

PLANNING APPLICATION FOR AN ADDITIONAL WOOD STORAGE YARD FOR THE STORAGE AND SHREDDING OF WOOD WASTE MATERIAL FOR THE PERMITTED RENEWABLE ENERGY GENERATION FACILITY (REGF) 13/00098/WASFUL FOR THE DURATION OF THE REGF

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Final

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1 INTRODUCTION

1.1 Background

- 1.1.1 This is an Addendum to the Environmental Statement (ES) submitted to Northamptonshire County Council in May 2016 in connection with a planning application that sought to gain planning permission for a wood storage yard to store fuel for the permitted Renewable Energy Generation Facility (REGF) at Pebble Hall, Theddingworth Road, Theddingworth, Northamptonshire, LE17 6NJ.
- 1.1.2 This Addendum to the ES has been prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2011 (as amended) (the EIA Regulations).
- 1.1.3 Since submission of the original planning application by GP Planning Ltd, on behalf of Welland Waste Management (the Applicant), the Environment Agency (EA) has issued revised guidance on Fire Prevention Plans (FPP) (29th July 2016). The guidance has the effect of reducing the maximum height of waste wood piles to 4m. In addition, for all waste piles, the maximum length or width allowed (whichever is the longest) is 20 metres. The FPP Guidance is attached as Appendix 1. Furthermore, discussions have been held with Northamptonshire County Council (NCC) regarding the perceived scale of the development.
- 1.1.4 As a result of amendments to the FPP Guidance it has been necessary to revise the site layout and elevations of the storage bays. This also has the effect of reducing the scale and development footprint.
- 1.1.5 Pebble Hall Farm has a long and complex planning history, which is set out in section 1.3 of the Planning Statement. In 2014, planning permission (13/00098/WASFUL) was granted for a Renewable Energy Generation Facility (REGF) at Pebble Hall, Theddingworth. The REGF is a biomass facility that processes 72,000 tonnes of wood waste per annum in order to produce renewable energy. The wood proposed to be stored in the wood storage area would be used as a fuel for the REGF.
- 1.1.6 At the time that planning permission was granted, the wood storage and shredding activities at Pebble Hall were already permitted and allowed a total of 40,000 tonnes of wood waste to be imported to the site per annum. The REGF planning permission (Ref: 13/00098/WASFUL) granted approval for an increased level of importation of 32,000 tonnes of wood waste per annum, taking the total to 72,000 tonnes.
- 1.1.7 Initially, it was intended to store a maximum of 5000 tonnes of wood waste on site at any one time. It was proposed to continue using the existing area of the Pebble Hall complex to store and shred material once the REGF is operational, which will be early 2017. The existing wood yard covers an area of 0.46 hectares. The Environmental Permit allows the Applicant to store 5,000 tonnes of wood in that area. However, there is now a previously unforeseen requirement to comply with the FPP Guidance. As a result of the Guidance and, in particular, storage heights and spacing, it is only possible to store 400 tonnes of unprocessed wood, leaving the need to consider an appropriate location to store the residual requirements (up to 4,600 tonnes).

1.1.8 This Addendum to the Environmental Statement comprises three main parts:

- Environmental Statement Addendum;
- Technical Appendices; and
- An update of the original Non-Technical Summary (NTS).

1.1.9 The updated NTS is presented as a separate document.

1.1.10 The Environmental Statement is supported by the following revised drawings:

- GPP/WWM/PHWY/16/04 Revision 12 - Proposed Site Layout Plan
- GPP/WWM/PHWY/16/06 Revision 2 – Proposed Storage Bays – Indicative Elevations

2 THE SITE AND ITS SETTING

2.1 The Development Site and its Setting

- 2.1.1 The Pebble Hall complex is located south of the A4304 (Bosworth Road), Theddingworth in the northern part of the District of Daventry as shown on Drawing GPP/WWM/PHWY/15/01 (Site Location Plan). It is approximately 1.8 km east of the village of Husbands Bosworth and approximately 750 metres South-West of Theddingworth.
- 2.1.2 Existing access to the Application Site, which crosses the Northamptonshire and Leicestershire county boundaries, is surfaced in concrete and is approximately 560 metres long from its junction with the A4304. The site has excellent access onto the strategic highway network via the A4304, A5199 and M1.
- 2.1.3 The original ES explained the layout of the development site and its context. Pebble Hall Farm has been, and remains, an agriculturally based operation that has been forced to consider farm diversification, mainly as a result of the BSE crisis. By a series of grants of planning permission over a number of years, the site has established a variety of industrial/commercial/ renewable energy uses and a waste management operation as part of the diversification of the farm.
- 2.1.4 The site already undertakes wood waste management operations and shredding, in compliance with planning permission for the REGF (Ref: 08/00053/WAS). The waste wood is sourced from commercial operators and Household Waste Recycling Sites, within a catchment area of approximately 30 mile radius, as required by Condition 14 of the existing planning permission (Ref: 08/00053/WAS).
- 2.1.5 The area of the planning application has not been altered and is approximately 7.5ha in size as shown on drawings GPP/WWM/PHWY/15/02 Revision 3 Site Plan and GPP/WWM/PHWY/16/04 Revision 12 Site Layout Plan.
- 2.1.6 The site is located in an area of open countryside, in a rural context. The nearest sensitive receptor is located over 600 metres from the Application Site. Land around the Pebble Hall Farm complex has been extensively landscaped in recent years.
- 2.1.7 The application site is situated on grade 3b agricultural land. There are no international or European designated nature conservation sites within 2km of the application site. There is one SSSI within 2km of the application site at a distance of approximately 1.98km. There is a Scheduled Ancient Monument in Theddingworth which is approximately 750 metres from the site. The Public Right of Way Network in the area is limited. The nearest public footpath is east of the site, through the Hothorpe Hills, which is approximately 1.3km away.

2.2 Planning History

- 2.2.1 The planning history for the site is set out in Section 1.3 of the Planning Statement.

3 EIA REGULATIONS 2011

3.1 Introduction

- 3.1.1 The proposed development falls under Schedule 2 of the Town & Country Planning (Environmental Impact Assessment) Regulations 2011 (as amended).
- 3.1.2 In terms of Schedule 2 of the EIA Regulations, the proposal falls within Paragraph 13(b) "Changes and Extensions". Paragraph 13(b) states that where there is any change to or extension of development of a description listed in paragraphs 1 to 12 of Schedule 2 and where that development is already authorised, executed or in the process of being executed, an EIA may be required.
- 3.1.3 This development is accordingly a change/extension of the permitted REGF, which was deemed EIA development under Schedule 2 by virtue of paragraph 11 "Other Projects, (b) Installations for the disposal of waste" and paragraph 3(a) "Industrial Installations for the Production of Electricity, Steam and Hot Water (unless included in Schedule 1)".
- 3.1.4 The applicable threshold and criteria at paragraph 13 (b) is whether the development as changed or extended, may have significant adverse effects on the environment or whether the thresholds and criteria in column 2 of the table in Schedule 2 applied to the change or extensions are met or exceeded.
- 3.1.5 The original ES explained that the proposal exceeded the indicative Schedule 2 threshold of 0.5 hectares and for that reason a voluntary EIA was undertaken and an ES submitted. The revised site layout shows a reduced wood storage area. However, as it represents an amendment to EIA development, the impacts of the revised layout need to be assessed.

3.2 Scope of Assessment

- 3.2.1 The environmental topics considered in the original EIA related to noise, air quality, ecology, surface water and drainage, landscape and visual amenity, traffic, agricultural land and archaeology together with cumulative effects, need and alternatives.
- 3.2.2 The site layout has been revised to meet the requirements of the revised FPP Guidance and address concerns relating to the scale of the development. The revisions have the effect of:
- Moving the location of the above ground water tanks from the south-eastern part of the site to a more central and screened location;
 - The removal of 3 x 4 storage bays and 1 single bay from the south-eastern part of the site;
 - The addition of a double storage bay adjacent to the waste reception area;
 - The introduction of additional planting in the south-eastern part of the site;
 - Amendments to contours in the south-eastern part of the site, and
 - A reduction in the quantity of surface water required to be accommodated in the surface water storage lagoons.

3.2.3 As a consequence, it has been necessary to revisit the scope and conclusions of the original EIA and update the assessment work with reference to the changes outlined above.

3.3 The Assessment Team

3.3.1 The following consultancies have contributed to updating the EIA and the preparation of this Addendum to the Environmental Statement:

- Landscape and Visual Impact Assessment – Watkins Design Associates
- Noise Assessment – LF Acoustics
- Phase 1 Habitat Survey – Jonathan Tye Consulting
- Surface Water and Drainage – Abington Consulting Engineers
- Dust - GF Environmental Ltd
- Archaeology - CgMs
- Agricultural Land Classification - Tim O'Hare Associates

3.3.2 The revised site layout has been supplied to all of the consultants. Where updated Reports have been provided, these are appended to this Addendum. Otherwise, textual updates are presented in this ES Addendum.

3.4 Documentation

3.4.1 A copy of the ES (main statement only) or the ES (main statement plus technical appendices) can be purchased from GP Planning Ltd for £25 or £75 respectively for printed copies or £5 for a copy on CD. Copies of the Non-Technical Summary are available free of charge. A copy of the Addendum to the ES can be purchased for £25 (main statement only) or the Addendum to the ES (main statement and technical appendices) can be purchased for £35.

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4 EIA METHODOLOGY

4.1 General

- 4.1.1 The EIA and review of the EIA has been carried out in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (as amended) and appropriate government guidance.
- 4.1.2 The specific methodologies for the assessment of the individual environmental topics are presented separately in the technical reports in the appendices to the original ES. Where relevant the methodology for review of the original EIA outcomes are referred to in the technical documents appended to this Addendum.

4.2 Baseline Survey

- 4.2.1 Baseline survey work has been carried out as part of the EIA process. A series of detailed surveys were undertaken during December 2015 – March 2016. The revisions to the site layout have not resulted in a requirement to undertake additional baseline surveys.

4.3 Approach to Assessment

- 4.3.1 Consultants employed to undertake the original EIA work have been retained to review the revised site layout and update the original EIA, where necessary. The original technical assessments considered the environmental impacts resulting from the maximum development parameters and most unfavourable conditions. The revisions to the site layout have the effect of reducing the development parameters.

4.4 Cumulative Effects

- 4.4.1 A number of environmental impacts may combine to result in a cumulative impact that is of greater significance than the individual impacts. An assessment of cumulative impacts was contained in the original ES. This assessment is reviewed and the outcomes reported in Section 10 of this Addendum.

4.5 Limitations and Assumptions

- 4.5.1 Each individual, original technical assessment includes discussion on the limitations and assumptions made during the process.

5 THE PROPOSED DEVELOPMENT

5.1 Overview

- 5.1.1 This original planning application seeks planning permission for an additional wood storage yard to store fuel for the permitted Renewable Energy Generation Facility (REGF) (13/00098/WASFUL). This included a proposed site layout plan that incorporated the requirements of the Environmental Agency's Fire Prevention Guidance (FPP), Version 2 March 2015. Since submission of the planning application, the FPP Guidance has been amended in July 2016 which means that the height of the storage bays can be reduced. In addition, some of the storage bays in the south-western part of the site have been removed to reduce the physical footprint of the development.
- 5.1.2 The planning application area for the wood storage yard is 7.5 hectares in total (including the access track, wood yard, surface water lagoons and recontouring of surrounding land). The revised wood yard area to be concreted is 2.45 hectares (previously 3.2 hectares).
- 5.1.3 The site layout now comprises of 42 bays (instead of the previous 53 bays), each 14.6m x 16.6m in size (as opposed to the previous 14.6m x 14.6m). The bays will be situated in groups of four, for the most part, and in groups of 16. To accord with the FPP Guidance it is necessary to layout the site with 20m spacing between the main groups and 6m spacing between the groups of 4. This revised footprint reduces the storage capacity in the proposed wood yard from 5,000 tonnes to 4,200 tonnes, which is sufficient for approximately 3 weeks feedstock to the approved REGF.
- 5.1.4 The bay walls have been reduced to a height of 5m as a result of the FPP Guidance which states that the waste wood can only be stored to a height of 4m.
- 5.1.5 Additional landscape planting and revisions to the contours of the land are also introduced as a result of the bays in the south eastern part of the site being removed. The yard area will be levelled and laid to drain to the north-west, where smaller surface water lagoons will be located. Around the same quantity of material will be created when levelling the site. The additional material will be deposited to the west of the site, as shown on Drawing GPP/WWM/PHWY/15/04, Revision 12.

5.2 Site Operations and Process Description

- 5.2.1 Site operations are not affected by the revised layout.
- 5.2.2 Two lagoons will be in place, which will take the surface water drainage. These are capable of accommodating fire water run-off and have a valve which can be closed to prevent fire water flowing into the Welland River.

5.3 Landscaping

- 5.3.1 Landscape planting is proposed to the west, south and east of the site, along with recontouring of the land to screen the development. The removal of the storage bays on

the eastern part of the site provides an opportunity to introduce additional planting and retain some of that land in agricultural use.

5.4 Environmental Controls

- 5.4.1 The site will be regulated by the Environment Agency through the conditions contained in an Environmental Permit.

Air Quality, Noise and Drainage

- 5.4.2 An Air Quality Assessment was included in Appendix 3 of the ES, and determined that with the proposed recontouring and landscape planting, dust will be adequately controlled.
- 5.4.3 A Noise Assessment was included in the ES at Appendix 4. This confirmed that noise from the shredder and traffic movements will not cause an unacceptable impact. The Noise Assessment has been reviewed as a result of the changes to the site layout and the conclusions are set out in Section 7.
- 5.4.4 The site is located outside an area at risk of flooding. A sustainable drainage scheme has been designed to prevent the risk of run-off leading to flooding downstream on the River Welland. A Flood Risk Assessment and Drainage Strategy was included in Appendix 5 of the Environmental Statement. The Flood Risk Assessment has been reviewed as a result of the changes to the site layout and the conclusions are set out in Section 7.

6 PLANNING POLICY CONTEXT

6.1 Introduction

- 6.1.1 The ES and Planning Statement set out the planning policy context. Since submission of the planning application, a partial review of the Northamptonshire Minerals and Waste Local Plan has been submitted for examination by an Independent Inspector. The Hearing sessions will commence on 26th November 2016.
- 6.1.2 There are no fundamental changes to policy that impact upon the EIA or subsequent determination of the planning application.

7 ENVIRONMENTAL IMPACT ASSESSMENT

7.1 Introduction

- 7.1.1 This Addendum to the ES, and original ES, have been prepared under the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2011 (as amended).
- 7.1.2 In accordance with the EIA Regulations 2011 (as amended) and the supporting guidance in the NPPG, the proposed development has been assessed in terms of the potential for significant environmental effects to arise.
- 7.1.3 A comprehensive assessment of the following matters has been subject of EIA, the outcome of which is recorded in ES:
- Landscape and Visual Impact Appraisal (LVIA)
 - Surface Water and Drainage
 - Ecology
 - Noise Assessment
 - Air Quality (including Dust and Human Health)
 - Archaeology
 - Soil Quality
 - Traffic
- 7.1.4 This Addendum to the ES considers the impact of the revised site layout on the EIA carried out under each topic heading.
- 7.1.5 In considering potential receptors, regard has been had to the contents of Schedule 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (as amended). The assessment has also had regard to the potential for adverse cumulative effects taking into account any potential adverse successive, simultaneous and combined environmental effects.

7.2 Landscape and Visual Impact Assessment

Introduction

- 7.2.1 An assessment of the impact of the development on landscape character and visual amenity has been carried out and The Landscape and Visual Impact Assessment (LVIA) formed part of the Environmental Statement and was included in Appendix 6. An Addendum to Landscape and Visual Impact Assessment, October 2016 is attached to this Addendum.
- 7.2.2 The Addendum to the LVIA considers whether:
- Any of the significant effects identified in the assessment are substantially altered as a result of the amendments to the proposals;
 - Any new effects likely to arise; and
 - Any effects previously judged insignificant are likely to become significant as a result of the changes.

Assessment Methodology

- 7.2.3 The approach taken in the Addendum LVIA reflects the limited nature of the amendments to the proposals. In principle, the objective of the approach was to focus only on matters of significance. These were identified by considering those impacts of significance described in the original LVIA, augmented where relevant by any new or increased effects likely to impact upon features or views identified as sensitive in the original LVIA.
- 7.2.4 There is no specific guidance pertaining to adjustments to LVIAs following amendments to the subject of those assessments. However, the Addendum LVIA utilises the structure of, and information in, the original LVIA to identify matters of significance. It relies on the same guidance upon which the original LVIA was based:
- Guidelines for Landscape and Visual Impact Assessment Third Edition (Landscape Institute and Institute of Environmental Management and Assessment, 2013)
 - Landscape Character Assessment Guidance for England and Scotland, published by the Countryside Agency, 2002
 - Photography and photomontage in landscape and visual impact assessment, Advice Note 01/11, published by the Landscape Institute, 2011
- 7.2.5 The following data sources were utilised in the original LVIA:
- Ordnance Survey 1:25,000 mapping
 - Natural England National Character Area Profiles
 - Northamptonshire's Environmental Character and Green Infrastructure Suite¹, including Environmental Character and Current Landscape Character Assessments
 - landscape character assessments prepared on behalf of Harborough District Council²
 - MAGIC Interactive Map, Defra and Natural England
 - Field survey
- 7.2.6 These data source remained applicable for the purposes of this ES Addendum. In addition, the amended proposals were used to inform the analytical process.
- 7.2.7 While the planning application area remains the same, there is no increase in the footprint or height of the physical components or change of materials likely to result in increased visibility within the original Visual Envelope. For that reason, it was not considered necessary to amend the original study area.
- 7.2.8 The effect upon the Visual Envelope in the original LVIA did assist in identifying the principle effects of the amendments, insofar as the reduced footprint may result in a potential reduction in the Visual Envelope. The effect of the changes is shown on Figure 7 in the Addendum to Landscape and Visual Impact Assessment, attached as Appendix 4.

Changes to the Landscape Assessment

- 7.2.9 Since the components and general location of the Proposals remains as for the original LVIA, no change in aesthetic characteristics is expected to result for the amendments.

¹ Available from <http://www.rnrpenvironmentalcharacter.org.uk/>

² Harborough Rural Centres Landscape Character Assessment and Landscape Capacity Study, The Landscape Partnership, July 2014

Table 4.1 in the Addendum LVIA is drawn from Table B3 of Appendix B of the original LVIA and confirms:

- No substantive change in the significance of the residual effect (landform);
- No change to vegetation/hedgerows resulting from the amended site layout;
- No substantive change in the significance of the residual effect (vegetation – tree cover);
- No substantive change in the significance of the residual effect (materials).

7.2.10 While a spur of fill has been omitted, relocation of forestry planting and smaller quantities of concrete walls and waste wood stacks are now proposed. Therefore, the overall changes to the previously identified significant residual effects on landscape character are not likely to be noticeable.

7.2.11 In the original LVIA there were some attributes of character that were not considered to be significantly affected by the proposals. Of these attributes, only vegetation and landscape pattern are affected differently by the amendments to the proposed site layout.

7.2.12 The area of arable vegetation removed by the Proposals would be reduced and is no further affected by the amended proposals.

7.2.13 Landscape pattern would be slightly altered in the area of the revised site layout through the introduction of a smaller field pattern adjacent to the main site. This is an extremely localised effect and not considered to be of any substantive significance.

7.2.14 Overall, the magnitude of impacts upon the landscape character would remain as previously assessed. The significance of effects after mitigation is also considered to be unchanged.

Changes to the Visual Assessment

7.2.15 Table 5.1 in the Addendum to the LVIA is drawn from Table B6 of Appendix B of the original LVIA. The table identifies the changes resulting from the revised site layout for those visual receptors whose view would be noticeably different as a result of the amendments to the Proposals.

7.2.16 The key changes resulting from the amendments are summarised below:

- Woodside Farm, upper storey window – reduced height of bays and wood piles and additional shrub planting aid integration of wood storage bays in the view, although one pair of bays would be closer than in the original proposals. This results no substantive change in significance of residual effect.
- Outlying single storey building west of Hothorpe Hall – landform spur no longer proposed. Proposals are further removed and with reduced height of the bay structures, occupy a negligible or vanishing proportion of the view. Residual effect is neutral.
- Walkers and riders on Bridleway DN1 south of Theddingworth – proposals are further removed. No substantive change in significance of residual effect.
- Occupants of vehicles exiting road from Marston Trussell onto Theddingworth-Sibbertoft Road – proposals are further removed. Landform spur no longer proposed. Reduced height of bays and wood piles lower perceptibility of the proposals. No

substantive change in significance of residual effect.

- Occupants of vehicles exiting Home Farm driveway – proposals are further removed. Landform spur no longer proposed. Reduced height of bays and wood piles lower perceptibility of the proposals. No substantive change in the significance of residual effect.

7.2.17 The removal of some of the storage bays represents a noticeable change when viewed from a number of locations east. However, the alteration at distance is in most cases too marginal to substantively change the already minor visual impact. In the instance of the outlying dwelling in the Hothorpe Hall Estate, however, the visual effect is likely to diminish from very minor to negligible.

7.2.18 In general, the smaller footprint of the physical development, combined with the reduced bay height means that the visual impact is slightly reduced for most visual receptors. However, for occupants of the three houses north of the A4304 at Theddingworth, the new location of one pair of bays in the north of the main site may very slightly increase the perceptibility of the proposals in the short term as the receptors are positioned above the level of the site. Nonetheless, due to the recently implemented planting on the north of the Site's access road, the magnitude of any visual impact on these receptors would reduce over time to negligible as with the original layout and proposals.

7.2.19 The amendments to the proposals do not substantively alter visual impacts except in the case of a few visual receptors experiencing minor effects both prior to and after the amendments to the site layout. No receptors experiencing effects of moderate significance with the original layout and proposals would experience lesser effects with the amended layout. Visual impacts remain for the most part *slight* but with a few instances of more *moderate* magnitude, and of no greater than *moderate adverse* significance.

Changes to the Cumulative Assessment

7.2.20 The original LVIA assessed the cumulative effects of the proposed wood storage yard alongside two other consented developments within the Study Area: the REGF with which the proposals are associated and an existing gravel extraction facility south of Husbands Bosworth.

7.2.21 The original LVIA judged that the proposals would contribute the following impacts on landscape character of a similar nature to those produced by other recent or committed developments within the Study Area:

- The creation a small area of artificial landform
- The creation of a large area of artificial surfacing
- The creation of some industrial structures
- The creation of artificial water bodies and associated safety fencing
- The addition of tree cover to the area
- Renovation of hedgerow boundaries

7.2.22 It is considered that the cumulative impacts of the revised site layout alongside those of other developments of a similar nature within the Study Area remains are previously assessed i.e. that the Proposals, including their mitigation, contribute marginally to these impacts but that the bulk of the impacts are due to the two existing developments and would not be unduly increased through the addition of the proposed development. Further, those aspects of the proposal, including the approach to landform and mitigation

planting, will continue to serve to reduce some of the visual impact currently experienced as a result of the two existing developments as well as offsetting some of their effect on landscape character.

- 7.2.23 Accordingly, the cumulative effects upon both landscape character and views of the three developments continue to be considered of moderate adverse significance, with a positive contribution made by the proposals to reducing cumulative effects.

Conclusion

- 7.2.24 No substantive adjustments to the significance of effects upon landscape character or views are considered to result from the amendments to the proposed site layout. However, the marginal reduction in land take by features likely to be considered negative in character such as storage bays, concrete surfacing and artificial landform are considered to be positive in principle. Further, the increased distance of the proposals to some viewing locations is likely to marginally reduce any perceived negative effects of visual receptors in these locations.
- 7.2.25 The mitigation proposed remains effective in offsetting some of the impacts on landscape character and reducing visual impacts. The recommendations in the LVIA concerning the type and species of planting and the adoption of minimum standards of soil handling and storage remain applicable.
- 7.2.26 For the reasons outlined above, the revised proposals remain compliant with Policies 11, 22, 24, 25 and 27 of the Northamptonshire Minerals and Waste Local Plan. The proposed wood yard has been redesigned to comply with the EA's FPP Guidance and by reducing the physical development and the perceived scale.

7.3 Surface Water and Drainage

Introduction

- 7.3.1 A Flood Risk Assessment (FRA) was carried out and copy of the report by Abington Consulting Engineers dated 11th March 2016 was included in the original ES as Appendix 5. Abington Consulting Engineers have been retained to update the original FRA taking into account the revised site layout. An updated FRA is appended to this EA Addendum as Appendix 3.

Assessment Methodology

- 7.3.2 The majority of the site falls within Flood Zone 1 which is described as having a 'low' probability of flooding. However, the primary access serving the site crosses the River Welland via a bridge which falls within Flood Zone 3. The area of Zone 3 is narrow, reflecting the gradient of the land either side of the River and only covers a very small section of the access road.
- 7.3.3 A sequential test has been undertaken in accordance with paragraph 102 of NPPF and Planning Practice Guidance. There are no alternative access solutions. The access is considered to be 'essential infrastructure' which is compatible with Zones 1 and 2 but requires the Exception Test to be passed as it passes through Zone 3.

Flood Risk Management Measures

- 7.3.4 The original FRA appraised the sources of flooding from fluvial sources, groundwater, surface run-off from the development and surface water run-off from the adjacent site.
- 7.3.5 A number of flood risk management measures were proposed in the FRA. The revised site layout incorporates less concreted area and as a result the flood risk measures have been altered to reflect that. The Addendum FRA states:

The wood storage area will be surfaced with concrete. As the wood may be contaminated, any run-off from this area will need to be contained. For the majority of rainfall events it is anticipated that the wood will absorb a lot of water which will then either evaporate or be transferred into the REGF with the wood. However, during major rainfall events, run-off will be drained via a class 1 bypass interceptor into a new total retention pond located to the north. The will be divided into two ponds located either side of an existing ditch. The volume of the pond has been calculated using FEH data as 2190m³ [previously 3101m³] for a 100 year return period plus a 20% allowance for climate change in accordance with the National Planning Policy Framework technical guidance (refer to calculations in Appendix 2).

Run-off collected in the total retention pond will normally be recycled within the REGF. However, when significant surplus water has been collected, the water will be tested for contamination. If the water is found to be contaminated, it will be tankered off site to a suitable disposal facility. If the water is found to be uncontaminated, it will be released into the River Welland at a limited discharge rate of 8.5 l/s [previously 12.1 l/s] which is the equivalent of the green-field run-off rate (refer to calculations set out in Appendix 2 of the Addendum FRA). An indicative drainage layout is shown in Appendix 1 of the Addendum FRA.

There is an opportunity to increase the size of the total retention pond in order to collect water which could be used for extinguishing fires. The size of such a facility would need to be agreed with the local fire service and accord with the requirements of the Building Regulations if it is to be used as an alternative to a fire hydrant. Any water used for extinguishing fires would either evaporate or return to the total retention pond via the proposed drainage system, thereby reducing risk of contamination to the River Welland.

- 7.3.6 In all other respects the Addendum FRA remains the same.

Cumulative Assessment

- 7.3.7 The FRA has had regard to all other hard surfaced areas in the locality in order to ensure that there are no adverse cumulative impacts. The FRA concludes that all surface water can be managed via a combination of interceptors, balancing ponds and drainage of non-contaminated water only to the River Welland at a reduced rate than previously anticipated, given the reduced area of concreted surface. Fire extinguishing water and resultant water run-off from the proposed development is capable of being accommodated in the surface water drainage lagoons. Other parts of the Pebble Hall

complex have separate drainage arrangements. The FRA has considered the cumulative impact upon the River Welland and concludes that there will be no unacceptable impact as a result of this proposal.

Conclusions

- 7.3.8 It is concluded that the proposed amended development complies with the requirements of the Sequential and Exception Tests in national policy. Any potential impacts arising from the development can be mitigated by the implementation of the flood risk management measures set out in the Addendum FRA. The proposals are therefore compliant with Policy 22 of the Northamptonshire Minerals and Waste Local Plan.

7.4 Ecology

Introduction

- 7.4.1 An assessment of the ecology at the site was carried out by Jonathan Tye on 14th March 2016 and is included as Appendix 8 in the original ES.

Assessment Methodology

- 7.4.2 A desk based study was carried out in order to establish any protected species and protected bird records. The assessment followed the current baseline ecological survey guidance as set out in the institute of Ecology and Environmental Management Guidelines for Preliminary Ecological Appraisal (2012).
- 7.4.3 A Phase 1 Habitat survey was carried out on the Application Site in order to identify the ecology on the area. This has been reviewed in the context of the revised site layout and confirms that the original desk based survey stands.

Identification of Key Impacts

- 7.4.4 Overall the original ecological assessment concluded that:

Due to the distance between the proposed development area and designated nature conservation sites in the local area it is considered highly unlikely that there will be any adverse effects on these sites as a result of the works. Therefore no recommendations in relation to designated sites are made.

- 7.4.5 The following further surveys and inspections have been recommended:

Nesting Birding

Nesting bird inspections will be required if vegetation including hedgerows and scrub is to be cleared during the bird nesting season. A suitably qualified ecologist is to inspect the vegetation to be removed within at least 24hrs in advance of its removal. If nesting birds are discovered during these inspections a 20m buffer zone will be produced which will remain until all nesting activity is complete.

Reptiles

Pre works inspections are to be carried out for reptiles within areas of

vegetation to be removed during soil stripping operations.

Cumulative Impact

- 7.4.6 The Phase 1 Habitat Survey has found that the proposed development is unlikely to have any significant impact upon any ecological feature. The revised site layout will have a reduced physical footprint. Therefore, when considered in combination with the surrounding developments and ecological features in the wider landscape, the proposed development will not give rise to unacceptable cumulative effects.

Conclusions

- 7.4.7 It is concluded that ecological impacts can be appropriately mitigated to ensure that there will be no significant impacts. The proposed landscape planting will provide bio-diversity enhancements and ecological benefit through the development of a cohesive scheme and ecological corridor. Therefore, the proposal is compliant with Policy 22 and 24 of the Northamptonshire Minerals and Waste Local Plan (2014).

7.5 Noise Assessment

Introduction

- 7.5.1 A noise assessment was carried out by Les Jephson of LF Acoustics in March 2016 and the report was included in Appendix 4 of the original ES. LF Acoustics have been retained and an Addendum to the Noise Assessment has been prepared. The update Noise Assessment is included as Appendix 2.

Assessment Methodology

- 7.5.2 The updated noise assessment considers the noise levels associated with the development on a revised site layout at the surrounding noise sensitive receptors and, in particular the removal of the bunding in the south eastern part of the site. It also considers the cumulative effects of the shredding in addition to the operation of the other facilities at the site to ensure that the overall noise levels associated with the site operations remain within the noise limits specified within the existing planning conditions for the REGF, which seek to ensure any adverse noise effects are minimised. The noise levels associated with the operation of the shredder and associated plant have been calculated at the properties identified using the methodology contained within BS 5228:1 [2].

Identification of Key Impacts

- 7.5.3 The results of the calculations from the proposed shredding operation have been combined with the noise levels calculated previously for the REGF and TAD sites to evaluate the cumulative noise levels from the site. These cumulative levels are presented in the following table.

Receptor	Calculated Daytime $L_{Aeq, 1 \text{ hour}}$ [dB]		
	REGF + TAD	Shredding	Cumulative
Hothorpe Hall	29	35	36
Hothorpe Hall Eco Lodges	33	35	37
Woodside Farm	34	42	42
Bosworth Hall	27	37	38
Pebble Hall Farm	50	41	51

Note: The noise levels for the REGF and TAD were calculated taking into account the background noise levels, which included the operation of the compost site and existing wood yard.

- 7.5.4 The calculated cumulative noise levels have been assessed against the noise limits derived from the requirements of Condition 20, of the REGF planning permission in the following table (Assessment of Calculated Noise Levels).

Receptor	Calculated Daytime $L_{Aeq, 1 \text{ hour}}$ [dB]		
	Cumulative Noise Level [dB $L_{Aeq, 1 \text{ hour}}$]	Worst Case Noise Limit [dB $L_{Aeq, 1 \text{ hour}}$]	Difference [dB]
Hothorpe Hall	37	42	-5
Hothorpe Hall Eco Lodges	38	42	-4
Woodside Farm	42	52	-10
Bosworth Hall	38	45	-7
Pebble Hall Farm	51	52	-1

- 7.5.5 The table above indicates that the proposed shredding operation would give rise to an increase in the overall noise levels from the site. As a result of omitting the bund from the site layout, the only change in the calculated daytime noise levels are a 1 dB $L_{Aeq, 1 \text{ hour}}$ at Hothorpe Hall and Hothorpe Hall Eco Lodges with a resultant 1 dB difference between worst case and cumulative levels (from the levels set out in the original assessment). However, the calculations indicate that the overall noise levels would remain below the noise limits derived from the requirements of Condition 20 of the planning permission for the REGF and would still remain acceptable to ensure any potential adverse effects upon the occupants of the surrounding properties were minimised.

- 7.5.6 On this basis, the intermittent operation of a wood shredder within the storage bays would not result in any adverse impact.

Cumulative Impact

- 7.5.7 The Noise Assessment has considered the predicted noise impacts in combination with the existing operations at Pebble Hall. Even when considered in combination with the other operations at Pebble Hall, the overall noise levels are at an acceptable level and below the noise limit set by Condition 20 for the Planning Permission for the REGF. This condition seeks to ensure that the noise impacts at the surrounding properties are acceptable.

Conclusions

7.5.8 The Addendum Noise Assessment concludes that:

Noise levels associated with the additional operations have been calculated and combined with the noise levels calculated previously for the TAD and REGF to evaluate the cumulative noise levels from the site. The calculated noise levels have been assessed against noise limits for daytime operations based upon the requirements of Condition 20 of the REGF planning permission, which demonstrated that noise levels from the combined operation, including shredding, would remain below the noise limits.

The proposed shredding operation would therefore give rise to acceptable noise levels at surrounding properties, thus ensuring that any potential adverse effects were minimised.

7.6 Air Quality (including Dust and Human Health)

Introduction

- 7.6.1 An assessment of fugitive dust emission was prepared by Geoff Fynes, GF Environmental and the report was included as Appendix 3 of the original ES. Geoff Fynes of GF Environmental has also considered the impact of the revised site layout on the conclusions of the previous assessment.
- 7.6.2 It is confirmed that the introduction of the wood yard, in its reduced footprint format, will significantly reduce the potential for fugitive dust emissions compared to existing, consented activities associated with the reception, storage and shredding of recycled wood. With effectively managed storage and handling procedures for the coarser wood chip fuel, the wood yard extension will have a beneficial impact on the potential for fugitive dust emissions to migrate into the area surrounding the Welland Waste Management site.

7.7 Archaeological and Cultural Heritage

Introduction

- 7.7.1 An Archaeology Desk Based Assessment was prepared by CgMs Consulting in May 2016 and was attached as Appendix 7 to the original ES. CgMs Consulting have been retained and have provided updated text to support this Addendum to the ES.
- 7.7.2 The proposed development site lies on farmland associated with Pebble Hall, on rising ground in the River Welland Valley south of the river. The land is presently arable farmland and has been periodically fertilised with green waste and is on National Grid Reference SP 66089 84434.
- 7.7.3 In accordance with local and central government guidance on archaeology and planning (NPPF) this assessment draws together the available archaeological, topographic and land-use information in order to clarify the archaeological impact of the proposed development.

7.7.4 Evidence from published and archive sources including the Leicestershire and Northamptonshire Historic Environment Records (HER) has been examined and the site has been evaluated using geophysical survey and sample trial trenching.

7.7.5 The results of the combined techniques have revealed no archaeological deposits within the proposed development area (see Appendix 5).

Assessment Methodology and Significance

7.7.6 This assessment comprises three parts. The first part was an assessment of documentary evidence, aerial photograph evidence, ground inspection, to assess the potential survival of below ground archaeology. Evidence for this element has been collated from an area extending some 500m from the boundaries of the Application Site. This aspect of the assessment was guided by: the Chartered Institute of Field Archaeologists (CifA) Standard and Guidance on Desk Based Assessments, Environmental Assessment and Archaeology (Institute of Field Archaeologists 1993) and the Department for Transport (DfT) Design Manual for Roads and Bridges. The following data sources have been used in the compilation of the assessment: Historic maps (available at the County Records Office); Published sources such as academic journals, histories and antiquarian works (obtained from the Local Studies Libraries in Northampton; the academic library collection in the Sackler Library, Oxford; and the internet); Topographical survey data; Archive documents, including Historic Environment Records (HER), from Northamptonshire and Leicestershire Historic Environment Records. The baseline survey also involved consultation of readily available archaeological and historical data from the following documentary and cartographic sources: English Heritage database of Scheduled Ancient Monuments for Northamptonshire and Leicestershire; Northamptonshire and Leicestershire List of buildings of Special Architectural or Historic Interest; English Heritage Register of Historic Parks and Gardens; English Heritage Register of Historic Battlefields; and the County Records Offices and Local Studies Libraries.

7.7.7 The desk-based assessment was supplemented by a walk-over survey.

7.7.8 The geophysical survey by Stratascan was conducted in accordance with the latest guidance by Historic England (2006) and the Chartered Institute for Archaeologists (2002 & 2014). Stratascan Ltd are a Registered Organisation with the CifA. Due to the potential for prehistoric and Roman remains, detailed magnetic survey was used as an efficient and effective method of locating archaeological anomalies. Processing of the data followed three stages 1. De-stripe; 2. De-stagger; and presentation of the results. Interpretation involved a plot of the minimally processed data as a greyscale plot and a colour plot showing extreme magnetic values. Magnetic anomalies are identified and plotted onto the 'Interpretation of Anomalies' drawing. Typically when interpreting the results several factors are taken into consideration, including the nature of archaeological features being investigated and the local conditions at the site (geology, pedology, topography etc.). Where identified anomalies are categorised by their potential origin. Where responses can be related to specific documented features these are identified otherwise generic categories levels of confidence are indicated as probable or possible archaeology. During geophysical survey the Bartington Grad601-2 a fluxgate gradiometer with dual-sensor array was used.

7.7.9 Trial trenching was undertaken according to an agreed Written Scheme of Investigation (see Appendix 5). The methodology was guided by the Chartered Institute for

Archaeologists Standards and Guidance: for Archaeological evaluations (CIfA S&G) and was a controlled programme of intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features, structures, and as appropriate, retrieves artefacts or ecofacts within a specified development area. The records made and objects gathered during fieldwork are studied and the results of that study published in detail evaluation report appropriate to the project design.

Significance Criteria

7.7.10 The significance of potential impacts has been assessed by taking into account the sensitivity of the heritage assets and the potential magnitude of the predicted impact. Magnitude of change is a function of the nature, scale, and type of disturbance, or damage to the heritage asset. For example, a major magnitude of change may result in the loss of or damage to, a feature of archaeological interest. Criteria for assessing the magnitude of change are provided in the table below, derived from the Design Manual for Roads and Bridges, and professional experience.

Table 1: Factors in the Assessment of the Magnitude of Impact

Magnitude of Change	Criteria
Major	Change to most or all key heritage assets, such that the resource is totally altered. Comprehensive changes to setting.
Moderate	Changes to many key heritage assets, such that the resource is clearly modified. Considerable changes to setting that affect the character of the asset.
Minor	Changes to key heritage assets, such that the asset is slightly altered. Slight changes to setting.
Negligible/Imperceptible	Very minor changes to heritage asset, or setting.
No Change	No Change

7.7.11 The sensitivity of the heritage assets will depend on factors such as condition and perceived heritage value or significance of the asset. These levels of sensitivity are defined in the Table below.

Table 2: Sensitivity of Heritage Assets

Sensitivity of Heritage Assets	Definition
High	Heritage Assets of national importance including Listed Buildings, Scheduled Ancient Monuments.
Medium	Heritage Assets of regional importance.
Low	Heritage Assets of county or local importance.
Negligible	Heritage Assets of little value at local, regional or national level.

7.7.12 The sensitivity of the receiving environment, together with the magnitude of the change, defines the significance of the impact.

Table 3: Significance of Impact Matrix

Impact Magnitude	Sensitivity of Receiving Environment			
	Negligible	Low	Medium	High
Major	Negligible	Moderate	Major	Major
Moderate	Negligible	Minor	Moderate	Moderate
Minor	Negligible	Minor	Minor	Minor
Negligible	Negligible	Negligible	Negligible	Negligible

7.7.13 For this development, the principal types of impact on Heritage Assets are anticipated to be direct impacts, physical damage to sites, whether recorded or, as yet, undiscovered. Due to the nature of the Proposed Development, the direct impacts will be permanent (irreversible). With the vast majority of ground disturbances occurring at the construction stage, it is at this time that potential direct impacts on the archaeological resource are most likely. For example, ground disturbances could include topsoil stripping, excavation, machine movement and placement of temporary soil or construction material storage.

Baseline

7.7.14 The desk based assessment revealed that no Palaeolithic finds have been found within the proposed development area or within the wider study area extending to 500m. The presence of Palaeolithic archaeology is notoriously hard to predict but the majority of evidence from the wider region is from stray artefacts with few in-situ sites (Cooper, 2006) and overall the potential for such material was very low. Evidence from the Prehistoric period including the Mesolithic, Neolithic, Bronze Age and Iron Age is characterised by increasingly sedentary activity, probably agricultural, together with settlements, probably farmsteads, established by the first Millennium BC. Settlements are often found in valley side locations and on topography similar to the proposed development site but documentary search revealed no indication of any previous discoveries or landscape trends which suggested that the area might have supported significant activity in the Prehistoric past.

7.7.15 Roman period evidence was also absent and activity within the search area, which could be dated to this period, was limited. Two possible Roman period sites were identified south of the proposed site (NHER 688 & 695) which suggested a Roman settlement nearby. The Royal Commission survey of 1981 notes that "there is considerable evidence for prehistoric and Roman occupation in the area [parish of Marston Trussell]; with Roman sites both close to the River Welland and on the higher ground to the South".

7.7.16 The absence of Roman period data was matched by the Anglo-Saxon, Medieval and Early Post-Medieval periods. In the post-Roman and Anglo-Saxon period the proposed development area lay south west of the historic core of Theddingworth (LHER9153) and west of the now deserted hamlet of Hothorpe (NHER482). The land lay in the ancient parish of Marston Trussell in the Gartree hundred and the majority of the evidence recorded on the HER comes from the village earthworks at Hothorpe (NHER 482), a possible medieval watermill east of the proposed development site (LHER2524) on the River Welland and ridge and furrow in the fields to the west (NHER 9487).

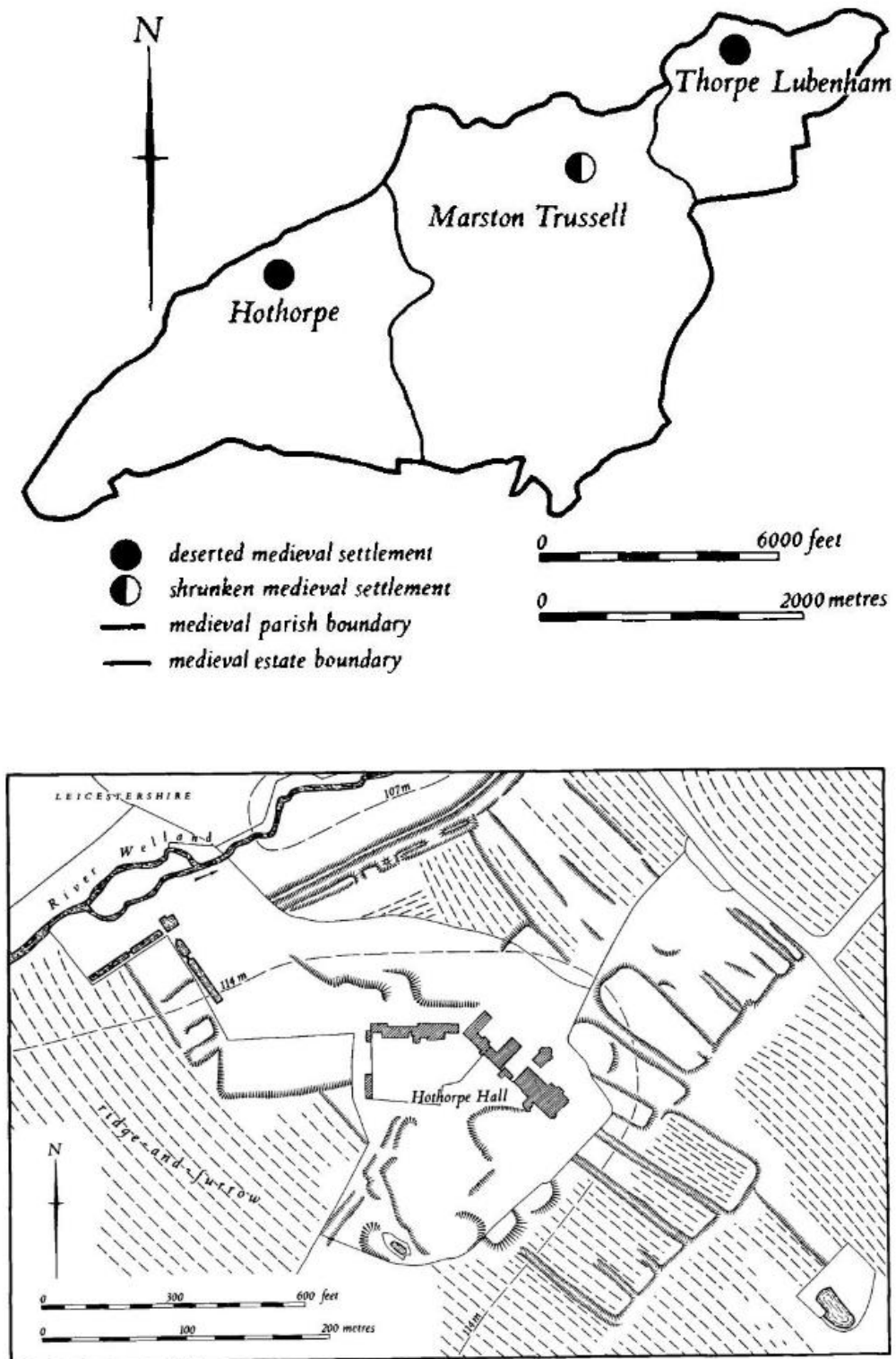


Fig 1 The parish of Marston Trussell showing the historic estates of Hothorpe, Marston Trussell and Thorpe Lubenham (above) with (below) the earthworks of Hothorpe, largely deserted, medieval village (NHER 482).

- 7.7.17 The ridge and furrow recorded in the HER (NHER 9487) and by Lidar Survey (Appendix 1) indicates that the proposed development area probably lay within the open fields of Hothorpe. Hall's survey of the open fields of Northamptonshire records that the vill³ of Hothorpe had two fields in the 13th century, a small grant of 2 acres (called virgates⁴) describes 1 acre in one part of the vill and the other in another part. In 1639 there were 3 open fields. The vill was enclosed in 1666, but no map survives.
- 7.7.18 The nature of the topography and the evidence cited above suggested that the location of the site had only low potential for significant medieval evidence. In the Late Post Medieval and Modern periods map evidence, although limited, showed the field boundaries of the 19th century remaining substantially unchanged throughout the 20th century and into the 21st century. The evidence recovered, therefore, suggested there was no potential for significant evidence of the Post-Medieval and Modern periods within the proposed development area.
- 7.7.19 To test the documentary evidence a geophysical survey was undertaken. However, the survey was unable to reveal anything of the possible below ground deposits because of the presence of green waste which masked the geophysical data.⁵



Fig 2 Sample area showing the masking effect of green waste at Pebble Hall

³ Vill – basic economic unit which contained all the necessary resources for an agricultural community

⁴ Virgate – the amount of land which could be ploughed by a pair of oxen in a year.

⁵ Gerrard J, Caldwell L, Kennedy A. 2015 Green Waste and Archaeological Geophysics, *Archaeological Prospection* 2015, 22(2), 139-142.

7.7.20 The results of the geophysical survey were discussed with Northamptonshire the county's archaeological advisor and at her advice, to test further the potential of the site, a programme of trial trenching was implemented.

7.7.21 The trenching, which sampled the proposed development, area revealed no archaeological deposits (see Appendix 5)

Conclusion: Operational and Residual Impacts

7.7.22 The absence of archaeological deposits at the site indicates that there will be no change to archaeological remains within the Site or surroundings from the operation of the Proposed Development. The operational impact is, therefore, considered to be nil and no further mitigation is required.

7.7.23 In conclusion, the impact of development on heritage assets within the development area will result in no harm for the purpose of the NPPF and in terms of the Environmental Statement the effect will be no impact. The proposed development is compliant with Policy 26 in the Northamptonshire Minerals and Waste Local Plan, 2014.

7.8 Agricultural Land Quality

Introduction

7.8.1 An Agricultural Land Classification has been carried out and was included in Appendix 2 of the original ES.

Identification of Key Impacts

7.8.2 A review of the revised layout confirms that the majority of the Application Site remains Subgrade 3b, with a small proportion of it being classed as "other land".

7.8.3 The removal of part of the storage area from the site layout has the effect of removing some agricultural land from the development footprint and this area will remain in agricultural use.

Cumulative Impact

7.8.4 The proposed development will have a temporary impact upon grade 3b land, which is of "moderate" quality for agricultural purposes. As the impact is temporary and there are no future development plans at Pebble Hall that will cause the loss of agricultural land, the cumulative impacts on agricultural land quality will be minimal.

Conclusion

7.8.5 The proposed development will not give rise to unacceptable impact on agricultural land, in compliance with Policy 22 of the Northamptonshire Minerals and Waste Local Plan, 2014.

7.9 Other Environmental Matters

- 7.9.1 There are no other environmental matters apart from those referenced in the original ES that require additional consideration.

8 NEED

8.1 Introduction

- 8.1.1 The EIA Regulations require an assessment of need for the proposed development. Appendix 9 in the original ES included a justification document, which set out the need for the proposed development.
- 8.1.2 Since the original EIA was conducted the need case is strengthened by further changes to the FPP. A further justification document is included at Appendix 6.

8.2 The Environment Agency's Guidance on Fire Prevention Plans

- 8.2.1 The Environment Agency's guidance on Fire Prevention Plans published in July 2016 requires operators to store wood waste in smaller piles of material, instead of one large pile, and to provide separation distances between the piles of material. A copy is included as Appendix 1.
- 8.2.2 The new guidance follows on from that in place when the original planning application was submitted.
- 8.2.3 At the time that planning permission was granted for the REGF, the wood storage and shredding activities at Pebble Hall were already permitted and operational for a total of 40,000 tonnes of wood waste per annum. The REGF planning permission (Ref: 13/00098/WASFUL) granted approval for an increase to 72,000 tonnes of wood waste per annum. However, it was always intended to only store a maximum of 5,000 tonnes of wood waste on site at any one time. It was proposed to carry on using the existing area of the Pebble Hall complex to store and shred material once the REGF was operational. An area of 0.46 hectares was allocated for wood storage. Prior to the Environment Agency (EA) issuing their Fire Prevention Plan Guidance in March 2015 and revised Guidance in July 2016, the permitted amount of wood storage was 5,000 tonnes.
- 8.2.4 As a result, the original wood yard extension layout was designed to store 5,000 tonnes worth of material. Full details of the need for this are included in the justification report included in Appendix 9 in the ES and updated in Appendix 6 to reflect the revised FPP Guidance.
- 8.2.5 The new guidance remains much more land intensive and means that Welland Waste Management can only store 750 tonnes of wood waste where they could previously store 5,000 tonnes of wood waste. The new Guidance further reduces that storage to 400 tonnes.
- 8.2.6 Welland Waste Management could operate the facility with 400 tonnes of wood storage waste, but it would be on a very "hand to mouth" basis and there would be a risk of not having a constant supply of input to the biomass facility due to seasonal fluctuations in the availability of wood waste and the unreliability of delivery times.
- 8.2.7 Alternative offsite sites for wood waste storage have been considered. The Applicant has approached several land agents in order to find a site that is approximately 2 hectares in

size, with no viable results. They have also used their local knowledge to consider alternative local sites, but none are considered viable development options.

- 8.2.8 A range of site specific alternatives to the proposed wood yard development have been considered in this report in order to find the onsite option with the least environmental impact.
- 8.2.9 In overall conclusion, it has been found that there is a strong and defensible need for the development and that the proposed wood storage yard is the most viable and practical development option.
- 8.2.10 The independent economic justification for the development in the ES remains unchanged as does the availability of waste feedstock.

8.3 Conclusions

- 8.3.1 There remains an urgent requirement to meet targets for diverting biodegradable material from landfill. The ability to store wood waste in this location presents significant benefits by diverting up to 72,000 tonnes of biodegradable waste and facilitating the delivery of renewable and low carbon energy.
- 8.3.2 There remains a clear and compelling need for the proposal in diverting waste from landfill, reducing greenhouse gas emissions, and facilitating the generation of renewable energy.

9 ALTERNATIVES

9.1 Introduction

9.1.1 It is a requirement of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (as amended) that alternatives to the proposed development are considered. These were considered and set out in full in the justification report included in Chapter 2 of Appendix 9 of the original ES.

9.1.2 It is concluded that:

Welland Waste Management could operate the facility with 750 tonnes of wood storage waste, but it would be on a very "hand to mouth" basis and there would be a risk of not having a constant supply of input to the biomass facility due to seasonal fluctuations in the availability of wood waste and the unreliability of delivery times.

Alternative offsite sites for wood waste storage have been considered. The Applicant has approached several land agents in order to find a site that is approximately 3 hectares in size, with no viable results. They have also used their local knowledge to consider alternative local sites, but none are considered viable development options.

A range of site specific alternatives to the proposed wood yard development have been considered in this report in order to find the best option, with the least environmental impact.

9.2 Conclusions

9.2.1 It remains the case that the proposed wood storage yard is the most environmentally friendly, viable and practical development option to ensure a consistent and reliable supply of wood waste to the permitted REGF.

10 CUMULATIVE EFFECTS

10.1 Introduction

10.1.1 Schedule 4 of the EIA Regulations 2011 relates to information for inclusion in environmental statements and requires;

*A description of the likely significant effects of the development on the environment, which should cover the direct effects and any indirect, secondary, **cumulative**, short, medium and long term, permanent and temporary, positive and negative effects of the development...*

10.1.2 In addition to the above requirements, planning policies contained within the Northamptonshire Local Development Framework also require consideration of the 'cumulative effects' of development. The main policies are outlined below.

10.1.3 Policy 22 of the Northamptonshire Minerals and Waste Local Plan seeks to minimise the impacts of new waste development.

10.1.4 The Northamptonshire Local Development Framework requires that proposals for waste management development avoid unacceptable cumulative effects associated with past, present and future operations. Accordingly, assessments of the potential cumulative effects of the proposal were considered in detail in Chapter 10 of the ES.

10.2 Assessment Methodology

10.2.1 The assessment methodology is set out in full in the ES and not repeated in this ES Addendum. Instead, this Chapter focusses on consideration of the potential impacts arising from the revised site layout.

Consideration of the Potential Impacts

10.2.2 The potential level of objectionability for each area of potential impact was outlined in the EA with careful regard to the subject specific technical/professional reports of the various specialists appended to this statement and contained in the Appendices of the Environmental Statement. The revised Assessments are contained in this ES Addendum and, where applicable, in the Appendices. A summary of the updated assessment findings is set out below, along with and an assessment of the level of objectionability.

Landscape and Visual Impact Appraisal (LVIA)

10.2.3 The potential landscape and visual impacts of the proposal are set out in detail within the LVIA report (Appendix 6 in the ES). The updated LVIA confirms there are no substantive adjustments to the significance of effects upon landscape character as a result of the revised site layout. The reduction in land take, and reduction of negative features is considered to be positive in principle and the mitigation remains effective. It is considered that the cumulative impacts of the revised study area, the REGF complex and the existing sand and gravel quarry at Husbands Bosworth remain as previously assessed. The landscape and visual impact is not considered to be close to a threshold of acceptability.

Drainage and Flood Risk Assessment

10.2.4 A Flood Risk and Drainage Report was attached at Appendix 5 of the ES. An updated Report is attached as Appendix 3 of this ES Addendum. It remains the conclusion that drainage and flood risk will not give rise to significant adverse effects, taking into account the impacts from the existing Pebble Hall developments. This conclusion has been reached having regard to the extent of all proposed developments and all existing and proposed hardcored areas. Therefore, for the purposes of cumulative impact assessment, the risk of flood as a result of the development is not considered to be close to a threshold of acceptability.

Ecology

10.2.1 The potential ecology impacts of the proposal are considered in the Phase 1 Habitat report (Appendix 8 of the ES). This concludes that:

Due to the distance between the proposed development area and designated nature conservation sites in the local area it is considered highly unlikely that there will be any adverse effects on these sites as a result of the works. Therefore no recommendations in relation to designated sites are made.

10.2.2 There is no change as a result of the revised site layout. For the purposes of cumulative impact assessment, the risk of unacceptable ecology impacts as a result of the development are not considered to be close to a threshold of acceptability.

Noise

10.2.3 The potential noise impacts of the proposal are considered in the Noise Assessment report (Appendix 4 of the ES). The Noise Assessment has been updated to take account of the revised site layout and concludes, in terms of cumulative impact that even when considered with other operations at Pebble Hall, the overall noise levels are at an acceptable level and below the noise limit set by Condition 20 of the REGF planning permission.

10.2.4 In conclusion, the Addendum Noise Assessment states:

Noise levels associated with the additional operations have been calculated and combined with the noise levels calculated previously for the TAD and REGF to evaluate the cumulative noise levels from the site. The calculated noise levels have been assessed against noise limits for daytime operations based upon the requirements of Condition 20 of the REGF planning permission, which demonstrated that noise levels from the combined operation, including shredding, would remain below the noise limits.

The proposed shredding operation would therefore give rise to acceptable noise levels at surrounding properties, thus ensuring that any potential adverse effects were minimised.

10.2.5 For the purposes of cumulative impact assessment, the risk of unacceptable noise impacts as a result of the development are not considered to be close to a threshold of acceptability.

Air Quality

- 10.2.6 The potential air quality impacts of the proposal are considered in the Dust Assessment (Appendix 3 of the ES). This concludes that the introduction of the wood yard extension will significantly reduce the fugitive dust emissions compared to existing, consented activities associated with the reception, storage and shredding of recycled wood. The preparation of fuel for the REGF will require much coarser feedstock than those already employed on site. Therefore, the dust generated from the operations should considerably reduce. The site layout revisions do not alter the conclusions of the original assessment.
- 10.2.7 For the purposes of cumulative impact assessment, the risk of unacceptable air quality impacts as a result of the development are not considered to be close to a threshold of acceptability.

Archaeology

- 10.2.8 The potential archaeological impacts of the proposal are set out in detail within the archaeological report (Appendix 7 of the ES and updated accordingly in Section 7 of this ES Addendum). The absence of archaeological deposits at the site indicates that there will be no change to the archaeological remains within the site or surroundings. The operational impact is, therefore, considered to be nil and no further mitigation is required. For the purposes of cumulative impact assessment the potential archaeological impacts of the development are not considered to be close to a threshold of acceptability.

Agricultural Land Quality

- 10.2.9 The potential impacts on Agricultural Land Quality have been considered in the Agricultural Land Classification Assessment, included in Appendix 2 of the EA. The revised site layout has the effects of reducing agricultural land take and overall, the potential impacts upon agricultural land quality are not close to the thresholds of acceptability.

Traffic

- 10.2.10 The revised site layout marginally reduces the quantity of material stored on the proposed wood yard. This has a marginal impact on traffic levels and the original conclusion that the potential traffic impacts are not close to the thresholds of acceptability remains the case.

Odour

- 10.2.11 The potential odour impacts have been considered and it has been concluded that the odour produced from timber processing is extremely low. In addition, no additional wood waste will be imported to the site over that which has been granted planning permission for the REGF. Revisions to the site layout do not impact on the potential for odour impacts. Therefore, it is concluded that the potential odour impacts are not close to the thresholds of acceptability.

Conclusions on the Potential Impacts

- 10.2.12 In terms of individual areas of potential impact, it is concluded that there would be no objectionable environmental impacts arising from the proposed, amended layout. None of the potential environmental impacts are considered to be close to thresholds of acceptability and therefore make no significant contribution to cumulative harm, either

when considered in isolation or when considered with the existing and future developments at Pebble Hall.

10.3 Assessment of the Combination of Potential Impacts

10.3.1 The assessment of the combination of potential impacts is not affected by the revised site layout.

10.4 Assessment of Potential Positive Effects

10.4.1 The benefits of the proposal set out in Section 10 of the ES are considered to combine to provide a significant positive effects.

10.5 Overall Conclusions on Cumulative Effects

10.5.1 The original and updated assessment works has concluded that no unacceptable successive or simultaneous effects are likely to occur as a result of the development of the proposal.

10.5.2 In terms of the combined effects from the same development, it is considered that none of the environmental matters are close to being unacceptable. It is therefore concluded that, because none of the individual environmental areas are nearly unacceptable, the totality will not be cumulatively unacceptable.

10.5.3 In light of the above it is concluded that the lack of a cumulative effect of the proposal means that the Council should not object to the proposal on the basis of cumulative effect.

11 SUMMARY AND CONCLUSIONS

Summary

- 11.1.1 In conclusion, since the REGF biomass facility was granted planning permission in 2015, new guidance has been issued by the Environment Agency on Fire Prevention Plans (V2, March 2015 and further revised in July 2016). All operators need to comply with this guidance in order to gain an environmental permit. The guidance is intended to make the storage of material safer and requires operators to store wood waste in smaller piles of material, instead of one large pile, and to provide the separation distances between the piles of material.
- 11.1.2 Welland Waste Management therefore require a larger area than that which was already permitted at Pebble Hall Farm in order to store similar quantities of waste wood waste which will be used as fuel for the REGF.
- 11.1.3 The application seeks does not seek any increase in annual tonnage inputs to the site; 72,000 tonnes per annum were approved in the planning permission for the REGF. Also, it only seeks permission for the life of the REGF at Pebble Hall.
- 11.1.4 This Environmental Statement and ES Addendum, in accordance with the EIA Regulations 2011, has considered the main potential environmental effects of the proposal and has concluded that, subject to the imposition of conditions to secure appropriate mitigation measures, no unacceptably adverse impacts will arise from the proposed wood yard development.
- 11.1.5 The conclusions of the ES are not altered by this ES Addendum. It remains the case that the revised site layout, and operations thereon, will not give rise to unacceptable environmental effects and that the potential benefits of the scheme are substantial such that they clearly outweigh any negative harm that might result from the proposal. In this regard the proposal accords with the relevant policies in the Development Plan, National Planning Policy Framework and wider government policy and guidance.

APPENDIX 1: Fire Prevention Guidance (July 2016)

APPENDIX 2 Noise Assessment

APPENDIX 3: Flood Risk and Drainage Assessment

APPENDIX 4: Landscape and Visual Impact Assessment

APPENDIX 5: Trial Trenching Report

APPENDIX 6: Justification Resume