



Ford Oaks Solar and Green Infrastructure Facility

BS5837 Arboricultural Survey

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Author: Matt Jackson MCIHort Date: 15/11/2021

Checked: Simon Humphreys Date: 18/11/2021

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1. Summary

This is a BS5837 Arboricultural report in relation to a proposed development on land at Marsh Green, near Exeter (Ford Oaks Solar and Green Infrastructure Facility). The proposal is to install a solar and green infrastructure facility on current agricultural land covering c. 74 hectares.

The landscape is typical of the low hills of Devon, with a rolling landform populated with mature trees. This particular site has a high population of category A and category B trees, with 20 veteran trees and many more close to veteran status, making it a collection of high value trees.

The proposal aims to achieve a 'Building with Nature' benchmark accreditation, with high ecological and biodiversity standards. The proposed layout, Landscape Strategy and Plan, and Ecological Enhancement Management and Monitoring Plan (EMMP) shows large areas of ecological enhancement, which will increase connectivity and is likely to reduce the vulnerability of category A and veteran trees.

Overall the scheme is likely to have negligible adverse impact during the construction phase, and a high beneficial cumulative impact from the operational phase and beyond. **The proposal does not require the removal of any trees during both the construction and operational phases.**

2. The Site

2.1. Grid Reference: SY03825 93432

2.2. Address: Quarter Mile Lane, Marsh Green, Exeter, EX5 2EU

2.3. Description:

The site surveyed is approximately 74 hectares and is made up entirely of agricultural land currently under three different tenancies/ownerships. The majority of the land is permanent, long-term pasture raising cattle for beef and sheep. Areas to the north contain two fields which are a mixture of arable and rotational pasture, and there are several arable fields to the southwest of the survey area.

The site is located immediately south of the A30, approximately 6km east of Exeter, and 4km east of Exeter Airport. The village of Marsh Green is situated on the east of the main

site, with sections of the site to the north and south. Aylesbeare is 0.6km from the far southern boundary of the site, accessed via Quarter Mile Lane.

The site is bisected by an unnamed stream or river (referred to elsewhere as Ford Stream), which flows from the far southeast to the northwest, creating a gentle valley. The main site to the west of Quarter Mile Lane rises to the north and the south away from the river valley. The eastern fields have a very gentle incline to the south and is relatively flat to the north.

Across the site there are a large number of mature trees within existing hedgerows, or isolated within fields as remnants of lost hedgerows.

2.4. Designations:

The following Site designations apply:

- The site is within a Nitrate Vulnerable Zone (NVZ)
- The site is within an impact risk zone for East Devon Pebblebed Heaths Special Area of Conservation (SAC), Special Protection Area (SPA), National Nature Reserve (NNR), Site of Special Scientific Interest (SSSI) which are approximately 2km to the southeast
- East Devon AONB is approximately 2km to the southeast
- The Knoll, Rose Cottage, The Old Post Office and Lower Marsh Farmhouse are Grade II designated, and situated within Marsh Green
- Rockbeare Manor is located to the north of the site (north of the A30) and is designated Grade I, with Grade II* stables and a Grade II Park and Garden.
- **There are no TPOs within the site**, and the area is not within a Conservation Area (Tree Officer Alastair Jeans was consulted, however East Devon DC don't publish TPO maps for report inclusion)

2.5. Site Plan



Fig 1: Area surveyed (Google Earth)

The area surveyed for the BS5837 report is shown in figure 1 above. It is larger than the final project area. The initial survey took in all possible fields that might be developed, however following the consultation and design stages a reduced site area has been proposed. This can be seen in figure 2.

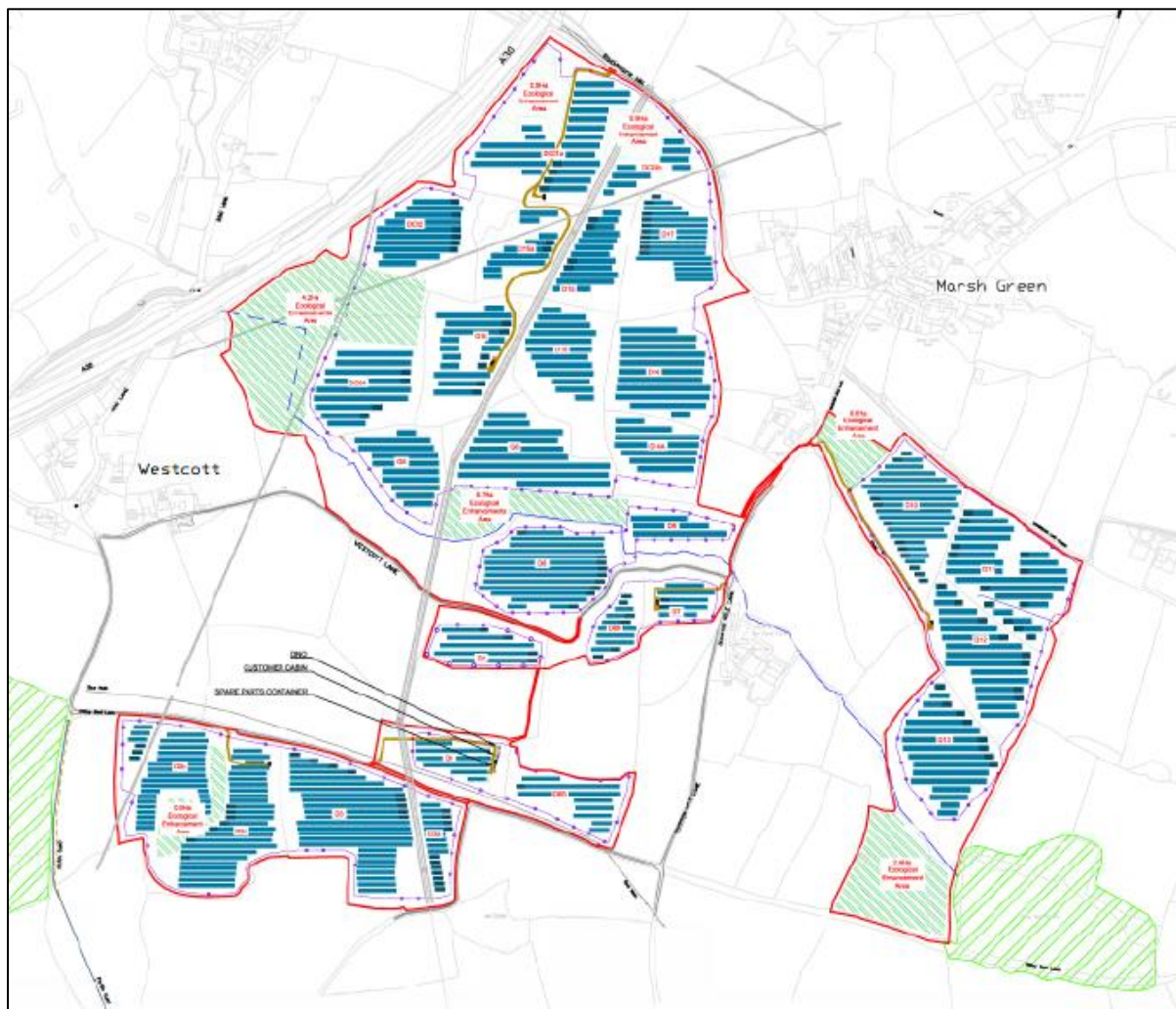


Fig 2: Proposed development area, with the site boundary shown in red

3. Scope

The survey aims to assess the overall condition of all the trees on and adjacent to the development area, as shown in the survey area plan (fig. 1). This includes:

- the suitability of trees for retention as categorised in accordance with BS 5837: 2012 'Trees in relation to design, demolition and construction – Recommendations';
- the constraints presented by the trees;
- impacts of the scheme development in relation to any retained trees;
- the arboricultural impacts of the proposed scheme; and
- the requirements for tree management where appropriate.

British Standard (BS) 5837: 2012 'Trees in relation to design, demolition and construction – Recommendations' requires that information on the constraints associated with retained trees be sent to the project designers. This information is detailed in the Tree Constraints Plan (8.2). The information has been used to inform the layout design of the development proposals. The constraints, which are covered by BS 5837, are associated with issues relating to retained trees both above and below ground, and the necessary measures to ensure their safe retention.

4. Methodology

4.1. Survey Details:

The survey was undertaken by Matt Jackson MCIHort and Megan Dalton QCIEEM on the 25th and 26th October, and the 10th December 2021. The weather was mixed, mostly clear and dry with some showers.

4.2. Survey format/procedure:

The survey was a visual inspection to BS5837 guidelines, with the data recorded on site using PocketGIS software on a smartphone, and collated at the desk using PTMapper Pro.

4.3. Equipment Used:

A smartphone was used to capture data, GIS positions, images. Measurements were taken using a DBH tape. Binoculars were used to examine trees.

4.4. Climbing Inspection:

No climbing inspections were undertaken

4.5. Detailed survey methodology

Detailed survey methodology can be seen in appendix 8.4

5. Survey Data

5.1. Soil Type:

Soilscape 7: Freely draining slightly acid but base-rich soils¹

5.2. Constraints Summary:

A total of 336 records were made on site during the survey. Of these there were 246 individual tree records, and 90 group records.

There were 20 individual veterans recorded, and a greater number of trees that are becoming veteran or have potential veteran characteristics.

There are 5 category A trees, and 3 category A groups. Some of the category A trees are in prominent public locations, such as roadside trees forming a notable approach to Marsh Green, or within the surrounding lanes.

There are 319 category B trees, and 54 category B groups. This is a high ratio of category B trees, which reflects just how established, preserved and important the tree assemblage is on the site. Some of the category B groups also contain category C understory or sub-dominant trees.

There are 36 category C trees, and 18 category C group.

Four potential access routes to the site have been identified, with the first three routes A,B and C subject to an arboricultural assessment by Tim Moya Associates on 17th August 2021, which produced a tree constraints plan for access to the site. Several trees have been assessed by our survey to have different categories, increasing their level of significance and

¹ <http://www.landis.org.uk/soilscales/>

therefore level of ‘protection’. This does not however significantly change the overall access options.

Land & Heritage undertook a driving survey of the fourth route D. This takes the B3184 heading east from Exeter Airport, and then a left fork along Marwood Lane, heading east towards Aylesbeare. At the north of Aylesbeare the route takes Quarter Mile Lane heading north and arriving at the site adjacent to Marsh Green Farm. There are a number of mature trees along the route to Aylesbeare, however they all appear to provide standard highway clearance based on visual observations. Quarter Mile Lane is narrow, however it provides regular access to farm machinery (large tractors and high trailers), and whilst measurements were not taken it is likely that they will pose no height constraints to the 3.5m height and 2.25m width stated in the Tim Moya Associates review. Sweeps and turning circles were not assessed by Land & Heritage, although it would appear that the proposed route D would allow for relatively large turning sweeps.

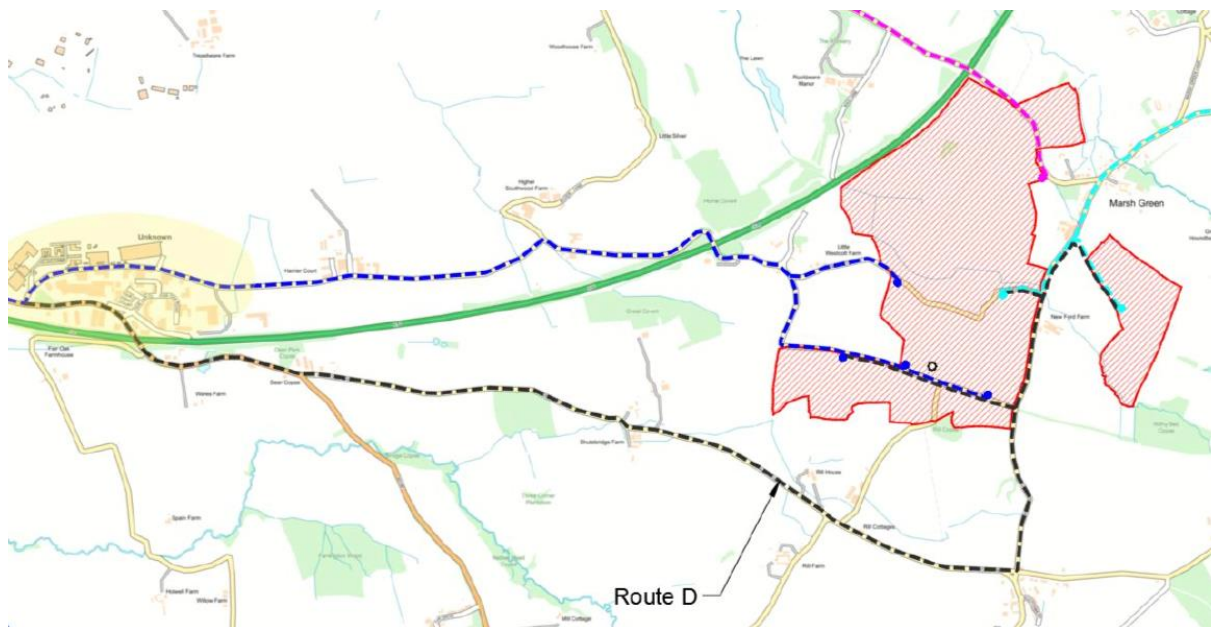


Fig 3: Potential routes to site, including route D



5.3. Tree Schedule:

The tree schedule is large, and in this case is attached in section 8.1 with full detail.

5.4. Tree Constraints Plan

The tree constraints plan is a large A1 sized plan, and is therefore attached in section 8.2.

6. Project Design Development

6.1. Design Proposal Summary

The proposed development consists of a solar and green infrastructure facility, including solar arrays, transformers, substations and ancillary infrastructure, such as internal haul roads and gates. The solar infrastructure is enclosed by security fencing, with CCTV and gates.

The Devon Green Infrastructure Strategy guiding principles have been followed during the design iteration process. The overall proposed site layout is shown above (fig. 2 and appendix 8.8).

The proposal will also create large areas (in total) of diverse planting and habitat creation to enhance the site ecology, and to mitigate for potential losses. This will include 19 Ha of dedicated tree planting, hedgerow enhancement, creation or reinstatement, scrub and wildflower areas. Figure 4 below shows an extract from the initial proposed site layout with ecological proposals.

The project is working to secure a Building with Nature accreditation, which ensures the delivery of high-quality green infrastructure in relation to health and wellbeing, sustainable water management and biodiversity. Devon Wildlife Consultants are collaborating on the scheme to design a suitable green infrastructure proposal to achieve this.



Fig 4: Extract from the Ecological Enhancement Management and Monitoring Plan

During the operational stages of the proposed development, the site will only be visited for maintenance purposes. However, access arrangements during construction will necessitate vehicles entering and existing the site and as such a survey of potential access roads has been undertaken.

As part of the construction phase, a temporary reception area is also proposed. This field, located at land off Bishop's Court Lane, Clyst Honiton in East Devon at postcode EX5 2HN (centred at grid reference SX 99063 93002) will receive vehicles until they are conveyed to the required construction areas. This site does not have any trees, and was not surveyed.

6.2. Arboricultural Impact Assessment

The proposed site is complex and covers a large area, which has required a careful and considered approach to impact assessment. Detailed design plans have not been produced,

however there are detailed layout plans, which means that the potential for impacts can be assessed in general terms, and advice given relating to the detailed construction design stages.

The impact assessment will therefore be broken down into several stages:

- Proposed ecological enhancement and green infrastructure
- Construction access and activities
- Maintenance access and activities (operational phase)

6.2.1 Proposed Ecological Enhancement and Green Infrastructure

The proposed layout plan (fig. 2) shows a mosaic of solar array fields (with an alpha numeric code eg 'D4') surrounded by open spaces (white). These open areas are broadly to be managed as biodiverse grassland, with new hedgerows, riparian and meadow botanical enhancements and swales (refer to the EMMP plans in appendix 8.9). This network in all areas appears to provide extensive protection for all of the existing trees and hedgerows, creating wide buffer strips between the solar installations and associated works. In some cases the benefits of the proposed green infrastructure network are potentially very high, where isolated veteran and notable trees are once more linked by hedgerows. Category A trees in fields between G5 and G6 will particularly benefit from this.

There is potential for existing trees to be adversely impacted upon by the new green infrastructure if there is poor species selection, and the wrong type of management allows for competitive growth. Veteran trees are vulnerable to competing growth, and a management prescription commonly has to be 'halo thinning', which requires all competing vegetation within the crown to be cleared. **There are no proposals however to plant trees or shrubs within the canopies or adjacent to existing trees.**

Given the extent of the wildlife mitigation proposals, the overall effect on existing trees within the landscape is likely to be negligible.

6.2.2. Construction Access and Activities

Constructing the solar array and associated power management facilities has the potential to cause the greatest adverse impact to the trees on site. The panels will be moved to their site locations for installation using tractors and quad bikes with trailers, and mounted on piles, driven posts or 'raft' type foundations. Cables will be routed to power transformers via trenched ducts, and transformer substations installed mounted on constructed foundations. The transformers will be lifted into position using a hiab truck or crane, which

is delivered on a low loader, requiring access along lanes to the site, and access to transformer positions on site. These will require access tracks, and there will need to be long term access tracks for routine maintenance. Installation of the tracks and access routes will require removal of hedgerow sections to widen gates and create access to the site, however the access arrangements have been designed to avoid trees and RPAs, and there are no proposed tree removals. The full impacts can only be assessed following detailed design specifications for trackways and gates, however swept path analysis has been undertaken for all access routes, and the layout designed accordingly. At this stage it is not anticipated that trees will be adversely impacted upon.

The impact to trees on site caused by access and construction routes is likely to be low. Construction specifications for the tracks and infrastructure have not been produced at this stage, and will need to be reviewed further in order to fully assess impacts and make recommendations.

The proposed temporary reception area for machinery and equipment is a field surrounded by hedges. There are no trees on or adjacent to the area, and it has therefore not been surveyed.

6.2.3. Maintenance Access and Activities

Following construction, the site will require regular maintenance and access to the solar arrays, and to the green infrastructure. Maintenance routes will use several permanent access tracks to the transformer substations, and 'soft' access using ATVs or quad bikes to the wider site, as shown in the proposed layout plan.

The regular use of permanent tracks for access will have a negligible adverse impact upon trees, assuming that the tracks have been well designed and constructed initially. There is potential for tracks to introduce a change in run-off and drainage leading to waterlogging or water loss to root areas. There is also a potential for mineral and chemical/salt pollution to the roots of established and vulnerable trees but this is highly unlikely for the expected level of traffic use. A drainage plan has been produced with trees in mind, which should be further analysed for impact upon trees at the detailed construction specification stage.

Access to the wider site could lead to compaction, rutting and soil erosion if routes are repeatedly used, or used during the wrong weather and soil conditions. This has the potential to adversely impact upon tree rooting areas.

The long term impacts of the proposed green infrastructure scheme are likely to result in a significant positive impact to the existing trees, and in particular the vulnerable veteran

trees. Lack of correct long-term management could however lead to stress and overwhelming competition to existing vulnerable trees, resulting in their loss or decline.

6.3. Ecological Considerations

Ecological assessments and mitigation proposal are being carried out by Devon Wildlife Consultants, and separate reports must be referred to by them for all ecological information.

Land & Heritage have highlighted trees that may have suitable bat habitat in the raw survey data, which can be seen in section 8.1.

Veteran trees and groups containing veterans have a high biodiversity value, and must be considered when designing the green infrastructure layout.

6.4. Draft Tree Protection Plan

The draft tree protection plan has been prepared as a version 1 draft, which relates to the proposed layout and access points. Swept path analysis has been undertaken to avoid adverse impact upon tree RPAs, but design specifications for access routes have not been produced at this stage. It must be updated in response to the detailed design when subsequently produced.

The draft tree protection plan is large and attached in section 8.3.

6.5. Recommendations & Mitigation

- 6.5.1. In order to fully assess the potential arboricultural impacts, full and detailed design and construction specifications need to be drafted and reviewed prior to construction commencing. **This should be a pre-commencement condition.**
- 6.5.2. Tree root protection areas are clearly marked on the Tree Constraints plan, and have been considered when designing the site layout. Adequate root protection measures are shown below, and in the draft tree protection plan.
- 6.5.3. The draft tree protection plan shows the location and nature of short term and long-term tree protection measures. These must be followed and set in place prior to any commencement of works on site.

- 6.5.4. Proposed new tree species must include Oak *Quercus robur* and Field Maple *Acer campestre*.
- 6.5.5. An arboricultural method statement must be produced prior to commencement of works, detailing any required tree works, tree protection measures and construction within root protection areas. **This should be a pre-commencement condition.**
- 6.5.6. The EMMP (Ecological Enhancement Management and Monitoring Plan) which has been produced detailing the long-term management of the site, including new and existing trees, must be followed.

7. Limitations

The information reported is based only on the interpretation of data collected during the survey undertaken on site.

This report has been prepared by Land and Heritage Ltd. with all reasonable skill, care and diligence, and taking account of the manpower and resources devoted to it by agreement with the client.

This report does not seek to address the specific area of subsidence risk. Any discussion of soil characteristics are included only where they may affect tree or root growth. Queries regarding subsidence will require a separate specialist report to be commissioned.

This report has been prepared solely for the use of the client and their professional advisors and may not be relied upon by other parties without written consent from Land and Heritage Ltd. In addition, it must be understood that this report does not constitute legal advice.

Land and Heritage disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.



8. Appendices

8.1. Tree Schedule

Tree ID	Tree Type	Common Name	Latin Name	Maturity	Likely Bat Habitat	Measurements Estimated	Height (m)	Number of Stems	Stem 1 (mm)	Stem 2 (mm)	Stem 3 (mm)	Stem 4 (mm)	Stem 5 (mm)	Spread - N (m)	Spread - E (m)	Spread - S (m)	Spread - W (m)	Crown	Stem	Basal Area	Category	Life Expectancy	Subcategories	Phys Condition	Time	Date	Comment
14	Oak	Common Oak	Quercus robur	Veteran	Yes	Yes	10	1	542					5	6	4	6				A	>40 yrs	3 Cultural;1	Fair	10:47:26	#####	
16	Oak	Common Oak	Quercus robur	Veteran	Yes	Yes	15	1	900					12	10	10	10				A	>40 yrs			10:55:16	#####	
23	Oak	Common Oak	Quercus robur	Veteran		Yes	6	1	690					5	3	2	3				A	>40 yrs		Decline	11:28:49	#####	
33	Oak	Common Oak	Quercus robur	Veteran		Yes	8	1	820					9	6	7	4				A	>40 yrs		Fair	13:27:44	#####	
40	Oak	Common Oak	Quercus robur	Veteran		Yes	12	1	1770					7	11	11	8				A	>40 yrs		Good	13:44:22	#####	
41	Oak	Common Oak	Quercus robur	Over Mature		Yes	10	1	1010					5	7	7	4				A	>40 yrs		Fair	13:52:00	#####	
45	Oak	Common Oak	Quercus robur	Veteran	Yes	Yes	12	1	1220					6	10	12	6				A	>40 yrs		Fair	14:06:08	#####	
49	Oak	Common Oak	Quercus robur	Mature		Yes	11	1	1000					7	6	5	8				A	>40 yrs		Good	14:28:06	#####	
50	Oak	Common Oak	Quercus robur	Mature		Yes	15	1	1000					8	5	8	8				A	>40 yrs		Good	14:30:11	#####	
51	Oak	Common Oak	Quercus robur	Mature		Yes	17	1	1500					8	8	10	8				A	>40 yrs		Good	14:32:03	#####	
53	Oak	Common Oak	Quercus robur	Over Mature		Yes	12	1	950					6	5	7	5				A	>40 yrs		Good	14:36:31	#####	
																										Vet hedgerow oak, linear coppard appearance	
57	Oak	Common Oak	Quercus robur	Veteran		Yes	11	3	550	300	300			8	9	9	5				A	>40 yrs		Good	14:51:20	#####	
60	Oak	Common Oak	Quercus robur	Mature		Yes	10	1	450					5	5	5	6				A	>40 yrs		Good	15:09:41	#####	
61	Oak	Common Oak	Quercus robur	Mature		Yes	9	1	800					6	4	3	5				A	>40 yrs			15:12:13	#####	
62	Oak	Common Oak	Quercus robur	Mature		Yes	10	1	1200					4	7	7	7				A	>40 yrs		Good	15:13:53	#####	
73	Oak	Common Oak	Quercus robur	Mature		Yes	12	1	1025					7	4	5	6				A	>40 yrs		Good	08:59:23	#####	
74	Oak	Common Oak	Quercus robur	Mature		Yes	12	1	600					4	4	6	5				A	>40 yrs		Good	09:02:35	#####	
75	Oak	Common Oak	Quercus robur	Mature		Yes	15	1	1090					6	7	9	6				A	>40 yrs		Good	09:04:32	#####	
79	Oak	Common Oak	Quercus robur	Mature		Yes	11	1	1020					8	7	8	7				A	>40 yrs		Good	09:14:53	#####	
82	Oak	Common Oak	Quercus robur	Over Matu	Yes	Yes	11	1	550					4	4	6	5				A	>40 yrs		Good	09:25:41	#####	
83	Oak	Common Oak	Quercus robur	Veteran		Yes	10	1	900					3	4	5	5				A	>40 yrs		Fair	09:27:57	#####	
94	Oak	Common Oak	Quercus robur	Over Mature		Yes	12	1	1610					7	6	7	6				A	>40 yrs		Good	10:16:33	#####	Hornets nest
94	Oak	Common Oak	Quercus robur	Mature		Yes	12	1	1700					4	3	10	8				A	>40 yrs		Good	10:20:29	#####	
95	Oak	Common Oak	Quercus robur	Mature		Yes	12	1	1030					5	7	8	3				A	>40 yrs		Good	10:22:17	#####	
105	Oak	Common Oak	Quercus robur	Mature		Yes	16	1	1400					11	8	7	10				A	>40 yrs		Good	10:44:17	#####	
107	Oak	Common Oak	Quercus robur	Mature		Yes	12	1	800					9	6	10	6				A	>40 yrs		Good	11:28:01	#####	
108	Oak	Common Oak	Quercus robur	Mature		Yes	15	1	1200					7	9	8	8				A	>40 yrs		Good	11:31:18	#####	
111	Oak	Common Oak	Quercus robur	Mature		Yes	15	1	1210					13	12	12	5				A	>40 yrs		Good	11:42:11	#####	
113	Oak	Common Oak	Quercus robur	Over Mature		Yes	14	1	1120					9	9	6	8				A	>40 yrs			11:53:41	#####	
120	Oak	Common Oak	Quercus robur	Mature		Yes	15	1	1200					11	9	11	5				A	>40 yrs		Good	12:10:23	#####	
144	Oak	Common Oak	Quercus robur	Veteran		Yes	12	1	800					4	6	5	5				A	>40 yrs			14:56:23	#####	
202	Oak	Common Oak	Quercus robur	Over Matu	Yes		8	1	1000					4	3	4	5	Good	Good	Good	A	>40 yrs			08:23:38	#####	
205	Oak	Common Oak	Quercus robur	Over Matu	Yes		15	1	1000					8	6	7	10	Good	Good	Good	A	>40 yrs			08:34:48	#####	
208	Oak	Common Oak	Quercus robur	Over Mature			13	1	1100					6	6	6	6	Fair	Good	Fair	A	>40 yrs			08:42:21	#####	
211	Oak	Common Oak	Quercus robur	Veteran	Yes		12	1	1200					2	10	12	8	Fair	Good	Good	A	20 to 40 yrs			08:51:19	#####	
216	Oak	Common Oak	Quercus robur	Veteran			5	1	1000					4	2	3	3	Good	Good	Good	A	20 to 40 yrs			09:00:31	#####	
227	Oak	Common Oak	Quercus robur	Veteran	Yes		12	1	1200					6	9	6	7				A	>40 yrs			09:26:48	#####	
																										3 X notable old Pollards. Each circa 750mm dbh. Not in proposed scheme	
G236	Oak	Common Oak	Quercus robur	Mature			6														A	>40 yrs			09:51:35	#####	
238	Oak	Common Oak	Quercus robur	Veteran			9	1	900					3	6	6	3				A	>40 yrs			09:56:29	#####	
																										Interesting group of oaks around a pond. Some near vet, some mature, with deadwood collapsed over pond. Great habitat. 18m top height	
G239	Oak	Common Oak	Quercus robur																		A	>40 yrs			09:59:25	#####	
240	Oak	Common Oak	Quercus robur	Veteran	Yes		14	1	1990					5	8	6	6				A	>40 yrs			10:03:05	#####	
241	Oak	Common Oak	Quercus robur	Mature			15	1	1350					6	11	11	11				A	>40 yrs			10:04:44	#####	
242	Oak	Common Oak	Quercus robur	Mature			13	1	1020					10	10	9	10				A	>40 yrs			10:06:00	#####	
257	Oak	Common Oak	Quercus robur	Mature			18	1	1030					12	11	5	10				A	>40 yrs			10:42:19	#####	
266	Oak	Common Oak	Quercus robur	Veteran			8	1	1100					5	4	5	3				A	20 to 40 yrs			10:59:09	#####	
269	Ash	Common Ash	Fraxinus excelsior	Veteran			15	1	1100					8	6	7	6				A	10 to 20 yrs			11:03:27	#####	
275	Oak	Common Oak	Quercus robur	Over Mature			18	1	1100					9	9	11	10				A	>40 yrs			11:13:15	#####	
280	Oak	Common Oak	Quercus robur	Mature			15	1	1100					8	8	7	8				A	>40 yrs			11:20:21	#####	
																										Oak lined 'green way' with good hard surface. Good healthy canopy of mature oak along entire length. Circa 7 to 10 m Reminance of a paper wasp nest in hallow stem	
G160	A Group																				A	>40 yrs					

G08	8 Oak	Common Oak	Quercus robur	Mature	Yes	11	1	750		3	5	10	10	Good	Good	Good	B	>40 yrs	Good	10:23:44	#####
	Alder	Common Alder	Alnus glutinosa	Mature	Yes	12	10	300		7	10	3	5				B	>40 yrs	Good	10:28:48	#####
	9 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	750		10	10	10	10				B	>40 yrs	Good	10:31:35	#####
G10	Alder	Common Alder	Alnus glutinosa	Mature	Yes	12	10	300		4	7	5	7				B	>40 yrs	Good	10:33:26	#####
G11	Alder	Common Alder	Alnus glutinosa	Mature	Yes	12	10	300		8	4	8	4				B	>40 yrs	Good	10:39:35	#####
	17 Oak	Common Oak	Quercus robur	Mature	Yes	17	1	655		10	3	10	8				B	>40 yrs		11:01:36	#####
	18 Oak	Common Oak	Quercus robur	Mature	Yes	12	1	800		9	9	10	10				B	>40 yrs	Good	11:13:33	#####
G19	Oak	Common Oak	Quercus robur	Mature	Yes	8	1	500		15	5	15	5				B	>40 yrs	Good	11:17:23	#####
	20 Oak	Common Oak	Quercus robur	Semi-mature	Yes	6	1	400		3	5	4	2				B	>40 yrs		11:21:39	#####
	22 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	700		8	8	8	6				B	>40 yrs		11:25:13	#####
	25 Oak	Common Oak	Quercus robur	Mature	Yes	7	1	550		7	7	7	7				B	>40 yrs		11:34:31	#####
	26 Oak	Common Oak	Quercus robur	Mature	Yes	7	1	350		7	7	7	7				B	>40 yrs		11:37:05	#####
	28 Oak	Common Oak	Quercus robur	Mature	Yes	11	1	500		7	7	6	6				B	>40 yrs		11:47:00	#####
	29 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	500		4	5	6	5				B	>40 yrs		11:48:32	#####
	29 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	500		3	7	7	5				B	>40 yrs		11:50:19	#####
	30 Oak	Common Oak	Quercus robur	Mature	Yes	11	1	600		5	7	5	5				B	>40 yrs		11:51:54	#####
	32 Oak	Common Oak	Quercus robur	Mature	Yes	12	1	550		4	6	5	5				B	>40 yrs		11:57:52	#####
	35 Oak	Common Oak	Quercus robur	Mature	Yes	8	1	300		5	6	5	3				B	>40 yrs		13:32:34	#####
	36 Oak	Common Oak	Quercus robur	Mature	Yes	7	1	300		4	2	2	3				B	>40 yrs		13:34:21	#####
	37 Oak	Common Oak	Quercus robur	Mature	Yes	11	1	775		7	6	5	7				B	>40 yrs		13:36:17	#####
	38 Oak	Common Oak	Quercus robur	Over Mature	Yes	9	1	550		5	4	4	6				B	>40 yrs		13:38:58	#####
	39 Oak	Common Oak	Quercus robur	Mature	Yes	12	1	600		5	8	5	6				B	>40 yrs		13:42:19	#####
	42 Oak	Common Oak	Quercus robur	Over Mature	Yes	8	1	500		7	7	4	3				B	>40 yrs		13:55:17	#####
	43 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	650		7	6	5	7				B	>40 yrs	Good	13:58:13	#####
	44 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	830		6	6	6	6				B	>40 yrs	Good	14:02:52	#####
	46 Oak	Common Oak	Quercus robur	Mature	Yes	7	1	350		3	4	4	4				B	>40 yrs	Good	14:10:53	#####
	47 Oak	Common Oak	Quercus robur	Mature	Yes	11	1	600		6	8	6	8				B	>40 yrs	Good	14:22:46	#####
	56 Oak	Common Oak	Quercus robur	Semi-mature	Yes	10	1	430		8	5	6	7				B	>40 yrs	Good	14:49:48	#####
	59 Oak	Common Oak	Quercus robur	Mature	Yes	11	1	450		10	8	6	7				B	>40 yrs	Good	15:06:49	#####
	64 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	750		6	6	9	6				B	>40 yrs	Good	15:18:06	#####
	66 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	700		5	7	9	7				B	>40 yrs	Good	15:22:34	#####
	67 Oak	Common Oak	Quercus robur	Mature	Yes	14	1	850		7	10	8	8				B	>40 yrs	Good	15:24:25	#####
	70 Oak	Common Oak	Quercus robur	Mature	Yes	8	1	500		5	4	5	4				B	>40 yrs	Good	08:52:31	#####
	77 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	300		5	4	5	4				B	>40 yrs	Good	09:11:54	#####
	78 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	800		6	5	6	6				B	>40 yrs	Good	09:13:25	#####
	79 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	500		4	4	6	5				B	>40 yrs	Good	09:19:52	#####
	80 Oak	Common Oak	Quercus robur	Mature	Yes	11	1	600		7	7	8	7				B	>40 yrs	Good	09:22:23	#####
	81 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	400		6	4	5	5				B	>40 yrs	Good	09:23:43	#####
	87 Oak	Common Oak	Quercus robur	Mature	Yes	12	1	600		8	7	7	7				B	>40 yrs	Good	09:47:25	#####
	90 Oak	Common Oak	Quercus robur	Mature	Yes	11	1	600		5	7	7	4				B	>40 yrs	Good	10:01:49	#####
	92 Oak	Common Oak	Quercus robur	Over Mature	Yes	12	1	700		10	11	11	7				B	>40 yrs	Good	10:10:24	#####
	93 Oak	Common Oak	Quercus robur	Mature	Yes	11	1	960		8	7	6	7				B	>40 yrs	Good	10:13:14	#####
	96 Oak	Common Oak	Quercus robur	Mature	Yes	13	1	900		4	4	7	4				B	>40 yrs	Good	10:27:37	#####
	97 Oak	Common Oak	Quercus robur	Mature	Yes	12	1	900		4	4	6	5				B	>40 yrs	Good	10:29:38	#####
	98 Oak	Common Oak	Quercus robur	Mature	Yes	12	1	1200		3	4	7	8				B	>40 yrs	Good	10:31:54	#####
	99 Oak	Common Oak	Quercus robur	Over Mature	Yes	12	1	900		3	4	4	3				B	>40 yrs	Fair	10:34:56	#####
	100 Oak	Common Oak	Quercus robur	Mature	Yes	12	1	600		4	4	4	2				B	>40 yrs	Good	10:36:26	#####
	101 Oak				Yes	13	2	300	350	6	6	6	7				B	>40 yrs	Good	10:38:09	#####
	102 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	900		6	7	8	6				B	>40 yrs	Good	10:39:52	#####
	104 Oak	Common Oak	Quercus robur	Mature	Yes	16	1	800		6	7	6	7				B	>40 yrs	Good	10:41:30	#####
	109 Oak	Common Oak	Quercus robur	Semi-mature	Yes	6	1	200		3	4	3	4				B	>40 yrs	Good	11:34:23	#####
	112 Oak	Common Oak	Quercus robur	Mature	Yes	13	1	1250		10	10	9	4				B	>40 yrs	Good	11:50:38	#####
	115 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	1100		11	9	6	6				B	>40 yrs	Good	11:59:07	#####
	117 Oak	Common Oak	Quercus robur	Mature	Yes	14	1	800		8	8	5	6				B	>40 yrs	Good	12:05:17	#####
	118 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	600		11	11	6	3				B	>40 yrs		12:06:46	#####
	119 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	300		6	4	4	5				B	>40 yrs	Good	12:08:32	#####
	121 Oak	Common Oak	Quercus robur	Mature	Yes	14	1	800		11	7	7	4				B	>40 yrs	Good	12:13:58	#####
	122 Oak	Common Oak	Quercus robur	Mature	Yes	13	1	1000		5	5	5	6				B	>40 yrs	Good	12:15:58	#####
	123 Oak	Common Oak	Quercus robur	Mature	Yes	13	1	500		7	7	8	8				B	>40 yrs	Good	12:20:07	#####
	125 Oak	Common Oak	Quercus robur	Mature	Yes	15	2	400	900	12	10	9	12				B	>40 yrs	Good	12:24:42	#####
	126 Oak	Common Oak	Quercus robur	Mature	Yes	14	1	400		11	1	1	9				B	>40 yrs	Good	12:42:26	#####
	127 Oak	Common Oak	Quercus robur	Mature	Yes	12	1	800		3	6	3	2				B	>40 yrs	Good	12:44:35	#####
	128 Oak	Common Oak	Quercus robur	Mature	Yes	11	1	400		8	4	6	4				B	>40 yrs	Good	12:56:01	#####
	129 Oak	Common Oak	Quercus robur	Mature	Yes	11	1	700		10	9	8	7				B	>40 yrs	Good	12:57:49	#####
	130 Oak	Common Oak	Quercus robur	Mature	Yes	14	1	500		8	5	7	9				B	>40 yrs	Good	13:02:03	#####
	131 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	600		8	5	8	8				B	>40 yrs	Good	13:05:03	#####
	132 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	750		8	10	10	8				B	>40 yrs	Good	13:06:27	#####
	134 Oak	Common Oak	Quercus robur	Over Mature	Yes	14	1	900		7	8	8	6				B	>40 yrs	Good	13:08:29	#####
	135 Oak	Common Oak	Quercus robur	Mature	Yes	16	1	900		11	11	10	10				B	>40 yrs	Good	13:10:13	#####
	136 Oak	Common Oak	Quercus robur	Mature	Yes	14	1	500		6	2	3	7				B	>40 yrs	Good	13:22:38	#####
	137 Oak	Common Oak	Quercus robur	Mature	Yes	8	1	750		3	3	3	3				B	>40 yrs	Good	13:26:10	#####
	139 Oak	Common Oak	Quercus robur	Mature	Yes	13	1	900		9	7	6	7				B	>40 yrs	Good	14:35:43	#####
	139 Oak	Common Oak	Quercus robur	Mature	Yes	12	1	500		8	6	5	2				B	>40 yrs	Good	14:41:29	#####

Group of 5 semi mature and mature oaks.

	140	Oak	Common Oak	Quercus robur	Mature	Yes	15	1	1000				8	5	3	4		B	>40 yrs		Good	14:45:49	#####	
	143	Oak	Common Oak	Quercus robur	Mature	Yes	15	1	400				2	6	6	7		B	>40 yrs			14:55:09	#####	
	146	Oak	Common Oak	Quercus robur	Mature	Yes	13	1	800				6	7	6	6		B	>40 yrs		Good	15:03:09	#####	
	147	Oak	Common Oak	Quercus robur	Mature	Yes	13	1	750				7	6	6	4		B	>40 yrs		Good	15:04:46	#####	
	148	Oak	Common Oak	Quercus robur	Mature	Yes	14	1	900				8	7	9	5		B	>40 yrs		Good	15:07:44	#####	
	149	Oak	Common Oak	Quercus robur	Mature	Yes		1	1035				9	4	8	5		B	>40 yrs		Good	15:12:28	#####	
	150	Oak	Common Oak	Quercus robur	Mature	Yes	15	1	900				10	10	9	9		B	>40 yrs		Good	15:26:42	#####	
	151	Oak	Common Oak	Quercus robur	Mature	Yes	10	1	960				6	8	6	8		B	>40 yrs		Good	15:29:17	#####	
	152	Oak	Common Oak	Quercus robur	Mature	Yes	13	1	950				6	8	8	5		B	>40 yrs		Good	15:34:15	#####	
	156	Ash	Common Ash	Fraxinus excelsior	Mature	Yes	11	1	950				5	6	5	6		B	>40 yrs		Good	15:42:48	#####	
	201	Oak	Common Oak	Quercus robur	Mature		8	1	500				4	6	5	5	Good	B	>40 yrs			08:21:54	#####	
	204	Oak	Common Oak	Quercus robur	Mature		15	1	1010				9	8	9	9	Good	B	>40 yrs			08:32:35	#####	
	207	Oak	Common Oak	Quercus robur	Mature		11	1	500				6	5	5	5	Good	B	>40 yrs			08:40:58	#####	
G209		Oak	Common Oak	Quercus robur	Mature		10											B				08:46:51	#####	3 X cat B Oak
G210		Oak	Common Oak	Quercus robur	Mature		10											B				08:48:36	#####	3 X Oak
	213	Oak	Common Oak	Quercus robur	Semi-mature		8	1	300				4	4	4	4	Good	B	>40 yrs			08:56:29	#####	
	214	Oak	Common Oak	Quercus robur	Semi-mature		8	1	300				4	4	4	4	Good	B	>40 yrs			08:57:35	#####	
G217		Oak	Common Oak	Quercus robur														B				09:02:30	#####	3 X SM Oak and 1 X Y Oak. 5 to 8 m. Group of 5 oak. 1 cut low under power lines.
G218		Oak	Common Oak	Quercus robur	Mature													B	>40 yrs			09:04:11	#####	Mixed 10 to 12m
	220	Oak	Common Oak	Quercus robur	Mature		14	1	900				7	6	6	5		B	>40 yrs			09:11:06	#####	
	222	Oak	Common Oak	Quercus robur	Mature		11	1	680				5	5	5	5		B	20 to 40 yrs			09:14:30	#####	
	223	Oak	Common Oak	Quercus robur	Mature		10	1	750				5	7	7	5		B	>40 yrs			09:16:29	#####	
G224		Oak	Common Oak	Quercus robur	Mature		16											B	>40 yrs			09:18:33	#####	3 X large Oak. Each dbh circa 800mm
G225		Oak	Common Oak	Quercus robur	Mature		12											B	>40 yrs			09:23:07	#####	2 X Oak. 8m spread into field
	228	Oak	Common Oak	Quercus robur	Mature		12	1	1000				7	9	7	7		B	>40 yrs			09:28:57	#####	
	230	Oak	Common Oak	Quercus robur	Mature		15	1	1010				7	7	9	7		B	>40 yrs			09:33:58	#####	
																								3 X Oak. 1 big with 1000mm dbh. 14m high
G232		Oak	Common Oak	Quercus robur														B				09:39:06	#####	with 12m spread
G233		Oak	Common Oak	Quercus robur	Mature		8											B	>40 yrs			09:41:48	#####	2 X Oak
	234	Oak	Common Oak	Quercus robur	Mature		18	1	1000				6	6	6	6		B	>40 yrs			09:47:50	#####	
G235		Oak	Common Oak	Quercus robur	Mature		18											B	>40 yrs			09:49:51	#####	2 X Oak not in the scheme proposals
G237		Oak	Common Oak	Quercus robur	Mature		10											B	10 to 20 yrs			09:53:57	#####	2 X Oak circa 500 dbh. In decline. 3m spreads
G244		Oak	Common Oak	Quercus robur	Mature													B	>40 yrs			10:19:43	#####	6 X Oak. 15 to 17 m
	256	Oak	Common Oak	Quercus robur	Mature		10	1	750				4	6	7	7		B	>40 yrs			10:22:59	#####	
	258	Oak	Common Oak	Quercus robur	Mature		15	1	800				10	10	11	10		B	10 to 20 yrs			10:43:49	#####	
	259	Oak	Common Oak	Quercus robur	Mature		12	1	900				4	6	5	4		B	>40 yrs			10:46:57	#####	
	260	Oak	Common Oak	Quercus robur	Mature		12	1	1000				5	5	6	5		B	>40 yrs			10:48:30	#####	
	261	Oak	Common Oak	Quercus robur	Mature		10	1	600				4	5	4	4		B	>40 yrs			10:49:53	#####	
	263	Oak	Common Oak	Quercus robur	Mature		12	1	750				4	4	4	4		B	>40 yrs			10:55:03	#####	
	264	Oak	Common Oak	Quercus robur	Mature		12	1	1000				5	5	6	5		B	20 to 40 yrs			10:56:14	#####	
	265	Oak	Common Oak	Quercus robur	Mature		10	1	500				4	6	4	5		B	>40 yrs			10:57:26	#####	
	267	Oak	Common Oak	Quercus robur	Mature		11	1	600				4	6	6	4		B	10 to 20 yrs		Decline	11:00:50	#####	
	268	Oak	Common Oak	Quercus robur	Mature		14	1	700				6	6	7	6		B	>40 yrs			11:02:18	#####	
	270	Oak	Common Oak	Quercus robur	Over Mature		10	1	900				7	6	6	6		B	>40 yrs			11:04:43	#####	
G271		Oak	Common Oak	Quercus robur	Mature		12											B	>40 yrs			11:06:34	#####	3 X Oak. 6m spread
	273	Oak	Common Oak	Quercus robur	Mature		9	1	500				4	4	3	4		B	>40 yrs			11:09:09	#####	
																								Group of mature hedgerow oak, ash, field maple, small leaf lime, holly, hazel, hawthorn. 10-17m
G274		A Group																B				11:10:51	#####	
	277	Oak	Common Oak	Quercus robur	Mature		11	1	750				4	4	5	6		B	>40 yrs			11:15:49	#####	
	278	Oak	Common Oak	Quercus robur	Mature		12	1	900				6	6	6	6		B	>40 yrs			11:17:34	#####	
	279	Oak	Common Oak	Quercus robur	Semi-mature		7	1	400				5	5	5	5		B	>40 yrs			11:19:01	#####	
	281	Oak	Common Oak	Quercus robur	Mature		13	1	1000				6	6	6	5		B	>40 yrs			11:21:34	#####	
	282	Oak	Common Oak	Quercus robur	Mature		12	1	700				5	4	6	5		B	>40 yrs			11:23:49	#####	
	300	Oak	Common Oak	Quercus robur	Mature	Yes	12	1	1000				12	10	9	10		B	>40 yrs		Good	10:00:34	#####	
	303	Oak	Common Oak	Quercus robur	Mature	Yes	10	1	800				4	5	5	6		B			Good	10:13:10	#####	
	304	Oak	Common Oak	Quercus robur	Mature	Yes	10	1	300				5	5	4	4		B	>40 yrs		Good	10:16:49	#####	
	307	Oak	Common Oak	Quercus robur	Mature	Yes	10	1	400				5	5	3	4		B	>40 yrs		Good	10:20:36	#####	
	318	Oak	Common Oak	Quercus robur	Over Mature	Yes	15	2	300	890			7	7	2	5		B	>40 yrs		Good	11:06:33	#####	
	319	Oak	Common Oak	Quercus robur	Mature	Yes	13	1	685				2	6	6	6		B	>40 yrs		Good	11:11:22	#####	
	320	Oak	Common Oak	Quercus robur	Mature	Yes	13	1	850				5	7	5	6		B	>40 yrs		Good	11:15:05	#####	
	321	Oak	Common Oak	Quercus robur	Over Mature	Yes	15	1	950				11	6	7	3		B	>40 yrs		Good	11:17:35	#####	
	322	Oak	Common Oak	Quercus robur	Mature	Yes	13	2	400	500			11	3	10	8		B	>40 yrs		Good	11:22:29	#####	
	323	Oak	Common Oak	Quercus robur	Mature	Yes	14	1	600				10	10	10	1		B	>40 yrs		Good	11:24:53	#####	
	324	Oak	Common Oak	Quercus robur	Mature	Yes	12	4	250	400	450	300	10	1	10	5		B	>40 yrs		Good	11:28:04	#####	
	329	Oak	Common Oak	Quercus robur	Mature	Yes	10	1	500				5	3	4	3		B	>40 yrs		Good	11:39:58	#####	
	330	Oak	Common Oak	Quercus robur	Mature	Yes	10	1	800				7	6	5	4		B	>40 yrs		Good	11:41:42	#####	
	334	Oak	Common Oak	Quercus robur	Mature	Yes	13	1	600				9	8	9	6		B	>40 yrs		Good	11:50:18	#####	
	335	Oak	Common Oak	Quercus robur	Mature	Yes	10	2	300	350			4	6	4	5		B	>40 yrs		Good	11:53:04	#####	
	338	Oak	Common Oak	Quercus robur	Mature	Yes	10	1	500				5	6	6	6		B	>40 yrs		Good	12:04:58	#####	
	339	Oak	Common Oak	Quercus robur	Mature	Yes	13	1	800				5	2	2	3		B	>40 yrs		Good	12:08:53	#####	
	340	Oak	Common Oak	Quercus robur	Mature	Yes	15	1	750				4	6	5	3		B	>40 yrs		Good	12:10:29	#####	

	349 Oak	Common Oak	Quercus robur	Mature	Yes	11	1	900					5	5	5	5					B	>40 yrs	Good	12:44:13	#####	
	353 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	800					5	5	3	5					B	>40 yrs	Good	13:03:18	#####	
	354 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	800					7	7	6	4					B	>40 yrs	Good	13:16:06	#####	
	356 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	600					7	6	4	3					B	>40 yrs	Good	13:24:14	#####	
	360 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	970					9	10	9	8					B	>40 yrs	Good	13:42:21	#####	
	361 Oak	Common Oak	Quercus robur	Mature	Yes	14	1	750					2	5	7	8					B	>40 yrs	Fair	13:45:05	#####	
	362 Oak	Common Oak	Quercus robur	Mature	Yes	16	1	1090					12	10	3	11					B	>40 yrs	Good	13:45:45	#####	
	364 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	800					10	6	8	7					B	>40 yrs	Good	13:48:05	#####	
	365 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	1200					10	10	10	10					B	>40 yrs	Good	13:48:38	#####	
	366 Oak	Common Oak	Quercus robur	Mature	Yes	14	1	1000					3	8	7	7					B	>40 yrs	Good	13:49:15	#####	
	367 Oak	Common Oak	Quercus robur	Mature	Yes	13	1	900					10	9	11	10					B	>40 yrs	Good	13:50:23	#####	
	368 Maple	Field Maple	Acer campestre	Mature	Yes	5	1	150					2	2	2	2					B	>40 yrs	Good	13:51:40	#####	
	369 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	860					4	5	6	7					B	>40 yrs	Decline	13:52:19	#####	
	370 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	1100					10	3	10	11					B	>40 yrs	Good	13:52:28	#####	
	371 Oak	Common Oak	Quercus robur	Mature	Yes	8	1	1000					7	4	5	3					B	>40 yrs	Good	14:18:58	#####	
	372 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	1100					4	5	4	3					B	>40 yrs	Good	14:20:56	#####	
	375 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	1200					9	10	3	6					B	>40 yrs	Good	14:30:04	#####	
	376 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	850					8	7	7	8					B	>40 yrs	Good	14:35:01	#####	
	382 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	900					3	4	4	3					B	>40 yrs	Good	14:41:10	#####	
	377 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	1000					10	7	8	10					B	>40 yrs	Good	14:44:16	#####	
	379 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	1200					10	10	7	10					B	>40 yrs	Good	14:45:09	#####	
	380 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	1150					11	10	9	9					B	>40 yrs	Good	07:45:12	#####	
	382 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	1300					7	10	9	9					B	>40 yrs	Good	07:50:41	#####	
	383 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	800					9	7	7	9					B	>40 yrs	Good	07:52:00	#####	
	384 Oak	Common Oak	Quercus robur	Mature	Yes	10	1	900					4	5	5	3					B	>40 yrs	Good	07:54:01	#####	
	385 Oak	Common Oak	Quercus robur	Mature	Yes	9	1	700					4	3	4	3					B	>40 yrs	Good	07:55:50	#####	
	390 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	1000					3	10	5	10					B	>40 yrs	Good	08:03:38	#####	
	391 Oak	Common Oak	Quercus robur	Mature	Yes	13	1	950					5	10	6	10					B	>40 yrs	Good	08:05:06	#####	
	392 Oak	Common Oak	Quercus robur	Mature	Yes	15	1	700					3	7	6	5					B	>40 yrs	Good	08:06:40	#####	
	2 Ash	Common Ash	Fraxinus excelsior	Semi-mature	Yes	6	1	250					2	2	2	4	Good	Good	Good		C	<10 yrs	Good	10:00:46	#####	
	7 Ash	Common Ash	Fraxinus excelsior	Mature	Yes	11	2	500	500				7	5	3	5	Good	Good	Good		C	10 to 20 yrs	Good	10:20:05	#####	No sign of die back yet
	12 Ash	Common Ash	Fraxinus excelsior	Mature	Yes	15	1	700					2	3	5	3	Fair				C	<10 yrs	Fair	10:42:22	#####	
	21 Oak	Common Oak	Quercus robur	Mature	Yes	5	1	400					3	3	3	3					C	10 to 20 yrs	Decline	11:22:59	#####	
	27 Oak	Common Oak	Quercus robur	Over Mature	Yes	6	1	375					3	3	3	3					C	>40 yrs	Decline	11:44:55	#####	
	48 Maple	Field Maple	Acer campestre	Mature	Yes	7	1	300					3	3	2	3					C	20 to 40 yrs	Good	14:25:08	#####	
	68 Ash	Common Ash	Fraxinus excelsior	Mature	Yes	18	1	790					5	3	5	13					C	>40 yrs	Decline	15:26:12	#####	
	85 Elm	Wych Elm	Ulmus glabra	Young	Yes	7	1	180					2	1	1	1					C	20 to 40 yrs	Fair	09:35:45	#####	
	138 Hazel	Common Hazel	Corylus avellana	Semi-mature	Yes	5	10	100					2	2	1	1					C	20 to 40 yrs	Good	14:30:00	#####	
	142 Ash	Common Ash	Fraxinus excelsior	Mature	Yes	16	1	600					1	2	2	1					C	<10 yrs	Decline	14:53:34	#####	Greatly affected by die back
	147 Ash	Common Ash	Fraxinus excelsior	Over Mature	Yes	14	1	900					2	1	8	4					C	<10 yrs	Decline	15:18:38	#####	
	155 Ash	Common Ash	Fraxinus excelsior	Mature	Yes	10	1	600					2	2	4	2					C	<10 yrs	Decline	15:40:22	#####	
	157 Ash	Common Ash	Fraxinus excelsior	Veteran	Yes	10	1	900					7	5	7	7					C	<10 yrs	Decline	15:44:58	#####	
	158 Maple	Field Maple	Acer campestre	Mature	Yes	6	10	100					2	2	1	1					C	20 to 40 yrs	Fair	15:48:23	#####	
	200 Ash	Common Ash	Fraxinus excelsior	Young		3	1	150					2	2	2	2	Fair	Good	Good		C	<10 yrs		08:20:19	#####	
G203	Ash	Common Ash	Fraxinus excelsior	Mature		10															C	<10 yrs		08:30:36	#####	Group of 2 X Ash
	215 Willow	Goat Willow	Salix caprea	Semi-mature		4	1	250					4	3	1	2	Good	Fair	Good		C	10 to 20 yrs		08:58:55	#####	
	219 Ash	Common Ash	Fraxinus excelsior	Mature		7	4	300	200	300	450		2	2	6	5					C	<10 yrs		09:09:21	#####	
	221 Ash	Common Ash	Fraxinus excelsior	Semi-mature		5	5	200	300	150	350	100	3	3	3	3					C	<10 yrs		09:12:31	#####	
	226 Ash	Common Ash	Fraxinus excelsior	Mature		13	1	500					4	6	7	5	Poor	Fair	Fair		C	<10 yrs	Decline	09:24:59	#####	
	229 Maple	Field Maple	Acer campestre	Young		6	4	200	200	200	200															

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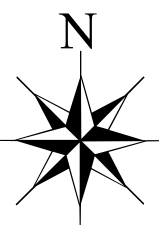
G349	A Group		12:41:23	#####	Åžemi mature multi stemmed oaks, 10m tall, 250mm average diameter. Canopy extending west 4m and east 3m. Cat B
G350	A Group		12:45:56	#####	Unhealthy ash, one semi mature, multi stemmed oak.10m tall. Cat C.
G351	A Group		12:47:26	#####	5 young oaks, diameter approx 100mm to 200mm. 10m tall. Cat B
G352	A Group		12:49:08	#####	Group of field maples. Approx 8m tall. Canopy 2m west and 2m east. Cat C.
G358	A Group		13:33:55	#####	Ash, wych elm, Hawthorne, hazel. Ring of trees around a natural pond feature. Cat C
G359	A Group		13:36:03	#####	2 mature oaks on north edge of pond. 700mm diameter. 10m tall. Cat B
G363	A Group		13:46:50	#####	Goat Willow group, 6m tall, Cat C
G374	A Group		14:27:06	#####	3 mature oaks. Diameters around 900mm. 10m tall. Canopy 5m west and 6m east. Cat B
G381	A Group		14:38:33	#####	7 mature oaks, 10 m tall, average diameter 800mm, canopy extending approx 7m north and 6m South into either field
G383	A Group		14:42:57	#####	Mature oaks, tallest 10m, Cat B, canopy extending approx 6m north and 5m South.
G378	A Group		14:44:40	#####	Pair of oaks, 10m tall, 7m into field, approx 900mm diameter. Cat B
G386	A Group		07:56:58	#####	3oaks approx 12m tall, average diameter 800, canopy extending 7m into field. Cat B
G388	A Woodland		08:00:41	#####	Native broad leaf semi natural woodland. Extending into the field 5 to 7m. Cat B.



8.2. Tree Constraints Plan

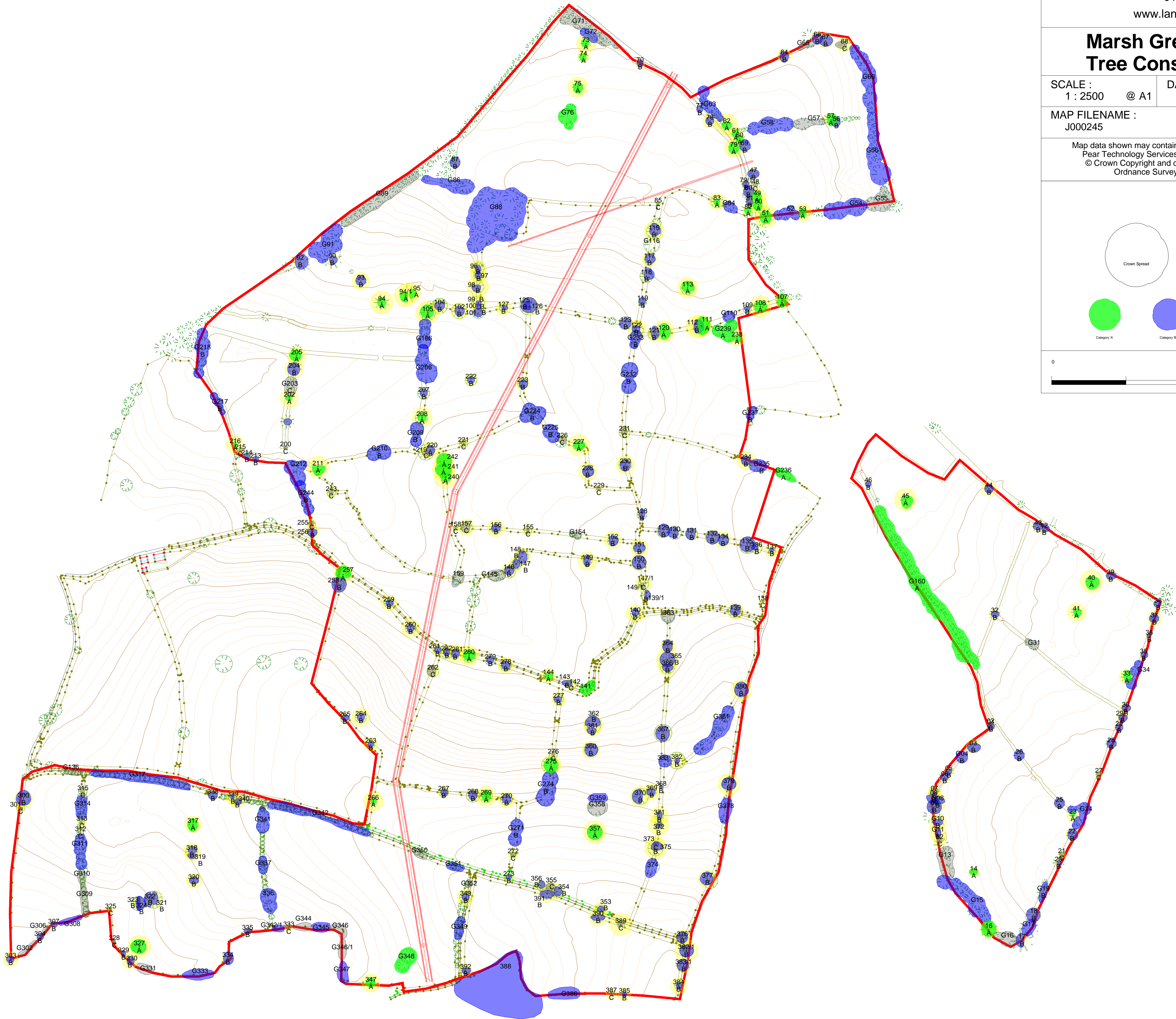
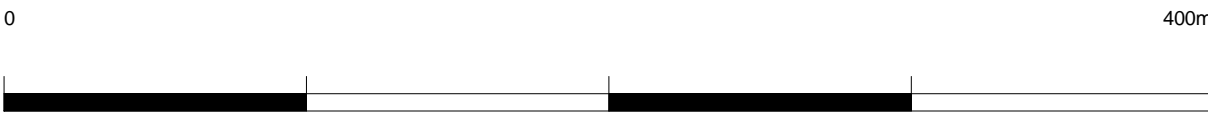
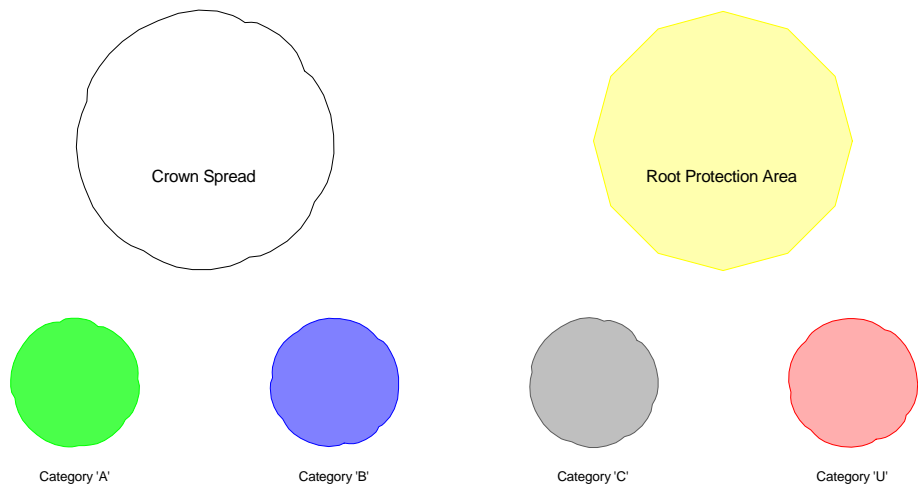
Marsh Green Solar Farm:
Tree Constraints Plan

SCALE : 1 : 2500 @ A1 DATE : 15/11/2021



MAP FILENAME : J000245

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8.3. Tree Protection Plan

Heras Tree Protection Fencing

Tape and Pin Tree Protection

Land & Heritage Ltd

01752 545710

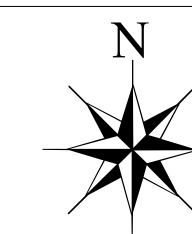
www.landandheritage.com

Ford Oaks GIF: Draft Tree Protection Plan

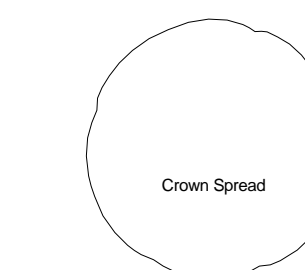
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1	DATE : 18/03/2022
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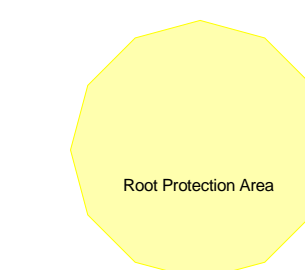
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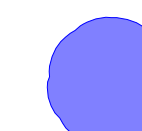
Crowl



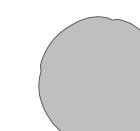
Roce



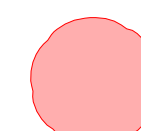
Category A



Citroxy B



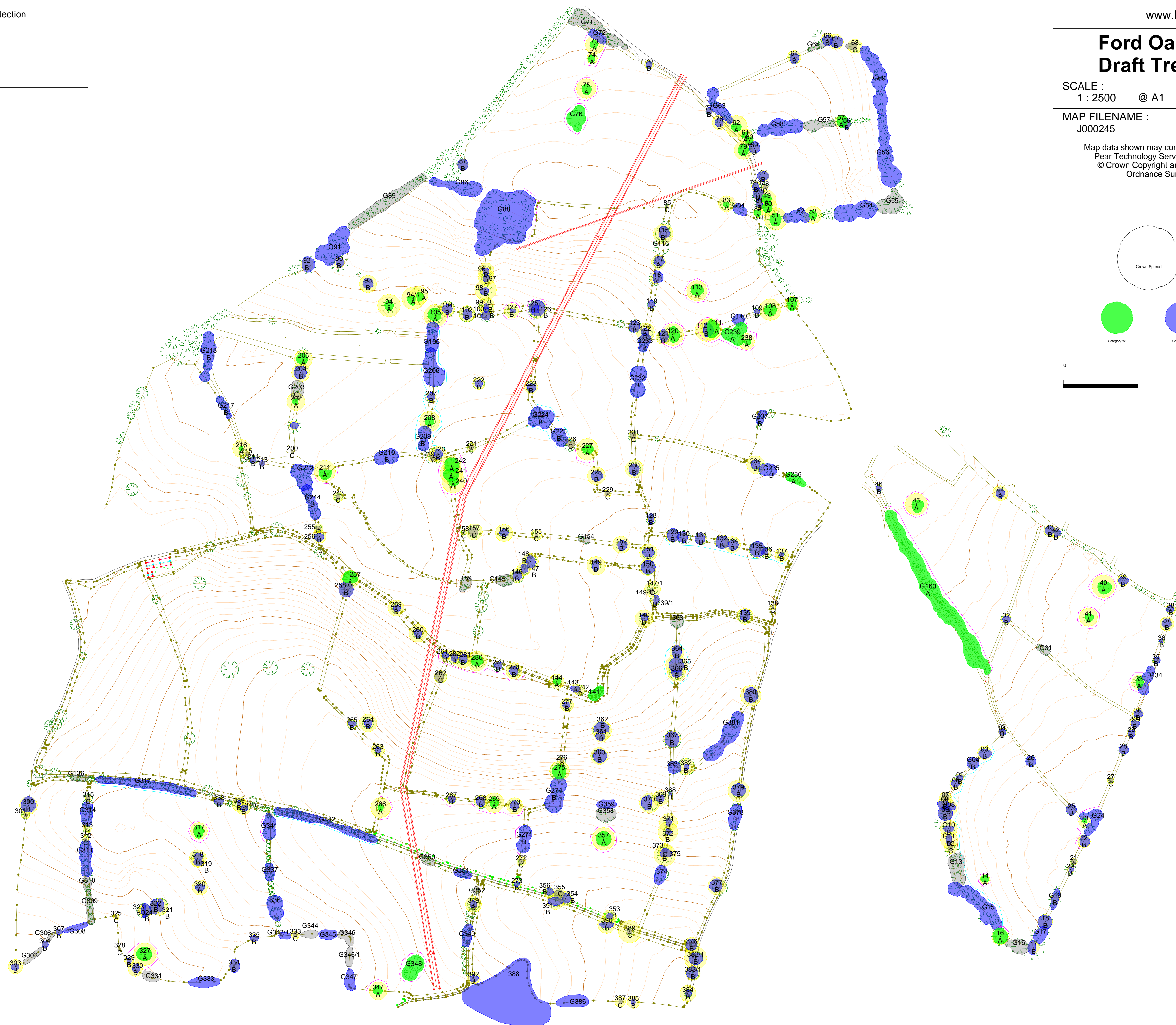
Category 'C'



Category 'U'

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8.4. National Legislation and Policy

Legislation

Town and Country Planning Act

Tree Preservation Orders and Conservation Areas

Under the Town and Country Planning Act 1990, local planning authorities (LPA's) have a duty to make provision for the preservation and planting of trees when granting permission for new developments.

The Town and Country Planning Act affords LPA's with the power to make Tree Preservation Orders (TPO) where it is practical. This will usually be in the interests of amenity and enable the LPA to make provision for the preservation of trees and woodlands.

TPOs are used to protect specific trees, groups of trees and woodlands where removal would result in a significant adverse effect to the local amenity.

A TPO should not be used to prevent development, or the removal of trees in order to impede a development. However, a TPO does prevent unauthorised removal or works, and ensures that trees, groups of trees or woodlands are fully considered within the planning process.

Conservation Areas are areas which have been designated due to their special architectural or historic interest which is considered desirable to preserve or enhance. Trees, groups of trees, or woodland within a Conservation Area are considered to positively contribute towards the character, appearance and general amenity of a conservation area. Trees within a Conservation Area, if not protected by a tree preservation order, are protected by the provisions in section 211 of the Town and Country Planning Act 1990.

TPO's and Conservation Areas (under Section 211 of the Town and Country Planning Act 1990) makes it a statutory offence to carry out any of the following works to trees without the formal consent of the LPA (for TPO's) or without first providing the LPA with six weeks' notice of intent (for conservation areas):

- Cutting down;
- Topping;
- Lopping;
- Uprooting;
- Wilful damage; and

- Wilful destruction.

Certain exemptions apply for works to trees within Conservation Areas and therefore the usual six weeks' notice of intent to carry out work to trees is not required. These include, but are not limited to:

- The making safe of dangerous trees where there is an immediate risk of serious harm;
- The removal of dead wood or dead trees;
- Work necessary to abate an actionable legal nuisance; and
- Where work is necessary to implement a grant of full planning consent.

Forestry Act 1967

The Forestry Act 1967 sets out the requirements for the felling of growing trees and states when trees can and cannot be felled. Exemptions that apply are outlined under Section 9 (4)(d) of the Act which allows developers to legally fell trees which:

“...is immediately required for the purpose of carrying out development authorised by planning permission granted or deemed to be granted under the Town and Country Planning Act 1990 or the enactments replaced by that Act”.

Natural Environment and Rural Communities Act 2006

LPA's and government departments are required to have regard for the conservation of biodiversity when exercising their normal functions under Section 40 of the Natural Environment and Rural Communities Act (NERC) 2006. This includes communities and habitats formed by animals and plants, as well as fungi and micro-organisms.

Trees are considered to be integral elements of the natural environment. This may be due to their rarity (e.g. Common Juniper (*Juniperus communis*)), their part of an important habitat (e.g. ancient woodland) or because they directly support another species (e.g. a bat roost or nesting bird). Widespread, common or even non-native tree species are also important as they contribute towards a sustainable natural environment.

Trees and their biodiversity value must be considered during all development activities. Trees should be retained wherever practicable and opportunities taken to maintain and enhance their environmental contribution.

Trees on Third-Party Land

Roots and branches which cross property boundaries and encroach onto neighbouring land are deemed to be a nuisance under Common Law as they have the potential to affect the owner/occupier's use of their own land. The landowner can legally decrease this nuisance by cutting back encroaching roots or branches to the edge of their property if required.

However, the following considerations must be followed:

- No duty to give notice to the tree owner is required – however it is considered courteous to provide some notice;
- All work must be undertaken without trespass onto the neighbouring property unless agreed otherwise with the landowner;
- All arisings from tree works remain the property of the tree owner – these should be offered back to the landowner and only disposed of with their permission; and
- All work must be undertaken with reasonable skill and in accordance with any relevant best practice guidance.

The potential for future nuisance must be considered when undertaking new tree planting within development landscape schemes. This includes the likely effects of encroaching roots and branches onto neighbouring land. Sufficient room for future growth and movement due to wind must be considered within the landscape planting scheme to avoid the possibility of direct damage to boundary walls, fences and properties.

Policy

National Planning Policy Framework

The National Planning Policy Framework (NPPF 2021) paragraphs 174 to 188 set out the Government's policies on protection of biodiversity through the planning system. These policies are expected to be incorporated into development planning documents at regional and local scales and are also of material worth in considering individual planning applications.

Paragraph 174(b) states – recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

Paragraph 180(c) states – development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists.

8.5. Guidance and Standards

British Standard BS 5837:2012

British Standard BS 5837:2012 is the standard for 'Trees in Relation to Design, Demolition and Construction. The standard sets out the principles and procedures to be applied during the design and construction process to ensure a positive relationship is achieved between trees and structures. BS5837 is applicable whether or not planning consent is required for a development.

Ancient Woodland and Veteran Trees

Ancient semi natural woodland consists of any wooded area which has been wooded continuously since at least 1600 AD and has protection under the NPPF. Ancient Woodlands are described as irreplaceable habitats as per Natural England's standing advice which states that LPA 'should refuse planning permission if development will result in the loss or deterioration of ancient woodland, ancient trees and veteran trees unless:

- there are wholly exceptional reasons; or
- there's a suitable compensation strategy in place.

To protect Ancient Woodland and Veteran Trees during development, The Forestry Commission and Natural England have published guidance (known as 'standing advice'). This standing advice is a material consideration during the planning process and should therefore be considered when making decisions on relevant planning applications. This standing advice was last updated in November 2018 and states the following:

- 'For ancient woodlands, you should have a buffer zone of at least 15 metres to avoid root damage. Where assessment shows other impacts are likely to extend beyond this distance, you're likely to need a larger buffer zone. For example, the effect of air pollution from development that results in a significant increase in traffic'.
- 'A buffer zone around an ancient or veteran tree should be at least 15 times larger than the diameter of the tree. The buffer zone should be 5m from the edge of the tree's canopy if that area is larger than 15 times the tree's diameter'.

8.6. Standard Survey Methodology

The following classification is employed:

Newly Planted: Saplings and young trees under 5 years of age

Young: Trees older than 5 years but still establishing (varies considerably depending upon species, but circa 20 to 30 years)

Semi-mature: Well established, but less than one third of the life expectancy of their species, normally making substantial extension growth.

Mature: Trees between one third and two thirds of the life expectancy of their species. More or less full height and large girth, increasing only slowly over time.

Over Mature: Trees beyond two thirds of the life expectancy of their species. No significant extension growth. Crown starting to break up and decrease in size.

Veteran Trees: Trees beyond the over mature stage but because of their size and age are significant features within the landscape and which can be rejuvenated and conserved by appropriate management.

The tree surveyor assessed the individual condition of all trees identified within the proposed development area. The assessment of condition is based on a visual and professional view.

Each tree was assessed by consideration of the following;

- a. the health, vigour and condition of the tree;
- b. any structural defects, and its life expectancy;
- c. the size and its form and the suitability of its position;
- d. The location as regards the position of other relevant features.

Categories for Tree Constraints Plan

For tree numbers please refer to the appended Tree Constraints Plan. Four categories of trees were recorded in the survey, which are defined as follows:

Category A (marked Light Green on the Tree Constraints Plans). Trees which are the most significant and which should be retained within the layout.

Category B (marked Mid Blue on the Tree Constraints Plans). These trees should be retained where possible within any development proposals.

Category C (marked in Grey on the Tree Constraints Plans). Trees which do not have sufficient Arboricultural merit to constrain development proposals (as long as proposals are included for landscape planting and mitigation).

Category U (marked in Dark Red on Tree Constraints Plans). Trees which will not remain safe features beyond the short term and should be removed as part of any development proposals.

BS5837 requires that trees are further identified according to tree quality with particular merits defined as:

- Arboricultural qualities – sub division 1
- Trees of landscape qualities – sub division 2
- Trees with ecological, historical or cultural value – sub division 3

The design layout should allow for the retention of A and B category trees where possible. C category should only be retained in locations where they will not over constrain development proposals or present additional amenity issues. Mitigation will be required for the loss of any trees particularly groups which have been classified as Category A or B.

During the site survey data was gathered using the PocketGIS arboricultural survey software, and PT Mapper Pro, which has been used to generate the attached observations and recommendations.

Tree Survey Schedule

As part of the assessment a tree survey schedule has been produced. A key of terms and definitions applied to the schedule are detailed in Table 1 below.

Species	Latin Genus and Species + common name
Height	Measured/estimated in metres
Stem diameter	Diameter measured at 1.5 m from ground level with tape in mm
Spread area (N,S,E,W)	Crown spread measured in metres at the points on the compass
Height of Crown Clearance	In metres to inform on ground clearance, shading and crown to stem ratio.
Age Class	Newly Planted, Young, Semi-mature, Mature, Veteran, Over Mature, Dead
Physiological Condition	Good, Fair, Poor Dead
Structural Condition	Detail of the presence of decay, physical defects or danger of collapse
Category Grading	A-Notable, B-Good, C-Moderate - Poor, U-Dead or dangerous

8.7. Tree Protection Guidelines

General Tree Protection Measures

Root Protection Areas have been calculated for each individual tree and each group. These are shown on the Tree Constraints Plan in Appendix B. These must be used in setting a Construction Exclusion Zone (CEZ) on the draft Tree Protection Plan (TPP). The TPP will be produced once the Scheme design has been finalised and it is possible to accurately locate the position for tree protection fencing in relation to the proposed building and access road.

BS 5837 specifies that a Tree Protection Plan (TPP) should be prepared to show the impact of the proposed development on existing trees at the site.

Information from the TPP should be incorporated into subsequent drawings and method statements to ensure that all interested parties are fully aware of the areas in which access and works may and may not take place. There may, for example, be impacts resulting from the provision of underground services or replacing existing security fences. These currently unforeseen impacts should be assessed and incorporated into the TPP before work commences.

Care must be taken to ensure that existing ground levels around trees are maintained as mature trees are sensitive to any changes in water level or factors which alter the aeration of the root system. Pile foundations have been advocated where construction takes place close to retained trees and to maintain existing ground levels.

As a general guide, the full root protection area (RPA) should be observed, and BS 5837 adhered to.

BS 5837 states that all retained trees or groups of trees should be protected by Root Protection Areas (RPAs) marked by the erection of a protective barrier. The Tree Protection Plan and the Tree Survey Schedule shows the RPA for each group of trees.

BS 5837 specifies the minimum RPA in square metres rather than a radial distance; the final barrier position will be shown on a Tree Protection Plan which will be produced once the final development layout has been finalised and approved.

BS 5837 gives the opportunity for the professional arborist to make small changes to the shape (but not the area) of the RPA to fit with local conditions. These alterations have been incorporated into the final Tree Protection Plan to ensure that retained trees are adequately protected.

The Tree Protection Plan will also need to detail routes for services and site facilities.

Retained trees will require ground protection around their Root Protection Area (RPA) using a combination of barriers and ground protection.

All barriers should conform to the standard specified in BS 5837:2012 and are shown in Figure 7.

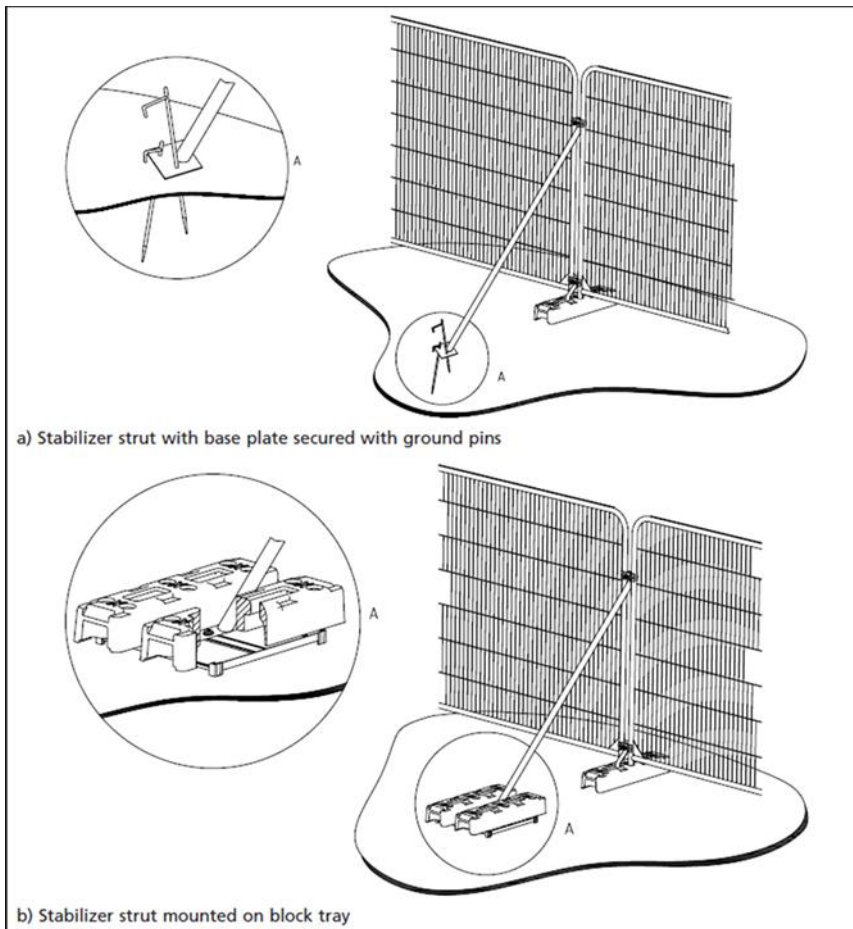


Figure 7: Protective Barrier

The protective barriers should comprise a scaffold frame from which “Heras” type fencing (or similar) should be firmly attached. The barrier must be strong enough to protect the trees from the expected level of construction activity and should be constructed so that it cannot be easily moved.

Once the exclusion zone has been protected by barriers and /or ground protection, construction work can commence. All weather notices must be erected on the barriers stating “Construction Exclusion Zone KEEP OUT” The Construction Exclusion Zone (CEZ) at this site is likely to be complex due to its

topography. It is recommended that the protective fencing is erected under the supervision of the project arborist to ensure that adequate protection is provided.

The location of protective barriers is shown on the draft TPP. Where there is steep topography barriers will need additional stakes to ensure they are secure. All fences must be carefully checked by the Project Arborist.

Compaction Protection Mats

Where RPAs must be crossed to provide access, or temporarily entered to gain access angles, suitable ground protection matting must be installed to protect the root area. The specification must be drawn up to suit each site and application and approved by the project arborist or tree officer. The design needs to consider type of compaction, paying particular attention to weight. An example of a suitable matting that provides temporary compaction protection rated to 45 tons follows:



Typical applications:

- Depending on the underlying ground conditions, they will support a 45 tonne lorry
- Made from recycled plastic material and is therefore recyclable again.
- Superb for covering and protecting tree roots, potentially sensitive archaeology and subterranean assets.
- A 'clean feet' solution for parties, events and sensitive job sites.
- Non metallic and resistant to electrical conduction. Useful where electricity is involved
- Tough enough to be used to stockpile spoil to be reloaded by an excavator or grab lorry
- Suitable for vehicle and pedestrian access.

- Can be bolted together with a clamp plate system or stapled to ground to improve security and load performance.
- Suitable for traversing with steel tracked plant up to a certain weight and rubber tracked and wheeled vehicles.
- NOT suitable for bridging open excavations or voids.
- Mass: 28 kgs each
- Mechanical handling: Forklift/HIAB for multiples. Personnel can move and position unaided if required

Other protection measures

- Material which will contaminate the soil, such as concrete mixings, diesel and vehicle washings, should not be discharged on site.
- Notice boards, telephone cables or other services should not be attached to any part of any tree.
- Fires should not be lit within 5 metres of the CEZ This will restrict any site burning to a small area to the front and side of the Manor House.
- No materials or rubbish should be left within the CEZ. The CEZ will be inspected on a regular basis by the project arborist.

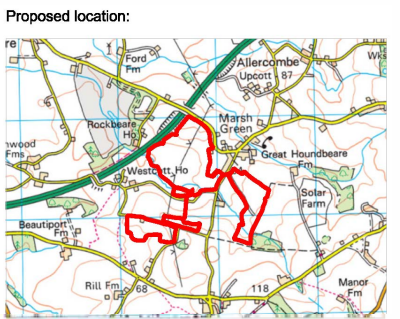


8.8 Proposed Site Layout



- Legend:
- Planning application boundary
 - Perimeter fence
 - Solar PV Modules
 - Maintenance track (3.5m width)
 - Customer cabin
 - DNO equipment
 - Transformer Station 6MW
 - Transformer Station 3MW
 - Spare parts container
 - Field Gate
 - Security Gates
 - County Wildlife Site
 - Ecological Enhancement Area
 - High pressure gas main
 - Public footpath
 - Over-head line (OHL)
 - River / drain
 - Culverted Stream Route

Fence area: ~55.15 ha
Fence length: ~8093.4 m
Total area: ~74.77 ha



Revisions:

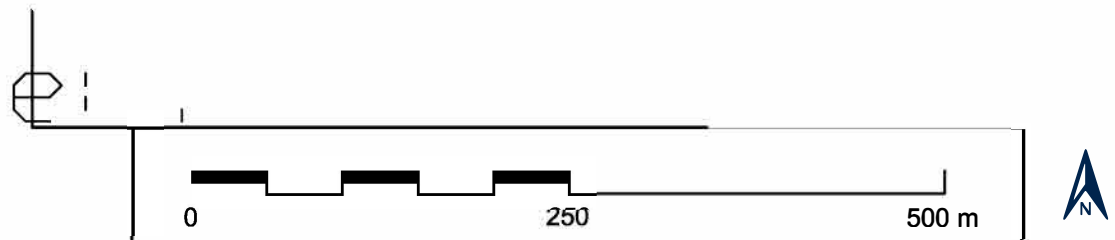
Rev	Date	Comments	Drawn
A	02/09/21	DNO and substation location changed	MG
B	04/01/22	Re-design of the site	TS
C	28/01/22	Changed structure type	TS
D	17/03/22	Swales added, restriction changed	UZ
E	28/03/22	Compounds added and position changed	UZ
		Site road added, fenceline changed	MSTP

Project: Ford Oaks Solar & Green Infrastructure Facility
Location: Land South and West Of Marsh Green

Title: Proposed Development Plan Complete Site
Client: Taiyo Power & Storage Limited
Drawn: MSTP Checked: PC LCA
Scale: 1:5000@A2 Date: 04.05.2022
Drawing No: TPS FO 001 001 Rev: E

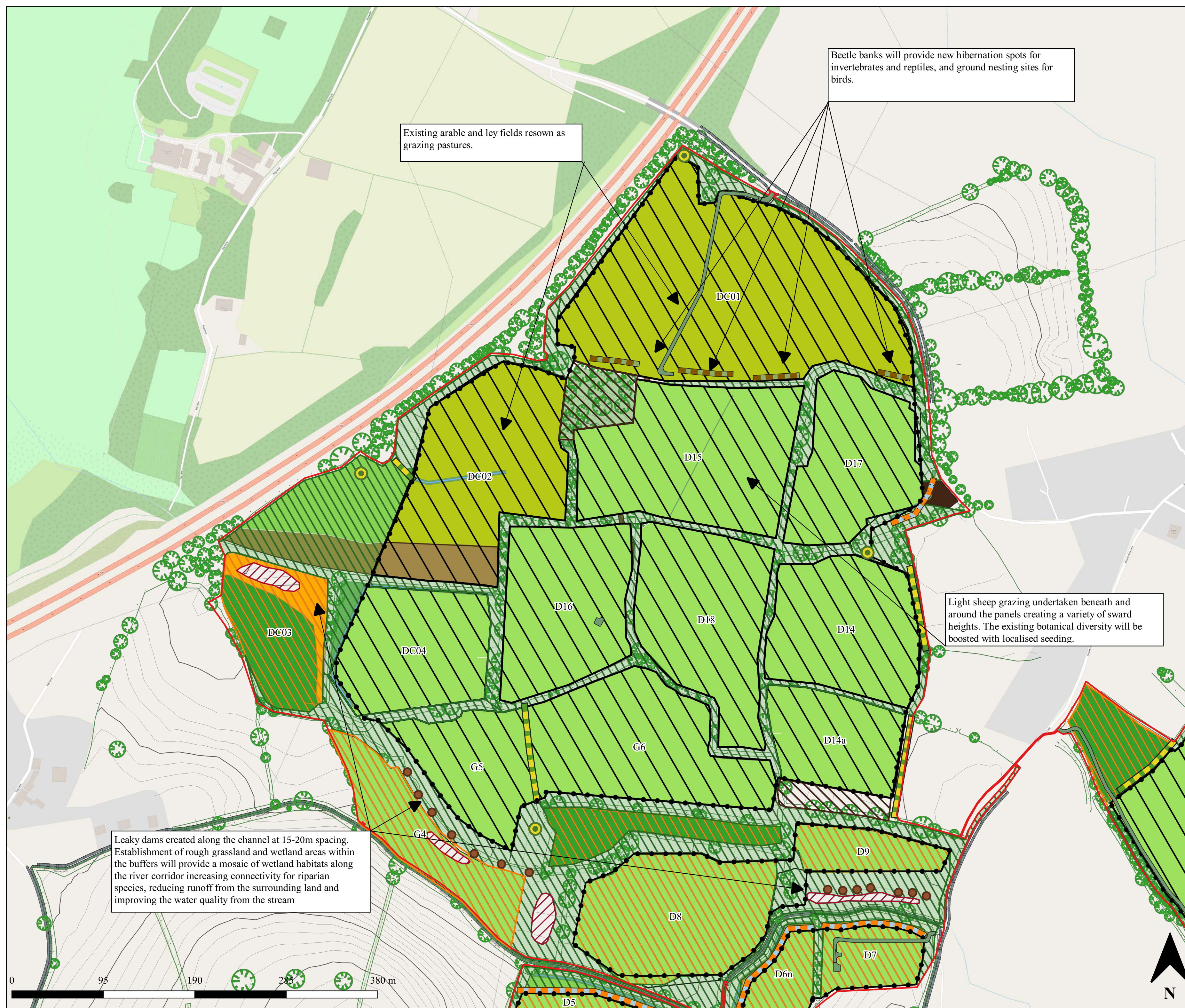


3rd Floor, 14-16 Great Pulteney Street, London W1F 9ND
www.lowcarbonalliance.co.uk
Tel: +44 (0)207 434 8790
Do not scale from this drawing. Site verify all dimensions prior to construction.
Report to discrepancies to the drawing engineer immediately. This drawing is to be read in conjunction with all relevant documents and drawings.





8.9 EEMMP Plans



Legend

Red line boundary

Fence

Beetle bank

Hedgerow creation and enhancement

Swale

Leaky dam

Habitat pile location

Pond enhancement

Managed through sheep grazing

Managed through annual cutting

Area of rotational cutting to manage field margins

tussocky grassland and hedgerows

Wetland creation

Area of natural succession

Bunds

Wet meadow seeding

Meadow creation

Grazing pasture enhancement

Grazing pasture seeding and creation

Area left unseeded

Shrub Planting

Habitat creation, enhancement and management will provide a diverse mosaic of habitats for bats, birds, reptiles and invertebrates across the landscape.

The development fields in the north of the site will be resown to create grazing pastures to provide additional habitat for invertebrates.

Grasslands abutting existing farmland outside of the solar array fence will be outside the control of the managed stocking densities

The network of field margins and corners will be managed as rough grassland providing habitat for reptiles, small mammals, and invertebrates.

50 bird boxes and 30 bat boxes will be installed on mature trees in hedgerows across the site.

Selected scrub removal around existing ponds on site allowing a greater amount of light to reach open water and the habitat margins.

7 habitat piles created across the site consisting cuttings from site management

Title: Ecology Mitigation and Management Plan

Site: Ford Oaks Solar and Green Infrastructure Facility

Client: Taiyo Power & Storage Ltd.

Date: May 2022

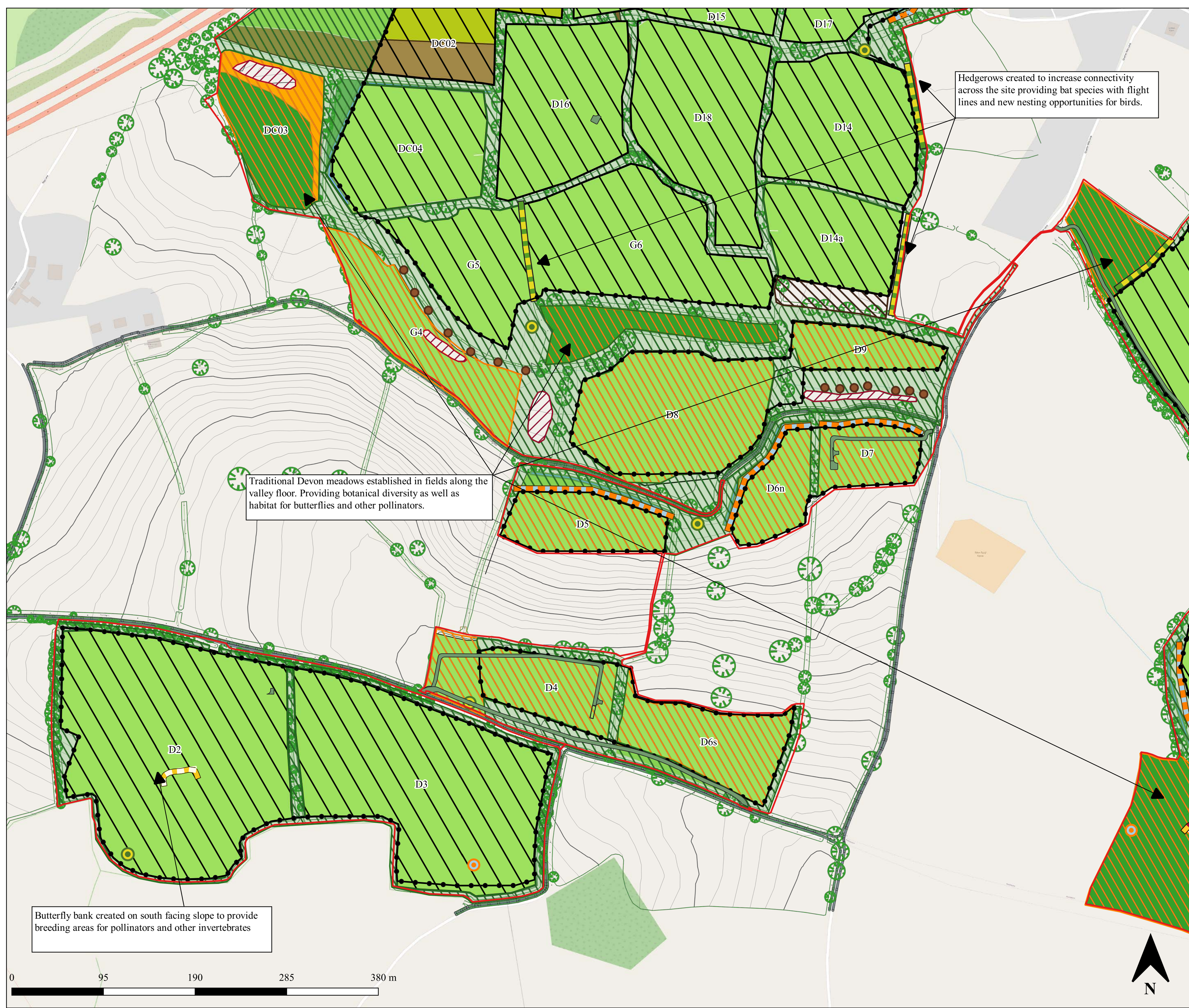
Drawn by: AP

Checked by: LW

DEVON

ILDLIFE

CONSULTANTS



Legend

Red line boundary

Fence

Hedgerow creation and enhancement

Butterfly bank

Bund

Swale

Leaky dam

Habitat pile location

Pond enhancement

Managed through sheep grazing

Managed through annual cutting

Area of rotational cutting to manage field margins tussocky grassland and hedgerows

Wetland creation

Area of natural succession

Wet meadow seeding

Meadow creation

Grazing pasture enhancement

Grazing pasture seeding and management

Area left unseeded

Habitat creation, enhancement and management will provide a diverse mosaic of habitats for bats, birds, reptiles and invertebrates across the landscape.

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Client: Taiyo Power & Storage Ltd.

Date: May 2022

Drawn by: AP

Checked by: LW

DEVON ILLDLIFE

CONSULTANTS



Existing hedgerows managed with 1m margins. Hedges cut on rotation with hedge height growing up to 4m. Providing bats with strong commuting features within the landscape

Woodland planting along the boundary with the County Wildlife Site. Designed to provide a continuation of habitats between the County Wildlife Site and the surrounding grasslands

Legend

- Red line boundary
- Fence
- Hedgerow creation and enhancement
- Bund
- Swale
- Leaky dam
- Habitat pile location
- Pond Enhancement
- Managed through sheep grazing
- Managed through annual cutting
- Area of rotational cutting to manage field margins
- tussocky grassland and hedgerows
- Scrape
- Area of natural succession
- Meadow creation
- Grazing pasture enhancement
- Woodland planting

Habitat creation, enhancement and management will provide a diverse mosaic of habitats for bats, birds, reptiles and invertebrates across the landscape.

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Title: Ecology Mitigation and Management Plan
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Client: Taiyo Power & Storage Ltd.
Date: May 2022
Drawn by: AP
Checked by: LW