

Woodland & Countryside Management Ltd.

Helping you make the most of your land



HOPKINS SOLAR FARM, LAND AT TYCROES.

Arboricultural Impact Assessment & Method Statement (DNS Ref. No. 3227364)

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1 INTRODUCTION

1.1 Background

Woodland & Countryside Management Ltd. was commissioned to carry out a BS5837 (2012) Tree Survey in November 2019, following a number of layout revisions Woodland & Countryside Management Ltd. were subsequently asked to produce an Arboricultural Impact Assessment and Method Statement in January 2020. The Tree Survey carried out on the 19th -21st November 2019 has been applied to the latest proposed layout plan.

1.2 Purpose of Report

This report provides analysis of the impact of the proposed development on trees and local amenity, its primary purpose is for the planning authority to review the tree information in support of the planning submission and for use as a basis for issuing planning consent or engaging in further discussion towards that end. This report is based on my site observations and the information provided; I have interpreted this in the context of my experience.

The report provides details of the recommendations for tree protective measures that should be put in place to ensure the retained trees remain in the long term.

1.3 Ecological Constraints

The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act 2000, provide statutory protection for the species that inhabit trees particularly Bats. Although there was no evidence noted during the tree survey, a Bat survey is recommended and this matter should be dealt with in a separate report by a suitably qualified Bat inspector.

1.4 Qualifications and Experience

My Qualifications are a BSc (Hons) in Countryside Management and National Diploma in Forestry. I have over 40 years' experience in Forestry, Arboriculture and Countryside Management primarily in the local authority sector but also the Forestry Commission. I hold numerous NPTC certificates including tree inspection. I have been running Woodland and Countryside Management Ltd. for 10 years. I have worked for Local Authorities, Forestry Commission, MOD, Environmental Organisations, Estates, Estate Agents, Individual landowners and householders. I am a serving member of the Royal Forestry Society and Confederation of Forest Industries. I have also been a part time lecturer in Arboriculture and Woodland Management at Sparsholt and Lackham Colleges.

2 SITE EVALUATION

2.1 Site Visit

The Tree Survey was carried out on the 19th - 21st November 2019. All observation was from ground level, observations were confined to what was visible from within the site and adjacent property. The weather was generally overcast but dry.

2.2 Site Description

The site is an area of primarily sheep and cattle grazing located at three locations on land to the east of the A48 and land to the south west of Tycroes. The three sites consist of grazed fields surrounded by hedges with mature trees and adjacent areas of woodland. The sites are generally gently sloping from north to south. Trees are primarily around the boundary of the areas with a few within the internal hedge features, there are no individual field trees or groups within the fields.

2.3 Proposal

The proposal is to develop the area as a solar site with associated access whilst maintaining the existing field structure and hedge and boundary features. The proposal is to set out the solar panels within the fields with the boundary fence siting outside the Tree Root Protection Areas (RPA). The layout has been designed so as to retain and protect all hedge and trees features, except for the removal of a few coppiced Willow in the south west corner of the central area.

2.4 Collection of Data

All significant individual trees impacting on the site were surveyed as advocated by BS5837 (2012). Category rating was based on BS5837 (2012) Tree Quality Assessment Chart (Appendix 3). The surveyed trees details are found in the Tree Survey Schedule (Appendix 1) and the Tree Survey Plans (Appendix 2). The fully surveyed trees were the dominant trees within the hedgerows, and adjacent woodland. Primarily the trees on the site of most importance were Oak and are Category B trees; these were the larger trees with the greatest life expectancy and provide a good guide of the extent of the protection area required. Other recorded species included Ash, Alder, Sycamore, Willow, Birch and Holly. A further 48 trees were recorded and mapped but not fully surveyed; these were trees of lesser size and impact whose RPA and Crown would be smaller than the fully surveyed adjacent dominant trees.

2.5 Interpretation of Data

The Root Protection Area (RPA) for individual trees was calculated using the process laid down in section 4.6 of BS5837 (2012). However this is a simplistic methodology for establishing the minimum distance for protective barriers and consideration should be given to the influencing factors set out in section 4.6.3 of BS5837 (2012) in setting the RPA's on this site. Consideration has been given to the both the current and ultimate height and spread of retained trees. The calculated RPA's of the retained trees are detailed in the Root Protection Area Plans (Appendix 4). The area of the retained trees shadow has also been calculated and is detailed in the Outline Tree Shadow Plans (Appendix 5).

2.6 Root Protection Area

The Root Protection Area (RPA) is the area where ground disturbance must be carefully controlled. In principle, no significant disturbance should occur within the RPA of category A, B or C trees as described in the BS5837 (2012) Tree Quality Assessment Chart (Appendix 3), and high levels of care are needed during any activities authorised within the RPA if the trees are to be successfully retained. Consideration also needs to be given to the space needed for the trees to be successfully retained after development has finished i.e. enabling tree crowns to have room to develop. This is more important for trees that fall within Category A or B.

3 ARBORICULTURAL IMPACT ASSESSMENT

3.1 Impact on Trees

Any development should be made based on the primary assumption that there is no disturbance within the RPA's of the retained trees, particularly those of categories A and B. The dominant trees on the site are the Mature Oak within the hedgerows and woodland, the majority are Category B. The proposals are to retain all trees and to set the security fencing at a distance that sits outside the RPA's thus ensuring that the Solar panels are located well away from the trees RPA's and away from the influence of current and future crown shadowing. A small area of coppiced Willow will be removed in the south west corner of the central area. Access to and through the site will use existing gateways.

3.2 Proposals to Mitigate Impact

Trees will require protection during the development of the site. Successful retention of trees depends on the quality of the protection and the administrative procedures in place to ensure that the protective measures remain in place whilst there is any risk of damage. This report provides the methodology for achieving this and is set out in the Arboricultural Method Statement (Section 4) below.

3.3 Impact on Local Landscape

The proposal has ensured that virtually all of the trees on the site are retained. Subject to adequate precautions to protect the retained trees as specified in the Arboricultural Method Statement the development proposals will have no impact on the local landscape.

3.4 Detailed Impact Appraisal

The site has 139 fully surveyed trees and 48 other recorded trees. Of the fully surveyed trees, 66 are Oak of which 1 is Category A, 62 are Category B and 3 are Category C, 20 trees are Ash of which 19 are Category C and 1 is Category U. The remaining fully surveyed trees are Alder, Sycamore, Willow, Birch, Larch, Elm and Holly, the majority being Category C. The other recorded but not fully surveyed trees are 16 Birch, 13 Ash, 10 Oak, 8 Alder and 1 Willow, and are all Category C (see BS5837 (2012) Tree Quality Assessment Chart (Appendix 3)). This is due to their maturity and condition as well as their role they have in the local landscape.

4 ARBORICULTURAL METHOD STATEMENT

4.1 Introduction

The Arboricultural Method Statement sets out the protection measures that must be put in place to secure successful tree retention prior to, during and after development. It is based on the assumption that the minimum general standards for development issues are those set out in BS5837 (2012). The location and methodology of the protection measures must be approved by the Planning Authority and are subject to a site inspection and approval prior to commencement of works.

4.2 Protection Barriers

Due to the location of the retained trees within hedge lines and adjacent woodland and the nature of the development proposal, the erection of protection fencing prior to the development across the site prior to commencement is impractical and unreasonable. As the proposal will include a full deer/security fence around it, this will effectively be the protection fencing and fully protect the RPA of the trees outside this fence. There are a number of trees in hedge lines within the security/deer fence and these will require temporary protection during the development. Phase 1 of the development should be the erection of the permanent security/deer fence followed by the temporary tree protection fencing. Once all fencing is completed erection of the solar panels can be carried out.

The temporary tree protection fencing is to be erected prior to the start of any on-site works and will protect both the trees and hedgerows. The fencing will be retained and maintained for the full duration of the construction works. BS5837 (2012) states that where protective barriers are used these should be fit for purpose, BS5837 (2012) section 6.2.2 sets out the default position, however it also states in 6.2.2.3 that 'where the site circumstances and associated risk do not necessitate the default position, an alternative specification should be prepared and agreed by the local planning authority'. Due to the nature of the site and the amount of fencing within the RPAs, it is proposed that an above ground stabilising system of protective fence with stabilisers in block trays as per Figure 3b of BS5837 (2012) will be used (Appendix 6). The protective fencing will be erected as per the Tree Protection Plans (Appendix 7), and where meeting the permanent fencing or boundary of the site will link to the boundary to create fully enclosed protection areas.

4.3 Protection of RPA outside the Protective Fencing

Existing farm access gateways and hard tracks will be used to access the site and to carry out the development works, these are in places that generally sit outside Tree RPA's, however where they are within Tree RPA's they are considered to be suitable for access without any protection, should these access points prove to be insufficiently stable enough Protective Surfacing may be required (see 4.4 below).

4.4 Protective Surfacing

Should the existing access gateways or tracks not prove suitable then a surfacing option will be required, this could be a basic temporary tracked system or a more permanent 'non dig' solution. Any Protection Surfacing should be carried out in line with BS5837 2012 Section 7.4 and guided by Arboricultural Practice Note No 12 'Through the Trees to Development'.

Any permanent surfacing must be of a proprietary cellular confinement system that will allow water and gas movement, will provide load spreading to avoid compaction and will require no excavation to the existing surface e.g. the Cellweb TRP® Cellular Confinement System. Any edge retention if used should be custom designed to avoid any significant excavation into existing soil levels being pre-formed edging secured by metal pins.

4.5 General Excavation

There are no proposed excavations within the RPA. However if for any reason excavation is required within the RPA's, this must be carried out by hand digging and targeted to avoid any roots. Should any roots be exposed and need to be removed, these should be cut 10-20cm behind the final face of excavation. Retained roots must be protected from direct sunlight, drying out and extreme temperatures by an appropriate covering. Roots greater than 25mm should be retained where possible and should only be cut in exceptional circumstances and following guidance from the Arboricultural Advisor.

4.6 Removal of Structures

There are no existing structures to be removed.

4.7 Installation of New Services

Provision of new underground services has yet to be finalised, however these should be located so that where possible they sit outside the RPA's. Where the services must pass through the RPA's they should be installed using trenchless installation as the preferred method although hand excavation as detailed above (4.5) may be acceptable. The final details of services are provide separately and is not a part of this report.

4.8 Site Storage, Cement mixing and Washing points

Fuel storage, materials storage, handling and mixing areas and washing points for equipment and vehicles will all be located outside the RPA's. Where there is a risk of polluted water run off precautions will be in place to contain any spillages. Siting of any site office will be outside the RPA's. There will be no burning of waste material on the site; all waste material will be removed from site.

4.9 Tree Protection Supervision

Tree protection will be overseen by the Arboricultural Advisor, who will ensure all the proposed protective measures set out in this Method Statement are implemented and carried out in accordance with the approved details. This will require a visit once protection measures are in place and prior to commencement of works as well as a final visit to confirm removal of protective fencing on completion.

4.10 Tree Management Works

There are no proposed tree management works at this stage. Should any works be proposed these will need approval of the Local Planning Authority, with works being carried out to BS3998 (2010) Tree Work - Recommendations, by a competent Arboricultural contractor being overseen by the Arboricultural Consultant. All tree works should be carried out outside the bird nesting season and prior to the commencement of the development.

4.11 Soft Landscaping

No re-profiling is proposed and ground levels will be maintained at original levels where they extend over the RPA's.

4.12 Tree and Shrub Planting

There are no landscape proposals for the site.

4.13 Site Management

It is the developer's responsibility to ensure that the details of the Method Statement and any subsequent details and amendments are fully understood by all site personnel. The developer will also be responsible for alerting the Arboricultural Advisor of any unforeseen works that have potential to impact on any RPA and to take advice on the works and implement any recommendations made. The developers will also be responsible for the provision of site visit records and certificates of completion.

5 SUMMARY

The protection of retained trees on this site has been considered and this report provides an Arboricultural Method Statement that ensures the development is carried out with the minimum impact on the retained trees.

6 APPENDIX

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| Appendix 1 | Tree Survey Schedule |
| Appendix 2 | Tree Survey Plans |
| Appendix 3 | BS5837 (2012) Tree Quality Assessment Chart |
| Appendix 4 | Tree RPA Plans |
| Appendix 5 | Tree Shadow Plans |
| Appendix 6 | BS5837 (2012) Fencing |
| Appendix 7 | Tree Protection Plans |



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