You should ensure that the proposed works are in accordance with the Merri-bek City Council guidelines for development within the Erosion Management Overlay.
- Contour plans if available.

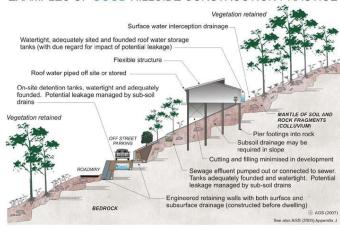
To obtain a list of geotechnical practitioners servicing the Melbourne area, it is recommended that you contact Engineers Australia (phone 03 9329 8188) or Consult Australia (phone 03 8699 7700).

Alternatively, refer to the Yellow Pages under "Soil Testing and Investigation".

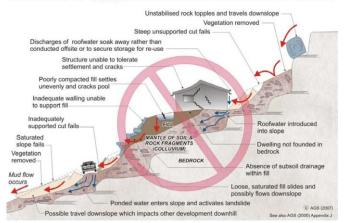
## Where can information on erosion management be obtained?

Some examples of good and bad hillside construction practice and the types of hazards that can be found within Merri-bek are available on the Merri-bek city Council website, <a href="www.Merri-bek.vic.gov.au">www.Merri-bek.vic.gov.au</a>. In particular the Australian Geoguide LR8 Examples of Good and Bad Hillside Construction Practice as shown in the diagrams opposite provides useful information.

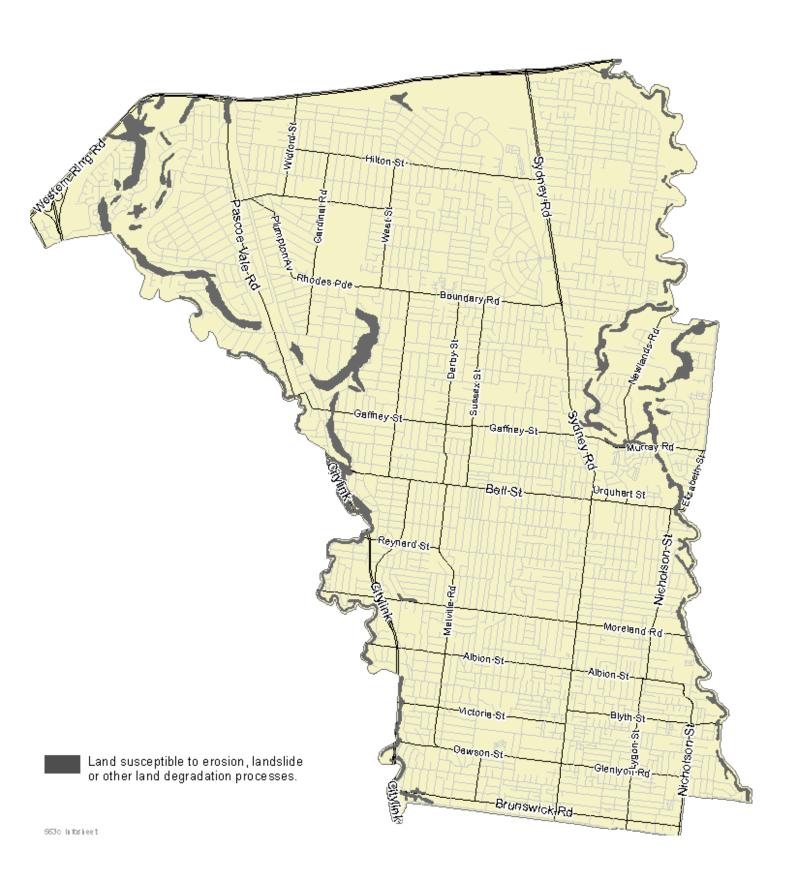
#### EXAMPLES OF GOOD HILLSIDE CONSTRUCTION PRACTICE



#### EXAMPLES OF POOR HILLSIDE CONSTRUCTION PRACTICE



### Land affected by the Erosion Management Overlay



#### Merri-bek Language Link

Italiano		9280 1911		Turkish	9280 1914
Ελληνικά	Greek	9280 1912	Tiếng Việt	Vietnamese	9280 1915
عربي	Arabic	9280 1913	ਪੰਜਾਬੀ	Nepali	9280 0751

普通话 Chinese (Simplified) 9280 0750

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