



## **MGWSP Report**

Isham Bypass

Pre-construction Ecological Survey Report

(Additional)

**September 2011**

**MGWSP**



Northamptonshire  
County Council

Delivering highways and transport services together



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# 1 Introduction

## 1.1 BACKGROUND

The proposed Isham bypass will be constructed west of the village of Isham in Northamptonshire. The bypass consists of a dual carriageway which would join the south side of the A14 Pytchley roundabout and run to the west of Isham and re-join the A509 Wellingborough Road midway between Hill Top and Great Harrowden.

## 1.2 EMP

An Environmental Statement (ES) was produced and submitted to Northamptonshire County Council by Atkins Ltd in August 2005 to support a planning application for the Isham Bypass.

A Pre-construction Ecological Survey Report (Additional) was issued in December 2008.

This updated Pre-construction Ecological Survey Report (September 2011) has been produced as a response to Northamptonshire County Council requesting an “Extension of time for Implementation”

The report provides detail on surveys for the following species:

- Bats;
- Watervoles;
- Otters;
- White Clawed Crayfish;
- Reptiles;
- Invasive and Injurious Species; and:
- Hedgerows

The results of the badger survey can be found in the separate report – ‘Badger Survey Results’.

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## 2 Legally Protected and Notable Species

### 2.1 BADGERS

Due to the sensitivity of the information found during the badger survey, you will find the results in Badger Survey Results report. This information should not be made available for public viewing.

### 2.2 BATS

#### 2.2.1 Background

All bat species and their roosts are protected under Schedule 5 of the WCA and the Conservations of Species and Habitats Regs 2010. Bats may roost in the cavities of trees and behind vegetation growing on trees (ivy etc.). They can be present in nursery roosts between May and August and hibernate between November and March. These dates may vary slightly depending on species, seasonal variations and climate.

All trees along the route of the bypass which are to be affected by the bypass were assessed for bat roost potential and suitability recorded.

#### 2.2.2 Survey Results

An initial daytime bat walkover survey was carried out in August and September 2011 to establish the presence of potential bat roost sites and migration routes. The entire route of the proposed bypass was walked and a minimum of 100m either side of the centre line of the bypass. All potential bat roost sites and migration routes were highlighted during the survey, results of these can be found below:

During the initial daytime walkover inspections, the following was noted:

- 63 trees with low bat roost potential
- 3 trees with moderate bat roost potential
- 5 trees with high bat roost potential
- 8 hedge lines with potential for bat activity (migration routes)

All trees which have been highlighted as having a high or moderate potential for bat roosts are to be surveyed by a licenced bat ecologist.

In the 'A509 Isham Bypass: Pre-Construction Ecological Survey Report (Additional December 2008', carried out by Atkins, there were 8 locations of trees highlighted as having potential for bats roosts. In addition activity surveys were carried out along the hedgerows connecting the Ashpole Plantation and Cock-o-Roost Spinney, and along the water courses. Subsequent emergence surveys carried out by Atkins revealed that no bats were seen to be emerging or re-entering any of the identified trees. Low numbers of Pipstrelles were recorded foraging along some of the hedgerows and Harpers Brook, a Noctule was heard migrating towards the Cock-o-Roost Spinney. Pipestrelles and Daubenton bat activity was recorded along the other watercourse, indicating this is used as a migration or foraging route.

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Following the 2011 survey, there are two new transects that have been identified and it is recommended that five of the transects that have previously been surveyed are extended as per Appendix 1.

There are 8 number of trees which have been identified as having high or moderate potential for bats, which matches the survey results carried out in 2008.

### 2.2.3 Further Surveys

It is recommended that two dusk emergence surveys and one dawn emergence survey is carried out on each of the hedge lines and trees identified as having high or moderate bat potential. These are to be carried out May to September when the bats will not be hibernating and activity levels are expected to be higher.

## 2.3 REPTILES

### 2.3.1 Reptiles

Within the site there is suitable habitat for common reptiles to use. It was ascertained following the walkover survey that there were several areas where there was potential for reptiles to inhabit.

Previous surveys have been carried out in regards to reptiles; these focussed on the grassland either side of Pytchley Brook. No reptiles were found during the surveys carried out in the summer of 2008. The areas surveyed have not changed and are still suitable for reptiles.

During the walkover survey in August and September 2011 areas to be surveyed for reptiles were identified, these included the areas previously surveyed as well as new additional areas. The areas potentially suitable for reptiles are shown in Appendix 2. The walkover survey also identified a grass snake skin near the Cock-o-Roost Spinney.

Due to the time of year reptile traps cannot be placed until spring 2012. Traps will be placed in the areas identified in Appendix 2 and checked regularly for reptiles.

However as local conditions have not changed dramatically the results of the reptile surveys are not expected to be significantly different.

## 2.4 WHITE CLAWED CRAYFISH

### 2.4.1 Background

There are records of White-clawed crayfish in the River Ise; however it is unlikely that they will occur in the two tributaries which will be affected by the proposed scheme. There are areas of tree roots along the two tributaries which could provide a refuge for WCC; however the extremely silty nature of both water courses makes them generally unsuitable habitats for crayfish.

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No previous surveys have been carried out, however, recommendations for searches prior to construction work commencing have been outlined in the 2008 report produced by Atkins.

During the 2011 walkover survey carried out by MGWSP the potential for WCC in all three watercourses was considered low.

#### 2.4.2 Further Surveys

All three watercourses provide a very low potential for WCC habitat. However, evidence for their presence will be checked during the otter and water vole surveys of the watercourses.

### 2.5 OTTERS

#### 2.5.1 Background

Otters and their resting places are fully protected under Schedule 5 of the WCA and The Conservation of Species and Habitats Regs 2010, it is an offence to deliberately capture, injure or kill them or to damage, destroy or obstruct their breeding or resting places whether occupied or not. It is also an offence to disturb otters in their breeding or resting places.

Licences are required in England to carry out any work likely to affect an otter, or its places of shelter.

There are records of otter at the Southfields Marsh Farm SSSI, which is within 1.5km of the proposed route. The tributary watercourses which cross the proposed scheme would only provide a temporary habitat and dispersal routes for the otter. In the surveys carried out by Atkins in 2008, evidence of otter activity was identified on both of the watercourses.

*Pytchley Brook (north watercourse)* - otter spraints have been identified in the culvert under the A509, during this and previous surveys. Droppings potentially from an American Mink have also been identified at this location.

*Hardwick Brook (central watercourse)* – fresh otter prints and spraint were found in the gravel within the channel of the brook, approximately 120m from the potential crossing point. Potential resting sites were identified at several points along the brook along with potential ‘slides’ along the vegetated banks. No feeding remains or spraints were found.

*Great Harrowden Bridge watercourse (south watercourse)* – No evidence of otter activity was recorded.

#### 2.5.2 Further Surveys

It is recommended that all three watercourses are re-surveyed for evidence of otter activity. Otters are active all year round and breed at any time, enabling surveys to be carried out at any time of the year.

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## 2.6 WATERVOLES

### 2.6.1 Background

Watervoles and their resting places are fully protected in England, it is an offence to deliberately, capture, injure or kill them or to damage, destroy or obstruct their breeding or resting places.

There are records of watervoles occurring near the weir on the River Ise near Burton Latimer.

In the February- March 2008 surveys carried out by Atkins burrows were found along the watercourses that were believed to have been used by watervoles. In the subsequent October 2008 survey there was no evidence of activity identified.

No evidence of watervole activity was identified on the 2011 walkover survey.

### 2.6.2 Further Surveys

It is recommended that the two watercourses feeding into the River Ise and the Great Harrowden Bridge watercourse (south watercourse) are surveyed for evidence of watervole activity. Surveys are recommended April to March and August to September as this is when the watervoles are more active.

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## 3 Hedgerows

A hedgerow is defined as a boundary line of trees or shrubs over 20m long and less than 5m wide at the base. Hedgerows are a distinctive landscape feature of lowland Britain and are very important, providing valuable habitats and network connections for many different species. Hedgerows provide important foraging and refuge habitats for wildlife and provide important corridors for migration between habitats. They are protected under the Hedgerow Regulations 1997. It is a criminal offence to remove a hedgerow without a hedgerow removal notice from the LPA.

### Hedgerows in Northamptonshire

The Northamptonshire Habitat Action Plan (HAP) for hedgerows consists of a number of objectives and targets for the management and mitigation of the habitat within the county. The objectives and targets relevant to the EMP are:

- Objective 5: to increase the length of hedgerow under conservation management.
- Target: to increase the length under conservation management by 50,000m per year.

According to the local Wildlife Trust the conservation management involves:

- Trimming hedgerows outside of growing season, when dormant,
- No or little use of flail to cut the hedgerow,
- Managing the hedgerow to encourage an 'A' shaped cross section, introducing a cycle of hedge laying as a management technique (when appropriate)

### Hedgerow surveys

Generally the hedgerows within the route of the proposed scheme were species poor and sparse, but locally significant. This was also stated in the 2005 Environmental Statement, produced by Atkins. The majority of species found within the hedgerow are hawthorn, blackthorn, and ash with the occasional mature tree (oak and ash). Some of the mature trees with cavities have the potential as suitable bat roost locations.

The hedgerows do provide important networks for foraging animals, like badgers and bats as well as habitat for over-wintering birds. The hedgerow networks within the proposed route of the bypass provide important corridor links to other woodland habitats. Overall it was felt that the hedges to be affected by the proposed scheme have a lower biodiversity value according to TAG.

During the initial walkover survey carried out by MGWSP in 2011 hedgerows were looked at and identified for further surveys to be carried out.

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### **Further Surveys**

During the initial walkover survey in 2011, hedgerows which were considered potentially important, either as a result of species they contain, habitats they may accommodate or migration routes they provide which were to be affected either directly or indirectly by the construction of the new road were highlighted, and recommendations made for full surveys to be carried out.

These hedgerow surveys would be carried out to establish:

- The state of the hedgerow, in terms of length and condition,
- To identify species diversity within the hedgerow,
- To identify the potential of the hedgerow for wildlife habitat,
- Points of connection at either end

Seven hedgerows were identified as requiring further surveys in total along the route of the proposed road using the 'Standard Procedure for local surveys in the UK', prepared on behalf of the Steering Group for the UK Biodiversity Action Plan for Hedgerows. These hedgerows are shown in Appendix 4.

These hedgerow surveys are to be carried out between April and September.

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## 4 Invasive species

Invasive species are not native to this country, and in many situations were brought over from abroad because of their ornamental properties. They do not compete fairly with our native plants, and can quickly take over a large area, killing off the native species.

Under the Wildlife and Countryside Act 1981 it is an offence to 'plant or otherwise cause to grow in the wild' Giant Hogweed and Japanese Knotweed.

A walkover survey was carried out of the whole site and evidence of injurious and invasive species was identified.

### 4.1 RAGWORT

A small area of ragwort was found along a field edge and a small area along the river near the Great Harrowden Bridge No. 1, which is shown in Appendix 3.

Ragwort is one of five injurious weeds covered by the provisions of The Weeds Act 1959, making it an offence to cause the plant to spread. It has a distinctive bright yellow flower, often found along roadsides.

Although not usually harmful to humans, it can prove fatal to horses and cattle; we have a duty to remove ragwort from the network if it is endangering animals.

#### 4.1.1 Mitigation

Chemical control of ragwort using an approved herbicide is the most effective method of control.

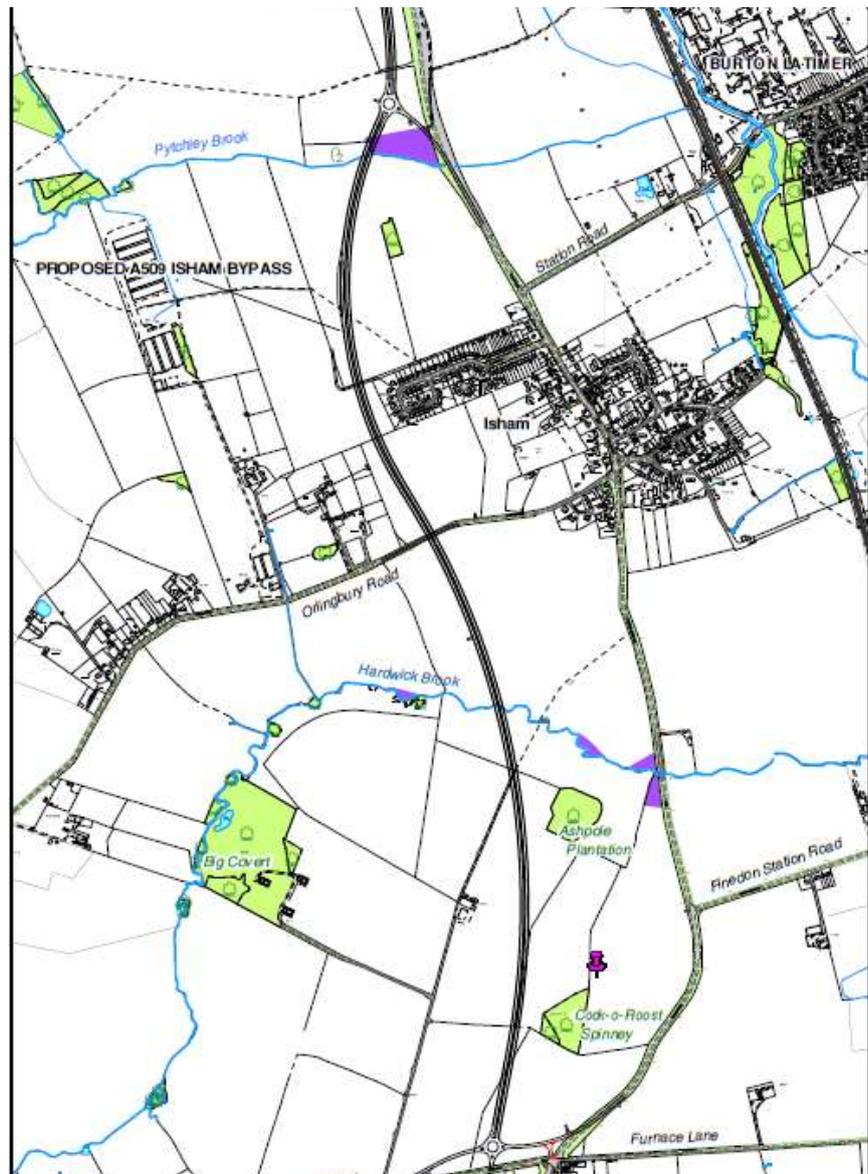
Ragwort can be hand pulled by the root, although this is not as effective as chemical treatment, as roots remaining in the ground can grow into new plants.

Any waste from ragwort removal should be double bagged and disposed of appropriately.

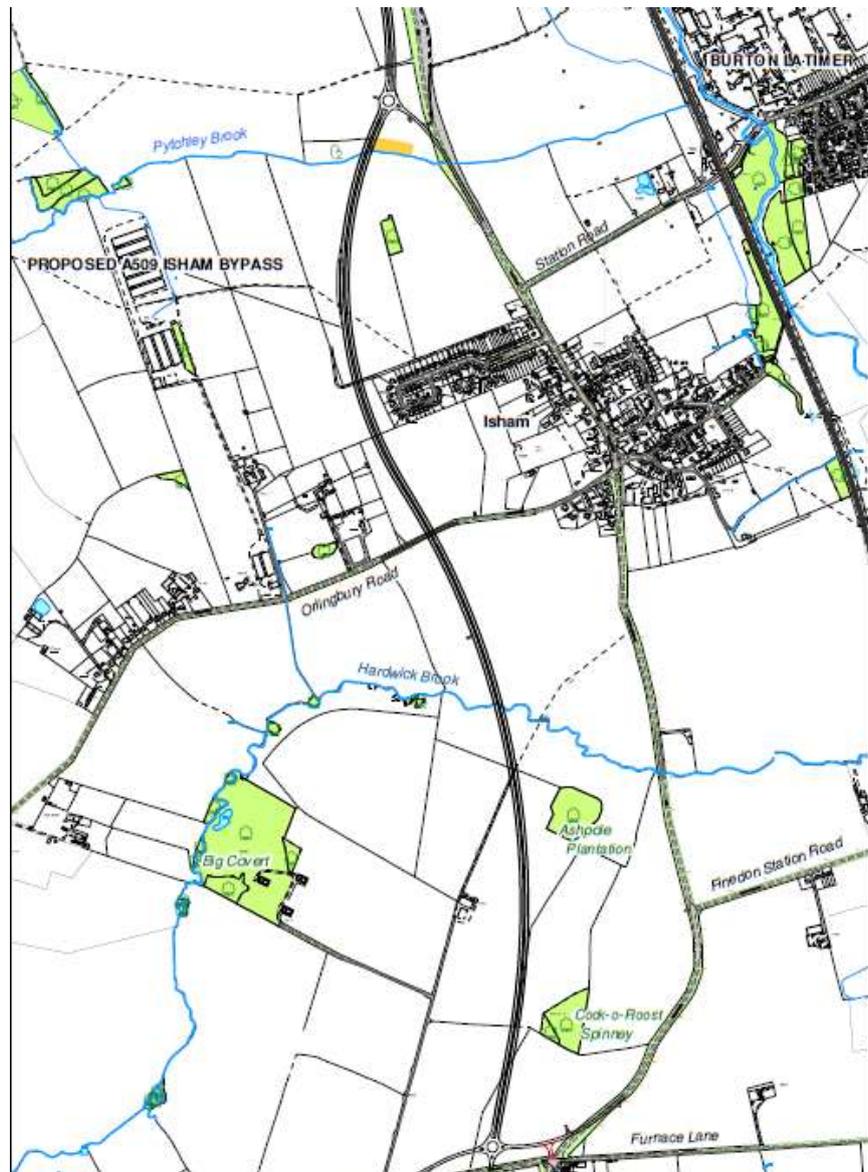
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# Appendix Number 1: Bat potential survey results

## Appendix Number 2: Reptile survey locations



# Appendix Number 3: Invasive and Injurious Species



# Appendix Number 4: Hedgerow Survey Results

