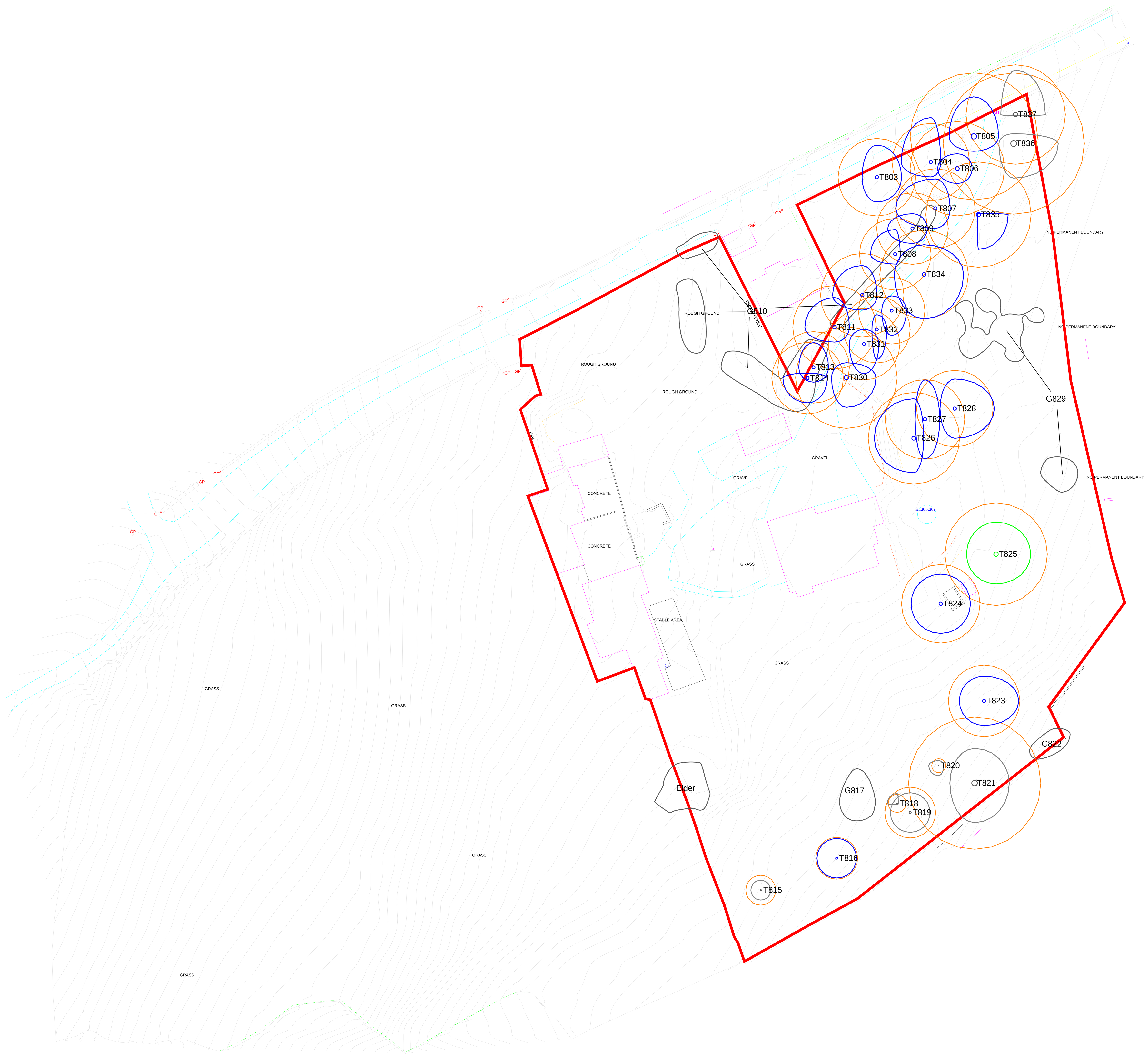

KEY

[This drawing must be reproduced in colour]

T1 Individual trees

G1 Groups of trees

Root Protection Area (RPA)

Survey Boundary

Tree Categorisation

(Tree quality assessment based on BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations)

Category A
(High quality)

Category B
(Moderate quality)

Category C
(Low quality)

Category U
(Unsuitable for retention)

Rev	Description	Drawn	Approved	Date
A	Amendment to 810	TP	JS	12.10

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Project

Macclesfield Old Road, Buxton

Title

Tree Constraints Plan
[EXISTING]

Drwg No D5318.001

Scale 1:500 @ A1

Date 09/10/15

Drawn TDP

Checked JGS

Approved JGS

Macclesfield Old Road, Sandbach

Tree Removal Plan

1. This document should be reproduced in colour and read in conjunction with D5318.003 and D5318.004.
2. This document should also be read in conjunction with tree survey data produced by ACS Consulting (document reference: 2748/DR.12), which was submitted to High Peak Borough Council in support of application HPK/2014/0438 . The data has been accepted as valid and, following refusal of the above application, it has been agreed to base all supporting arboricultural information on the original dataset for consistency. Tree numbers on this plan are the same as on the above documents.
3. The following trees would be removed as part of the proposed development:
   - 3.1. 810 Category C Row of cypress along existing drive
   - 3.2. 824 Category B Sycamore
   - 3.3. 826 Category B Sycamore
   - 3.4. 827 Category B Sycamore
   - 3.5. 828 Category B Sycamore
   - 3.6. 829 Category C Group of self-set willow and sycamore
4. All other trees will be retained and protected according to BS5837:2012.

KEY

[This drawing must be reproduced in colour]

- T1 Individual trees
- G1 Groups of trees
- Survey Boundary

Trees to be retained

(Tree quality assessment based on BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations)

- Category A (High quality)
- Category B (Moderate quality)
- Category C (Low quality)
- Category U (Trees with existing or potential conservation value)

Trees to be removed

(Tree quality assessment based on BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations)

- Category A (High quality)
- Category B (Moderate quality)
- Category C (Low quality)
- Category U (Unsuitable for retention)

Rev	Description	Drawn	Approved	Date
A	Amendment to 810	TP	JS	12.10

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Macclesfield Old Road, Buxton

Title

Tree Removal Plan
[PROPOSED]

Drwg No		
D5318.002		
Scale: 1:500 @ A1		Date: 09/10/15
Drawn: TDP	Checked: JGS	Approved: JGS

Macclesfield Old Road, Sandbach

Arboricultural Method Statement

This Arboricultural Method Statement (AMS) outlines the parameters within which construction and remediation must be undertaken in order to retain protected trees in satisfactory condition. This document gives a definitive account of the treatment of retained trees during the construction process and outlines approved construction methods. The detail and requirements of this method statement comprise commitments to complete the construction phase of the development in a specific manner and must inform the production of all relevant tender documents and instructions to contractors. Failure to adhere to the correct sequence, manner and timing of operations detailed below may result in irremediable damage to trees, and thereb breach of planning consent.

GENERAL TERMS

A. This document should be reproduced in colour and read in conjunction with D5318.002 and D5318.004.
B. The activities described by this method statement will be used to inform a planning decision. Any deviation from this document may result in enforcement action.
C. All operations requiring supervision or independent verification before works can proceed are in blue text.
D. A copy of this Method Statement will be made available for inspection on site and introduced to all relevant contractors.
E. **The existing driveway will not be used by construction traffic and will be fenced at both ends prior to commencement.**
F. Works will proceed in a careful and logical manner, such that accidental damage to trees by booms, cranes, vehicles etc. is avoided.
G. All areas that are protected by Tree Protection Fencing or Ground Protection will be collectively defined as a Construction Exclusion Zone (CEZ).
H. Tree protection fencing and Ground Protection will not be removed or realigned other than as directed by an arboricultural consultant.
I. Storage of materials and access of any kind will be prohibited within the CEZ.
J. If unexpected large roots (>25mm diameter) are encountered during excavation works or if additional pruning of branches is required, the advice of an Arboricultural Consultant will be sought.
K. No compaction, smearing or rutting of soils will be allowed to occur by whatever means within the CEZ.
L. Operations within the CEZ will be undertaken during dry weather. Works will cease during rainfall and recommence after 24 hours.

SEQUENCE OF EVENTS (Operations to be undertaken in strict chronological order)

1. The site manager will read and understand this method statement . It will be his responsibility to implement it in full.
2. An arboricultural contractor will be appointed to undertake the removal of trees.
3. An arboricultural consultant will be appointed, provided with contact details for the site manager and notified date of commencement of works.

Setting-out

4. The alignment of tree protection fencing and ground protection will be set out accurately with wooden marker posts (using northing and easting coordinates) by a surveyor.
5. The arboricultural consultant will verify and set out the alignment of tree protection fencing and ground protection using spray paint and/or post markers; the site/construction manager will be present.
6. If any variations in fencing specification or alignment are required, a revised Tree Protection Plan will be produced to reflect the changes. This will be issued to the LPA; changes that reduce the level of protection will not be made without written approval.

Tree marking

7. Trees for removal will be marked using spray paint according to Tree Removal Plan D5318.002 by the arboricultural consultant.

Nesting bird checks

8. Within bird nesting season (March to August inclusive) checks of all trees will be undertaken by an ecologist within 24 hours prior to felling.
9. Any unprocessed piles of brash that have been left unattended will also be subject to checks prior to processing.
10. Nesting bird checks will be undertaken by a qualified ecologist.

Tree works

11. Tree works will be undertaken according to BS3998:2010 by a suitably qualified, experienced and insured contractor.
12. All trees shown for removal on drawing D5318.002 will be felled.
13. In addition, trees will be crown raised to 2.5m over proposed footpaths and or to 5.4m over proposed highways.
14. Arisings will be processed by chipping removed from the site.

Installation of Tree Protection Fencing and Ground Protection

15. Once tree works and setting out has been signed off, the tree protection fencing and ground protection will be installed.
16. Fencing will be installed according to the specifications shown on Inset 1 in drawing D5318.004 (Type A and D).
17. If the installation of Type A fencing is prevented by on-site constraints such as existing hard surfaces, the arboricultural consultant instruct an alternative method (Type B or Type C).
18. Signs will be affixed to the fencing at visible intervals indicating the protected status of the area and prohibiting access.
19. Ground protection will be installed according to the specification shown on Inset 2 in drawing D5318.004.
20. If any requirement to enter the fenced **CEZ** for operational reasons arises, the Arboricultural Consultant will first be contacted for advice.
21. Ground protection will be used for pedestrian access and scaffolding but not heavy plant or storage of cement, bricks or blocks.
22. Tree protection will remain in situ for the duration of the construction or until its removal is specified by this method statement.

Pre-start meeting

23. The site manager and arboricultural consultant will jointly inspect the tree works; and verify the correct installation of tree protection measures. The Tree Officer will be notified at this point.

EVERYTHING UP TO THIS POINT MUST BE COMPLETED BEFORE ANY CONSTRUCTION COMMENCES

Above Ground Construction

24. New permanent surfaces within the CEZ will follow an above ground, no-dig design. These areas are highlighted opposite with a magenta hatch.
25. A Cellular Confinement System (CCS) will be used. See Inset 2 for an indicative specification.
26. Finished levels of adjacent ground will be designed to tie in with the CCS surface (this may be higher than would otherwise be specified).
27. Vehicular access will not be permitted along the route of the proposed new surface prior to installation of the CCS. All preparation work up to this point will be carried out by hand.
28. Installation will be supervised by the arboricultural consultant. The site manager will be responsible for coordinating this within the programme. It is anticipated that completion of one area will be supervised until the consultant is satisfied that the working method has been understood and correctly applied. A photographic record of all remaining areas will be maintained by the Site Manager and provided on request.
29. The following method will be observed:
    - 29.1. A 50mm surface scrape maybe undertaken manually to remove vegetation.
    - 29.2. The new surface layout will be marked out and established by the installation of manually driven tanalised pegs and tanalised boarding affixed with galvanised nails.
    - 29.3. A levelling layer of up to 50mm sharp sand may be applied.
    - 29.4. A geotextile membrane will be laid with dry-jointed overlaps of 30mm.
    - 29.5. A proprietry cellular confinement product will be stretched and pegged across the working area (150mm Geoweb is recommendedfor vehicles, 100mm for pedestrian only areas).
    - 29.6. The cellular confinement layer will infilled with clean 20:40 aggregate (no fines).
    - 29.7. The surface will be constructed in a logical manner such that vehicles avoid tracking on bare, unprotected ground.
    - 29.8. A pervious surface will be applied (e.g. porous tarmacadam, resin bonded gravel or dry-jointed pavoirs or blockwork) depending on the location.
    - 29.9. Where pavoirs or blockwork is used, the CCS web will be overlaid with a second geotextile membrane and a bedding layer of 2-6mm grit. For hot applications, the aggregate will be overfilled by 25mm and a binder course will be laid directly onto the aggregate prior to application of the wearing course.
    - 29.10. Blocks will be brush jointed with sharp sand.
    - 29.11. Strict adherence to all manufacturers' instructions will be observed for CCS and pervious products.
30. The existing driveway will be improved for use as a pedestrian access route according to the following methodology:
    - 30.1. The driveway will not be increased in width.
    - 30.2. The surface may be scarified or scraped back to a maximum depth of 100mm in preparation for resurfacing.
    - 30.3. No excavation other than removal of the existing surface will be undertaken (including for drainage or utility installations).
    - 30.4. New kerb edging will be installed following the existing alignment and will comprise manually driven tanalised pegs and tanalised boarding affixed with galvanised nails at ground level.
    - 30.5. Re-surfacing between may me completed using a compacted self-binding aggregate (e.g. MOT Type 1) or a hot rolled bitumen asphalt, depending on the quality of the sub-grade.

New Utility Connections

31. All new underground connections of electrical, gas, water or drainage will be installed outside the CEZ or, in the case of off-site connections, outside the RPA.

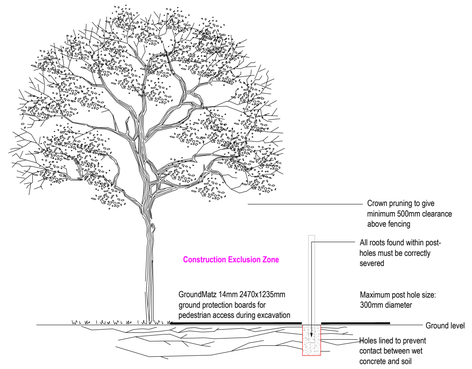
New Boundary Fences

32. Sections of tree protection fencing may be removed as required to allow for the installation of permanent boundary treatments.
33. The site manager will arrange a tool box talk with the arboricultural consultant to ensure that all operatives understand and can apply the following methodology:
    - 33.1. Heras panels will be removed but upright posts will be retained during installation of boundary fencing.
    - 33.2. No strip footings will be permitted within the CEZ; gravel boards will be laid above ground and not cut in.
    - 33.3. Posts will be installed into hand-dug holes. Small tree roots encountered will be neatly cut using a sharp spade, secateurs or a pruning saw.
    - 33.4. The precise location of individual holes will be subject to modification, such that major roots(>25mm diameter) are avoided.
    - 33.5. No post will be located within 2.5m of any retained tree.
    - 33.6. The maximum diameter of holes will be 300mm.
    - 33.7. Holes will be lined to prevent contact between concrete and the soil.
    - 33.8. GroundMatz 14mm ground protection boards will be laid to prevent soil compaction during operations. Excavated material will also be stored on the mats or removed.
    - 33.9. Protective fencing will be replaced following works.

Landscaping

34. The site manager will arrange a tool box talk with the arboricultural consultant to ensure that all operatives understand and can apply the following methodology within the CEZ:
    - 34.1. Ground levels within the CEZ will be maintained. Surrounding ground will be built up or reduced to tie in with pre-existing levels.
    - 34.2. All works within the CEZ will be completed manually and no vehicle access will be permitted.
    - 34.3. No mechanical excavation or rotavation of soils will be permitted within the CEZ.
    - 34.4. All new planting will be done manually.
    - 34.5. Care will be taken to minimise trampling and compaction of soils; temporary boards will be laid to prevent compaction of soils by repeated pedestrian access as required.
    - 34.6. Planting will be undertaken with regard for the location of surface tree roots and where roots larger than 10mm are encountered during planting, locations will be adjusted to avoid roots.
    - 34.7. Newly planted areas will be mulched where possible to maximise water retention and improve soil structure. Composted woodchip or bark is recommended.
    - 34.8. Ground level increases attributed to new planting will be restricted to a maximum increase of 200mm (including 100mm mulch layer).
    - 34.9. Where turf is specified, a manual vegetation scrape to remove existing surface vegetation will be permitted to a maximum depth of 50mm.
    - 34.10. Where minor ground levelling is required prior to turfing, this will be achieved by the addition of a sharp sand layer. Any sand will be manually tamped and not mechanically compacted.
    - 34.11. Prior to seeding, the CEZ may be scarified by vigorous raking with a rigid or wire rake but not rotavated or ploughed.

Inset 1: Fence post installation



KEY

[This drawing must be reproduced in colour]

- T1 Individual trees
- G1 Groups of trees
- Survey Boundary
- Tree Protection Fencing (c. 320m) (Must be installed prior to works commencement)
- Temporary Ground Protection (c. 47.5m²) (According to Arboricultural Method Statement)
- No-dig construction of new surface (According to Inset 2)
- No-dig improvement of existing drive (According to Arboricultural Method Statement)

Trees to be retained

(Tree quality assessment based on BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations)

- Category A (High quality)
- Category B (Moderate quality)
- Category C (Low quality)

Name of Appointed Arboricultural Consultant:

.....

Telephone Number of Appointed Arboricultural Consultant:

.....

Setting Out
Date: Initials:

Tree Works
Date: Initials:

Tree Protection Fencing
Date: Initials:

Ground Protection
Date: Initials:

Above ground construction
Date: Initials:

Boundary fences
Date: Initials:

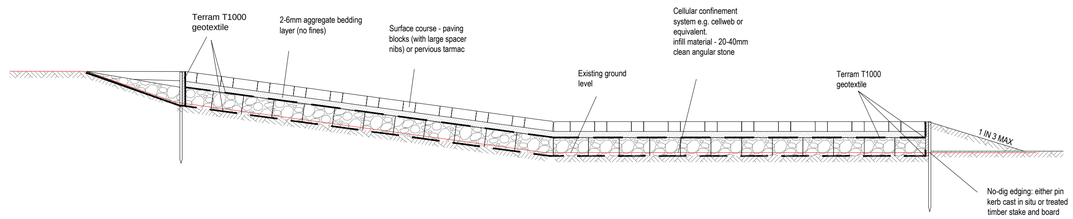
Landscaping
Date: Initials:

The above Method Statement elements have been discharged in full to the best of my knowledge and professional assessment. Where there has been any deviation from the specification, I am satisfied that this has not been injurious to retained trees and that all such deviations have complied with the spirit of the instruction insofar as was reasonably practicable or were approved in advance by the proper authority.

Signed:

.....

Inset 2: Above ground construction of path, private drive and parking bays



Notes

The cellular confinement system and geotextile membrane must be laid in accordance with the manufacturers' specifications.
A levelling layer of sharp sand may be laid beneath the system to fill small undulations.
All surfacing specifications to be verified by an engineer prior to installation.
Any variation to the materials specified should be discussed with the appointed arboricultural consultant.

Rev	Description	Drawn	Approved	Date

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Project

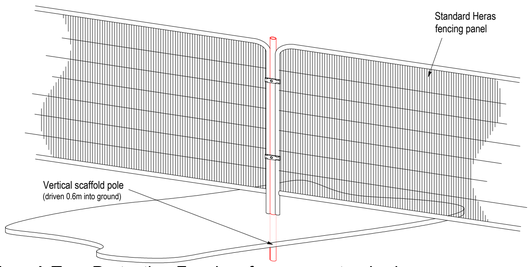
Macclesfield Old Road, Buxton

Title

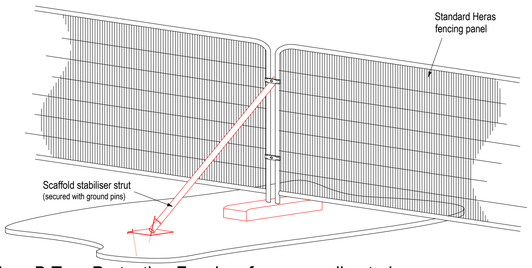
Arboricultural Method Statement [PROPOSED]

Drwg No		
D5318.003		
Scale		Date
1:500 @ A1		09/10/15
Drawn	Checked	Approved
TDP	JGS	JGS

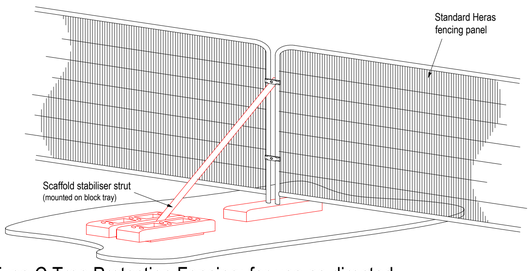
Inset 1: Tree Protection Fencing



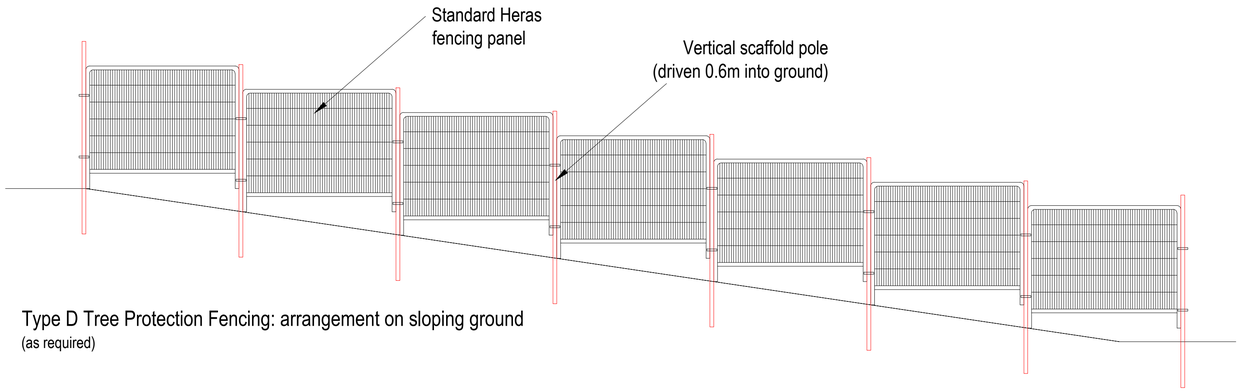
Type A Tree Protection Fencing: for use as standard
(see Tree Protection Plan for layout)



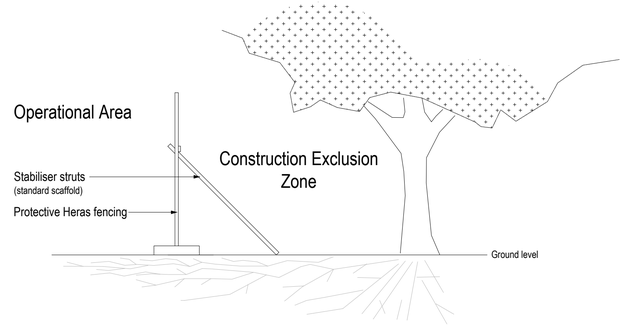
Type B Tree Protection Fencing: for use as directed
(e.g. where Type A would cause unacceptable damage to roots or underground services)

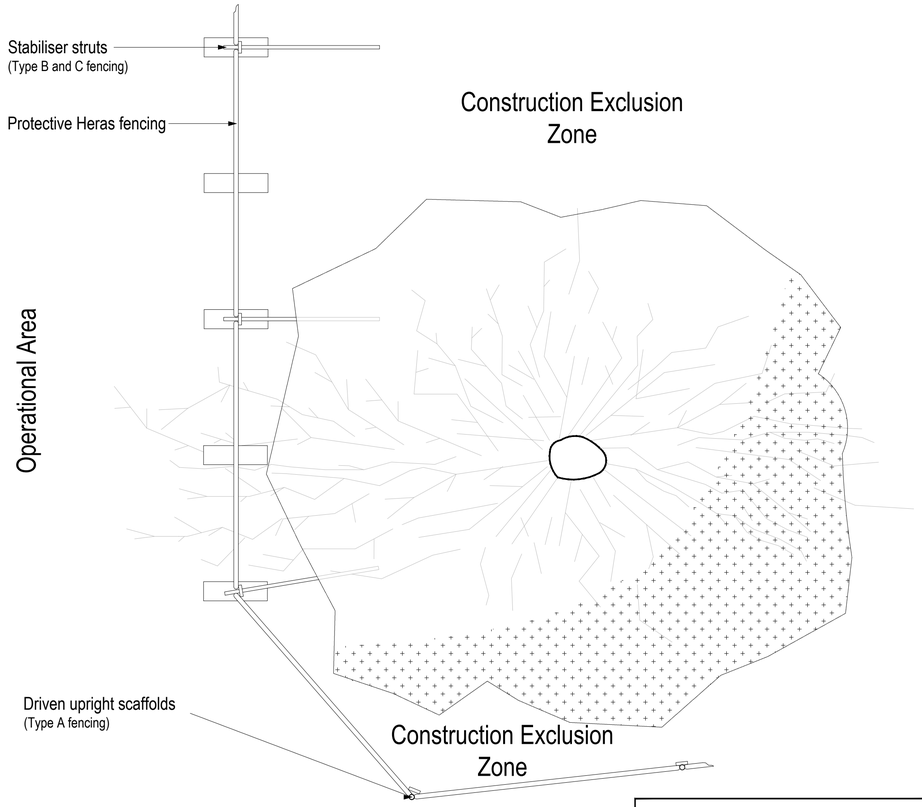


Type C Tree Protection Fencing: for use as directed
(e.g. on hard surfaces)

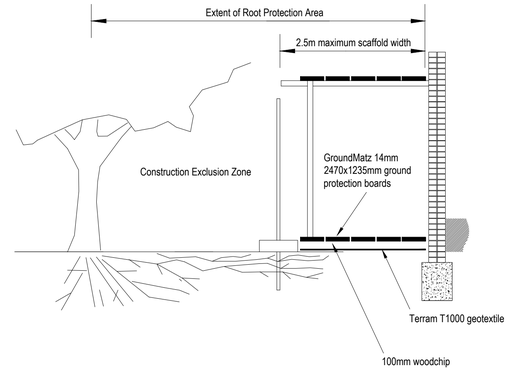


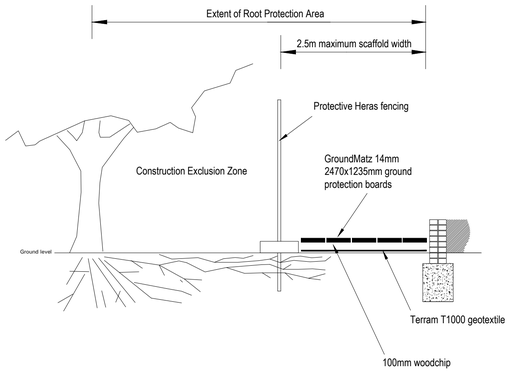
Type D Tree Protection Fencing: arrangement on sloping ground
(as required)





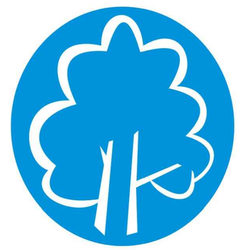
Inset 2: Ground Protection adjacent to units 6, 7 and 8





Tree Protection Notice to be attached to fencing 1.5m from the ground, facing out of the Construction Exclusion Zone and located at regular intervals along the fence line.

The notice must be at least A4 in size



PROTECTIVE FENCING. THIS FENCING MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DRAWINGS FOR THIS DEVELOPMENT.

TREE PROTECTION AREA
KEEP OUT !
(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A TREE PRESERVATION ORDER. CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY

This document should be reproduced in colour and read in conjunction with D5318.002 and D5318.003.

Rev	Description	Drawn	Approved	Date

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Project

Macclesfield Old Road, Buxton

Title

Tree Protection Specification [PROPOSED]

Drwg No		
D5318.004		
Scale		Date
1:500 @ A1		09/10/15
Drawn	Checked	Approved
TDP	JGS	JGS