

Title	Wrexham Recycling Park Phase II, Bryn Lane, Wrexham Industrial Estate - Hawthorn Translocation Method Statement
Client	Waste Recycling Group
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1 Introduction

1.1 Marches Ecology was commissioned by Waste Recycling Group (WRG¹) to produce a Method Statement for the proposed translocation of semi-mature Hawthorn (*Crataegus monogyna*) shrubs prior to development of Wrexham Recycling Park Phase II, Bryn Lane, Wrexham Industrial Estate, Wrexham (OS Grid Ref. 338755, 349908). The development received planning permission in January 2012 (Ref. P/2011/0769). Translocation of these shrubs forms part of the proposed ecological mitigation/compensation package and was briefly detailed in the Ecological Mitigation Method Statement (Marches Ecology 2011²).

1.2 Marches Ecology (2011) states that the translocation will be informed by a detailed Method Statement. This document has been produced to fulfil that purpose.

1.3 The planning permission was granted subject to 29 conditions. Condition 9 states the following:

'No part of the development shall commence until a detailed Arboricultural Method Statement has been submitted to and approved in writing by the Local Planning Authority. No development or other operations shall take place except in strict accordance with the Method Statement as is approved. The Method Statement shall include the following:

... 8) Details of transplanting/ relocation of trees on site'.

This Method Statement has also been produced to provide sufficient information with which to discharge Condition 9 (Part 8). A separate Arboricultural Method Statement has been produced and this Translocation Method Statement should be considered in conjunction with this document.

¹ Now FCC Environment.

² Marches Ecology (2011). *Wrexham Recycling Park Phase II, Bryn Lane - Ecological Mitigation Method Statement*. Unpublished report produced for Stratus Environmental Ltd.

2 General Description of Work

Introduction

- 2.1 It should be noted that the approach proposed in this Method Statement (see *Section 3*) differs from that previously described in the Ecological Mitigation Method Statement (Marches Ecology 2011). So, for example, translocation will no longer be undertaken with a 360° tracked excavator; a tree-spade will be used. The following text is an excerpt taken from Marches Ecology (2011).

'... it is also proposed to translocate some of the semi-mature/ mature Hawthorn shrubs from within the proposed development footprint to the compensation/ landscaping area. This translocation would be informed by a detailed Method Statement. The shrubs would largely be planted in a group to re-create the dense scrub conditions currently provided as far as is reasonably possible. It is likely that the shrubs would be heavily pruned to reduce stress and then excavated with a large tracked excavator with a deep digging bucket (e.g. Anderson, 2003³). Approximately 20-30 Hawthorns will be translocated. The translocation should be undertaken in the dormant season ideally autumn/ early winter when it is not too wet. The heavy pruning should be conducted immediately prior to translocation in the autumn.

The specimens to be translocated would need to be identified at an early stage prior to any vegetation removal works. It is currently envisaged that the translocation would be completed in the autumn prior to the start of the main physical works on the site. The selected specimens would be clearly marked (with an agreed method) and protected during any preparatory works. It may not be appropriate to select shrubs located on the spoil tip prior to the planned remediation of this feature and therefore specimens away from this feature should be chosen. It was originally planned that the shrubs would be planted in the landscaping bund in the southeast corner of the site but as the translocation is to be completed prior to the start of the construction phase this feature is unlikely to be available. The mature specimens would be planted within the Phase II mitigation area, in Zone 3 identified in the Management Plan (Marches Ecology 2011c⁴). Once the specimens have been translocated this area will be appropriately fenced to exclude further construction works.

The specimens should generally be below 20 cm diameter. They should be excavated with a 360° tracked excavator with a large digging bucket (approximately 4 foot deep). The specimens will be moved singly by the excavator as the translocation involves relatively few shrubs. The shrubs will be planted as soon as possible following excavation. The shrubs would be moved to pre-excavated pits or placed on sub-soil with the topsoil from the donor site packed around the stools. Watering of the shrubs immediately following translocation should not be necessary unless it is particularly dry (although such a period should be avoided for this operation).

³ Anderson, P. (2003). *A Review of Habitat Translocation*. CIRIA C601.

⁴ Marches Ecology (2011c). *Wrexham Recycling Park Phase II, Bryn Lane - Ecological Management Plan*. Unpublished report produced on behalf of Stratus Environmental Ltd.

Appropriate on-going (long-term) management of the scrub will be vital to the success of the translocation. The area within which they are planted should be mulched. During the establishment phase after translocation these shrubs will need to be regularly watered throughout the growing season for 2-3 years and mulched after planting. Watering may be required once a week between March through to September. A specialist contractor will provide guidance on aftercare'.

- 2.2 Further detail with regard the proposed approach is provided below in *Section 3*. The detailed approach involves minor divergence from that described above due to the equipment and methodology supplied by the selected contractor. These changes are justifiable in that they provide a more robust approach with less risk to the translocated specimens (e.g. use of a tree-spade rather than a tracked excavator). As established in Marches Ecology (2011) translocation has been programmed for the first half of November 2012.

3 Proposed Approach

Identification of Specimens

- 3.1 The Phase II site was visited on 2nd February 2012 by representatives of Marches Ecology and WRG. 26 Hawthorns and four Pedunculate Oaks (*Quercus robur*) were selected for translocation. Each individual tree was identified with a coloured tag and a spray paint ring around the trunk, on the ground (see photos below). These photos have been forwarded to the contractor responsible for clearance of the remaining scrub/ trees from the development site. A suitably qualified and experienced ecologist will also supervise the vegetation clearance work programmed to be undertaken in February 2012 as required (largely due to the presence of Great Crested Newts and Badger at the site). An ecological toolbox talk is to be provided prior to the start of the vegetation clearance and this will incorporate identification of the shrubs/ trees to be retained and subsequently translocated.



Semi-mature Hawthorn (*Crataegus monogyna*) marked for retention & subsequent translocation.

- 3.2 It should be noted that the specimens chosen were selected for their ecological value and not necessarily for their arboricultural form.

Translocation Methodology

- 3.3 Translocation of the selected Hawthorns and Oaks is to be undertaken by a specialist firm; Tilhill Forestry Ltd. Immediately prior to translocation of the specimens the contractor responsible for the translocation would review any requirement for pruning of the specimens and undertake this as required. The receptor site would also be mulched as appropriate. A Volvo loader (see photo below) with a Dutchman tree-spade will be used to lift the specimens (and not a 360° tracked excavator as previously proposed). The same equipment would be used to excavate the hole that would receive the specimen. This should ensure that the receptor hole will be the same shape as that removed with the specimen. The specimen would be transported to the receptor hole in the loader. Prior to any excavation all areas would be subject to CAT scan for underground services.



A loader and tree-spade similar to that to be used for the translocation.

- 3.4 As the tree-spade creates both the receptor hole and removes the specimens it negates the requirement for any other machinery/ plant. The soil from the receptor hole would be used to fill in the hole from which the specimen has been taken. Any objects around the specimen that may affect digging would be removed and the specimen will be watered where necessary. The specimens would be re-planted immediately within the same day. The contractor undertaking the translocation would review any requirement for staking/ stabilisation of the specimens and install as required. It is envisaged that the translocation will be completed in approximately two days.

Aftercare

- 3.5 A full aftercare/ maintenance schedule is provided below (*Section 3.6*). The company which undertakes the translocation would also be utilised for the aftercare. A standard three-year establishment maintenance contract would be drawn up. The following text indicates the requirements and schedule for this contract.

3.6 The establishment/ maintenance contract will incorporate the following:

- Maintenance Schedule: Maintenance visits would be undertaken once every three months during the winter period (approximately October-March). These visits would largely involve checking stakes/ ties. During the summer maintenance visits would be completed every month although this would be dependent on weather conditions. For example, should there be a prolonged period of drought then more frequent visits might be required. A general inspection would also be completed once a year in September to assess the condition of the specimens and the condition of the stakes, irrigation system, *etc.* Replacement equipment would be installed at this time where necessary.
- Irrigation: An irrigation system appropriate to the specimens will be installed (at the time of planting) should this be deemed necessary by the contractor. The irrigation system would allow water to penetrate to both shallow and deep roots rather than running off the surface. This may be important during the establishment phase.
- Watering: At the time of planting the specimens would be well watered (should this be deemed necessary by the contractor) and the ground firmed around the root-ball. During the summer/ dry periods of the year watering may be required up to once, possibly twice a week. Any requirement for watering should be monitored particularly during periods of dry weather. During a prolonged dry period the specimens should be watered as required until conditions improve and the ground is more saturated. The specimens should be watered to the full depth of the rootball with clean, potable water. The amount of water required is also likely to depend on prevailing weather conditions.
- Replacement: It is hoped that all/ most of the translocated specimens will survive. However where specimens fail there is no current intention to replace them. It is important to note that the specimens are being translocated primarily for ecological reasons (rather than arboricultural). As such should any specimens fail they would be left in-situ as 'dead-wood' habitat. Beneath such specimens natural regeneration would be allowed rather than planting of younger material. Furthermore following completion of requirements detailed in a Welsh Government Great Crested Newt 'development' licence disturbance of this area would be kept to a minimum.
- Staking/ Stabilisation: It may be necessary at the time of planting to provide stakes/ other supports for the specimens depending on their height/ spread. The method for stabilisation (*e.g.* single stake, double stake, angled stake, guying) will be determined for each individual specimen at the time of planting. Stakes would be inserted prior to planting. As detailed above the guys and stakes would be checked and maintained during annual visits.
- Pruning: As stated above the specimens are being translocated for ecological reasons. As such following translocation no pruning is proposed unless it is deemed important to prolong the life of a particular specimen. Minor dead/ dying branches would not be removed.

- 3.7 It should be noted that there is currently no proposal for mulching to be undertaken. This is considered unnecessary due to the age of the specimens to be translocated. However any requirement for mulching would be reviewed during each annual maintenance inspection. Similarly it is not proposed to suppress weeds through the application of herbicide around the specimens for the same reason. Herbicide use in the ecological mitigation area is also to be minimised elsewhere due to the presence of Great Crested Newts. Any requirement for mulching/ herbicide application that may be deemed necessary following one of the annual maintenance inspections would initially need to be discussed with FCC Environment's Ecology & Conservation Manager and or the project ecologist. The use of such materials would need to be considered in relation to risks posed to Great Crested Newts and therefore potential legal implications.
- 3.8 The application of fertiliser, compost, *etc*, is not considered necessary again due to the age of the specimens.