

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 detailed account of the treatment of retained trees during the construction process and outlines approved construction methods. The detail and requirements of this method statement complete 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 irreparable damage to trees, and thereby breach of planning consent.

GENERAL TERMS

- A. This document should be reproduced in colour and read in conjunction with D5318.002B 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.
- L. If unexpected large roots (>250mm 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 razing 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 consultant will be appointed, provided with contact details for the site manager and notified date of commencement of works.
3. An arboricultural contractor will be appointed to undertake the removal of trees as per Tree Removal Plan D5318.002 and contact details provided to the arboricultural consultant.

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 mark up the alignment of tree protection fencing and ground protection; 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.
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 for nesting birds will be undertaken no more than 24 hours prior to felling.
9. Any unprocessed piles of brush 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.
15. Stumps within the Root Protection Area of any retained tree will not be ground out. They will be cut as low as is practicable. This will apply to trees in Q810 along the northern edge of the driveway.

Installation of Tree Protection Fencing and Ground Protection

16. Once tree works and setting out are complete, the tree protection fencing and ground protection will be installed.
17. Fencing will be installed according to the specifications shown on Inset 1 in drawing D5318.004 (Type A and D).
18. If the installation of Type A fencing is prevented by on-site constraints such as existing hard surfaces, the arboricultural consultant will instruct an alternative method (Type B or Type C).
19. Signs will be affixed to the fencing as visible intervals indicating the protected status of the area and prohibiting access.
20. Ground protection will be installed according to the specifications shown on Inset 2 in drawing D5318.004.
21. If any requirement to enter the fenced CEZ for operational reasons arises, the Arboricultural Consultant will first be contacted for advice.
22. Ground protection will be used for pedestrian access and scaffolding but not heavy plant or storage of cement, bricks or blocks.
23. 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

24. 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

25. New permanent surfaces within the CEZ will follow an above ground, no-dig design. This area is highlighted opposite with a magenta hatch.
26. A Cellular Confinement System (CCS) will be used. See Inset 2 for an indicative specification. This must be verified by an engineer.
27. Adjacent ground will be graded up with clean topsoil to tie in with the CCS surface prior to seeding or turfing.
28. The overall path surface outside the CEZ to the south will tie in with the level of the CCS (this may be higher than would otherwise be specified).
29. 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.
30. Installation will be supervised by the arboricultural consultant. The site manager will be responsible for coordinating this within the programme.
31. The following method will be observed in magenta hatch areas:
 - 31.2. A 50mm surface scrape may be undertaken manually to remove vegetation. A levelling layer of up to 50mm sharp sand may be applied.
 - 31.3. The new surface layout will be marked out and established by the installation of manually driven tannalised pegs and tannalised boarding affixed with galvanised nails.
 - 31.4. Terram BGT100 geotextile membrane (or equivalent) will be laid with dry-jointed overlaps of 300mm.
 - 31.5. A proprietary cellular confinement product will be stretched and pegged across the working area (100mm depth typical for pedestrian only areas: to be confirmed by manufacturer).
 - 31.6. The cellular confinement layer will be filled with clean 20-40 aggregate (no fines).
 - 31.7. The surface will be constructed from the south-west to the north-east such that vehicles avoid tracking on bare, unprotected ground by tracking over already filled cells.
 - 31.8. A pervious surface will be applied (e.g. porous tarmacadam, resin bonded gravel or dry-jointed pavers or blockwork) depending on the location.
 - 31.9. Where blockwork is used, the CCS web will be overlaid with a second geotextile membrane and a bedding layer of 2-6mm grt. Blocks will be brush jointed with washed sharp sand.
 - 31.10. For hot applications, the aggregate will be overlaid by 25mm and a binder course will be laid directly onto the aggregate prior to application of the wearing course.
 - 31.11. Strict adherence to all manufacturers' instructions will be observed for CCS and pervious products.
32. The existing driveway will be converted to use as a pedestrian access route according to the following methodology in yellow hatch areas and working from the north-eastern end:
 - 32.1. The driveway will not be increased in width. The footpath will be laid wholly within the outline of the existing driveway.
 - 32.2. The surface may be scarified or scraped back to a maximum depth of 100mm in preparation for resurfacing. (Areas outside the final path may be removed as per Paragraph 31).
 - 32.3. No excavation other than removal of the existing surface will be undertaken (including for drainage or utility installations).
 - 32.4. New kerb edging will be installed following or within the existing alignment and will comprise manually driven tannalised pegs and boarding affixed with galvanised nails at ground level.
 - 32.5. Re-surfacing between may be 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.

Removal of Existing Driveway

33. Areas of existing driveway shown in a blue hatch will be removed according to the following methodology and under supervision by the arboricultural consultant:
 - 33.1. Works will only commence once the primary access road has been completed or is capable of being used as a construction access to the south-western end of the driveway.
 - 33.2. A section of tree protection fencing will be removed to allow access at the south-western end. Works will proceed backwards from the north-eastern end, tracking on the existing driveway.
 - 33.3. Vehicle tracking and storage of materials will only be permitted on the existing driveway surface.
 - 33.4. The existing surface will be scraped back using a flat end unpowered bucket down to original formation level. No excavation of the underlying soil will be permitted whatsoever.
 - 33.5. A manual surface scrape and scarification will be undertaken following mechanical removal of most material to prepare a clean surface for landscaping.
 - 33.6. Fresh clean topsoil will be spread within the scraped area to restore the original ground level. A compact (walk-behind) tracked dumper will be used to distribute soil and spreading and tamping will be done manually, working backwards from the north-eastern end towards the access road. GroundMatz 14mm boards or equivalent will be laid to prevent compaction.

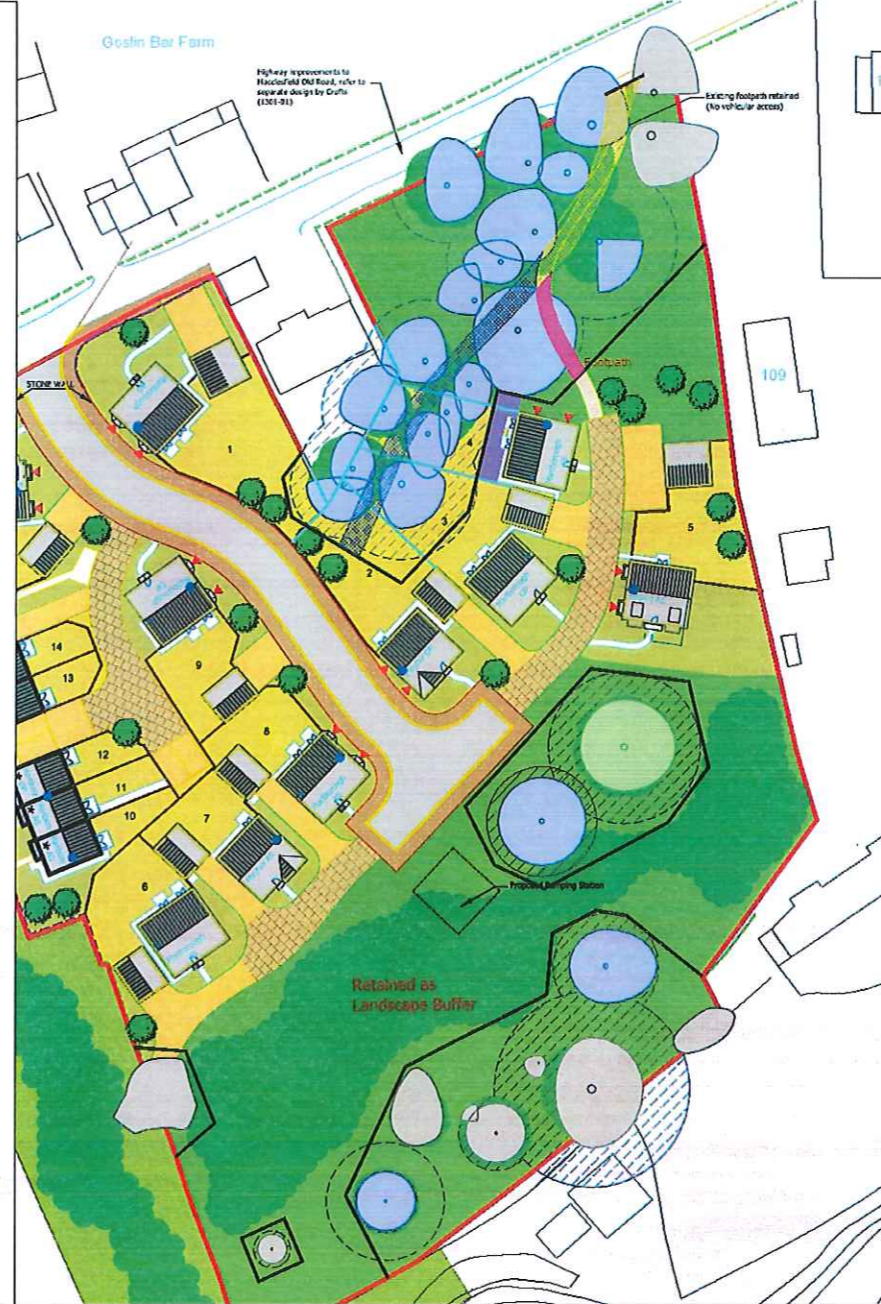
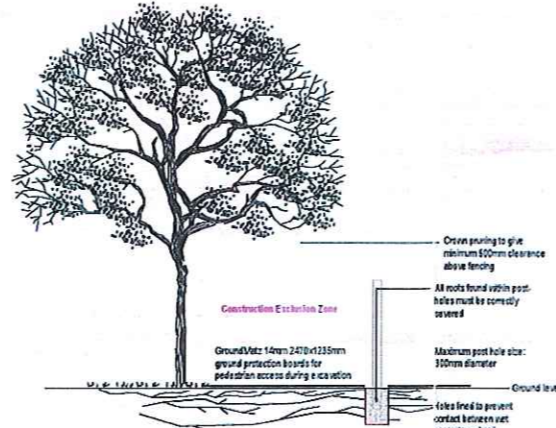
New Boundary Fences

34. Sections of tree protection fencing may be removed as required to allow for the installation of permanent boundary treatments.
 - 34.1. 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:
 - 34.2. Individual sections of Tree Protection Fencing may be removed but upright posts will be retained during installation of boundary fencing. Fencing will be replaced following works.
 - 34.3. No strip footings will be permitted within the CEZ; gravel boards will be laid above ground and not cut in.
 - 34.4. 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.
 - 34.5. The precise location of individual holes will be subject to modification, such that major roots (>25mm diameter) are avoided.
 - 34.6. No post will be located within 2.5m of any retained tree.
 - 34.7. The maximum diameter of holes will be 300mm and holes will be lined to prevent contact between concrete and the soil.
 - 34.8. GroundMatz 14mm ground protection boards or equivalent will be laid to prevent soil compaction during operations. Excavated material will also be stored on the mats or removed.

Landscaping

35. 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:
 - 35.1. Ground levels within the CEZ will be maintained. Surrounding ground will be built up or reduced to tie in with pre-existing levels.
 - 35.2. All works within the CEZ (including planting and soil preparation) will be completed manually and no vehicle access will be permitted.
 - 35.3. No mechanical excavation or re-treatment of soils will be permitted within the CEZ. Prior to seeding, the CEZ may be scarified by vigorous raking with a rigid or wire rake.
 - 35.4. Care will be taken to minimise trampling and compaction of soils; temporary boards will be laid to prevent compaction of soils as required.
 - 35.5. Planting will be undertaken with regard to the location of surface tree roots and where roots larger than 10mm are encountered during planting, locations will be adjusted to avoid roots.
 - 35.6. Newly planted areas will be mulched where possible to minimise water retention and improve soil structure. Composted woodchip or bark is recommended.
 - 35.7. Ground level increases attributed to new planting will be restricted to a maximum increase of 200mm (including 100mm mulch layer).
 - 35.8. Where turf is specified, a manual vegetation scrape to remove existing surface vegetation will be permitted to a maximum depth of 50mm.
 - 35.9. 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.

Inset 1: Fence post installation



KEY

(This drawing must be reproduced in colour)

- Survey Boundary
- Tree Protection Fencing (c. 330m) (Must be installed prior to works commencement)
- Temporary Ground Protection (c. 32m²) (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)
- Supervised removal of existing drive (According to Arboricultural Method Statement)
- Boundary treatment in protected area (According to Arboricultural Method Statement)

Trees to be retained

(Tree quality assessment based on BS 5377:2010. Trees in relation to design, function and construction - Parameters & Criteria)

- 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: _____

Removal of Driveway
Date: _____ Initials: _____

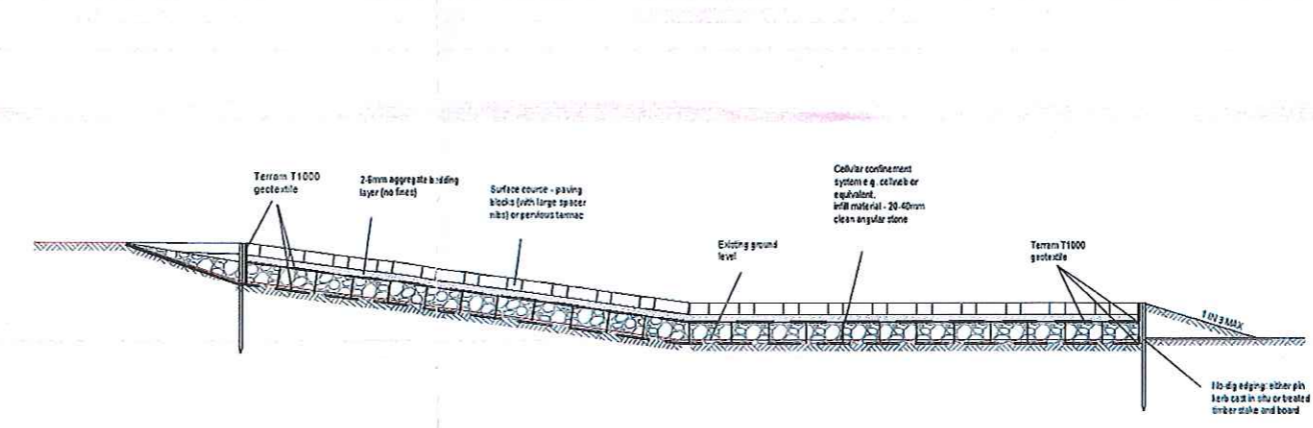
Boundary fences
Date: _____ Initials: _____

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 specifications, 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 more approved in advance by the proper authority.

Signed: _____

Inset 2: Above ground construction of path within CEZ



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.

B	Layout Revision U	TP	JS	24.03.16
A	Layout Revision T	TP	JS	18.03.16
Rev	Description	Drawn	Approved	Date

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Project
Macclesfield Old Road, Buxton

Title
Arboricultural Method Statement
[PROPOSED]

Drawn: TDP
Checked: JGS
Approved: JGS

Drawn	Checked	Approved
TDP	JGS	JGS
Scale	1:500 @ A1	Date
		09/10/15