Medworth Energy from Waste
Combined Heat and Power Facility

PINS ref. EN010110
Document Reference: Vol 7.13
Revision 1.0
June 2022

Tree Survey

Regulation reference: The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation 5(2)(q)

We inspire with energy.

Contents

1. Introduction

1.1.1 The following three reports were commissioned by the Applicant to identify trees with the potential to be affected by the Proposed Development and to define their dimensions, category and condition. Preliminary management recommendations are also provided. The tree surveys and reports were prepared by Amenity Tree Care.

1.1.2 The reports cover the following locations:

- Site of the EfW CHP Facility and New Bridge Lane, (**Appendix A**)
- Broaden Road (**Appendix B**), and
- Walsoken Substation (**Appendix C**).

Appendix A
Tree Constraints Report-Site of the EfW CHP Facility and New Bridge Lane

Medworth Energy from Waste
Combined Heat and Power Facility

PINS ref. EN010110
Document Reference: Volume 7.13.
Revision 1.0
June 2022

Tree Survey

Site of EfW CHP Facility and New Bridge Lane

Regulation reference: The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation 5(2)(q)

We inspire with energy.

AMENITYTREE

ENVIRONMENTAL PLANNING CONSULTANTS

Tree Survey and Constraints Report

For land at Medworth Energy from Waste Combined Heat and Power Facility: EfW CHP Facility Site, Water Connection and Grid Connection at Wisbech, Cambridgeshire

Report 1 of 3 prepared for Wood

AMENITY TREE CARE WILLOW HILL COTTAGE SCHOOL LANE BURWARDSLEY CHESTER, CH3 9NX
Tel: 01829 770075 www.amenitytree.com

Contents

1.0 Introduction

1.1 Instruction

1.2 Amenity Tree Care has been instructed by Neil Furber of wood to prepare the following Tree Constraints Report for land at Medworth Energy from Waste Combined Heat and Power Facility: EfW CHP Facility Site, Water Connection and Grid Connection at Wisbech, Cambridgeshire

1.3 The survey was conducted using the client supplied topographical data, which was issued by Wood.

1.4 The Tree Constraints Report will be carried out in line with the recommendations in BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* and evaluates the direct and indirect impacts of the current tree population.

1.5 The constraints assessment considers constraints posed above and below ground and should be used to inform any future design layout.

1.6 Further consideration will be required at the detailed design stage in the form of an impact assessment that evaluates the direct and indirect effects of any proposed design and where necessary will recommend mitigation.

1.7 Below ground constraints are influenced by the Root Protection Area (RPA) and are determined in line with the recommendations set out in BS 5837:2012. These recommendations quantify the root protection area based on a measured stem diameter in accordance with Annex C, and the RPA determined from Annex D.

1.8 It is important to understand that when considering the root protection area with regards to the circular plot as delineated on the tree protection plan that a number of site factors can influence root morphology and disposition of tree roots. Root morphology is taken into account when determining the impacts of the proposed development on existing woody vegetation.

1.9 Above ground constraints are considered in line with the recommendations in BS 5837:2012 and include shade dominance, current and future crown spread as well as the ultimate height of those retained trees.

2.0 Report Limitations

2.1 The inspection has been carried out from ground level only, using visual observation. Where a more detailed inspection is required, this is highlighted in the recommendations.

2.2 Trees are living organisms whose health and condition can change rapidly. The health, condition and safety of trees should be checked on a regular basis, preferably at least once a year. The conclusions and recommendations in this report are only valid for a period of 12 months from the date of this report. This period of validity may be reduced in the case of any change in conditions to or in proximity to the tree.

2.3 Fenland District Council and Kings Lynn and West Norfolk Borough Council who have confirmed that none of the areas surveyed have trees on or adjacent to the site(s) that are protected by a Tree Preservation Order and the sites are not located within a Conservation Area.

2.4 Any legal descriptions or information given to the consultant are understood to be accurate.

2.5 No responsibility is assumed by Amenity Tree Care Ltd for legal matters that may arise from this report and the consultant shall not be required to give testimony or to attend court unless subsequent contractual arrangements are made.

2.6 Any alteration or deletion from this report will invalidate it as a whole and the conclusions of this report will remain valid for 12 months from the date of the inspection.

2.7 The responsibility for any tree work(s) undertaken on the surveyed trees rests with the land managers.

3.0 Methodology and data collection

3.1 The site was visited as indicated above and the trees were assessed visually utilising the Visual Tree Assessment methodology.

3.2 Each individual tree has been assessed with general regard to condition, health and structural suitability and commented upon in the report.

3.3 An individual and group schedule is appended to this report and includes detailed information relating to tree height *both current and future*, stem diameters, crown dimensions and estimated remaining contribution.

3.4 Where dimensions have been recorded the following measurement conventions have been observed

a) Height, crown spread and crown clearance have been recorded to the nearest half metre (crown spread has been rounded up) for dimensions up to 10m and the nearest whole meter for dimensions over 10m.

b) Stem diameters have been recorded in millimetres and rounded to the nearest 10mm

c) Where dimensions have been estimated *(e.g. for those trees located off site or where access is restricted, and accurate data cannot be recorded) these trees will be suffixed with #.*

3.5 Recommendations for remedial tree works (Preliminary Management Recommendations) have been provided on the basis of the tree(s) current condition.

3.6 Trees growing as groups or woodland have been identified and assessed by the arboriculturist. An assessment has been undertaken of the individual trees within the group/woodland in order to determine the category score and aid future management plans.

3.7 Trees that have not been identified on the topographical survey have been plotted by eye on site and identified as such on the tree survey schedule (#).

4.0 Arboricultural Constraints

4.1 Below ground constraints are influenced by the root protection area (RPA) and are determined in line with the recommendations set out in section 4.6 of BS 5837:2012. These recommendations quantify the RPA based on a measured stem diameter in accordance with Annex C, and the RPA determined from Annex D. The RPA for trees with two to five stems are assessed using the calculation in 4.6.1. It is important to understand that when considering the RPA with regards to the circular plot that a number of site factors can influence the root morphology and disposition of tree roots as stated in section 4.6.3 of BS 5837:2012. Trees that form the leading edge of groups/woodland are recorded at intervals along the woodland/group edge in order to an accurately plot a root protection area. All these factors must be considered when contemplating the impacts of the potential development on existing woody vegetation.

4.2 Above ground constraints posed by existing trees can significantly affect the proposed land use and the subsequent condition will be considered by the planning officer should the development be allowed to proceed. Above ground, constraints are considered in line with the recommendations in section 5.2 of BS 5837:2012 and include shade dominance, current and future crown spread as well as the ultimate height of those retained trees.

5.0 Summary

5.1 A total of twenty-three individual trees, four groups and a single hedgerow have been surveyed.

5.2 Trees 1-5 and 14 and groups 1-2 are growing on land outside the order limits boundary. The trees were recorded because of their proximity to the CHP EfW Facility Site and the direct or indirect impact that development proposals could have on them. The arboricultural surveyor did not have permission to access the land, so the stem diameters have been estimated.

5.3 There are several large groups consisting of poplar, field maple, birch, and hawthorn on or adjacent to the site. Trees growing within the Order limits boundary include trees in groups. These include group 3 which is a linear group of mature hawthorn trees along the disused Wisbech to March railway line, whilst intermittent form an almost continuous group with under-storey shrubs along the western boundary of the Main CHP EfW Facility Site

5.4 The second group on note is the large group of poplars growing in the centre of the survey area around an area of dense vegetation. The trees that make up the group are considered to be of a low arboricultural quality.

5.6 Trees 6-13 are individual poplar trees growing on the northern boundary of the same parcel of land as group 4. The trees are in an older age class than those in group 4 with most trees having been badly damaged in storms and have poor form and little arboricultural merit.

5.7 The remaining individual trees of apple, cherry, poplar and laburnum are category ‘C’ because of their limited remaining life expectancy and low arboricultural merit. These trees will not be a constraint to the redevelopment of the Main CHP EfW Facility Site

5.8 A single hawthorn hedgerow has been recorded on the northeast corner of the site. The hedge is young and has been well maintained.

Note: *Please refer to tree survey schedule for detailed dimensions and specific site comments*

Appendix 1

Survey Key

Tree No. Sequential reference number e.g. T1, T2 for individual trees, where trees are determined to be a group they will be denoted as follows G1, G2 and W1, W2 for woodlands.

Species: Recorded and listed by both common name and scientific name

Stem: Principal above ground structural component(s) of a tree that supports its branches.

Height: Provides indication of the height of the tree and is measured in meters from ground level to the upper canopy edge and is recorded up to the nearest half meter for heights up to 10 meters and the nearest meter for heights over 10 meters.

Stem diameter: Measured at a height of 1.5 meters from ground level using a diameter tape and recorded in millimetres. Where the stem cannot be measured at 1.5 meters due to irregular swellings on the stem or low branching then the position of measurement will be taken in accordance with the specification in Annex C of BS 5837:2012

Crown spread: Measured at the four cardinal points of a compass (north, south, east, and west) from the centre of the stem and rounded up to the nearest meter in order to provide an accurate representation of the crown spread in order to show above ground constraints.

Crown height: Measured distance between the lowest points of the crown from ground level.

Life stage: A method of age estimation e.g. young - the first one third of the estimated life expectancy, middle mature- the second third of the estimated life expectancy, mature- The last third of the estimated life expectancy , over mature- trees showing obvious signs of senescence will not be a constraint to the redevelopment of the Main CHP EfW Facility Site

First significant branch (FSB): The direction of growth of the first significant branch from the point of attachment.

Comments: A brief evaluation and description of the tree in order to inform on significant defects or characteristics relating to tree form. Where comments are not present it should be assumed that no relevant features were exhibited.

Recommendations: Arboricultural recommendations based on the current land use only and are provided where action is required in order to aid in the long term management of the tree or for reasons of site safety.

Survey restrictions: It may be necessary on occasion to estimate tree dimensions where access is not available or where structure(s) or vegetation is precluding the visual assessment. Where dimensions are estimated it will clearly be marked in the tree survey schedule and be suffixed with #.

Root protection area (RPA) Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability. All stem diameters are calculated in line with the guidance given in BS 5837:2012 Annexe D

Tree categorisation: a method of apportioning a value (non-fiscal) to trees in order to identify the quality and value of existing tree stocks, allowing for informed decisions to be made regarding which trees are to be retained or removed dependant on development occurring. Category U-Those in such a condition that cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. Category A-Trees of a high quality with an estimated life expectancy of at least forty years. Category B-Trees of a moderate quality with an estimated remaining life expectancy of at least 20 years. Category C-Trees of a low quality with an estimated remaining life expectancy of at least 10 years.

Please refer to Table 1 Cascade chart for tree quality assessment, including subcategories, reference BS 5837:2012

Estimated remaining contribution: estimated remaining life expectancy e.g. <10, 10+, 20+, 40+

Statutory wildlife obligations: The Wildlife and Countryside Act 1981

The Wildlife and Countryside Act 1981 as amended, the Countryside and rights of Way Act 2000 and the Conservation (Natural Habitats) Regulations 1994.

These regulations protect all wild birds and make it an offence to intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Furthermore the Act makes it an offence (with exception to species listed in Schedule 2) to intentionally:

- kill, injure, or take any wild bird,
- take, damage or destroy the nest of any wild bird while that nest is in use or being built (also [take, damage or destroy the nest of a wild bird included in Schedule ZA1] under the Natural Environment and Rural Communities Act 2006), or
- take or destroy an egg of any wild bird

Bats are protected under Schedule 2 of the Conservation (Natural Habitats) Regulations 1994 making it an offence to damage or destroy a roost site even if the roost is not occupied at the time. The potential fines for each offence is £5000 and if more than one bat is involved in the incident then the fine can be extended to £5000 per bat. A prison sentence can be issued with offenders serving up to six months in prison.

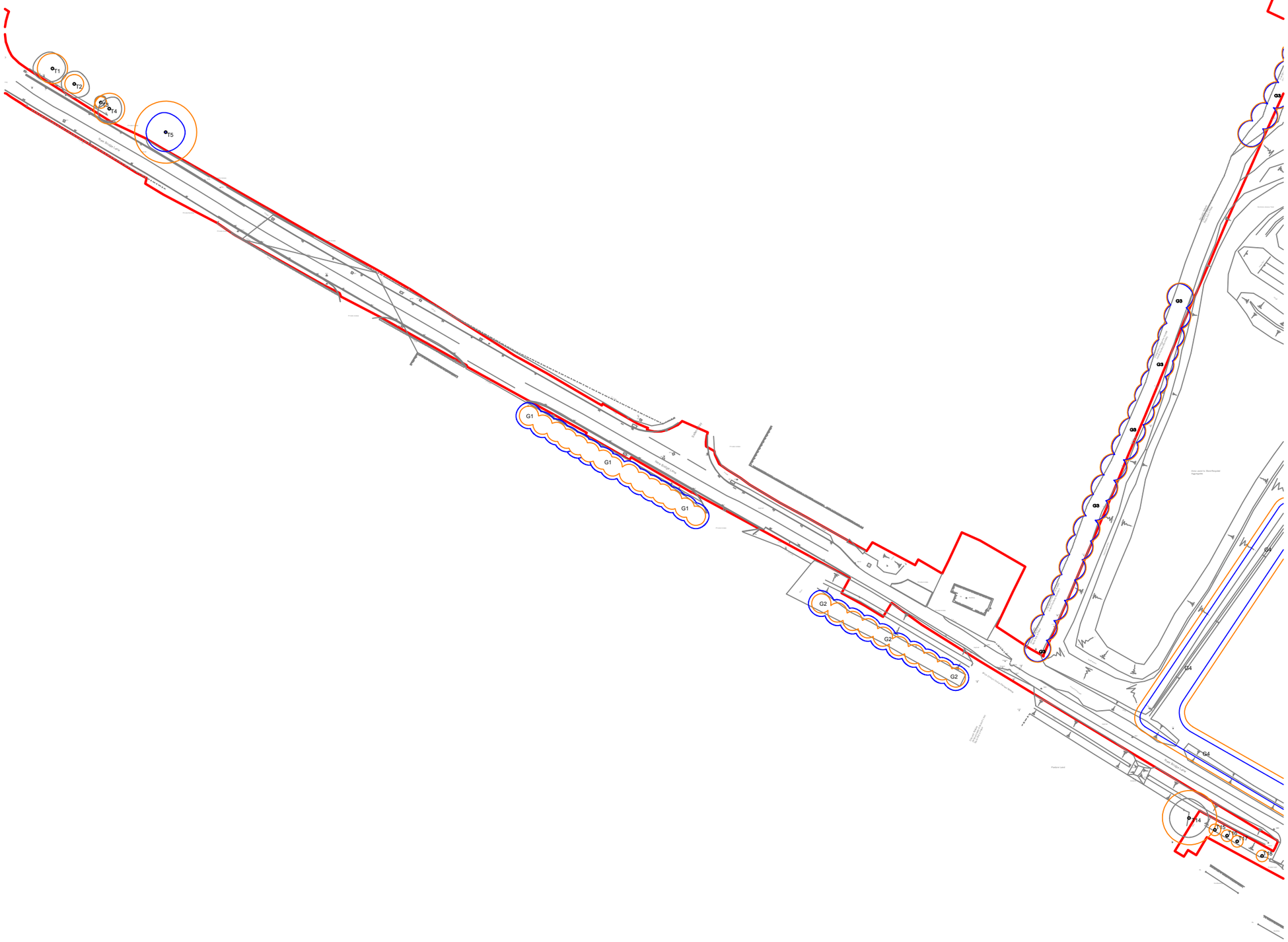
Appendix 2

Table 1 cascade chart

Category and definition	Criteria (including subcategories where appropriate)		Identification on plan
Trees unsuitable for retention (see Note)			
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 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 **NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7**		
	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 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)
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
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 value

Tree	Common Name	Life Stage	Diameter(mm)	Stems	Height(m)	Crown Height(m)	North(m)	South(m)	East(m)	West(m)	Category	Remaining Life Expectancey (yrs)	Comments	Recommendations	RPR(m)	RPA(m)
T1	Higan Cherry	M	391	2	5	2	5	4	4	6	C2	10+			4.7	69
T2	Higan Cherry	M	247	2	4	2	4	4	5	4	C2	10+			3	28
T3	Laburnum	Y	150	1	4	1.5	2	2	1	2	C2	40+			1.8	10
T4	Higan Cherry	Y	400	1	5	1.5	4	4	4	3	C2	10+			4.8	72
T5	Monterey cypress	M	800	1	12	1	6	6	6	6	B1	40+			9.6	290
T6	Poplar	SM	200	1	14	3	2	2	2	2	C1	40+			2.4	18
T7	Lombardy Poplar	SM	200	1	14	3	2	2	2	2	C1	40+			2.4	18
T8	Lombardy Poplar	SM	300	1	15	3	2	2	2	2	C1	40+			3.6	41
T9	Poplar	M	900	4	15	1.5	7	6	5	7	B2	40+			10.8	366
T10	Poplar	M	500	1	15	1.5	7	7	8	5	B2	40+			6	113
T11	Poplar	M	693	3	15	1	7	6	4	5	B2	40+			8.3	217
T12	Poplar	M	550	1	18	2	6	5	8	5	B2	40+			6.6	137
T13	Lombardy Poplar	EM	450	1	15	2	2	2	2	2	B1	40+			5.4	92
T14	Poplar	M	700	1	15	2	6	6	6	6	C1	20+	The tree is growing on private land. Decay is evident on the northeast side of the tree stem.		8.4	222
T15	Apple	SM	150	1	2	0.5	1	1	1	1	C1	20+			1.8	10
T16	Apple	SM	150	1	2	0.5	1	1	1	1	C1	20+			1.8	10
T17	Apple	SM	150	1	2	0.5	1	1	1	1	C1	20+			1.8	10
T18	Apple	SM	150	1	2	0.5	1	1	1	1	C1	20+			1.8	10
T19	Cherry	SM	150	1	2	0.5	2	2	2	2	C1	20+			1.8	10
T20	Apple	SM	150	1	2	0.5	1	1	1	1	C1	20+			1.8	10
T21	Apple	SM	150	1	2	0.5	1	1	1	1	C1	20+			1.8	10
T22	Apple	SM	150	1	2	0.5	1	1	1	1	C1	20+			1.8	10
T23	Apple	SM	150	1	2	0.5	1	1	1	1	C1	20+			1.8	10
T13	Lombardy Poplar	EM	450	1	15	2	2	2	2	2	B1	40+			5.4	92
T13	Lombardy Poplar	EM	450	1	15	2	2	2	2	2	B1	40+			5.4	92
T13	Lombardy Poplar	EM	450	1	15	2	2	2	2	2	B1	40+			5.4	92
T13	Lombardy Poplar	EM	450	1	15	2	2	2	2	2	B1	40+			5.4	92
T13	Lombardy Poplar	EM	450	1	15	2	2	2	2	2	B1	40+			5.4	92
T29	Poplar	M	500	1	15	1.5	7	7	8	5	B2	40+			6	113
T30	Poplar	M	500	1	15	1.5	7	7	8	5	B3	40+			6	113
T31	Poplar	M	500	1	15	1.5	7	7	8	5	B4	40+			6	113
T32	Poplar	M	500	1	15	1.5	7	7	8	5	B5	40+			6	113
T33	Poplar	M	500	1	15	1.5	7	7	8	5	B6	40+			6	113
T34	Poplar	M	500	1	15	1.5	7	7	8	5	B7	40+			6	113

Tree	Common Name	Life Stage	Diameter(mm)	Stems	Height(m)	Crown Height(m)	North(m)	South(m)	East(m)	West(m)	Category	Remaining Life Expectancy (yrs)	Comments	Recommendations	RPR(m)	RPA(m)
G1	Silver Birch	EM	250	1	12	3	4	4	4	4	B2	40+			3	28
G2	Field Maple	EM	250	1	8	0.5	4	3	2	2	B2	40+			3	28
G3	Hawthorn	EM	350	1	8	0	4	4	4	4	B2	40+			4.2	55
G4	Poplar	EM	500	1	14	2	5	7	5	5	B2	40+			6	113
G5	Apple	EM	150	1	1.5	0.5	0.5	0.5	0.5	0.5	B2	40+	Plantation orchard.		1.8	10
H1	Hawthorn	SM	100	1	5	0>	2	2	2	2	C2	40+			1.2	5



TREE CONSTRAINTS PLAN

Retention value key

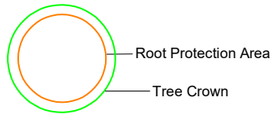
(Category A)

(Category C)

(category B)

(Category U)

Root Protection Areas have been identified and are based on BS5837:2012 and are shown as an orange polyline.



Note: The original of this drawing was produced in colour-a monochrome copy should not be relied upon

AMENITY TREE Ltd

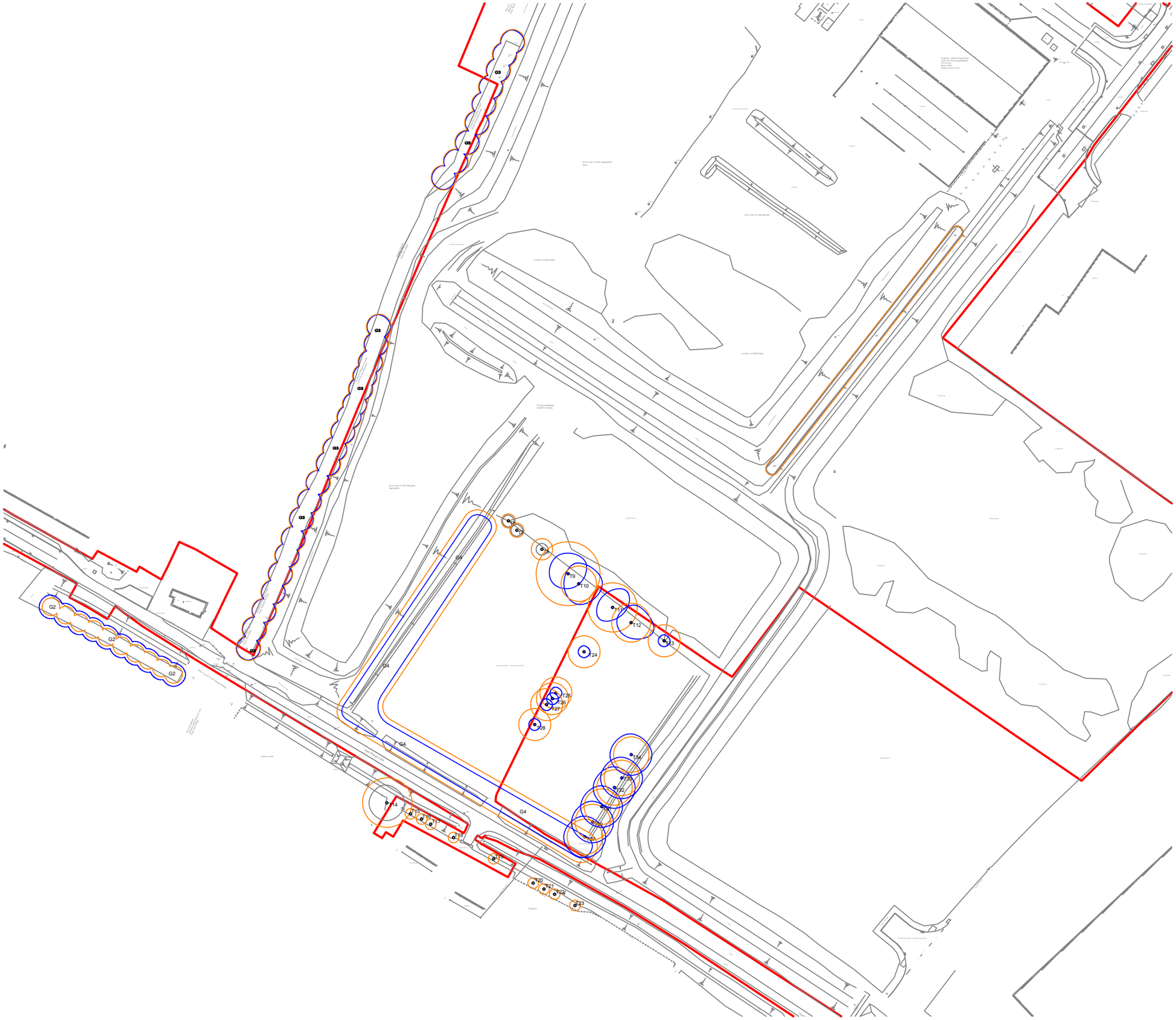
Client:
wood

Project:
Wisbech

Detail:
Tree Constraints Plan

Drawn By:	Date:	Scale:
SB	14.02.2022	1/1250@A3

Drg No:	Revision:
01	V2



TREE CONSTRAINTS PLAN

Retention value key

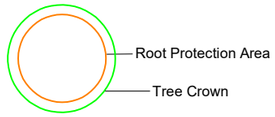
(Category A)

(Category C)

(category B)

(Category U)

Root Protection Areas have been identified and are based on BS5837:2012 and are shown as an orange polyline.



Note: The original of this drawing was produced in colour-a monochrome copy should not be relied upon

AMENITY TREE Ltd

Client:
wood

Project:
Wisbech

Detail:
Tree Constraints Plan

Drawn By:	Date:	Scale:
SB	14.02.2022	1/1250@A3

Drg No:	Revision:
01	V2

TREE CONSTRAINTS PLAN

Retention value key

(Category A)

(Category C)

(Category B)

(Category U)

Root Protection Areas have been identified and are based on BS5837:2012 and are shown as an orange polyline.

Root Protection Area

Tree Crown

Note: The original of this drawing was produced in colour-a monochrome copy should not be relied upon

AMENITY TREE Ltd

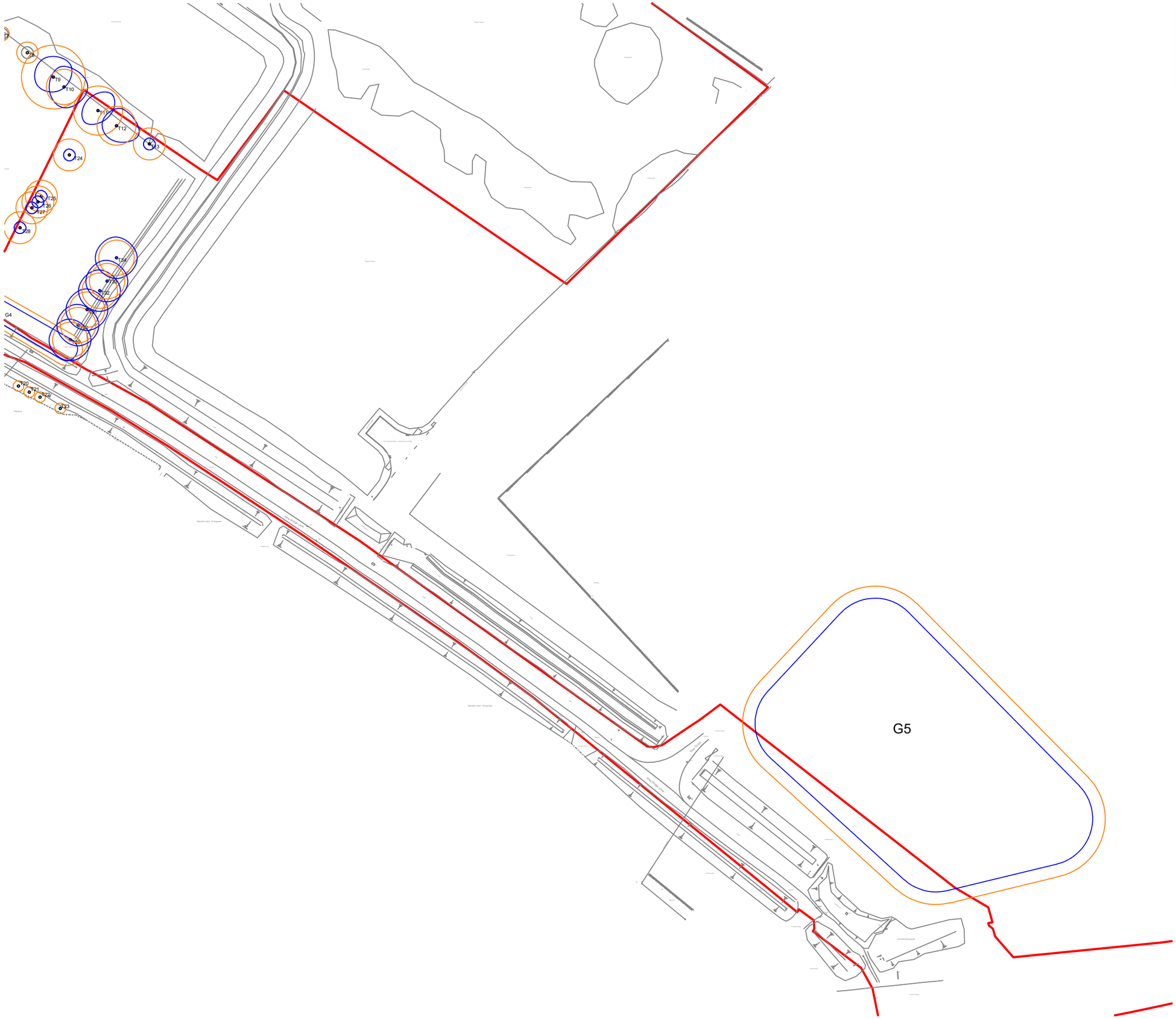
Client:
wood

Project:
Wisbech

Detail:
Tree Constraints Plan

Drawn By:	Date:	Scale:
SB	14.02.2022	1/1250@A3

Drg No:	Revision:
01	V2



TREE CONSTRAINTS PLAN

Retention value key

(Category A)

(Category C)

(category B)

(Category U)

Root Protection Areas have been identified and are based on BS5837:2012 and are shown as an orange polyline.

Root Protection Area

Tree Crown

Note: The original of this drawing was produced in colour-a monochrome copy should not be relied upon

AMENITY TREE Ltd

Client:
wood

Project:
Wisbech

Detail:
Tree Constraints Plan

Drawn By:	Date:	Scale:
SS	14.02.2022	1/1250@A3

Drg No:	Revision:
01	V2

Appendix B
Tree Constraints Report-Broaden Road

Medworth Energy from Waste
Combined Heat and Power Facility

PINS ref. EN010110
Document Reference: Volume 7.13.
Revision 1.0
June 2022

Tree Survey

Broadend Road

Regulation reference: The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation 5(2)(q)

We inspire with energy.

AMENITYTREE

ENVIRONMENTAL PLANNING CONSULTANTS

Tree Survey and Constraints Report

For land at Medworth Energy from Waste Combined Heat and Power Facility: EfW CHP Facility Site, Water Connection and Grid Connection at Wisbech, Cambridgeshire

Report 2 of 3 prepared for Wood

AMENITY TREE CARE WILLOW HILL COTTAGE SCHOOL LANE BURWARDSLEY CHESTER, CH3 9NX
Tel: 01829 770075 www.amenitytree.com

Contents

1.0 Introduction

1.1 Instruction

1.2 Amenity Tree Care has been instructed by Neil Furber of wood to prepare the following Tree Constraints Report for land at Medworth Energy from Waste Combined Heat and Power Facility: EfW CHP Facility Site, Water Connection and Grid Connection at Wisbech, Cambridgeshire

1.3 The survey was conducted using the client supplied topographical data, which was issued by Wood.

1.4 The Tree Constraints Report will be carried out in line with the recommendations in BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* and evaluates the direct and indirect impacts of the current tree population.

1.5 The constraints assessment considers constraints posed above and below ground and should be used to inform any future design layout.

1.6 Further consideration will be required at the detailed design stage in the form of an impact assessment that evaluates the direct and indirect effects of any proposed design and where necessary will recommend mitigation.

1.7 Below ground constraints are influenced by the Root Protection Area (RPA) and are determined in line with the recommendations set out in BS 5837:2012. These recommendations quantify the root protection area based on a measured stem diameter in accordance with Annex C, and the RPA determined from Annex D.

1.8 It is important to understand that when considering the root protection area with regards to the circular plot as delineated on the tree protection plan that a number of site factors can influence root morphology and disposition of tree roots. Root morphology is taken into account when determining the impacts of the proposed development on existing woody vegetation.

1.9 Above ground constraints are considered in line with the recommendations in BS 5837:2012 and include shade dominance, current and future crown spread as well as the ultimate height of those retained trees.

2.0 Report Limitations

2.1 The inspection has been carried out from ground level only, using visual observation. Where a more detailed inspection is required, this is highlighted in the recommendations.

2.2 Trees are living organisms whose health and condition can change rapidly. The health, condition and safety of trees should be checked on a regular basis, preferably at least once a year. The conclusions and recommendations in this report are only valid for a period of 12 months from the date of this report. This period of validity may be reduced in the case of any change in conditions to or in proximity to the tree.

2.3 Fenland District Council and Kings Lynn and West Norfolk Borough Council who have confirmed that none of the areas surveyed have trees on or adjacent to the site(s) that are protected by a Tree Preservation Order and the sites are not located within a Conservation Area.

2.4 Any legal descriptions or information given to the consultant are understood to be accurate.

2.5 No responsibility is assumed by Amenity Tree Care Ltd for legal matters that may arise from this report and the consultant shall not be required to give testimony or to attend court unless subsequent contractual arrangements are made.

2.6 Any alteration or deletion from this report will invalidate it as a whole and the conclusions of this report will remain valid for 12 months from the date of the inspection.

2.7 The responsibility for any tree work(s) undertaken on the surveyed trees rests with the land managers.

3.0 Methodology and data collection

3.1 The site was visited as indicated above and the trees were assessed visually utilising the Visual Tree Assessment methodology.

3.2 Each individual tree has been assessed with general regard to condition, health and structural suitability and commented upon in the report.

3.3 An individual and group schedule is appended to this report and includes detailed information relating to tree height *both current and future*, stem diameters, crown dimensions and estimated remaining contribution.

3.4 Where dimensions have been recorded the following measurement conventions have been observed

a) Height, crown spread, and crown clearance have been recorded to the nearest half metre (crown spread has been rounded up) for dimensions up to 10m and the nearest whole meter for dimensions over 10m.

b) Stem diameters have been recorded in millimetres and rounded to the nearest 10mm

c) Where dimensions have been estimated *(e.g. for those trees located off site or where access is restricted, and accurate data cannot be recorded) these trees will be suffixed with #.*

3.5 Recommendations for remedial tree works (Preliminary Management Recommendations) have been provided on the basis of the tree(s) current condition.

3.6 Trees growing as groups or woodland have been identified and assessed by the arboriculturist. An assessment has been undertaken of the individual trees within the group/woodland in order to determine the category score and aid future management plans.

3.7 Trees that have not been identified on the topographical survey have been plotted by eye on site and identified as such on the tree survey schedule (#).

4.0 Arboricultural Constraints

4.1 Below ground constraints are influenced by the root protection area (RPA) and are determined in line with the recommendations set out in section 4.6 of BS 5837:2012. These recommendations quantify the RPA based on a measured stem diameter in accordance with Annex C, and the RPA determined from Annex D. The RPA for trees with two to five stems are assessed using the calculation in 4.6.1. It is important to understand that when considering the RPA with regards to the circular plot that a number of site factors can influence the root morphology and disposition of tree roots as stated in section 4.6.3 of BS 5837:2012. Trees that form the leading edge of groups/woodland are recorded at intervals along the woodland/group edge in order to an accurately plot a root protection area. All these factors must be considered when contemplating the impacts of the potential development on existing woody vegetation.

4.2 Above ground constraints posed by existing trees can significantly affect the proposed land use and the subsequent condition will be considered by the planning officer should the development be allowed to proceed. Above ground, constraints are considered in line with the recommendations in section 5.2 of BS 5837:2012 and include shade dominance, current and future crown spread as well as the ultimate height of those retained trees.

5.0 Summary

5.1 A total of thirty-one individual trees have been surveyed and two groups. The trees growing on the grass verges adjacent to Broadend Road have little arboricultural merit as individual specimens, but they do have amenity value as part of the wider landscape.

Note: *Please refer to tree survey schedule for detailed dimensions and specific site comments*

Appendix 1

Survey Key

Tree No. Sequential reference number e.g. T1, T2 for individual trees, where trees are determined to be a group they will be denoted as follows G1, G2 and W1, W2 for woodlands.

Species: Recorded and listed by both common name and scientific name

Stem: Principal above ground structural component(s) of a tree that supports its branches.

Height: Provides indication of the height of the tree and is measured in meters from ground level to the upper canopy edge and is recorded up to the nearest half meter for heights up to 10 meters and the nearest meter for heights over 10 meters.

Stem diameter: Measured at a height of 1.5 meters from ground level using a diameter tape and recorded in millimetres. Where the stem cannot be measured at 1.5 meters due to irregular swellings on the stem or low branching then the position of measurement will be taken in accordance with the specification in Annex C of BS 5837:2012

Crown spread: Measured at the four cardinal points of a compass (north, south, east, and west) from the centre of the stem and rounded up to the nearest meter in order to provide an accurate representation of the crown spread in order to show above ground constraints.

Crown height: Measured distance between the lowest points of the crown from ground level.

Life stage: A method of age estimation e.g. young - the first one third of the estimated life expectancy, middle mature- the second third of the estimated life expectancy, mature- The last third of the estimated life expectancy , over mature- trees showing obvious signs of senescence will not be a constraint to the redevelopment of the Main CHP EfW Facility Site

First significant branch (FSB): The direction of growth of the first significant branch from the point of attachment.

Comments: A brief evaluation and description of the tree in order to inform on significant defects or characteristics relating to tree form. Where comments are not present it should be assumed that no relevant features were exhibited.

Recommendations: Arboricultural recommendations based on the current land use only and are provided where action is required in order to aid in the long term management of the tree or for reasons of site safety.

Survey restrictions: It may be necessary on occasion to estimate tree dimensions where access is not available or where structure(s) or vegetation is precluding the visual assessment. Where dimensions are estimated it will clearly be marked in the tree survey schedule and be suffixed with #.

Root protection area (RPA) Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability. All stem diameters are calculated in line with the guidance given in BS 5837:2012 Annexe D

Tree categorisation: a method of apportioning a value (non-fiscal) to trees in order to identify the quality and value of existing tree stocks, allowing for informed decisions to be made regarding which trees are to be retained or removed dependant on development occurring. Category U-Those in such a condition that cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. Category A-Trees of a high quality with an estimated life expectancy of at least forty years. Category B-Trees of a moderate quality with an estimated remaining life expectancy of at least 20 years. Category C-Trees of a low quality with an estimated remaining life expectancy of at least 10 years.

Please refer to Table 1 Cascade chart for tree quality assessment, including subcategories, reference BS 5837:2012

Estimated remaining contribution: estimated remaining life expectancy e.g. <10, 10+, 20+, 40+

Statutory wildlife obligations: The Wildlife and Countryside Act 1981

The Wildlife and Countryside Act 1981 as amended, the Countryside and rights of Way Act 2000 and the Conservation (Natural Habitats) Regulations 1994.

These regulations protect all wild birds and make it an offence to intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Furthermore, the Act makes it an offence (with exception to species listed in Schedule 2) to intentionally:

- kill, injure, or take any wild bird,
- take, damage or destroy the nest of any wild bird while that nest is in use or being built (also [take, damage or destroy the nest of a wild bird included in Schedule ZA1] under the Natural Environment and Rural Communities Act 2006), or
- take or destroy an egg of any wild bird

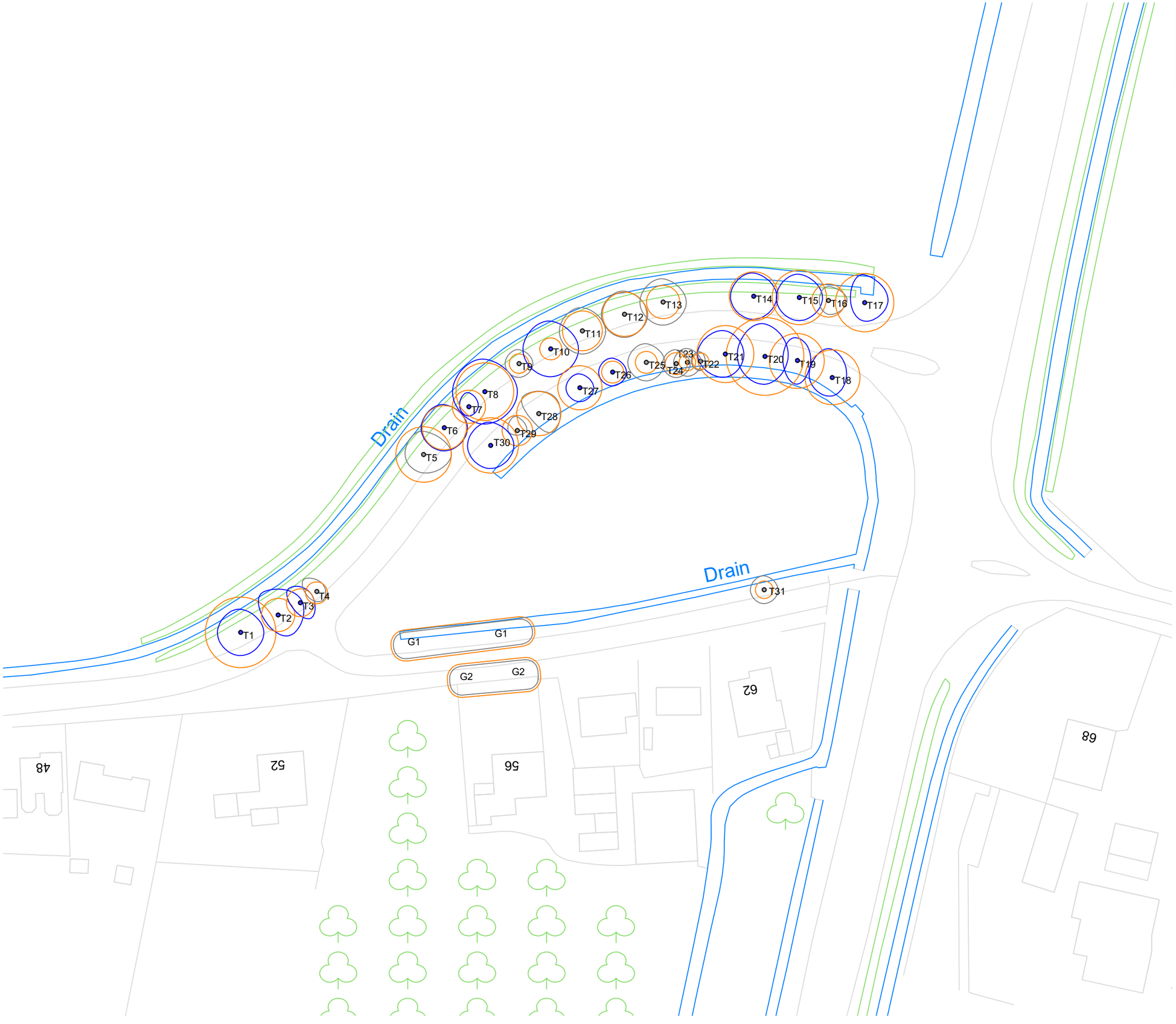
Bats are protected under Schedule 2 of the Conservation (Natural Habitats) Regulations 1994 making it an offence to damage or destroy a roost site even if the roost is not occupied at the time. The potential fines for each offence is £5000 and if more than one bat is involved in the incident then the fine can be extended to £5000 per bat. A prison sentence can be issued with offenders serving up to six months in prison.

Appendix 2

Table 1 cascade chart

Category and definition	Criteria (including subcategories where appropriate)		Identification on plan
Trees unsuitable for retention (see Note)			
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 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 **NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7**		
	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 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)
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
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 value

Tree No.	Common Name	Life Stage	Diameter(mm)	Stems	Height(m)	Crown Height(m)	North(m)	South(m)	East(m)	West(m)	Category	Remaining life Expectancy (yrs)	Comments	Recommendations	RPR(m)	RPA(m)
T1	Crack Willow	EM	636	2	11	1	5	5	5	5	B2	40+			7.6	183
T2	Crack Willow	SM	300	1	9	2	6	5	6	3	B2	40+			3.6	41
T3	Crack Willow	Y	253	1	5	1	4	4	3	2	C2	40+			3	29
T4	Crack Willow	Y	200	1	7	2	4	2	2	2	C2	40+			2.4	18
T5	Crack Willow	EM	500	1	9	1	5	4	6	4	B2	40+			6	113
T6	Poplar	EM	400	1	14	2	5	5	5	5	B1	40+			4.8	72
T7	Silver Birch	EM	300	1	9	2	3	2	2	2	C2	40+			3.6	41
T8	Crack Willow	EM	300	3	14	0	7	7	7	7	B2	20+			3	28
T9	Crack Willow	SM	175	1	5	1	3	3	3	3	C1	40+			2.1	14
T10	Ash	Y	200	1	6	1	4	4	4	4	C1	40+			2.4	18
T11	Goat Willow	SM	367	1	5	1	5	5	5	5	C2	40+			4.4	61
T12	Poplar	EM	400	1	13	4	4	4	4	4	B1	40+			4.8	72
T13	Crack Willow	Y	300	1	5	0.5	5	5	5	5	C2	40+			3.6	41
T14	Poplar	Y	440	1	13	0.5	5	5	5	5	B1	40+			5.3	88
T15	Poplar	Y	490	1	13	0.5	5	5	5	5	B1	40+			5.9	109
T16	Poplar	Y	212	2	10	1	3	3	4	2	C2	40+			2.5	20
T17	Poplar	EM	525	1	13	1	6	4	5	3	B2	40+			6.3	125
T18	Poplar	EM	495	1	13	1	6	4	3	5	B2	40+			5.9	111
T19	Goat Willow	SM	495	1	7	1	5	5	3	3	C2	40+			5.9	111
T20	Poplar	EM	615	1	14	1	7	6	5	6	B2	40+			7.4	171
T21	Poplar	EM	515	1	14	1	5	5	4	6	B2	40+			6.2	120
T22	Poplar	EM	150	1	9	1	2	2	1	2	C2	40+			1.8	10
T23	Poplar	EM	150	1	9	1	2	2	1	2	C2	40+			1.8	10
T24	Silver Birch	SM	200	1	9	2	3	3	3	3	C1	40+			2.4	18
T25	Hawthorn	SM	200	1	5	1	4	4	4	4	C2	40+			2.4	18
T26	Silver Birch	SM	200	1	8	1	3	3	3	3	B1	40+			2.4	18
T27	Crack Willow	M	400	1	14	1	6	7	7	5	B1	20+			4.8	72
T28	Poplar	Y	500	1	14	2	5	5	5	5	C1	40+			15	707
T29	Birch	Y	250	1	14	2	5	5	5	5	C1	40+			2.4	18
T30	Poplar	EM	500	1	14	2	5	5	5	5	C1	40+			15	707
T31	Birch	Y	150	1	6	1.5	2	2	2	2	C2	40+			1.8	10
G1	Elder Stags Horn Sumach	SM	160	1	5	0.5	3	3	3	3	C2	10+			1.9	12
G2	Austrian Pine	EM	200	1	11	1	3	1	2	2	C2	40+			3.3	34



TREE CONSTRAINTS PLAN

Retention value key

(Category A)

(Category C)

(Category B)

(Category U)

Root Protection Areas have been identified and are based on BS5837:2012. Root Protcetion Areas have been shown as an orange polyline.

Root Protection Area

Tree Crown

Note: The original of this drawing was produced in colour-a monochrome copy should not be relied upon accuracy.

AMENITY TREE Ltd

Client:
Wood

Project:
Broadend Road Wisbech

Detail:
Tree Constraints Plan

Drawn By:	Date:	Scale:
SB	04.03.2022	1/500@A3

Drg No:	Revision:
01	V2

Appendix C
Tree Constraints Report-Walsoken Substation

Medworth Energy from Waste
Combined Heat and Power Facility

PINS ref. EN010110
Document Reference: Volume 7.13.
Revision 1.0
June 2022

Tree Survey

Walsoken Substation

Regulation reference: The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation 5(2)(q)

We inspire with energy.

AMENITYTREE

ENVIRONMENTAL PLANNING CONSULTANTS

Tree Survey and Constraints Report

For land at Medworth Energy from Waste Combined Heat and Power Facility: Proposed Walsoken Substation at Wisbech, Cambridgeshire

Report 3 of 3 prepared for Wood

AMENITY TREE CARE WILLOW HILL COTTAGE SCHOOL LANE BURWARDSLEY CHESTER, CH3 9NX
Tel: 01829 770075 www.amenitytree.com

Contents

1.0 Introduction

1.1 Instruction

1.2 Amenity Tree Care has been instructed by Neil Furber of wood to prepare the following Tree Constraints Report for land at Medworth Energy from Waste Combined Heat and Power Facility: Proposed Walsoken Substation at Wisbech, Cambridgeshire.

1.3 The survey was conducted using the client supplied topographical data, which was issued by Wood.

1.4 The Tree Constraints Report will be carried out in line with the recommendations in BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* and evaluates the direct and indirect impacts of the current tree population.

1.5 The constraints assessment considers constraints posed above and below ground and should be used to inform any future design layout.

1.6 Further consideration will be required at the detailed design stage in the form of an impact assessment that evaluates the direct and indirect effects of any proposed design and where necessary will recommend mitigation.

1.7 Below ground constraints are influenced by the Root Protection Area (RPA) and are determined in line with the recommendations set out in BS 5837:2012. These recommendations quantify the root protection area based on a measured stem diameter in accordance with Annex C, and the RPA determined from Annex D.

1.8 It is important to understand that when considering the root protection area with regards to the circular plot as delineated on the tree protection plan that a number of site factors can influence root morphology and disposition of tree roots. Root morphology is taken into account when determining the impacts of the proposed development on existing woody vegetation.

1.9 Above ground constraints are considered in line with the recommendations in BS 5837:2012 and include shade dominance, current and future crown spread as well as the ultimate height of those retained trees.

2.0 Report Limitations

2.1 The inspection has been carried out from ground level only, using visual observation. Where a more detailed inspection is required, this is highlighted in the recommendations.

2.2 Trees are living organisms whose health and condition can change rapidly. The health, condition and safety of trees should be checked on a regular basis, preferably at least once a year. The conclusions and recommendations in this report are only valid for a period of 12 months from the date of this report. This period of validity may be reduced in the case of any change in conditions to or in proximity to the tree.

2.3 Fenland District Council and Kings Lynn and West Norfolk Borough Council who have confirmed that none of the areas surveyed have trees on or adjacent to the site(s) that are protected by a Tree Preservation Order and the sites are not located within a Conservation Area.

2.4 Any legal descriptions or information given to the consultant are understood to be accurate.

2.5 No responsibility is assumed by Amenity Tree Care Ltd for legal matters that may arise from this report and the consultant shall not be required to give testimony or to attend court unless subsequent contractual arrangements are made.

2.6 Any alteration or deletion from this report will invalidate it as a whole and the conclusions of this report will remain valid for 12 months from the date of the inspection.

2.7 The responsibility for any tree work(s) undertaken on the surveyed trees rests with the land managers.

3.0 Methodology and data collection

3.1 The site was visited as indicated above and the trees were assessed visually utilising the Visual Tree Assessment methodology.

3.2 Each individual tree has been assessed with general regard to condition, health and structural suitability and commented upon in the report.

3.3 An individual and group schedule is appended to this report and includes detailed information relating to tree height *both current and future*, stem diameters, crown dimensions and estimated remaining contribution.

3.4 Where dimensions have been recorded the following measurement conventions have been observed

a) Height, crown spread, and crown clearance have been recorded to the nearest half metre (crown spread has been rounded up) for dimensions up to 10m and the nearest whole meter for dimensions over 10m.

b) Stem diameters have been recorded in millimetres and rounded to the nearest 10mm

c) Where dimensions have been estimated *(e.g. for those trees located off site or where access is restricted, and accurate data cannot be recorded) these trees will be suffixed with #.*

3.5 Recommendations for remedial tree works (Preliminary Management Recommendations) have been provided on the basis of the tree(s) current condition.

3.6 Trees growing as groups or woodland have been identified and assessed by the arboriculturist. An assessment has been undertaken of the individual trees within the group/woodland in order to determine the category score and aid future management plans.

3.7 Trees that have not been identified on the topographical survey have been plotted by eye on site and identified as such on the tree survey schedule (#).

4.0 Arboricultural Constraints

4.1 Below ground constraints are influenced by the RPA and are determined in line with the recommendations set out in section 4.6 of BS 5837:2012. These recommendations quantify the RPA based on a measured stem diameter in accordance with Annex C, and the RPA determined from Annex D. The RPA for trees with two to five stems are assessed using the calculation in 4.6.1. It is important to understand that when considering the RPA with regards to the circular plot that a number of site factors can influence the root morphology and disposition of tree roots as stated in section 4.6.3 of BS 5837:2012. Trees that form the leading edge of groups/woodland are recorded at intervals along the woodland/group edge in order to an accurately plot a root protection area. All these factors must be considered when contemplating the impacts of the potential development on existing woody vegetation.

4.2 Above ground constraints posed by existing trees can significantly affect the proposed land use and the subsequent condition will be considered by the planning officer should the development be allowed to proceed. Above ground, constraints are considered in line with the recommendations in section 5.2 of BS 5837:2012 and include shade dominance, current and future crown spread as well as the ultimate height of those retained trees.

5.0 Summary

5.1 A total of six individual trees have been surveyed and two groups. The overall quality of the trees on site is poor except for T6 a mature maple tree growing at the front of group 1. The tree has established well in this position the crown has been partially suppressed on the north side because of the conifers. This does not detract from the overall arboricultural merit of the tree and the tree provides some contribution to the amenity of the local treed landscape.

5.2 The two birch trees T1 and T2 have grown as a cohesive feature and provide some contribution to the local treed landscape.

5.3 The remaining trees T4-T6 are lime trees and the oldest on site but due to their proximity to the overhead power line they have been heavily reduced in height and spread. This type of excessive pruning will continue on a cyclical basis and has reduced their amenity value.

5.4 The two groups consist of closely planted conifers that provide some amenity value by blocking the view of the sub-station from Broadend Road. The trees will suffer the same fate as the lime trees and be heavily pruned to prevent them coming into contact with the power lines.

Note: *Please refer to tree survey schedule for detailed dimensions and specific site comments*

Appendix 1

Survey Key

Tree No. Sequential reference number e.g. T1, T2 for individual trees, where trees are determined to be a group they will be denoted as follows G1, G2 and W1, W2 for woodlands.

Species: Recorded and listed by both common name and scientific name

Stem: Principal above ground structural component(s) of a tree that supports its branches.

Height: Provides indication of the height of the tree and is measured in meters from ground level to the upper canopy edge and is recorded up to the nearest half meter for heights up to 10 meters and the nearest meter for heights over 10 meters.

Stem diameter: Measured at a height of 1.5 meters from ground level using a diameter tape and recorded in millimetres. Where the stem cannot be measured at 1.5 meters due to irregular swellings on the stem or low branching then the position of measurement will be taken in accordance with the specification in Annex C of BS 5837:2012

Crown spread: Measured at the four cardinal points of a compass (north, south, east, and west) from the centre of the stem and rounded up to the nearest meter in order to provide an accurate representation of the crown spread in order to show above ground constraints.

Crown height: Measured distance between the lowest points of the crown from ground level.

Life stage: A method of age estimation e.g. young - the first one third of the estimated life expectancy, middle mature- the second third of the estimated life expectancy, mature- The last third of the estimated life expectancy , over mature- trees showing obvious signs of senescence

First significant branch (FSB): The direction of growth of the first significant branch from the point of attachment.

Comments: A brief evaluation and description of the tree in order to inform on significant defects or characteristics relating to tree form. Where comments are not present it should be assumed that no relevant features were exhibited.

Recommendations: Arboricultural recommendations based on the current land use only and are provided where action is required in order to aid in the long term management of the tree or for reasons of site safety.

Survey restrictions: It may be necessary on occasion to estimate tree dimensions where access is not available or where structure(s) or vegetation is precluding the visual assessment. Where dimensions are estimated it will clearly be marked in the tree survey schedule and be suffixed with #.

Root protection area (RPA) Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability. All stem diameters are calculated in line with the guidance given in BS 5837:2012 Annexe D

Tree categorisation: a method of apportioning a value (non-fiscal) to trees in order to identify the quality and value of existing tree stocks, allowing for informed decisions to be made regarding which trees are to be retained or removed dependant on development occurring. Category U-Those in such a condition that cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. Category A-Trees of a high quality with an estimated life expectancy of at least forty years. Category B-Trees of a moderate quality with an estimated remaining life expectancy of at least 20 years. Category C-Trees of a low quality with an estimated remaining life expectancy of at least 10 years.

Please refer to Table 1 Cascade chart for tree quality assessment, including subcategories, reference BS 5837:2012

Estimated remaining contribution: estimated remaining life expectancy e.g. <10, 10+, 20+, 40+

Statutory wildlife obligations: The Wildlife and Countryside Act 1981

The Wildlife and Countryside Act 1981 as amended, the Countryside and rights of Way Act 2000 and the Conservation (Natural Habitats) Regulations 1994.

These regulations protect all wild birds and make it an offence to intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Furthermore the Act makes it an offence (with exception to species listed in Schedule 2) to intentionally:

- kill, injure, or take any wild bird,
- take, damage or destroy the nest of any wild bird while that nest is in use or being built (also [take, damage or destroy the nest of a wild bird included in Schedule ZA1] under the Natural Environment and Rural Communities Act 2006), or
- take or destroy an egg of any wild bird

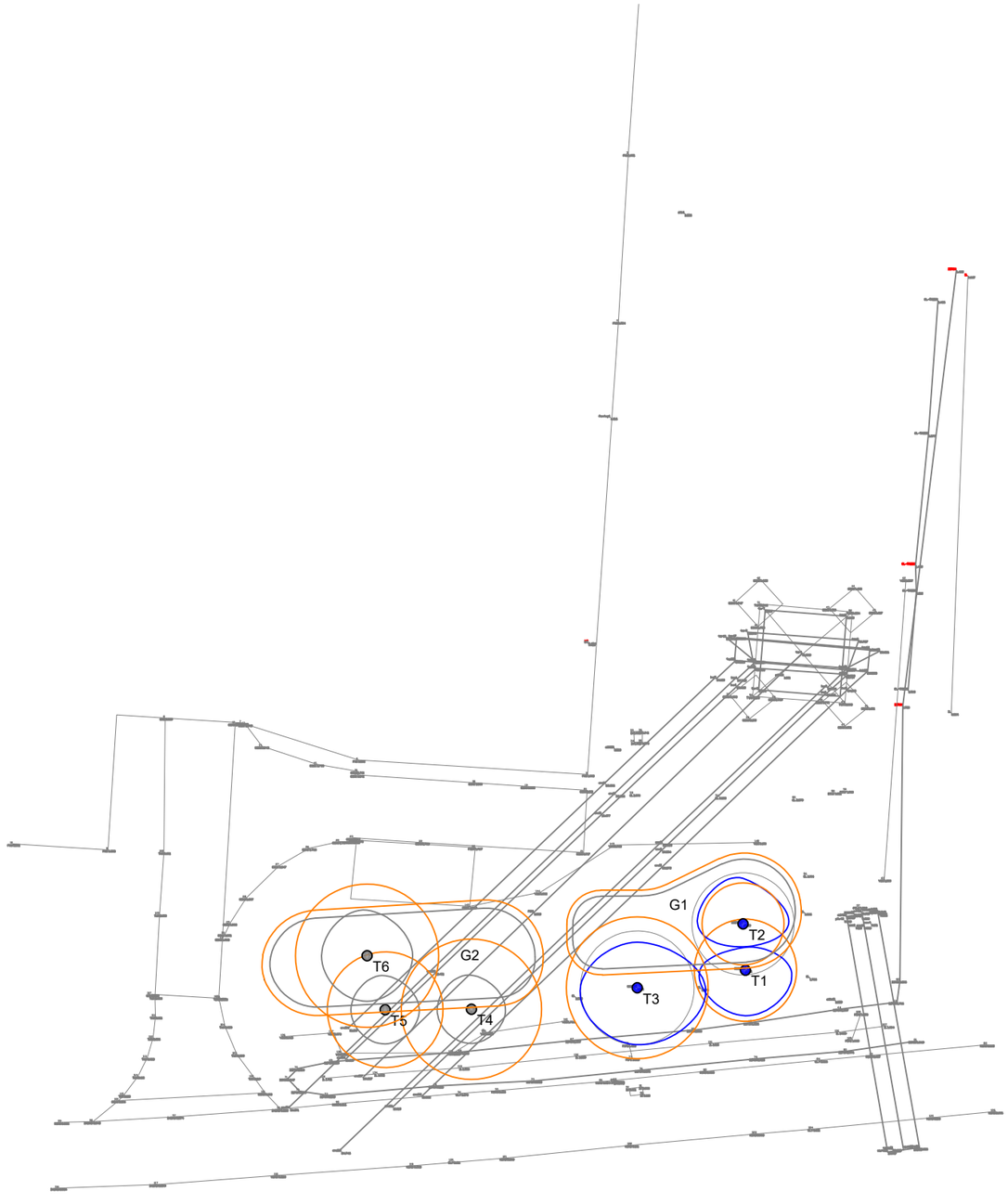
Bats are protected under Schedule 2 of the Conservation (Natural Habitats) Regulations 1994 making it an offence to damage or destroy a roost site even if the roost is not occupied at the time. The potential fines for each offence is £5000 and if more than one bat is involved in the incident then the fine can be extended to £5000 per bat. A prison sentence can be issued with offenders serving up to six months in prison.

Appendix 2

Table 1 cascade chart

Category and definition	Criteria (including subcategories where appropriate)		Identification on plan
Trees unsuitable for retention (see Note)			
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 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 **NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7**		
	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 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)
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
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 value

Tree No.	Common Name	Age	Diameter(mm)	Stems	Height(m)	Crown Height(m)	North(m)	South(m)	East(m)	West(m)	Category	Life Exp	Comments	Recommendations	RPR(m)	RPA(m)
T1	Silver Birch	EM	375	1	10	1	2	4	4	4	B1	40+			4.5	64
T2	Silver Birch	EM	300	1	10	1	4	2	4	4	B1	40+			3.6	41
T3	Norway Maple	M	520	1	10	1	4	5	6	5	B1	40+			6.2	122
T4	Lime	M	515	1	4	1	3	3	3	3	C1	20+	The tree has been topped as 4m above ground level because of the overhead power line.		6.1	117
T5	Lime	EM	425	1	4	1	3	3	3	3	C1	20+	The tree has been topped as 4m above ground level because of the overhead power line.		5	79
T6	Lime	M	525	1	12	1	4	3	3	4	C1	20+	Half the crown on the eastern side has been removed because of the proximity to the overhead power line.		6.2	121
G1	Lawson Cypress Western Red Cedar Elder	SM	175	1	5	0>	3	3	3	3	C2	40+			2.1	14
G2	Lawson Cypress Western Red Cedar Elder Small-leaved Lime	SM	200	1	6	0>	3	3	3	3	C2	40+			2.4	18



TREE CONSTRAINTS PLAN

Retention value key

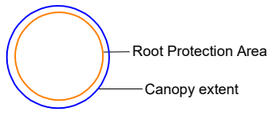
(Category A)

(Category C)

(Category B)

(Category U)

Root Protection Areas have been identified and are based on BS5837:2012 and have been shown as an orange polyline.



Note: The original of this drawing was produced in colour-a monochrome copy should not be relied upon

AMENITY TREE Ltd

Client:
Wood

Project:
Walsoken Substation

Detail:
Tree Constraints Plan

Drawn By:	Date:	Scale:
SS	18.02.2022	1/500@A3

Drg No:	Revision:
01	V2