

## 8.5 PLANNING SCHEME POLICY 5 - FILLING OF LAND

This Planning Scheme Policy sets the requirements and processes for:

- 8.5.1 Bonding
- 8.5.2 Geotechnical Reports and Sealing of Plans.
- 8.5.3 Engineering Requirements for geotechnical investigations:

### 8.5.1 BONDING

Bonding for subdivisional works involving filling to prescribed levels prior to the completion of the work will not be accepted.

### 8.5.2 GEOTECHNICAL REPORTS AND SEALING OF PLANS.

That the procedures for geotechnical reports and sealing of plans are -

- 1) Sites with soil classifications in the 'A', 'S', or 'M' range as defined by AS.2870 be accepted without any requisitions or endorsements on the Council's records.
- 2) Sites with soil classification defined as 'H' or with a 'H' component, would require an undertaking from the owner or developer to include a condition in the contract of sale whereby the purchaser acknowledges the 'H' classification of the site (highly reactive), or the relevant classification that the land has been filled if such is the case, and that appropriate footings designed by a registered professional engineer will be required by the Council prior to a building permit being obtained and that the relevant information will also be endorsed on the Council's records.
- 3) The procedure under 2 shall be dealt with administratively and the Council advised at a subsequent meeting.
- 4) Sites with a soil classification defined 'E' or 'P', or with an 'E' or 'P' component, will require special consideration and will be referred to the Council prior to any plans of survey being signed.

### 8.5.3 ENGINEERING REQUIREMENTS FOR GEOTECHNICAL INVESTIGATIONS:

Site Investigation Requirements for Material Change of Use, Reconfiguring a Lot and Building Works.

There are 2 types of reports that may be required:

**Preliminary Report:** - To accompany applications for building, reconfiguring a lot and material change of use proposals outlining preliminary site investigation, findings and nominated objectives related to the suitability of the site for the proposed building or development work.

**Complete Report:** - To verify the preliminary report and certify that filling or development work as executed complies with the Council's requirements.

These requirements are additional to any requirements that may be required for subdivisions, road drainage or other works.

#### **Preliminary and Complete Reports - General Requirements.**

- 1) The site investigation shall comply with A.S. 1726-1981 "Site Investigation" (hereinafter referred to as the Code), other relevant Australian Codes and proper geotechnical practices.
- 2) All site investigations, field and laboratory testing shall be supervised and verified by an engineer registered under the provisions of the Professional Engineers (Queensland) Act, experienced in geotechnical investigation and testing.
- 3) The report shall be prepared by an engineer registered under the Professional Engineers (Queensland) Act, who is experienced in geotechnical work and shall contain findings and recommendations in respect of the proposed building or development to be undertaken on the site.
- 4) The report shall contain a general description of the site and the extent of site modification, i.e., excavation, filling and drainage work to be undertaken.
- 5) The report shall contain a description of the topographical features and previous history of earthworks, building work or development (if any) on the site.

#### **Preliminary Report - Specific Requirements.**

- 1) The extent of sub-surface investigation and testing should be sufficient to establish general trends and enable general conclusions to be drawn and recommendations to be made. Sub-surface investigation and testing shall be in accordance with the requirements outlined in the code.
- 2) The report shall nominate the minimum soil characteristics and properties for the proposed development work and relate the suitability of the site to such requirements including site classification details as specified in A.S. 2870 - "Residential Slab Footings".
- 3) Where required, slope stability investigation and testing to be undertaken and general recommendations made in respect of the stability of the site for the extent of building or development work proposed.

#### **Complete Report - Specific Requirements.**

- 1) Sub-surface investigation procedures of naturally occurring and imported soil materials shall be undertaken in accordance with the following requirements:
  - A) Testing shall comply with Table 2.1 of the code for shallow-raft foundations.
  - B) The depth of sub-surface exploration, number of samples and testing undertaken shall comply with Parts 2.3.6 and 2.3.7 of the code. In respect of sites with uniform natural material, the number of bore holes may be reduced to every alternate proposed residential allotment.

- C) Sub-surface exploration to be fully recorded in accordance with Part 6. 10 of the code, all soil profile shall be identified and classified according to Appendix D of the code.
  - D) All field and laboratory test procedures shall be described and test results recorded and tabulated.
- 2) Establish by proper engineering methods, the following soil characteristics and properties:
- A) Bearing capacity;
  - B) Settlement;
  - C) Soil behaviour;
  - D) Sub-soil water tables;
  - E) Any other factor likely to influence the stability of the site.
- 3) Bearing capacity shall be determined as the maximum unit load that can be placed upon the underlying soil without
- A) excessive elastic, plastic deformation of the underlying soil;
  - B) shear or rupture failure of the underlying soil;
  - C) excessive consolidation of the underlying soil including deeply buried organic or compressible material.

The criteria and relevant factors of safety related to the above mentioned factors (i) to (iii) must be nominated in such instance of recommended bearing capacity.

Correlative factors for penetrometer tests used to establish shear or bearing capacities must be stated.

Settlement calculations related to bearing pressures shall be included.

- 4) Where recommended allowable bearing capacity is less than 100kPA, the report shall specify the type of footing and/or construction techniques suitable for supporting conventional residential buildings.

Where expansive or collapsing soils are encountered, the report shall specify the type of footing and/or construction techniques suitable for supporting conventional residential buildings.

#### **Preliminary and Complete Report - Recommendation.**

Recommendations in respect of the suitability of the soil material for the proposed building or development work shall include a statement of certification acknowledging that such recommendations conform with good building practice and are in accordance with relevant codes of practice.