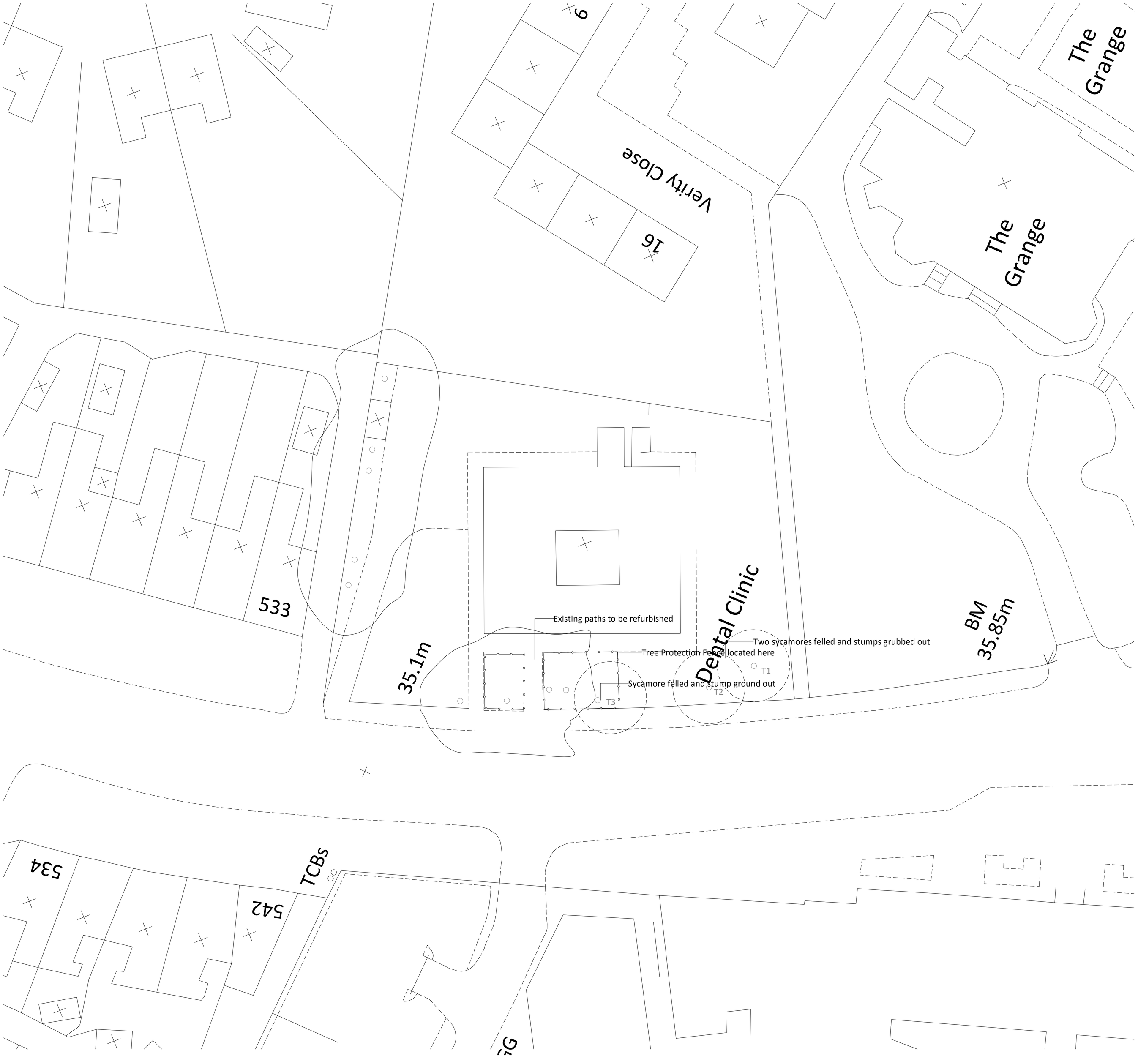


Tree Retention

This drawing is to be read in conjunction with all other relevant reports and drawings. Any discrepancies, errors or omissions to be brought to the attention of ACS Consulting.

Tree retention is colour coded to the following BS 5837:2005 colour codes.

Number	Category
1000	Highly Desirable
1000	Desirable
1000	Optional
1000	Felt/Loss to condition

Tree Pruning/Felling

Tree canopies shal be pruned to BS3998 or as modified by research that is more recent.

Trees to be removed shall be felled so as to fall away from tree protection areas and to avoid pulling and breaking of roots of trees to remain. If roots are entwined, the Consultant may first require the major woody root mass severing before extracting the trees. This may be accomplished by cutting through the roots by hand, with a vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root pruning equipment. All felled brush and trees shall be removed from the tree protection zone either by hand or with equipment sitting outside the tree protection zone.

Extraction shall occur by lifting the material out or by 'skidding' it across the ground. Any damage to trees due to demolition activities shall be reported to A.C.S. Consulting **within one hour** so that remedial action can be taken. The principal contractor shall also notify the Engineer of any damage to the trees.

Tree Protection

The principal contractor is required to liaise with A.C.S. Consulting (the Arboricultural Consultant) throughout the project which include additional site visits. The critical operations requiring liaison are as follows:

1. Start and conclusion of tree works
2. Erection of fencing
3. Removal of Hard Surfaces

The demolition/site clearance contractor is required to submit details, prior to beginning work, of all procedures, access and haul routes, storage and tree protection measures in the form of a Method Statement to the Engineer/ACS, with time for the Engineer/ACS to review and consider before the work starts on site.

The Tree Protection Area (TPA) is calculated as a multiple of the stem diameter measured at breast height subject to assessment by a suitably qualified arboriculturalist.

The TPA's are based on a multiplier (12) of the stem diameter usually measured at 1.5 metres from ground level, but where this is not possible, it is taken at a lower level and multiplied by a factor of 10. BS 5837 (5.2.3) sets out that the TPA may be represented as a square as well as a circle centred on the tree. The square has the same area as the circle, but, centred on the tree, the distance from the centre to the corner is greater, the distance of the sides from the centre vary from a minimum that is less than the radius to a centre to corner distance that is greater than the radius.

The area is to remain intact with no development and/or storage.

Tree Protection Fence

The following specification is considered to be a minimum to ensure tree protection. The fence is to be fixed in such away as to prevent it being relocated.

Panel Size

Length :	3472mm
Height :	2000mm
Vertical Tube	38.1 mm diameter 1.2mm wall thickness
Horizontal Tube	25.4 mm diameter 1.2mm wall thickness

Wire Thickness

Vertical wires:	3mm
Horizontal wires:	4mm
Wire Spacing	
Horizontal:	76mm
Vertical:	360mm

Temporary Working Surfaces within Tree Protection Area

The ground is to be covered in a suitable geo-textile as described in BS 5837:2005. The voids are to be filled with sharp sand or washed road stone to allow access.

Hard surfaces

Consultant may monitor any grading, construction, demolition or other work that is expected to encounter tree roots. The soil is to be removed using a 'super sonic' soil pick. The exposed roots are to be severed at a root hair or junction with a sharp implement - preferably a pruning knife. The severed roots will be kept moist with Hessian sacking. Spoil from trenches, basements or other excavations shall not be place within the tree protection zone. Details of site storage of demolition and building materials are to be agreed with the A.C.S. Consulting.

No materials, equipment, spoil, or wash out water may be deposited, stored or parked within the tree protection area.

Tree contractors and not construction personnel must perform additional tree pruning required for clearance during construction.

If injury should occur to any tree during construction the Consultant should evaluate it as soon as possible.

The Consultant may monitor any grading, construction, demolition or other work that is expected to encounter tree roots.

All services shall be installed in accordance with NJUG 10.

Exposed roots shall be covered in Hessian sacking and kept moist throughout the construction operations until they can be covered in high-grade topsoil.

Any roots damaged during grading or construction shall be exposed to sound tissue and cut cleanly with a saw.

Details of site storage of demolition and building materials are to be agreed.

The Contractor shall report to A.C.S. that the works have been completed satisfactory. A.C.S. will be given the opportunity to inspect the works.

Existing trees which are to be retained. (refer to Arboricultural Report for details)

Existing trees which are to be removed. (refer to Arboricultural Report for details)

Do Not Scale

No	INFORMATION	By	Date	Chkd

REVISIONS

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CLIENT:
TAYLOR YOUNG

LOCATION:
DENTAL CLINIC NHS, WITHINGTON

DRAWING TITLE:
ARBORICULTURAL LAYOUT PLAN

Drawing Status: Planning Only

SCALE:	SHEET SIZE:	DRAWING No:	REV
1:200	A1	2211_01	
DRAWN BY:	DATE: OCT 2009		