

Appendix 11.13: Off-Site Mitigation Drawings



THE
ENVIRONMENT
PARTNERSHIP



LAND NORTH OF BRYN LANE

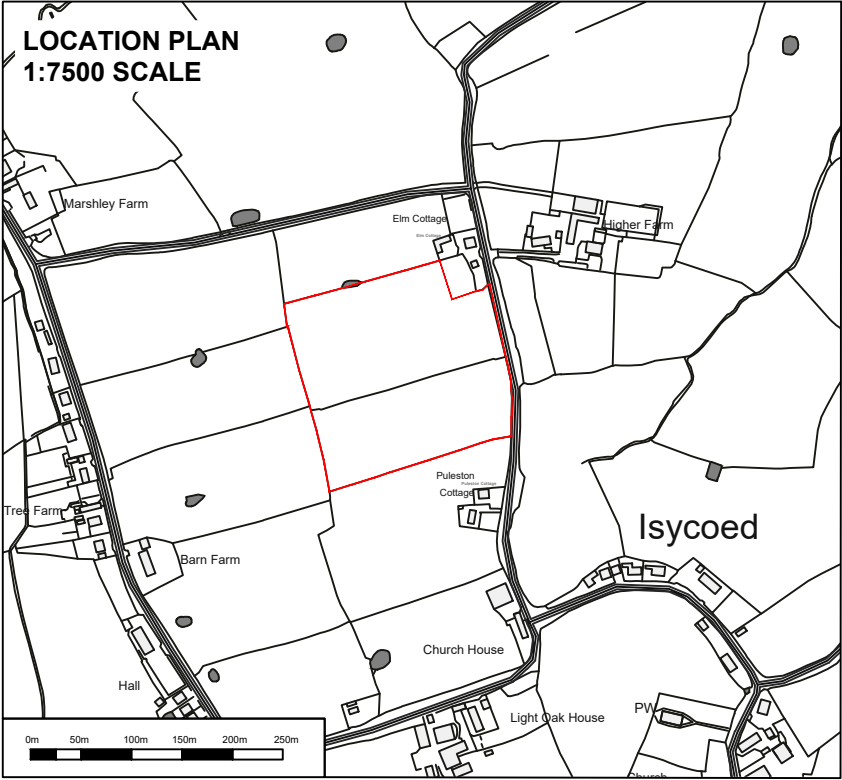
WREXHAM

OFF SITE MITIGATION DRAWINGS LAND AT ISYCOED

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Offices in Warrington, Market Harborough, Gateshead, London and Cornwall



Key:

 **Site Boundary**

REV: **v2** BY: **SF** DETAILS: **Add annotation**

NICHOLSONS
Leading solutions for the natural environment

TITLE: **Site Location Plan**

LAYOUT: **Overview**

PROJECT/SITE: **Land at Isycoed, Wrexham**

CLIENT: **Net World Sports**

MAP REF: **22-3014**

REVISION: **v2**

DATE: **26/07/2023** SCALE: **As Shown @A3**

APPROVED BY: **JK** PRODUCED BY: **SF**

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REV: 01 SITE PLAN	
v1	SF Drawing issued
NICHOLSONS Leading solutions for the natural environment	
TITLE Existing Site Plan	
LAYOUT Layout 1	
PROJECT Land at Isycoed, Wrexham	
CLIENT Net World Sports	
DRAWING NO. 22-3015	
REVISION v1	
DATE 26/07/2023	SCALE 1:500 @A1
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HIBERNACULA DESIGN

Cap with topsoil seeded with general purpose meadow grass seed. Leave gaps at ground level to allow access by small animals.

500mm

Pit back-filled with inert stones, bricks, sticks and logs. Loosely tip parent soil allowing gaps.

500mm



- Key:**
- | | |
|---|--|
|  | Site Boundary |
|  | Existing retained trees |
|  | Existing Hedgerow |
|  | Existing grass verge |
|  | Wildflower meadow grass (MG9) |
|  | Hibernaculum |
|  | Scrub thicket planting |
|  | Pond - Ponds to be between 350-800m² in area |
|  | Bridge |

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TITLE:	Proposed Site Plan
CADDET:	Layout 1
PROJECT SITE:	Land at Isycoed, Wrexham
CLIENT:	Net World Sports
MAP REF:	D2-3016
REVISION:	v1
DATE:	SIGL:
26/07/2023	1:500 @A1
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JK	SF
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PLANTING SCHEDULE - LAND AT ISYCOED, WREXHAM (25/07/23) - OFFSITE HABITAT CREATION PROJECT

PROPOSED NATIVE SCRUB / THICKET MIX PLANTING

(300mm depth of topsoil onto 600mm depth of subsoil)

Transplants to be planted on a 1.0m grid set and 45 degrees to main linear line of planting bed. Planting in groups of 7-15 of the same species within the grid to achieve natural drifts.

PLANT SCHEDULE

Trees			
Number	Species	Height	Specification
497	Crataegus monogyna		1+1; 45-60cm
202	Euonymus europaeus		1+1; 45-60cm
202	Salix caprea		1+1; 45-60cm

Shrubs		
Number	Species	Specification
497	Corylus avellana	1+1; 45-60cm
103	Hippophae rhamnoides	1+1; 45-60cm
103	Ilex aquifolium	45-60cm 2L
103	Rhamnus cathartica	1+1; 45-60cm
103	Viburnum lantana	1+1; 45-60cm
202	Viburnum opulus	1+1; 45-60cm

Corylus avellana



Hippophae rhamnoides



Rhamnus cathartica



Viburnum opulus



Viburnum lantana



Crataegus monogyna



Salix caprea



Thicket planting



Hibernacula creation



Hibernaculum



PROPOSED GRASSLAND MIX - RE2 (Lowland Meadow - MG9 Grassland)

A versatile meadow habitat that replicates an MG9 National Vegetation Classification (NVC) supplied by Germinal Amenity Ltd or similar approved, to be applied in accordance with manufacturers recommendations.

Mixture Breakdown

1.0%	Yarrow	(Achillea millefolium)
0.5%	Meadow Sweet	(Filipendula ulmaria)
0.5%	Lady's Bedstraw	(Galium verum)
2.0%	Oxeye Daisy	(Leucanthemum vulgare)
2.5%	Ribwort Plantain	(Plantago lanceolata)
0.1%	Meadow Vetchling	(Lathyrus pratensis)
2.8%	Self Heal	(Prunella vulgaris)
2.0%	Agrimony	(Agrimonia eupatorium)
1.0%	Soft Rush	(Juncus effusus)
2.5%	Dandelion	(Taraxacum officinale)
1.3%	Red Clover	(Trifolium pratense)
0.8%	White Clover	(Trifolium repens)
1.0%	Cow Parsley	(Anthriscus sylvestris)
2.0%	Birdsfoot Trefoil	(Lotus corniculatus)
25.0%	Slender Creeping Red Fescue	(Festuca rubra litoralis)
10.0%	Meadow Fescue	(Festuca pratensis)
1.0%	Browntop Bent	(Agrostis capillaris)
6.0%	Yorkshire Fog	(Holcus lanatus)
6.0%	Creeping Bent	(Agrostis stolonifera)
4.0%	Meadow Foxtail	(Alopecurus pratensis)
4.0%	Tall Oat-grass	(Arrhenatherum elatius)
10.0%	Crested Dogtail	(Cynosurus cristatus)
1.0%	Tufted Hair Grass	(Deschampsia cespitosa)
5.0%	Smooth Stalked Meadow Grass	(Poa pratensis)
3.0%	Golden Oat Grass	(Trisetum flavescens)
1.0%	Quaking Grass	(Briza media)
4.0%	Timothy (Small eared)	(Phleum bertolonii)

MG9 Meadow mix



MG9 Meadow mix



GENERAL GUIDANCE

Timing

Ground preparation to be undertaken in advance of all planting and seeding. No soil handling to be undertaken when the soil is wet to the extent that loss of structure would occur.

Planting to be carried out in the first planting season following completion of the development (between December and March inclusive) unless by prior agreement with the Local Planning Authority.

Seeding of grassed areas to be undertaken in autumn.

Best practice

All soil handling and storage to be undertaken in accordance with the following British Standard Specifications and Code of practice:

- BS 1377: 1990 Soils for Civil Engineering Purposes
- BS 8601: 2013 Specification for Subsoil and Requirements for Use
- BS 3882: 2015 Specification for Topsoil
- Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (DEFRA)

All plant stock, plant handling and planting to be undertaken in accordance with the following British Standard Specifications and Code of Practice:

- BS 3936:1992 Part 1 Nursery Stock - Specification for trees and shrubs;
- BS 3936:1981 Part 10 Nursery Stock - Specification for ground cover plants;
- BS 3936:1998 Part 9: Nursery Stock - Specification for Bulbs, Corms, and Tubers;
- BS 4428:1989 - Code of Practice for General Landscaping Operations (excluding hard surfaces);
- BS 8545: 2014 Trees from nursery to independence in the landscape; and
- The Code of Practice for Plant Handling 2002 (Horticultural Trades Association).

Planted Stock quality

General

All stock must comply with the Nicholsons Biosecurity Statement.

Standard Trees

Tree form and overall condition, including root condition, to be in accordance with BS 8545: 2014 Trees from nursery to independence in the landscape. All trees are to be inspected prior to planting by a suitably qualified third party.

Plants and Shrubs

Plant stock to be supplied in accordance with the size and description specified on the plant schedule. Plants to be healthy, vigorous, free from pests and diseases, suitably hardened off for the proposed situation of planting, and lifted at a time in accordance with good nursery practice. Stock shall have a well-formed fibrous root system and be free from perennial weeds.

Bulbs

Bulbs to be true to name, free of pests and pathogens, and of the correct approved size for the species.

The following information must be made available upon request:

- The botanical name, genus, species and cultivar, and, if appropriate, the colour or the designation 'mixed';
- The number of bulbs/plants;
- The size class;
- Any preparatory treatment that has been carried out (for example, pre-treatment for Christmas flowering);
- Any recommendation regarding appropriate planting periods and any requirements for special conditions.

Ground preparation

Compliance:

- Topsoil to comply with BS 3882.
- Subsoil to comply with BS 8601.
- Operations to comply with Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (DEFRA).

Cultivation of Grassed Areas

Topsoil to be cultivated to a fine tilth, and be free from weeds, contaminants, stones over 50mm, and any other debris. Levels to be graded to form agreed finished levels and be free of local mounds and depressions.

Cultivation of Shrub Beds and Tree Pits

When shrub beds and tree pits occur in large grass areas, formation levels should be prepared at the specified depth for grass over the whole area. Further excavation should be subsequently carried out to the additional depth for shrub and tree planting.

In all cases, the soil profile is to be maintained when replacing.

Handling stock

Shrubs and smaller nursery stock

All plant stock to be lifted, bundled, labelled, packaged, transported, stored and planted in accordance with the procedures and methods illustrated in "Plant Handling" (Horticultural Trades Association).

Bare root stock

All plant stock to be lifted, bundled, labelled, packaged, transported, temporarily stored and planted in accordance with the procedures and methods illustrated in chapter 9 of BS 8545: 2014.

Plants to be delivered to site in quantities that can be planted the same day. Any unplanted stock is to be stored overnight in a covered location within nursery bags, or heeled in trenches, and is to be well watered. Desiccated root systems will not be accepted.

Planting operations

General

Planting to be undertaken between December and March inclusive during suitable weather conditions. All planted stock to be watered on same day to field capacity.

Planting Beds - General

Planting to be undertaken in appropriate weather conditions, avoiding prolonged periods of drought, and preferably preceding predicted precipitation.

Planting Beds - Containerised Shrubs

Pits to be excavated to at least one third larger than the root system. Backfill material to incorporate 30% organic matter and slow release fertiliser at 3g/m². Firm plants upright, ensuring root flare sits at soil level.

Planting Beds - Bare root stock up to 60cm high

Roots to be dipped in rooting hormone prior to planting. Notch plant at specified density using 'T' or 'L' notches, or pit planting if the root system is too large to accommodate this method. Firm in upright, protect with specified mammal guards and support with 22-24lb/100 bamboo canes with tapered end uppermost.

Planting Beds - Bare root stock over 60cm high

Planting to be undertaken in appropriate weather conditions, avoiding prolonged periods of drought, and preferably preceding predicted precipitation. Pits to be excavated to at least one third larger than the root system. Backfill material to incorporate 30% organic matter and slow release fertiliser at 3g/m². Firm plants upright, ensuring root flare sits at soil level. Protect with suitable mammal guards and support with 22-24lb/100 bamboo canes with tapered end uppermost.

Hedgerows - Bare root stock up to 60cm high

Hedge line is to be cultivated to a depth of 150mm prior to planting unless specifically indicated otherwise. Stock to be notch-planted at 5 plants per metre in double staggered rows using 'T' or 'L' notches. Rows to be 40 - 45cm apart and follow the line as shown on the Detailed Landscape Design.

Protect with clear, non-perforated spiral guards and support with 22-24lb/100 bamboo canes with tapered end uppermost.

Hedgerows - Bare root stock over 60cm high

Hedgerow stock to be trench planted at 5 plants per linear metre in double staggered rows. Rows to be 40-45cm apart and follow the line as shown on the Detailed Landscape Design. Backfill material to incorporate 30% organic matter and slow release fertiliser at 3g/m². Firm plants upright, ensuring root flare sits at soil level.

Hedgerows - Containerised stock

Pits to be excavated to at least one third larger than the root system. Backfill material to incorporate 30% organic matter and slow release fertiliser at 3g/m². Firm plants upright, ensuring root flare sits at soil level. Fit with appropriate canes or stakes as appropriate, and fit mammal guards if there is a risk of predation.

Mulching

General

Mulch to be locally sourced where possible, to be medium grade, organic, free from fines, weeds, disease and contaminants.

Standard Trees

Trees planted within grass are to be mulched to a 500mm radius from the main stem to a settled depth of 100mm.

Planting Beds

Spread with bark mulch to a settled depth of 100mm.

Hedges

Hedge lines to be spread with bark mulch to a depth of 100mm, reaching 500mm either side of the centre line.

Grass Seeding

General

Areas must be seeded with the approved seed mix as specified on the Detailed Landscape Design. Any deviations or substitutions must be agreed with the project landscape architect in advance of any works being undertaken. Evidence must be supplied upon request. For ground preparation see above.

Amenity Grass

Remove all existing vegetation by spraying one month in advance.

Spread slow-release fertiliser at 5g/m², 10-14 days prior to seeding.

Sow at rate of 35g/m² in two perpendicular passes and lightly rake to a depth of 30mm. First cut to be undertaken when grass reaches a height of 50mm.

AFTERCARE AND MAINTENANCE

General

All stock to be thoroughly watered through periods of prolonged drought.

Any stock that dies or becomes damaged or diseased is to be replaced on a like for like basis. If stock fails due to climatic or ground conditions then a suitable alternative is to be agreed with the project landscape architect.

Standard Trees -Establishment period (c. 2 years following planting)

Stakes to be checked for stability monthly. Loose stakes to be straightened and driven in to be stable if still required. Damaged stakes to be replaced if still required.

Tree ties to be checked monthly. Restrictive ties to be loosened, missing/broken ties to be replaced.

Standard Trees - Continual maintenance

Damaged/dead limbs to be removed as required - ensure works are undertaken at the appropriate time for the species. Crown lift and thin as required. Inspect for public safety on a suitable inspection schedule. Seek advice of qualified arborist.

NICHOLSONS BIOSECURITY STATEMENT

Nicholsons ensures it is fully aware of and understands the current and future risks relating to threats from pests and diseases, and how they affect both native and non-native trees and plants. We follow the most up to date guidance from DEFRA and Forestry Commission, and keep regular contact with the horticultural industry.

We will inform, update, and advise our clients and contractors on all relevant biosecurity information. Our staff will adhere to current biosecurity good practice when on site, and will monitor contractor practice when administering contracts.

We insist that all planted stock as specified is UK grown for a minimum of two years at an approved UK nursery. All plants shall be certified as disease free at the time of delivery to their destination.

All planted stock must be accompanied with a certificate stating it has been grown in the UK for a minimum of two years and that it is free of pests and diseases. This certification must be provided to Nicholsons before planting is to commence.

Nicholsons accepts no responsibility for any planted stock that fails due to improper handling, planting, or aftercare. We expect contractors to adhere to our stated methodology, in line with current best practice guidance, and ensure that all stock meets the above criteria.

REV: 01
v1 SF

DATE: 26/07/2023
Drawing issued

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Plant Specification

Specification

Land at Isycoed, Wrexham

Net World Sports

22-3016

v1

26/07/2023 NA

JK SF

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