

LANDSCAPE EARTHWORKS NOTES

REFER TO THIS DOCUMENT FOR DETAILS ON:
EXISTING TOPSOIL, IMPORTED TOPSOIL, TOPSOIL ANALYSIS
TOPSOIL STRIP AND TOPSOIL STORAGE.

Vegetation to be retained

The Main Contractor shall take the necessary measures to prevent damage to existing vegetation, and unless otherwise instructed by the Contract Administrator, retain existing levels beneath the canopy of existing trees.

Where so instructed by the Contract Administrator the Main Contractor shall protect existing vegetation by the erection of fencing in accordance with the Tree Retention/Removal drawings or in accordance with BS 5837:2012 'Trees in Relation to Design, Demolition and Construction - Recommendations.

Herbicide Treatment

Use of chemicals shall comply with the Plant Protection Products (Sustainable Use) Regulations 2012 and Codes of Practice prepared jointly by the Department for Environment, Food and Rural Affairs (DEFRA), the Health and Safety Commission (HSC) and the National Assembly for Wales Environment, Planning and Countryside Department. All herbicides shall be on current list of approved products.

Storage, handling and application of chemical shall be in accordance with the manufacturers' instructions. The Contractor shall be responsible for any damage caused by spray drift and will make good at own expense.

Sufficient time for herbicide to be effective shall be allowed to elapse between application of herbicide and the commencement of any stripping or grading works.

Subsoil Formation for Wildflower/Species Rich Grassland Areas

Areas to be wildflower seeded are to be covered with 300mm depth well graded selected subsoil material which shall be suitable for the cultivation operations proposed, to achieve a fine tilth for seeding. Proposed subsoil material shall be tested to confirm that it is suitable for use for the specified seed mixes and free from contamination.

The subsoil shall be decompacted to a depth of at least 200mm to ensure the areas are free draining and be completely free of all large lumps of clay, rubbish, bricks and concrete. Subsoiled areas shall be completely cleared of all weed growth using an approved herbicide in accordance with the clause for herbicide treatment below.

A sample area of subsoil shall be prepared for approval by the Contract Administrator prior to preparation of remaining areas.

Formation level and subsoil preparation

Prior to preparation of formation level, the subsoil shall be completely cleared of all weed growth by the main contractor using an approved herbicide in accordance with the clause for herbicide treatment below.

The site shall be brought to formation level by the main contractor using an approved subsoil material. All soil handling should be carried out when the soil is sufficiently dry and not plastic.

The subsoil shall be decompacted to a depth of at least 300mm in grass areas and 600mm in shrub planting areas to ensure the areas are free draining and be completely free of all rubbish, bricks and concrete.

For small planting beds and areas of restricted access, decompaction may be carried out by hand or a small (1-5 tonne) to medium sized (13 tonne) tracked excavator, fitted with a ripper line attachment, shall be used. On larger, open areas a tractor mounted rigid line harrow (300mm depth) or subsoiler (600mm depth) shall be used.

The base of tree pits should be decompacted to a depth of at least 300mm and checked to ensure that they are free draining.

The Main Contractor shall obtain the Contract Administrator's acceptance of formation levels and subsoil preparation prior to the commencement of topsoiling.

Tree Pits

(Refer to Typical Tree Pit in Soft Landscape). The Main Contractor shall provide short stakes to mark the exact positions of tree pits for acceptance by the Contract Administrator, prior to pit excavation and retain in the same position after topsoiling.

Tree pits are to be:
1500 x 1500 x 900 overall depth; (18-20cm)

Topsoil Depths

Minimum subsoil depths are to be as follows:

- i in shrub bed areas 300mm
- ii in thicket areas 600mm
- iii in grassed areas 300mm

Topsoil depths are to be as follows:

- i in tree pits 300mm
- ii in shrub bed areas 300mm
- iii in thicket areas 300mm
- iv in grassed areas 150mm

Spreading Topsoil

Soil Handling & Weather

Soil handling operations should be carried out when soil is reasonably dry and non-plastic (friable) in consistency (at least 5% below the Lower Plastic Limit).

Topsoil shall not be unnecessarily compacted by trampling or trafficking by site machinery. Topsoil handling shall be stopped during and after heavy rainfall, and not continued until the soil is again non-plastic in consistency.

Depths

Topsoil depths and finished levels are to be as indicated on the Earthworks Layout and Sections drawings.

Ground Modelling

(Refer to Typical Section Through Ground Modelling). There shall be no ponding hollows within ground modelling.

Gradients

Finished gradients are to be smooth, flowing, free of minor hollows and high spots and marry in neatly with paving, kerbs, edgings, manhole covers and existing levels. Refer to Earthworks Layout and Sections drawings for landform levels and profiles.

Inspection Covers

Inspection covers to be inclined to marry with adjacent earthworks profiles and levels.

The minimum topsoil depth to be achieved over concrete manhole slabs (where constructed) shall be 300mm depth in shrub areas and 150mm depth in grass areas. This should be achieved by raising covers on brickwork (refer to attached typical section through ground modelling).

Inspection covers should be located in either shrub or grass areas a minimum of 750mm from the edge of either finish.

If the covers are square or rectangular they should be positioned so they are parallel to the adjacent edge (grass edge, kerb edge, footpath edge, building line, etc.). If distant from edges covers shall be parallel to the contours.

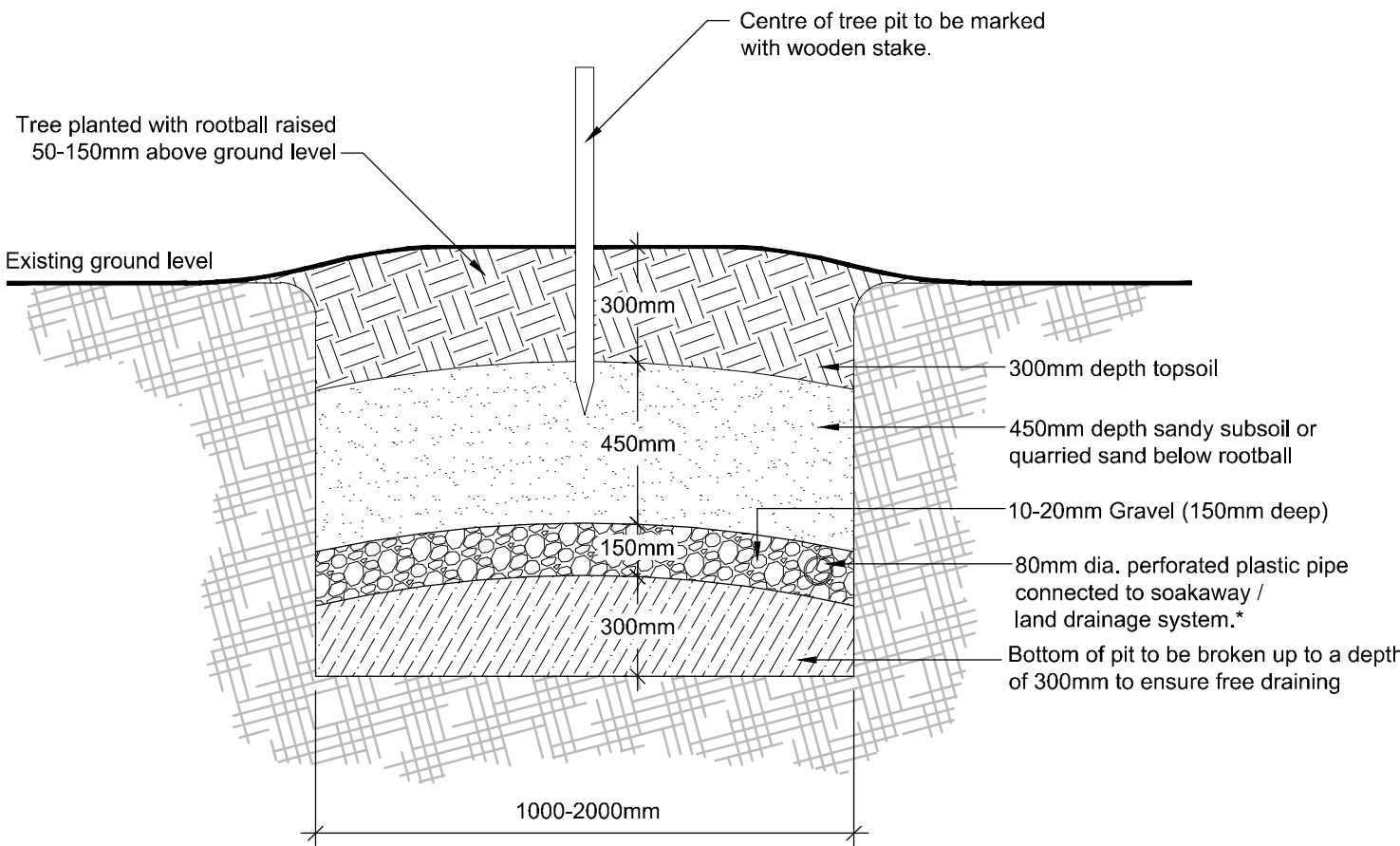
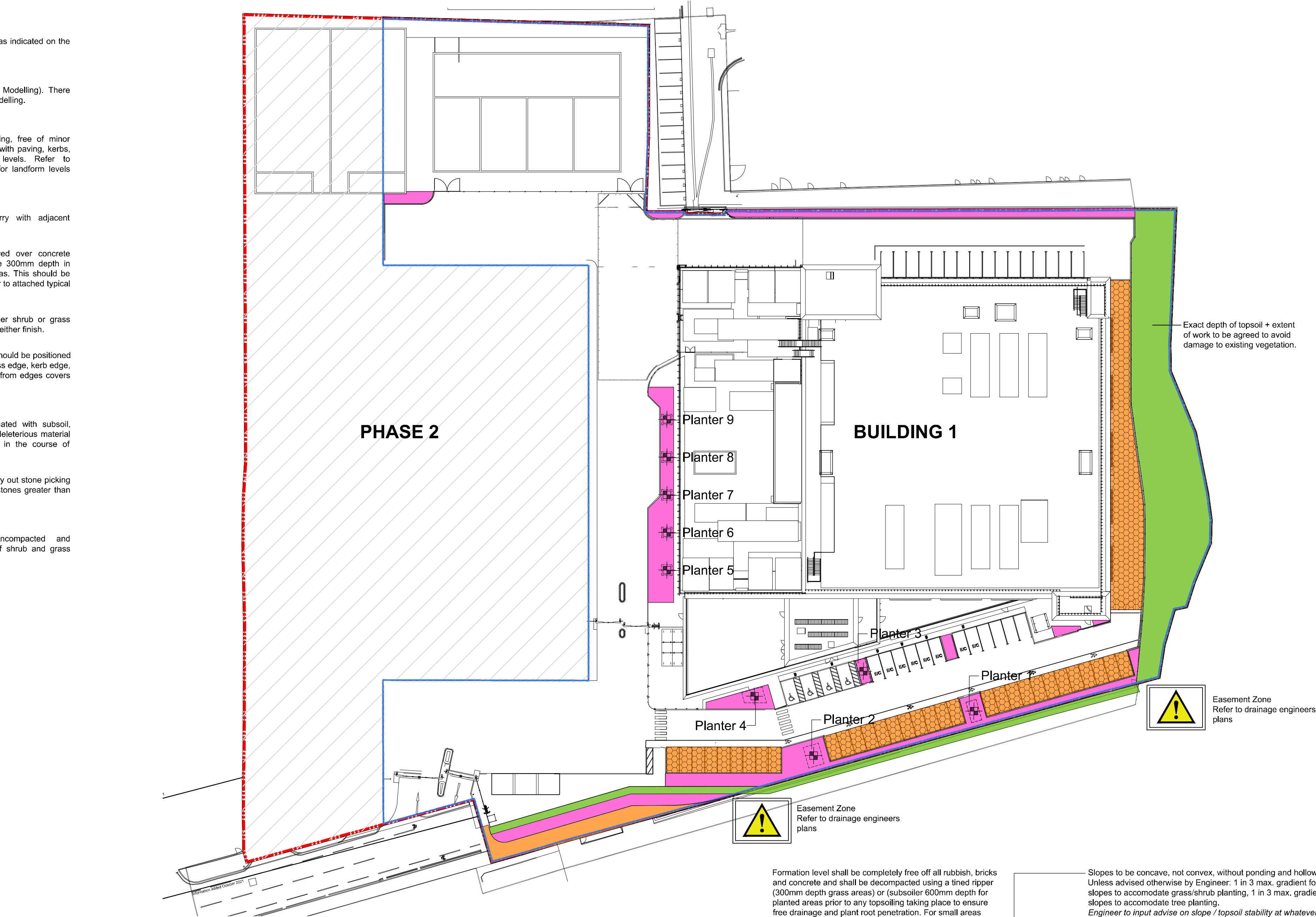
Contamination

Any areas of topsoiling that are contaminated with subsoil, rubbish, bricks, concrete, tarmac and other deleterious material shall be removed by the Main Contractor in the course of carrying out the earthworks.

The Main Contractor shall be required to carry out stone picking to all topsoiling to ensure it is free from all stones greater than 50mm.

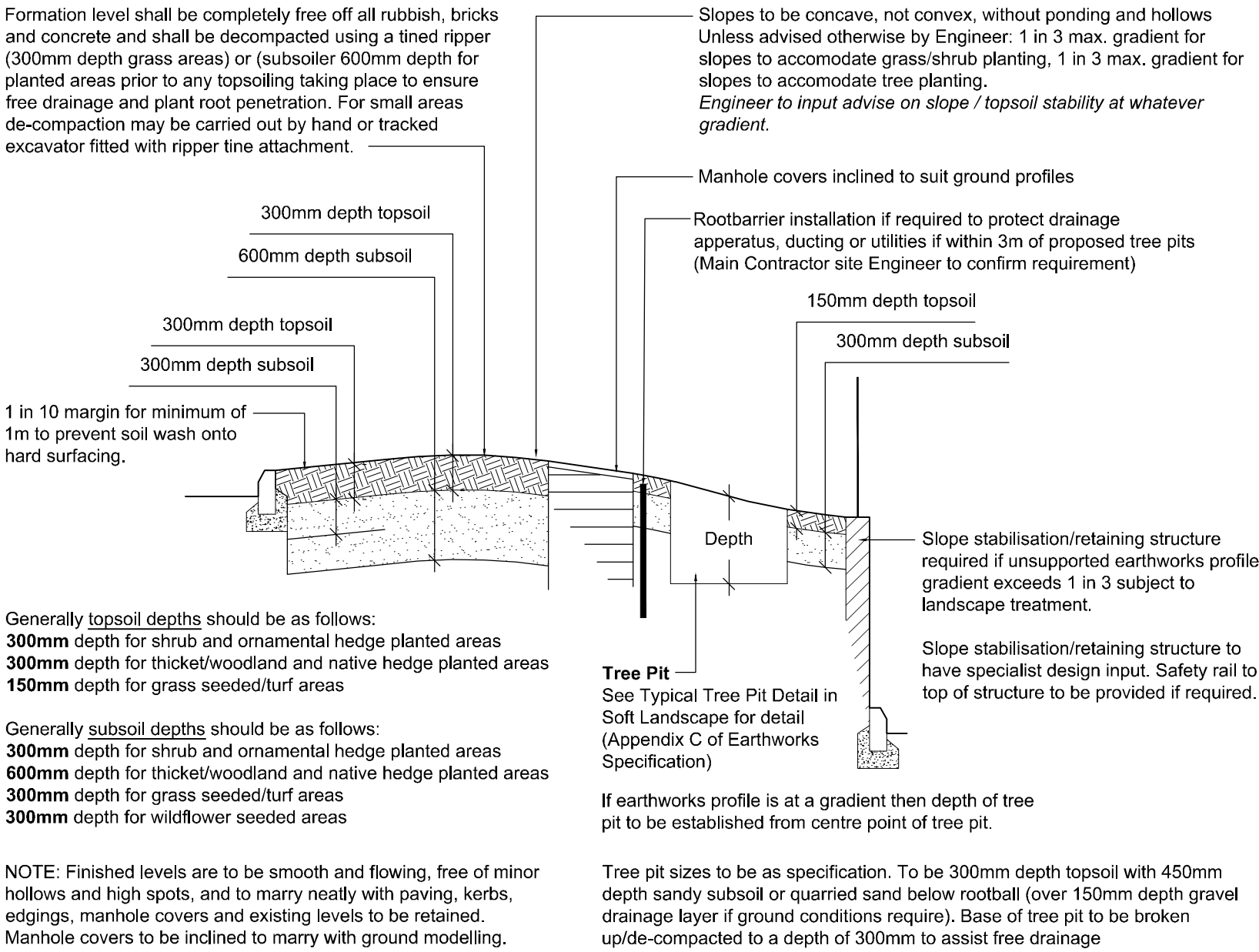
Compaction

Topsoiled areas shall be in an uncompacted and uncontaminated state prior to setting out of shrub and grass areas.



TYPICAL TREE PIT DETAIL IN SOFT LANDSCAPE

Scale 1:20



TYPICAL SECTION THROUGH GROUND MODELLING

Scale 1:50

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NOTES

CDM COMMUNICATION SYMBOLS

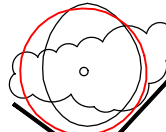


SIGNIFICANT HAZARDS
(Significant/unusual hazards that are difficult to manage and cannot be designed out, e.g. overhead/underground cables, gas, easements).

To be read in conjunction with:
• BCA 'Tree Pit Within Raised Planters' (drawing no. 00501-S4-P01)

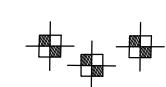
Layout based on NWA Associates drawing no. DCS20109-NWA-DC-01-LP-DR-A-10201 'Site Layout'.

KEY



EXISTING TREES AND VEGETATION TO BE RETAINED
Refer to BCA Tree Retention, Removal and Protection Plan (drawing no. xxxx/xx/xx for details). Dashed red line denotes extent of Root Protection Area (RPA). Dashed black line denotes location of protective barrier to protect RPAs.

EARTHWORKS



TREE PIT WITHIN RAISED PLANTERS
(Refer to BCA drawing 00501-S4-P01 for detail)



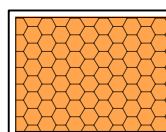
**300mm DEPTH TOPSOIL
300MM DEPTH SUB-SOIL** (de-compacted to 300mm depth)



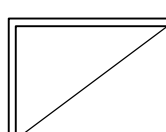
**300mm DEPTH TOPSOIL
600MM DEPTH SUB-SOIL** (de-compacted to 300mm depth)



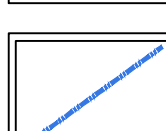
**150mm DEPTH TOPSOIL
300MM DEPTH SUB-SOIL** (de-compacted to 300mm depth)



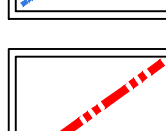
REINFORCED GRASS AREAS
Golpla Pre Grown grass system supplied by Geosynthetics Limited. Or similar approved. To be installed in line with manufacturers recommendations



SECURITY FENCE



PHASE 1 BOUNDARY



APPLICATION BOUNDARY

P01	Drawing number updated	HC	30-11-22
REV	DESCRIPTION	BY	CKD DATE



CLIENT COLT DATA CENTRE SERVICES			
PROJECT COLT L4			
DRAWING TITLE EARTHWORKS PLAN - PHASE 1			
CONTRACT NUMBER:	2179-21	DATE:	05-07-22
DRAWING STATUS:	PLANNING	CAD REFERENCE:	2179/21-10,11
DRAWN BY:	HC	CHECKED BY:	MB
SCALE:	1:500	ORIGINAL SHEET:	A1
PROJECT	ORIGINATOR	VOLUME	LEVEL TYPE ROLE NUMBER STATUS REV
DCS20109 - BCA - DC - 01 - LP - DR - L - 10201	S4	P01	

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