

Biodiversity Enhancement Plan for

Alder Wood, Station Lane, Rushton Spencer, SK11 0QU

1. Introduction

This document is provided to support the revised application made to the LPA. A previous consent Ref: SMD/2023/0067, received the pre-commencement conditions which required additional information to be supplied prior to commencement. This application is for a similar proposal with minor variations to the proposed plans, but the overall principle remains the same. It is likely to attract a similar set of conditions if approved. The applicant is therefore submitting this additional information as part of the new submission so that these conditions can be considered as part of the formal application process.

The planning application Ref: SMD/2023/0067 (approved) is for the erection of new detached dwelling and associated landscaping works and was approved by Staffordshire Moorlands District Council (SMDC) on 04th December 2023.

This BEP has been produced to provide a series of enhancements such that Condition 18 would no longer require additional information but can be in accordance with this document.

Condition 18.

Prior to the construction of the dwellinghouse hereby approved, a scheme of biodiversity enhancement shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall include, but shall not be limited to, the measures outlined within the Impacts and Recommendations Survey of the Preliminary Ecological Appraisal produced by Charnia Ecology and dated October 2018.

The approved measures shall be implemented in full prior to the occupation of the dwellinghouse hereby approved, unless alternative timings are first agreed in writing by the Local Planning Authority.

Reason:- To ensure the development achieves a net gain in biodiversity. Reason: To protect the amenities of the area during construction.

2. Site Context and Survey Information

2.1 – Site Location and Landscape Context

The proposed development lies within Rushton Spencer, approximately 11km south of Macclesfield town centre. The post code for the site is SK11 0QU, and the site is accessed from Station Lane which lies adjacent to the site's northern boundary. Aerial imagery showing the approximate site boundary is presented below. A proposed site plan is provided in Appendix 1 which also shows some of the mitigating features to address the above conditions.

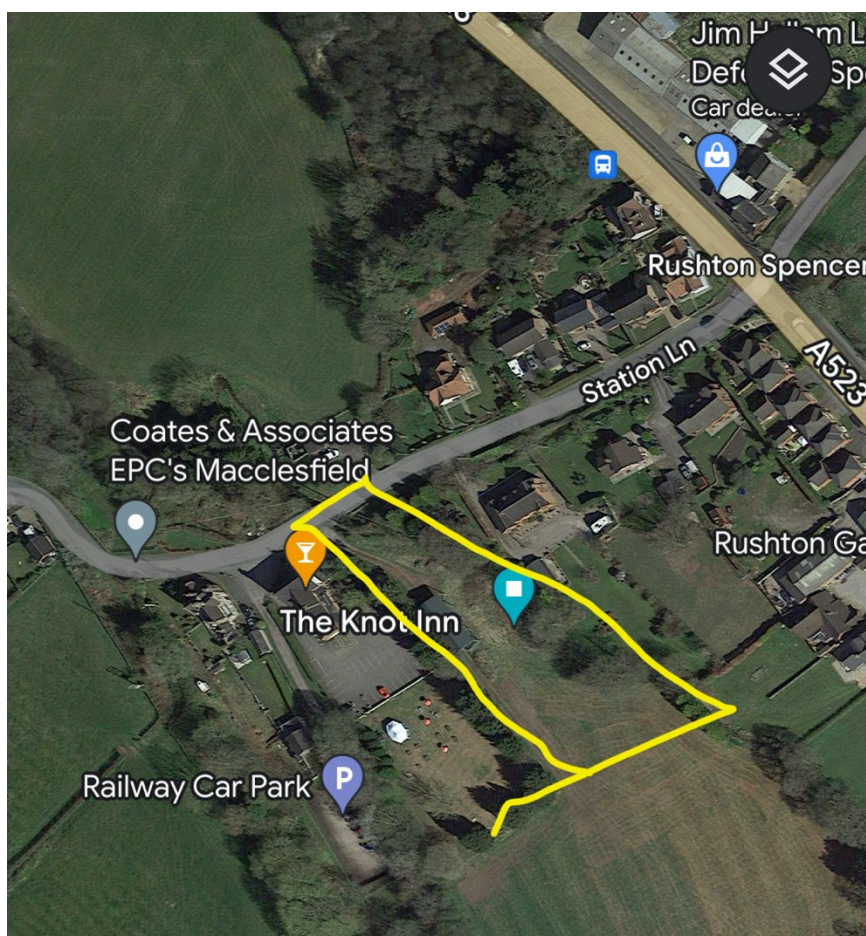


Figure 2-A: Aerial photograph and approximate site boundary

An access is provided via an existing gated vehicle and pedestrian access at the Northern boundary from Station Lane.

2.2 – Ecological Information

A Preliminary Ecology Appraisal (PEA) was completed by Charnia Ecology to inform the planning application. The appraisal concluded that, as the proposed development was considered a small-scale development, NO impact to any Statutory or Non-Statutory designated sites in the wider landscape is predicted.

The report made a number of recommendations to benefit the wider landscape and changes of temporal stability that may increase the site's importance to nature conservation.

Web based resources, such as Multi-agency Geographic Information for the Countryside (MAGIC) (www.magic.gov.uk), Natural England (www.naturalengland.org.uk); National Biodiversity Network (NBN) (www.nbn.org.uk); UK BAP (www.data.nbn.org.uk, Google Earth and www.ordinancesurvey.co.uk) were utilized. In order to compile background information on the site and immediate surroundings, local records regarding protected species within a 2km radius were requested from Staffordshire Ecological Records (SER).

Staffordshire Biodiversity Action Plan (BAP) was consulted to determine priority species of national or county conservation importance. The UK Biodiversity Action Plan (UK BAP) was set out to identify habitats and species on a national and regional scale that merit special consideration for protection,

enhancement and expansion through all appropriate mechanisms to contribute to the conservation of global biodiversity.

A formal data search was requested from Staffordshire Ecological Records (SER) within a 2km radius of the application area, to further substantiate methodology and ascertain the following information:

- Extent of Sites of Biological Importance* (SBIs) and Biodiversity Alert Sites*(BASs) in the area in question.
- A list of SBIs/BASs and other statutory and non-statutory sites of biological or geological importance, together with a list of woodlands listed on the Natural England Ancient Woodlands Inventory.
- An annotated list of protected species within the search area, covering European and UK protected species and species occurring on the UK Biodiversity Action Plan (BAP) (short list) and Staffordshire BAP.

Additionally, MAGIC (Multi-Agency Geographic Information for the Countryside, 2010) was used to establish whether any of the following are present:

- Statutory site designations on or within 1 km of the site.
- Statutory sites designated for bats within 5 km of the site.

The report highlighted the following likely impacts of the proposed dwelling:

PROTECTED SPECIES

Flora

The primary alteration/loss of habitat is considered as being species-poor, semi-improved grassland. In its current form, the grassland area is subsequently considered as being of low conservation value in terms of protected flora / vegetation communities and /or indicator species. Based on National habitats and local biological data records, the vegetation communities are NOT considered to be unique within the context of the surrounding landscape, and do not represent any significant loss in terms of nature conservation overall.

Invasive plant species

No NNIS or any other flora listed in Schedule 9 of the Wildlife and Countryside Act 1981 were recorded onsite itself. Conversely, irregular small stands of Himalayan balsam *Impatiens glandulifera* were recorded off-site along the adjacent brook water channel on the NE boundary.

Fauna

Based on local distribution of species and the habitats on and adjacent to the proposed development area, in the absence of mitigation the following impacts are considered with regard to protected fauna:

Bats

Based on a small-scale residential development (<1ha), no immediate impact to protected bat species/roosts is predicted under the proposed scheme, with no structures considered suitable for roosting bats within the proposed application area. Conversely, a mature oak with a high number of potential features for roosting bats is considered as being marginally within the zone of influence of the development. No further surveys are considered at this juncture on the condition that a work

exclusion / buffer zone is set around this tree, and a sensitive post developmental lighting design implemented.

Policy NE 2 states that the Council will protect existing trees, woodlands and hedgerows, in particular, ancient woodland, veteran trees and ancient or species-rich hedgerows from loss or deterioration.

The application is supported by a tree survey which states that all retained trees will require protection during the construction work to make sure they are not damaged. Tree planting is also proposed as part of the landscaping scheme. As such subject to a suitable condition the development will have an acceptable impact on Trees and hedgerows.

3. Biodiversity Enhancement Plan

The above findings have been used to support and inform the following recommendations for the proposed enhancements.

Table 1 outlines the enhancement measures to be implemented before and during construction.

Table 1: General Biodiversity Site Management Measures.

WORKS	Specification
Persons Responsible and Lines of Communication	It is recommended that a Development Biodiversity Champion (DBC) is selected for the construction phase of the development. The DBC should be someone with significant influence during construction, such as the contract or project manager. The DBC is responsible for ensuring all actions outlined in this BEP are implemented including the provision of a toolbox talk prior to works commencing. Any queries with regards to the mitigation prescriptions should be addressed to the DBC throughout the construction phase of the development where necessary to ensure the mitigation is applied and impacts to adjacent ecological and water source receptors are effectively minimised.
General Construction Activities	Heras fencing has already been installed around the perimeter of the construction zone to prevent any personal, vehicular or construction encroachment onto features of ecological value and onto the adjacent stream which feeds into the local water source. Any machinery used should be made safe or temporarily fenced off when not in use. Storage of construction materials will be kept to a minimum. Where materials must be stored, they will be restricted to inert objects and located on hardstanding away from hedgerows, trees and the water source. Skip or similar containers may also be used in place of piles on the ground. See site plan in Appendix 1. Trenches or open excavations will be covered at the end of each working day, or include a means of escape such as a sloping ramp for any animals that may fall in. Any temporarily exposed open pipe systems or ducts will be capped at the end of each working day in such a way as to prevent animals from gaining access. Fuller details of on-site protection measures are given in the CEMP.
Toolbox Talk and Pre-Commencement Inspection	The DBC will provide toolbox talk prior to the works within the development footprint commencing. This talk will indicate an appropriate procedure for working within this area to minimise disturbance on site and the risk of inadvertently harming retained habitats for wildlife.
Lighting	To address Condition 8 of the Decision , a low impact lighting strategy will be adopted for the site during and post-development, to minimize impacts to the local area and to nocturnal species such as bats, which will include the following measures: • Lighting of hedgerows and trees will be avoided. • Use narrow spectrum light sources to lower the range of species affected by lighting.

	• Use light sources that emit minimal ultra-violet light. • Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content they should be of a warm/ neutral colour temperature <4,200 kelvin. • Do not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal. • Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only. • External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on. • Wall lights and security lights will be 'dimmable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available.
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Table 2 outlines the measures to be implemented to manage the existing biodiversity.

Table 2: Existing Biodiversity Site Management Measures.

Existing Fauna and Flora	
Existing trees and Hedgerows	To address Conditions 15 of the Decision, and as covered by the CEMP, retained trees and hedgerows will be protected in line with the following measures: • No trenches or ground works will be completed within 5m of any trees or hedgerows on site. • Trees and hedgerows will be appropriately protected in accordance with BS 5837:2012 - "Trees in relation to design, demolition and construction - Recommendations". • As such, the trees and hedgerows have already been separated from construction works by protective 'Heras' fencing which will remain in place throughout the duration of the construction phase of the development.
Existing Herpetofauna	The PEA did NOT indicate a high incidence of amphibians and reptiles although the following was recommended: <i>Although considered unlikely, care and vigilance should be adopted during removal of scrub around the sites ecotone to minimize any inadvertent impact to wildlife in general. individual reptiles over space and time with consideration given to Grass snake which are highly mobile.</i> <i>All building materials, rubble, bricks and soil should be stored only within existing areas of hard-standing and should be raised above ground level using either pallets, skips, or other suitable containers in order to prevent amphibians, small mammals and/or reptiles from seeking refuge underneath them.</i> <i>Waste materials should be removed from site immediately or contained within skips. If this timeframe cannot be achieved, vegetation clearance works can be undertaken between June and September. During this timeframe, all refugia present will need to be subject to detailed finger-tip searches prior to removal. Clearance works must not take place between October and March when reptiles are mostly torpid and thus highly vulnerable to injury or death.</i> Once the sensitive vegetation clearance has been completed, if vegetation is to remain it will be maintained at a short sward (sward length<50mm) which is unsuitable to

	support amphibians and reptiles and is likely to prevent individuals from recolonising these areas of the site prior to or during construction works. If a common amphibian or reptile is found then this should be allowed to move away into adjacent habitats unharmed, of their own accord or, if at immediate risk, moved by gloved hand to an undisturbed and sheltered area of the site or adjacent land. In the unlikely event that a great crested newt is identified, works will cease and advise will be sought from a suitably qualified ecologist.
Existing Birds	Tree and hedgerow clearance will not be required or allowed and hence the impact on the local population of birds is expected to be minimal.

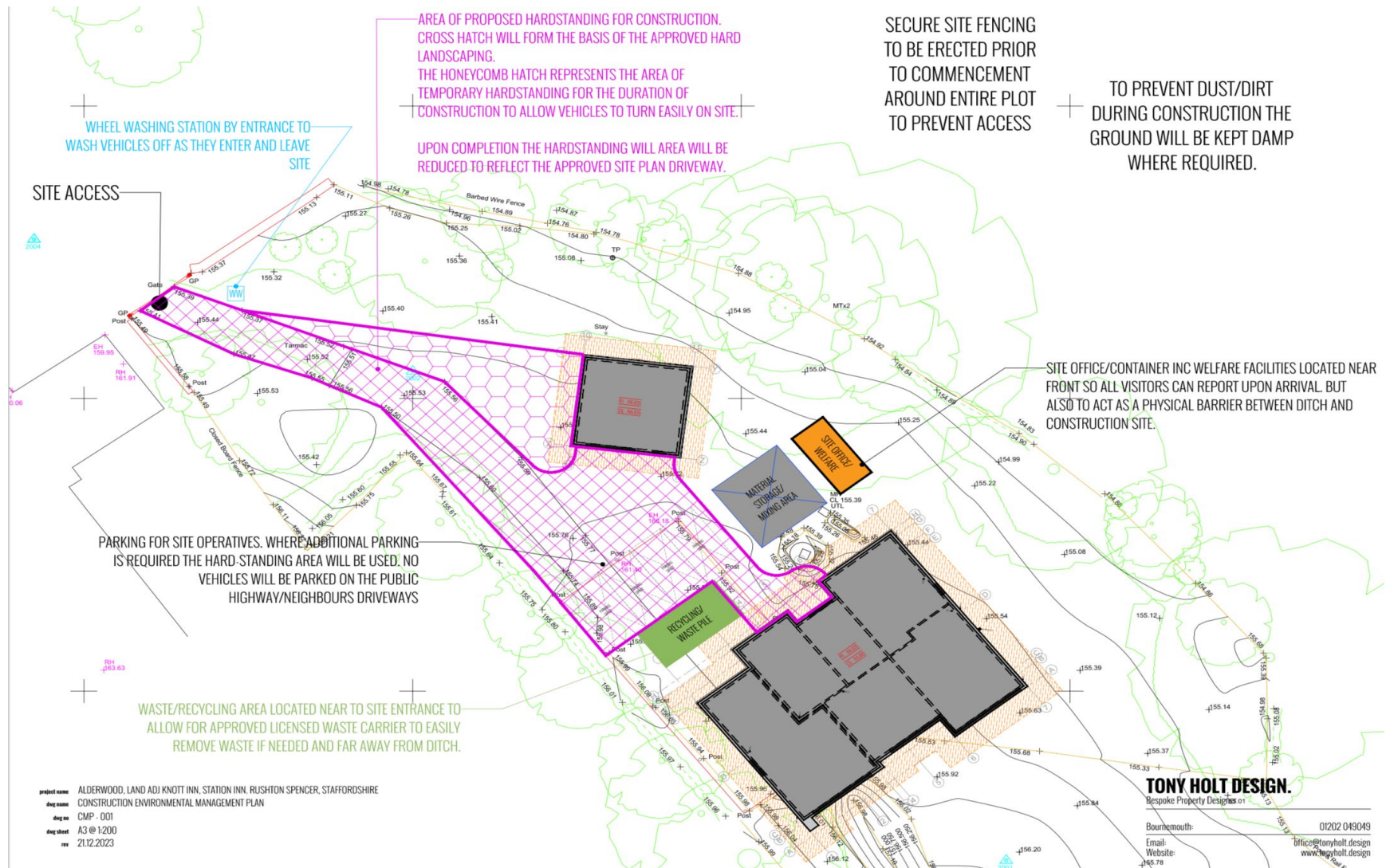
Table 3 outlines the enhancement measures to be implemented during and after construction to address Condition 18 of the Decision and which form the main part of the Biodiversity Enhancement Plan.

Table 3: Proposed Biodiversity Enhancement Measures.

Proposed Enhancements	
General	Features that have been considered to be included in the development of this plan to enhance site biodiversity include: • Setting aside space within the development to create woodland, wetland, wildflower meadows or other habitats of value to wildlife, • Using native plants in the landscaping design, which are of value in their own right and as habitat for other wildlife, • The addition of a green roof on one or more buildings, providing habitat for plants and animals typical of brownfield sites, • The use of climbing plants on walls within the new development which can provide shelter and foraging opportunities for wildlife, • The inclusion of bird and bat boxes within the structure of new buildings, • Use of sustainable urban drainage systems which double as wildlife habitats, for example, swales and balancing ponds.
Trees and shrubs	As shown on the site plan, the southern area of the development site will be set aside for planting of a 'mini woodland' with the sole purpose of enhancing biodiversity and offering a resource for local wildlife. Hedgerows will also be planted around the southern and western boundaries of the plot. When planting new trees, shrubs and hedgerows, consideration has been given to planting native species of local provenance. The applicants have already sourced a grant from The Woodland Trust to provide funding for planting of native trees for hedging and the creation of woodland. The type of trees and shrubs provided by the grant is shown in Appendix 2 and were chosen by The Woodland Trust to reflect the locally found plants. The layout of new hedgerows is also important; to this end they will connect with existing hedgerows as this may help the movement of some species of wildlife. Once the development is complete, the way in which the hedgerow is managed will determine its value for wildlife and this has been considered in the overall design of the development. It is understood that any newly planted trees and shrubs are likely to require a period of aftercare and maintenance until they become established.
Ground vegetation	The PEA did not find any critical species present on the existing plot which formed part of a managed silage crop but it is planned to create an area on the developed site to provide habitat and resource for local wildlife, in particular for invertebrates by preparing the ground and sowing seeds and planting. This will be carried out in the southern and eastern area of the plot. It is accepted that most plant communities require active management to maintain their botanical interest.
Invertebrates	There are a variety of ways in which invertebrates will be accommodated within the development site by habitat creation. Features which will be included to benefit invertebrates include: • Creation of a wildlife focussed pond to the south-east of the plot, • Creation of ditches/swales, • As described above, woodland, hedgerows and native shrubs will be planted, • Open, sunny grassland that is rich in wildflowers will be created within the woodland area to the south of the plot, • The use of log piles and other dead wood around the pond, • Invertebrate nesting and feeding boxes,

Birds	Methods will be used to improve conditions for birds on the development site following development. These include: • Allowing the growth of 'wild' areas of long grass, thistles and teasels in selected areas and maintaining areas of short grass to provide foraging opportunities for different species of birds, • Providing a wet area adjacent to the newly created pond that birds can use for drinking or for collecting mud for nest building, • Planting native trees, hedges and bushes, particularly those that support good numbers of insects or produce berries in the autumn, to provide foraging opportunities and nest sites, • Putting nest-boxes on existing, suitable trees, • Incorporating swift nest boxes into the development building(s). Management of the habitat once established will also influence its attractiveness for birds. For example, hedges will be cut only once every two or three years and have a few trees present within them which are allowed to grow without any trimming.
Bats	There are a variety of ways that bats will be accommodated within the new development. These include: • preserving existing trees, in particular the noted oak tree to the south-east of the plot which will benefit from a newly created wildlife pond close by, • incorporating bat roosting spaces within the structure of the building(s) via a special bat brick or modified roofing tile, • providing bat boxes on the outside of the new buildings and on trees, • constructing a purpose-built bat barn or bat tower located away from the new buildings. The design for this has already been sourced.
Newts and amphibians	The site will benefit from the development of a new, wildlife focussed pond which will include some features specifically focussed on amphibians, such as: • Being fish-free, • Have an open, sunny aspect, • Ensuring the pond stays wet throughout most summers, • Allowing the vegetation to become dense and coarse and/or creating similar coarse vegetation within the development site, • Planting or restoring hedgerows so that they provide dense ground cover; planting new broadleaved woodland and scrub close to ponds which the newts can use for foraging and over-wintering when the vegetation matures, • Creating artificial hibernacula and refugia from a combination of logs, stone and turf. It is likely that some post-development management of the wetland habitat will be required. In particular, it is important that the pond area is maintained in a condition suitable for amphibians and that areas of coarse vegetation are not subsequently brought into intensive management.
Reptiles	The site will include habitat enhancements and creation of new habitats that are suitable for reptiles, specifically for grass snakes, which will include: • Creating a new wildlife focussed pond in the south-east of the plot as breeding habitat for amphibians – the favoured prey of grass snakes, • Creating mixed patchy vegetation with areas of bare ground, coarse grasses, scattered and dense scrub and supplementary planting of native shrubs (as already mentioned above) • Creating free-draining, south-facing slopes with piles of rocks exposed to the sun for basking sites. These will be created adjacent to the newly created wildlife pond mentioned earlier, • Creating piles of rotting vegetation which are exposed to the south such that they benefit from direct sunlight and which can be used as egg laying sites by grass snakes, • Creating artificial hibernacula and refugia from a combination of logs, stone and turf, also adjacent to the wetland area

Appendix 1



Appendix 2

Confirmation of Order from The Woodland Trust showing type and number of trees and shrubs

THORPE TREES LIMITED
THORPE TREES
THORPE UNDERWOOD
YORK
YO26 9TA

Tel: 01423 330977. VAT No: 170 1393 87. Fax: 01423 331348. Email: caroline@tho

Order To:	THE WOODLAND TRUST (HDG) KEMPTON WAY GRANTHAM LINCOLNSHIRE NG31 6LL	Deliver To:	MR CHRIS MILES 11 CHESTERTON DRI WINWICK WARRINGTON WA2 8XF
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Our Order No: 018832/ 0
WT REF: 554047/2
Date: 30/11/2023

Customer Order No# MH115

ORDER ACKNOWLEDGEMENT

Description			Qty	Price	To
W/TH BETULA PENDULA (SILVER BIRCH)	40-60	1+1	25		
W/TH PRUNUS SPINOSA (BLACKTHORN)	40-60	1U1	75		
W/TH MALUS SYLVESTRIS (CRAB APPLE)	40-60	1U1	25		
W/TH CORNUS SANGUINEA (DOGWOOD)	40-60	1+1	25		
W/TH ROSA CANINA (DOG ROSE)	40-60	1+1	25		
W/TH ACER CAMPESTRE (FIELD MAPLE)	40-60	1+1	75		
W/TH CRATAEGUS MONOGYNA (QUICKTHORN)	40-60	1U1	325		
W/TH CORYLUS AVELLANA (HAZEL)	40-60	1+0	75		
SPIRAL SHELTER (75CM) X 50mm C283CR	75		625		
BAMBOO CANES 3' (12/14)			625		
STANDARD TREE SHELTER 1.2M 128914	120		25		
STAKES 5FT 150CM X 32MM	150		25		
CARRIAGE			1		
			1951		