DEVELOPMENT DESIGN SPECIFICATION

D6

SITE REGRADING

DEVELOPMENT DESIGN SPECIFICATION D6 - SITE REGRADING

GENERAL

D6.01 SCOPE

1. This design specification sets out requirements for the site regrading involved in land development and subdivision. Conceptual requirements are presented as necessary considerations when preparing designs for site regrading.

2. The scope of this specification assumes that the Designer is familiar with requirements cited in the various construction specifications, specifically those related to earthworks, clearing and grubbing, erosion and sedimentation. Additionally the Designer needs to make reference to the associated design specifications related to drainage design, geometric road design and stormwater management and erosion design.

Familiarity with other Specifications Required

D6.02 OBJECTIVES

1. This specification aims to assist the Designer in achieving:

- enhancement of the environmental character of the site whilst maintaining the natural features of the site

Environmentally Sound

- a minimal impact on adjoining properties and developments.

Impact on Adjoining Properties

D6.03 REFERENCE AND SOURCE DOCUMENTS

(a) Council Specifications

Construction Specifications

C212	-	Clearing and Grubbing
C213	-	Earthworks

Design Specifications

D1	-	Geometric Road Design
D5	-	Stormwater Drain Design Code

(b) Australian Standards

AS 3798	-	Guidelines on earthworks for commercial and residential developments
AS 2870.1	-	Residential slabs and footings - Construction.

(c) **Other Publications**

Managing Urban Stormwater: Soils and Construction - Volume 1 (Landcom 2004)

D6.04 SITE REGRADING CONCEPT

1. Subject to geotechnical, environmental and other constraints (such as but not limited to watercourses, remnant vegetation, heritage items, retention of flood storage) the Designer shall review the natural surface contours and where necessary shall design finished surface levels that ensure the land is suitably contoured to provide lots or building envelopes which are above the flood planning level in accordance with Council's DCP.

2. Site regrading shall not create localised or trapped low points and shall ensure that surface water flows naturally to roads or drainage reserves without concentration of flow which may cause hazardous situations or scour. ***Drainage***

3. The Designer shall consider the implications of site regrading in relation to the existing natural environment. Generally site regrading shall not be permitted in heavily treed areas or in floodplains. ***Natural Environment***

4. Care shall be taken to provide overland flow routes from low points and over major drainage lines, to direct runoff for floods up to a 100 year average recurrence interval (ARI). ***Overland Flow***

5. The design of site regrading areas in conjunction with the design of roadworks shall be considered with the objective of balancing cut to fill and achieving both an economical development and minimising haulage of imported fill or spoil to and from the development site. ***Minimal Road Haulage***

D6.05 SPECIAL TREATMENT OF PARTICULAR AREAS

1. The extent of the 100 year ARI flood inundation line shall be clearly shown on the design plans. ***Flooding***

2. Proposals to alter surface levels in an area affected by flooding or subject to inundation shall be supported by a detailed flood study which shall be lodged with the Development Application. ***Inundation Areas***

3. Site constraints may be required to be identified as a burden on developed property. It is recommended that the designer take this into account when preparing the design. The property may ultimately be affected by a "restriction as to user", which may be controlled by a legal 88B Instrument placed on title to the land and/or by a Section 149 message advising prospective purchasers of any restrictions affecting the land. ***Restrictions on Land Use***

4. The finished surface of filled areas shall be designed to levels allowing an adequate cover depth over pipelines and permitting surface stormwater flow to be guided to inlet pits. ***Piped Gullies or Depressions***

5. The location of natural and artificial features shall be clearly defined on the site regrading plans and defined by distance to corner boundaries, monuments, etc for purposes of relocation at the geotechnical testing stage for work as executed plans. A geotechnical report specifying the site preparation and compaction requirements shall be part of the site regrading plan. Any proposal for fill shall be supported by a geotechnical report justifying the type of material and physical and chemical characteristics including an assessment of the environmental impact.

6. The finished level of any building area shall be designed to ensure a surface grading of not less than 1% in the direction of the drainage system designed to cater for its catchment. ***Flat Ground***

7. For building areas on slopes greater than 15% refer to Council's DCP. For ***Steep Slopes***

developments not covered by the provisions of the DCP, Council should be consulted.

D6.08 TEMPORARY DIVERSION DRAINS

1. Temporary drains shall be installed to divert surface flows away from the site regrading area. The location and silt/erosion control treatment shall be clearly identified on the engineering plans. ***Erosion***

The objective will be to ensure minimal soil disturbances and material loss off the site.

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