

SLR Consulting Ltd

ARBORICULTURAL IMPLICATIONS ASSESSMENT

Site: Thurlow 2 Pipeline
Withersfield
Haverhill
CB9 7SW



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The Complete Arboricultural Consultancy



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Client: SLR Consulting Ltd

Site: Thurlow 2 Pipeline, Withersfield, Haverhill, CB9 7SW

Arboricultural Consultant: Joe Beznosiuk *Dip.Arb L4 (ABC)*

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1.0 INTRODUCTION

- 1.1 This Arboricultural Implications Assessment (AIA) is to provide for a pipeline route and lagoon at Thurlow Estate, Withersfield, Haverhill, CB9 7SW.
- 1.2 This assessment of the arboricultural implications that the proposal will have on the site and the tree stock based on drawings provided by the client:
 - Topographical Survey, reference: PLS-1281 – Spring Grove Farm
 - Proposed Plans, reference: GGP-29351-P-600-H-SG Farm Lagoon Layout
- 1.3 The above topographical plan has been the basis of the tree survey and Tree Survey Plan which has then been overlaid with the proposed plans to produce the indicative Tree Protection Plan (CBA11636PL.02A TPP).
- 1.4 This AIA will highlight any areas where the proposed lagoon and the route of the pipeline or the likely working and operating room to install the lagoon and pipeline will have potential conflict with either trees, groups, woodlands or hedges. The AIA will show which can be retained and which will need to be removed (where necessary) and ways to mitigate the proposals on the existing trees, groups, woodlands or hedges that may be implicated by the proposal or through construction activities to implement the proposal.
- 1.5 **Note:** Any mitigating build techniques for working methodologies etc. that are detailed within this assessment must be agreed upon/accepted to ensure that post planning approval, tree protection is in place and trees that are detailed for retention are retained and not removed because working practices have not considered the implications on trees.

2.0 SCOPE AND PURPOSE OF REPORT

- 2.1 This AIA considers the implications that the delivery and installation of a new pipeline and lagoon will have upon the existing tree stock, and also provides solutions to any implications where possible, to ensure the safe and healthy retention of any trees which are considered to be worthy of retention should the proposals be put forward for planning permission.
- 2.2 This AIA only considers the implications of the works which are illustrated on the drawings detailed above. If any changes to the proposed layout occur, then further advice should be sought.

3.0 LEGAL PROTECTION STATUS

- 3.1 The West Suffolk Council website interactive mapping facility indicates that at the time of compiling this report there are no Tree Preservation Orders (TPO) and the site is not within a Conservation Area that would provide legal protection to the trees on site.

3.2 It should be noted that the Local Planning Authority (LPA) can serve a TPO at any time without any prior notice; it is therefore essential that checks are made with the LPA prior to any work being carried out (along with checks for ecological constraints that may need to be adhered to).

4.0 TREE ASSESSMENT AND IMPLICATIONS

4.1 CBA Trees undertook a tree survey in accordance with BS5837:2012 on 28th March 2023. The tree survey exercises identified a total of 48 individual trees, 9 groups of trees, 17 hedges and 1 woodland; the Tree Survey Schedule and Tree Survey Plan (CBA11636PL.01 TSP) are appended at CB1.

4.2 The potential for damage to the trees, groups, hedges and woodland nearest to the proposed pipeline route comes from the location of the proposal itself, in particular the works to excavate the trench for the pipe route and the working space to complete this works as well as the transportation of materials and plant machinery to and from the areas of work.

4.3 The damage to the trees, groups, hedges and woodland may be in the form of direct damage where roots are cut or ripped/snapped for ground works or where the trunk and/or branches are hit by plant machinery movements or snapped by contractors where branches are in close proximity to the areas of work.

4.4 The trees groups, hedges and woodland could also be damaged through indirect causes such as ground compaction of soft ground by machine operation or material storage that has occurred on the rooting area as this can cause the soil structure to be compromised which impacts on the tree's roots and rooting environment.

4.5 The proposed pipeline route and the use of directional drilling and the lagoon has been designed to avoid root protection areas or reduce the impact on individual trees, groups and the woodland.

4.6 The use of the existing field access points has been utilised where possible to reduce the impact on field boundary hedges, groups, and trees. Grp 2 will require a short section to be removed to allow for the pipe route to cross this field boundary.

4.7 Where the pipeline is to be installed in the areas of Grp 8, Grp 9, H14 and H15, directional drilling will be utilised in these areas (shown as green dashed areas on the Tree Protection Plan). It has been advised that a depth of 2m will be applied in these areas to avoid roots and enable retention of these sections of groups and hedges.

5.0 TREE WORKS

5.1 If the pipeline route and lagoon are approved, works will be required to remove a section of Grp 2. Prior to any removal works starting, site advice must be sought from the project ecologist to ensure that ecological constraints are fully considered and adhered to.

5.2 **All tree/hedge related work** should be carried out in accordance with the British Standard “*Recommendations for Tree Work*” BS3998:2010, by suitably qualified and experienced professional arborists. Under no circumstances shall site personnel undertake any tree pruning operations. All tree surgery works should be carried out prior to the development of the site, and the erection of protective barriers.

5.3 Consideration should be given to the timing of the proposed tree works to avoid the active growing period of trees. Therefore, all tree work should ideally be carried out during the dormant period from November through to February and then again from June to August.

5.4 Due to the bird-nesting season, considered to be from 1st March through to the 31st July (Natural England) depending on weather conditions, consideration must also be given to the potential for nesting birds. Therefore, where tree work is to be carried out within these months the project ecologist must be consulted to:

- Complete or advise on a pre-works survey that needs to be carried out by a suitably competent person. As a general rule, it should be assumed that birds will be nesting in trees, and it is down to contractors to assess, record and confirm that any works carried out in the management of trees and other vegetation has not disturbed actively nesting birds.
- Ground vegetation, and therefore ground nesting birds, can often be overlooked by tree workers so additional care and controls should be taken when access and egress to the work site may also cause disturbance or damage to a nesting site. This is also true for retained trees on site as the removal of adjacent trees or remedial works on a tree may lead to an established nest being abandoned, exposed to the elements or predation. This action is also a breach of the Act and therefore could lead to prosecution due to the infringement of the Wildlife and Countryside Act 1981 and breaching the Conservation of Habitats and Species Regulations 2010 (as amended).

5.5 Consideration should also be given to the presence of bats, badgers and the possibility of Great Crested Newts. Again, advice and assessments from the project ecologist and a full visual assessment as part of the tree contractors’ method of working should be undertaken before any works are carried out on the trees. Where bats are identified as a serious concern where trees are being removed, the project ecologist will be able to advise on and identify the needs of the bats (roosts, resting place etc) and no tree works can be carried out until the ‘all clear’ is given by the project ecologist.

5.6 Tree works to facilitate the development are detailed within the Tree Works Schedule appended at CB3.

6.0 TREE PROTECTION MEASURES

6.1 Once planning approval has been granted and details to discharge planning conditions approved as required then all site operations will be planned, implemented and supervised to prevent the following unless otherwise agreed within this report:

- Unplanned root severance
- Damage to the bark, branches and trunks
- Compaction of the soil within the Construction Exclusion Zone
- Alterations in soil level
- Soil contamination by phytotoxic materials such as herbicides, petrol, oils, diesel, cement and concrete washings or other construction additives

6.2 Before starting any site works in relation to the lagoon and pipeline route proposal, tree protection will be installed in accordance with the Tree Protection Plan CBA11636PL.02A TPP (appended at CB4). Given that the pipeline route is installed in localised sections of work whereby a trench is dug, pipeline laid, and the trench filled back in and then work moves to the next section, tree protection will be established in a rolling working fashion.

6.3 The tree protection will be established for each area of works at a time i.e. the tree protection will be established and maintained in the field areas where pipeline work is being completed. For example, tree protection will be established and maintained in the fields that have contractor movement in. Once the works in that particular field area are complete the tree protection can be removed.

6.4 The establishment of tree protection will occur immediately following the completion of tree works and prior to any site preparation works starting. Phasing of site works may be programmed within the build programme and will enable tree protection to be set up and established for specific areas at a given time rather than have barriers erected across areas that are not under construction. Barriers may be formed by existing fencing on site or purposely erected barriers that will need to be fit for purpose.

6.5 A copy of the Tree Protection Plan CBA11636PL.02A TPP will be kept on site by the client and their appointed contractor. A specific copy will be kept in the site office of the appointed contractor as an immediate reference for all site operatives to review during working processes as required and to reference at the start of each phase or area of works.

6.6 Given the nature of the existing site being primarily agricultural fields, tree protective barriers will take the form of a design that is considered appropriate for the site and fit for purpose. The barrier must be robust, where it (the barrier) is resistant to impact from machinery or storage of materials and requires a positive or considered movement/adjustment by contractors of the barrier to adjust its position. The final chosen type of tree protection barrier will be informed to the LPA prior to works commencing.

6.7 The tree protection barrier will follow the principles as set out in BS5837:2012 and as set out on the Tree Protection Plan CBA11636PL.02A TPP to protect the retained trees during site works.

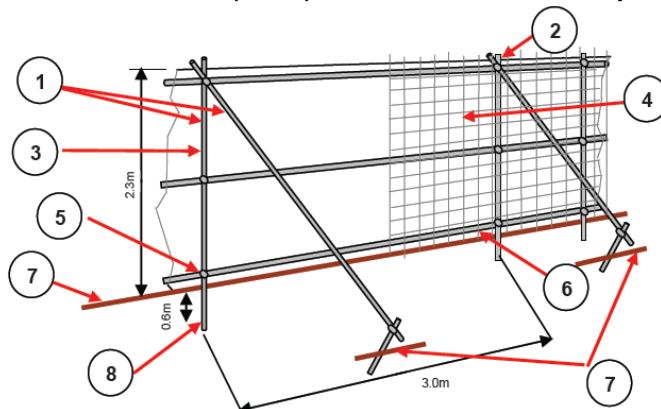
6.8 Examples of suitable tree protection barriers are detailed below but is not exclusive. Should the client wish to use a different specification of barrier, they may do so if it

follows the principles below and is agreed in writing by the retained arboricultural consultant for the project:

- The barrier is to comprise of a vertical and horizontal framework, well braced to resist impacts, with vertical tubes spaced at a maximum interval of 3m. Onto this, weld mesh panels should be securely fixed with wire or scaffold clamps (see Figure 1).
- The barrier will consist of weld mesh panels on rubber or concrete feet that are pinned into position with supporting struts. The weld mesh panels will be coupled together with clasps fastened from the inside (see Figure 2).
- The barrier will consist of 100mm x 100mm wooden posts concreted or driven into the ground supporting weld mesh panels. The fence will consist of weld mesh panels supported by one 100mm x 100mm x 3000mm post per panel. Posts will be concreted in position (see Figure 3).
- The barrier will consist of 100mm x 100mm wooden posts driven securely into the ground supporting 18mm plyboard or OSB board sheets (typical of development site hoarding). Within this barrier a gate/doorway access point for pedestrian use would be required to allow for a site assessment beyond the barrier.
- The barrier will consist of 100mm x 100mm wooden posts concreted or driven into the ground supporting taut orange mesh or chestnut pale fencing secured on the posts.

6.9 Tree protection measures will remain *in-situ* for the duration of the project as per the detail above for phased works. The areas protected by barriers will be regarded as **sacrosanct**, and the tree protective barriers shall not be taken down or relocated at any time without the prior written approval of the Tree Officer of Buckinghamshire Council.

Figure 1: Protective barrier principles as recommended by BS5837:2012



<ol style="list-style-type: none"> 1. Standard scaffold poles 2. Uprights to be driven into the ground 3. Panels secured to uprights with wire ties and where necessary standard scaffold clamps 4. Weldmesh wired to the uprights and horizontals 5. Standard clamps 6. Wire twisted and secured on inside face of barriers to avoid easy dismantling 7. Ground level 8. Approximately 0.6m driven into the ground

Example of protective barriers:



Figure 2: Alternative tree protection barrier example as recommended by BS5837:2012

Figure 3 Examples of above-ground stabilizing systems

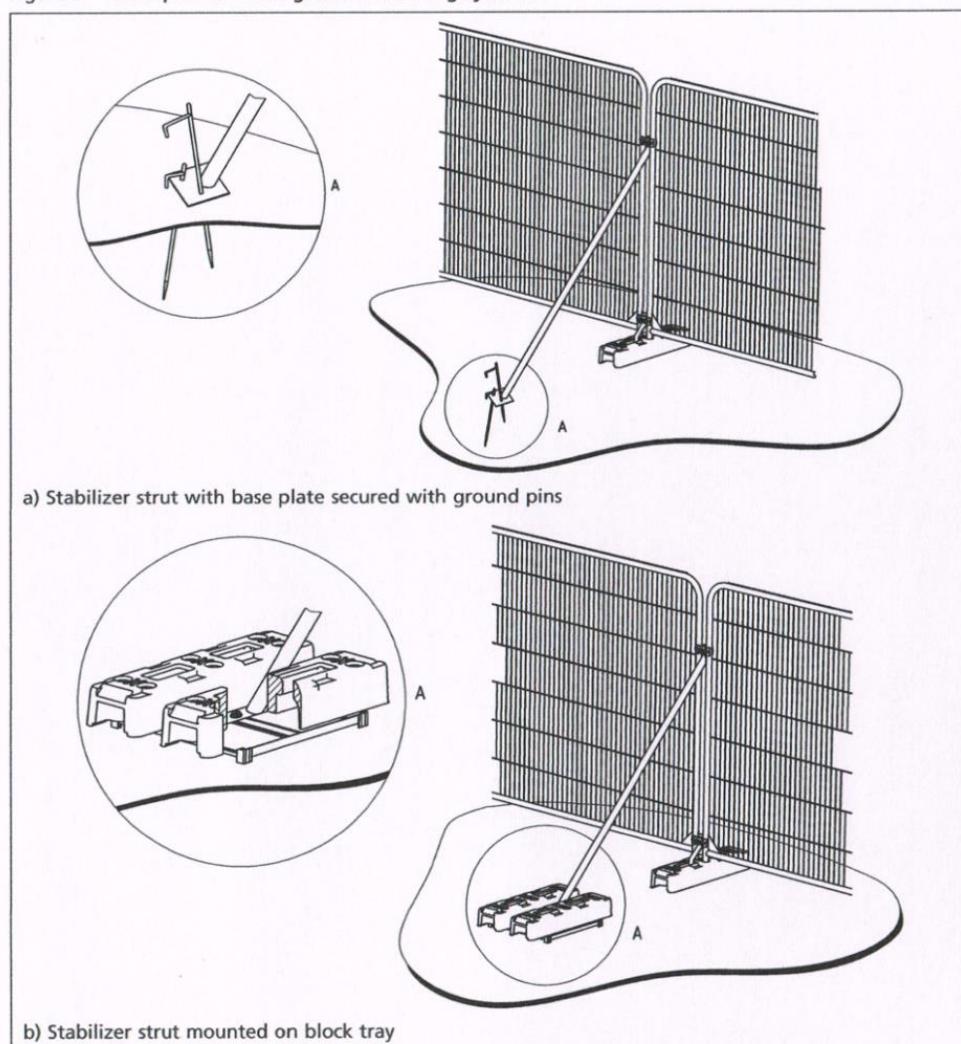
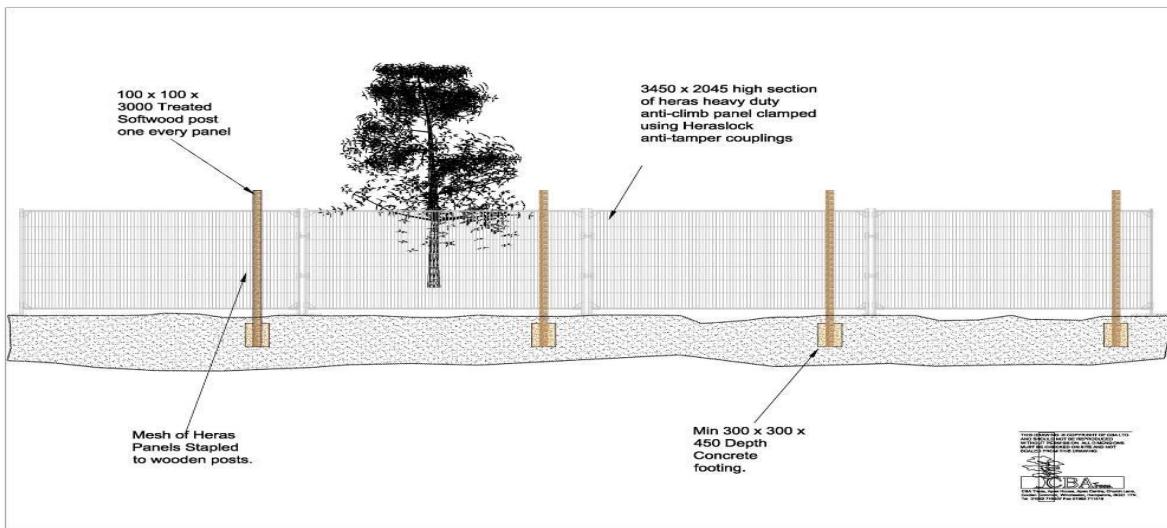


Figure 3: An example of a different specification of fit for purpose tree protection barrier



7.0 CONCLUSION

- 7.1 This Arboricultural Implications Assessment (AIA) is to provide for a pipeline route and lagoon at Thurlow Estate, Withersfield, Haverhill, CB9 7SW. The tree survey and report has been assessed broadly in accordance with BS5837:2012 “*Trees in Relation to Design, Demolition and Construction – Recommendations*”.
- 7.2 From an arboricultural view, it is important to ensure that mature trees are properly retained so that their rooting environment is minimally affected by site works to install the proposed pipeline and lagoon. The proposal avoids the larger, more dominant trees on the whole that were identified within the tree survey exercise and utilises existing field access points where possible to reduce the loss of trees and hedges.
- 7.3 The removal of a short section of Grp 2 is shown on CBA11636PL.02A TPP which will be required to facilitate the current pipeline design. This small section of Grp 2 will only be removed on confirmation and setting out of the pipeline route. Should the route avoid this section, then it will not need to be removed.
- 7.4 It is our opinion that the removal of the short section of Grp 2, should it occur, will not have a detrimental effect on the local visual amenity or significantly alter the visual tree character of the local area, given the exclusivity of the site.
- 7.5 With the correct and timely establishment and phasing of tree protection measures, it is our opinion that the retained trees, groups, hedges and woodland can be protected throughout the site works.
- 7.6 Provided the recommendations included within this report are strictly adhered to, CBA Trees believes the trees, groups, hedges and woodland highlighted for retention within this assessment can be retained without undue stress on their long-term health.







TREE SURVEY NOTES

This Tree Survey has been undertaken within the recommendations of British Standards 5837:2012 and current arboricultural best practice.

- Each tree has been numbered and, where instructed, for future identification on site, has been tagged using small durable metal or plastic tags.
- Due to variations of existing ground levels through the site, height dimensions are estimated and are given in metres. Accurate heights, measured with the aid of optical instruments can be provided where instructed.
- Trunk/stem diameters are measured in mm at 1.5 metres above ground level, using a standard measuring tape as defined by British Standards, unless otherwise stated.
- Estimated branch spread is taken in metres from the centre of the trunk, at the four cardinal points of a compass, to achieve an accurate representation of the crown shape which will be recorded on the tree survey plan.
- An assessment of a tree's age classification is made in terms of its maturity within the site's landscape and defined as:

Y = **young trees**
SM = **semi-mature trees**
EM = **early mature trees**
M = **mature trees**
OM = **over-mature trees**

- An assessment of a tree's physiological condition is defined as:
Good = **fully functioning biological system showing average vitality i.e. normal bud growth, leaf size, crown density and wound closure**
Fair = **fully functioning biological system showing below average vitality i.e. reduced bud growth, smaller leaf size, lower crown density and reduced wound closure**
Poor = **a biological system with limited functionality showing significantly below average vitality i.e. limited bud growth, small and chlorotic leaves, low crown density and limited wound closure**
Dead = **dead**
- An assessment of a tree's structural condition is defined as:
Good = **no significant structural defects**
Fair = **structural defects which could be alleviated through remedial tree surgery or management practices**
Poor = **structural defects which cannot be alleviated through tree surgery or management practices**
Dead = **dead**
- An assessment of a tree's future life expectancy is defined as: **<10, 10+, 20+ or 40+ years.**

Categorisation of Trees

The category for each tree is assessed using the recommendations of BS5837:2012. The assessment has not considered any site-specific development proposals, but will have considered any changes on or off-site which may have an effect on the conditions surrounding the surveyed trees.

The trees have been classified into one of the following categories (and one or more sub-categories [this will however not increase the value of the tree]) and are indicated on the associated drawings by colours as indicated.

Category U				Identification colour on plan
Trees 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	<ul style="list-style-type: none"> • 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 category U trees (e.g. 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 			DARK RED
Category A	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
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 those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant 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)	LIGHT GREEN
Category B	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
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 down-graded 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 value or other cultural value	MID BLUE
Category C	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	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 value	GREY

Clients are advised that Tree Surveys are a basic data collection exercise and record of tree condition at the time of survey. This will identify any visible signs of ill-health or major defects, advising a further detailed investigation where appropriate. This will most often take the form of a request for either *“full ground level inspection”* or *“climbing inspection required”*. There may also be a further reference to the need for *“decay detection equipment”* to aid diagnosis. A tree survey does not include a comprehensive schedule or specification of remedial tree works, but may contain a guide to the work which might be undertaken by a prudent tree owner, purely for reasons of health and safety.

A Tree Survey should not be confused with a Tree Inspection or Arboricultural Implication Assessment, which are totally separate exercises.

	TREE SURVEY REPORT (BS5837:2012)	
	Site:	Thurlow 2 Pipeline, Withersfield, Haverhill, CB9 7SW
	Date:	26th April 2022 (T1 to T3, Grp 1 & Grp 2, H1 & H2, W1) 28th March 2023
	Consultant:	Dominic Poston <i>F.Arbor.A, MICFor, CEnv, Prof Dip (RFS), BSc (Hons),HND</i> Joe Beznosiuk <i>Dip Arb L4 (ABC)</i>
	Tagged:	No
<p>Notes:</p> <ol style="list-style-type: none"> 1. It may be advised that some trees should have the ivy removed to enable a re-survey to be carried out. This would also alleviate the tree from becoming suppressed; carrying additional weight that increases the chance of windthrow due to a larger dense crown area; and only receiving restricted light. Unless otherwise stated, in order to prevent regrowth, it is only necessary to remove a 300mm section of ivy and clear around the base. 2. It may be advised that it was only possible to estimate the diameter of some trees because of ivy smothering, dense vegetation, or trees located off-site with no access. 3. The estimated remaining contribution in years, and the tree grading category have been calculated for the current situation and may alter where further investigation works are advised. 4. Some trees or groups may have been given an interim grade. The reason for the interim grading is addressed in the timescales given as this may have a bearing on health and safety and/or any development proposals. 5. Tree Groups have been assessed with estimated and representative data. 6. This is not a Tree Works Schedule. Any preliminary management recommendations are listed in the interests of health and safety and should be carried out by a prudent tree owner. 7. Any management recommendations are suggested for reasons of health and safety only, regardless of development proposals at this stage. However, the defects requiring remedial tree surgery are by their very nature potential wildlife habitats, including protected species which needs consideration prior to any tree surgery works commencing. 8. The data collected and any advice provided within this report is supplied in the interests of sound arboricultural management. Trees are a living dynamic organism that can be affected by external conditions (high winds, storms, snow, heavy rain or drought) and may occasionally fail without warning. It is therefore not possible to state with any certainty that any tree or group of trees is completely safe. The condition of a tree or group of trees can change rapidly as a result of external factors; we would advise that the occupier/owners inspect the trees at least every 12 months or following periods of extreme weather and where concerns are raised relating to tree health that would be considered beyond the knowledge of a layperson, further arboricultural advice should be sought. 		
<p>TREE PRESERVATION ORDER / CONSERVATION AREA STATUS:</p> <p>The interactive mapping facility on the West Suffolk District Council website indicates that there are no Tree Preservation Orders applicable to the site and it does not lie within a Conservation Area. However, online information is published for guidance and it is advised that written confirmation is sought from the LPA prior to undertaking any tree works.</p>		

Tree No	Species	H't (m)	Single/Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
T1	Common Ash <i>Fraxinus excelsior</i>	12	S	650	6.0	6.0	4.0	6.0	4.0	4.0	4.0	4.0	M	Fair	Fair Located on field side of deep ditch Major deadwood throughout	No works required at time of survey	20+	B2
T2	Pedunculate Oak <i>Quercus robur</i>	11	S	650	5.0	8.0	7.0	7.0	3.0	3.0	3.0	3.0	M	Good	Good Outgrown from hedge	No works required at time of survey	40+	A2
T3	Pedunculate Oak <i>Quercus robur</i>	8	S	600	3.0	4.0	5.0	3.0	2.0	2.0	2.0	2.0	M	Good	Fair Subordinate to T2	No works required at time of survey	40+	B2
T4	Hawthorn <i>Crataegus spp</i>	3	S	75	1.0	1.0	1.0	1.0	0.5	1.0	1.0	1.0	EM	Fair	Fair Small tree within base of ditch on west side Low amenity and landscape value	No works required at time of survey	10+	C1
T5	Ash <i>Fraxinus spp</i>	10	S	600	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	SM	Fair	Fair Tree within boundary hedge Low amenity and landscape value	No works required at time of survey	10+	C2
T6	Ash <i>Fraxinus spp</i>	12	S	700	3.0	3.0	4.0	3.0	3.0	3.0	3.0	3.0	SM	Fair	Fair Tree within boundary hedge Low amenity and landscape value Ivy covered	No works required at time of survey	10+	C2
T7	Ash <i>Fraxinus spp</i>	12	S	650	6.0	7.0	6.0	6.0	4.0	3.0	3.0	3.0	SM	Fair	Fair Tree within boundary hedge Low amenity and landscape value	No works required at time of survey	10+	C2

Tree No	Species	H't (m)	Single/Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
T8	Field Maple <i>Acer campestre</i>	8	S	350	3.0	4.0	4.0	4.0	4.0	3.5	3.5	3.5	EM	Fair	Fair Tree within boundary hedge Low amenity and landscape value	No works required at time of survey	10+	C2
T9	Ash <i>Fraxinus spp</i>	8	S	260	4.0	4.0	4.0	4.0	3.0	2.5	2.5	2.5	EM	Fair	Fair Tree within boundary hedge Low amenity and landscape value	No works required at time of survey	10+	C2
T10	Field Maple <i>Acer campestre</i>	12	S	550	7.0	6.0	7.0	7.0	3.0	4.0	3.0	3.0	SM	Fair	Good Collectively providing medium to high amenity and landscape value	No works required at time of survey	20+	B2
T11	Ash <i>Fraxinus spp</i>	12	S	500	7.0	7.0	7.0	6.0	2.5	3.0	2.5	2.5	SM	Fair	Good Collectively providing medium to high amenity and landscape value	No works required at time of survey	20+	B2
T12	Ash <i>Fraxinus spp</i>	17	S	250	5.0	4.0	4.0	5.0	3.0	3.0	2.0	3.0	SM	Fair	Fair Collectively providing medium to high amenity and landscape value	No works required at time of survey	10+	C2
T13	Field Maple <i>Acer campestre</i>	8	S	450	6.0	6.0	6.0	3.5	2.5	2.5	2.5	2.5	SM	Fair	Good Collectively providing medium to high amenity and landscape value	No works required at time of survey	20+	B2
T14	Field Maple <i>Acer campestre</i>	6	S	300	4.0	3.0	4.0	3.0	3.5	4.0	4.0	4.0	SM	Fair	Good Collectively providing medium to high amenity and landscape value	No works required at time of survey	20+	B2

Tree No	Species	H't (m)	Single/Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
T15	Ash <i>Fraxinus spp</i>	15	S	300	6.0	6.0	6.0	6.0	2.5	2.5	2.5	3.0	SM	Fair	Good Collectively providing medium to high amenity and landscape value	No works required at time of survey	20+	B2
T16	Ash <i>Fraxinus spp</i>	6	S	200	2.0	1.0	3.0	3.0	3.0	3.0	3.0	3.0	SM	Fair	Fair Collectively providing medium to high amenity and landscape value Heavily suppressed by adjacent tree	No works required at time of survey	10+	C2
T17	Ash <i>Fraxinus spp</i>	13	S	600	7.0	3.0	7.0	6.0	4.0	4.0	4.0	4.0	SM	Fair	Good Collectively providing medium to high amenity and landscape value	No works required at time of survey	10+	C2
T18	Ash <i>Fraxinus spp</i>	13	S	200	8.0	4.0	4.0	2.0	4.0	4.0	4.0	4.0	SM	Poor	Poor Dieback apparent Collectively providing high to medium amenity and landscape value	No works required at time of survey	10+	C2
T19	Field Maple <i>Acer campestre</i>	10	S	200	4.0	4.0	3.0	3.0	1.5	2.0	1.5	1.5	SM	Fair	Fair Dieback apparent Collectively providing high to medium amenity and landscape value	No works required at time of survey	10+	C2
T20	Field Maple <i>Acer campestre</i>	10	S	500	6.0	7.0	6.0	7.0	3.0	2.0	3.0	3.0	SM	Fair	Fair Dieback apparent Collectively providing high to medium amenity and landscape value	No works required at time of survey	10+	C2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
T21	Pedunculate Oak <i>Quercus robur</i>	16	S	800	8.0	7.0	8.0	8.0	3.0	2.0	3.0	3.0	M	Good	Good Medium to high amenity and landscape value provided Collective amenity and landscape value	No works required at time of survey	20+	B2
T22	Ash <i>Fraxinus spp</i>	12	S	300	5.0	4.0	4.0	4.0	3.0	3.0	3.0	2.0	Y	Fair	Fair Medium to high amenity and landscape value provided Collective amenity and landscape value	No works required at time of survey	10+	C2
T23	Pedunculate Oak <i>Quercus robur</i>	7	S	1100	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	OM/V	Good	Good Candidate veteran tree High amenity and landscape value	No works required at time of survey	20+	A1
T24	Pedunculate Oak <i>Quercus robur</i>	13	S	850	9.0	9.0	9.0	9.0	3.0	2.0	2.0	2.0	M	Good	Good Collectively providing medium to high landscape amenity value	No works required at time of survey	40+	B2
T25	Ash <i>Fraxinus spp</i>	10	S	250	4.0	4.0	3.0	3.0	3.0	2.5	2.5	2.5	Y	Fair	Fair Collectively providing medium to high landscape amenity value	No works required at time of survey	10+	C2
T26	Pedunculate Oak <i>Quercus robur</i>	16	S	850	9.0	9.0	9.0	9.0	2.0	3.0	3.0	3.0	M	Good	Good Collectively providing medium to high landscape amenity value	No works required at time of survey	20+	B2

Tree No	Species	H't (m)	Single/Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
T27	Ash <i>Fraxinus spp</i>	10	MS<5	370	6.0	6.0	6.0	6.0	2.0	3.0	3.0	3.0	SM	Poor	Poor Vitality and vigour Low amenity and landscape value provided	Advise removal	<10	U
T28	White Poplar <i>Populus alba</i>	16	S	800	10.0	10.0	10.0	10.0	3.0	3.0	3.0	3.0	M	Fair	Fair Crown dieback apparent High to medium amenity and landscape value provided	No works required at time of survey	10+	C1
T29	Ash <i>Fraxinus spp</i>	6	S	200	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	Y	Dead	Dead Low amenity and landscape value provided	Advise removal	-	U
T30	Ash <i>Fraxinus spp</i>	14	S	400	6.0	6.0	6.0	6.0	5.0	6.0	5.0	5.0	SM	Poor	Poor Dead/dying tree Adjacent to farm track Low amenity and landscape value	Advise removal	-	U
T31	Ash <i>Fraxinus spp</i>	13	S	500	7.0	7.0	7.0	7.0	3.0	3.0	3.0	2.0	SM	Fair	Fair <i>Inonotus</i> present on main stem Low amenity and landscape value	No works required at time of survey	10+	C2
T32	Willow <i>Salix spp</i>	14	S	900	10.0	10.0	10.0	10.0	3.0	3.0	2.0	3.0	M	Good	Good High to medium collective landscape and amenity value provided	No works required at time of survey	20+	B2
T33	Willow <i>Salix spp</i>	4	S	150	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	Y	Fair	Fair Multi-stemmed from ground level Low amenity and landscape value provided	No works required at time of survey	10+	C1

Tree No	Species	H't (m)	Single/Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
T34	Ash <i>Fraxinus spp</i>	7	S	100	2.0	2.0	2.0	2.0	4.0	2.5	4.0	4.0	Y	Fair	Fair Young tree within boundary hedge Low amenity and landscape value provided	No works required at time of survey	10+	C2
T35	Ash <i>Fraxinus spp</i>	14	MS<5	710	8.0	8.0	8.0	8.0	3.0	2.0	3.0	3.0	SM	Good	Good Collectively providing medium to high landscape amenity value	No works required at time of survey	20+	B2
T36	Ash <i>Fraxinus spp</i>	14	S	600	7.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	SM	Good	Good Collectively providing medium to high landscape amenity value	No works required at time of survey	20+	B2
T37	Ash <i>Fraxinus spp</i>	6	S	150	1.0	2.0	2.0	2.0	3.0	2.0	3.0	3.0	Y	Fair	Fair Low amenity and landscape value provided	No works required at time of survey	10+	C2
T38	Ash <i>Fraxinus spp</i>	8	S	750	8.0	8.0	8.0	8.0	1.0	1.5	1.0	1.0	SM	Fair	Fair Dense crown epicormics Collectively providing medium to high landscape and amenity value	No works required at time of survey	10+	C2
T39	Field Maple <i>Acer campestre</i>	5	S	100	1.0	1.0	1.0	1.0	2.5	2.0	2.5	2.5	Y	Fair	Fair Young tree within hedgerow Low amenity and landscape value	No works required at time of survey	10+	C2

Tree No	Species	H't (m)	Single/Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
T40	Ash <i>Fraxinus spp</i>	10	MS<5	380	4.0	4.0	4.0	4.0	2.0	2.0	3.0	3.0	SM	Poor	Poor Tree within hedgerow Low amenity and landscape value Crown dieback Adjacent to farm track	Advise removal	<10	U
T41	Ash <i>Fraxinus spp</i>	7	S	100	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	Y	Poor	Poor Tree within hedgerow Low amenity and landscape value Crown dieback Adjacent to farm track	Advise removal	<10	U
T42	Ash <i>Fraxinus spp</i>	20	S	650	12.0	12.0	12.0	12.0	2.0	2.0	2.0	3.5	SM	Good	Good High amenity and landscape value provided	No works required at time of survey	20+	B1
T43	Field Maple <i>Acer campestre</i>	10	S	300	5.0	5.0	5.0	5.0	1.0	1.5	1.5	1.5	SM	Fair	Fair Collectively providing medium to high amenity and landscape value	No works required at time of survey	10+	C1
T44	Pedunculate Oak <i>Quercus robur</i>	11	S	680	6.0	6.0	7.0	6.0	3.5	3.5	3.5	3.5	SM	Good	Good Adjacent to field boundary Collectively providing high amenity and landscape value	No works required at time of survey	40+	B2
T45	Pedunculate Oak <i>Quercus robur</i>	9	S	500	7.0	6.0	7.0	7.0	3.0	3.0	3.0	3.0	SM	Good	Good Adjacent to field boundary Collectively providing high amenity and landscape value Basal cavity facing south with extensive decay within	No works required at time of survey	20+	B2

Tree No	Species	H't (m)	Single/Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
T46	Pedunculate Oak <i>Quercus robur</i>	12	MS<5	710	7.0	10.0	10.0	10.0	3.5	4.0	3.5	3.5	SM	Good	Good Adjacent to field boundary Collectively providing high amenity and landscape value	No works required at time of survey	40+	A2
T47	Pedunculate Oak <i>Quercus robur</i>	10	MS<5	730	8.0	8.0	6.0	8.0	4.0	3.0	4.0	4.0	SM	Good	Good Adjacent to field boundary Collectively providing high amenity and landscape value	No works required at time of survey	20+	B2
T48	Poplar <i>Populus spp</i>	8	S	180	2.0	2.0	2.0	2.0	3.0	3.5	3.5	3.0	Y	Fair	Fair Young tree Low amenity and landscape value provided	No works required at time of survey	10+	C1
Grp 1	Mixed species	12	S/MS	500	-	-	-	-	-	-	-	-	M	Fair	Fair Dense group of mixed deciduous trees but predominantly Ash located far side of deep ditch/watercourse and over what appears to be a redundant railway embankment Good screening value from south	No works required at time of survey	40+	B2
Grp 2	Mixed species: Common Oak Common Ash Maple Thorn	12	S	700	-	-	-	-	-	-	-	-	M	Good	Good Shelter belt of secondary woodland consisting of mixed broadleaved species Predominantly Oak but with Thorn, Ash and Maple Good screening value from north	No works required at time of survey	40+	A2

Tree No	Species	H't (m)	Single/Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
Grp 3	Elder Rose Hawthorn	3	S	30	-	-	-	-	-	-	-	-	Y	Fair	Fair Scrub/bramble Low amenity and landscape value	No works required at time of survey	10+	C1
Grp 4	Pedunculate Oak Ash	16	MS<5	810	-	-	-	-	-	-	-	-	SM/M	Good	Good Medium to high landscape and amenity value provided Collective amenity and landscape value	No works required at time of survey	20+	B2
Grp 5	Ash Pedunculate Oak	10	MS<5	510	-	-	-	-	-	-	-	-	Y	Good	Good Collectively providing medium to high landscape amenity value	No works required at time of survey	20+	B2
Grp 6	Ash	10	MS<5	490	-	-	-	-	-	-	-	-	EM	Fair	Fair Collectively providing medium to high landscape amenity value	No works required at time of survey	10+	C2
Grp 7	Pedunculate Oak	16	MS<5	1260	-	-	-	-	-	-	-	-	SM	Good	Good Collectively providing high amenity and landscape value	No works required at time of survey	40+	B2
Grp 8	Ash Field Maple	7	S	150	-	-	-	-	-	-	-	-	Y	Fair	Fair Three young trees within hedgerow Collectively providing low to medium landscape and amenity value	No works required at time of survey	10+	C2

Tree No	Species	H't (m)	Single/Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
Grp 9	Ash Field Maple Scrub	6	S	150	-	-	-	-	-	-	-	-	Y	Fair	Fair Three trees with scrub area Low amenity and landscape value provided	No works required at time of survey	10+	C2
W1	Mixed species: Poplar	16	S	600	-	-	-	-	-	-	-	-	M	Good	Good Dense area of mixed deciduous species but with apex species being predominantly Poplar Good screening value from south	No works required at time of survey	40+	A2
H1	Mixed species: Maple Elm Common Oak Thorn	10	S	500	-	-	-	-	-	-	-	-	M	Good	Good Mixed native hedgerow including Thorn, Maple, Elm, Oak Lapsed from normal management but faced back from field boundary	No works required at time of survey	40+	B2
H2	Mixed species	3	S	200	-	-	-	-	-	-	-	-	SM	Fair	Fair Intermittent native hedgerow with dense bramble ingress Predominantly Thorn	No works required at time of survey	20+	C2
H3	Hawthorn	3	-	80	-	-	-	-	-	-	-	-	SM	Fair	Fair Boundary hedge to west side of ditch Trees present within Low amenity and landscape value	No works required at time of survey	20+	C2

Tree No	Species	H't (m)	Single/Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
H4	Hawthorn	0.5	-	80	-	-	-	-	-	-	-	-	Y	Fair	Fair Layed hedge Low amenity and landscape value provided	No works required at time of survey	10+	C1
H5	Hawthorn	3	-	75	-	-	-	-	-	-	-	-	SM	Fair	Fair Low amenity and landscape value provided	No works required at time of survey	10+	C1
H6	Hawthorn	3	-	100	-	-	-	-	-	-	-	-	SM	Good	Good Medium to high landscape and amenity value provided	No works required at time of survey	10+	B2
H7	Hawthorn	3	-	100	-	-	-	-	-	-	-	-	SM	Good	Good Collectively providing medium to high landscape amenity value	No works required at time of survey	20+	B2
H8	Hawthorn	3	-	100	-	-	-	-	-	-	-	-	SM	Fair	Fair Field boundary hedge Medium to low amenity and landscape value provided	No works required at time of survey	10+	C2
H9	Hawthorn	3	-	100	-	-	-	-	-	-	-	-	SM	Fair	Fair Field boundary hedge Medium to low amenity and landscape value provided	No works required at time of survey	10+	C2
H10	Hawthorn	3	-	100	-	-	-	-	-	-	-	-	SM	Fair	Fair Field boundary hedge Medium to low amenity and landscape value provided	No works required at time of survey	10+	C2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
H11	Hawthorn	3	-	100	-	-	-	-	-	-	-	-	SM	Fair	Fair Field boundary hedge Medium to low amenity and landscape value provided	No works required at time of survey	10+	C2
H12	Hawthorn	3	-	100	-	-	-	-	-	-	-	-	SM	Fair	Fair Field boundary hedge Medium to low amenity and landscape value provided	No works required at time of survey	10+	C2
H13	Hawthorn	3	-	100	-	-	-	-	-	-	-	-	SM	Good	Good Well maintained field boundary hedge High to medium landscape and amenity value provided	No works required at time of survey	20+	B2
H14	Hawthorn	3	-	100	-	-	-	-	-	-	-	-	SM	Good	Good Well maintained field boundary hedge High to medium landscape and amenity value provided	No works required at time of survey	20+	B2
H15	Hawthorn	3	-	100	-	-	-	-	-	-	-	-	SM	Good	Good Well maintained field boundary hedge High to medium landscape and amenity value provided	No works required at time of survey	20+	B2
H16	Hawthorn	3	-	100	-	-	-	-	-	-	-	-	SM	Good	Good Well maintained field boundary hedge High to medium landscape and amenity value provided	No works required at time of survey	20+	B2

Tree No	Species	H't (m)	Single/Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
H17	Hazel Maple Blackthorn	4	-	150	-	-	-	-	-	-	-	-	SM	Poor	Poor Low amenity and landscape value provided	No works required at time of survey	10+	C2

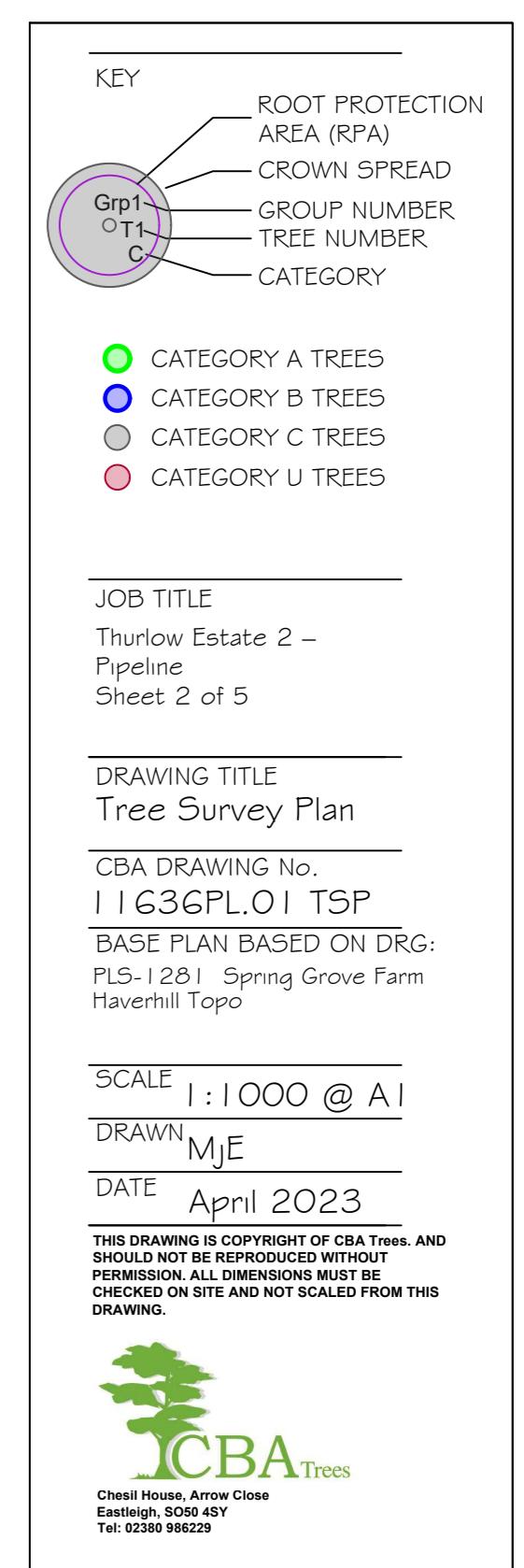
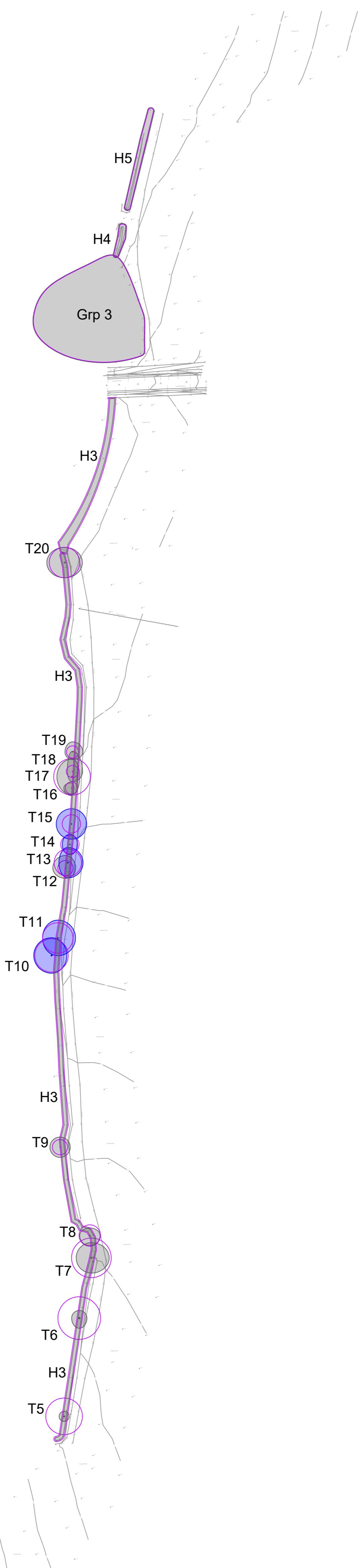
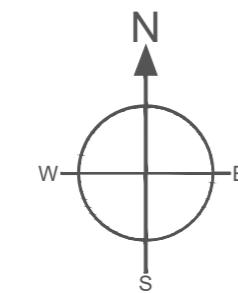


NOTI

1. Shading Arcs not shown on this plan.
2. Root Protection Areas are shown as a theoretical circle and at this stage do not take into account site features and constraints.
3. The original of this drawing was produced in colour, a monochrome copy should not be relied upon.
4. The West Suffolk Council interactive map shows that at the time of the enquiry there are no Tree Preservation Orders on site and the site is not located within a Conservation Area.



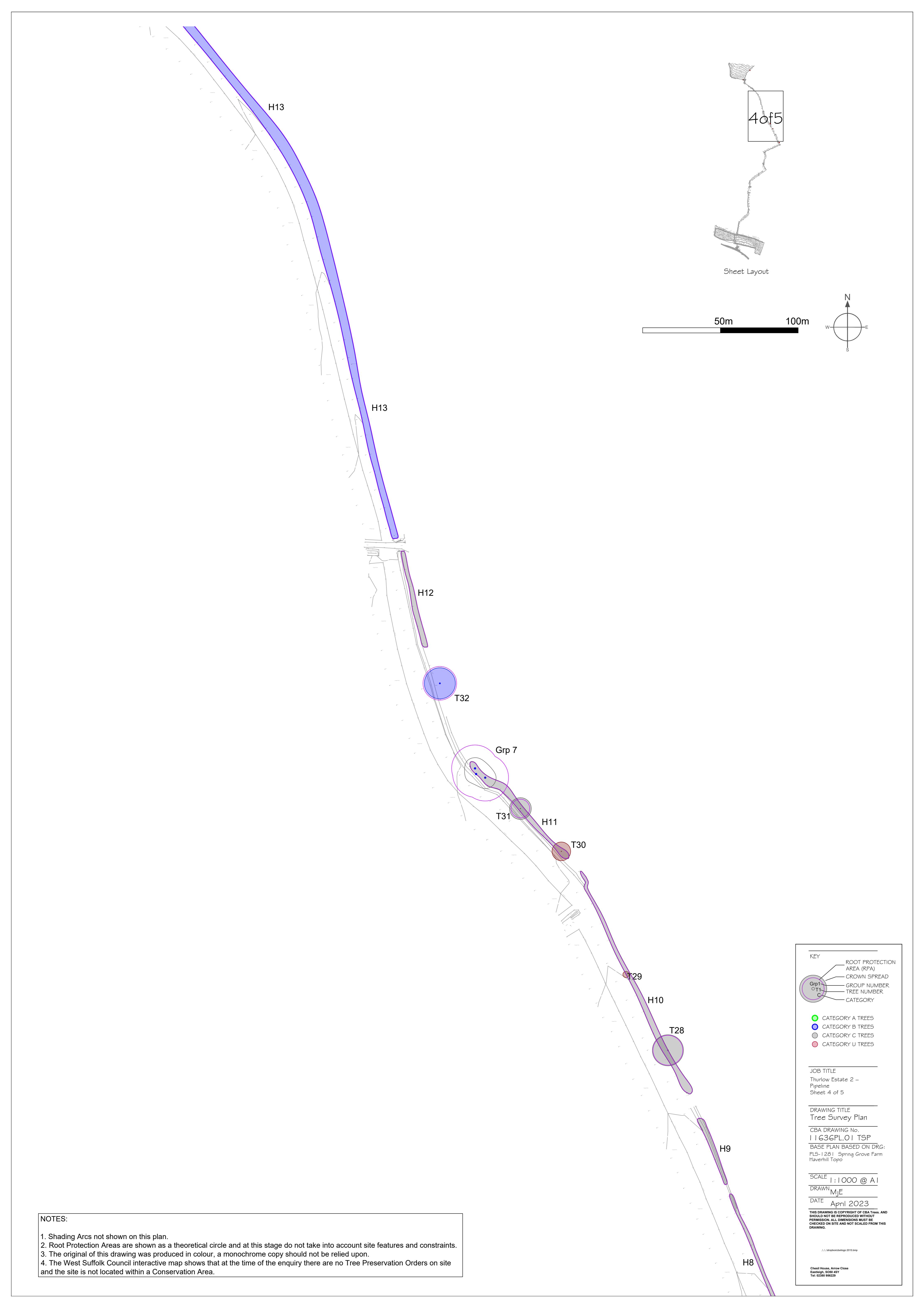
Sheet Layout

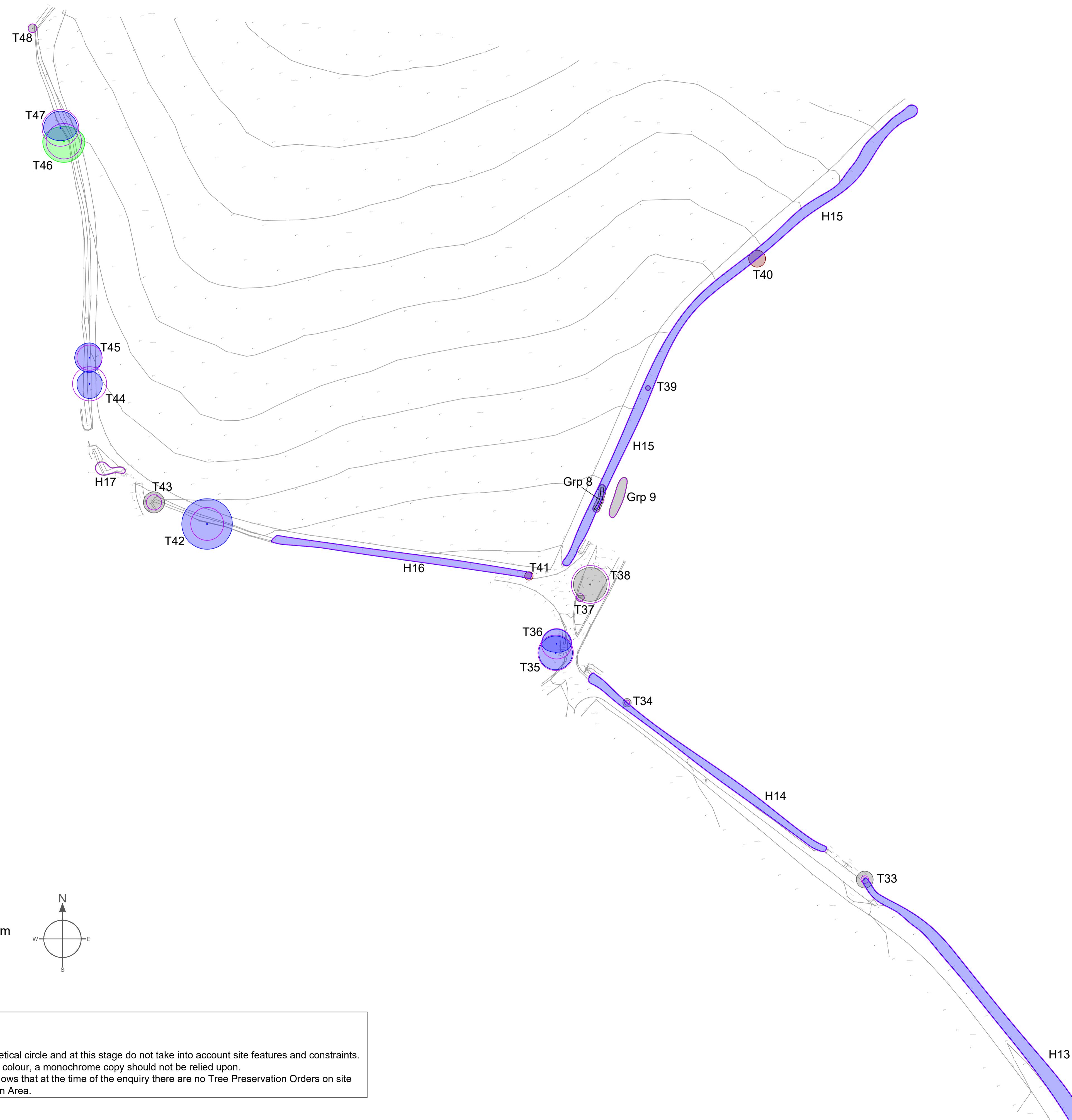


NOTES:

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4. The West Suffolk Council interactive map shows that at the time of the enquiry there are no Tree Preservation Orders on site and the site is not located within a Conservation Area.







KEY

Root Protection Area (RPA)
 Crown Spread
 Group Number
 Tree Number
 Category

 Category A Trees
 Category B Trees
 Category C Trees
 Category U Trees

JOB TITLE
 Thurlow Estate 2 - Pipeline
 Sheet 5 of 5

DRAWING TITLE
 Tree Survey Plan

CBA DRAWING NO.
 1163GPL.01 TSP

BASE PLAN BASED ON DRG:
 PLS-1281 Spring Grove Farm
 Haverhill Topo

SCALE 1:1000 @ A1

DRAWN MJE

DATE April 2023

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 Chest House, Arrow Close
 Eastleigh, SO36 4SY
 Tel: 02380 996229



	BS5837:2012 TREE ROOT PROTECTION AREA SCHEDULE						
	Site:	Thurlow 2 Pipeline, Withersfield, Haverhill, CB9 7SW					
	Date:	26th April 2022 (T1 to T3, Grp 1 & Grp 2, H1 & H2, W1) 28th March 2023					
	Consultant:	Dominic Poston F.Arbor.A, MICFor, CEnv, Prof Dip (RFS), BSc (Hons),HND Joe Beznosiuk Dip Arb L4 (ABC)					
<p>Notes:</p> <ol style="list-style-type: none"> 1. This is an assessment of the Root Protection Area (RPA) required, based on the individual tree data collected and Section 4.6.1 of BS5837:2012. 2. For all single stem trees with a stem diameter greater than 1250mm, and multi-stem trees with a stem diameter greater than 1500mm, the calculated RPA has been capped at 707m² in accordance with Section 4.6.1 of BS5837.2012. 							
<p>TREE PRESERVATION ORDER / CONSERVATION AREA STATUS:</p> <p>The interactive mapping facility on the West Suffolk District Council website indicates that there are no Tree Preservation Orders applicable to the site and it does not lie within a Conservation Area. However, online information is published for guidance and it is advised that written confirmation is sought from the LPA prior to undertaking any tree works.</p>							
Tree No	Species	Category	Single/ Multi-Stemmed (S or MS)	Stem Diameter (mm)	Initial Linear Root Protection Distance (Radius m)	Root Protection Area (m ²)	
T1	Common Ash <i>Fraxinus excelsior</i>	B2	S	650	7.8	191	
T2	Pedunculate Oak <i>Quercus robur</i>	A2	S	650	7.8	191	
T3	Pedunculate Oak <i>Quercus robur</i>	B2	S	600	7.2	163	
T4	Hawthorn <i>Crataegus spp</i>	C1	S	75	0.9	3	
T5	Ash <i>Fraxinus spp</i>	C2	S	600	7.2	163	
T6	Ash <i>Fraxinus spp</i>	C2	S	700	8.4	222	
T7	Ash <i>Fraxinus spp</i>	C2	S	650	7.8	191	

Tree No	Species	Category	Single/ Multi-Stemmed (S or MS)	Stem Diameter (mm)	Initial Linear Root Protection Distance (Radius m)	Root Protection Area (m ²)
T8	Field Maple <i>Acer campestre</i>	C2	S	350	4.2	55
T9	Ash <i>Fraxinus spp</i>	C2	S	260	3.1	31
T10	Field Maple <i>Acer campestre</i>	B2	S	550	6.6	137
T11	Ash <i>Fraxinus spp</i>	B2	S	500	6.0	113
T12	Ash <i>Fraxinus spp</i>	C2	S	250	3.0	28
T13	Field Maple <i>Acer campestre</i>	B2	S	450	5.4	92
T14	Field Maple <i>Acer campestre</i>	B2	S	300	3.6	41
T15	Ash <i>Fraxinus spp</i>	B2	S	300	3.6	41
T16	Ash <i>Fraxinus spp</i>	C2	S	200	2.4	18
T17	Ash <i>Fraxinus spp</i>	C2	S	600	7.2	163
T18	Ash <i>Fraxinus spp</i>	C2	S	200	2.4	18
T19	Field Maple <i>Acer campestre</i>	C2	S	200	2.4	18
T20	Field Maple <i>Acer campestre</i>	C2	S	500	6.0	113
T21	Pedunculate Oak <i>Quercus robur</i>	B2	S	800	9.6	290
T22	Ash <i>Fraxinus spp</i>	C2	S	300	3.6	41
T23	Pedunculate Oak <i>Quercus robur</i>	A1	S	1100	13.2	547
T24	Pedunculate Oak <i>Quercus robur</i>	B2	S	850	10.2	327

Tree No	Species	Category	Single/ Multi-Stemmed (S or MS)	Stem Diameter (mm)	Initial Linear Root Protection Distance (Radius m)	Root Protection Area (m2)
T25	Ash <i>Fraxinus spp</i>	C2	S	250	3.0	28
T26	Pedunculate Oak <i>Quercus robur</i>	B2	S	850	10.2	327
T27	Ash <i>Fraxinus spp</i>	U	MS<5	370	-	-
T28	White Poplar <i>Populus alba</i>	C1	S	800	9.6	290
T29	Ash <i>Fraxinus spp</i>	U	S	200	-	-
T30	Ash <i>Fraxinus spp</i>	U	S	400	-	-
T31	Ash <i>Fraxinus spp</i>	C2	S	500	6.0	113
T32	Willow <i>Salix spp</i>	B2	S	900	10.8	366
T33	Willow <i>Salix spp</i>	C1	S	150	1.8	10
T34	Ash <i>Fraxinus spp</i>	C2	S	100	1.2	5
T35	Ash <i>Fraxinus spp</i>	B2	MS<5	710	8.5	228
T36	Ash <i>Fraxinus spp</i>	B2	S	600	7.2	163
T37	Ash <i>Fraxinus spp</i>	C2	S	150	1.8	10
T38	Ash <i>Fraxinus spp</i>	C2	S	750	9.0	255
T39	Field Maple <i>Acer campestre</i>	C2	S	100	1.2	5
T40	Ash <i>Fraxinus spp</i>	U	MS<5	380	-	-
T41	Ash <i>Fraxinus spp</i>	U	S	100	-	-

Tree No	Species	Category	Single/ Multi-Stemmed (S or MS)	Stem Diameter (mm)	Initial Linear Root Protection Distance (Radius m)	Root Protection Area (m ²)
T42	Ash <i>Fraxinus spp</i>	B1	S	650	7.8	191
T43	Field Maple <i>Acer campestre</i>	C1	S	300	3.6	41
T44	Pedunculate Oak <i>Quercus robur</i>	B2	S	680	8.2	209
T45	Pedunculate Oak <i>Quercus robur</i>	B2	S	500	6.0	113
T46	Pedunculate Oak <i>Quercus robur</i>	A2	MS<5	710	8.5	228
T47	Pedunculate Oak <i>Quercus robur</i>	B2	MS<5	730	8.8	241
T48	Poplar <i>Populus spp</i>	C1	S	180	2.2	15
Grp 1	Mixed species	B2	S/MS	500	6.0	113
Grp 2	Mixed species: Common Oak Common Ash Maple Thorn	A2	S	700	8.4	222
Grp 3	Elder Rose Hawthorn	C1	S	30	0.4	0
Grp 4	Pedunculate Oak Ash	B2	MS<5	810	9.7	297
Grp 5	Ash Pedunculate Oak	B2	MS<5	510	6.1	118
Grp 6	Ash	C2	MS<5	490	5.9	109
Grp 7	Pedunculate Oak	B2	MS<5	1260	15.0	707

Tree No	Species	Category	Single/ Multi-Stemmed (S or MS)	Stem Diameter (mm)	Initial Linear Root Protection Distance (Radius m)	Root Protection Area (m ²)
Grp 8	Ash Field Maple	C2	S	150	1.8	10
Grp 9	Ash Field Maple Scrub	C2	S	150	1.8	10
W1	Mixed species: Poplar	A2	S	600	7.2	163
H1	Mixed species: Maple Elm Common Oak Thorn	B2	S	500	6.0	113
H2	Mixed species	C2	S	200	2.4	18
H3	Hawthorn	C2	-	80	1.0	3
H4	Hawthorn	C1	-	80	1.0	3
H5	Hawthorn	C1	-	75	0.9	3
H6	Hawthorn	B2	-	100	1.2	5
H7	Hawthorn	B2	-	100	1.2	5
H8	Hawthorn	C2	-	100	1.2	5
H9	Hawthorn	C2	-	100	1.2	5
H10	Hawthorn	C2	-	100	1.2	5
H11	Hawthorn	C2	-	100	1.2	5

Tree No	Species	Category	Single/ Multi-Stemmed (S or MS)	Stem Diameter (mm)	Initial Linear Root Protection Distance (Radius m)	Root Protection Area (m2)
H12	Hawthorn	C2	-	100	1.2	5
H13	Hawthorn	B2	-	100	1.2	5
H14	Hawthorn	B2	-	100	1.2	5
H15	Hawthorn	B2	-	100	1.2	5
H16	Hawthorn	B2	-	100	1.2	5
H17	Hazel Maple Blackthorn	C2	-	150	1.8	10



 CBA Trees	TREE WORKS SCHEDULE		
	Site:	Pipeline Route, Thurlow 2, Withersfield, Haverhill, CB9 7SW	
	Date:	April 2023	Consultant: Joe Beznosiuk <i>Dip.Arb L4 (ABC)</i>

Works detailed below relate to the installation of the Pipeline works.

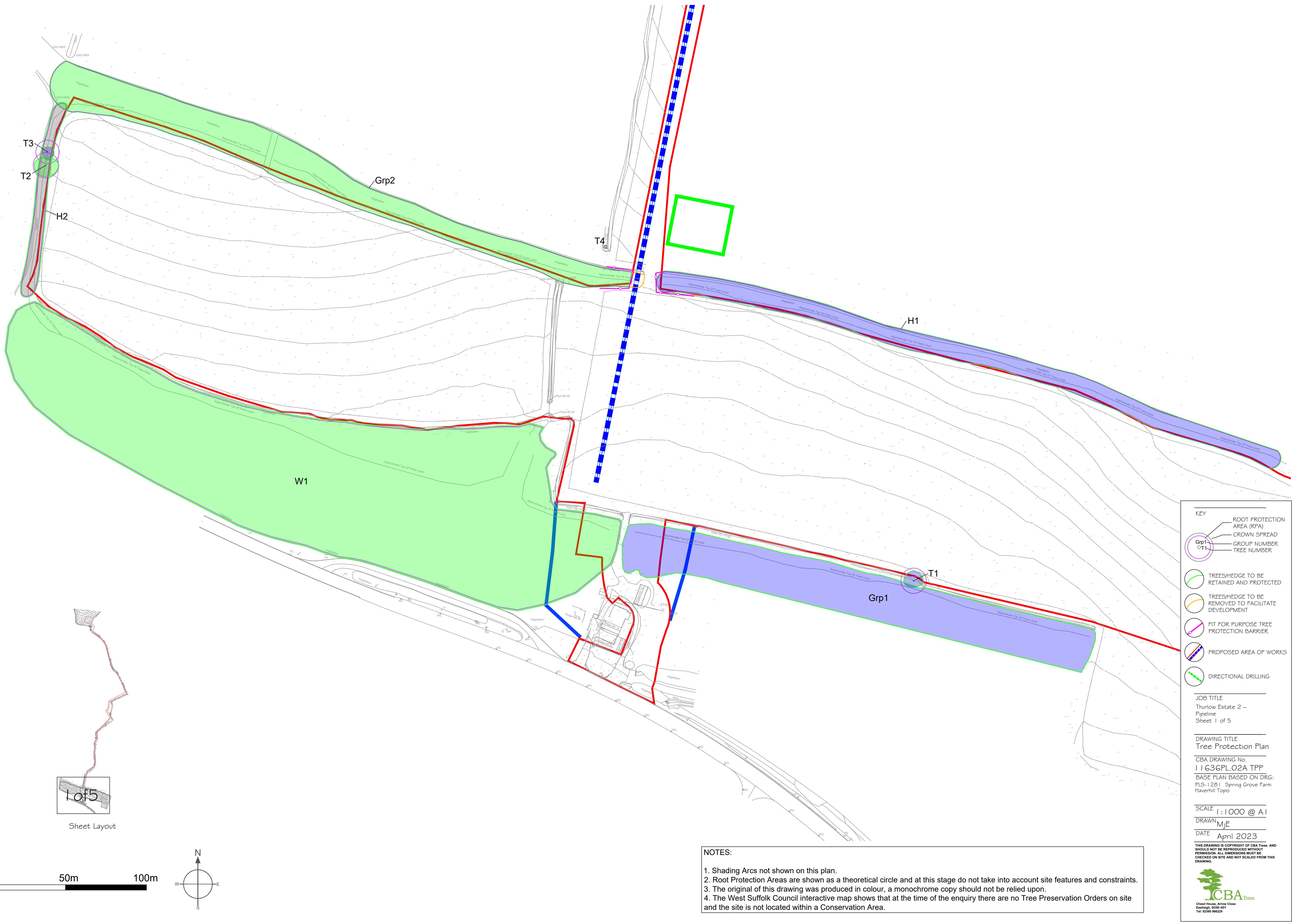
Tree No.	Species	Recommended Works
T1	Common Ash <i>Fraxinus excelsior</i>	<ul style="list-style-type: none"> None required for planning application
T2	Pedunculate Oak <i>Quercus robur</i>	<ul style="list-style-type: none"> None required for planning application
T3	Pedunculate Oak <i>Quercus robur</i>	<ul style="list-style-type: none"> None required for planning application
T4	Hawthorn <i>Crataegus spp</i>	<ul style="list-style-type: none"> None required for planning application
T5	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> None required for planning application
T6	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> None required for planning application
T7	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> None required for planning application
T8	Field Maple <i>Acer campestre</i>	<ul style="list-style-type: none"> None required for planning application
T9	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> None required for planning application
T10	Field Maple <i>Acer campestre</i>	<ul style="list-style-type: none"> None required for planning application
T11	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> None required for planning application
T12	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> None required for planning application
T13	Field Maple <i>Acer campestre</i>	<ul style="list-style-type: none"> None required for planning application
T14	Field Maple <i>Acer campestre</i>	<ul style="list-style-type: none"> None required for planning application
T15	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> None required for planning application
T16	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> None required for planning application
T17	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> None required for planning application
T18	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> None required for planning application
T19	Field Maple <i>Acer campestre</i>	<ul style="list-style-type: none"> None required for planning application
T20	Field Maple <i>Acer campestre</i>	<ul style="list-style-type: none"> None required for planning application
T21	Pedunculate Oak <i>Quercus robur</i>	<ul style="list-style-type: none"> None required for planning application
T22	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> None required for planning application
T23	Pedunculate Oak <i>Quercus robur</i>	<ul style="list-style-type: none"> None required for planning application

Tree No.	Species	Recommended Works
T24	Pedunculate Oak <i>Quercus robur</i>	<ul style="list-style-type: none"> • None required for planning application
T25	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> • None required for planning application
T26	Pedunculate Oak <i>Quercus robur</i>	<ul style="list-style-type: none"> • None required for planning application
T27	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> • None required for planning application
T28	White Poplar <i>Populus alba</i>	<ul style="list-style-type: none"> • None required for planning application
T29	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> • None required for planning application
T30	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> • None required for planning application
T31	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> • None required for planning application
T32	Willow <i>Salix spp</i>	<ul style="list-style-type: none"> • None required for planning application
T33	Willow <i>Salix spp</i>	<ul style="list-style-type: none"> • None required for planning application
T34	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> • None required for planning application
T35	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> • None required for planning application
T36	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> • None required for planning application
T37	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> • None required for planning application
T38	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> • None required for planning application
T39	Field Maple <i>Acer campestre</i>	<ul style="list-style-type: none"> • None required for planning application
T40	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> • None required for planning application
T41	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> • None required for planning application
T42	Ash <i>Fraxinus spp</i>	<ul style="list-style-type: none"> • None required for planning application
T43	Field Maple <i>Acer campestre</i>	<ul style="list-style-type: none"> • None required for planning application
T44	Pedunculate Oak <i>Quercus robur</i>	<ul style="list-style-type: none"> • None required for planning application
T45	Pedunculate Oak <i>Quercus robur</i>	<ul style="list-style-type: none"> • None required for planning application
T46	Pedunculate Oak <i>Quercus robur</i>	<ul style="list-style-type: none"> • None required for planning application
T47	Pedunculate Oak <i>Quercus robur</i>	<ul style="list-style-type: none"> • None required for planning application
T48	Poplar <i>Populus spp</i>	<ul style="list-style-type: none"> • None required for planning application
Grp 1	Mixed species	<ul style="list-style-type: none"> • None required for planning application
Grp 2	Mixed species: Common Oak Common Ash Maple Thorn	<ul style="list-style-type: none"> • Partial removal required as shown on tree protection plan (CBA11636PL.02 TPP) subject to setting out and confirmation of pipeline route

Tree No.	Species	Recommended Works
Grp 3	Elder Rose Hawthorn	<ul style="list-style-type: none"> • None required for planning application
Grp 4	Pedunculate Oak Ash	<ul style="list-style-type: none"> • None required for planning application
Grp 5	Ash Pedunculate Oak	<ul style="list-style-type: none"> • None required for planning application
Grp 6	Ash	<ul style="list-style-type: none"> • None required for planning application
Grp 7	Pedunculate Oak	<ul style="list-style-type: none"> • None required for planning application
Grp 8	Ash Field Maple	<ul style="list-style-type: none"> • Partial removal required as shown on tree protection plan (CBA11636PL.02 TPP) subject to setting out and confirmation of pipeline route
Grp 9	Ash Field Maple Scrub	<ul style="list-style-type: none"> • Partial removal required as shown on tree protection plan (CBA11636PL.02 TPP) subject to setting out and confirmation of pipeline route
W1	Mixed species: Poplar	<ul style="list-style-type: none"> • None required for planning application
H1	Mixed species: Maple Elm Common Oak Thorn	<ul style="list-style-type: none"> • None required for planning application
H2	Mixed species	<ul style="list-style-type: none"> • None required for planning application
H3	Hawthorn	<ul style="list-style-type: none"> • None required for planning application
H4	Hawthorn	<ul style="list-style-type: none"> • None required for planning application
H5	Hawthorn	<ul style="list-style-type: none"> • None required for planning application
H6	Hawthorn	<ul style="list-style-type: none"> • None required for planning application
H7	Hawthorn	<ul style="list-style-type: none"> • None required for planning application
H8	Hawthorn	<ul style="list-style-type: none"> • None required for planning application
H9	Hawthorn	<ul style="list-style-type: none"> • None required for planning application
H10	Hawthorn	<ul style="list-style-type: none"> • None required for planning application
H11	Hawthorn	<ul style="list-style-type: none"> • None required for planning application
H12	Hawthorn	<ul style="list-style-type: none"> • None required for planning application
H13	Hawthorn	<ul style="list-style-type: none"> • None required for planning application
H14	Hawthorn	<ul style="list-style-type: none"> • Partial removal required as shown on tree protection plan (CBA11636PL.02 TPP) subject to setting out and confirmation of pipeline route
H15	Hawthorn	<ul style="list-style-type: none"> • Partial removal required as shown on tree protection plan (CBA11636PL.02 TPP) subject to setting out and confirmation of pipeline route
H16	Hawthorn	<ul style="list-style-type: none"> • None required for planning application
H17	Hazel Maple Blackthorn	<ul style="list-style-type: none"> • None required for planning application

- It is advised that all remedial tree works such as pruning is carried out between July and September or November and February. Tree works should also avoid the season for nesting birds.
- All tree works should be carried out in accordance with current best practice guidelines and BS3998: 2010 – Tree Works. Only natural target pruning method to be used.
- We recommend the use of an Arboricultural Association Approved Contractor or an ISA Certified Arborist/Tree Worker suitably insured and experienced to carry out the tree works.



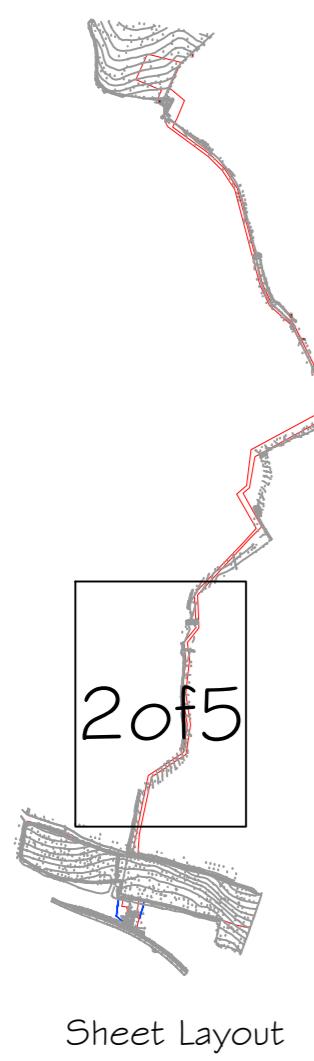


NOTE

1. Shading Arcs not shown on this plan.
2. Root Protection Areas are shown as a theoretical circle and at this stage do not take into account site features and constraints.
3. The original of this drawing was produced in colour, a monochrome copy should not be relied upon.
4. The West Suffolk Council interactive map shows that at the time of the enquiry there are no Tree Preservation Orders on site and the site is not located within a Conservation Area.

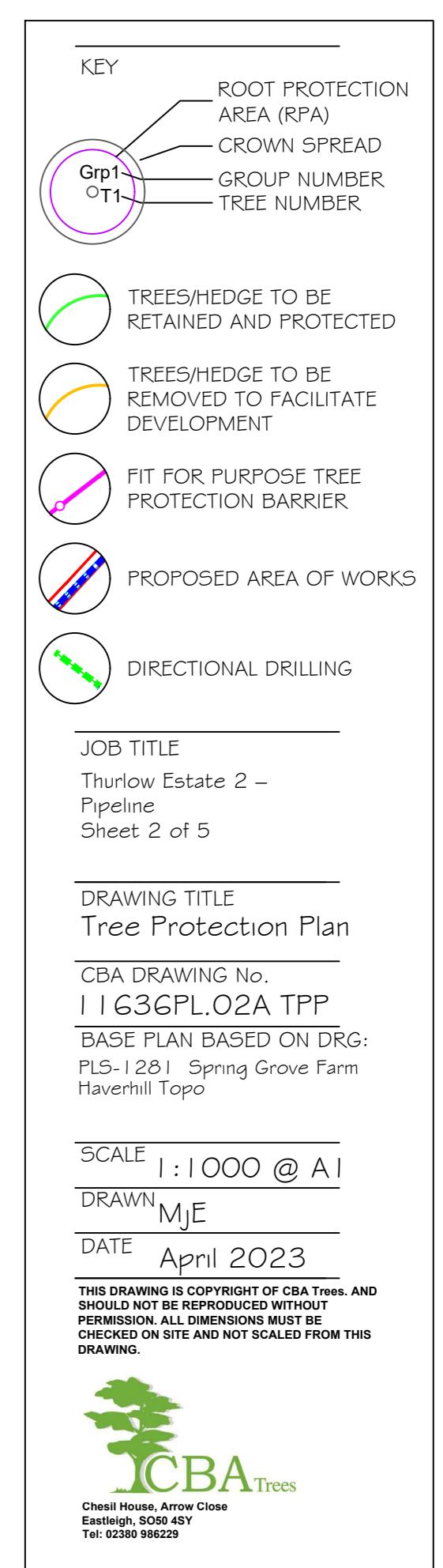
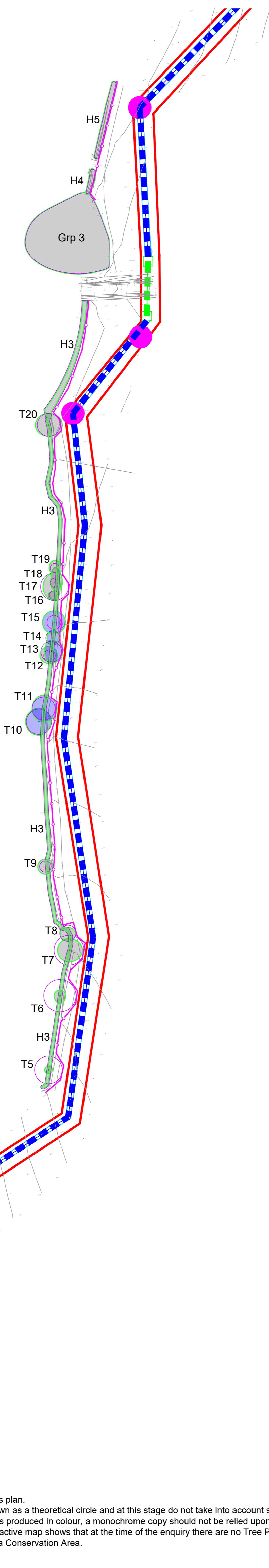
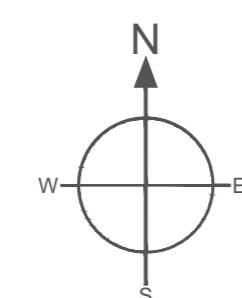
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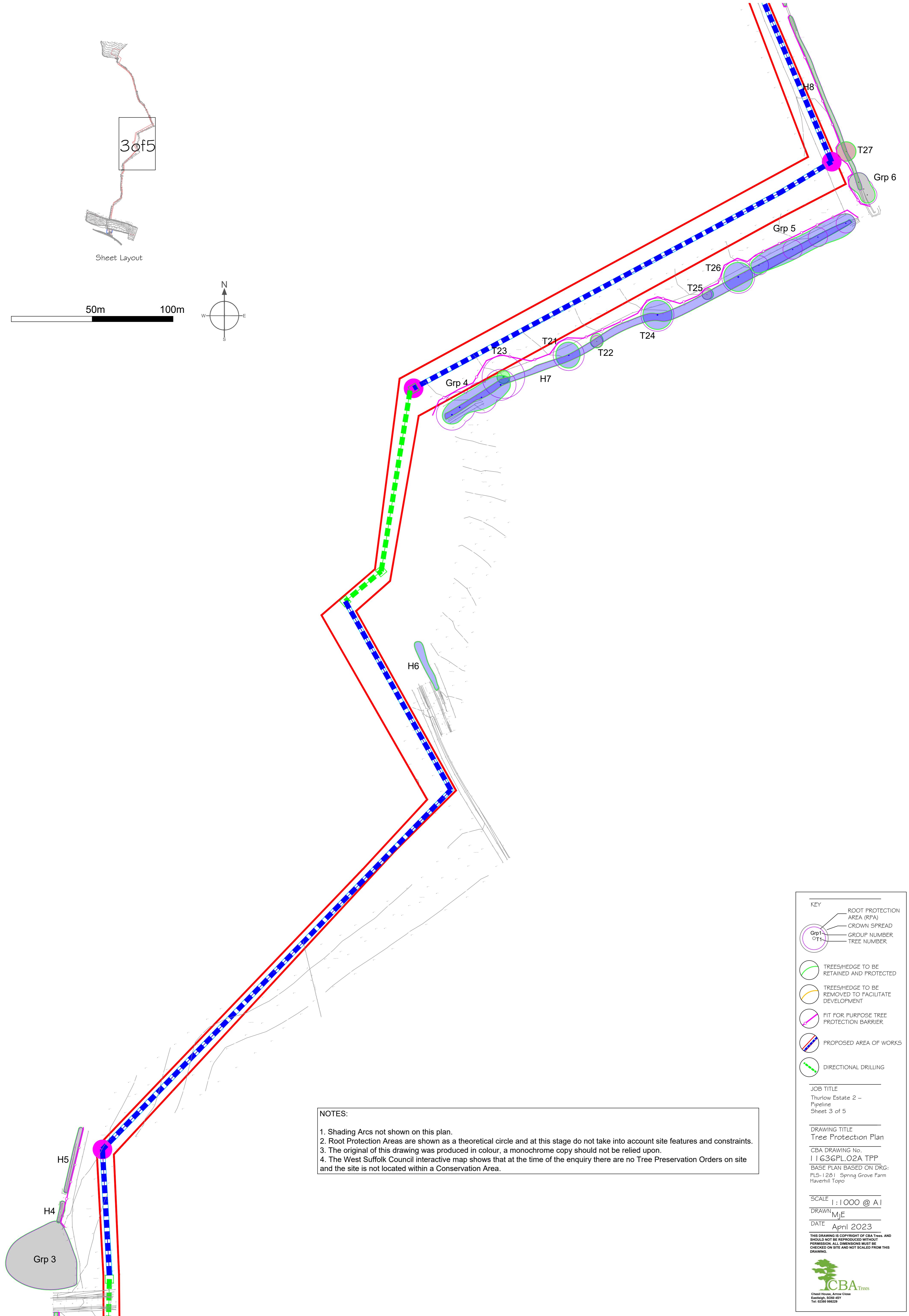
Sheet Layout

50m 100m



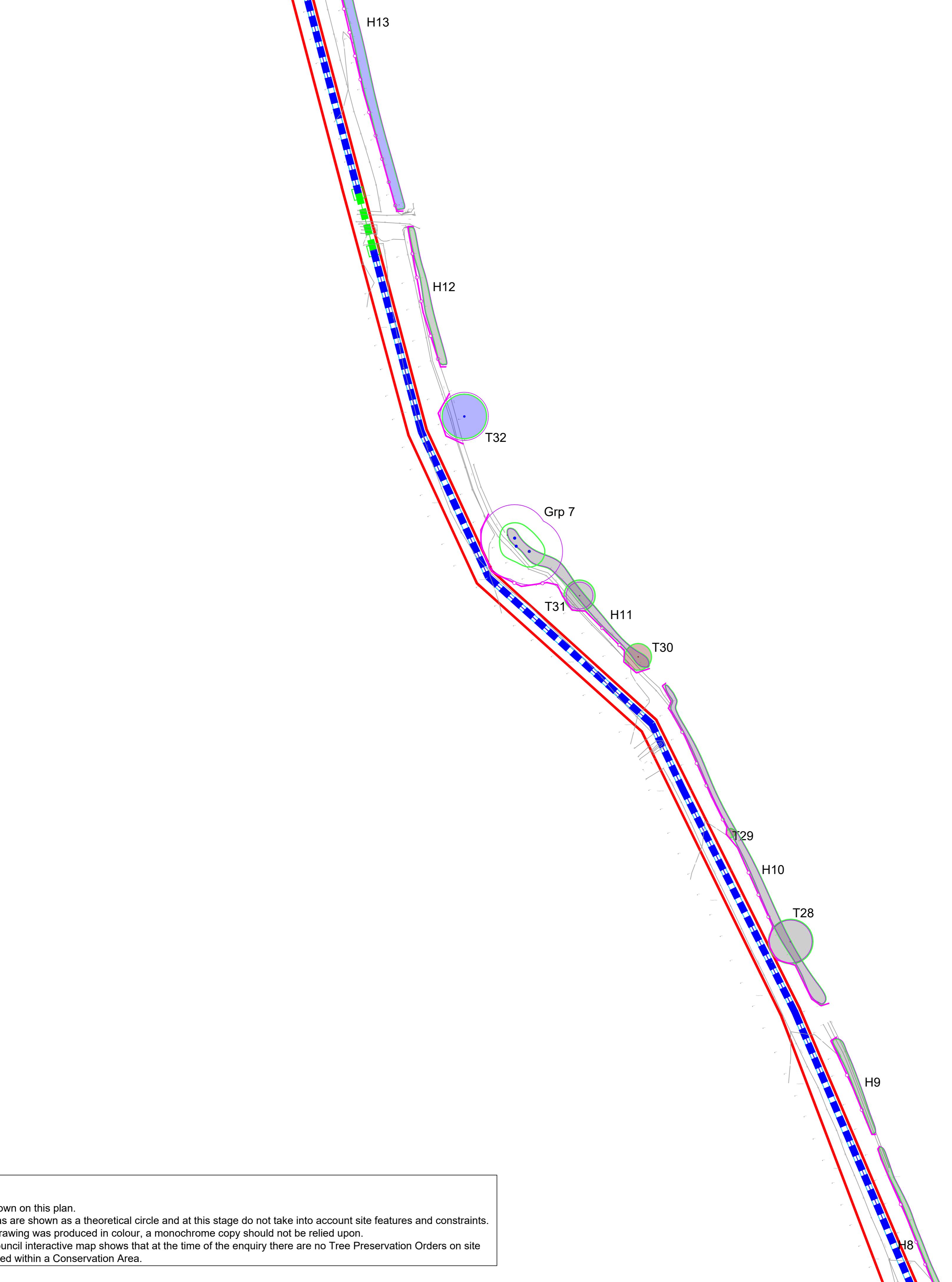
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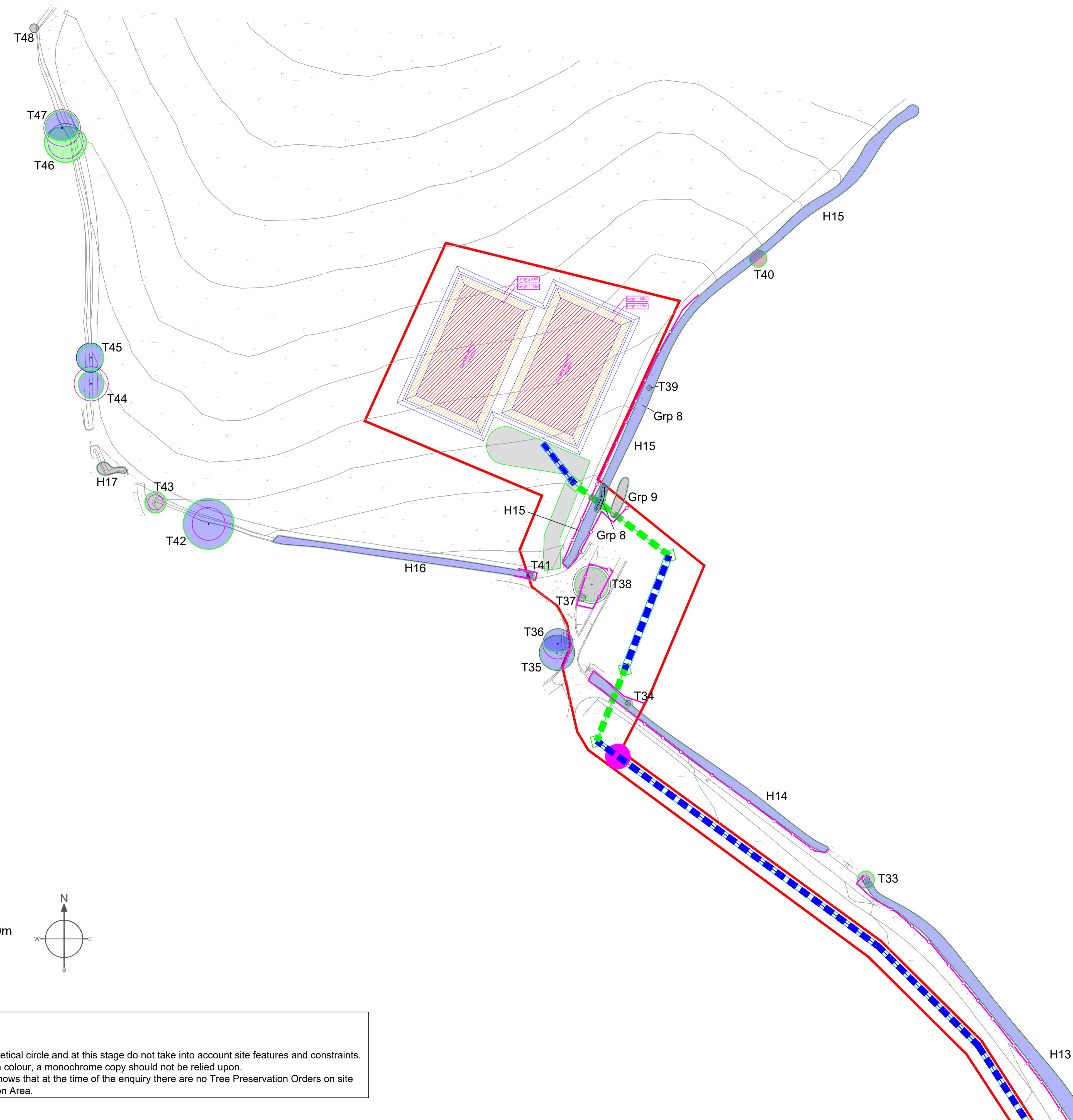
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Sheet Layout





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4. The West Suffolk Council interactive map shows that at the time of the enquiry there are no Tree Preservation Orders on site and the site is not located within a Conservation Area.

KEY

- ROOT PROTECTION AREA (RPA)
- CROWN SPREAD
- GROUP NUMBER
- TREE NUMBER
- TREES/HEDGE TO BE RETAINED AND PROTECTED
- TREES/HEDGE TO BE REMOVED TO FACILITATE DEVELOPMENT
- FIT FOR PURPOSE TREE PROTECTION BARRIER
- PROPOSED AREA OF WORKS
- DIRECTIONAL DRILLING

JOB TITLE
Thurlow Estate 2 –
Pipeline
Sheet 5 of 5

DRAWING TITLE
Tree Protection Plan

CBA DRAWING No.
1163GPL.02A TPP

BASE PLAN BASED ON DRG:
PLS-1281 Spring Grove Farm
Haverhill Topo

SCALE 1:1000 @ A1

DRAWN MJE

DATE April 2023

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Chesh House, Arrow Close
Eastleigh, SO36 4SY
Tel: 02380 996229





The Professional Arboricultural Consultancy

Qualifications of Joe Beznosiuk Arboricultural Consultant

Joe Beznosiuk *Dip Arb L4 (ABC)* the newest member of our team, Joe started his career as a tree surgeon before he made the transition into consultancy 10 years ago, where he has worked for both local authorities and private consultancies, providing a wide range of arboricultural advice, which has involved tree stock management, development projects in relation to BS5837, planning advice and Health and Safety risk assessment surveys.