

## Tell-Tale Signs and Rectification

If there are tell-tale signs (Figure 3), owners and management corporations should:

- Engage a Professional Engineer (PE) in Civil/ Structural/ Geotechnical discipline to inspect, assess and recommend rectification measures.

The list of PE can be found on the Professional Engineers Board website [www.peb.gov.sg](http://www.peb.gov.sg)

- Rectify the defects as recommended by the PE

## Safe Slope and Slope Protection Structures

(Regular Inspection and Maintenance)



Damaged slope surface protection (turfing/shotcrete/stone pitching) leads to soil erosion



Cracks/eroded cement mortar/growing vegetation

Up-heaving of ground near to the toe of slope

Crack on earth retaining wall (rc/rubble/brick)

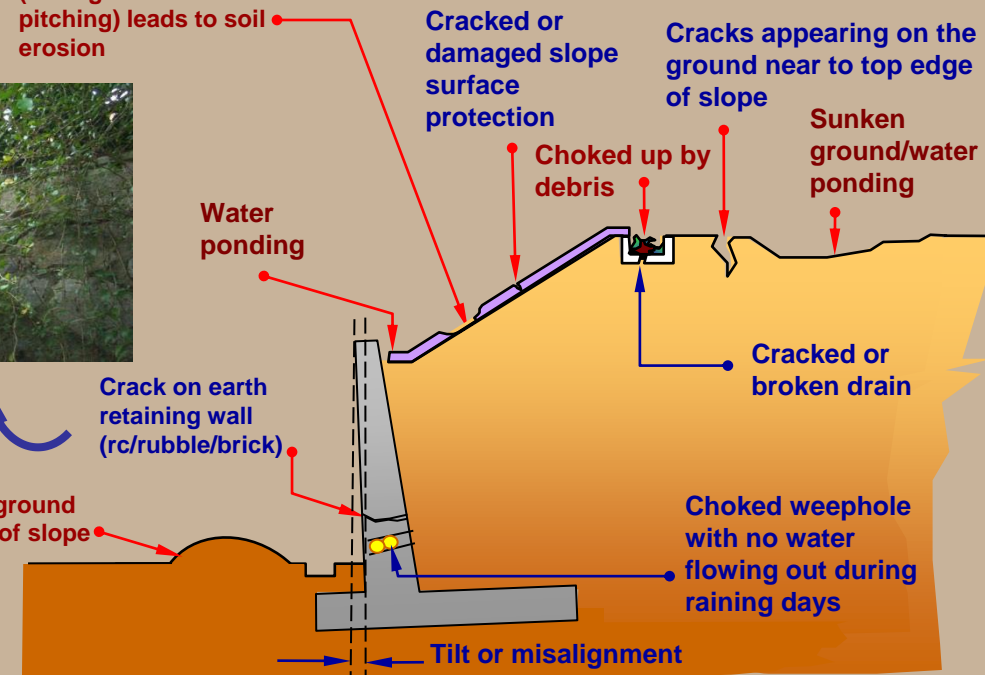


Figure 3: Cross Section Showing Various Tell-Tale Signs



Building and Construction Authority  
52 Jurong Gateway Road #11-01  
Singapore 608550 (Above JEM)  
Tel: 1800-3425222 (1800-DIAL BCA)  
Fax: 6325 4800  
Email: [bca\\_enquiry@bca.gov.sg](mailto:bca_enquiry@bca.gov.sg)

For Building / Land Owners & Management Corporations

## Slope Protection Structures

Slope protection structures help to stabilise the slope and can last a lifetime in protecting surrounding properties from damage and people from injury if they are maintained in a good and functional condition at all times.

Slope protection system may comprise one or a combination of the following:

- Slope surface protection
- Slope protection structure (including reinforced concrete (RC) earth retaining wall, rubble / brick wall, bored-pile wall, diaphragm wall, tie-back wall made of RC or steel sheet pile, etc)

Figures 1 and 2 show the functions of various slope surface protection and a typical reinforced concrete (RC) earth retaining wall respectively.

## Safeguarding your property from slope erosion or sliding

To ensure that slope protection system functions properly, owners and management corporations should:

- Be vigilant to look out for defects or damages
- Be proactive in regular inspection and maintenance
- Rectify defects to prevent soil erosion and water inflow during heavy rainfall that may trigger slope and slope protection structures, which have stood for many years, to fail due to poor maintenance and deterioration over time

## Functions of Slope Surface Protection and Earth Retaining Wall

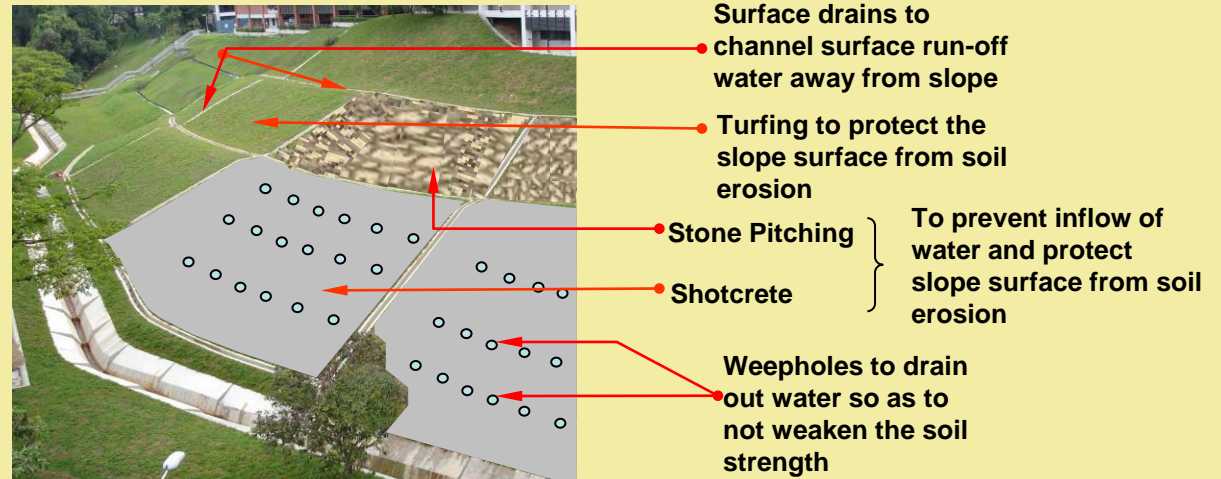


Figure 1. Various Types of Slope Surface Protection

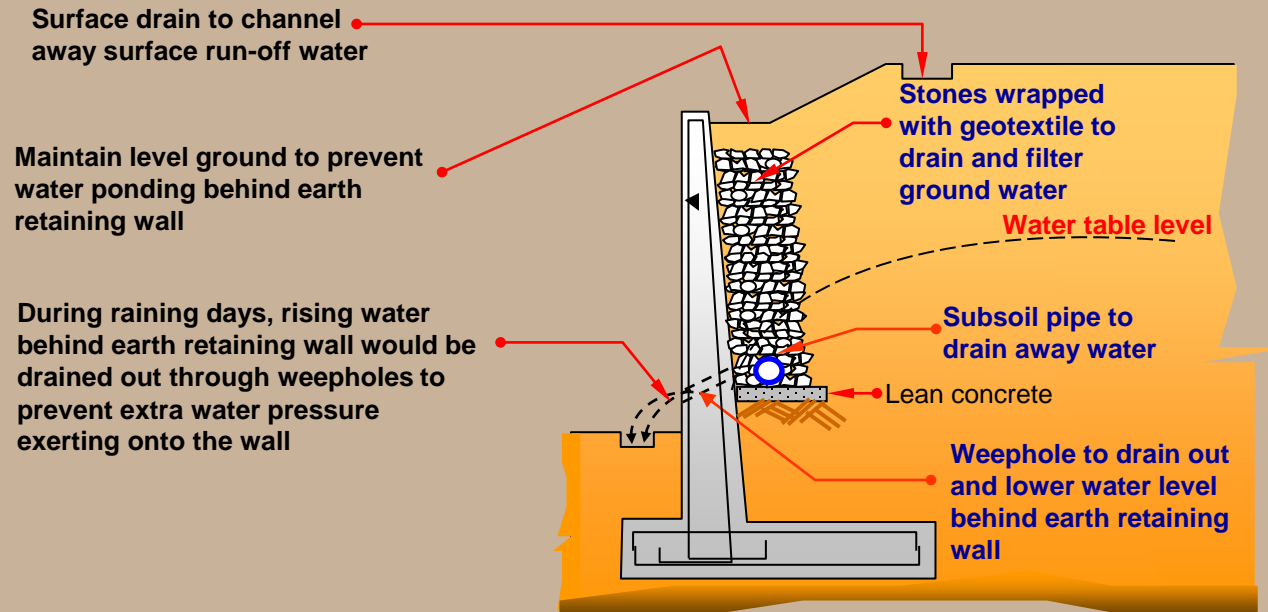


Figure 2. Typical Cross Section of RC Earth Retaining Wall