

### Trunk Protection

**Protective trunk Wrapping:**  
To be attached to the trunks of retained trees prior to the commencement of all works on site, and retained in place throughout construction. To comprise of a minimum of three wrappings of clean dry hessian around the trunk from ground level up to 2.3m high and held in place using sisal. Onto the hessian a minimum of three wraps of chestnut palling and is to be held in place by 2.50mm mild steel galvanized wire in three locations and fixed into place using fencing staples fixed into the chestnut palling.

**Protective hoarding:**  
To be erected prior to the commencement of all works on site, and retained in place throughout construction. To comprise of 2.4m wooden site hoarding constructed upon a timber frame work situated around the outside of the planting pit. Where the timber frame is constructed around the tree trunk a minimum of 4 layers of clean dry hessian is to be wrapped around the trunk to protect the bark.  
All weather notices should be erected at regular intervals on the weld mesh panels with words such as "Construction exclusion zone - Keep out".

### Ground boarding

New temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil.

*Note The ground protection might comprise one of the following:*

- for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100mm depth of woodchip), laid onto a geotextile membrane;
- for pedestrian-operated plant up to a gross weight of 2t, proprietary inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150mm depth of woodchip), laid onto a geotextile membrane;
- for wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. proprietary system or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.

### Supervised demolition

Demolition of existing structures and foundations situated either partially or completely within RPAs of retained trees shall be undertaken with care and under the direct on-site arboricultural supervision as these areas are likely to contain roots.

Where it is necessary for the foundations to be removed they are to only be removed where critical to the proposed development and to the minimum depth required. The foundations will be broken up using a hand held pneumatic breaker, hand tools and a wheel barrow to break up and remove the surfacing. In some situations and at the discretion of the arborist it may be possible to use an excavator using a hydraulic breaker and suitably sized toothless grading bucket. If an excavator is to be used it must be situated outside of the RPAs, on top of the hard surfacing working away from the RPAs or from ground boarding. If it is likely that there will be any collapse of the soil within the rooting environment excavation is to be stopped immediately and the trench is to be shored up to prevent loss of the rooting environment. Which ever system is used there is to be NO disturbance of the soil on the tree side of the foundations. If roots are found they are to be covered over with damp hessian and a layer of either sharp sand, wood chip or top soil to prevent desiccation.

### Hard Surfacing Removal

Removal of and or replacement of hard surfacing situated either partially or completely within the RPAs of retained trees shall be undertaken with care and under the direct on-site arboricultural supervision as these areas are likely to contain roots.

Where this is necessary the wearing course will be broken up using a hand held pneumatic breaker, hand tools and a wheel barrow to break up and remove the surfacing. If it is necessary to remove the sub base this is to be undertaken using hand tools such as a fork to loosen the material and removed using shovels and wheelbarrows. In some situations and at the discretion of the arborist it may be possible to use an excavator using a hydraulic breaker and suitably sized toothless grading bucket. If an excavator is to be used it must be situated outside of the RPAs, on top of the hard surfacing working away from the RPAs or from ground boarding. Which ever system is used there is to be NO disturbance of the soil beneath. If roots are found they are to be covered over with damp hessian and a layer of either sharp sand, wood chip or top soil to prevent desiccation.

### Supervised Excavation

Excavation adjacent to RPAs are to be undertaken under direct on-site arboricultural supervision. Excavation will consist of a mixture of mechanical and manual excavation.

Initial excavation will be undertaken by hand under to a minimum of 200mm deep of any excavation, the soil is to be loosened with the use of a fork or pick and then cleared with the aid of an air-spade, air-vac or shovel. There after excavation can be undertaken using an excavator with a suitably sized toothless grading bucket using a grading motion rather than digging and taking no more than 10 - 20mm deep swipes at any time, if any roots are discovered mechanical excavation will be stopped immediately and manual excavation will resume to expose the root. All roots to be cut will be cleanly severed with the use of a hand saw or secateurs. The edge of the excavation closest to the retained trees will be covered over with damp hessian to prevent drying out, and where necessary be shuttered to prevent soil collapse or contamination by concrete. If appropriate soil beneath the depth 600mm may be sheet piled, lagged piles or individual piles. Any deeper excavations may be undertaken by a machine provided it works from outside of the RPA or has appropriate ground protection in place to move and work upon.

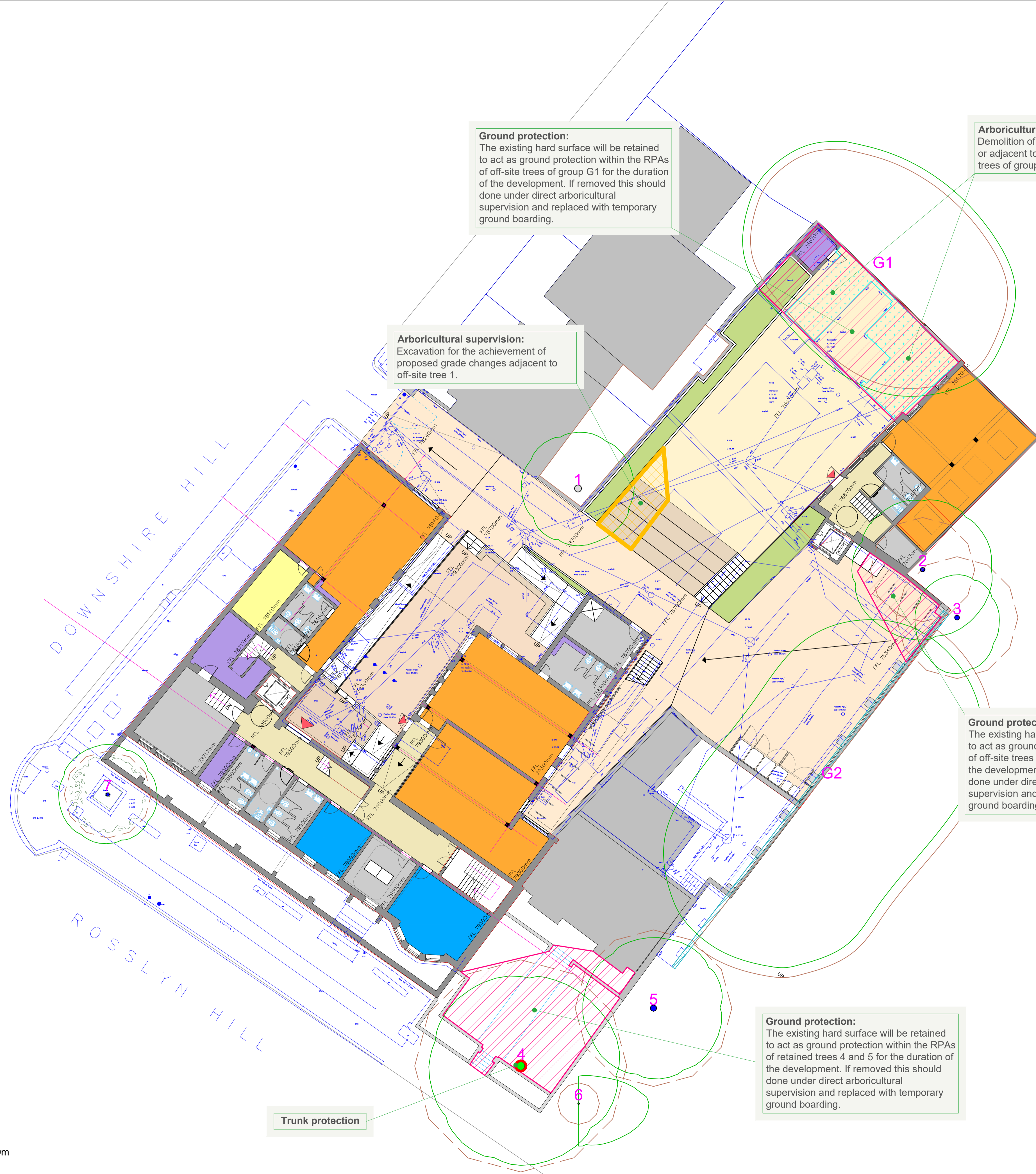
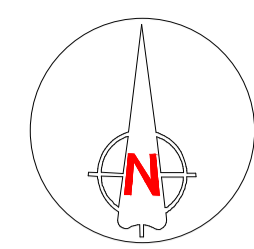
### Arboricultural Supervision

The arboricultural consultant will be required to attend site to directly supervise all demolition and construction works that have to be undertaken within the root protection areas. This will include:

- Pre start meeting.
- Location of protective measures.
- Supervised demolition of structures and foundations within RPAs of trees of group G1.
- Supervised demolition of hard surfacing, if required, within RPAs of trees 2, 3, 4, and/or 5.
- Excavation for achievement of grade changes adjacent to tree 1.
- Any excavations within or adjacent to RPAs, including foundations, hard surfacing or underground services.
- Removal of protective measures.
- Sign off from arboriculturalist as complete.

### Arboricultural Method Statement

Please refer to Arbttech Consulting Ltd. Tree Schedule and Arboricultural Method Statement, for full details on all surveyed trees and how all aspects of the development may be implemented without detriment to retained trees.



**Ground protection:**  
The existing hard surface will be retained to act as ground protection within the RPAs of off-site trees of group G1 for the duration of the development. If removed this should be done under direct arboricultural supervision and replaced with temporary ground boarding.

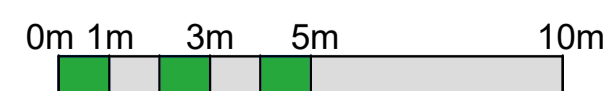
**Arboricultural supervision:**  
Demolition of existing structures within or adjacent to the RPAs of off-site trees of group G1.

**Arboricultural supervision:**  
Excavation for the achievement of proposed grade changes adjacent to off-site tree 1.

**Ground protection:**  
The existing hard surface will be retained to act as ground protection within the RPAs of off-site trees 2 and 3 for the duration of the development. If removed this should be done under direct arboricultural supervision and replaced with temporary ground boarding.

**Ground protection:**  
The existing hard surface will be retained to act as ground protection within the RPAs of retained trees 4 and 5 for the duration of the development. If removed this should be done under direct arboricultural supervision and replaced with temporary ground boarding.

Trunk protection



Rev: Date: Notes:

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Project:  
**26 Rosslyn Hill,  
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Client:  
**Ridge and Partners on behalf of the  
Department for Education**

Drawing:  
**Tree Protection Plan**

Based on:  
**P - 1732 - 101**

Drawing No:  
**Arbttech TPP 01**

Date:  
**Jan 2019**

Scale:  
**1:150 @ A1**

Drawn:  
**JCH**

Tree Nos.:	1	Tree Canopies:	Trunks:
RPAs:	Category 'B' trees:	Category 'C' trees:	
Topo. survey:	Trunk protection:	Supervised demolition:	
Supervised excavation:	Ground boarding:		

All dimensions should be checked on site. No dimensions are to be scaled from this drawing. Please notify us of any discrepancies found. Arbttech Consulting Ltd. cannot be held responsible for inaccuracies in the base drawing on which this plan is based. This drawing is designed to reflect the principles of the layout or design only, and relates only to the protection of retained trees. This drawing is not to be read as a definitive part of the engineering or construction design or method statement. An architect or structural engineer should be consulted over any matters of construction, detailing or specifications, and for any standards or regulatory requirements relating to proposed structures, hard surfacing or underground services. This drawing was produced in colour - a monochrome copy should not be relied upon. © Arbttech Consulting Ltd. 2013