



Lower Whitemore Farm, Whitemore, CW12 3NF

Arboricultural Report

December 2021

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Limitation

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Chapter 1 Introduction

1.01

ACS Consulting is instructed by Mr. S. George & Miss. E. Zegar to report on trees and the implications for the proposed development at Lower Whitemore Farm, Whitemore, CW12 3NF. The assessment and report was undertaken by Ian Murat, Registered Consultant of the Arboricultural Association.

1.02

In accordance with guidance on information requirements and validation for planning applications, this report fulfils the recommended national list criteria for tree survey/arboricultural information. More specifically, it contains the following:

- A full tree survey to the requirements of BS5837 (2012) Trees In Relation To Design, Demolition and Construction – Recommendations.
- A plan showing tree survey information, retention categorisation and root protection areas,
- An assessment of the arboricultural implications of development detailing trees to be retained/removed and appropriate protection measures,
- A Heads of Terms Arboricultural Method Statement detailing a set of agreed principles for tree protection, implementation and phasing of works (where applicable).

1.03

The site was visited during December 2021. A survey of the trees was completed recording; species type, age, height, crown spread, diameter-at-breast-height and, condition.

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Chapter 2 Background

2.01 The Site

The site is a detached property in mature grounds with a workshop. It is a rural location accessed by a track from the A527. It is located to the west of the Biddulph Valley Way (Figure 1).

2.02 Statutory Protection/Planning Policies

The application is subject to the Planning Policies of Staffordshire Moorlands District Council. The site is not located within a Conservation Area. Hedgerows do not accord with the Hedgerow Regulations 1997 Part 7 (1-5) or Part 8 (a and b). The trees are not the subject of a Tree Preservation Order.

2.03 Soils

BS 5837 – 2012 requires a basic assessment of the soils on site. An examination of the British Geological Survey records the superficial deposits as. Glaciofluvial Deposits, Devensian - Sand And Gravel. Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions (UGF).

The Cranfield Soil and Agrifood Institute Soilscales viewer shows soils at the site to freely draining slightly acid loamy soils.

2.04 Topographical Survey

The arboricultural survey is based on the supplied topographical survey. Where trees have been missed they have been added with a reasonable degree of accuracy.



Figure 1

Chapter 3 Tree Survey

3.01

I have identified trees as individuals, groups and woodlands. The group classification is intended to identify trees that form cohesive arboricultural features either aerodynamically, visually or culturally.

3.02

The tree data can be found at Appendix A. There is no requirement in BS 5837 to repeat the details of the constraints information save for confirming that the tree was surveyed for species type, age, height, crown spread, diameter-at-breast-height, condition, and its suitability for retention from ground level.

The height was measured with a digital Hypsometer and the diameter taken with a diameter tape to give an average stem measurement. Canopy spreads have been measured at the cardinal points or where they significantly extend in other directions.

Chapter 4 Development Implications

4.01 Application

The site is a detached property in mature grounds with a workshop. The application is described in detail in the Design and Access statement. In simple terms, it is for the demolition of the current buildings on site and the reconstruction of them in the same form for the house, with a modern workshop on a revised and improved footprint.

4.02 Development Implications

Loss for Development

The proposal will result in the removal of a small number of Category C trees. Overall, the removal of these trees has no implications for the tree cover at the site or the treed character of the Conservation Area. In line with the advice set out in BS 5837, the trees are not of such importance and sensitivity as to be a major constraint on development or, justify substantial modification of the proposals.

The Category C trees are unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories. They offer low or only temporary/transient landscape benefits. Views from the Biddulph Valley Way are negligible, screened by the tree cover around the Way and the tree cover on site.

Retained trees that may be affected by disturbance

The proposal will be relocated on a new footprint. In terms of the residential element of the application there are no issues save for the use of 'top down pull back' to keep the structure away from the woodland. The workshop can be demolished similarly.

The workshop is to be moved away from the current embankment. The current foundations and impervious concrete flooring create conditions that are hostile to tree root growth. The relocation of the workshop has no implication for tree retention. The location requires a new retaining wall to retain the bank. This will be placed on the same footprint as the current building foundations. There are no implications for tree retention.

The proposal will use the current entrance. This will be reinforced with three-dimensional geo grids to ensure the soil structure remains viable and to minimise any damage to the beech (T12) which may be rooting in this location.

Chapter 4 Development Implications

Pruning

Trees T5 may need to be pruned to allow access during demolition and construction. It has already been pruned to clear the building though it is of a poor standard. The crown lifting proposed will be undertaken in accordance with current best practice and has no implication for tree physiology or visual amenity.

Secondary Development Pressures

None. The property has an improved relationship with the site's trees.

4.03 Policy

The over-arching policy guidance in respect of the site is that contained within the Staffordshire Moorlands District Council Adopted Local Plan 2014 – 2033. (Policy NE 2 Trees, Woodland and Hedgerows) and Development and the policies of central government (NPPF 131) document.

The development in arboricultural terms, accords with the council's policies in that the development of the site retains the site's principal arboreal specimens. The development has the same relationship with those features minimising issues with secondary development pressure. Where trees are removed, their loss does not impact on the treed character of the rural area and is not considered harmful. The use of advanced construction techniques and products ensures the retention of trees.

Areas of potential conflict in terms of site development are addressed by the draft method statement at Appendix B.



Chapter 5 Conclusions

5.01

The Arboricultural Layout Plan indicates the location of the development.

5.02

The development retains the site's principal arboreal specimens with an improved relationship as the property and the trees have always enjoyed. The use of three-dimensional geo-grids for the access drive is an acceptable method of achieving a new drive over and above the current rutted access. The application will result in the loss of a number of Category C trees. Overall, from the major public view points, the scale of change will be low. The development accords with the council's policies and those of central government.

5.03

A method statement is appended to demonstrate the scheme is feasible. Certain matters listed therein may alternatively be addressed satisfactorily by means of a condition(s). This requires detailed discussions with the LPA on the principle that conditions should always be used in the first instance as per government guidance and that contained in BS 5837 – 2012 Table B.1 Delivery of tree-related information into the planning system; the method statement fulfils the recommended criteria for arboricultural information.

Appendix A

Contents

Key

BS 5837 2012

Tree data

KEY

Age	Y – Young: Out-planted trees that have not yet established SM – Semi-mature: Established trees up to 1/3 of expected height and crown EM – Early mature: Between 1/3 and 2/3 of expected height and crown M – Mature: Between 2/3 and full expected height and crown FM – Fully mature: Full expected height and crown OM – Over mature: Crown beginning to break-up and decrease in size S – Senescent: Crown in advanced stage of break-up
Physiological Condition	Good – Very few defects a reasonable long life expectancy depending on age class Fair – Some defects giving the tree a shortened life expectancy Poor – Limited life with major problems
Structural Condition	Good – Very few defects Fair – Some defects rectifiable with minor tree surgery Poor – Significant defects rectifiable with major tree surgery or felling
#	Estimated dimensions.
(a)	Average stem diameter across a group of trees.
*	Tree subject to TPO.

Table 1 – Cascade chart for tree quality assessment

Category and definition	Criteria			Identification on Plan
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.	- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other U category trees (i.e. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning). - Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline. - Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality. <i>NOTE Category U trees can have existing or potential conservation value which might be desirable to preserve; see 4.5.7</i>			RED
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation.	
Trees To Be Considered For Retention				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dormant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	GREEN
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation.	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.	Trees with material conservation or other cultural value.	BLUE
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm.	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value, and/or trees offering low or only temporary/transient landscape benefits.	Trees with no material conservation or other cultural benefits	GREY

Tree Ref No.	Species	Height M	Stem Diameter MM	Branch Spread M				Height of Crown Clearance M	Clear Branch Height M	Age Class	Physiological Condition	Structural Condition	Comments/Preliminary Management Recommendations	Estimated Remaining Contribution Years	Category Grading
				N	E	S	W								
1	Willow	13	770	0.5	2	8	7.5	2	3	M	Good	Fair	Incongruous feature. Suppressed by adjacent trees. A tree of low quality and value in the landscape.	10+	C1/2
H1	Hedge	<9	200	2	2	2	2	0	0	M	Good	Good	Mixed species hedge. Hazel, holly and hawthorn marking the boundary. A hedge of moderate quality and value in the landscape.	20+	B1/2
2	Oak	17	450, 300	6	6	6	8	3 (W)	2 (W)	M	Good	Good	Twin stemmed. Located on top of the bank. Light ivy on the stem and into the canopy. Dead wood. A tree of moderate quality and value in the landscape. Work Crown clean.	20+	B1/2
3	Birch	15	300	0.5	2	3	3	4	4	M	Good	Fair	Formally twin stemmed – the southern stem has been removed. Decay. Tall, drawn specimen. Influenced in development by adjacent trees. A tree of low quality and value in the landscape.	10+	C1/2

Tree Ref No.	Species	Height M	Stem Diameter MM	Branch Spread M				Height of Crown Clearance M	Clear Branch Height M	Age Class	Physiological Condition	Structural Condition	Comments/Preliminary Management Recommendations	Estimated Remaining Contribution Years	Category Grading
				N	E	S	W								
4	Oak	15	500	5	5	5	5	3	3	EM	Good	Fair	Twin stemmed at 2m with a partly included stem union. Poor past pruning practice. Located on top of the bank – some erosion. A tree of moderate quality and value in the landscape. Work Crown clean.	20+	B1/2
5	Oak	14	400	2	5	6	6	0	0	EM	Good	Good	A tree of high quality and value in the landscape. Work Crown lift to give 3m clear canopy height to the southern canopy over the building.	40+	A1/2
6	Cypress	25	300	2	2	2	2	0	0	M	Good	Good	Incongruous features. Trees of low quality and value in the landscape.	10+	C1/2
7	Cherry	6	300	3	3	7	2	2 (S)	1 (S)	M	Good	Good	Mediocre specimen. A tree of low quality and value in the landscape.	10+	C1/2
8	Cypress	20	300	2	2	2	2	0	0	M	Good	Good	2 trees as one visual unit. Incongruous features. Trees of low quality and value in the landscape.	10+	C1/2

Tree Ref No.	Species	Height M	Stem Diameter MM	Branch Spread M				Height of Crown Clearance M	Clear Branch Height M	Age Class	Physiological Condition	Structural Condition	Comments/Preliminary Management Recommendations	Estimated Remaining Contribution Years	Category Grading
				N	E	S	W								
9	Dead												Collapsed.	-	U
W1	Woodland	<15	250	5	5	5	5	0	0	SM/EM	Good	Good	Oak with cypress, goat willow and holly. Ground later of rhododendron and bramble. A woodland of high quality and value in the landscape. Work Remove cypress and rhododendron.	40+	A1/2
10	Sumac	3	150	1	0.5	1	1	2	2	M	Poor	Poor		-	U
G1	Holly	8	200	2	2	2	2	0	0	EM	Good	Good	Linear group of densely planted holly. A group of low quality and value in the landscape.	10+	C1/2
11	Willow	5	190	2	3	3	0.5	2	2	EM	Fair	Fair	Pronounced lean – partly collapsed. Severely suppressed. A tree of low quality and value in the landscape.	10+	C1/2
W2	Woodland	20	400	5	5	5	5	0	0	EM/M	Good	Good	Mixed species wood. Norway spruce, pine, birch, lime, willow, beech, prunus and alder. A woodland of high quality and value in the landscape.	40+	A1/2

Tree Ref No.	Species	Height M	Stem Diameter MM	Branch Spread M				Height of Crown Clearance M	Clear Branch Height M	Age Class	Physiological Condition	Structural Condition	Comments/Preliminary Management Recommendations	Estimated Remaining Contribution Years	Category Grading
				N	E	S	W								
12	Beech	30	1100	10	#12	10	10	1	3	FM/OM	Good	Fair	Twin stemmed with significant included stem union. Significant specimen. Possibly not within the site – confirm ownership. Downgraded due to defect. A tree of moderate quality and value in the landscape.	20+	B1/2

Appendix B

Contents

Method Statement

Arboricultural Method Statement

Arboricultural Supervision

The general purpose is to ensure compliance with planning conditions. It is anticipated that arboricultural input is likely to be needed for the following operations:

- Pre-commencement meeting;
- Tree felling and pruning;
- Installation of protective fencing/surfaces;
- Removal of protective measures.

All supervisory visits will be logged and a copy of the minutes circulated to all team members including the LPA. A number of the operations named above can be undertaken in a single visit.

The pre-commencement site meeting is to be held before any work is undertaken. All tree protection measures, haul routes, site storage, contractor parking, deliveries, working methods are to be freely discussed and agreed in writing. Initial site visits may be intense to ensure measures are implemented.

General site visits will be undertaken once the site is 'live' at intervals agreed with the team. Our role will be to initially to act in a compliance capacity to ensure the protective measures are fit for purpose and meet or exceed the council's requirements and the tree works are undertaken to the required standard. Once this has been completed, our role will be one of monitoring and 'troubleshooting'.

Targets

- Pre-commencement site meeting to agree roles, responsibilities and duties in relation to tree protection. Details to be minuted and distributed.
- Appointment of an Arboricultural Consultant to oversee works.

Arboricultural Method Statement

Tree Felling/Stump Removal/Tree Pruning

The following precautions are to be taken.

Actions

- Trees to be removed shall be felled so as to fall away from tree protection zones and to avoid pulling and breaking of roots of trees to remain. Brush can be chipped into the tree protection zone to a depth of 150 mm.
 - The roots shall be removed by severing the major woody root mass before extraction. This may be accomplished by Hydro Vacuum & Suction Excavation or Compressed Air Displacement and then, cutting through the roots by hand, with a vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root pruning equipment.
 - Trees to be removed within the tree protection zone shall be removed by qualified tree contractors.
 - 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.
 - Exposed roots to be kept moist with hessian sacking.
- Site inspections to be reported to the development team and the LPA.
 - Tree pruning to BS3998 – 2010.

Arboricultural Method Statement

Construction Exclusion Zone Root Protection – Site Wide

Due to the nature of the works, standard BS 5837 fencing will be used. The Construction Exclusion Zone fence will be heras fence panels fixed to a scaffold framework. Alternatively, heras panels fixed to timber posts. The location will be marked on site by the Arboricultural Consultant and are also shown on the Drawing No. – TPP/4515/Y/300. The requirement will be assessed on a weekly basis by the ACoW.

Targets

- Heras fencing fixed to a scaffold framework or timber posts as illustrated.
- Fencing installed at locations shown on the plan (TPP/4515/Y/300) and marked on site.
- Location and adequacy signed off by Arboricultural Consultant and LPA advised.
- Tool Box Talk – make construction staff aware of the importance of areas by site manager.
- Signs to be erected advising of the area's importance.
- Fence to be adjusted as noted in the Construction Timetable.



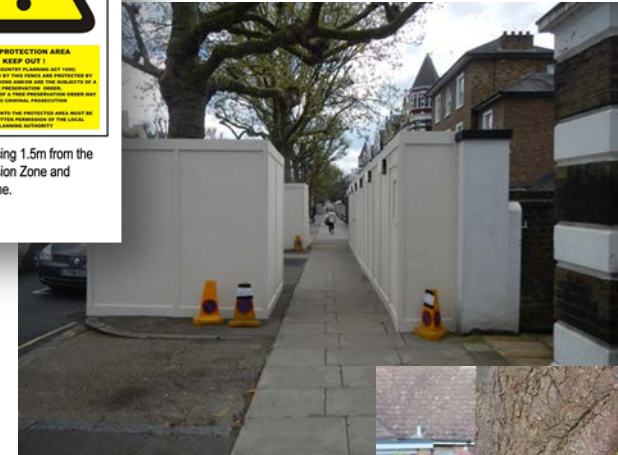
Arboricultural Method Statement

Construction Exclusion Zone Root Protection

Due to the restricted nature of the site standard BS 5837 type fencing will not be used. Instead the trunk of the prunus T2 and beech T3 will be encased in plywood on a timber framework (image below). Alternatively, Trunk Protecta® by Greengrid Systems, Winchester can be used.

Targets

- The plywood box section constructed around the tree trunks.
- Plywood boards (24mm thickness EN 636-2 EN 314-3 CE4 CE2+ E1 – Grade - C+ / C) to be used.
- Location and adequacy signed off by Arboricultural Clerk of Works and LPA advised.
- Works to be monitored by Arboricultural Consultant.
- Completion to be reported to the LPA and signed off by Arboricultural Consultant.
- Tool Box talk.



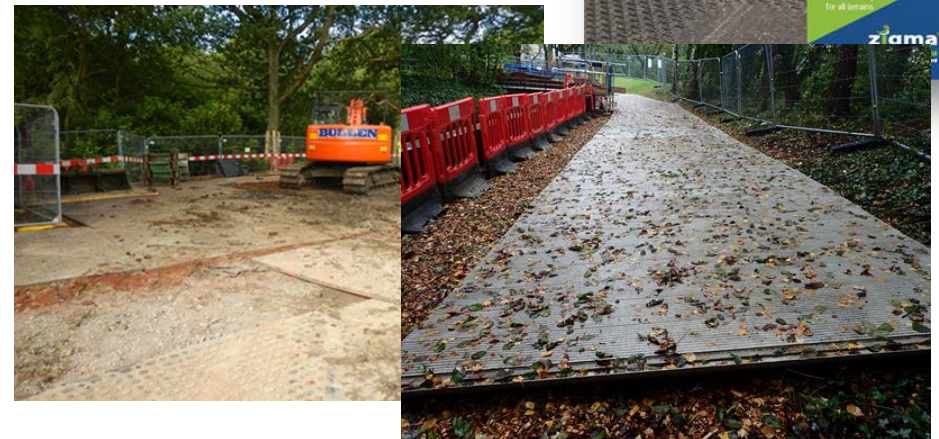
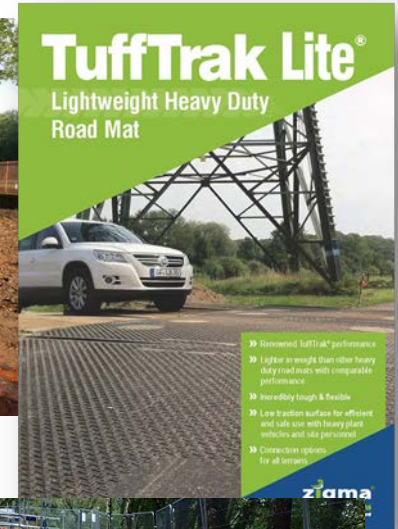
Arboricultural Method Statement

Construction Exclusion Zone Ground Protection

The Construction Exclusion Zone for T6 will be protected by Tuff Trak over a sand blinding. Adequate protection of trees requires the installation of the correct ground protection at the locations shown on the Drawing No. – TPP/4515/Y/300.

Targets

- The following applies to Tuff Trak (other systems follow a similar installation procedure).
- The existing grass and ground cover and any hard surfaces are to be removed by hand working.
- Permatex 300 geotextile to be laid with a sharp sand blinding layer, or wood chip compressible layer to bring to level.
- Tuff Trak laid over. This surface will be retained through the contract to form a working surface.
- Location and adequacy signed off by the Arboricultural Clerk of Works and the LPA advised.
- Works to be monitored by Arboricultural Consultant.



Arboricultural Method Statement

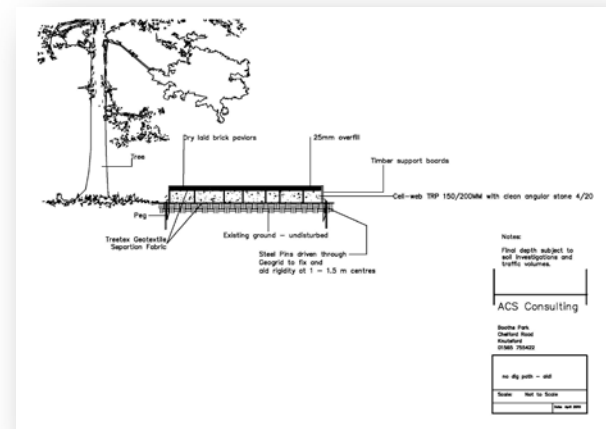
Construction Exclusion Zone No dig

The contractor is required to meet with the ACS Consulting at the site prior to beginning work to review all procedures, access and haul routes, storage and tree protection measures. Tree contractors and not construction personnel must perform additional tree pruning required for clearance during construction.

Targets

- Major protrusions: Rocks, stumps to be removed under supervision. Major hollows: All significant hollows are to be filled with SHARP sand to give a level surface. All other vegetation shall be retained. Tree tex shall be laid directly on the site
- The geogrid may be placed on the sub-grade to the road centre line or transversely. The minimum overlap shall be 300 mm, the maximum overlap shall be 600 mm. Any overlap is to be maintained. This may be achieved by pinning the overlap in position with steel pins or placing local mounds of fill material on the overlap. Timber boards shall be placed along the sides of the area, overlapping the geogrid. The boards shall be fixed in place with timber pegs.
- A WASHED, graded aggregate is considered a suitable sub-base. Type 1 or Type 2 is recommended as described in Clauses 803 and 804 in the DoT Specification for Highway Works.

- Lorry loads of the sub-base material shall be tipped into stockpiles adjacent to the Tree Protection Area and NOT directly onto the geogrids. The sub-base shall be spread by suitable mechanical plant with due regard for the tree canopies. The sub-base shall be spread in such a manner that the material cascades onto the geogrids. The material will be spread in such a fashion that the material advances across the grids rather than along. The material shall be spread in layers of 100 mm thickness to the required depth.
- No compaction of the unbound sub-base is to take place.
- The final layer shall be placed over the stone. This may consist of dry laid block sets or tarmac. At all times the operation will be conducted from the roadside.



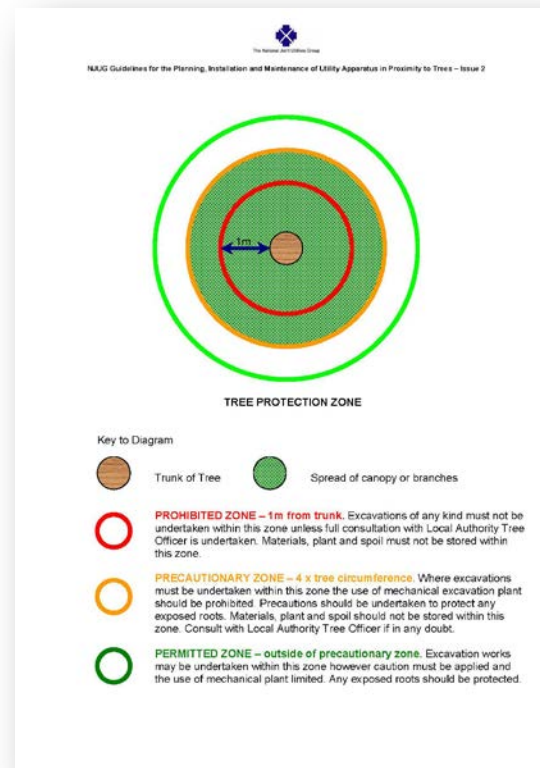
Arboricultural Method Statement

Services - NJUG 4.2

Work area to be marked out in accordance with NJUG 4.2.

Targets

- The precautionary area is to be identified.
- Suitable method of service installation to be identified.
- Location and adequacy signed off by the Arboricultural Clerk of Works and the LPA advised.
- Works to be monitored by Arboricultural Clerk of Works.



Arboricultural Method Statement

General Precautions

The retention of trees requires a number of general precautions to be taken. Compliance is to be maintained on site by the Arboricultural Consultant. The site visits are detailed at criterion 1 – Timing of Works.

Targets

- Spoil from the foundation pits or other excavations shall not be placed within the Construction Exclusion Zone.
- No materials, equipment, spoil or washout water may be deposited, stored or parked within the Root Protection Area/ Construction Exclusion Zone.
- On-site inspections to be undertaken by the Arboricultural Clerk of Works with the Arboricultural Consultant visiting during critical operations. The aim of the visits is to maintain on-going liaison with all personnel involved in the site development, Local Planning Authority and its Tree Officer.
- Any defects requiring rectification shall be notified to the Contractor/Site Manager/Arboricultural Consultant and the client.
- A site logbook for tree protection measures is kept to record all stages of the development from the erection of the protective fencing, right through to the completion of the project. This will be made available to the Arboricultural Consultant and the Local Planning Authority, if required, to show evidence of continuous site monitoring.

Protection and Emergency Procedure/Contacts

Adherence to the method statement, appointment of the Arboricultural Consultant and their involvement, at the critical demolition and construction phases, should negate any incident. The contact page details those personnel who should be contacted if an incident involving a retained tree should take place.

Targets

- Spill kit available.
- On site fuels to be located away from RPA/CEZ and contained in a bunded tank at 110% capacity.
- All incidents involving trees to be reported by telephone and email.
- Bunded storage of oil/fuels.
- Refuelling points for machinery at distance to the watercourse.
- Use of drop trays under plant/machinery overnight.
- Availability of spill kits on site – and training of site staff in their use.
- No excavation during periods of heavy rain.
- Regular maintenance and inspection of plant – engines and hydraulic systems.

Arboricultural Method Statement

* Tree subject to TPO/CA

Tag No.	Identity	Particular Schedule of Works Required
5	Oak	Crown lift to give 3m clear canopy height to the southern canopy over the building.

Arboricultural Method Statement



Contact List

Title	Name	Address	Telephone	Email
Arboricultural Consultant	TBA			
Design	TBA			
Project Manager	TBA			
Arboricultural Consultant (Council)	TBA			

Head Office

Booths Park, Chelford Road, Knutsford, Cheshire, WA16 8GS

01565 755 422

www.acsconsulting.co.uk

Scotland Office

272 Bath Street, Glasgow, G2 4JR

0141 354 1633

glasgow@acsconsulting.co.uk

www.acsconsulting.co.uk

Ian Murat

M.Sc, F.Arbor.A, CEnv, MCIEEM, RC. Arbor.A

Registered Consultant of the Arboricultural Association.

ian.murat@acsconsulting.co.uk

