



Arboricultural Method Statement for Enabling and Construction Phases of Work

Studley Solar Farm

Antea®Group

Understanding today.
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PREPARED FOR

Melksham Calne Green Ltd

ISSUED:

10th June 2025

PROJECT NUMBER

2024-07-546400

[anteagroup.uk](https://www.anteagroup.uk)

Key Details

Client Name	Melksham Calne Green Ltd
Site Address	Land at Studley Farm, Atworth, Melksham, Wiltshire
Antea Group UK Contact	Peter Morrell (Peter.morrell@anteagroup.uk)
Project Reference	2024-07-546400

Document Control

Issue No.	Status	Issue Date	Comments
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Arboricultural Method Statement for Enabling and Construction Phases of Work

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE OF THE METHOD STATEMENT

Antea Group UK ('Antea') was instructed by Melksham Calne Green Ltd (the "Client") to produce an Arboricultural Method Statement (AMS) to British Standard BS5837:2012. This AMS has been prepared for Studley Solar Farm, Studley Farm, Atworth, Melksham, Wiltshire (hereafter referred to as 'the Site') as indicated on Figure 1 and has been informed by a Tree Survey undertaken on 17th July 2024. The proposed development plan is included as Drawing 1.

This AMS covers the Enabling and Construction Phases of Works to facilitate construction of the proposed solar farm, including areas required for access, temporary and permanent construction and temporary storage areas. A separate AMS will cover the cable route that connects the solar farm to the National Grid.

The purpose of this Document is to assist with the preservation of trees shown to be retained at, and adjacent to, the Site. Trees can readily be retained and protected during the proposed development by ensuring that the tree protection methods, construction techniques and working practices are adhered to. This document provides this information; principles that are approved and enforced by the County Planning Authority, Wiltshire County Council (WCC).

1.2 AMS SUMMARY

The following points are explained and qualified in more detail within this AMS, and this summary is intended for reference only. Any actions subsequent to this summary should be discussed with the Arboriculturist at Antea before being undertaken in order to prevent a potential breach of tree protection legislation, whether by planning condition, area planning designation or specific tree preservation order (which may apply to individual trees or groups).

This document gives Site-specific instructions on the methods required to protect the existing tree stock, which is agreed to be retained. These methods are set out in a logical sequence of operations as follows:

- Pre-construction meeting: To review the AMS and ensure all relevant parties are familiar with its content, show the trees concerned and where protection will be required;
- Tree protection fencing and exclusion signage: To BS 5837:2012 or other agreed approach if required;
- Ground protection: Techniques to avoid compaction, disturbance or contamination of the tree root environment;
- Boundary fencing, panel installation and services: Methods to allow building operations including service routing and special measures where Root Protection Areas (RPA) are unavoidably breached. To include specialist construction methods such as no-dig solutions where permissible, in proximity to trees/hedgerows;
- General tree care measures and awareness; and

- Site monitoring to be undertaken by the Arboriculturist at agreed intervals through the Site preparation and construction process.

The British Standard recommendations are made for appropriate barriers to exclude construction from RPA: The RPA for each tree is provided in the Tree Schedule (Appendix B). It should be noted that this is a Site-specific AMS produced solely for the physical protection of those trees identified within the Tree Survey and is not relevant to any other site or situation. This Report has been compiled from data achieved during a Tree Survey by Antea.

This document gives Site-specific instructions on the methods required to protect the existing tree stock, which is agreed to be retained. These methods are set out in a logical sequence of operations as follows:

- Pre-construction meeting: To review the AMS and ensure all relevant parties are familiar with its content, show the trees concerned and where protection will be required;
- Tree protection fencing and exclusion signage: To BS 5837:2012 or other agreed approach if required;
- Ground protection: Techniques to avoid compaction, disturbance or contamination of the tree root environment;
- Groundworks, foundations and services: Methods to allow building operations including service routing and special measures where Root Protection Areas (RPA) are unavoidably breached. To include specialist construction methods such as piling for foundations, no-dig solutions for footpaths and paved areas, where permissible, in proximity to trees without damage to the tree, from root damage, or to the buildings, either from roots or from ground desiccation and heave;
- Erection of scaffolding for construction;
- General tree care measures and awareness; and
- Site monitoring to be undertaken by the Arboriculturist at agreed intervals through the Site preparation and construction process.

The British Standard recommendations are made for appropriate barriers to exclude construction from RPA: The RPA for each tree is provided in the Tree Schedule (Appendix B). It should be noted that this is a Site-specific AMS produced solely for the physical protection of those trees and hedgerows identified within the Tree Survey and is not relevant to any other site or situation. This AMS is based on up-to-date data from a Tree Survey conducted by Antea in July 2024.

2.0 ROOT PROTECTION AREAS

Since the majority of tree roots are found in the upper metre of soil, development works, such as shallow excavation and soil compaction can adversely affect the health of trees in close proximity. Trees differ in their tolerance to root loss or disturbance, according to their age, species and/ or condition. All protection works within this document are in accordance with BS5837:2012 'Trees in Relation to Design, Demolition and Construction – Recommendations'

Based on the tree survey data, RPAs have been determined for every retained tree as shown in the Tree Constraints Plan (Appendix B). The RPAs are designed to protect at least a functional minimum of tree root mass in order to ensure that the trees survive the construction process. The RPA has been used to inform the Construction Exclusion Zone (CEZ), the area to be protected during development by the use of ground protection and specialised construction techniques, outlined below.

From the assessment undertaken, the following tree stock need specific consideration in this AMS:

- A section of **H3** is to be removed to enable an internal access road to be created;
- Sections of **H11, H18, H21, H23 and H28** – Sections of hedgerows are to be coppiced to create access points and allow boundary security fencing to be erected; and
- **T6, T7, T8, T9, T10, T15, T16, T20, T21, T22, T29, T30, T38, T42, T43, T44, T45, TG5, H3, H5, H9, H10, H14, H15, H16, H21, H23, H24, H28, H29, H30** - The trees, tree group and hedgerows are located immediately adjacent to the compound entrances and areas of proposed works with RPAs and canopies which may extend into the working footprint which could be impacted by vehicle movements during development works.

3.0 METHODOLOGY

The following sequences are governed by operational constraints and subject to change. The Site Arboriculturist must be noted of any changes to this schedule.

Roles and Responsibilities

The Client shall hold overall responsibility for the project and shall appoint professionals and delegate responsibility in relation to the Scheme of Tree Protection as follows:

- The Contractor's Site Manager (CSM) shall hold the responsibility to ensure that all key contractors and all other persons working on-Site have a responsibility to be aware of trees and to abide by tree protection procedures set out within the AMS.
- The Project Arboriculturist / Arboricultural Clerk of Works (ACoW) shall be responsible for independently monitoring/supervising the effectiveness of tree protection at regular intervals and report all findings in writing back to the Client, the CSM, and WCC, if required. They shall also be instructed to provide additional advice should unforeseen circumstances develop.
- Other appointed individuals and their contact information shall be recorded as part of the on-Site pre-commencement site meeting.

3.1 SEQUENCED METHODS OF CONSTRUCTION AND TREE PROTECTION

Pre-Development Stage

3.1.1 PRE-COMMENCEMENT

In advance of enabling works and construction activities, an on-Site meeting will be held to enable all relevant parties within the development team to meet, to be aware of the requirements of the AMS, and to agree a coordinated approach to the project. The meeting shall be pre-arranged, and the WCC Tree Officer shall be given five working days' written notice and invited to attend. As a minimum the meeting will include the CSM and the Project Arboriculturist, along with any other relevant sub-contractors or project managers. Matters to be addressed in this meeting include:

- Identification of persons present and exchange of contact information;
- Familiarisation with all aspects of the AMS;
- Familiarisation with the site in relation to the AMS;
- Location of temporary construction compounds;
- Phasing of work, including installation of perimeter fencing;
- Identification and marking-up of hedgerow sections to be removed; and
- Setting out of any additional temporary tree protection measures specified by Project Arboriculturist or Tree Officer.

The Project Arboriculturist shall provide written confirmation to the WCC Tree Officer that the meeting has occurred and that specified matters have been addressed. If required, an amended Tree Protection Plan will be submitted for approval. The outcomes of the meeting will be recorded by the Project Arboriculturist as part of the Site's construction phase ecological monitoring record.

3.1.2 COMPLETION OF AGREED TREE WORKS

All tree work is to conform to BS3998:2010 'Tree Work' and to current arboricultural best practice. Tree works are to be undertaken by a professional and specialist arboricultural contractor, who carries the appropriate experience and insurance cover and following formal approval from WCC.

The following works are specifically proposed:

- A section of **H3** is to be removed to enable an internal access road to be created;
- Sections of **H11, H18, H21, H23 and H28** are to be coppiced to create access points and allow boundary security fencing to be erected; and .
- **T15** is to be canopy lifted to 3 m to allow boundary fencing to be erected.

3.1.3 TREE PROTECTION BARRIERS

Tree protection barriers will be erected in order to exclude the RPZ from significant construction activity. All construction work will be undertaken from the existing hard standing or previously impacted agricultural land. It is the responsibility of everyone engaged in the construction process to respect the tree protection measures and observe the necessary precautions within and adjacent to them. Inside the exclusion area of the development, the following shall apply:

- No mechanical excavation without approval from WCC;
- No excavation by any other means without ACoW supervision;
- No hand digging without a written Method Statement having first been approved by the ACoW;
- No ground level changes whatsoever;
- No storage of plant or materials;
- No storage or handling of any chemicals;
- If 360-degree excavators are to be used during construction, at no time is the excavating arm to encroach over the position of the protection barriers;
- No vehicular access;
- No fires should be lit within 10 metres of the nearest point of the canopy of any retained tree;
- No equipment, signage, fencing, tree protection barriers, materials, components, vehicles or structures shall be attached to or supported by a retained tree; and
- No mixing of cement or use of other materials or substances shall take place within tree RPA or RPZ, nor in proximity to tree RPA or RPZ, since leakage or displacement of those materials or substances could cause them to enter tree RPA or tree RPA.

The majority of tree protection fencing will comprise of the boundary security fencing for solar farm (Drawing 2. (01/0.2)) and will be erected prior to any works being undertake in each specific area. Internally, trees and hedgerows will be protected by BraceBlok fencing system at pinch-points and where vehicle traffic may impact. The minimum BraceBlok that will be used is 100 kg as shown on Appendix C. Given that the hedgerows and trees stand within intensively farmed agricultural land and will have sustained soil compaction and ploughing damage within the outer RPA, post and wire fencing will be erected to provide separate on between on-site working practices and retained vegetation.

The location of the protection barriers is indicated on Figure 2. The position of the barriers is to be marked out with biodegradable marker paint on-Site and agreed with appropriate representatives from WCC and the CSM. All operatives and other relevant personnel are to be informed of the role of the exclusion barriers and their

importance. A copy of the Tree Protection Plan (TPP) (Figures 2) will be displayed on-Site at all times during the construction process.

The barriers will be erected prior to any works on-Site in the vicinity of retained trees, including enabling works or the delivery of machinery, materials, plant or equipment to the Site or any adjacent land. Once the barriers have been properly erected in position, they are to be considered fixed, and are not to be removed or altered in any way without prior approval from the Project Arboriculturist and WCC. Weather-proof signs shall be fixed to the outside of the hoarding with words such as 'CONSTRUCTION EXCLUSION ZONE – NO ACCESS AND NO STORAGE OR WORKING WITHIN THIS AREA'. (See Appendix D).

The barriers will remain in situ until final completion or until a time agreed by WCC and Project Arboriculturist.

Enabling Works

3.1.4 INSTALLATION OF SECURITY FENCING, ACCESS TRACKS AND TEMPORARY CONSTRUCTION COMPOUNDS

Reasonable notice will be given to WCC as to the date of commencement of installation of security fencing, access tracks and temporary construction compounds adjacent to retained trees and hedgerows as part of the commencement of the Development, noting that there is very limited amount of works being undertaken near to retained vegetation. This will provide WCC with the opportunity to visit the Site and ensure that all tree protection methods are in place.

3.1.5 TEMPORARY GROUND PROTECTION METHOD AND SPECIFICATION

Construction of buildings, hardstanding, services and erection of solar panels are to be undertaken as part of the Construction Stage, with all works being undertaken outside of RPZ.

In the unlikely event that it is required, the CSM, ACoW, and WCC will liaise over measures for vehicular or pedestrian access for construction operations to be located within a trees or hedgerows RPA. In such a case, a combination of barriers and ground protection should be adopted to form the CEZ. The objective is to minimise soil compaction.

- Example 1 - For pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g.) 100 mm depth of woodchip, laid on to a geotextile membrane (see Appendix E);
- Example 2 - For pedestrian-operated plant up to a gross weight of two tonnes, proprietary inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane; and
- Example 3 - For wheeled or tracked construction traffic exceeding two tonnes gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.

The Ground Guards temporary road system can be used on construction sites to protect virgin ground from erosion and damage by construction vehicles. Ground Guards are usually installed as a construction 'haul' roadway

consisting of a parallel track of 2.4 m x 1.2 m panels with a 1.2 m space in between. Where a temporary 'haul' roadway must pass near to trees, the following extra precautions must be taken in order to spread the loading applied to the track way:

- Edge rails of 200 x 50 mm sawn timber or un-treated sleepers should be installed where the track way will pass over exposed retained tree RPA's. These should be installed on either side of the track way using either 50 x 50 x 500 mm timber stakes of 500 mm steel pins spaced at 1.5 m intervals;
- A layer of geotextile membrane should then be laid over the area of ground to have the track way installed upon it;
- A base layer of Ground Guards should be laid over the top of the geotextile membrane at least three boards wide between the installed timber edging;
- A minimum layer of at least 150 mm deep coarse, preferably green wood chippings should be laid as a compressible layer over the top of the Ground Guards; and
- The twin surface Ground Guard track way can then be laid over the top of the wood chippings.

3.1.6 UNDERGROUND AND ABOVE-GROUND UTILITY APPARATUS

Mechanical trenching for the installation of underground apparatus and drainage severs any roots present and can change the local soil hydrology in a way that adversely affects the health of the tree. For this reason, particular care should be taken in the routeing and methods of installation of all underground apparatus. Wherever possible, apparatus should be routed outside RPAs. Where this is not possible, it is preferable to keep apparatus together in common ducts. Inspection chambers should be sited outside the RPA.

Where underground apparatus is to pass within the RPA, detailed plans showing the proposed routeing should be drawn up in conjunction with the project arboriculturist. In such cases, trenchless insertion methods should be used, with entry and retrieval pits being sited outside the RPA. Provided that roots can be retained and protected in accordance with the National Joint Utilities Guide, Volume 4, (see Appendix F).

3.1.7 GROUNDWORKS

- Spoil, including soil and rubble will be removed from the Site and not stored against any protection barriers or over any ground protection;
- Only predetermined access routes with appropriate ground protection will be used to during this process; and
- The enabling programme is to be undertaken across the Site. The works are not considered to impact upon any RPA.

3.1.8 DISMANTLING PROTECTION BARRIERS AND LANDSCAPING WORKS

- It is anticipated that the barriers will remain in place until the substantive completion of construction activities across the Site;
- A minimum of seven days' notice will be given to the LPA prior to the dismantling of the protection barriers; and
- Once the barriers have been removed all landscaping works undertaken will avoid soil re-grading and disturbance within the CEZ, and no soil levels will be altered after the protection barriers have been removed.

4.0 COMMUNICATIONS AND MONITORING

4.1 COMMUNICATIONS

Prior to commencing relevant works on Site, all Site operatives must be briefed by the CSM in relation to site procedures and rules that relate to retained trees as well as the content of the AMS.

The Project Arboriculturist will remain on hand in an advisory role to answer any questions relating to tree protection that may arise during construction planning or during the build phase.

In order to ensure that the principles of tree protection set out in the statement are adhered to, the contact details of the key individuals involved with these works, and the tasks that require monitoring should be set out. These details should be retained by all relevant parties and available on-Site at all times. Relevant parties will be advised of any changes in personnel or contractor during the development process.

Before construction begins written confirmation that the Client or its agents agree to comply in full with the principles set out within this AMS will be lodged with WCC.

Upon successful completion of the on-site works the Project Arboriculturist shall review the site monitoring and compliance actions from throughout the installation process and prepare a final completion statement for submission to WCC.

4.2 MONITORING

Monitoring of all trees on-Site and immediately adjacent to the Site will be undertaken by the Project Arboriculturist. This will take the form of Arboricultural Protection Site Inspections:

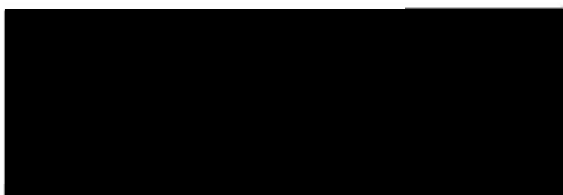
- Site inspections will be completed at regular intervals for the entire duration of on-Site external operations;
- Adherence to the approved AMS and any incidents will be monitored and recorded; and
- A Reporting Form (Appendix G) will be produced following each visit by the Project Arboriculturist and will form part of the Site's ecological and arboricultural monitoring record.

5.0 DISCLAIMER

The recommendations contained in this report represent Antea's professional opinions based upon the currently available information and are arrived at in accordance with currently accepted professional standards. This report is based upon a specific scope of work requested by the Client. The contract between Antea, and its Client outlines the scope of work, and only those tasks specifically authorised by that contract or outlined in this report were performed. This report is intended only for the use of Antea's Client and anyone else specifically identified in writing by Antea as a user of this report. Antea will not and cannot be liable for unauthorised reliance by any other third party. Other than as contained in this paragraph, Antea makes no express or implied warranty as to the contents of this report

6.0 REPORT AUTHORISATION

Prepared by:



10th June 2025

Peter Morrell
Principal Arboriculturist

Reviewed and Authorised by:



10th June 2025

Dr Charlotte Sanderson-Lewis
Senior Client Account Director

7.0 CONTACT INFORMATION

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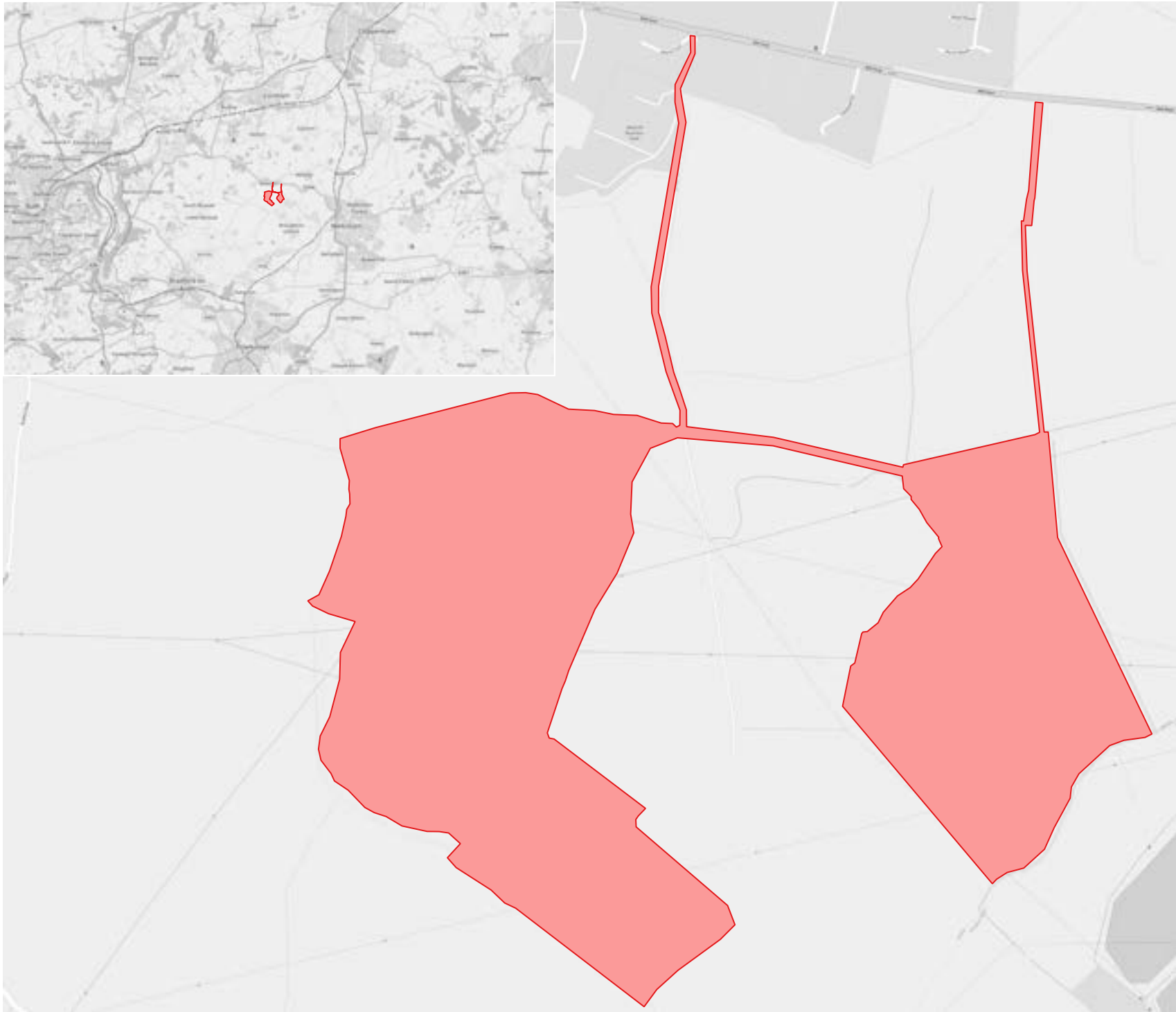
8.0 REFERENCES

BSI Publication BS 5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations.
BSI Publication BS 5837:2005 Trees in Relation to Construction - Recommendations.
Stace, C. (2010). New Flora of the British Isles 3rd edition. University Press, Cambridge.
The Hedgerow Regulations 1997. HMSO

Figures

Figure 1 - Site Location Plan

Figure 2. (01/0.2) - Tree Protection Plan



Legend

Site Boundary

Figure **Site Location Plan**

Project **Studley Solar Farm**

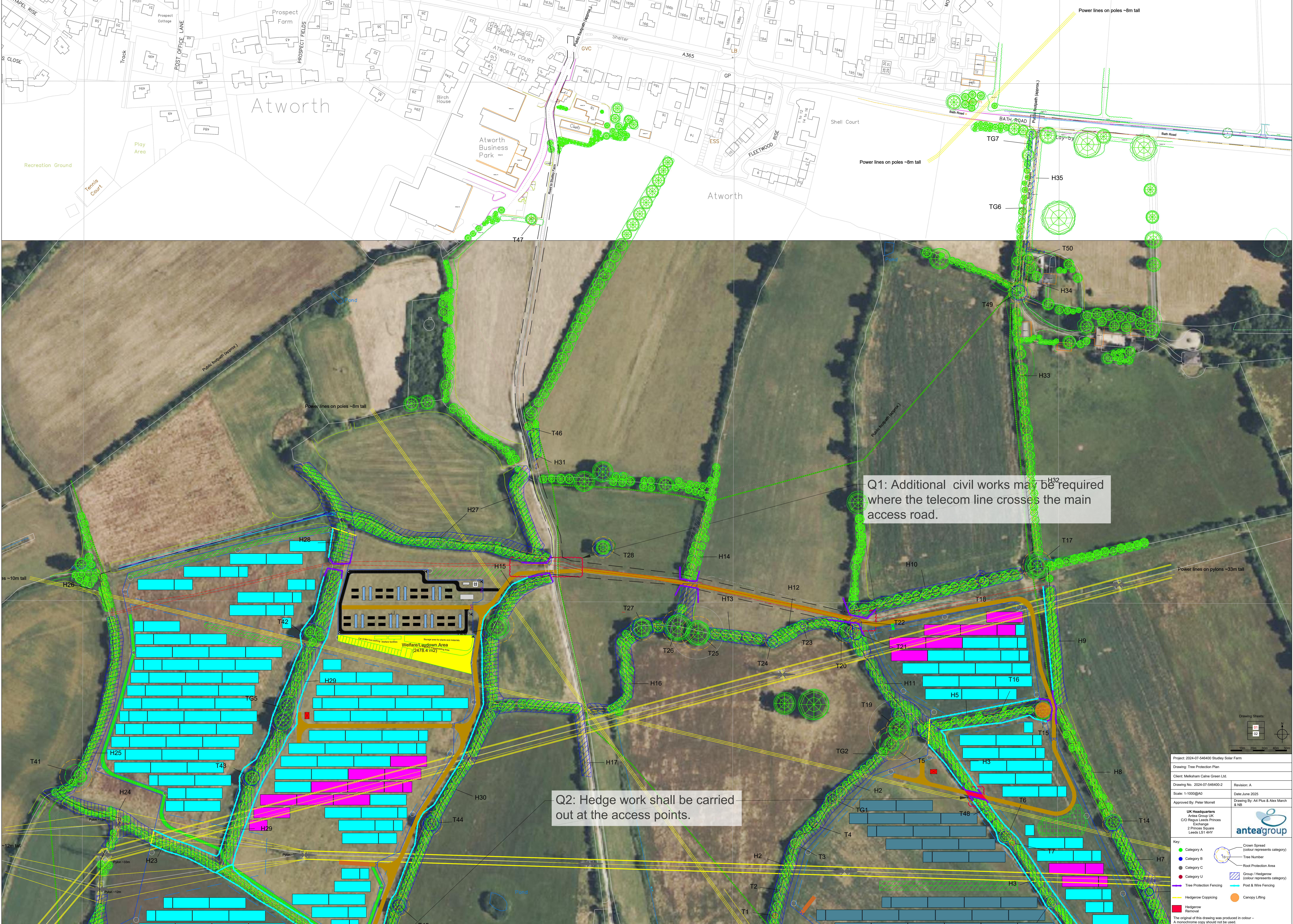
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OH		2024-07-546400

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Q1: Additional civil works may be required where the telecom line crosses the main access road.

Q2: Hedge work shall be carried out at the access points.

Project: 2024-07-546400 Studley Solar Farm
Drawing: Tree Protection Plan
Client: Melkham Caine Green Ltd.
Drawing No: 2024-07-546400-2
Scale: 1:1000@A0
Approved By: Peter Mornell

Revision: A
Date: June 2025
Drawing By: A4 Plus & Alex March & NB

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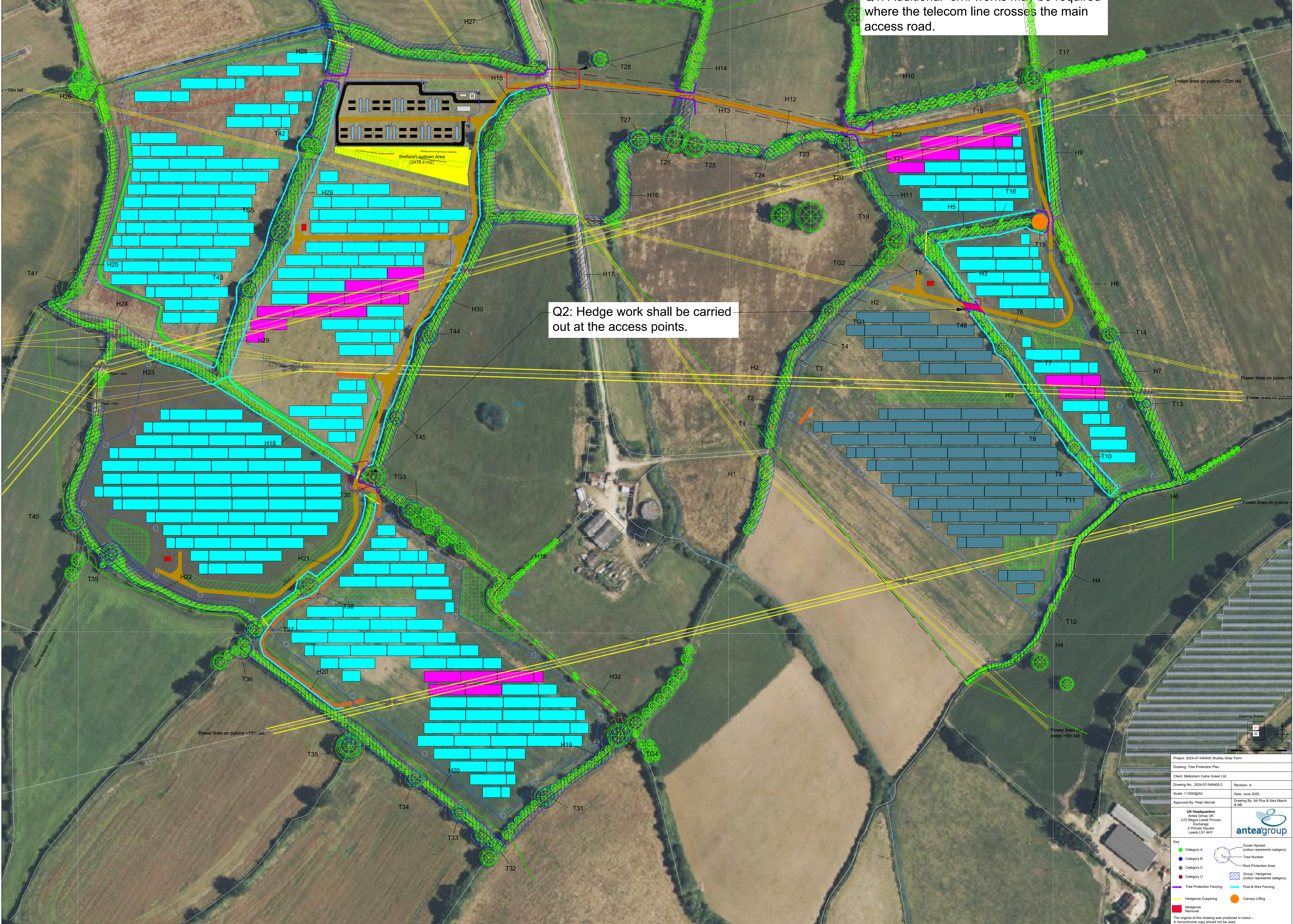
anteagroup

Key:

- Category A (green circle)
- Category B (blue circle)
- Category C (grey circle)
- Category D (red circle)
- Category E (orange circle)
- Category F (yellow circle)
- Category G (purple circle)
- Category H (brown circle)
- Category I (pink circle)
- Category J (light blue circle)
- Category K (light green circle)
- Category L (light orange circle)
- Category M (light purple circle)
- Category N (light brown circle)
- Category O (light pink circle)
- Category P (light blue circle)
- Category Q (light green circle)
- Category R (light orange circle)
- Category S (light purple circle)
- Category T (light brown circle)
- Category U (light pink circle)
- Category V (light blue circle)
- Category W (light green circle)
- Category X (light orange circle)
- Category Y (light purple circle)
- Category Z (light brown circle)

Crown Spread (colour represents category)
Tree Number
Root Protection Area
Group / Hedgerow (colour represents category)
Tree Protection Fencing
Hedgerow Coping
Hedgerow Removal
Post & Wire Fencing
Canopy Lifting

The original of this drawing was produced in colour – A monochrome copy should not be used.



Q1: Additional on-site works may be required where the telecom line crosses the main access road.

Q2: Hedge work shall be carried out at the access points.

Project: 2024-07-546400 Studley Solar Farm
Drawing: Tree Protection Plan
Client: Melkham Calne Green Ltd.
Drawing No: 2024-07-546400-2
Scale: 1:1000@A0
Approved By: Peter Morrell

Revision: A
Date: June 2025
Drawing By: A4 Plus & Alex March & NB

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Key:

- Category A
- Category B
- Category C
- Category U
- Tree Protection Fencing
- Hedgehog Coppicing
- Hedgehog Removal

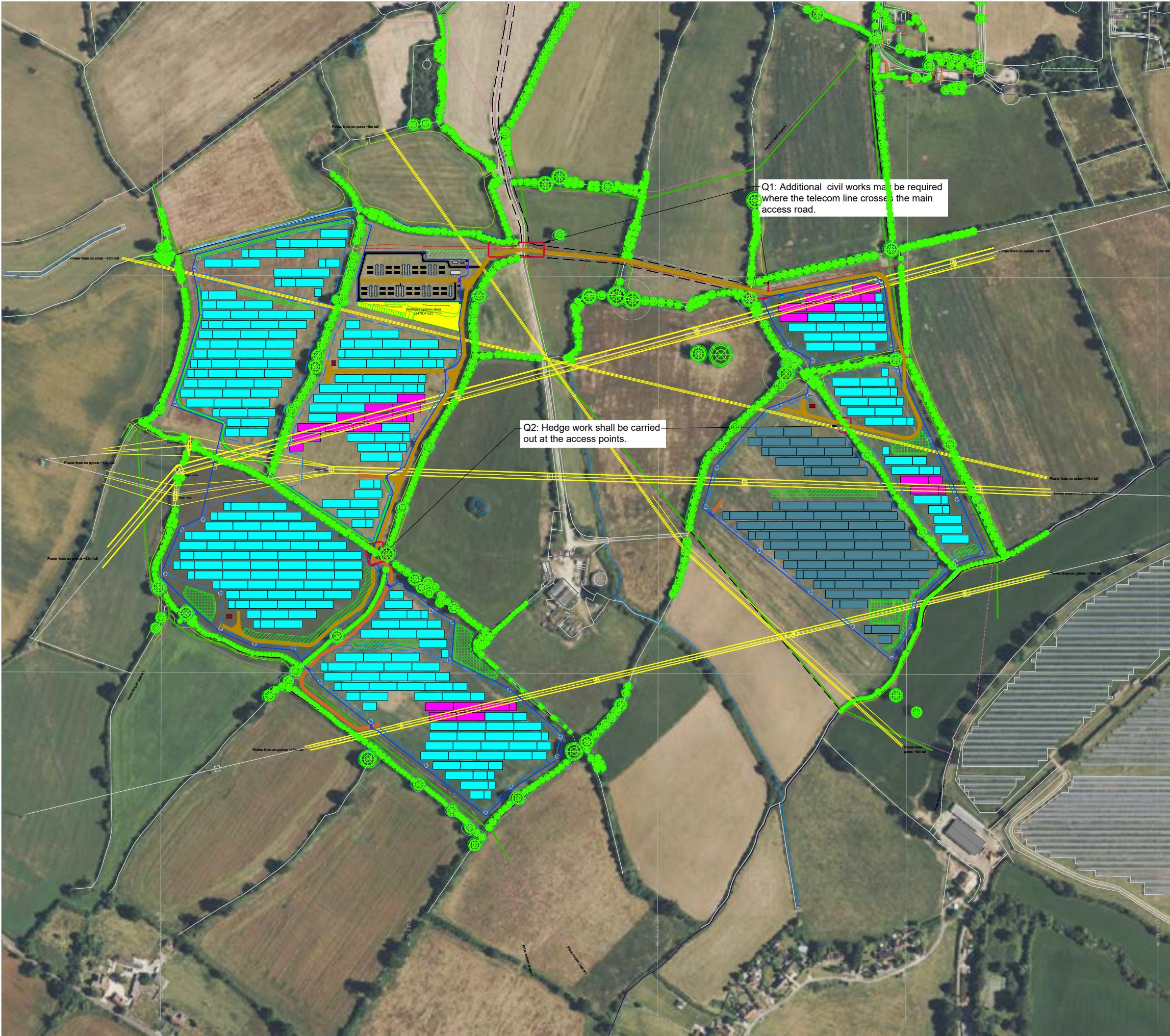
- Crown Spread (colour represents category)
- Tree Number
- Root Protection Area
- Group / Hedgerow (colour represents category)
- Post & Wire Fencing
- Canopy Lifting

The original of this drawing was produced in colour –
A monochrome copy should not be used.

Drawings

Drawing 1 - Proposed Development Plan

Drawing 2 – Boundary Fence and Gate Design



MELKSHAM

OVERALL SITE LAYOUT

FIXED TILT 10°

COORDINATES 51.383583° N -02.189528° E

COUNTRY - UK
REGION / PROVINCE - ATWORTH
COUNTY - WILTSHIRE

KEY

- | | | | |
|--|-------------------------|--|--------------------------|
| | MV STATION | | OVER HEAD LINE |
| | PLANT BOUNDARY | | 33KV UNDERGROUND UTILITY |
| | FENCE / GATE | | HEDGES |
| | LAYDOWN AREA | | SWALE |
| | PEDESTRIAN GATE | | FOOT PATH |
| | CCTV | | PEDESTRIAN ACCESS |
| | ACCESS ROAD | | VEHICLE ACCESS TO PYLON |
| | MAINTENANCE ACCESS | | USED AREA |
| | MODULE STRUCTURE(615Wp) | | BALLAST STRICTURE |
| | MODULE STRUCTURE(620Wp) | | EXPORT CABLE |

PROJECT DATA

PLOT AREA - 31.59 ha
USED AREA - 18.74 ha
FENCED AREA - 23.89 ha
FENCE LENGTH / GATES - 3661 m / 11

PV PARAMETERS

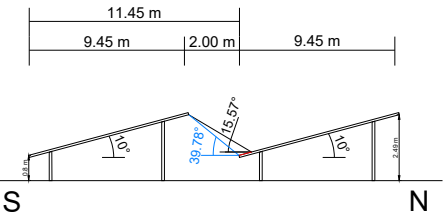
NUMBER OF STRUCTURES (4 X 7) - 58
NUMBER OF STRUCTURES (4 X 14) - 62
NUMBER OF STRUCTURES (4 X 28) - 290
NUMBER/ TYPE/ POWER MODULES - 7504/ JAM66D45LB/ 620Wp
NUMBER/ TYPE/ POWER MODULES - 30072/ JAM66D45LB/ 615Wp
INVERTER / STANDS - 52 x SUNGROW SG350HX
MV STATION - 3 x SPS-7040

PLANT SYSTEM RATING- 23.146760 MWp-DC

CONSTRUCTION AND PARAMETER

CONSTRUCTION SERIES - FIXED TILT 10°, 4 MODULES PORTRAIT
CONNECTION - 28 / STRING
SYSTEM ROTATION - NONE
SHADING - 25.76 %
SUN ANGLE / SHADOW ANGLE - 15.57° / 39.78°

SKETCH
CONSTRUCTION
SERIES



☒ PRELIMINARY ☐ EXECUTION ☐ AS BUILT

R07	UPDATED LAYOUT(ADD 33KV UTILITY LINE)	RV	02.12.24	MV	02.12.24
R06	UPDATED LAYOUT(ROAD & EXPORT CABLE)	RV	26.11.24	MV	26.11.24
R05	UPDATED LAYOUT	RV	14.11.24	MV	14.11.24
R04	UPDATED MODULE BIN CLASS	RV	07.11.24	MV	07.11.24
REV	CHANGES IN THE DESIGN	NAME	DATE	CHECKED	DATE

SITE LAYOUT

SCALE 1:4500

A 3

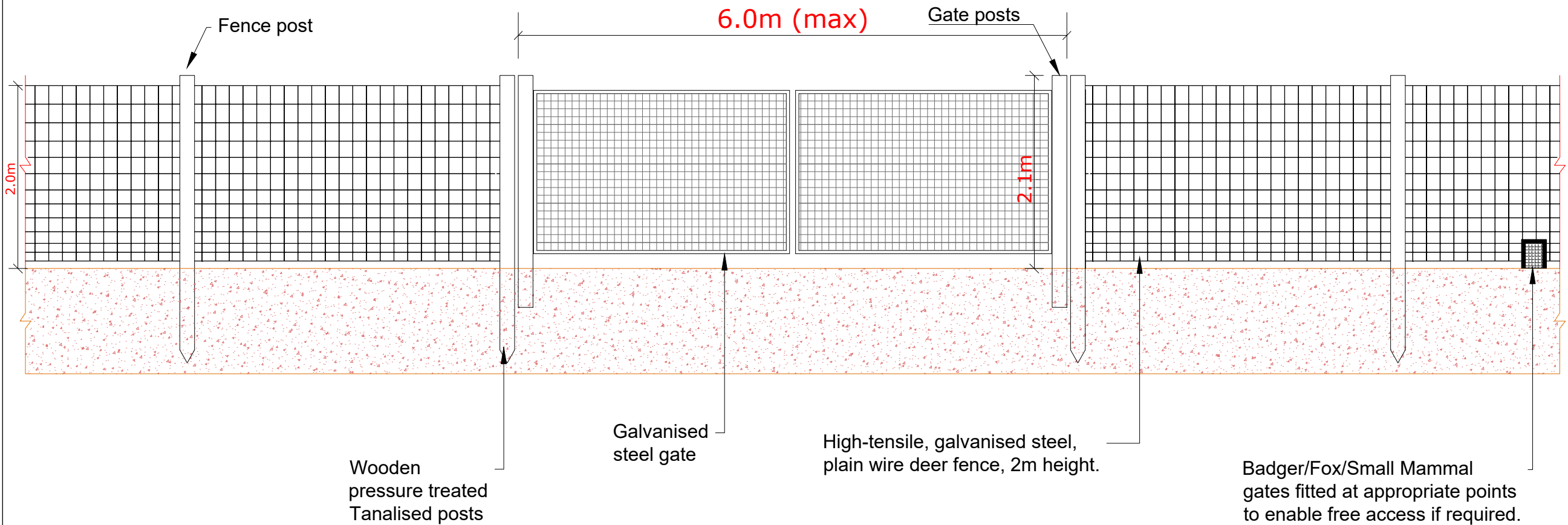


GB-MEL01&CLD104_R07_OVERALL SITE LAYOUT

DATE, SIGNATURE
Frederick Sterling
BELECTRIC

BELECTRIC GMBH
WADENBRUNNER STR. 10
97509 KOLITZHEIM
TEL. +49 (0)9385 5489 000
FAX. +49 (0)9385 5489 040

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GENERAL NOTES

- 1) ALL DIMENSIONS ARE IN METERS UNLESS SPECIFIED.
2) DISTANCES BETWEEN FENCE POSTS WILL VARY.

LEGEND

REFERENCE DRAWINGS

No.	DRAWING TITLE	DRAWING No.

R	DATE	DESCRIPTION OF REVISION	REMARKS

PROJECT NAME :
**STUDLEY FARM
SOLAR PV AND BATTERY**

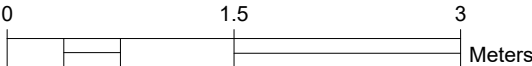
OWNER'S ENGINEER :

GENERAL CONTRACTOR :



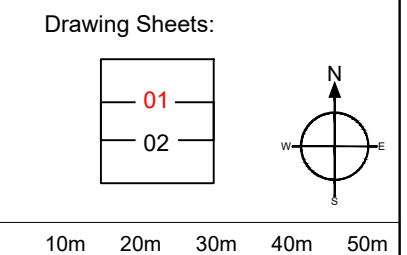
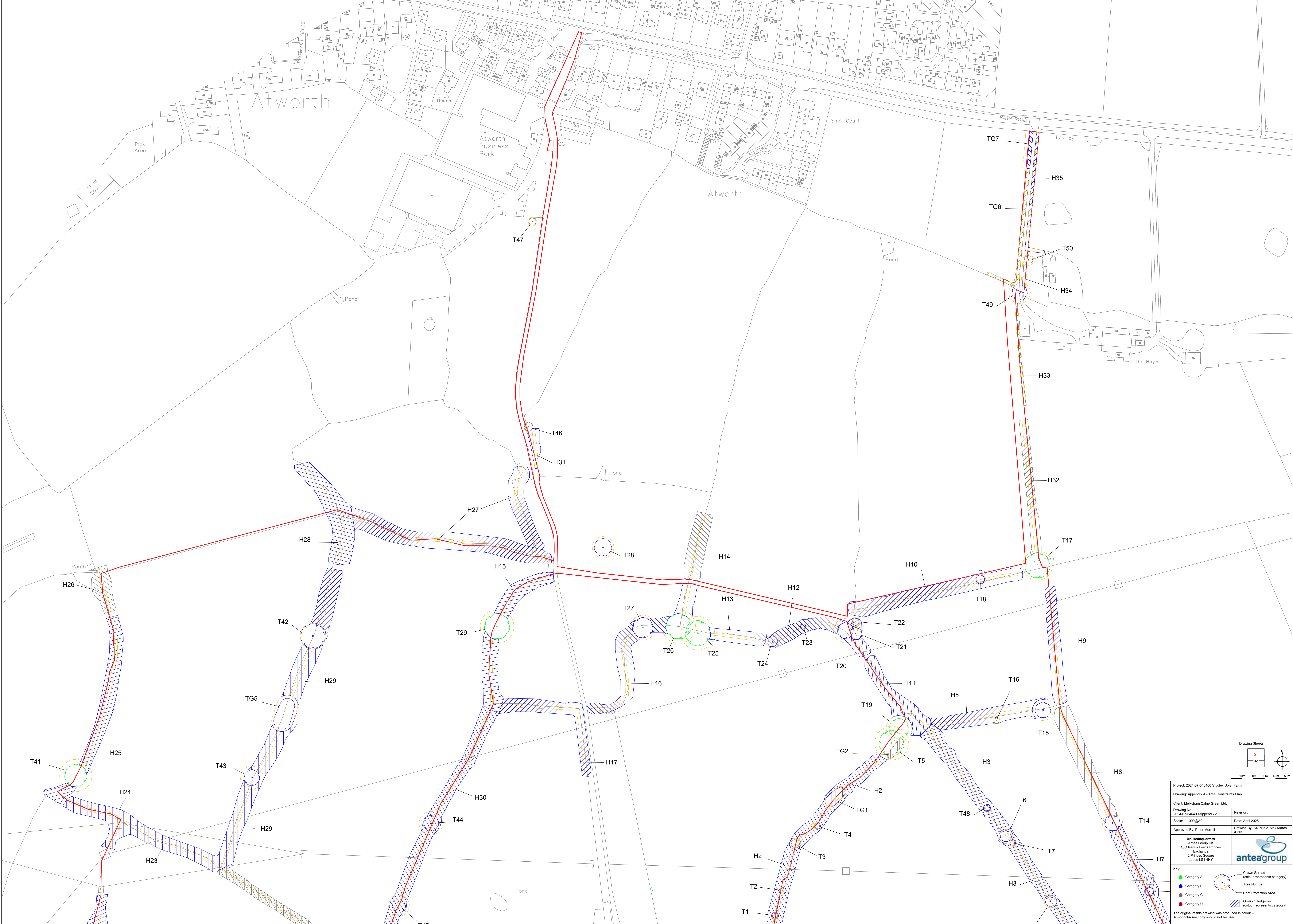
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Appendices

- Appendix A - Tree Constraints Plan
- Appendix B - Tree Schedule
- Appendix C - Tree Protection Barriers
- Appendix D - CEZ Warning Sign
- Appendix E - Example of Ground Protection
- Appendix F - NJUG Volume 4
- Appendix G - AMS Reporting Form



Project: 2024-07-548400 Studley Solar Farm
Drawing: Appendix A - Tree Constraints Plan
Client: Molkham Caine Green Ltd.
Drawing No: 2024-07-548400-Appendix A
Scale: 1:1000@A0
Approved By: Peter Morrell

Revision:
Date: April 2025
Drawing By: A4 Plus & Alex March & NB

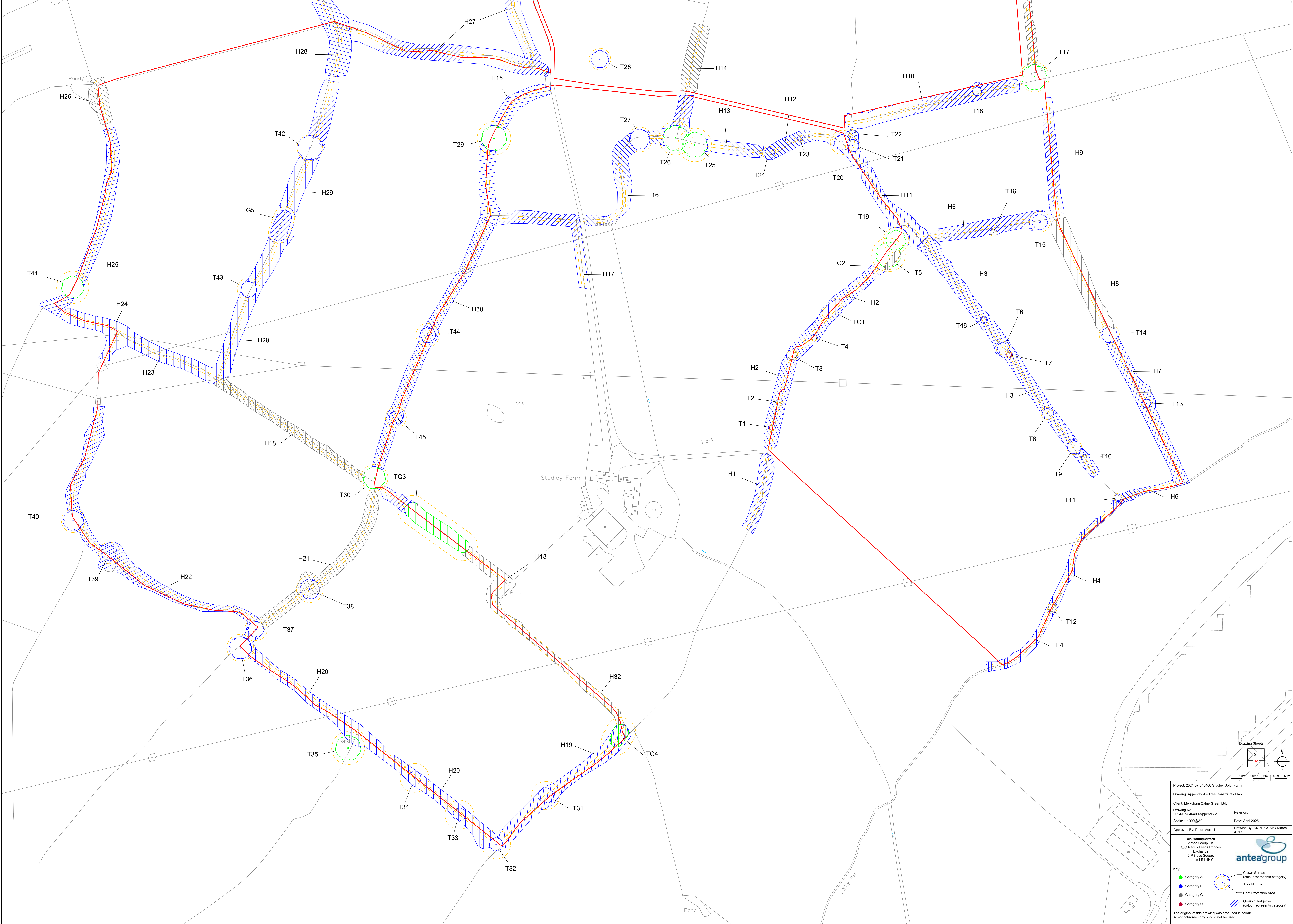
UK Headquarters
Antea Group UK
C/O Regus Leeds Princes Exchange
2 Princes Square
Leeds LS1 4HT

anteagroup

Key:

- Category A (green circle)
- Category B (blue circle)
- Category C (grey circle)
- Category U (red circle)
- Crown Spread (colour represents category)
- Tree Number (number in circle)
- Root Protection Area (blue hatched area)
- Group / Hedgerow (yellow hatched area)

The original of this drawing was produced in colour - A monochrome copy should not be used.



Project: 2024-07-548400 Studley Solar Farm

Drawing: Appendix A - Tree Constraints Plan

Client: Melksham Caline Green Ltd.

Drawing No: 2024-07-548400-Appendix A

Scale: 1:1000@A0

Approved By: Peter Morrell

Revision:

Date: April 2025

Drawing By: A4 Plus & Alex March & NB

UK Headquarters
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Leeds LS1 4HT


anteagroup

Key:

● Category A

● Category B

● Category C

● Category U

Crown Spread
(colour represents category)

Tree Number

Root Protection Area

Group / Hedgerow
(colour represents category)

The original of this drawing was produced in colour –
A monochrome copy should not be used.

2024-07-546400 Studley Solar Farm

TABLE 1 - BS 5837:2012 TREE SCHEDULE

Tree No.	Species Name	Botanical Name	Ht (m)	Stem dia (mm)	No. of Stems	Crown spread				Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comment	Cat Grading	Estimated Remaining Contribution (yrs)	Radius of RPA (m)	RPA (sq m)	Recommendations
						N	E	S	W										
T1	Ash	<i>Fraxinus excelsior</i>	7.0	Est 225	1	4	4	4	4	3	SM	Poor	Poor	Ash dieback present. Failing tree.	U1	<10	2.7	23.0	Consider removal and replacement
T2	Ash	<i>Fraxinus excelsior</i>	7.0	Est 230	1	4	4	4	4	3	SM	Poor	Fair	Establishing hedgerow tree, limited maturity	C1	40+	2.8	24.0	
T3	Ash	<i>Fraxinus excelsior</i>	7.0	Est 400	1	4	4	4	4	3	SM	Poor	Fair	Establishing hedgerow tree, limited maturity. Sparse canopy.	C1	40+	4.8	72.0	
T4	Goat willow	<i>Salix caprea</i>	6.0	Est 225	1	4	4	4	4	0.5	SM	Fair	Fair	Hedgerow coppice	C1	40+	2.7	23.0	
T5	Pedunculate oak	<i>Quercus robur</i>	17.0	Est 1800	1	10	11	10	10	3	M	Good	Good	Located amongst dense bracken. Of lapsed pollard form with large diameter hollowed stem.	A3	40+	15.0	707.0	
T6	Pedunculate oak	<i>Quercus robur</i>	8.0	Est 500	1	6	6	6	6	2	EM	Good	Good	Establishing hedgerow tree.	B1	40+	6.0	113.0	
T7	Ash	<i>Fraxinus excelsior</i>	6.0	Est 230	1	4	4	4	4	3	SM	Poor	Poor	Ash dieback present. Failing tree.	U1	<10	2.7	24.0	Consider removal and replacement
T8	Pedunculate oak	<i>Quercus robur</i>	9.0	Est 450	1	5	6	5	5	2	SM	Good	Good	Establishing hedgerow tree.	C1	40+	5.4	92.0	
T9	Pedunculate oak	<i>Quercus robur</i>	9.0	Est 5 x 250	5	6	6	6	5	2	SM	Good	Good	Establishing hedgerow tree of coppiced form.	B1	40+	6.6	137.0	
T10	Ash	<i>Fraxinus excelsior</i>	7.0	Est 4 x 100	4	4	4	3	4	3	SM	Good	Fair	Establishing hedgerow tree of coppiced form.	C1	40+	2.4	18.0	
T11	Ash	<i>Fraxinus excelsior</i>	9.0	Est 8 x 100	8	5	6	4	5	2	SM	Good	Fair	Hedgerow coppiced tree.	B1	40+	3.6	41.0	
T12	Ash	<i>Fraxinus excelsior</i>	7.0	Est 6 x 150	6	4	4	3	4	3	SM	Good	Fair	Establishing hedgerow coppice tree, limited maturity.	C1	40+	4.5	64.0	
T13	Ash	<i>Fraxinus excelsior</i>	9.0	Est 6 x 150	6	6	6	6	5	5	SM	Good	Fair	Hedgerow coppiced tree.	B1	40+	4.5	64.0	

T14	Pedunculate oak	<i>Quercus robur</i>	9.0	Est 750	1	8	8	7	8	0.3	EM	Good	Good	Mature hedgerow oak of good form and condition.	B1	40+	9.0	255.0	
T15	Pedunculate oak	<i>Quercus robur</i>	18	775	1	8	9	6	8	3.0	EM	Good	Good	Mature hedgerow oak of good form and condition, located adjacent to farm track (9m to the north).	B1	40+	9.3	272.0	
T16	Ash	<i>Fraxinus excelsior</i>	9	3 x 150	3	5	5	5	5	1.0	SM	Good	Fair	Multi-stemmed from base. Establishing hedgerow tree.	C1	40+	3.0	28.0	
T17	Pedunculate oak	<i>Quercus robur</i>	15	Est 1100	1	8	8	8	8	3.0	M	Good	Good	Mature tree with large stem diameter. Scattered deadwood in canopy. Adjacent to dried pond.	A3	40+	13.2	547.0	
T18	Ash	<i>Fraxinus excelsior</i>	8	Av 7 x 150	7	5	5	5	5	2.0	SM	Good	Fair	Coppiced hedgerow tree.	B1	40+	4.8	72.0	
T19	Pedunculate oak	<i>Quercus robur</i>	8	Est 950	1	7	7	8	8	4.0	M	Good	Good	Mature hedgerow tree with scattered deadwood in canopy.	A3	40+	11.4	408.0	
T20	Ash	<i>Fraxinus excelsior</i>	16	Est 900	1	7	7	8	8	4.0	M	Good	Good	Mature hedgerow tree with scattered deadwood in canopy.	B3	40+	10.8	366.0	
T21	Ash	<i>Fraxinus excelsior</i>	8	550	3	6	7	7	6	2.0	SM	Good	Fair	Located amongst dense vegetation. Ivy clad stems.	B2	40+	6.6	137.0	
T22	Ash	<i>Fraxinus excelsior</i>	9	325	1	5	5	1	2	3.0	Y	Good	Fair	Canopy suppressed by adjacent tree	C2	20+	3.9	48.0	
T23	Ash	<i>Fraxinus excelsior</i>	9	240	6	5	5	5	5	2.0	Y	Good	Fair	Hedgerow coppiced tree.	B1	40+	2.9	26.0	
T24	Ash	<i>Fraxinus excelsior</i>	10	250 450	2	5	5	5	5	2.0	Y	Good	Good	Hedgerow tree, bifurcated at 1 m.	B1	40+	6.0	113.0	
T25	Pedunculate oak	<i>Quercus robur</i>	20	1580	1	10	10	11	10	4	OM	Good	Good	Over mature tree with large spreading canopy with scattered deadwood and basal flare.	A3	40+	15.0	707.0	
T26	Pedunculate oak	<i>Quercus robur</i>	20	1200	1	10	10	10	10	4	M	Good	Good	Mature oak with large canopy and scattered deadwood	A3	40+	15.0	707.0	
T 27	Pedunculate oak	<i>Quercus robur</i>	15	1250	1	8	8	8	8	3	M	Good	Good	Hedgerow tree with canopy that reads as one with an adjacent similar sized tree	B2	40+	11.1	387.0	
T28	Pedunculate oak	<i>Quercus robur</i>	17	800	1	7	8	8	9	4	M	Good	Good	Open grown oak of good form and condition, scattered deadwood present.	B2	40+	9.6	308.0	

T29	Pedunculate oak	<i>Quercus robur</i>	20	Est 1500	1	8	10	10	9	4	M	Good	Good	Mature oak with spreading canopy and scattered deadwood.	A3	40+	15.0	707.0	
T30	Pedunculate oak	<i>Quercus robur</i>	13	Est 1000	1	8	10	9	8	4	M	Good	Good	Mature oak with spreading canopy and scattered deadwood.	A1	40+	12.0	452.0	
T31	Pedunculate oak	<i>Quercus robur</i>	20	Est 1050	1	10	9	9	7	4	M	Good	Good	Mature hedgerow tree with spreading canopy and scattered deadwood. Main stem to west tear out to west.	B3	40+	12.6	499.0	
T32	Pedunculate oak	<i>Quercus robur</i>	13	Est 1075	1	8	6	8	10	4	M	Good	Good	Mature hedgerow tree with spreading canopy and scattered deadwood. Large branch tear out.	B3	40+	12.9	519.0	
T33	Pedunculate oak	<i>Quercus robur</i>	13	Est 1075	1	9	6	7	8	4	M	Good	Good	Mature hedgerow tree with spreading canopy and scattered deadwood. Ivy clad stem.	B1	40+	12.9	519.0	
T34	Pedunculate oak	<i>Quercus robur</i>	13	Est 1075	1	8	8	8	8	4	M	Good	Good	Mature hedgerow tree with spreading canopy and scattered deadwood. Ivy clad stem.	B1	40+	12.9	519.0	
T35	Pedunculate oak	<i>Quercus robur</i>	20	Est 1225	1	11	11	11	11	4	M	Good	Good	Mature hedgerow tree with an extensive spreading canopy and scattered deadwood.	A1	40+	14.7	679.0	
T36	Pedunculate oak	<i>Quercus robur</i>	15	Est 1050	1	8	7	8	10	4	M	Fair	Fair	Mature oak, main stem lost. Major deadwood in crown. Ivy clad.	B3	40+	12.6	499.0	
T37	Pedunculate oak	<i>Quercus robur</i>	8	Est 850	1	5	5	5	5	4	M	Good	Good	Mature hedgerow tree with rounded canopy and scattered deadwood.	B1	40+	9.9	308.0	
T38	Pedunculate oak	<i>Quercus robur</i>	15	Est 1000	1	10	10	9	9	4	M	Fair	Fair	Mature hedgerow tree with spreading canopy and scattered deadwood.	B3	40+	12.0	452.0	
T39	Pedunculate oak	<i>Quercus robur</i>	15	800	1	10	10	10	9	4	M	Fair	Good	Mature hedgerow tree with spreading canopy of reduced vitality and scattered deadwood.	B1	40+	9.6	290.0	
T40	Pedunculate oak	<i>Quercus robur</i>	15	875	1	10	10	10	10	4	M	Good	Good	Mature hedgerow tree with an extensive spreading canopy and scattered deadwood.	B1		10.50	40+	

T41	Pedunculate oak	<i>Quercus robur</i>	17	Est 1200	1	10	10	9	8	4	M	Good	Good	Mature hedgerow tree with spreading canopy and scattered deadwood. Stem leans to the east	A3		14.4	40+	
T42	Pedunculate oak	<i>Quercus robur</i>	15	950	1	11	11	12	10	4	M	Good	Fair	Mature hedgerow tree with spreading canopy and scattered deadwood. Major wound base to 5 m on north trunk.	B1	40+	11.4	408.0	
T43	Pedunculate oak	<i>Quercus robur</i>	16	850	1	9	9	9	9	3	M	Good	Good	Located in hedgerow, of good form and condition. Bifurcated at 4 m.	B1	40+	10.2	327.0	
T44	Pedunculate oak	<i>Quercus robur</i>	16	875	1	8	8	9	8	3	M	Good	Good	Mature hedgerow tree with spreading canopy and scattered deadwood. Ivy clad.	B1	40+	10.5	346.0	
T45	Pedunculate oak	<i>Quercus robur</i>	15	775	1	8	8	8	8	3	M	Good	Good	Located in hedgerow, of good form and condition. Scattered deadwood present.	B1	40+	9.3	272.0	
T46	Field maple	<i>Acer campestre</i>	8	350	3	4	4	4	3	3	SM	Good	Good	Multi-stemmed from base. Rounded canopy	C1	20+	4.2	55.0	
T47	Goat willow	<i>Salix caprea</i>	6	320	3	5	5	5	5	0	SM	Good	Fair	Multi-stemmed from base. Rounded canopy	C1	20+	3.8	46.0	
T48	Pedunculate oak	<i>Quercus robur</i>	7	250	1	3	3	3	3	1	SM	Good	Good	Establishing hedgerow tree.	B1	40+	3.0	28.0	
T49	Ash	<i>Fraxinus excelsior</i>	18	Est 800	1	8	8	8	8	1	M	Good	Good	Mature hedgerow tree with spreading canopy and scattered deadwood.	B1	40+	9.6	290.0	
T50	Cherry	<i>Prunus sp.</i>	9	Est 400	1	5	5	5	5	4	SM	Good	Fair	Garden tree with spreading canopy.	C1	20+	4.8	7.2	
TG1	Pedunculate oak	<i>Quercus robur</i>	9-10	Av 400	3	4	4	4	4	1.5	SM	Good	Good	Establishing hedgerow tree group with canopies that read as one.	B2	40+	4.8	72.0	
TG2	Goat willow	<i>Salix caprea</i>	8-9	Av 8 x 100	2	5	5	5	5	0	SM	Good	Fair	Multi-stemmed at base with rounded canopy	C2	20+	3.3	34.0	
TG3	Pedunculate oak	<i>Quercus robur</i>	13-17	Av 1100	5	9	9	9	9	3	M	Good	Good	Mature oak forming a linear tree group with scattered deadwood throughout.	A3	40+	13.2	547.0	

TG4	Pedunculate oak	<i>Quercus robur</i>	15-19	Av 1100	3	9	9	9	9	3	M	Good	Good	Mature oak forming a linear tree group with scattered deadwood throughout. Ivy clad stems.	A3	40+	13.2	547.0	
TG5	Pedunculate oak	<i>Quercus robur</i>	15-17	Av 775	2	10	10	10	10	3	EM	Good	Good	Two trees of the same age and condition with canopies that read as one.	B2	40+	9.3	272.0	
TG6	Blackthorn Hawthorn English elm Field maple	<i>Prunus spinosa</i> <i>Crataegus monogyna</i> <i>Ulmus procera</i> <i>Acer campestre</i>	Av 9	Av 100	S/ MS	3	3	3	3	0	SM	Fair	Fair	Over-grown defunct hedgerow with canopies that read as one.	C1	20+	1.3	6.0	
TG7	Ash English elm	<i>Fraxinus excelsior</i> <i>Ulmus procera</i>	Av 15	Av 3 x 250	S/ MS	4	4	4	4	0	Y/SM	Good	Fair	Linear group with canopy that reads as one. Single and multi-stemmed at base.	B1	40+	5.1	81.0	
H1	Field maple Blackthorn	<i>Acer campestre</i> <i>Prunus spinosa</i>	Av 5	Av 100	MS	6	6	6	6	0	EM	Good	Fair	Intact species poor hedgerow becoming outgrown.	B2	40+	1.3	6.0	
H2	Field maple Blackthorn	<i>Acer campestre</i> <i>Prunus spinosa</i>	Av 5	Av 100	MS	6	6	6	6	0	EM	Good	Fair	Intact species poor hedgerow becoming outgrown.	B2	40+	1.3	6.0	
H3	Field maple Blackthorn	<i>Acer campestre</i> <i>Prunus spinosa</i>	Av 5	Av 100	MS	6	6	6	6	0	EM	Good	Fair	Intact species poor hedgerow becoming outgrown. Bracken present.	B2	40+	1.3	6.0	
H4	Hawthorn Common hazel Blackthorn	<i>Crataegus monogyna</i> <i>Corylus avellana</i> <i>Prunus spinosa</i>	Av 3	Av 80	MS	3.5	3.5	3.5	3.5	0	SM	Good	Fair	Intact species poor hedgerow. Bracken present.	B2	40+	1.0	4.0	
H5	Field maple Blackthorn	<i>Acer campestre</i> <i>Prunus spinosa</i>	Av 6	Av 100	MS	6	6	6	6	0	EM	Good	Fair	Intact species poor hedgerow becoming outgrown.	B2	40+	1.3	6.0	
H6	Hawthorn English elm Blackthorn	<i>Crataegus monogyna</i> <i>Ulmus procera</i> <i>Prunus spinosa</i>	Av 4	Av 80	MS	4	4	4	4	0	SM	Good	Fair	Intact species poor hedgerow becoming outgrown. Dutch elm disease present with several stems dead.	B2	40+	1.0	6.0	
H7	Hawthorn English elm Blackthorn	<i>Crataegus monogyna</i> <i>Ulmus procera</i> <i>Prunus spinosa</i>	Av 6	Av 100	MS	6	6	6	6	0	EM	Good	Fair	Intact species poor hedgerow becoming outgrown. Dutch elm disease present with several stems dead.	B2	40+	1.3	6.0	

H8	Blackthorn Dog rose	<i>Prunus spinosa</i> <i>Rosa canina</i>	Av 2	Av 80	MS	3	3	3	3	0	EM	Poor	Fair	Defunct species poor hedgerow. Large amount of bramble present.	C2	20+	1.0	6.0	
H9	Hawthorn English elm Blackthorn	<i>Crataegus monogyna</i> <i>Ulmus procera</i> <i>Prunus spinosa</i>	Av 5	Av 100	MS	6	6	6	6	0	EM	Good	Fair	Intact species poor hedgerow becoming outgrown. Dutch elm disease present with several stems dead.	B2	40+	1.3	6.0	
H10	Hawthorn English elm Blackthorn	<i>Crataegus monogyna</i> <i>Ulmus procera</i> <i>Prunus spinosa</i>	Av 6	Av 100	MS	6	6	6	6	0	EM	Good	Fair	Intact species poor hedgerow becoming outgrown. Dutch elm disease present with several stems dead.	B2	40+	1.3	6.0	
H11	Hawthorn English elm Blackthorn	<i>Crataegus monogyna</i> <i>Ulmus procera</i> <i>Prunus spinosa</i>	Av 5	Av 100	MS	5	5	5	5	0	EM	Good	Fair	Intact species poor hedgerow becoming outgrown. Dutch elm disease present with several stems dead.	B2	40+	1.3	6.0	
H12	Hawthorn Blackthorn	<i>Crataegus monogyna</i> <i>Prunus spinosa</i> 0	Av 5	Av 100	MS	5	5	5	5	0	EM	Good	Good	Intact species poor hedgerow becoming outgrown.	B2	40+	1.3	6.0	
H13	Hawthorn English elm Blackthorn	<i>Crataegus monogyna</i> <i>Ulmus procera</i> <i>Prunus spinosa</i>	Av 6	Av 100	MS	6	6	6	6	0	EM	Good	Good	Intact species poor hedgerow becoming outgrown.	B2	40+	1.3	6.0	
H14	Hawthorn English elm Field maple	<i>Crataegus monogyna</i> <i>Ulmus procera</i> <i>Acer campestre</i>	Av 5	Av 100	MS	5	5	5	5	0	EM	Fair	Fair	Intact species poor hedgerow becoming outgrown. Dutch elm disease present with several stems dead.	C2	20+	1.3	6.0	
H15	Hawthorn English elm Blackthorn	<i>Crataegus monogyna</i> <i>Ulmus procera</i> <i>Prunus spinosa</i>	Av 5	Av 100	MS	5	5	5	5	0	M	Good	Good	Intact species poor hedgerow becoming outgrown.	B2	40+	1.3	6.0	
H16	Hawthorn Common hazel Blackthorn	<i>Crataegus monogyna</i> <i>Corylus avellana</i> <i>Prunus spinosa</i>	Av 6	Av 100	MS	5	5	5	5	0	M	Good	Good	Intact species poor hedgerow becoming outgrown.	B2	40+	1.3	6.0	
H17	Hawthorn Common hazel Blackthorn Ash	<i>Crataegus monogyna</i> <i>Corylus avellana</i> <i>Prunus spinosa</i> <i>Fraxinus excelsior</i>	Av 7	Av 100	MS	6	6	6	6	0	M	Good	Good	Intact species poor hedgerow becoming outgrown.	B2	40+	1.3	6.0	
H18	Hawthorn English elm Blackthorn Goat willow	<i>Crataegus monogyna</i> <i>Ulmus procera</i> <i>Prunus spinosa</i> <i>Salix caprea</i>	Av 5	Av 100	MS	5	5	5	5	0	EM	Fair	Poor	Intact species poor hedgerow becoming outgrown. Dutch elm disease present with significant number of stems dead.	C2	20+	1.3	6.0	

H19	Hawthorn English elm Blackthorn Common hazel Common hazel	<i>Crataegus monogyna</i> <i>Ulmus procera</i> <i>Prunus spinosa</i> <i>Corylus avellana</i>	Av 5	Av 100	MS	5	5	5	5	0	M	Good	Good	Intact species poor hedgerow becoming outgrown. Dutch elm disease present with several stems dead.	B2	40+	1.3	6.0	
H20	Hawthorn English elm Blackthorn	<i>Crataegus monogyna</i> <i>Ulmus procera</i> <i>Prunus spinosa</i>	Av 4.5	Av 100	MS	5	5	5	5	0	EM	Good	Good	Intact species poor hedgerow becoming outgrown. Blackthorn dominant.	B2	40+	1.3	4.0	
H21	Hawthorn Common hazel Blackthorn	<i>Crataegus monogyna</i> <i>Corylus avellana</i> <i>Prunus spinosa</i>	Av 4	Av 100	MS	5	5	5	5	0	EM	Fair	Poor	Defunct species poor hedgerow becoming outgrown. Blackthorn dominant.	C2	20+	1.3	6.0	
H22	Hawthorn Common hazel Blackthorn	<i>Crataegus monogyna</i> <i>Corylus avellana</i> <i>Prunus spinosa</i>	Av 4	Av 100	MS	6	6	6	6	0	EM	Good	Good	Intact species poor hedgerow becoming outgrown. Blackthorn dominant.	B2	40+	1.0		
H23	Hawthorn Common hazel Blackthorn	<i>Crataegus monogyna</i> <i>Corylus avellana</i> <i>Prunus spinosa</i>	Av 5	Av 100	MS	6	6	6	6	0	EM	Fair	Good	Intact species poor hedgerow becoming outgrown. Blackthorn dominant.	B2	40+	1.3	6.0	
H24	Hawthorn Common hazel Blackthorn	<i>Crataegus monogyna</i> <i>Corylus avellana</i> <i>Prunus spinosa</i>	Av 4	Av 100	MS	6	6	6	6	0	EM	Fair	Fair	Intact species poor hedgerow becoming outgrown. Blackthorn and bramble dominant.	B2	40+	1.3	6.0	
H25	Field maple Blackthorn English elm	<i>Acer campestre</i> <i>Prunus spinosa</i> <i>Ulmus procera</i>	Av 5	Av 100	MS	6	6	6	6	0	EM	Good	Good	Intact species poor hedgerow becoming outgrown. Dutch elm disease present with several stems dead.	B2	40+	1.3	6.0	
H26	English elm Blackthorn	<i>Ulmus procera</i> <i>Prunus spinosa</i>	Av 2	Av 80	MS	4	4	4	4	0	EM	Fair	Fair	Defunct species poor hedgerow becoming outgrown. Elm dominant. Dutch elm disease present with several stems dead.	C2	20+	1.0	4.0	
H27	Common hazel Blackthorn Field maple	<i>Corylus avellana</i> <i>Prunus spinosa</i> <i>Acer campestre</i>	Av 6	Av 100	MS	6	6	6	6	0	EM	Good	Good	Intact species poor hedgerow becoming outgrown. Blackthorn and dominant.	B2	40+	1.3	6.0	
H28	Common hazel Blackthorn Field maple	<i>Corylus avellana</i> <i>Prunus spinosa</i> <i>Acer campestre</i>	Av 6	Av 100	MS	6	6	6	6	0	EM	Good	Good	Intact species poor hedgerow becoming outgrown. Blackthorn and dominant.	B2	40+	1.3	6.0	
H29	Common hazel Blackthorn Field maple	<i>Corylus avellana</i> <i>Prunus spinosa</i> <i>Acer campestre</i>	Av 6	Av 100	MS	6	6	6	6	0	EM	Good	Good	Intact species poor hedgerow becoming outgrown.	B2	40+	1.3	6.0	

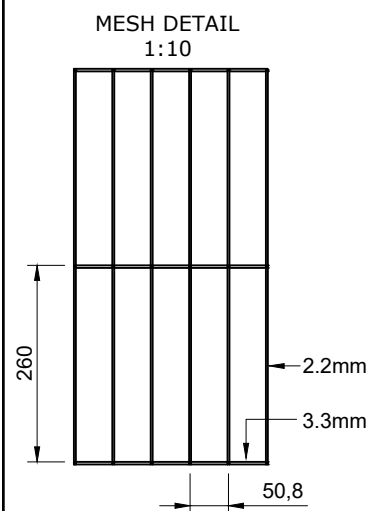
H30	Common hazel Blackthorn Field maple English elm	<i>Corylus avellana</i> <i>Prunus spinosa</i> <i>Acer campestre</i> <i>Ulmus procera</i>	Av 5	Av 100	MS	6	6	6	6	0	EM	Fair	Fair	Defunct species poor hedgerow becoming outgrown. Dutch elm disease present with several stems dead.	B2	40+	1.3	6.0	
H31	Blackthorn	<i>Prunus spinosa</i>	Av 3	Av 100	MS	5	5	5	5	0	M	Good	Good	Intact species poor hedgerow becoming outgrown.	B2	40+	1.3	6.0	
H32	Hawthorn	<i>Crataegus monogyna</i>	Av 6	Av 100	MS	2	2	2	2	0	SM	Fair	Fair	Defunct species poor hedgerow becoming outgrown.	C2	20+	1.3	6.0	
H33	Hawthorn Blackthorn Field maple English elm	<i>Crataegus monogyna</i> <i>Prunus spinosa</i> <i>Acer campestre</i> <i>Ulmus procera</i>	Av 6	Av 100	MS	3	3	3	3	0	SM	Fair	Fair	Defunct species poor hedgerow becoming outgrown.	C2	20+	1.3	6.0	
H34	Leyland cypress	<i>Cupressus x leylandii</i>	Av 6	Av 175	MS	3	3	3	3	0	SM	Good	Fair	Intact species poor hedgerow, managed both sides.	C2	20+	2.1	14.0	
H35	English elm Ash Sycamore Common hazel	<i>Ulmus procera</i> <i>Fraxinus excelsior</i> <i>Acer pseudoplatanus</i> <i>Corylus avellana</i>	Av 4	#av 100	MS	2	2	2	2	0	SM	Fair	Fair	Defunct species poor hedgerow becoming outgrown.	B2	40+	1.3	6.0	

TABLE 2 – KEY TO TREE SCHEDULE

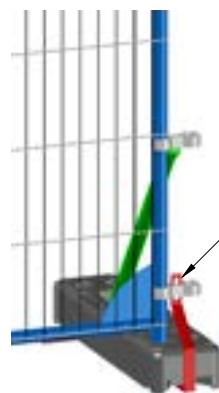
BS 5837: 2012 Tree Survey Key to Terminology		
Term	Explanation	Notes
Tree Ref.	Sequential reference number for individual tree or distinct tree in hedgerow	The measurement conventions are as follows:
Common Name	Tree species listed by common name	

Height	Overall tree height measured in metres (m)	Height, crown spread, and crown clearance are recorded to the nearest 0.5 m (crown spread is rounded up) for dimensions up to 10 m and the nearest metre for dimensions over 10 m.
Branch Spread	Taken as a minimum at the four cardinal points (north, south, east & west) to derive a representation of the crown spread	Stem diameter is recorded in mm, rounded to the nearest 5 mm. Estimated dimensions (e.g. for off-Site or otherwise inaccessible trees where accurate data cannot be recovered) should be clearly identified as such (e.g. suffixed with a “#”)
Stem Diameter	Diameter of single stem trees on level ground measured at 1.5 m above ground level. Diameters of other commonly encountered tree stems should be measured in accordance with Annex C (BS5837 2012 p. 39)	RPA – Radius of nominal circle of Root Protection Area in metres from centre of tree stem. Figures used originate from Annex D BS5837: 2012 (p. 40). Provided as a minimum distance and calculated in accordance with section 4.6 BS5837: 2012 (p. 10) RPA ^{m2} – Extent of root protection area * signifies dimensions have not been recorded
Existing Height Above Ground Level – FSB/DG	Height of first significant branch (FSB) and its direction of growth (DG) identified as height in metres and direction of growth (e.g. 2.4-N)	Measurements taken to provide information relating to ground clearance, crown/stem ratio and shading of site
Life Stage	Young (Y)	Tree within the first one quarter of life expectancy
	Semi mature (SM)	Tree in second quarter of life expectancy
	Early mature (EM)	Tree in third quarter of life expectancy
	Mature (M)	Tree in final quarter of life expectancy
	Over mature (OM)	Tree having reached the anticipated maximum height and spread typical for its species and setting and which has entered a period of stasis where physiological processes maintain a functional status quo.
	Veteran tree (V)	Tree that, by recognised criteria, shows features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned. NOTE: These characteristics might typically include a large girth, signs of crown retrenchment and hollowing of the stem. Veteran trees may be subject to a tree preservation order (TPO). Clients are responsible for determining whether a TPO is present.
General Observations	To provide information on the structural and/or physiological condition (e.g. the presence of any decay and physical defects), and/or preliminary management recommendations	
Physiological Condition - An assessment of the physiological	GOOD	Tree in a healthy condition with no significant problems

condition (i.e. health/vitality) of the tree	FAIR POOR DEAD	Tree generally in good health with some problems that can be remediated Tree in poor health with significant problems that can't be remediated Tree without sufficient live material to sustain life
Structural Condition - An assessment of the structural/safe condition of the tree	GOOD MODERATE POOR	Tree in a sound condition with no significant defects Tree in a sound condition at present but with defects or with significant defects that can be remediated Tree with significant defects that can't be remediated
Notes related to both physiological and structural condition follow the categorisation in order support the statement and give greater detail on the true quality and value of the tree.		
Preliminary Management Recommendations	These may include further investigations for the presence or extent of decay or climbed inspections, ivy removal or pruning works when access is a non-moveable aspect etc. (NB this is not intended to be a specification for tree work and further advice maybe required prior to implementation). Trees assessed as being in apparently immediately hazardous condition will be notified to the client separately as soon as practicable.	
Estimated remaining contribution (yrs)	An estimate of the remaining life contribution in years that the tree or group of trees is expected to have based on species, condition on the Site in its current context	<10 - Tree is dead or dying and unlikely to contribute beyond 10 years 10+ - Tree is assessed as being able to contribute to the site for 10+ years 20+ - Tree is assessed as being able to contribute to the site for 20+ years 40+ - Tree is assessed as being able to contribute to the site for 40+ years
Category grading	Category of tree in accordance with BS5837 2012 Cascade Chart (Source BS5837 2012 p9)	'U' Unsuitable for retention, within the context of the current land user 'A' Trees of high quality with 40yr remaining lifespan 'B' Trees of moderate quality and remaining lifespan of at least 20yrs 'C' Trees of low quality with an estimated remaining lifespan of at least 10 yrs or young trees with a stem diameter below 150mm Categories A-C are further classified as 1 (mainly arboricultural qualities), 2 (mainly landscape qualities), 3 (mainly cultural values, including conservation). For further details refer to Cascade Chart in BS 5837 2012 p. 9

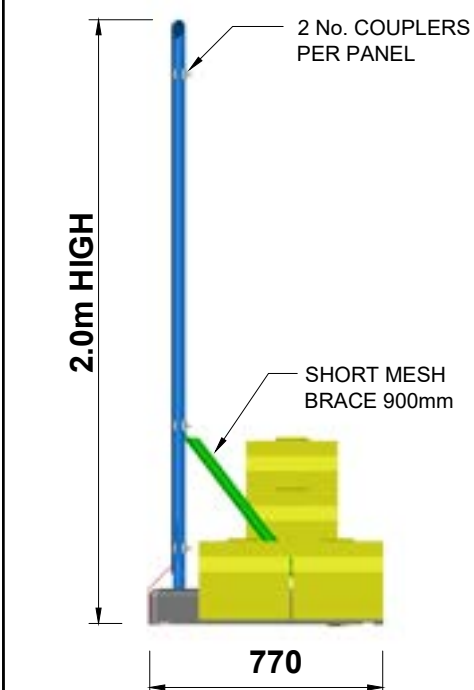


ANTI-LIFT BRACKET
VIEW FROM FRONT

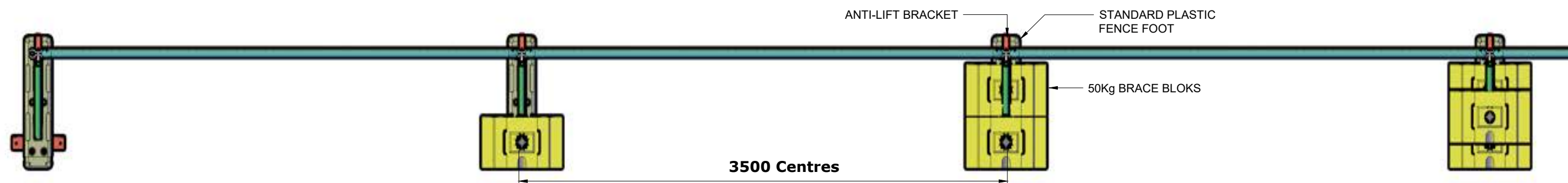
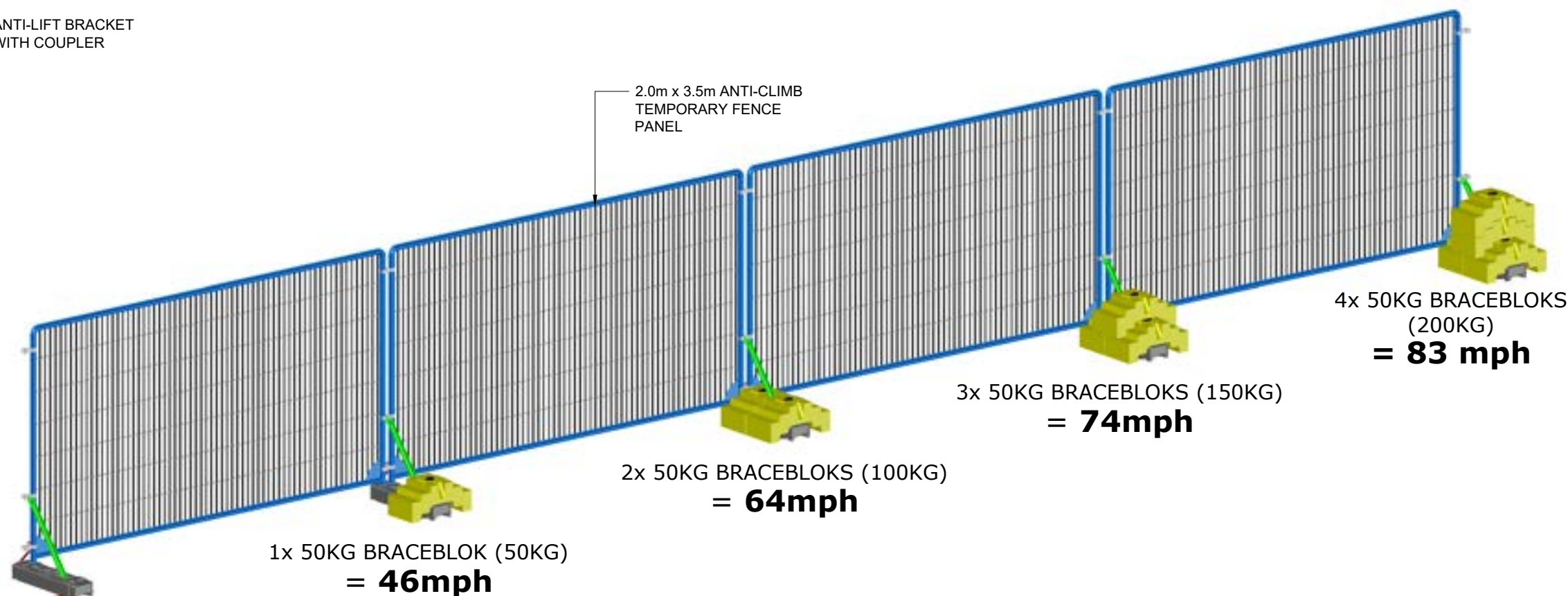


ANTI-LIFT BRACKET
WITH COUPLER

MAXIMUM WIND SPEED RESISTANCE (No Safety Factor)



NO ADDED BALLAST
= **23mph**



NOTE:
BRACEBLOKS STACK FOR ADDITIONAL BALLAST WHEN REQUIRED
(REFER TO RELEVANT WIND LOAD CALCULATION)



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www.bloknmesh.com
www.polmilfence.com

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DATE	17/03/2023	
SCALE	1:30	@A3
DRAWN	CDV	
CHECKED	T. STEWART	
APPROVED	T. STEWART	

TITLE
BNM TEMPORARY FENCE 2.0m x 3.5m, SINGLE BASE,
SHORT BRACE, BRACEBLOK OPTIONS
SHOWING MAXIMUM WIND SPEEDS

DRAWING
No. BNM 14-236

REV
MPH2

– TREE PROTECTION AREA – KEEP OUT!

(TOWN & COUNTRY PLANNING ACT 1990)

**THE TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING
CONDITIONS, THE CONTRAVENTION OF WHICH MAY LEAD TO CRIMINAL
PROSECUTION.**

THE FOLLOWING MUST BE OBSERVED BY ALL PERSONNEL:

- △ THE PROTECTIVE FENCING MUST NOT BE MOVED**
- △ NO PERSON SHALL ENTER THE CONSTRUCTION EXCLUSION ZONE**
- △ NO MACHINE, PLANT OR VEHICLES SHALL ENTER THE EXCLUSION ZONE**
- △ NO MATERIALS SHALL BE STORED IN THE EXCLUSION ZONE**
- △ NO SPOIL SHALL BE DEPOSITED IN THE EXCLUSION ZONE**
- △ NO EXCAVATION SHALL OCCUR IN THE EXCLUSION ZONE**
- △ NO FIRES SHALL BE LIT IN THE EXCLUSION ZONE**

**ANY INCURSION INTO THE EXCLUSION ZONE MUST BE WITH THE
WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY**

Example of Ground Protection

Using TERRAM GEOCELL for tree root protection ensures the roots beneath are protected from vehicle loads by confining the sub-base and stabilising the ground. When the permeable TERRAM GEOCELL is filled with a porous, no fines, free-flowing aggregate the system allows essential passage of air and water providing essential nutrients to the roots. TERRAM GEOCELL is ideal for "No-Cut" situations.

Typical Applications

- Permanent Woodland Trails
- Paths & Cycleways
- Driveways*
- Roads
- Access Routes*
- Parking Areas

*See Arboricultural Advisory and Information Services
APN12: Driveways close to trees

TERRAM GEOCELL is supplied as flat packed panels which are opened to form the honeycomb-like structure. These are positioned and pinned to the ground using fixing pins and filled with a suitable, permeable infill.

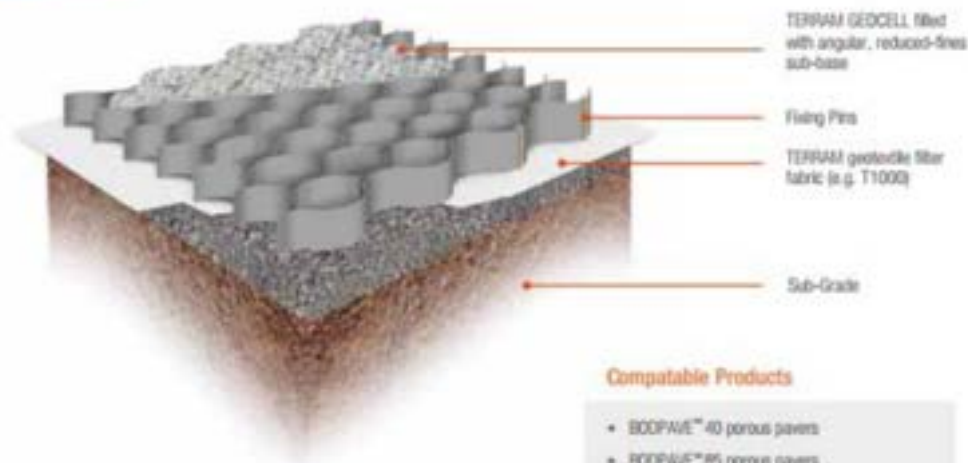
TERRAM GEOCELL confines the infill and ensures that downward forces are spread laterally, reducing pressure on the sub-base. Without this cellular system, the surface would become rutted and compacted with the traffic loads, damaging the tree roots and potentially resulting in the death of the tree.

WHY TERRAM GEOCELL?

- Lightweight and easy to handle reducing installation costs.
- Permeable geotextile allows free flow of water, essential in tree root applications.
- The flexible TERRAM geotextile material allows TERRAM GEOCELL to effectively adapt to any variations in the terrain.
- TERRAM GEOCELLS are easily cut to size without damage, therefore reducing cost.



Typical Profile



Fixing Pins

Fixing pins available upon request.

Compatible Products

- BODPAVE™ 40 porous pavers
- BODPAVE™ 65 porous pavers
- TRUCKPAVE™
- TERRAM geotextile filter
- Geogrid

Product Details

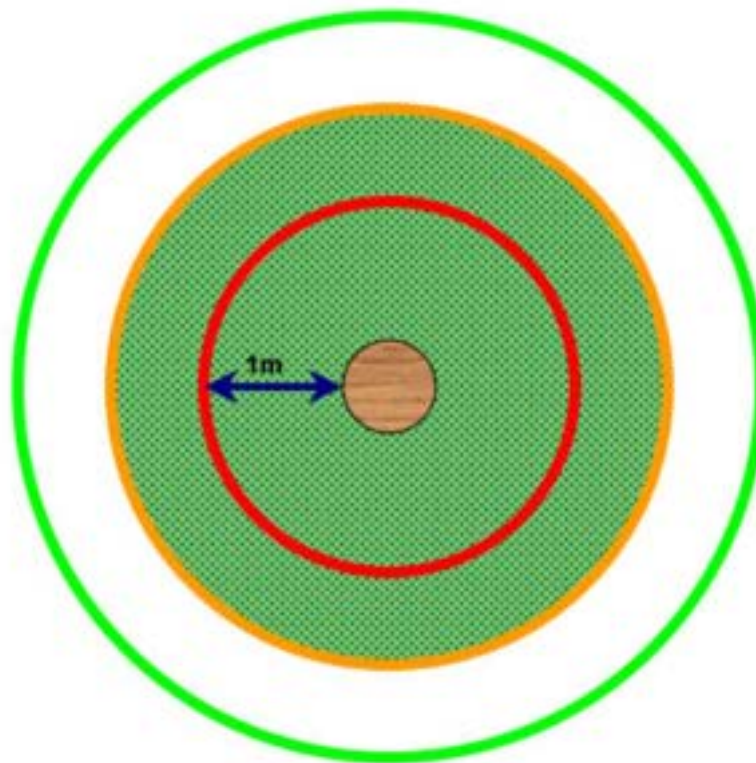
PRODUCT	PANEL SIZE (m)	CELL Dia & DEPTH (mm)	PANEL WEIGHT	TYPICAL LOADING
GEOCELL 25/10	5 x 7	250 dia x 100	17kg	Pedestrian cycle*
GEOCELL 25/15	5 x 7	250 dia x 150	25kg	Light vehicles*
GEOCELL 33/20	5 x 3	330 dia x 200	39kg	Optimum for heavier vehicles or more frequent traffic*

* These are typical profiles only.



NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees

FIGURE 1 – Tree Protection Zone



Key



Trunk of tree



Canopy or branch spread



PROHIBITED ZONE – 1m from trunk. Excavations of any kind must not be undertaken within this zone unless full consultation with the local authority Tree Officer is undertaken. Materials, plant and spoil must not be stored within this zone.



PRECAUTIONARY ZONE – 4 x tree circumference. Where excavations must be undertaken within this zone the use of mechanical excavation plant should be prohibited. Precautions should be undertaken to protect any exposed roots. Materials, plant and spoil should not be stored within this zone. Consult with the local authority Tree Officer if in any doubt.



PERMITTED ZONE – outside of the precautionary zone. Excavation works may be undertaken within this zone, however caution must be applied and the use of mechanical plant limited. Any exposed roots should be protected.

DAMAGE TO TREES

Tree roots keep a tree healthy and upright. Most roots are found in the top 600mm of soil and often grow out further than the tree's height. The majority of these roots are very fine; even close to a tree few will be thicker than a pencil. Most street tree roots grow under the footway but may also extend under the carriageway. If roots are damaged the tree may suffer irreversible harm and eventually die.

PROTECTING ROOTS - DO'S and DON'TS

There are three designated zones around a tree each of which has its own criteria for working practices.

THE PROHIBITED ZONE

- Don't** excavate within this zone.
- Don't** use any form of mechanical plant within this zone
- Don't** store materials, plant or equipment within this zone.
- Don't** move plant or vehicles within this zone.
- Don't** lean materials against, or chain plant to, the trunk.
- Do** contact the local authority tree officer or owner of the tree if excavation within this zone is unavoidable.
- Do** protect any exposed roots uncovered within this zone with dry sacking.
- Do** backfill with a suitable inert granular and top soil material mix as soon as possible on completion of works.
- Do** notify the local authority tree officer or the tree's owner of any damage.

THE PRECAUTIONARY ZONE

- Don't** excavate with machinery. Where excavation is unavoidable within this zone excavate only by hand or use trenchless techniques.
- Don't** cut roots over 25mm in diameter, unless advice has been sought from the local authority tree officer.
- Don't** repeatedly move / use heavy mechanical plant except on hard standing.
- Don't** store spoil or building material, including chemicals and fuels, within this zone.
- Do** prune roots which have to be removed using a sharp tool (e.g. secateurs or handsaw). Make a clean cut and leave as small a wound as possible.
- Do** backfill the trench with an inert granular material and top soil mix. Compact the backfill with care around the retained roots. On non highway sites backfill only with excavated soil.
- Do** protect any exposed roots with dry sacking ensuring this is removed before backfilling.
- Do** notify the local authority tree officer or the tree's owner of any damage.

THE PERMITTED ZONE

- Don't** cut roots over 25mm in diameter, unless advice has been sought from the local authority tree officer.
 - Do** use caution if it is absolutely necessary to operate mechanical plant within this zone.
 - Do** prune roots which have to be removed using a sharp tool (e.g. secateurs or handsaw). Make a clean cut and leave as small a wound as possible.
 - Do** protect any exposed roots with dry sacking ensuring this is removed before backfilling.
 - Do** notify the local authority tree officer or the tree's owner of any damage.
-

Technical Note

Project: Studley Solar Farm	Project No: 2024-07-546400
Subject:	Report Date:
Author:	Survey Date:

1.0 Results

2.0 Actions to be Taken

Distribution

Client	
Project File	2024-07-546400

Please note that this Technical Note is not suitable for planning purposes.

Enclosed:

Figures

Appendices