15 Disruption due to Construction

15.1 Introduction

This chapter provides an assessment of the potential disruption likely to be caused during construction of the Proposed Scheme. It has been prepared with the best information available at this stage, prior to the appointment of a contractor.

15.2 Key Construction Activities

15.2.1 Construction Area

All construction activities will take place within the planning application boundary as shown on Drawing ES 15.1 (this includes the scheme and land required to construct it and any land required for mitigation). All site works will be undertaken in compliance with the CEMP. An outline of the CEMP is provided in Appendix 15A.

15.2.2 Programme and Working Hours

Construction works are currently planned to begin in March 2007 and are programmed to last approximately 12 months, ending in March 2008. The construction programme is provided in Table 15.1.

Construction hours are likely to be 0700-1900 hrs Monday to Friday and 0700-1300 hrs on Saturdays. Works are not currently anticipated on Sundays or Public Holidays. Variations from these times are unlikely but, if required, it is recommended that the prior written consent of the Borough’s Principal Environmental Health Officer be sought. There is no intention for works to occur 24 hours a day.
### Table 15.1: Construction programme

<table>
<thead>
<tr>
<th>Activity</th>
<th>Vehicle Movement</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set up site and lay out haul road</td>
<td>100 trucks*</td>
<td>M</td>
<td>A</td>
</tr>
<tr>
<td>Import and install fill material</td>
<td>1,000 trucks*</td>
<td>J</td>
<td>J</td>
</tr>
<tr>
<td>Realign Berrywood Road and construct new islands</td>
<td>200 trucks*</td>
<td>A</td>
<td>S</td>
</tr>
<tr>
<td>Construct highway and drainage features</td>
<td>1,500 trucks*</td>
<td>S</td>
<td>O</td>
</tr>
<tr>
<td>Apply final surface to highway, plant landscape and remove haul road</td>
<td>200 trucks*</td>
<td>N</td>
<td>D</td>
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</table>

*Each bearing 15-20 tons of soil/day

### 15.2.3 Key Construction Phases and Activities

Key construction activities can be categorised in 5 phases (as Table 15.1).

- Phase 1 - Set up construction corridor and site compound and lay out haul road
- Phase 2 - Import and install earthworks
- Phase 3 - Realign Berrywood Road and construct new islands
- Phase 4 - Construct highway and drainage features
- Phase 5 - Apply final surface to highway, plant landscape and remove haul road

Landscape and planting proposals are provided in Chapter 2 - Proposals and Chapter 8 – Landscape and Visual Effects.

### 15.2.4 Labour Force

Car journeys to and from the site by the permanent on-site labour force are unlikely to exceed twenty-five movements per day in each direction at any time
during the construction program. This figure does not include the drivers in visiting haulage vehicles.

15.3 Assessment Methodology

This section follows the three stage assessment methodology set out in the Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3, Part 3.

15.3.1 Study Area
The study area for the assessment of disruption due to construction is normally a corridor 100m either side of the working area of the Proposed Scheme, including the contractor's compound, storage areas, haul routes and areas of land shaping.

15.3.2 Receptors
There are a number of residential properties within 250 metres of the site, mostly towards its northern end. To the immediate north of the Sandy Lane Link Road are two commercial properties. There are no industrial, community, recreational, medical or educational facilities within 250 metres of the construction corridor.

Public access along bridleway KP16 will be severed during construction and the northern end of Sandy Lane is likely to be closed for a few days while work is undertaken to tie it into the Proposed Scheme.

Ecological, archaeological and cultural receptors that may experience disturbance or disruption during construction include:

- Species Rich Hedgerows;
- Known populations of notable/protected fauna;
- An unnamed tributary associated with the River Nene;
- As yet unknown archaeological sites; and
- Users of Sandy Lane and the Public Rights of Way network.

15.4 Potential Impacts

The following construction activities are considered likely to cause disruption.
15.4.1 *Construction Compound*

The construction compound is likely to be located to the immediate north of the A4500 Weedon Road, east of the Proposed Scheme and close to the existing Upton Lodge Farm.

Access to the site compound and construction corridor is initially likely to be taken from the A4500 Weedon Road. It is expected that most of the construction corridor will continue to be accessed from this point for the duration of the works. The exception will be the works to Berrywood Road and the far north of the Proposed Scheme, where an additional access is likely to be created from Berrywood Road.

The exact locations of the access points are still to be determined but it is likely that the access from A4500 Weedon Road will be taken from the lay-by to the east of South View. This will require the removal of a length of hedgerow.

Traffic generated by the construction personnel who are permanently based in the compound is unlikely to exceed 25 vehicle movements per day. Vehicles would be parked within the contractor’s site compound shown in Drawing ES 15.1. Noise and vibration effects from this traffic would be insignificant.

The presence of badgers has been found in this area and suitable mitigation will be undertaken as part of advance works. This mitigation will involve relocating the badgers to a new permanent location (available on request).

15.4.2 *Source and Haulage of Construction Materials*

Wherever possible, fill material will be sourced from within the site. The alignment has been designed to balance the need for cut and fill. However, the import of up to 20,000 cubic metres of fill material is also likely to be needed.

Of particular note is the requirement for approximately 1,000 trucks to deliver the fill material. This activity is likely to occur between the months of May and August 2007. Movements are likely to be fairly evenly spaced throughout this six month period. Assuming 5.5 working days over 23 weeks, this equates to approximately 8 truck movements per weekday, or a 1.4\% rise on 2008 AAWT 18hr HGV flows (along the A4500 Weedon Road).

No decision has yet been made on the source of the imported fill material. As such, no information is available on the likely haulage routes. It is therefore
assumed that fill material will be sourced from licensed quarries or aggregate recycling facilities. The source of fill material will be at the discretion of the contractor, and may require a separate planning application to be lodged with the relevant decision making authorities.

It is envisaged that vehicles accessing the site would follow existing approved haulage routes to the heavy vehicle access to be constructed on the A4500 Weedon Road. Transport of materials within the construction corridor will be via the internal haul road as illustrated on ES Drawing 15.1.

As direct to the site is available via the trunk road network, a 1.4% rise in HGV movements is considered to have a minor effect on the transport network.

15.4.3 Traffic Management
In order to minimise disruption to road users, a traffic management plan will be drawn up in the CEMP for the A4500 Weedon Road to cover the works required at the junction of the Proposed Scheme. This plan will be discussed and agreed with Northamptonshire County Council highways department, as the relevant highway authority.

15.4.4 Site Clearing, Earthworks and Piling
Noise and vibration impacts are likely to be generated from the movement and/or operation of haulage vehicles and earth working machinery, in general accordance with the construction programme shown in Table 15.1.

There are a number of sensitive premises within 250 metres from the construction corridor, and this scenario is not expected to change during the construction programme. The impact of air quality and noise and vibration on these sensitive receptors is reported in Chapter 5 and 10 respectively.

Sensitive ecological, archaeological and hydrological resources have been identified in the relevant topic chapters. Mitigation during the advance works programme and construction, in combination with the implementation of the CEMP, will aim to minimise the impacts on these resources.

The effect of visual impacts during construction is considered to be of low significance. Construction activities would be visible from the A4500 Weedon Road, Sandy Lane and Berrywood Road but the impact is considered to be short term, temporary and localised.
15.4.5 Waste and Recycling
Where possible site generated waste (e.g. packaging, redundant materials or offcuts) would be re-used on site or recycled. Waste would be segregated into various categories such as steel, plastic, wood and paper, so that opportunities for recycling could be maximised.

All materials requiring disposal would be removed in accordance with ‘Duty of Care’ legislation and the Contractor’s waste management procedure set out in the CEMP.

Waste and recycling operations will be managed from within the construction site compound. Waste and recyclable materials will be managed by appropriately licensed contractors in accordance with the management practices detailed in the CEMP. With this mitigation the effect would be insignificant.

15.4.6 Cultural Heritage
Stripping of topsoil and compaction from heavy vehicle movements can damage archaeological resources. A detailed survey of the construction corridor is currently being undertaken and results are expected at the end of September 2006. The results of this will provide greater confidence of the potential for impacts on archaeological resources. It is not possible to determine the importance, magnitude or significance of these impacts at this time. However, on learning the outcome of this survey, a mitigation strategy that follows best practice will be agreed with the County Archaeologist.

15.4.7 Severance of Bridleway KP16
For safety reasons, the public will not be able to use bridleway KP16 where it crosses the Proposed Scheme during the course of the works. A temporary diversion route will be put in place for the period of construction, more details of this route can be found in Chapter 11 – Pedestrians, Cyclists, Equestrians and Community Effects. Where the construction program allows, and where safe and practical so to do, it may be possible to reopen the bridleway to the public on special occasions such as Bank Holidays. It is foreseen that, throughout the construction programme, signs advising the status of public access and diversion routes will be placed at the entrances of all affected Right of Ways.

15.4.8 Severance of Sandy Lane
Access to Sandy Lane from the south (from A4500 Weedon Road) will be maintained at all times during the works. Access from the north (from Berrywood
Road) will be maintained on the existing alignment until such time as works are needed to tie the northern end of the Proposed Scheme into Sandy Lane. It is likely that the link between Berrywood Road and Sandy Lane will need to be broken for a few days while these tie in works are ongoing. Access will then be provided on the new alignment.

15.5 Mitigation Measures

In addition to the general provisions contained within the CEMP, the contractor will be expected to include the following specific measures.

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<tr>
<td>1</td>
<td>Vehicular access to and from the construction corridor being restricted to those access and egress points approved by the appropriate authority.</td>
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<tr>
<td>2</td>
<td>Ensure all refuelling, storage of hydrocarbons, and stockpiling of potentially polluting materials (including soil/sediment) are covered by the contractor's Environmental Management Plan.</td>
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<tr>
<td>3</td>
<td>Waste is to be minimised by maximising the reuse and recycling of resources, for example using soil from cuttings as fill, avoiding contamination of waste streams and storing materials to prevent adverse environmental or health and safety outcomes.</td>
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</table>

15.6 Summary

It is envisaged that the final CEMP will provide effective mitigation of construction impacts. Implementation of the CEMP would be the responsibility of the contractor assisted by a fulltime Environmental Manager and Environmental Clerk of Works.

15.7 References