

# GRIN LOW WOODS, BUXTON CW/6516-P-TP

## ARBORICULTURAL METHOD STATEMENT

### Scope

This method statement relates to the section of path between the Green Lane entrance to Grin Low Wood (Access Point A) and the point at which the proposed path crosses the eastern boundary of Grin Low Wood (Access Point B) on Tree Protection Plan CW/6516-P-TP(Rev.F).

The 'Work Site' shall be defined as and limited to the areas identified as the proposed path, proposed cut and fill, and proposed wooden bridge on the Tree Protection Plan unless otherwise extended by means of 'Ground Protection' as set out below at item 4. All work activities shall be limited to the 'Work Site'.

The method statement considers the potential effects of the work operations on retained trees and sets out how any adverse impacts will be avoided. This method statement is generally not concerned with the management of health and safety of either personnel employed on the project or members of the public who may be affected by the works. The only exception being the reference to tree felling and pruning operations below at item 3.

### Project Arboriculturist

From the commencement of works on site, all managers, supervisors and other personnel who might be charged with overseeing the works shall be provided with the contact details of the Project Arboriculturist. In the event of any matters arising in relation to trees the Project Arboriculturist shall be consulted.

The Project Arboriculturist shall be retained to make monthly site monitoring visits for the duration of the works and shall issue to the Project Engineer, to the Council's Arboriculturist and to Buxton Civic Association, a report on the progress of the works in relation to trees. The Project Arboriculturist shall issue written confirmation to all parties when an instruction has been received for the site monitoring visits and shall similarly issue a written notice to the Project Engineer, to the Council's Arboriculturist and to Buxton Civic Association if the contract is terminated by either party.

### Site Personnel

All personnel employed in the execution of the works shall be provided with a copy of the Tree Protection Plan and shall be instructed in the protection of trees on and adjacent to the work site as set out in this Method Statement.

### Mobile Equipment

Mobile equipment shall be limited to:

1. a 1.5 tonne tracked 360 degree excavator with a track width of 1 metre extendible to 1.5 metres, the use of which will be limited to areas of excavation and fill in excess of 0.4 metres depth
2. 1.5 tonne tracked dumpers with a maximum track width of 1 metre

### Storage of Materials and Equipment

Materials shall not be stored in the woodland other than the Work Site and on the area of ground identified as 'Storage Area' on the Tree Protection Plan, which shall be excavated to the finished cut and fill levels prior to being used for storage. Access to the Storage Area shall be along completed sections of path only. Materials shall be transported only to the final position, other than materials being transported to the storage area.

A secure container can be accommodated, as identified on the Tree Protection Plan, adjacent to the Green Lane entrance at the location of the proposed zigzag access ramp.

### Working Methods

From commencement of the works, the following methodology shall be implemented in the manner and sequence described below.

### SEQUENCE OF WORKS

1. Pre-contract site meeting
2. Phasing of works
3. Tree removal and pruning
4. Ground Protection and Tree Protection Barriers
5. Path construction requiring minor excavation and fill
6. Path construction requiring significant excavation and fill
7. Construction of retaining walls
8. Construction of wooden bridge between trees T123 and T124
9. Main construction phase
10. Removal Ground Protection and Tree Protection Barriers

### 1. PRE-CONTRACT SITE MEETING

To outline working methods in relation to trees, a site meeting of the following shall take place prior to delivery of equipment and materials or commencement of any work activity on the site: -

- Client
- Project Engineer
- Main Contractor
- Site Agent
- Volunteer Supervisor
- Project Arboriculturist

## **2. PHASING OF WORKS**

1. Personnel, equipment and materials shall enter the Work Site only via access points A and B, which are clearly identified on the Tree Protection Plan, and other than described below at 2, shall travel only on the route of the proposed path or other aggregate-surfaced path of sufficient bearing capacity that the underlying soils will not be unduly compacted or puddled
2. A plan of work shall be developed to phase the work operations in such a manner that access for personnel, equipment and materials will not cross any section of unsurfaced path of a length greater than 60 metres. In this regard, 'surfaced path' shall mean a path that has been constructed to completion save for the application of the final surface wearing-course of crushed aggregate
3. Phasing of the works shall require that each section of work will be secured by the erection of Tree Protection Barriers and where appropriate by Ground Protection. Construction operations in each section shall be completed up to base aggregate level before removing barriers and ground protection onto the next section

## **3. TREE REMOVAL AND PRUNING**

1. Prior to any other works, all tree removal and pruning works shall be implemented in accordance with the Tree Schedule CW/6516-SS1 and drawing number CW/6516-P-TP(Rev.F). All arisings shall be retained on site with large diameter logs being used for edging paths as described elsewhere in the planning submission and all surplus material being stacked in habitat piles of a volume not exceeding 2 cubic metres, or chipped for use in the Ground Protection as described below at item 4
2. Every effort shall be made to prevent damage to adjacent retained trees
3. All tree stumps shall be removed by mechanical stump grinder; and shall not be excavated in their entirety by mechanical excavator. Arisings from stump grinding operations shall be spread thinly on site at locations to be identified by Buxton Civic Association, or used in the Ground Protection as described below at item 4
4. All tree removal and pruning works shall be carried out by appropriately trained and certificated personnel to at least the standards set out in British Standard 3998: 2010 'Tree Work - Recommendations', unless otherwise specified in the Tree Schedule
5. All operatives shall be equipped with and shall use personal protective equipment in accordance with current Health and Safety Executive guidance or current industry codes of practice
6. Herbicides shall not be used to poison the roots of felled trees
7. Performance of all arboricultural operations and use of equipment shall be in accordance with current directives of the Health and Safety Executive and current industry codes of practice

## **4. GROUND PROTECTION AND TREE PROTECTION BARRIERS**

1. There shall be no construction operations whatsoever in any area identified as 'Construction Exclusion Zone' on the Tree Protection Plan. Access to Construction Exclusion Zones shall be prevented by the erection of Tree Protection Barriers to each section of the works. The barriers shall be removed only on completion of each section, after which all works shall be accessed along completed sections of the path only. Any identified shortcuts between completed sections shall be blocked by the erection of Tree Protection Barriers
2. The areas of ground identified as 'Ground Protection' on the Tree Protection Plan shall be either:
  - a) excluded from the Work Site by the erection of Tree Protection Barriers, or
  - b) covered by side-butting 18mm thick 2.4 x 1.2m external grade plywood sheets on top of a compressible layer of wood chips laid over a geotextile membrane, or supported on scaffold board bearers, which shall be fixed at 1.0m centres (pedestrian access only).
3. Ground protection and Tree Protection Barriers shall be installed prior to any work operations on any particular section of the works and shall be retained up to completion of that section
4. Tree Protection Barriers shall comprise 1 metre high, high visibility orange mesh fencing supported on either steel pins or fixed to 75 - 100mm diameter wooden posts

## **5. PATH CONSTRUCTION REQUIRING MINOR EXCAVATION AND FILL**

1. Before the base for path is laid, loose material and surface irregularities shall be removed by hand excavation to a depth not greater than 100mm. No roots shall be excavated during this process
2. Increases in path level shall be achieved by spreading the base material to any depth up to 400mm and either grading out from the edge of the path or supporting the edge with logs from felled trees
3. Where the proposed path is at risk of blocking natural surface drainage a sub-base of imported no-fines 20-40mm diameter aggregate shall be laid to a depth of 100mm over a geotextile membrane, which shall be wrapped over the aggregate to form a continuous envelope. The edges of the geotextile shall be blinded with 150mm of topsoil recovered from elsewhere on the Work Site
4. A wearing course of fine crushed aggregate shall be applied and compacted as required to a maximum depth of 100mm

## **6. PATH CONSTRUCTION REQUIRING SIGNIFICANT EXCAVATION AND FILL**

1. Before the base for path is laid, ground shall be excavated to the desired depth and to the minimum lateral extent possible, and in any event not extending beyond the area identified on the Tree Protection Plan
2. Increases in path level shall be achieved by first determining the lateral extent of the fill, which in any event not extending beyond the area identified on the Tree Protection Plan
3. To the full extent of the proposed fill material, loose soil and organic material shall be removed and a sub-base of imported no-fines 20-40mm diameter aggregate shall be laid to a depth of 100mm over a geotextile membrane, which shall be wrapped over the aggregate to form a continuous envelope
4. The base material shall be spread over the sub-base and compacted in layers as required to achieve the necessary bearing capacity. The edge may be supported with logs from felled trees where considered appropriate by the Project Engineer
5. The edges of the geotextile shall be blinded with 150mm of topsoil recovered from elsewhere on the Work Site

## 7. CONSTRUCTION OF RETAINING WALLS

Excavations for the installation of dry stone retaining walls shall not extend further than the nearest edge of the path as identified on the Tree Protection Drawing

## 8. CONSTRUCTION OF WOODEN BRIDGE BETWEEN TREES T123 AND T124

1. Between trees T123 and 124, a wooden structure shall be constructed to bridge the buttress roots of the trees
2. The structure shall be designed by the Project Engineer and shall have a minimum clearance of 200mm from any above ground part of either tree
3. The positions of any underground supports or ground anchors shall be excavated by hand insofar as necessary to avoid contact with structural roots exceeding 20mm diameter

## 9. MAIN CONSTRUCTION PHASE

1. There shall be no storage of construction equipment, plant and materials within any area designated as a Construction Exclusion Zone or otherwise protected on the Tree Protection Plan
2. No fires shall be lit
3. The integrity of the Tree Protection Barriers and Ground Protection shall be maintained for the duration of works along any particular section of the path.
4. Any damage occurring to Temporary Protective Fencing or Ground Protection shall be immediately made good by the Main Contractor.
5. The Sign at fig1 shall be tied to trees along the route of the path at intervals of 30 - 50 metres

## 10. REMOVAL OF GROUND PROTECTION AND TREE PROTECTION BARRIERS

Ground Protection and Tree Protection Barriers shall be removed only upon completion of each section of path and in compliance with any relevant planning conditions.

## TREE PLANTING SCHEDULE

KEY	SPECIES	SIZE	ROOT TYPE	QUANTITY
FE	Ash ( <i>Fraxinus excelsior</i> )	6-8cm girth	Bare root	3
CM	Hawthorn ( <i>Crataegus monogyna</i> )	6-8cm girth	Bare root	2
CA	Hazel ( <i>Corylus avellana</i> )	45/60cm high	Container grown	14
1A	Holly ( <i>Ilex aquifolium</i> )	30-40cm high	Container grown	28

## CONSTRUCTION EXCLUSION ZONE KEEP OUT! PROTECTED TREES!

ALL TREES ENCLOSED BY THIS FENCE ARE PROTECTED  
BY PLANNING CONDITIONS (TOWN AND COUNTRY PLANNING ACT 1990)  
AND ARE THE SUBJECTS OF A TREE PRESERVATION ORDER.  
CONTRAVENTION OF TREE PRESERVATION ORDER CONTROLS  
CAN LEAD TO **CRIMINAL PROSECUTION**

- NO MACHINE OR PLANT SHALL OPERATE OR MATERIAL BE STORED IN ANY AREA OTHER THAN:
- THAN THE ROUTE OF THE PATH IDENTIFIED THE TREE PROTECTION PLAN
  - AN AREA DESIGNATED AS 'CUT' OR 'FILL' ON THE TREE PROTECTION PLAN
  - AN AREA PROTECTED BY 'GROUND PROTECTION' ON THE TREE PROTECTION PLAN

NO FIRES !

Fig. 1