PLANNING APPLICATION FOR A PROPOSED WESTERN EXTENSION TO THE EXISTING COLLYWESTON QUARRY

PLANNING AND ENVIRONMENTAL STATEMENT

May 2014
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Executive Summary</td>
<td>1</td>
</tr>
<tr>
<td>2 Introduction and Background to Proposal</td>
<td>3</td>
</tr>
<tr>
<td>2.1 Purpose of this Report</td>
<td>3</td>
</tr>
<tr>
<td>2.2 The Applicant and Collyweston Quarry</td>
<td>9</td>
</tr>
<tr>
<td>2.3 Planning History</td>
<td>9</td>
</tr>
<tr>
<td>2.4 Summary of the Proposals</td>
<td>10</td>
</tr>
<tr>
<td>3 Community Consultation</td>
<td>12</td>
</tr>
<tr>
<td>3.1 Introduction</td>
<td>12</td>
</tr>
<tr>
<td>3.2 Parish Council Meeting 1&lt;sup&gt;st&lt;/sup&gt; November 2014</td>
<td>12</td>
</tr>
<tr>
<td>3.3 Public Information Exhibition (PIE) 06&lt;sup&gt;th&lt;/sup&gt; March 2014</td>
<td>13</td>
</tr>
<tr>
<td>4 Site Location and Setting</td>
<td>16</td>
</tr>
<tr>
<td>4.1 Site Location</td>
<td>16</td>
</tr>
<tr>
<td>4.2 Site Setting</td>
<td>16</td>
</tr>
<tr>
<td>5 Geology</td>
<td>18</td>
</tr>
<tr>
<td>6 The Proposed Development - Detailed Working, Design and Restoration Scheme</td>
<td>20</td>
</tr>
<tr>
<td>6.1 Introduction</td>
<td>20</td>
</tr>
<tr>
<td>6.2 Method of Working of Extension Area</td>
<td>20</td>
</tr>
<tr>
<td>6.3 Access and Transport</td>
<td>24</td>
</tr>
<tr>
<td>6.4 Plant Complement</td>
<td>24</td>
</tr>
<tr>
<td>6.5 Hours of Operation</td>
<td>25</td>
</tr>
<tr>
<td>7 Planning Policy Context</td>
<td>28</td>
</tr>
<tr>
<td>7.1 Introduction</td>
<td>28</td>
</tr>
<tr>
<td>7.2 The Main Planning Policy Considerations</td>
<td>29</td>
</tr>
<tr>
<td>8 Need and Mineral Supply Considerations</td>
<td>32</td>
</tr>
<tr>
<td>8.1 Local Policies for Limestone Supply</td>
<td>32</td>
</tr>
<tr>
<td>8.2 National Policy</td>
<td>33</td>
</tr>
<tr>
<td>8.3 Potential Material Considerations</td>
<td>34</td>
</tr>
<tr>
<td>8.4 The Benefit of continued supply of Collyweston Limestone</td>
<td>35</td>
</tr>
<tr>
<td>8.5 Conclusions on the Need for Continued Future Supply of Collyweston Limestone</td>
<td>36</td>
</tr>
<tr>
<td>9 Environmental Impact Assessment</td>
<td>37</td>
</tr>
<tr>
<td>9.1 Introduction</td>
<td>37</td>
</tr>
<tr>
<td>9.2 Landscape and Visual Impact Considerations</td>
<td>39</td>
</tr>
<tr>
<td>Section</td>
<td>Title</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>12.5</td>
<td>Socio Economic Policy Issues</td>
</tr>
<tr>
<td>12.6</td>
<td>Assessment of the development proposal and its implications for future economic and social conditions</td>
</tr>
<tr>
<td>12.7</td>
<td>Conclusions</td>
</tr>
<tr>
<td>13</td>
<td>Conclusions</td>
</tr>
</tbody>
</table>

APPENDIX 1 – Scoping Opinion from Northamptonshire County Council

APPENDIX 2 – Non Technical Summary

APPENDIX 3 – Planning Policy

APPENDIX 4 – Waste Catchment Area Plan
1 Executive Summary

1.1.1 A planning application was originally submitted to Northamptonshire County Council in August 2013. However, after negotiations with the Council, Bullimores temporarily withdrew the application whilst some further assessment work was carried out, along with the clarification of a number of points raised by Council Officers. Additionally, Bullimores have carried out further public consultation which has led to some careful consideration and assessment of the matters raised by local residents.

1.1.2 This revised planning application seeks planning permission for a western extension to the existing Collyweston Quarry. The extension would release 2 million tonnes of saleable limestone aggregate to replace the permitted reserves contained in the eastern extension of the quarry, currently being worked under planning permission reference EN/06/1278C. The geological conditions in permission area EN/06/1278C are now at a point where it is becoming un-economic to continue extraction, thus creating a need for a replacement area of extraction at Collyweston Quarry.

1.1.3 Limestone aggregate from Collyweston currently supplies between one third and half of the overall 0.39 mtpa crushed rock apportionment identified within Policy CS5 of the Northamptonshire Minerals and Waste Development Framework (MWDF) Core Strategy. Current working in the eastern extension is becoming uneconomic due to the amount of overburden encountered. This application contains a similar extent of reserve to that already permitted from the eastern extension. If permission is not granted for the proposed western extension, Collyweston limestone will no longer be able to contribute to the County’s crushed rock requirements.

1.1.4 The application is accompanied by a comprehensive restoration plan which provides a co-ordinated approach for the site as a whole (including all worked and proposed working areas). The land is to be restored primarily to agricultural use, along with the reinstatement of hedgerows and hedgerow trees, which will contribute to local biodiversity in the field boundaries.

1.1.5 This Planning and Environmental Statement includes Technical Appendices containing specialist technical reports. A Non-Technical Summary is also included.
1.1.6 The site has been subject to environmental impact assessment to establish the most environmentally acceptable scheme. Any potential for adverse impacts arising from the operations can satisfactorily be mitigated and controlled by the imposition of planning conditions.

1.1.7 In overall terms, the proposal is considered to comply with the main tests of policy contained within the Northamptonshire Minerals Core Strategy and would secure the long term supply of limestone and Collyweston “slate log” provision within the County.
2 Introduction and Background to Proposal

2.1 Purpose of this Report

2.1.1 This document is the Planning and Environmental Statement, on behalf of Bullimores Sand and Gravel Ltd (The Company), for the proposed extension to the west of the existing Collyweston Quarry. This Planning and Environmental Statement accompanies the planning application and considers the main potential environmental and local amenity impacts of the proposed development. It includes Technical Appendices containing specialist technical reports.

2.1.2 A planning application was originally submitted to Northamptonshire County Council in August 2013. However, after negotiations with the Council, Bullimores temporarily withdrew the application whilst some further assessment work was carried out, along with the clarification of a number of points raised by Council Officers. Additionally, Bullimores have carried out further public consultation which has led to some careful consideration and assessment of the matters raised by local residents.

2.1.3 Therefore this revised planning application, in terms of further work/clarification/consideration of matters raised by the Council, statutory consultees and local residents includes the following:

*Working Method Statement (WMS)*

2.1.4 Local residents have raised some concerns regarding potential blasting from quarrying operations at the proposed Western Extension to Collyweston Quarry. Therefore, a WMS has been developed (Technical Appendix 1) in order to clarify the proposed method/system of working of the proposed western extension.

2.1.5 It is Bullimore’s intention not to blast and to help achieve the Company’s objective to minimise and reduce vibration and potential disturbance to acceptable levels, Bullimores propose to work the western extension using a 45 tonne excavator rather than a lower capacity machine. Whilst the Company considers this will minimise the need for blasting, there is always some potential that they might need to carry out some limited quarry blasting if they were to encounter particularly hard or consolidated limestone material.
2.1.6 Therefore, in terms of potential blasting, the WMS includes a Blast Management Plan (BMP). In formulating this BMP various approaches adopted elsewhere overseas and in the UK have been looked at as well as taking on board issues and concerns raised by local residents and the Council. Blasting experts Vibrock who produced the Blasting Assessment contained at Technical Appendix 2 to this Planning and Environmental Statement were also consulted on the content of the WMS.

2.1.7 The objective of the BMP is to ensure blasting activities are carried out in order to minimise any public concerns in relation to ground vibration and air blast overpressure whilst enabling effective, efficient extraction and processing of limestone and slate log.

Archaeology

2.1.8 Following the submission of the original planning application and a meeting with Northamptonshire County Council on 25th September 2014, the County Archaeologist requested that in order to assess the potential for heritage assets within the site it would be appropriate to test this potential by the use of geophysical survey.

2.1.9 Stratascan were commissioned to carry out a geophysical survey of the proposed western extension with the work undertaken in February 2014. The geophysical survey is attached at Technical Appendix 10, Appendix B with the findings summarised in section 9.9 of this Planning and Environmental Statement.

Noise

2.1.10 In terms of noise, following feedback received from the Council and local residents, Vibrock have looked again at their noise assessment and have revised their report taking account of the following:

- The proposed method of working set out in the WMS;
- The incorporation of ‘white noise’ reversing alarms to the mobile plant within the existing quarry development area;
- The potential for noise of plant and vehicles operating in the proposed western extension to bounce off or be reflected off the eastern backwall of the quarry extension; and
• New National Planning Policy Guidance (NPPG) regarding the potential for high levels of peak noise.

2.1.11 The revised noise assessment is attached at Technical Appendix 6 with the findings summarised in section 9.7 of this Planning and Environmental Statement.

Dust and Air Quality

2.1.12 In terms of dust and air quality, local residents have sought clarification with regards the prevailing wind of the area and the susceptibility of neighbouring activities to dust dispersal.

2.1.13 The Air Quality Assessment submitted as part of this planning application (Technical Appendix 7) has been updated to take account of this issue with the findings summarised in section 9.5 of this Planning and Environmental Statement.

The Impact on Water Resources

2.1.14 Following submission of the original planning application in August 2013, the Environment Agency (EA) considered the submitted Flood Risk Assessment, Water Management Report and the Planning and Environmental Statement. This led to a request for some further information in order to clarify pre and post restoration levels with regards to run off (Technical Appendix 9, Appendix B).

2.1.15 Rob Harper of Watermill Environment Ltd emailed the EA on 7th November 2013 providing a suggested revision to the Water Management Report in order to clarify and agree the requested information (Technical Appendix 9, Appendix C). The EA responded by letter dated 20th November 2013 (Technical Appendix 9, Appendix D) confirming that the survey data is adequate and the revised wording appropriate.

2.1.16 The revised Water Management Strategy is attached at Technical Appendix 9, Appendix A with the findings summarised in section 9.7 of this Planning and Environmental Statement.

Landscape and Visuals

2.1.17 Following the submission of the original planning application and a meeting with Northamptonshire County Council on 25th September 2014, it was discussed that the western extension application provides an excellent opportunity for the submission of a comprehensive restoration scheme that extends to all of the site,
including the previously worked areas, the eastern and the proposals for the western extensions.

2.1.18 Therefore as part of this resubmission, an Overall Landscape Restoration Plan (Drawing No. 5526-L-03 Rev. C) is submitted, contained in the Landscape and Visual Impact Assessment attached at Technical Appendix 4, Appendix A. The key objectives of the Landscape Restoration plan draw upon the LVIA and ecological work undertaken and the issues and considerations highlighted as part of the consultation process to date and present a balanced approach to the restoration of the site.

2.1.19 Furthermore, in response to comments received on the original application and feedback from the Public Information Exhibition (PIE) held in Duddington Parish Hall on 6th March 2014, a Visual Appraisal Addendum has been prepared (Technical Appendix 4, Appendix B). This addendum specifically addresses concerns raised about the potential views towards the proposed western extension from properties on Green Lane (on the eastern side of Duddington). This addendum also includes a note addressing other matters raised by local residents.

Public Rights of Way

2.1.20 Following submission of the original planning application, a consultation response received from Northamptonshire Highways revealed that the dashed lines showing the public rights of way plan submitted as part of the application were slightly wrong.

In light of this drawing HPL/COLLY/004 has been amended in line with the Definitive Map provided by the Council.

Catchment Area – Waste Imports

2.1.21 The Council have requested an indicative catchment area plan showing the areas from where waste would be imported. A plan showing the catchment area of where inert waste is imported from is attached as Appendix 4 to this Planning and Environmental statement.

Local Geological Site

2.1.22 The Council have requested clarification of the details and location of the Collyweston Local Geological Site (previously Regionally Important Geological Site
(RIGS)). Heaton Planning contacted Northamptonshire Biodiversity Records Centre for information and the received details are attached at Technical Appendix 3, Appendix A.

**Working Hours**

2.1.23 Further to meetings with the Council and responses received from local residents, Bullimores have agreed to revise the proposed working hours from that submitted as part of the original planning application. The proposed working hours are now 0700-1800 Monday to Friday with Saturday mornings 07.30-13.00. Furthermore, Bullimores can confirm that no soil stripping operations will take place on a Saturday.

**Background**

2.1.24 An eastern extension to the quarry was granted planning permission on 2nd November 2006 – reference EN/06/1279C. This provided for an additional area of extraction with backfilling and restoration facilitated by the importation of inert waste.

2.1.25 The eastern extension was planned on the basis of an annual production rate of around 250,000 tonnes of limestone aggregate per annum, which was reflective of production rates prior to 2006. Quarrying operations in this eastern extension commenced in Autumn 2009. To date, approx 500,000 tonnes of rock have been extracted resulting in the production and supply of 360,000 tonnes of aggregate limestone across the last 3 years. The “wastage” factor in processing the rock is of the order of 25-30%, which results in the creation of limestone fines waste – used in site restoration. Based on the original estimate of the eastern extension containing a total of 3 million tonnes of rock, around 2.5 million tonnes of limestone remains in this area. Given the wastage factor, the eastern extension has the remaining potential to produce just less than 2 million tonnes of limestone aggregate. This equates to approximately 15 years supply at current supply rates of around 120,000 tonnes per annum or 7-8 years supply at the originally planned rate of aggregate production.

2.1.26 Aggregate production levels are currently suppressed due to the effects of the economic recession and it is assumed that demand for construction aggregates will increase with the onset of increased construction activity.
2.1.27 As workings have progressed in the eastern extension during the last 3 years, increasing thicknesses/quantities of overburden have been encountered by the Company. These geological conditions, combined with the escalating costs of overburden removal (to access the rock) are now reaching a point where it has become un-economic to continue to extract from this area. Therefore, in order to sustain limestone aggregate supply, as well as the supply of building stone and the specialist Collyweston “slate log” from Collyweston Quarry, the Company needs to access more economically viable limestone reserves.

2.1.28 The Company has carried out extensive geological exploration and analysis and has identified potentially workable and viable limestone reserves to the west of the existing quarry and backfilling operations. The Company considers there is good potential to extract and produce limestone aggregate and building stone, along with the potential to recover Collyweston Slate Log from this area. The overburden depths are significantly less than in the eastern extension area where workings are currently taking place.

2.1.29 The Company therefore considers it reasonable that the western extension will most likely sustain aggregate and building stone/slate log supply for a further 10-13 years approximately – i.e. based on average production levels of 150,000 to 200,000 tonnes per annum.

2.1.30 Given that the actual mineral reserves are similar, the Company is now proposing to switch extraction and mineral supply from the eastern extension area of working to a new western extension, thus giving up the un-economic mineral reserves in the existing permitted extension, in exchange for the ability to extract and supply minerals from a new, viable western extension. In doing so there would, effectively, be a swap of permitted mineral reserves amounting to around 2 million tonnes of saleable aggregate, along with a proportion of building stone and the specialist Collyweston Slate Log. The western extension is therefore needed in order to sustain and maintain a viable mineral supply from Collyweston Quarry, as envisaged by the minerals policies for Northamptonshire and the previous planning permission for the eastern extension to the quarry.

2.1.31 Revised restoration contours for the original quarry submitted by Bullimores were deemed acceptable by the Council in August 2013. The revised contours reflect the raising of levels above original levels as a consequence of the excess overburden now being generated by the eastern extension area.
2.1.32 There is upon completion of working and restoration a requirement to restore the site access under the conditions of the permission for the original quarry. However, the company proposes the continued use of this access as part of the western extension proposals.

2.2 The Applicant and Collyweston Quarry

2.2.1 The Company has been supplying aggregates to the building and construction industry for well over 50 years. The Company has a wide customer base, which includes Northamptonshire, Leicestershire, Rutland, Peterborough, Cambridgeshire, and areas of East Anglia.

2.2.2 Collyweston Quarry is located off the A47 trunk road to the east of the village of Duddington. The Quarry is well located in relation to the strategic highway network and has easy access to the A47, A43 and A1. The Quarry is therefore an important element of the Company’s aggregate supply business and the site has been one of the most important limestone aggregate supply sites in Northamptonshire since the early 1980’s

2.2.3 Collyweston Quarry produces limestone aggregate from the Lincolnshire Limestone, which is the better quality limestone present in Northamptonshire. It has superior quality over the Blisworth Limestones, which tend to be softer and have limited use in construction works.

2.2.4 Collyweston Quarry not only produces crushed limestone rock aggregate, but also produces quantities of building stone as well as the particularly scarce “Collyweston Slate Log”. The Collyweston Log is used as a roofing material on specialist building conservation projects and can often be found on local Listed Buildings and in local Conservation Areas.

2.3 Planning History

2.3.1 Limestone extraction at Collyweston Quarry has been carried out for a number of decades. Operations have been more active since the grant of planning permission by Northamptonshire County Council in the early 1980s. Permission was granted for the extension of limestone quarry and backfilling with inert waste under planning permission reference EN/88/809C. The continuation of inert filling of quarry void was permitted by 92/00434/CRA. On 4th February 1999, permission was granted for
an extension in time of planning permission EN/88/809C for continued quarrying operation (Ref: EN/98/374C).

2.3.2 A southern extension to the original quarry was granted planning permission by Northamptonshire County Council on 14th December 1998. This permission – reference EN/97/802C – provided for the continued extraction of limestone and backfilling of the quarry with inert waste materials.

2.3.3 An eastern extension to the quarry was granted planning permission on 2nd November 2006 – reference EN/06/1279C. This provided for an additional area of extraction with backfilling and restoration facilitated by the importation of inert waste.

2.4 Summary of the Proposals

2.4.1 The area assessed for the western extension is approximately 17.11 hectares in area. Within this area a potential extraction area of 16.07 hectares has been identified – based on the rock depths and overburden depths and the overall contours of the land. The geological assessment has indicated that this potential extraction area contains approximately 3 million tonnes of rock and has the potential to supply around 2 million tonnes of aggregate. Aggregate production from the quarry is still planned to supply approximately 200,000 tonnes of aggregate per annum. Assuming a return to this level of production, the western extension is capable of maintaining supply for approximately 8 years. Recent production/supply levels from Collyweston Quarry have been between 100,000 and 150,000 tonnes per annum. There is likely to be a progressive return to past production levels of approximately 200,000 tonnes per annum as economic recovery and an increase in construction activity occurs – based on considerable planned growth and development in the region, particularly housing development.

2.4.2 This proposed extension will replace the remaining permitted reserves contained in the eastern extension of the quarry that is currently being worked under planning permission reference EN/06/1278C. The company considers that the proposed western extension will most likely sustain mineral supply from Collyweston Quarry for a further 10-13 years approximately.

2.4.3 It is clear from borehole information in the proposed extension that a substantial proportion of the available limestone reserve can be removed without the need for
blasting. Therefore, Bullimores propose to work the western extension using a 45 tonne excavator rather than a lower capacity machine.

2.4.4 Whilst the Company considers this will minimise the need for blasting, there is always some potential that they might need to carry out some limited quarry blasting if they were to encounter particularly hard or consolidated limestone material.

2.4.5 A WMS has been developed (Technical Appendix 1) in order to clarify the proposed method/system of working of the proposed western extension.

2.4.6 The proposed extension is to be worked over eleven phases with a comprehensive restoration scheme forming part of the planning application with the land being restored to agricultural use, along with the reinstatement of hedgerows and hedgerow trees, which will contribute to local biodiversity in the field boundaries.

2.4.7 The extension to the quarry would not only ensure the continued supply of important aggregates, building stone and slate log, but would also ensure the continued employment for 8 quarry operators, the quarry manager and 8-10 full time HGV drivers. The quarry is considered to be an important local, rural source of employment.

2.4.8 Further details of working are contained in section 6 of this environmental statement.
3 Community Consultation

3.1 Introduction

3.1.1 As part of the scoping exercise and in the preparation of the original planning application, Bullimores carried out consultation with the Parish Council.

3.1.2 Following withdrawal of the original planning application, in preparation for resubmission, the strategy for community consultation has been to inform stakeholders, including the local community, of the proposals, understand the local community’s aspirations/expectations and concerns for the site and seek their feedback on proposals. The consultation strategy has been designed so as to meet and exceed the requirements of relevant planning policy and legislation, demonstrating good practice.

3.1.3 The consultation strategy has included two main events; attendance at a Parish Council meeting on 1st November 2013 and a Public Information Exhibition (PIE) held on 6th March 2014. The attendance at the Parish Council meeting was undertaken first as an information gathering exercise, where Bullimores and Heaton Planning could outline the current position regarding the Planning Application and to discuss some of those matters that are of concern to local residents. This was considered a necessary stage before presenting revised proposals to the wider community at the PIE. The PIE sought feedback on revised proposals prior to the revised planning application being submitted.

3.2 Parish Council Meeting 1st November 2014

3.2.1 Bullimores along with Heaton Planning attended a parish council meeting on 1st November 2013 in Duddington Parish Hall. As discussed above, the position of the Planning Application was discussed along with matters that were of concern to local residents.

3.2.2 It was explained at the meeting that the application was temporarily withdrawn to enable the carrying out of some further assessment work on a number of aspects and also to clarify a number of points raised by Council Officers. Additionally, in this work some careful consideration and assessment of the matters discussed at the meeting with local residents would be carefully considered.
3.2.3 It was clear that the biggest area of concern to the local residents related to the potential impact of blasting and the related considerations concerning the most effective method of extraction of limestone and the need to minimise impact on residential amenity. It was therefore confirmed that Bullimores would undertake some further work on this.

3.2.4 It was confirmed that as a follow up to the meeting it was Bullimore’s intention to carry out some further assessment work and consideration of the scheme of working, with a view to establishing the best option or mix of options that will allow effective mineral recovery whilst minimising impact on the local community. This work has resulted in the production of a Working Method Statement (Technical Appendix 1).

3.2.5 It was stressed that Bullimore’s approach to this work is influenced by a combined commercial and environmental desire to absolutely minimise the amount of hydraulic breaking and blasting that is undertaken. Bullimore’s approach will therefore be built around these considerations and they will look at all potential means of minimising any potential impact and maintaining good relations with their neighbours.

3.2.6 It was confirmed that another meeting would be arranged in the new year to outline and clarify Bullimore’s approach prior to re-submitting the Planning Application to Northamptonshire County Council.

3.3 Public Information Exhibition (PIE) 06th March 2014

3.3.1 The PIE was held on 6th March 2014 from 4pm to 8pm at Duddington Parish Hall.

3.3.2 The exhibition material was displayed on boards that could be viewed by the public, with representatives from Bullimores and Heaton Planning on hand to answer questions about the proposals. Pictures of the exhibition boards are outlined below. Comments forms were also available for people to fill in and leave at the exhibition, or send on by post or email.

3.3.3 Furthermore, a draft WMS was provided as a handout for attendees which outlined the mix of options that will allow effective mineral recovery whilst minimising impact on the local community.
3.3.4 The following considers the feedback received from the PIE with reference to issues raised by attendees and how the proposals have evolved in response to the feedback.

**Blasting**

- Consider whether the ground vibration limit could be reduced; and
- Consider receiving independent advice/input from specialists in terms of the working method statement

3.3.5 In response to these points, as set out in the WMS attached at [Technical Appendix 1](#), the ground vibration limit has been reduced to 6 mms\(^{-1}\) from the previously proposed 10 mms\(^{-1}\). Blasting experts Vibrock who produced the Blasting Assessment contained at [Technical Appendix 2](#) to this Planning and Environmental Statement were consulted on the content of the blast assessment and their input and advice has been included.

3.3.6 As set out in the WMS, the objective of the BMP is to ensure blasting activities are carried out in order to minimise any public concerns in relation to ground vibration and air blast overpressure whilst enabling effective, efficient extraction and processing of limestone and slate log.

**Visuals/Screening**

- Residents of a small number of properties alleged that they can see up the valley into the quarry and would be able to see the working face of the proposed western extension even with the proposed bunding in place. Bullimores’ assured the residents that this issue would be looked into in some detail and options were discussed with Phil Watson of...
In response to these issues, Bullimores have incorporated ‘white noise’ reversing alarms to the mobile plant within the existing quarry development area.

Furthermore, in terms of the potential for noise to bounce or be reflected off the eastern backwall, Vibrock were commissioned to look at this issue and review their noise assessment which was submitted as part of the original application. The revised noise assessment is attached at Technical Appendix 6 with the findings summarised in section 9.7 of this Planning and Environmental Statement.

Re-Submission

Look to provide a good response to the community engagement. At resubmission stage could provide the Parish Council with information which shows what the company has done in response to the local concerns.

In response to this, Heaton Planning on behalf of Bullimores have provided the Parish Council with a letter outlining the main details of the application along with how the proposals have evolved in response to the feedback received from the PIE and further correspondence with local residents.
4 Site Location and Setting

4.1 Site Location

4.1.1 The existing quarry lies approximately 500 metres to the east of Duddington village in Northamptonshire, as shown on drawing reference HPL/COLLY/001.

4.1.2 The proposed quarry extension area (to replace the remainder of the eastern extension) is located on land to the west of the existing quarry and backfill operations. The area of land identified on drawing reference HPL/COLLY/002 – measures approximately 17.11 hectares.

4.1.3 Quarrying is currently taking place in the eastern quarry extension area, covered by planning permission EN/06/1279C.

4.1.4 The proposed extension area is currently in agricultural use. The land slopes from a high point of approximately 80 m AOD at its boundary with the existing quarry site down to approximately 66-72m AOD at its western edge.

4.1.5 The extension area falls within the administrative boundary of East Northamptonshire District Council.

4.2 Site Setting

4.2.1 Access to the quarry is gained via an access off the A47 (T) situated to the north-east of Duddington village. A hard surfaced internal haul road runs in a north to south alignment to access the quarry workings, which are located over 1 km (approx) to the south of the access.

4.2.2 The A43 road is situated approximately 100 metres to the west of the identified extension area. The A43 is in cutting along this section adjacent to Duddington Village. The edge of the residential area of Duddington village is approximately 250 metres to the west of the western edge of the identified area. To the south lies agricultural land. To the north is the A47 (T) road.

4.2.3 The closest properties are located on the eastern edge of Duddington approximately 250m from the extension area. The properties are well screened by existing mature vegetation either side of the A43 cutting and by screening bunds next to the internal access road. An agricultural smallholding – which appears to be the nearest building to the potential extension area shown on the OS plan base - is
situated approximately 50 metres to the west of the western boundary of the area of land identified on Drawing No. HPL/COLLY/002 - towards the southern end of the area identified, but this has been confirmed to be unoccupied.

4.2.4 The area surrounding Collyweston Quarry is predominantly agricultural with mixed arable crops. The Collyweston Great Wood and Easton Hornstocks National Nature Reserve (NNR) and Site of Special Scientific Interest (SSSI) are located 750 east of the extension area. The reserve consists mainly of ancient woodland dominated by small-leaved lime trees. Birch, oak and ash are also common, and added interest is provided by open glades, rides and clearings.

4.2.5 There are a number of public rights of way that lie within or immediately adjacent to the proposed western extension. These are shown on the Plan of Public Rights of Way (HPL/COLLY/004) as being – rights of way numbers: MX12; MX14; MX17; and, MX18.

4.2.6 There are no known land-use activities sensitive to mineral development surrounding the site and no industrial or commercial manufacturing activity.

4.2.7 The existing quarry processing area, involving mobile plant and machinery, is sited in the base of the main area of quarry working, which currently is in the eastern quarry extension area. As part of a western quarry extension the quarry plant would be sited in the base of the proposed workings.
5 Geology

5.1.1 The underlying geology is mainly limestone of Jurassic age. The British Geological Survey (BGS) 1:50,000 online mapping records the surface bedrock within and around the study site as Limestone of the Lower Lincolnshire Limestone Member (mapapps.bgs.ac.uk). Quarrying has been a feature of the area for many centuries for the extraction of limestone for building and previously ironstone for the local iron industry.

5.1.2 Adjoining the proposed quarry extension is the existing quarry, Collyweston Quarry Local Geological Site (previously Regionally Important Geological Site (RIGS)) and 0.2km to the east within the quarry is a geological exposure designated as a Local Geological Site. Details of the Collyweston Quarry Local Geological site have been received from Northamptonshire Biodiversity Records Centre and are included at Technical Appendix 3, Appendix A.

5.1.3 Collyweston Quarry produces limestone aggregate from the Lincolnshire Limestone, which is the better quality limestone present in Northamptonshire. It has superior quality over the Blisworth Limestones, which tend to be softer and have limited use in construction works.

5.1.4 Collyweston Quarry not only produces crushed limestone rock aggregate, but also produces quantities of building stone as well as the particularly scarce “Collyweston Slate Log”.

5.1.5 Borehole information provided by Bullimores Sand and Gravel indicates that there are generally very shallow depths of soil and overburden above the bedrock: thicknesses of 0.3m, 0.2m or 0.1m are recorded over the majority of the site. It is only within a narrow band crossing east-west through the centre of the site that there is more than 1.0m of soil and overburden material above the bedrock. Plans are included at Technical Appendix 3, Appendix B showing the borehole information in terms of borehole locations and overburden thickness.

5.1.6 As workings have progressed in the eastern extension during the last 3 years, increasing thicknesses/quantities of overburden have been encountered in this area by the Company. These geological conditions, combined with the escalating costs of overburden removal (to access the rock) are now reaching a point where it has become un-economic to continue to extract from this area.
5.1.7 The limestone contained in the proposed western extension is of the same quality and characteristics as that in the permitted eastern extension where workings are currently taking place. However, the overburden depths are significantly less than in the eastern extension area which contains overburden of around 11m in depth compared to around 0.1-0.3m in the proposed western extension.

5.1.8 Therefore, in order to sustain limestone aggregate supply, as well as the supply of building stone and the specialist Collyweston “slate log” from Collyweston Quarry, the Company needs to access the more economically viable limestone reserves in the proposed western extension.
6 The Proposed Development - Detailed Working, Design and Restoration Scheme

6.1 Introduction

6.1.1 The proposed western extension covers an area of approximately 17.11 hectares, located to the west of the existing Collyweston quarry. The area contains an estimated 3 million tonnes of limestone rock, with the potential to realize approximately 2 million tonnes of saleable mineral. This potential western extension of the quarry is needed to maintain the supply of limestone aggregate, building stone and Collyweston Slate log from Collyweston Quarry.

6.1.2 This proposed extension will replace the remaining permitted reserves contained in the eastern extension of the quarry that is currently being worked – planning permission reference EN/06/1279C.

6.1.3 The reserves contained in the proposed western extension are broadly similar both in terms of volume/tonnage and quality as those remaining in permission EN/06/1279C. They are though overlain by much less overburden than the current eastern extension workings and are therefore considered to be economically viable, as opposed to the reserves remaining in permission EN/06/1279C, which are now proving too costly and un-economic to extract.

6.1.4 The proposed extension is to be worked over eleven phases with a comprehensive restoration scheme forming part of the planning application with the land being restored to agricultural use, along with the reinstatement of hedgerows and hedgerow trees, which will contribute to local biodiversity in the field boundaries.

6.1.5 A WMS has been developed (Technical Appendix 1) in order to clarify the proposed method/system of working of the proposed western extension. A summary of the contents of the WMS in terms of the methods of working the proposed western extension is set out below.

6.2 Method of Working of Extension Area

Advance Works

6.2.1 To access the limestone, soils will be stripped and placed into temporary storage for later use in restoration. The soils will be placed at the perimeter of the quarry
workings to provide boundary screening. Any overburden will be stripped and placed directly as part of the backfilling and reclamation or held in temporary storage.

6.2.2 Perimeter storage bunds will be grass seeded to bind the soil to prevent any wind-blown dust arising and erosion.

6.2.3 As the proposed western extension gets progressively taken out, the restoration of the main quarry will be continuing which will lead to a net ecological balance.

6.2.4 There are a number of public rights of way that lie within or immediately adjacent to the proposed western extension. These are shown on the Definitive Map of Public Rights of Way as being – rights of way numbers: MX12; MX14; MX17; and, MX18. It is proposed to apply for a temporary diversion of these routes to facilitate the carrying out of mineral extraction, backfilling and restoration. The proposed diversion can be seen on drawing no. HPL/COLLY/004.

The Proposed Phased Working

6.2.5 The quarry extension will be worked in a phased manner from south to north. The phased approach will limit the amount of land that is stripped and quarried at any one time, and, with backfilling and placement of inert waste, will see the landform restored on a progressive basis. The proposed phased working is shown on drawing no. HPL/COLLY/003. This shows a series of 11 phases that indicates the overall progression of mineral working and restoration from south to north.

6.2.6 During soil stripping a bulldozer is used to build and shape the screening/storage mounds. A bulldozer or excavator will be used to strip the top and sub-soils and place these in storage for eventual use in restoration. For a short period, the hydraulic excavator would then be utilised to remove the mineral and load into articulated dump-trucks that operate between the extraction and processing areas. As operations progress, the material will go direct from the face into the processing plant.

6.2.7 It is clear from borehole information in the proposed extension that a substantial proportion of the available limestone reserve can be removed without the need for blasting. This is borne out by past experience at the quarry where there have been prolonged periods during which the quarry operators have avoided the use of blasting as part of the mineral extraction process. In particular, over a period of
approximately 18 months, no blasting took place. The Company confirms that the employment of a 45 tonne excavator during this period facilitated the excavation of all the available limestone, as the larger machine had the power/capacity to excavate both consolidated and less consolidated material.

6.2.8 Therefore, in light of local concerns over potential impact and to help to minimise and reduce vibration and potential disturbance to acceptable levels, Bullimores propose to work the western extension using a 45 tonne excavator rather than a lower capacity machine. The Company would accept a planning condition to formally control/require this.

6.2.9 Whilst the Company considers this will minimise the need for blasting, there is always some potential that they might need to carry out some limited quarry blasting if they were to encounter particularly hard or consolidated limestone material.

6.2.10 Based on the geology confirmed by the borehole data and taking a potential “worst case” view, a reasonable prediction would be that 50% of the limestone reserve trending to the eastern part of each phase in the extension appears from the borehole data to have the potential to be more consolidated. Looking at this from the point of view of timescales – (each proposed phase represents approximately 1 year of working) the working year is 48 weeks which means that 24 weeks in every year has some blasting potential. Potentially blasting, when carried out at Collyweston Quarry normally takes place every 2 weeks. Therefore the potential worst case based on these assumptions is around 12 blasts per year. Based on the Company’s past experience, employment of the 45 tonne excavator is likely though to reduce this worst case potential further.

6.2.11 As per the existing operation - the extraction will recover some larger, “blockier” limestone rock, which will be set aside for secondary breaking. This involves the use of a mobile hydraulic breaker for short periods annually.

6.2.12 Based on Company experience of utilising a larger machine for limestone extraction at Collyweston Quarry, such as the 45 tonne excavator, the majority of excavated limestone is capable of being fed directly into the mobile processing plant. There are however cases where harder pieces of rock require secondary breaking. In the first instance, this can usually be achieved by simply dropping the rock from the excavator bucket causing it to fracture through impact on the quarry floor. In
circumstances where this is not effective, the rock has to be set aside and then subsequently broken using a hydraulic breaker. To carry out this operation, the harder rocks are set aside and then hydraulically broken using plant brought to site for relatively short periods during a working year. Typically, previously, this might take place over a maximum of 6 weeks in a year. Given the usage of the 45 tonne excavator, it is expected that there will be a reduced volume resulting in no more than 4 weeks of hydraulic breaking in a given year.

6.2.13 Given that the breaking is generally more audible than day to day processing, the Company proposes to restrict its hours of usage to the hours of 09:00 – 15.30 on weekdays only.

6.2.14 Crushed and screened rock will produce a limestone aggregate for sale and export to construction projects. The screened limestone aggregate will be stockpiled on the quarry floor prior to sale and being transported off site.

6.2.15 The limestone aggregate will be collected from the quarry floor stockpiles by HGV’s, which will be filled using a loading shovel. The HGV’s will export the aggregate off the quarry site using the internal haul road and via the weighbridge and then wheel wash facility.

6.2.16 As per the existing operation – suitable smaller pieces of rock will be extracted from the working face for cutting and subsequent use as sized building stone.

6.2.17 Collyweston Slate Log will be extracted during suitable dry, frosty conditions in the winter months. Although the volumes/tonnages are relatively small, this material is in demand for specialist conservation projects. Recent the biggest customer has been English Heritage who purchased 80 tonnes of Slate Log in 2012 for roofing as part of the conservation work on Apethorpe Hall. During the same period, specialist masons have purchased 60 tonnes of Slate Log for conservation work on Tolethorpe Hall. Following extraction the Slate Log is set to one side for customer inspection and selection.

6.2.18 The depth of working will be consistent with that in the existing quarry, with face heights not exceeding 12 m approx. The workings lie above the local water table and are dry without any need for dewatering.
6.2.19 As the limestone extraction progresses in the extension, backfilling and infilling will be carried out on a progressive basis to reclaim the quarry and restore the land to its current landform. The backfilling will involve the use of quarry waste/fines from the process, excess clays and overburden as well as clean, inert waste imported from construction projects.

6.2.20 As the infilling/backfilling approaches final levels – reflective of the current landform – soils will be replaced to secure the final restoration and after-use. Following restoration the land will be restored to agricultural use, along with the reinstatement of hedgerows and hedgerow trees, which will contribute to local biodiversity in the field boundaries.

6.3 Access and Transport

6.3.1 The access to the existing public highway and the route used by vehicles for transporting limestone will, again, remain unaltered. The present number of vehicle movements (in/out) equate to approximately 70 per day. However, for the purposes of the environmental assessment, peak production levels have been used to demonstrate a worst case scenario. Therefore vehicle numbers equate to 92 per day or approximately 9 per hour, based on a 250,000 tonnes per annum over a 270 day working year.

6.3.2 The egres from the quarry is directly onto the A47(T) from which access can be easily gained to the A1(T) and Peterborough or markets to Corby or the east via the A47(T) or the A43(T). The number of vehicles arising from limestone sales are easily catered for on these roads.

6.3.3 At present 75% of vehicles leaving the site turn right towards the A1 and Peterborough markets. The remaining 25% turn left for markets in Corby and Kettering.

6.3.4 To ensure that deleterious material is not deposited on the public highway all HGVs leaving the site pass through the wheelwash located next to the weighbridge and access area.

6.4 Plant Complement

6.4.1 All of the quarry infrastructure and processing plant already exists on site and no additional or new facilities are proposed. The retention of the quarrying operations
would provide the essential continuity in the supply of minerals to the local area. The existing site infrastructure includes an office, toilets, mess room, weighbridge, diesel fuel storage and wheel cleaning equipment.

6.4.2 The following plant compliment is proposed:

- Kleeman Reiner 110 jaw crusher
- Komatsu WA 470 Loading shovel
- Hitachi 350 45 tonne excavator
- Komatsu D65 Bulldozer
- Powerscreen Horizon 5163 Screen

6.5 Hours of Operation

6.5.1 The operating hours of the quarry working and export of minerals in the proposed extension area would be - 0700-1800 Mon to Fri with Saturday mornings 07.30-13.00. Furthermore, Bullimores can confirm that no soil stripping operations will take place on a Saturday.

6.5.2 There would be no mineral working or export of minerals from the proposed extension area on Sundays or public/bank holidays. Proposed Restoration

6.5.3 The restoration phase aims to return the land to its previous use with no lasting or altering effect on the topography or quality of the land. The restoration is based upon the Overall Landscape Restoration Plan (Drawing No. 5526-L-03 Rev. C) contained in the Landscape and Visual Impact Assessment attached at Technical Appendix 4, Appendix A.

6.5.4 This comprehensive restoration plan provides a co-ordinated approach for the site as a whole (including all worked and proposed working areas). This plan shows the final restored landscape proposals following completion of all of the worked areas and shows final contours, new woodland/tree/hedgerow and other habitat proposals, restored farmland and retained/diverted or new public rights of way. A schedule of the new planting and habitat areas is also provided which demonstrate the beneficial gain between the before and after situations.

6.5.5 The proposed overall landscape scheme has been assessed by the application's ecological and landscape consultants and is considered to provide adequate
ecological mitigation and compensation for habitats impacted by the mineral development. The key objectives of the Landscape Restoration plan draw upon the LVIA and ecological work undertaken and the issues and considerations highlighted as part of the consultation process to date and present a balanced approach to the restoration of the site. They are summarised as follows:

- Respect existing local landscape character and utilise this to inform the layout and design of the development and landscape proposals;
- Conserve landscape features and characteristics and use these to inform and reinforce the unique character of the proposed development;
- Provide new native planting and habitats as part of a thorough and long term approach to the growth and management of the overall landscape framework; and
- Minimise any potential adverse landscape or visual effects through the application of best practice design principles and careful attention to design through all stages of the development process.

6.5.6 The approved restoration proposals for the eastern extension to Collyweston Quarry (EN/06/1279C) are for woodland. The Overall Landscape Restoration Plan (Drawing No. 5526-L-0203 Rev. C) now proposes to restore this area to its former use as farmland along with the introduction of hedgerows. Bullimores have only worked around 1/3 of the eastern extension, therefore restoration to farmland is seen as a balanced approach based on the economics of the site and the landowners wishes.

6.5.7 The proposed restoration scheme has been developed taking account of the three dimensions to sustainable development (NPPF, para 7). The site needs to perform an economic role to provide a level of income to sustain the long term management of the proposed ecological and nature conservation benefits. The restoration proposes a balance of environmental and economic considerations. Finally the end uses provide significant long term enhancements to ecology and nature conservation.

6.5.8 Restoration to agriculture provides the most versatile and economic option for the area and the landowner. The restoration scheme has been designed so that the land is returned to an appropriate standard to allow for the recommencement of
agricultural practices on the land following restoration of the quarry.

6.5.9 The restoration proposals therefore provide a balanced range of economic, social and ecological benefits meet the requirements of both landowner and statutory and local stakeholders.

6.5.10 Restoration of the site will be undertaken progressively using imported waste material to restore each phase to the levels required to receive the final soil placement. The final sub soil and topsoil covering to achieve the restoration profiles for each phase will be obtained from either direct placement of soils stripped as part of the preparation for the subsequent working phases or from the soil storage mounds of the previously stripped soils located around the edge of the site.

6.5.11 All PROW will be restored along their existing alignments as part of the landscape restoration proposals. The existing PROW that is proposed to be diverted around the western side of the site will be reinstated after the site is restored.

6.5.12 The restoration proposals include the replacement of the planting that will be lost initially along with a proposal to create a woodland edge area with scrub planting to the north of the site and a grassland margin to the eastern boundary of the site where the PROW will pass through the restored farmland.

6.5.13 Upon completion, the proposed development will be returned to arable farmland with hedgerow and trees reinstated and some additional grassland and scrub introduced. The new trees and hedgerows will be native, indigenous and appropriate to the landscape character of the wider area and would offer valuable localised landscape and ecological benefits. The landform will also be returned to reflect its existing sloping form, albeit that there may be some minor variations.

6.5.14 The restored site landscape will essentially reflect the existing landscape except that there will be some minor and localised beneficial and longer term effects arising from the increased lengths of hedgerows, additional hedgerow trees, wider grassland margins to the eastern side of the site; and inclusion of some additional grassland and woodland edge planting to the north.

6.5.15 Coupled with these localised measures, the application of a suitable landscape maintenance regime; including for new infill planting to the retained site hedgerows will all offer sympathetic and low key landscape improvements.
7 Planning Policy Context

7.1 Introduction

7.1.1 Section 38(6) Planning and Compulsory Purchase Act 2004 states that determination must be made in accordance with the Development Plan unless material considerations indicate otherwise.

7.1.2 The Planning and Compulsory Purchase Act 2004 defines the Development Plan as (a) the Regional Spatial Strategy for the region in which the area is situated, and (b) the Development Plan documents (taken as a whole) which have been adopted or approved in relation to that area. Adopted Structure and Local Plans retain development plan status and automatically became ‘saved’ policies for a period of three years from the commencement of the Act. For plans in preparation the three year period will commence from the adoption or approval of the draft plan.

7.1.3 On the 20th March 2013 the Secretary of State laid before Parliament a statutory instrument to revoke the Regional Strategy for the East Midlands. This came into force on 12th April 2013. As such the East Midlands Regional Plan no longer forms part of the Development Plan.

7.1.4 In reaching a decision on this application the first consideration is therefore whether the proposals accord with the Development Plan. Having done this it is then necessary to have regard to all other material considerations, which include all relevant policy considerations contained in the emerging Development Plan as well as National Planning Policy Guidance.

7.1.5 A full audit of the policies of relevance to the proposed development is included within Appendix 3 to this Environmental Statement (ES).

7.1.6 The main Planning Policy documents of relevance are considered to be:

- The Northamptonshire Minerals and Waste Core Strategy 2010
- Location for Minerals Development Plan Document – March 2011
- Control and Management of Development Plan Document – March 2011
- The North Northamptonshire Core Spatial Strategy – June 2008

7.1.7 Other Material Planning Policy Considerations include:
7.1.8 In reviewing the planning policies relevant to the proposed development, the following considerations are considered of particular relevance and are examined in more detail in the remainder of this Statement:

- Need and Mineral Supply
- An assessment of Alternatives
- Environmental Impact Assessment including:
  - Potential landscape and visual impact
  - Potential for impact on ecology and nature conservation
  - Potential for adverse impact upon amenity, particularly in regards to noise and air quality
  - Potential impact upon soils, land quality and agriculture
  - Potential impact upon Water resources
  - Potential for flood risk
  - The potential for impact as a result of transportation and traffic
  - Potential for impact on archaeology
- Cumulative Impact Assessment

7.2 **The Main Planning Policy Considerations**

7.2.1 Based on the analysis of national and local planning policies, it is apparent that the main considerations relevant to the determination of the planning application are as follows:

- Need and Sustaining Mineral Supply
- Environmental Acceptability

**Need and Sustaining Mineral Supply**

7.2.2 The principle policy for assessing the need for mineral supply is Policy CS5 (providing for an adequate supply of aggregates) of the Northamptonshire Minerals and Waste...
Core Strategy 2010. Policy CS5 is seeking to ensure that provision is made over the Plan period for the extraction of 7.9 million tonnes of crushed rock (limestone) (equivalent to an annual average of 0.39 million tonnes) provided from deposits outside unworked river valleys or from sites with old permissions upgraded to modern conditions. A landbank of at least 10 years for crushed rock will be sought.

**Environmental Acceptability**

7.2.3 In order to sustain the identified need for limestone aggregate, policy CS5 recognises that provision is to come from both extensions to existing sites and new sites if they meet the spatial strategy for mineral extraction and are assessed as meeting environmental, amenity and other requirements of the MWDF.

7.2.4 Paragraph 7.14 of the Core Strategy identifies that for crushed rock, site allocations and decisions on proposals will be made having regard to the factors to be addressed in site selection. These factors include:

- Impacts of mineral working such as visual intrusion, dewatering, water pollution, noise, dust and fine particles, blasting, transport, and access,

- Impact on landscape, agricultural land, soil resources, water resources (ground and surface), land instability, ecology and wildlife, including severance of landscape and habitat loss, and impacts on sites of geological and nature conservation, archaeological and cultural heritage value,

- Benefits such as providing an adequate supply of minerals to the economy and hence for society (including construction materials needed for the development of national infrastructure and the creation of sustainable communities), creating job opportunities, and the scope for landscape, biodiversity and amenity improvements through mineral working and subsequent restoration,

- Methods of control through planning conditions or agreements to ensure that impacts are kept to an acceptable minimum,

- Level of existing activity and impacts, the duration and nature of proposals for new or further working, and the extent of impacts which a particular site, locality, community, environment or wider area of mineral working can reasonably be expected to tolerate over a particular or proposed period.
With respect to an individual site, the effect of all relevant impacts (i.e. of noise, dust, traffic, on landscape, etc.) should be considered objectively, and

- Cumulative impacts of simultaneous and / or successive working of a number of sites in a wider area of commercially-viable deposits.

7.2.5 These issues are explored in greater detail in Section 8 (need) and 9 (environmental impact assessment) of this Statement.
8 Need and Mineral Supply Considerations

8.1 Local Policies for Limestone Supply

8.1.1 Policy CS5 of the Northamptonshire Minerals and Waste Development Framework (MWDF) Core Strategy is the main policy test and sets out in terms of crushed rock/limestone that 7.9 million tonnes (equivalent to an annual average of 0.39 million tonnes) is to be provided from deposits outside unworked river valleys or from sites with old permissions upgraded to modern conditions. The provision will come from both extensions to existing sites and new sites.

8.1.2 Box CS2 within the Core strategy identifies the mineral resources available within Northamptonshire. In regards to Limestone, the Lincolnshire Limestone (as found at Collyweston) is identified as being of higher quality than the Blisworth limestone as it can be used as both an aggregate material and a building stone. Specifically in regards to Collyweston, a local variation (Collyweston Slate Stone) is also present and is used locally as stone slates for roofing and as building stone.

8.1.3 Paragraph 7.7 of the Minerals Core Strategy identifies that substantial permitted reserves of crushed rock exist, in excess of the requirement of 7.9 million tonnes for the Plan period, but most is within a single site (Wakerley) the yield from which it is not at present possible to estimate. Overall, 6.63 million tonnes of crushed rock provision needs to be identified in the Locations for Minerals Development DPD.

Paragraph 7.9 of the Minerals Core Strategy identifies that, the supply of crushed rock as aggregate in Northamptonshire has traditionally been met through a combination of old minerals permissions and permissions granted specifically for limestone. However, sites with old permissions are effectively dormant and do not give a true reflection of what the approved supply, and therefore the landbank, is in reality.

8.1.4 Paragraph 7.19 of the Minerals Core strategy identifies that, the use of locally sourced building and roofing stone has become a significant factor in the promotion of local identity and in creating a sense of place, and as such the demand for traditional building materials has increased. Paragraph 3.24 of the Locations for Minerals Development DPD states that it is not anticipated that further provision for roofing stone beyond that identified through the committed (Duddington) and allocated (Collyweston village) sites will be required.
8.2 National Policy

8.2.1 Although now superseded by the National Planning Policy Framework (NPPF), Minerals Planning Policy Statement 1: Minerals and planning stated at paragraph 15 bullet point 4 in terms of supply for minerals planning that RPBs, MPAs and LPAs should “consider the benefits, in terms of reduced environmental disturbance and more efficient use of mineral resources including full recovery of minerals, of extensions to existing mineral workings rather than new sites.”

8.2.2 The NPPF emphasizes the need to achieve “sustainable development” and highlights 3 dimensions of sustainable development – made up of economic, social and environmental considerations.

8.2.3 The NPPF (at paragraph 7) requires the planning system to contribute to building a strong, responsive and competitive economy and to support growth and development. The system has a social role in ensuring strong, vibrant and healthy communities by providing the supply of housing that is needed and by creating a high quality built environment. The system also has an environmental role in protecting and enhancing the natural, built and historic environment.

8.2.4 The NPPF (at paragraph 142) highlights that minerals are essential to support sustainable economic growth and the quality of life and there is therefore a need to ensure sufficient supply of materials to provide the infrastructure, buildings, energy and goods that the country needs.

8.2.5 The NPPF (at paragraph 143) requires Mineral Planning Authorities, when preparing Local Plans, to include policies for the extraction of mineral resources of local and national importance.

8.2.6 The NPPF (at paragraph 145) requires Mineral Planning Authorities to plan for a steady and adequate supply of aggregates. This includes making provision for land won aggregates, including specific sites, in their Minerals Local Plan. Such provision should take account of annual Local Aggregate Assessment and the advice of the Aggregate Working Party (made up of representatives of Mineral Planning Authorities and aggregate producers). In planning for future aggregate supply the NPPF (at paragraph 145) advises Mineral Planning Authorities to use “landbanks” of aggregate mineral reserve, principally as an indicator of the security of aggregate minerals supply, and to indicate the additional provision that needs to be made for...
new aggregate extraction and alternative supplies in mineral plans. The NPPF requires Mineral Planning Authorities to make provision for the maintenance of landbanks for at least 10 years supply of crushed rock and maintaining separate landbanks for any aggregate materials of a specific type or quality, which have a distinct or separate market.

### 8.3 Potential Material Considerations

#### 8.3.1

The emerging Draft Minerals & Waste Local Plan for Northamptonshire is at an advanced stage and some weight is likely to be given to the policies and site (mineral extraction) allocations contained within it. It is therefore important to highlight a number of points that are of particular relevance to the proposals to extend Collyweston Quarry and the need to sustain supply and meet the demand for Collyweston Limestone. Important and relevant points are as follows:

- **Trends for growing limestone sales** highlight the potential demand for limestone to outweigh that of sand and gravel in the future.

- **The draft Local Plan** supports the distinctive local identity of Northamptonshire through the supply of locally sourced building materials (including varieties of limestone, ironstone, sandstone and Collyweston stone slate) and encourages their use within the county for the purposes for which they are most suitable.

- **In terms of provision to be met**, Northamptonshire’s annual apportionment is for an average annual figure of 0.39 Mt (7.8 Mt 2011-31) of crushed rock (limestone) per annum.

- **Paragraph 4.4** states that the apportionment figure for crushed rock has been increased from 0.33 Mt to 0.39 Mt to reflect the steady increase in sales in recent years and the increase in sites that have been coming forward for permission and being implemented, unlike for sand and gravel.

- **3 sites** have been allocated for the provision of crushed rock namely MA8: Wakerley (4.5 million tonnes (approximately) to 2031 (6.75 million tonnes thereafter)), MA9: Ringstead (2.1 million tonnes approximately); and MA10: Pury End (South) (limestone and building stone) (1.5 million tonnes approximately).
The draft Local Plan does not specifically include commitments (i.e. sites with planning permission or equivalent) for minerals-related development. However, it states that these commitments make a fundamental contribution in providing adequate supply of aggregates throughout the plan period, and for the Local Plan to meet its objectives.

In terms of building and roofing stone, Policy 6 sets out that provision will come from both extensions to existing sites and new sites.

Paragraph 4.58 states with regards building and roofing stone that it is not anticipated that further provision for roofing stone beyond that identified through the committed (Duddington) and allocated (Collyweston village) sites will be required.

8.4 The Benefit of continued supply of Collyweston Limestone

8.4.1 Limestone aggregate from Collyweston currently supplies between one third and half of the overall 0.39 mtpa crushed rock apportionment identified within Policy CS5 of the Minerals Core Strategy. Current working in the eastern extension is becoming uneconomic due to the amount of overburden encountered. This application contains a similar extent of reserve to that already permitted from the eastern extension. If permission is not granted for the proposed western extension, Collyweston limestone will no longer be able to contribute to the County’s crushed rock requirements.

8.4.2 Collyweston Quarry produces limestone aggregate from the Lincolnshire Limestone, which is the better quality limestone present in Northamptonshire. It has superior quality over the Blisworth Limestones, which tend to be softer and have limited use in construction works. The Ringstead site contains the lower quality Blisworth limestone.

8.4.3 Collyweston Quarry not only produces crushed limestone rock aggregate, but also produces quantities of building stone as well as the particularly scarce “Collyweston Slate Log”. The Collyweston Log is used as a roofing material on specialist building conservation projects and can often be found on local Listed Buildings and in local Conservation Areas. It is a very important sustainable, local, natural resource. An extension to Collyweston Quarry will assist in meeting the demand for specialist
building and roofing stones in the interest of both conserving existing buildings and maintaining local settlement character in the context of new development.

8.5  **Conclusions on the Need for Continued Future Supply of Collyweston Limestone**

8.5.1 A positive determination of this planning application for a western extension to Collyweston Quarry, would sustain and maintain a viable and high quality mineral supply from Collyweston Quarry, as required by Policy CS5 of the Minerals Core Strategy.

8.5.2 The NPPF makes clear the benefits of the requirement to plan for the maintenance of a steady and adequate supply of aggregates, including those of a specific type or quality, which have distinct markets. This is reflected also within the adopted Minerals and Waste Core Strategy and the draft Local Plan where it is recognised that traditional materials such as Collyweston stone slate play an important role in the restoration of historic buildings and are also used in new buildings, extensions, and walling in order to preserve and enhance local distinctiveness and local building character.
9 Environmental Impact Assessment

9.1 Introduction

Scoping

9.1.1 In accordance with good practice and the guidance provided by the Department of Environment, Transport and the Regions (DETR) in Circular 02/99 entitled ‘Environmental Impact Assessment’ the Applicant has sought the Mineral Planning Authority’s (MPA) Screening and Scoping Opinion. To assist the MPA in their judgment a report was prepared which provided an outline of the development proposal and broad consideration of its likely impacts. A request for an Environmental Impact Assessment Screening and Scoping Opinion was submitted in December 2012.

9.1.2 A Scoping Opinion was issued on 21st January 2013. Following consultation with statutory consultees, an agreed set of topics to be covered by the Environmental Impact Assessment was presented. This included:

- Landscape and Visual
- Ecology and Nature Conservation
- Archaeology and Cultural Heritage
- Noise and Vibration
- Air Quality and Dust
- Highways and Public Rights of Way
- Soil Resources and Land Use
- Hydrology and Hydrogeology
- Geology
- Cumulative Impacts
- Socio-Economic Impacts
- Alternatives

9.1.3 Further to the Scoping Opinion issued by Northamptonshire County Council in January 2013, further consideration and assessment of matters raised by the
Council, statutory consultees and local residents has been carried out in preparation for resubmission of the planning application.

**The Planning and Environmental Statement**

9.1.4 In preparing the Planning and Environmental Statement, the Company and its consultants have had regard to the contents of Schedule 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011. Specifically, the ES has addressed the main elements of the proposals that have the potential to impact (positively and/or negatively) on:

- Human beings;
- Flora and fauna;
- Soil, water, air, climate and the landscape;
- Material assets and the cultural heritage;
- Interaction between the first three bullet points.

9.1.5 A non-technical summary has been provided.

**Main Environmental Considerations**

9.1.6 Policy CS5 of the Minerals and Waste Core Strategy identifies a need for sustaining limestone aggregate supply within the County. This need will be met through new sites and as extensions to existing sites. The need section of this statement has explored the benefits in sustaining a limestone aggregate supply from Collyweston. As well as meeting a need for crushed rock supply, Policy CS5 identifies that for crushed rock, site allocations in the Locations for Minerals Development DPD and decisions on proposals will be made having regard to the “factors to be addressed in site selection”. These factors include:

- Impacts of mineral working such as visual intrusion, dewatering, water pollution, noise, dust and fine particles, blasting, transport, and access,
- Impact on landscape, agricultural land, soil resources, water resources (ground and surface), land instability, ecology and wildlife, including severance of landscape and habitat loss, and impacts on sites of geological and nature conservation, archaeological and cultural heritage value,
- Benefits such as providing an adequate supply of minerals to the economy and hence for society (including construction materials needed for the
development of national infrastructure and the creation of sustainable communities), creating job opportunities, and the scope for landscape, biodiversity and amenity improvements through mineral working and subsequent restoration,

- Methods of control through planning conditions or agreements to ensure that impacts are kept to an acceptable minimum,

- Level of existing activity and impacts, the duration and nature of proposals for new or further working, and the extent of impacts which a particular site, locality, community, environment or wider area of mineral working can reasonably be expected to tolerate over a particular or proposed period. With respect to an individual site, the effect of all relevant impacts (i.e. of noise, dust, traffic, on landscape, etc.) should be considered objectively, and

- Cumulative impacts of simultaneous and/or successive working of a number of sites in a wider area of commercially-viable deposits.

9.1.7 All of the above are explored in further detail in the following section.

9.2 Landscape and Visual Impact Considerations

9.2.1 A Landscape and Visual Impact Assessment has been carried out by FPCR which includes further consideration and assessment of matters raised by the Council, statutory consultees and local residents during preparation for resubmission of the planning application. The full assessment can be found contained within the Technical Appendices to the Planning and Environmental Statement at Technical Appendix 4, Appendix A. Furthermore, in response to comments received on the original application and feedback from the Public Information Exhibition (PIE) held in Duddington Parish Hall on 6th March 2014, a Visual Appraisal Addendum has been prepared (Technical Appendix 4, Appendix B).

Policy Context

9.2.2 The Environmental Impact Assessment Directive (85/337/EEC) states that the direct and indirect effects of development should be assessed in terms of their impact on specific factors. Based on the factors identified in Article 3 of the EIA regulations, the direct and indirect effects of the proposal on the landscape and visual impact have been assessed. The interaction that the impact upon the landscape resource may have upon the flora and fauna and the alteration of landscape features upon
human beings have also been assessed. The visual impact of the proposed development scheme has also been assessed.

9.2.3 The NPPF, Northamptonshire Minerals and Waste Development Framework, and Northamptonshire Environmental Character and Green Infrastructure Suite, Launched November 2006: Green Infrastructure making the Connection all contain policies and text concerning the potential for landscape and visual impact in connection with development proposals. In particular:

- NPPF section 11;
- Northamptonshire Minerals and Waste Development Framework (MWDF) Control and Management of Development DPD Policies CMD4, CMD8 and CMD9; and
- Northamptonshire Environmental Character and Green Infrastructure Suite, Launched November 2006: Green Infrastructure making the Connection.

9.2.4 A full breakdown of policies that are relevant to this planning application can be found at Appendix 3. The thrust of these policies encompasses the advice in the NPPF to protect, maintain and enhance the conservation of diversity and the local distinctiveness of landscape character.

Consideration of the potential for impact

Landscape Character

9.2.5 No specific landscape designations have been identified within or in close proximity to the proposed site. The landscape character of the site is largely defined by the areas of open farmland. Field boundaries contain some mature trees and there is evidence of some rationalisation of field boundaries to create larger fields for agricultural use. The existing quarry is located directly adjacent to the east of the site.

9.2.6 The site lies within the northern part of the National Character Area number 92 ‘Rockingham Forest’ of the Countryside Character Initiative. The Natural England document provides a very broad assessment and appreciation covering a significant landscape tract with a more detailed and site relevant landscape character assessment contained within the countywide.
9.2.7 The Northamptonshire Environmental Character Strategy (ECS) includes a Current Landscape Character Assessment (CLCA) for the County. This states that the Landscape Character of the site lies on the north eastern edge of the Farmed Scarp Slopes, it borders with Wooded Limestone Hills and Valleys as the adjoining Landscape Character Type (LCT). These areas lie respectively within the Lower Jurassic Geology Landscapes and Limestone Landscapes as defined in the CLCA.

9.2.8 Northamptonshire County Council has undertaken a landscape assessment covering the County. This fits within the broader Natural England assessment and adopts the Character Area (No. 92) described above. Within this broader assessment the Northamptonshire Assessment identifies a series of more detailed Landscape Character Types (LCT’s). Figure 2 illustrates the location of the relevant LCT’s.

9.2.9 The site lies within the Farmed Scarp Slopes LCT. This is summarised as a “relatively steep elevated northwest facing scarp slope.” This LCT covers parts of the landscape to the north and south of the sites location. The specific areas within this LCT are 15c Harringworth to Duddington and 15d Duddington to Easton on the Hill. The most relevant extracts and descriptions for these LCT’s to the site and its context are as follows:

*Geology and Soils*

....To the North, the scarp slopes are increasingly influenced by Oolitic limestones and ironstone, particularly on the upper slopes where these deposits can be seen to extend westwards into the Wooded Limestone Hills...

*Hydrology*

....A number of small streams flow off the scarp in to the Welland. These tend to be narrow brooks...

*Woodland and Trees*

....Steeper portions of the scarp slopes are cloaked in woodland and form a dark, textural backdrop to view eastwards for the vale....

*Communications and Infrastructure*

....The road runs at the base of the scarp, defining its lower limit, as is the case between Wakerly and Duddington. Routes also run along the top of the scarp for example the A43 south of Collyweston....
9.2.10 The operation of the proposed development would not have any significant effects on the relevant landscape types and character areas identified in the published national and countywide landscape character assessments. The Farmed Scarp Slopes LCT is characterised as having limited settlements, generally found on the fringes of the landscape spilling over from neighbouring ‘upland’ landscapes and extending up from the adjacent lowland vale. As a result of the existing quarry at this location there is already a level of operation ongoing. Existing operations will continue to be restored as work commences on the western extension.

9.2.11 At the height of activity, the operation of the site will result in a minor adverse effect upon the localised landscape character of this LCT, though for the wider and more removed parts of this LCT and for the other surrounding published landscape character areas and types the construction effects would be negligible during the operations.

9.2.12 The landscape character of the site would change markedly during the operational period. The existing farmland would be progressively worked and some hedgerows within the site boundary removed to facilitate the operations. However, the presence of the existing works immediately to the east of the site will in part lessen the influence of the proposal over the local landscape.

9.2.13 The most significant changes arising to the site’s landscape character during the extension process would result from the removal of the existing planting and vegetation and the modifications to the landform. The majority of the land to be used for the extension is currently used as agricultural farmland with some field boundary hedgerow and trees. The mature hedgerow and trees to the most westerly part of the fields are not within the site boundary and so these will all be retained.

9.2.14 At the height of activity, construction will result in a minor/ moderate adverse effect upon the site’s landscape character. Once the land is restored after the extraction is complete there will be no adverse effect upon the site’s landscape character.

9.2.15 The restored landscape will have no effect upon the relevant landscape types and character areas identified in the national and countywide landscape character assessments. Returning the landscape to agriculture and restoring the former hedgerows and trees will effectively return the landscape to its existing condition and characteristics.
9.2.16 Upon completion, the proposed development will be returned to arable farmland with hedgerow and trees reinstated and some additional grassland and scrub introduced. The landform will also be returned to reflect its existing sloping form, albeit that there may be some minor variations.

9.2.17 Upon completion, the proposed development would result in no effect upon the landscape character of this localised part of the Farmed Scarp Slopes LCT. For the other surrounding published landscape character areas and types the effect would also be none.

9.2.18 Overall, the landscape effects of the development would generally vary between minor/moderate adverse and minor beneficial throughout the course of the scheme and its restoration. These varying landscape effects reflect the different phases of development on the sensitivities of the site’s landscape character and related features. The adverse effects would significantly reduce after the initial construction phase and in the longer term due to the restoration and maturing of the landscape.

Visual Impact

9.2.19 The visual receptors are identified in the LVIA, and their views/visual amenity described. The degree to which the proposed development has the potential to impact upon the view (extent of view of the site) has been assessed and graded, together with the sensitivity of the viewpoint - see Appendix B of the LVIA. The below is a summary of the findings:

<table>
<thead>
<tr>
<th>Receptor</th>
<th>Note</th>
<th>Overall Significance of Operational Effect</th>
<th>Overall Significance of Effects at Year 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duddington Village</td>
<td>Existing views from the village are generally restricted on this side with the majority of residential properties facing into the village. Properties that have a rear aspect to the east are generally surrounded by mature trees. The combination of different areas of planting in this area provides an effective screen to the length of the site. A very small number of properties (predicted to be 2 or 3) may have restricted views to the perimeter mound but with the exception</td>
<td>None/ Negligible to Minor/ Moderate Adverse</td>
<td>None/ Negligible to Minor Beneficial</td>
</tr>
</tbody>
</table>
of the single property in the very north of the settlement (Robinswood) no direct views to the working operations are predicted. From the single property (Robinswood) restricted/ glimpsed views to the very highest parts of the active site may be possible subject to the planting and management of the existing and new intervening trees and hedgerows.

<table>
<thead>
<tr>
<th>Location</th>
<th>Visibility Description</th>
<th>Impact Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tixover</td>
<td>The proposed site will be visible from Tixover. The current view is mainly open farmland; there are however some field boundaries across the valley with mature hedgerow and trees that provide some screening of the site.</td>
<td>Minor Adverse</td>
</tr>
<tr>
<td>Collyweston (Kingscliffe Road)</td>
<td>The current view is mostly restricted to the neighbouring field and a small band of mature trees that line the field boundary. There may be glimpses possible from this area but in general the views will be very restricted.</td>
<td>None/ Negligible to Minor Adverse</td>
</tr>
<tr>
<td>Tixover Grange</td>
<td>Some properties may have restricted views of the site due to the topography of the land at the proposed site. The current view of mainly open farmland will allow some views of the site. Mature trees and planting within the valley will provide some level of screening.</td>
<td>None/ Negligible to Minor Adverse</td>
</tr>
<tr>
<td>Jurassic Way (Public Right of Way) (South of Site)</td>
<td>The way is located within a significant cutting with mature trees and hedgerow to both sides. This provides a significant restriction of the views available towards the site. As the site nears the woodland area to the east, the path opens out. At this point however the Gore Piece area of woodland provides a screen between the path and the site. The view of the site is therefore restricted entirely at this point of the Jurassic Way.</td>
<td>None (South of Site); Negligible/ Minor Adverse (North of Tixover Grange)</td>
</tr>
<tr>
<td>Public Right of Way (Footpath)</td>
<td>The current Right of Way runs from the A43 at the south end of Duddington eastwards and around the perimeter of the existing site. Existing views from the way allow the user to see across the areas of farmland to the north and south, therefore the proposed site is likely to be visible from this right of way. The path currently runs directly alongside the</td>
<td>Minor/ Moderate Adverse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minor Beneficial</td>
</tr>
</tbody>
</table>
boundary for the proposed area and will need to be diverted in some areas to allow for the development. During the active period of the quarry however the views will be restricted by the proposed bunds that will be constructed around the site. After the quarry has been restored the footpaths will be reinstated to pass through the original farmland route.

<table>
<thead>
<tr>
<th>Public Right of Way (Footpath) (Westhay Wood/The Assarts)</th>
<th>The views from the woods and any public rights of way within the woods will be restricted and limited. The existing site which sits between the proposed site and this location will be restored and so will significantly improve the current view from this area.</th>
<th>Negligible/Minor Adverse</th>
<th>Negligible/Minor Beneficial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Right of Way (Footpath)</td>
<td>The public rights of way that run through the immediate vicinity of the quarry both existing and proposed will run along the boundary to the north, west and south. During its use, the quarry boundary will have bunds located along its entirety with the public footpaths running along their outer edge. This will restrict views of the proposed site itself. The bunds will also be increasingly covered with vegetation and improve the boundary edge.</td>
<td>Minor/Moderate Adverse</td>
<td>Minor Beneficial</td>
</tr>
<tr>
<td>Public Footpath (Footpath)</td>
<td>This public Right of Way runs along the edge of the Village of Duddington to the east. The proposed site sits to the east with the A43 running between the two. The road has a significant edge to each side with mature trees that create a substantial barrier. The road also sits within a cutting that has its lowest point centrally as it passes Duddington. This prevents views across the road and would restrict any visual connection between the Right of Way and the site.</td>
<td>None/Negligible</td>
<td>None/Negligible</td>
</tr>
<tr>
<td>A43/A47 Roundabout</td>
<td>Travelling south on the A43 from Collyweston towards the roundabout there is a partial view of the site from the north edge. This will be further restricted once the proposed bund is located along this edge. The land where the site will be located rises up away from the roundabout and therefore gives a slightly elevated view of the north part of the proposed area. The south end of the proposed site will not be visible. Users travelling towards Duddington from this</td>
<td>Negligible/Minor Adverse</td>
<td>Negligible/Minor Beneficial</td>
</tr>
</tbody>
</table>
9.2.20 Given the nature of the proposed development, the visual effects arising during the operational phase would vary. Early construction of the perimeter mounding would be carried out and will be followed by the progressive quarrying of the site.

9.2.21 Many of the more distant receptors or those with more limited views towards the site may only be able to glimpse part of the construction activity for the short period of time whilst this phase is completed. During the operational phase the visual receptors will have differing degrees of views towards the workings, although for some the extent of the view will be very limited. Once the operational phase is completed, the land will be restored to principally farmland.

9.2.22 Those receptors likely to experience the most notable adverse effects during construction will comprise the immediately surrounding and diverted PROW. In terms of views from properties and settlement, there will be no major or moderate...
adverse visual effects. The clearest views from these types of receptor will be experienced by some properties facing east in Tixover. The significance of the visual effects upon these receptors has been assessed as minor/ moderate adverse at the height of the bund construction activity. It should however be noted that these effects would be temporary and once this initial work is completed the effects would be lessened and minor adverse for the duration of the operations.

9.2.23 Views towards the operation of the works from properties within Duddington will be limited to only a very small number of properties. This settlement is very effectively screened from the site by a combination of the landform and the mature trees and hedgerows surrounding the village and lining the A43 road corridor. There will be no views towards the works from the nearly all parts of the village and nearly all properties. Where there is a glimpse towards the site, the resultant visual effect will be minor/ moderate adverse at worst. For most at Duddington, the resultant visual effect will be none.

9.2.24 There will be no discernible effects upon the Cemetery which lies on the eastern side of the A43 close to the southern edge of Duddington. Views towards the scheme from Collyweston will be similarly limited. With the exception of partial and distant views from a handful of properties on the southern edge of this village there would be no views towards the scheme.

9.2.25 Overall, the operational effects on the surrounding visual receptors will vary from negligible to moderate adverse with the receptors with the closest and clearest views towards the construction activity experiencing the most significant visual effects at the peak of construction activity.

Further Assessment and Development Design Iteration

9.2.26 As stated previously, in response to comments received on the original application and feedback from the Public Information Exhibition (PIE) held in Duddington Parish Hall on 6th March 2014, a Visual Appraisal Addendum has been prepared (Technical Appendix 4, Appendix B). This addendum specifically addresses concerns raised about the potential views towards the proposed western extension from properties on Green Lane (on the eastern side of Duddington). This addendum also includes a note addressing other matters raised by local residents.

9.2.27 The results of this original visual impact assessment included within the original Landscape and Visual Impact Assessment do not vary as a result of this further
detailed visual appraisal work, although it does offer an additional detail particularly in relation to views from the eastern edge of Duddington. The following provides a summary of the results of the Visual Appraisal Addendum.

9.2.28 There would be no discernible views from the Green Lane property (Viewpoint 1 and landscape cross section) towards the proposed western quarry extension operations. The nature of the landform and the intervening mature planting along the A43 road corridor combine to form an effective visual screen and barrier to views in this direction. At the time of forming the temporary proposed soil storage bund along the western perimeter of the site, glimpsed and very restricted views through the existing planting (if in winter) towards these works may be possible. However, even in these circumstances the nature and significance of this visual change would be negligible.

9.2.29 Once in place, this soil storage bund (constructed to approximately 5 metres high along this part of the western site perimeter) would screen any glimpsed or restricted views towards the quarrying operations. Consequently, any visual effects upon this property would be at most negligible.

9.2.30 Although the adjacent properties on Green Lane were not visited at the same time, the analysis undertaken from the road, public footpath and from looking back towards the site from the existing soil storage bund (Viewpoint 4) indicate that the visual effects for the adjacent properties would be very similar and at most would result in a negligible visual effect.

9.2.31 As stated in the Landscape and Visual Impact Assessment, at 4.46 “Views towards the operation of the works from properties within Duddington will be limited to only a very small number of properties. This settlement is very effectively screened from the site by a combination of the landform and the mature trees and hedgerows surrounding the village and lining the A43 road corridor. There will be no views towards the works from the nearly all parts of the village and nearly all properties.”

9.2.32 Any potential views towards the operations within the site would be very limited from Duddington. The single property known as Robinswood on the northern elevated edge of the village would have some views between a break in the A43 roadside planting towards the proposed development, yet the soil storage bund along the western side of the site and some additional hedgerow tree planting
would assist in limiting the extent of these views. The resultant visual effect upon this property would be minor/moderate adverse. The only other Duddington properties that may experience any more than a negligible visual effect would be a small number on Highfield and from these the effects would be at most minor adverse.

9.2.33 As confirmed at 4.46 of the Landscape and Visual Impact Assessment, “For most at Duddington, the resultant visual effect will be none.” This is because there would be no views towards any part of the proposed site or operations.

Consideration of Potential Mitigation

9.2.34 The key objectives of the Overall Landscape Restoration plan draw upon the LVIA undertaken along with further consideration and assessment of matters raised by the Council, statutory consultees and local residents as part of the consultation process carried out in preparation for resubmission of the planning application. They are summarised as follows:

- Respect existing local landscape character and utilise this to inform the layout and design of the development and landscape proposals;
- Conserve landscape features and characteristics and use these to inform and reinforce the unique character of the proposed development;
- Provide new native planting and habitats as part of a thorough and long term approach to the growth and management of the overall landscape framework;
- Provide for some additional hedgerow tree planting between a break in the A43 roadside planting; and
- Minimise any potential adverse landscape or visual effects through the application of best practice design principles and careful attention to design through all stages of the development process.

9.2.35 Whilst the majority of the existing trees and other planting across the site will be removed to facilitate implementation of the earthworks, some existing trees, tree groups and other planting and habitats will be conserved to the west of the site. Once the extraction phase has been completed the removed trees and hedgerow will be replanted.
In addition to the replacement of the planting that was lost initially there is a proposal to create a woodland edge area with scrub planting to the north of the site and a grassland margin to the eastern boundary of the site where the PROW will pass through the restored farmland.

The phasing is designed to mitigate visual and landscape impacts. At any one point there will only be one part of the quarry open. Through planning controls, the length of soil stripping can be controlled. Therefore, there is the scope for phased bund construction and screening of the proposed development.

The bunding will become covered in vegetation over time and sit more comfortably within the landscape. They will be removed once the quarry has finished extracting material.

The existing PROW that was relocated for the proposed site will be returned to its original position. This sits to the east of the site and will be sited within a grassland margin to the restored fields. There are also two short lengths of PROW that cross the farmland to meet the path in the east and these will also be restored along their existing alignment.

All of the landscape areas and features would be managed and maintained in the long term. This would be achieved through the implementation of a comprehensive landscape maintenance regime, to ensure the successful establishment and continued thriving of the Landscape Restoration proposals.

Conclusions

In accordance with the Scoping Opinion issued by Northamptonshire County Council in January 2013 along with further matters raised by the Council, statutory consultees and local residents as part of the consultation process carried out in preparation for resubmission of the planning application, the Environmental Statement has considered the landscape character of the site and its surroundings and has described and assessed the potential impacts of working and restoration with regard to the landscape character. The visual impact has also been assessed and the mitigation measures identified.

Overall, the proposed development is not considered to give rise to any effects that should preclude it on landscape and visual grounds. The landscape and visual effects are considered to be predominantly localised and contained. The most notable landscape effects arise from changes to the landscape character of the site and its
local context and from the loss of a relatively small number of trees and vegetation. In visual terms, the effects are contained, although there would be some notable yet short term adverse effects upon the immediately adjoining PROW. Similarly, these adverse effects will only occur for the duration of the operations and following the landscape restoration of the site there will be no visual effects once the planting and habitats establish and mature.

9.2.43 In terms of landscape and visual impact, the proposed development will not have an unacceptable impact on human beings, flora or fauna in accordance with EIA regulations.

9.2.44 In conclusion, the objectives of the NPPF, the Development Plan and other material policy considerations are met.
9.3  **Nature Conservation and Ecology**

9.3.1 An ecological impact assessment along with other additional surveys that form appendices has been carried out by Argus Ecology. Furthermore, there has been consideration and assessment of matters raised by the Council, statutory consultees and local residents as part of the consultation process carried out in preparation for resubmission of the planning application. The full reports can be found contained with the technical appendices to this Statement at **Technical Appendix 5**.

**Policy Context**

9.3.2 The Environmental Impact Assessment Directive (85/337/EEC) states that the direct and indirect effects of development should be assessed in terms of their impact on specific factors. Based on the factors identified in Article 3 of the EIA regulations, the direct and indirect effects of the proposal on ecology and nature conservation have been assessed. The interaction that the impact upon the nature conservation resource may have has been assessed.

9.3.3 The NPPF, Northamptonshire Minerals and Waste Development Framework, and North Northamptonshire Core Spatial Strategy all contain policies and text concerning the protection of ecology and nature conservation with development proposals. In particular:

- NPPF paragraphs 117 and 118;
- North Northamptonshire Core Spatial Strategy Policy 5;
- Northamptonshire Minerals and Waste Development Framework (MWDF) Control and Management of Development Policies CMD4, CMD7, CMD8 and CMD13; and

9.3.4 A full breakdown of policies that are relevant to this planning application can be found at **Appendix 3**. The thrust of these policies is to protect and where possible enhance features of nature conservation importance.
Consideration of the potential for impact

9.3.5 In considering the issues set out in the Development Plan and other policy documents regard must be had to the impact of the development on sites of nature conservation interest as well as on individual species, to minimise the impact and seek opportunities to maintain and enhance interest.

9.3.6 The ecological impact assessment has demonstrated that the planned mineral extraction can be undertaken without there being a likely significant effect on designated European and nationally important nature conservation sites. There are no European or internationally designated conservation sites within 5km of the proposed extension area and there are no statutory designated conservation sites within the site boundary.

9.3.7 The ecological impact assessment has further demonstrated that there is a negligible risk of any impacts on legally protected species and that there is no risk of contravention of legislation relating to European protected species as a consequence of this development.

9.3.8 A badger latrine within the site and to the south east of the survey area indicates that badgers are present in the wider area and the arable fields do provide suitable habitat for foraging badger. No confirmed setts, trails, or feeding signs were located within the survey area but the presence of dung pits/latrines indicates that there are social groups in the local area that do use the site. Depending on the time of year and crops grown the arable fields within the site and in the wider area are likely to be valuable foraging habitat for local badgers.

9.3.9 There are mature trees within the site that have features that could be of interest to bats. The transect surveys recorded low numbers of bats commuting across the site and there were no physical signs that bats were roosting in these trees.

9.3.10 Residual and cumulative impacts on farmland birds such as skylark, linnet and yellowhammer are either of negligible significance or in the case of linnet of minor positive significance. Peregrine falcon will be either unaffected by or benefit from the quarrying due to the potential creation of additional nesting sites. Red kite will also be unaffected by the proposals and the restoration will create a habitats suitable for foraging red kite, which as generalists use a variety of habitats for foraging. Similarly peregrine falcon utilise open habitats and the restoration will create habitats suitable for foraging peregrine falcon.
9.3.11 The impact assessment has indicated that there will be a potential minor positive impact of minor significance on one priority habitat, hedgerow, if the restoration is successful. There is also the potential for another minor positive impact of minor significance by the creation of another BAP priority habitat, calcareous grassland as part of the restoration.

9.3.12 The restored landform will provide ecological enhancement with the creation of habitats absent from the survey area. These include calcareous grassland and steep cliff slopes, which have the potential to develop significant nature conservation interest, especially with respect to bats and peregrine falcon.

9.3.13 Hazel dormice were not considered to be an ecological constraint because the most recent record is 14-18 years old and from the south west and the hedgerows on site are unsuitable for dormice and no signs of dormouse (e.g. feeding sign) was noted during the survey. The intensively managed arable fields and hedgerows within the extraction area do not provide suitable habitat for dormouse, and there is very little suitable habitat connecting the proposed site with the record 1.8km to the SSW in Fineshades Wood.

9.3.14 Amphibians, great crested newt in particular, are not considered to be an ecological constraint as there are no ponds on site, there were no records of GCN within 2km and the nearest ponds were in little wood and the assarts to the east of the existing quarry, which would be an enormous barrier to newts moving onto the site from the east. The site is also bounded by busy roads to the north and west which also form effective barriers to colonization of the site. The only other ponds in the wider area, near the clay pits and near another wood called Little Wood are over 1km from the site boundary to the south east. The River Welland is an effective barrier preventing newts colonizing from further afield from the west.

9.3.15 Records of grass snake are historical from 1948 (i.e. 65 years ago) and there is an historical record of adder also from 1948 both from 1.3km SSW in Fineshade Wood. There are however 2 records of adder in very close proximity to each other - 0.13 – 0.2km to the west of the site on the A43 at Duddington. This is quite close to the site but the habitat on site is sub-optimal for reptiles, they generally prefer heathland and moorland and woodland edges and the foraging habitat within the extraction area would be poor. The land is intensively farmed with narrow field margins with a resultant lack of suitable habitat. Due to the very poor habitat for
reptiles within the extraction area they were not considered an ecological constraint to the development.

**Consideration Mitigation Proposals**

9.3.16 The following mitigation proposals have been informed by both the original ecological impact assessment along with further careful consideration and assessment of matters raised by the Council, statutory consultees and local residents as part of the consultation process carried out in preparation for resubmission of the planning application.

9.3.17 The extraction area at Collyweston Quarry has been designed to avoid woodland habitats of National- and Local-level importance. The quarry has also been designed to avoid as many hedgerows as possible.

9.3.18 To avoid any potential impact on roosting bats it is necessary to undertake dusk emergence and/or dawn re-entry surveys on these trees immediately prior to removal. There are no other impacts which may affect the conservation status of European protected species in the local area.

9.3.19 In order to maintain compliance with the 1981 Wildlife & Countryside Act (as amended), it is necessary to avoid destruction of nests, eggs and young of breeding birds. There are also species in the wider vicinity of the site protected under Schedule 1.1 of the Act such as peregrine falcon, where it is illegal to deliberately or recklessly disturb birds while breeding. Site clearance works should therefore take place between August and March, bearing in mind that parts of the site support ground-nesting species, so such restrictions should apply to all habitats, not just trees and scrub.

9.3.20 In order to maintain compliance with the Protection of Badgers Act (1992) it is necessary to ensure that badgers from social groups in the wider area have not moved onto the site before site clearance begins. Interfering with an occupied badger sett by damaging, destroying, obstructing or disturbing it is against the law.

**Mitigation of impacts on ecological interest features**

9.3.21 The key aims of mitigation measures are to:

- Create new habitats in quarry restoration of equal or greater value than the current baseline; and
Mitigate for the loss of hedgerow and scrub habitat on site and maintain habitat connectivity across and around the site; and

Avoid or reduce off-site impacts on surrounding habitats or species during the operational phase of the development.

*Mitigation measures in site restoration*

9.3.22 The primary focus of ecological mitigation efforts in site restoration is to create BAP priority habitats suited to the location and to create habitats suitable for species of conservation interest. Suggested restoration includes:

- Lowland calcareous grassland

9.3.23 Upon completion, the proposed development will be returned to arable farmland with hedgerow and trees reinstated and some additional grassland and scrub introduced. Calcareaous grassland could be introduced along the field margins to the east with additional grassland, scrub and woodland edge planting to the north east.

- Peregrine falcon nesting habitat

9.3.24 Exposed limestone quarry faces have sufficient height so as to be potentially suitable for breeding peregrine falcon. While for territorial reasons this may not result in a net increase in local breeding pairs, it does provide a greater choice of potential nest sites. The value of the site for peregrine falcon can be realised prior to restoration, as undisturbed faces within working quarries provide favoured sites for nesting.

- Lowland mixed broadleaf woodland /scrub creation

9.3.25 A new area of woodland with a scrub edge could be planted adjacent to the existing plantation woodland at the north of the site. This will extend the available habitat area for woodland/scrub species and enhance existing habitats and restore lowland mixed broadleaf woodland a Northamptonshire BAP priority habitat. Opportunities should be taken to enhance the value of external woodland edges as ‘marginal habitat’. They are valuable for depth of canopy and high light conditions that encourage flowering and fruiting of understory and shrubs. In general, wide diffuse margins and gradual transitions are better than abrupt edges. Wide woodland edges of scrub including hazel will also provide habitat suitable for dormice and the
addition of species such as crab apple would be beneficial to foraging mammals such as badger.

- **Hedgerows**

9.3.26 Peripheral species-rich hedgerows with hedgerow trees could be planted in advance of quarrying operations so they begin to establish as viable bat commuting and foraging routes before the hedgerows within the site are removed.

9.3.27 Suitable species for the creation of species-rich hedgerows include hazel, hawthorn, midland hawthorn, blackthorn, wild privet and spindle. Hedgerow tree could include field maple, pendunculate oak, beech and crab apple.

9.3.28 The restoration plan indicates that all current field margins will be restored to hedgerows with hedgerow trees and new hedgerows will be created along the north and south of the track between Farnsworth’s north and south fields. The restoration proposals will result in a net increase in hedgerow habitat and will provide excellent habitat connectivity across the landscape, and will link the hedgerows within the western extension with the hedgerows within the restored Collyweston Quarry to the east and across the landscape to The Assarts and Fineshade Wood.

_Mitigation of impacts on surrounding habitats_

9.3.29 The impact assessment has not identified any impacts on surrounding habitats of greater than minor significance. Nevertheless, the following mitigation measures will have the effect of reducing the magnitude of impact further, and thereby the risk of effects on ecological interest features:

- Dust suppression measures, described in the Dust Report set out as a Technical Appendices to the Planning and Environmental Statement; and

- Noise reduction measures, described in the Noise Report set out as a Technical Appendices to the Planning and Environmental Statement.

_Ecological enhancement_

9.3.30 A number of features within the restoration plan will create new features of ecological interest not present in the current baseline, and as such will represent a positive enhancement.
9.3.31 The key features included in the restoration proposals are the planting of hedgerows and woodland/scrub and the creation of areas of calcareous grassland, which could represent a significant increase in both habitat and botanical diversity relative to the current baseline. Hedgerow creation will also improve habitat connectivity across the landscape.

Conclusions

9.3.32 In accordance with the Scoping Opinion issued by Northamptonshire County Council in January 2013 along with matters raised by the Council, statutory consultees and local residents as part of the consultation process carried out in preparation for resubmission of the planning application, the Environmental Statement has determined the use of the site and its immediate surroundings by protected species and has considered the direct and indirect impacts of the proposed development on statutory and non-statutory sites of biological importance. All survey work was conducted during an appropriate season and using a recommended method. The Environmental Statement has also outlined appropriate mitigation measures.

9.3.33 The assessment of ecological impacts, and related impacts including atmospheric dust deposition and noise, have demonstrated that there will either be no impacts on statutory sites or their effects will be so small in magnitude as to have no effect on site integrity.

9.3.34 The restoration of the quarry offers opportunities for creating new habitats which may provide longer-term benefits for nature conservation.

9.3.35 In terms of ecology and nature conservation, the proposed development will not have an unacceptable impact on flora or fauna in accordance with EIA regulations.

9.3.36 In conclusion, the objectives of the NPPF, the Development Plan and other material policy considerations are met.
9.4  Noise

9.4.1 A noise assessment has been carried out by Vibrock Limited which has taken account of matters raised by the Council, statutory consultees and local residents as part of the consultation process carried out in preparation for resubmission of the planning application. The full assessment can be found within Technical Appendix 6 to this Statement.

Policy Context

9.4.2 The Environmental Impact Assessment Directive (85/337/EEC) states that the direct and indirect effects of development should be assessed in terms of their impact on specific factors. Based on the factors identified in Article 3 of the EIA regulations, the direct and indirect effects of potential noise from the proposals on the local environment and residential amenity have been assessed.

9.4.3 The NPPF, Technical guidance to the NPPF, Northamptonshire Minerals and Waste Development Framework, and North Northamptonshire Core Spatial Strategy all contain policies and text concerning the protection of amenity and pollution control with development proposals. In particular:

- NPPF paragraph 144;
- Technical Guidance to the National Planning Policy Framework Sections 30 and 31;
- North Northamptonshire Core Spatial Strategy Policy 13;
- Northamptonshire Minerals and Waste Development Framework (MWDF) Control and Management of Development Policies CMD4, CMD7 and CMD8; and

9.4.4 A full breakdown of policies that are relevant to this planning application can be found at Appendix 3. The thrust of these policies seek to ensure that the proposals do not give rise to adverse noise impact.
Consideration of Potential Impact

9.4.5 In considering the issues set out in the Development Plan and other policy documents there is a need to ensure that impacts on local communities and amenity are maintained or reduced to acceptable levels. An important point is that there is an acceptance within planning policy that there will be some adverse effects and that the test is whether the adverse effects have been reduced or controlled to sufficiently low levels.

9.4.6 A series of noise predictions, have been made to three noise sensitive locations around the proposed extraction area and these have been assessed against criteria in the NPPF.

9.4.7 These locations were:

- Robinswood
- The Pines
- Small Holding

9.4.8 Since the initial site survey and after discussion with the local authority, the ‘small holding’ has been scoped out of the assessment. Oak Cottage is positioned to the west of the A43 along a row of residential properties in Duddington and is deemed to be the closest residential property to the proposed development. The noise monitoring conducted at the agricultural small holding is deemed to be representative of the local noise climate at Oak Cottage due to its similar proximity to the A43, which was the dominant noise source during the survey.

9.4.9 The noise climate during the monitoring at the three sensitive locations was influenced by constant road traffic noise along the A43 and A47. The operation of the quarry was inaudible throughout the survey from the locations.

9.4.10 It should be noted that the predicted noise levels in this report refer to worst case scenarios, when operations are undertaken at their closest distances to sensitive properties and therefore have the greatest influence on the noise levels at these locations. These worst case noise scenarios may only last for a few weeks or even days throughout the envisaged working life of the proposed extraction area.
Furthermore, all predictions have been calculated with the combinations of plant working (including hydraulic breaking) at the closest point to the prediction location.

From the results it is apparent that calculated worst case noise levels from mineral extraction operations:

(a) Normal operations do not exceed the 55 dB $L_{Aeq,1h}$ criterion considered as an upper limit for mineral extraction operations in the NPPF.

(b) Without exception do not exceed the 70 dB $L_{Aeq,1h}$ criterion considered a normally justifiable limit for temporary operations, such as soil stripping and bund construction at mineral extraction sites in the NPPF.

(c) Backfilling operations do not exceed the 55 dB $L_{Aeq,1h}$ criterion considered as an upper limit for such operations in the NPPF.

The noise predictions during normal operations have accounted for the operation of a loading shovel, hydraulic 45 tonne excavator, mobile crushing and screening plants and the movements of HGV’s along the internal haul roads. The noise predictions have accounted for the attenuation provided by the nature of the overlying land and the screening bunds along the perimeter of the extension at noise sensitive location.

In terms of the potential for noise of plant and vehicles operating in the quarry extension to bounce off or be reflected off the eastern backwall of the quarry extension, the Vibrock report confirms that the reflection of sound via an excavation high wall or overburden mound causes the sound wave to be reflected back into the quarry and dissipate with distance. Any reflection of sound from vehicles or static plant would have a negligible effect on noise levels at sensitive receptors positioned outside of the quarry boundary.

With the exercise of reasonable engineering control over general site operations, the proposed extraction site should be able to be worked within the noise criteria in the NPPF to be normally justified for mineral extraction operations.

**Consideration of Potential Mitigation**

The site has been designed with the potential impact for noise and the location of sensitive receptors in mind. The site will continue to operate within the hours of operation currently employed on the existing site.
9.4.17 During the permitted working hours the noise level (L_{Aeq,1h} free field) for the period due to mineral operations and subsequent backfilling, shall not exceed an upper limit of 55 dB L_{Aeq,1h} free field as recorded at any inhabited property.

9.4.18 Specifically the following limits are recommended:-

- Robinswood 55 dB L_{Aeq,1h}
- The Pines 55 dB L_{Aeq,1h}
- Oak Cottage 55 dB L_{Aeq,1h}

9.4.19 Topsoil and subsoil stripping and other works in connection with landscaping shall not exceed 70 dB L_{Aeq,1h} free field at any inhabited property and be limited to a period not exceeding 8 weeks at any one property.

9.4.20 Where possible, control measures should be employed on site in accordance with BS 5228-1: 2009, such as:

(a) Avoid unnecessary revving of engines and switch off equipment when not required;
(b) Keep internal haul routes well maintained;
(c) Minimise drop heights of materials;
(d) Ensure machinery is regularly well maintained;
(e) Ensure perimeter bunds are to the required height, with no gaps or inconsistencies.

9.4.21 Audible reversing warning systems on mobile plant and vehicles should be of a type which, whilst ensuring that they give proper warning, has a minimum noise impact on persons outside sites.

9.4.22 Bullimores Sand and Gravel Limited have fitted a number of ‘white noise’ vehicle reversing alarms to the mobile plant within the existing quarry development area, with notable benefits, the primary of which is the reduction in peak noise levels.

9.4.23 It is recommended the mineral operator incorporates this type of reversing alarm on all mobile plant in order to reduce peak noise levels whilst satisfying the requirements of NPPG.
Conclusions

9.4.24 In accordance with the Scoping Opinion issued by Northamptonshire County Council in January 2013, along with matters raised by the Council, statutory consultee responses received and local residents as part of the consultation process carried out in preparation for resubmission of the planning application, a comprehensive noise assessment has been undertaken to assess the impact of the operations on the surrounding area. Background noise monitoring was carried out at the nearest noise sensitive receptors and an assessment was undertaken of the predicted noise levels from the site operations including noise from the extraction operations, plant, construction plant and equipment, vehicle and traffic noise levels. The mitigation measures proposed have also been set out.

9.4.25 The Noise Impact Assessment has found that with appropriate mitigation measures the relevant site noise limits, based on NPPF Guidance, are met and concludes that noise from the proposed site operations will not cause an unacceptable impact. The objectives of the NPPF, the Development Plan and other material policy considerations are met.

9.4.26 In terms of noise, the proposed extension will not cause an unacceptable impact on human beings or fauna in accordance with EIA regulations.
9.5 **Air Quality and Dust**

9.5.1 An assessment of dust and air quality has been undertaken by EA Ltd which has taken account of matters raised by the Council, statutory consultees and local residents as part of the consultation process carried out in preparation for resubmission of the planning application. The full assessment can be found contained within the Technical Appendices to this Statement at **Technical Appendix 7**.

**Policy Context**

9.5.2 The Environmental Impact Assessment Directive (85/337/EEC) states that the direct and indirect effects of development should be assessed in terms of their impact on specific factors. Based on the factors identified in Article 3 of the EIA regulations, the direct and indirect effects of the proposals and the potential for impact of dust and on air quality on the local environment and residential amenity have been assessed.

9.5.3 The NPPF, Technical Guidance to the NPPF, Northamptonshire Minerals and Waste Development Framework, and North Northamptonshire Core Spatial Strategy all contain policies and text concerning the protection of amenity and pollution control with development proposals. In particular:

- NPPF paragraph 144;
- Technical Guidance to the National Planning Policy Framework Sections 23-27;
- North Northamptonshire Core Spatial Strategy Policy 13;
- Northamptonshire Minerals and Waste Development Framework (MWDF) Control and Management of Development Policies CMD4, CMD7 and CMD8; and
A full breakdown of policies that are relevant to this planning application can be found at Appendix 3. The thrust of these policies seek to ensure that the proposals do not give rise to adverse dust impact or detrimental impact on air quality.

**Consideration of Potential Impact**

9.5.4 Dust can be generated by numerous activities associated with mining and quarrying. It can potentially be derived from soil stripping and overburden removal; the extraction of the mineral; transportation of material on-site; material processing; wind erosion from dry, unvegetated surfaces; vehicle movements and their exhaust emissions; and the deposition of materials for restoration purposes.

9.5.5 The proposed extension area moves mineral operations closer to Duddington. However, no receptors designated as having high sensitivity to dust were identified. There are no known high sensitivity land-use activities surrounding the site such as hospitals, electronic industry, painting activities or food processing and no industrial or commercial manufacturing activity.

9.5.6 No properties are located within 200m of the proposed extension area and the 2006 Air Quality Screening Assessment undertaken by East Northamptonshire Council identified Collyweston Quarry as an active mineral working, and confirmed that it was unlikely to lead to PM$_{10}$ or NO$_2$ concentrations exceeding the air quality objectives.

9.5.7 The locations of dust sensitive receptors and the potential for impact is fully discussed within Technical Appendix 7, and forms part of this Environmental Statement. Below is a summary of the potential impacts upon the nearest sensitive receptors.

9.5.8 The nearest and most sensitive receptors to the extraction area, not within the control of the Applicant, are listed in the following table:
9.5.9 The closest properties are located on the eastern edge of Duddington approximately 250m from the extension area on the other side of the A43. The properties are well screened by existing mature vegetation either side of the A43 cutting and by screening bunds next to the internal access road.

9.5.10 In terms of meteorological susceptibility, the prevailing winds in the area, in common with most of the UK, are south-westerly, thereby predominantly dispersing any potential dust emission to the north-east of the site. The nearest property to the north-east of the site is Cuckoo Lodge, approximately 1,000m from the extension area. As a consequence of the wind patterns, easterly winds, required to potentially transport dust towards Duddington, are very infrequent, only occurring for 2% of the time, and the likelihood is that properties to the west of the site have no risk of potentially elevated dust levels for 98% of the time. The risk is then further reduced as in the UK, rain or damp conditions occur for at least 30% of the time, thereby preventing any potential dust emissions. The meteorological susceptibility analysis identified that all the surrounding areas have low, or very low susceptibility.

9.5.11 Although all the surrounding activities are classed as Moderate or Low sensitivity, this does not indicate that they are likely to be impacted by the quarry. Extensive
research and study at other quarries has shown that the likelihood of dust impacts occurring at distances over 100m from a site is very low as the majority of fugitive dusts are likely to be greater than 30μm in size and will deposit easily within 100m of the source.

9.5.12 As the potential for air emissions from Collyweston Quarry are considered to be low, and the distance and meteorological susceptibility of neighbouring activities is very low, it is therefore highly unlikely that any of the surrounding areas will experience any change in air quality and the overall likelihood of any air quality impacts can be considered to be very low.

**Consideration of Potential Mitigation**

9.5.13 In general, dust mitigation requirements should be minimal due to the high moisture content typically associated with limestone.

9.5.14 Site design considerations which will reduce the dust emission potential at Collyweston Quarry include:

- maintaining the existing screening by processing within the quarry void to reduce wind speeds and entrain any fugitive dust;
- placing storage bunds along the western boundary to provide protection from wind; and
- material storage piles located within the sheltered quarry area.

9.5.15 In considering the mitigation of potential impacts, the following measures are proposed to minimise the generation of airborne dust as set out in the Collyweston Quarry Dust Control Plan:

9.5.16 **General**

- A high standard of housekeeping shall be maintained at all times.
- All operatives receive formal training and instruction in relation to the control of the process and emissions to air.
- A daily log book is maintained
- Visual dust assessments are made twice daily by competent persons

9.5.17 **Soil Stripping and Handling**

- Soil removal will be restrict to low risk meteorological periods.
• Only small scale plant will be used.
• The duration of the activity will be minimal.
• Disturbed surfaces will be re-seeded as soon as is practicable.
• Screening bunds will be created to provide protection from winds.

9.5.18 Extraction

• The limestone has a high moisture content.
• The materials handled will be wet/damp.
• Drop heights will be kept to a minimum wherever practicable.

9.5.19 Access/Haul road

• Vehicle speeds will be restricted.
• Unsurfaced roads will be damped down when required using a water bowser.
• Loading and unloading will occur in areas protected from wind.
• Drop heights will be minimised.
• All vehicle loads will be sheeted and loads inspected to ensure no potential spillages.
• A water bowser and sprays will be available to moisten material if required.

9.5.20 Mobile Processing plant

• The processing of wet/damp materials will ensure that dust generation is minimised.
• The weighbridge will be damped down when required.
• All equipment referred to in the EPR Permit shall be well maintained and serviced.
• Mobile Plant – all mobile plant brought onto site must hold a permit under the above legislation and operate in accordance with its permitted conditions.
9.5.21 Drilling Equipment

- All rock drilling equipment shall be fitted with dust suppression.
- Dusts collected by arrestment equipment shall be discharged into suitable containers that do not give rise to a secondary dust problem.
- Stockpiles
  - Stockpiles will be sprayed with water to maintain moisture content if required.
  - Stockpiled material washed and screened to remove dusty fractions prior to external storage.
  - Stockpiles will be located in areas protected from prevailing winds.
  - The storage areas are located away from sensitive areas.

9.5.22 Waste Disposal

- Drop heights from tipping trucks will be kept to a minimum.
- Tipping will be undertaken as slowly as possible.
- A water bowser and sprays will be available to moisten material if required.

9.5.23 Vehicle Movements and Housekeeping

- Yard area will be kept clean.
- The site wheel wash shall be regularly maintained
- Vehicle exhausts will be directed above the horizontal.
- A road sweeper will be regularly used.
- Training will be received for all employees.
- Site procedures and daily records.

9.5.24 Restoration

- Restored areas will be grassed as soon as practicable.
- Soil removal will be restrict to low risk meteorological periods.
9.5.25 The results of all visual dust monitoring observations, along with remedial actions implemented and details of who carried out the monitoring is recorded. All personnel employed on-site are aware of and will undertake visual monitoring for dust throughout the working day. Daily monitoring in the form of a visual assessment is undertaken at the site.

9.5.26 Any problem observed, i.e. raised clouds of dust, is reported to the Site Manager (or the next level of management if they are unavailable), who is responsible for investigating the cause and implementing any necessary remedial action. All personnel who undertake particulate observations have received appropriate training, guidance and instruction in how to carry out the task.

9.5.27 Effective preventative maintenance are also undertaken on all plant and equipment concerned with the control of emissions to the air and spares and consumables are available at short notice in order to rectify breakdowns rapidly.

9.5.28 Plant personnel complete a daily site diary. This is kept on site, and is available for inspection. Daily comment is made about weather conditions on site when necessary. Daily checks are carried out to ensure that there are no visible emissions across the boundary.

Impact upon Human Health

9.5.29 Consideration has been given to pertinent air pollutants as defined within the UK National Air Quality Strategy (see reference 2, section 10.0). The National Air Quality Strategy (NAQS) sets objectives for pollutants that have the potential to give cause for concern. The pollutants contained in current regulation include: nitrogen dioxide, particles (PM$_{10}$), sulphur dioxide, carbon monoxide, lead, benzene, 1-3 butadiene, whilst pollutants that have objectives set but are not currently included in regulation include PM$_{2.5}$, polycyclic aromatic hydrocarbons (PAHs) and ozone. The NAQS requires Local Authorities to periodically review and assess local air quality and identify areas where air quality standards and objectives are exceeded. In such areas the Local Authority is obliged to designate an Air Quality Management Area (AQMA) and subsequently present an Action Plan to reduce the responsible pollutants. The pollutants pertinent to this development are presented below.

9.5.30 Detailed reviews of local air quality within the East Northamptonshire area have been undertaken as part of the National Air Quality Strategy updating and screening
assessment programme. The objective of these assessments is to monitor relevant pollutants and identify any areas where residents may be exposed to air pollution that exceeds concentrations detailed in the UK Air Quality Criteria. Where potential exceedances are identified, Local Authorities are required to designate Air Quality Management Areas (AQMA), and detail action plans for reducing exposure. The last updated screening assessment in the East Northamptonshire area was conducted in 2013 and confirmed that air quality objectives were likely to be achieved for all pollutants and there were no specific concerns related to dust or NO2. The main source of air pollution in the district is road traffic emissions from major roads, notably the A43 and A47.

9.5.31 In undertaking its screening assessment, East Northamptonshire Council has followed DEFRA technical guidance, LAQM.TG (09), which outlines the process for evaluating source specific emissions such as that from quarries. The guidance suggests that quarrying activities are unlikely to contribute to background PM10 but recommends that the following approach is taken:

- If there are no relevant locations for public exposure within 1000 metres of the dust emissions source then there should be no need to undertake further assessment;
- If the PM10 background is less than 26 μg m⁻³, as they are around Collyweston, then there is no need for further assessment if there are relevant locations for public exposure within 200 to 400 metres;
- Where properties lie closer than 200 metres to the source, local authorities are advised to investigate whether any dust nuisance complaints have been reported, as this may give a guide to potential problems. The absence of complaints is not alone a basis for saying that the objectives will not be exceeded, and authorities are advised to take account of local background levels and their own professional judgement based on visual inspection of the operations.

9.5.32 No properties are located within 200m of the proposed extension area and the 2006 Air Quality Screening Assessment undertaken by East Northamptonshire Council identified Collyweston Quarry as an active mineral working, and confirmed that it
was unlikely to lead to PM$_{10}$ or NO$_2$ concentrations exceeding the air quality objectives.

9.5.33 East Northamptonshire Council does not undertake any continuous monitoring for PM$_{10}$ or NO$_2$, however, reference to the national background pollution maps suggests that PM$_{10}$ concentrations in the area are likely to range from 17 - 20 $\mu$gm$^{-3}$ and NO$_2$ concentrations in the area are likely to range from 10 – 20 $\mu$gm$^{-3}$.

9.5.34 In addition to the East Northamptonshire Council assessment of all local sources of air quality in the area, there have been numerous generic assessments of the potential local dust contribution from quarrying operations in the UK, all of which have shown quarries to be insignificant contributors to local PM$_{10}$ and NO$_2$ concentrations.

Conclusions

9.5.35 In accordance with the Scoping Opinion issued by Northamptonshire County Council in January 2013 along with matters raised by the Council, statutory consultees and local residents as part of the consultation process carried out in preparation for resubmission of the planning application, the Environmental Statement has included an assessment of the potential impacts of the development on air quality. Mitigation measures have also been identified where appropriate.

9.5.36 The Dust and Air Quality Assessment has found that with appropriate mitigation measures the impacts of dust and air quality should be negligible. The objectives of the NPPF, the Development Plan and other material policy considerations are met.

9.5.37 In terms of dust, the proposed extension will not cause an unacceptable impact on human beings, flora or fauna in accordance with EIA regulations.
9.6 **Soils, Land Quality and Agriculture**

9.6.1 A soil resource survey, undertaken by Land research Associates provides detailed information on the agricultural land quality and soil resources within land at the proposed extension area at the existing Collyweston Quarry site. The full soil resource survey can be found at Technical Appendix 8.

**Policy Context**

9.6.2 The Environmental Impact Assessment Directive (85/337/EEC) states that the direct and indirect effects of development should be assessed in terms of their impact on specific factors. Based on the factors identified in Article 3 of the EIA regulations, the direct and indirect effects of the proposals and the potential for impact on soils, land quality and agriculture have been assessed.

9.6.3 The NPPF, Northamptonshire Minerals and Waste Development Framework, and North Northamptonshire Core Spatial Strategy all contain policies and text concerning the protection of amenity and pollution control with development proposals. In particular:

- NPPF paragraphs 109, 112 and 113;
- North Northamptonshire Core Spatial Strategy Policy 13;
- Northamptonshire Minerals and Waste Development Framework (MWDF) Control and Management of Development Policies CMD4, CMD7, CMD8 and CMD13; and

9.6.4 A full breakdown of policies that are relevant to this planning application can be found at Appendix 3. The thrust of these policies seek to ensure that the proposals do not give rise to an adverse or detrimental impact on soils, land quality and agriculture.
Consideration of Potential Impact

9.6.5 The 1:50,000 BGS geological information shows the area is underlain by Lower Lincolnshire Limestone, with no recorded drift cover.

9.6.6 The national soil map at 1:250,000 scale shows that the land mainly has soils of the Elmton 1 Association comprising shallow well drained brashy soils over limestone, with some similar deeper soils.

9.6.7 Reconnaissance agricultural land classification (ALC) mapping carried out in the 1970s shows the agricultural land of the study area as grade 3. Reconnaissance mapping carried out by MAFF in the 1990’s using the modern (post 1988) classification shows grade 4 land fringing the site to the west.

9.6.8 A detailed soil resource and agricultural quality survey showed mainly thin brashy soils over limestone at shallow depth. The topsoil is very calcareous heavy clay loam and stony, ranging from 10% stone content to over 40% in some areas. At around 30 cm depth it overlies rubbly limestone, the upper layers of which are in a brown heavy clay loam matrix.

9.6.9 In a dry valley and on slopes the soils are deeper. The topsoil is calcareous heavy clay loam with less stones than the shallower type. The soils are formed in colluvium, so that the topsoil overlies a similar organic enriched layer passing to 40-45 cm depth. The subsoil below is brown heavy clay loam and calcareous, and overlies limestone at various depths, the deepest being in valley bottoms.

9.6.10 Most of the soils of the site have more or less stony heavy clay loam topsoils. There are patches of very stony material locally, but in general the topsoil can be considered as one resource. It is resilient but needs careful handling to retain its structure. Most of the topsoils are around 300 mm thick, giving an estimated yield of 43,000 m³ from the agricultural land.

9.6.11 Over much of the site there is no usable subsoil, but small areas in dry valleys and on some lower slopes have a brown heavy clay loam subsoil of various thickness which should be stripped and stored separately. This very calcareous material is also resilient, but need careful handling to maintain structure.

9.6.12 The agricultural quality in most of the survey area is determined by the ability of the soils to provide adequate moisture for crop growth. Land of grades 3 and 4 agricultural quality exists on the site.
The areas occupied by the different grades of land are shown below:

<table>
<thead>
<tr>
<th>Grade/sub-grade</th>
<th>Area (ha)</th>
<th>% of agricultural land</th>
<th>% of the site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-grade 3a</td>
<td>1.6</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Sub-grade 3b</td>
<td>11.8</td>
<td>82</td>
<td>73</td>
</tr>
<tr>
<td>Grade 4</td>
<td>0.9</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Other land</td>
<td>1.8</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16.1</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Consideration of Potential Mitigation**

9.6.14 In terms of soil handling and restoration all soil resources are easily damaged by being stripped or moved when wet. Consequently, stripping should only take place in the driest parts of the year, using the excavator and dumper method as described by Sheet 1 in the MAFF Good Practice Guide for Handling Soils.

9.6.15 If direct placement of stripped soils onto areas being restored is not possible, the resources should be stripped and stored separately in low bunds (no more than 3 m high for topsoil). Topsoil should be stripped from areas designated for storing subsoil. The bunds should be constructed either by excavator or bulldozer (Sheets 2 and 14 in the MAFF Good Practice Guide) avoiding overcompaction. They should be sown with grass to help maintain biological activity and prevent water erosion.

9.6.16 The soils should be removed from storage (Sheet 3 in the MAFF Good Practice Guide) and replaced by excavator during the summer using the loose tipping technique (Sheet 4 in MAFF Good Practice Guide), which avoids traffic on the restored surfaces.

9.6.17 Over most of the site it will only be possible to restore the land to moderate quality by placing 300 mm of topsoil over limestone. The very stony topsoil resource would be improved by screening to remove at least the large stones. Small areas could be restored to best and most versatile quality by adding a 250 mm layer of the subsoil resource below the topsoil.

9.6.18 The restored land should be sown to ensure that a ground cover of vegetation is established before the ensuing winter.
Conclusions

9.6.19 A comprehensive soil and land quality assessment has been undertaken to assess the impact of the proposal on soil resources in order to safeguard where practicable the best and most versatile agricultural land.

9.6.20 The available soil resources have been identified and their storage, handling and reuse have been assessed in terms of available good practice guidance. The most favourable topsoils and subsoil materials will be concentrated on land proposed for restoration to agriculture.

9.6.21 In terms of soil, land quality and agriculture, the proposed development will not have an unacceptable impact on human beings, flora or fauna in accordance with EIA regulations.

9.6.22 In conclusion, the objectives of the NPPF, the Development Plan and other material policy considerations are met.
9.7 **The Impact on Water Resources**

9.7.1 An assessment of the potential for impact on water resources has been undertaken by Watermill Environmental Ltd which has taken account of matters raised by the Council, the Environment Agency and local residents as part of the consultation process carried out in preparation for resubmission of the planning application. The full assessment can be found contained within the Technical Appendices to his Statement at *Technical Appendix 9, Appendix A.*

**Policy Context**

9.7.2 The Environmental Impact Assessment Directive (85/337/EEC) states that the direct and indirect effects of development should be assessed in terms of their impact on specific factors. Based on the factors identified in Article 3 of the EIA regulations, the direct and indirect effects of the proposals on the local water environment have been assessed.

9.7.3 The NPPF, Northamptonshire Minerals and Waste Development Framework, and North Northamptonshire Core Spatial Strategy all contain policies and text concerning the protection of amenity and pollution control with development proposals. In particular:

- NPPF paragraphs 94, 100, 101, 109 and 143;
- NPPF Technical Guidance on flood risk;
- North Northamptonshire Core Spatial Strategy Policy 13;
- Northamptonshire Minerals and Waste Development Framework (MWDF) Control and Management of Development Policies CMD4, CMD7 and CMD8; and

9.7.4 A full breakdown of policies that are relevant to this planning application can be found at *Appendix 3.* The thrust of these policies seek to ensure that the proposals do not give rise to adverse impact on the water environment.
Consideration of Potential Impact

9.7.5 The quarry will fully remove the Lincolnshire Limestone, exposing the Northampton Sands in the quarry floor. The watertable elevation is likely to be below the proposed quarry floor based on observed groundwater levels across the entire site.

9.7.6 There are no surface watercourses that are intercepted by the proposed quarry extension and therefore the only significant source of water ingress into the site is via direct rainfall. However, no surface water accumulation within the quarry void is expected due to the permeable nature of the quarry floor (sand deposits). Consequently, there is no requirement for water management operations at the site.

9.7.7 Waste will be disposed at the site up to almost pre-quarrying ground levels and the site finished with the original topsoil (it having been used in formation of on-site bunds) to the pre-excitation levels given at Appendix B of the Water Management Report (Technical Appendix 9, Appendix A). No increase in run-off potential is envisaged with and therefore no consequent impacts are likely to arise from surface water run-off west of the site.

9.7.8 Should any problem arise in relation to run-off from the restored landfill, it is considered that ground conditions are favourable to install an infiltration drainage system (e.g. French drain or borehole soakaway) at an appropriate location adjacent to the landfill. However, such action is considered unlikely to be required.

Flood Risk

9.7.9 The proposed development site is located within the EA indicative Flood Risk Zone (FRZ) 1. FRZ1 has an annual likelihood of <0.1% of being inundated by rivers – i.e. the site is considered not susceptible by inundation by any river flood event of less than (more frequent than) a one in one thousand year return period. No flooding has been recorded at the site by the EA (records dating back to 1947).

9.7.10 There is currently negligible risk of pluvial flooding at the site (prior to development as a quarry/landfill). It is considered that, upon commencement of quarrying operations, the excavated void has the potential to experience ingress of surface water although flooding is not considered likely due to the presence of unsaturated but highly-permeable underlying geological deposits (Northampton Sand).
9.7.11 The area to the west of the site, between the site and the River Welland, is considered to have a moderate to high susceptibility to groundwater flooding. No such zones exist on-site.

Consideration of Potential Mitigation

9.7.12 In order to minimise impact upon water resources the following is recommended with regard to water environment:

- Additional groundwater monitoring boreholes should be drilled along the western limit of the proposed quarry extension area. These will confirm the watertable elevation (likely to be <57 mOD) and allow baseline groundwater sampling of the downgradient side of the proposed landfill (this data to be required in the Permit variation process).

- A sump should be constructed within the quarry floor, along with levelling of the quarry floor and grading towards the sump, in the event that surface water accumulation does occur (not envisaged). The detailed design of this feature can be considered at such time when it is necessary to be implemented.

- Due to the likely high permeability of the quarry floor (sand) and its proximity to the watertable, a simple action plan should be formulated to minimise the potential impact on the water environment of any oil (or other chemical) spillage within the quarry. The plan should include for excavation of contaminated sand and the introduction of oxygenating compounds to degrade any residual hydrocarbon contamination within the subsurface. The plan should be submitted to the EA for agreement, possibly as part of the Permit variation application.

Conclusions

9.7.13 In accordance with the Scoping Opinion issued by Northamptonshire County Council in January 2013 along with matters raised by the Council, statutory consultees and local residents as part of the consultation process carried out in preparation for resubmission of the planning application, the Environmental Statement has incorporated a full assessment of the potential impacts on the quality and quantity of ground and surface waters both within the actual site and the surrounding area.
that could be influenced by the proposal. It has also assessed the potential impacts of de-watering activities and discussed sources of contamination. Mitigation measures and proposals for monitoring have also been outlined that conform with the approach to protecting surface and groundwater already undertaken at Collyweston Quarry.

9.7.14 With the proposed mitigation measures in place the quarry extension can be worked without posing any risk to the water environment. The objectives of the NPPF, the Development Plan and other material policy considerations are met.

9.7.15 In terms of the water environment, the proposed extension will not cause an unacceptable impact upon the water environment or have an impact upon human beings, flora and fauna in accordance with EIA regulations.
9.8 Rights of Way

Introduction

9.8.1 The Public Rights of Way (PROW) in close proximity to the site and affected by the proposed development are shown on Drawing No. HPL/COLLY/004. The following section will consider any potential impacts on the existing PROW network as a result of the proposed development and the significance of these impacts. Consideration will also be given to mitigation measures proposed as part of the scheme. The opportunity for enhancement to the PROW network as a result of restoration will be explored as an extension to the mitigation measures.

9.8.2 Measures have been taken to both minimise the amount of disturbance, and to mitigate for any losses that cannot be avoided to the PROW in close proximity to and within the proposed development site.

Policy Context

9.8.3 The NPPF, Northamptonshire Minerals and Waste Development Framework, and North Northamptonshire Core Spatial Strategy all contain policies and text concerning the protection of amenity and pollution control with development proposals. In particular:

- NPPF paragraph 75;
- North Northamptonshire Core Spatial Strategy Policy 13;
- Northamptonshire Minerals and Waste Development Framework (MWDF) Control and Management of Development Policies CMD4, CMD7 and CMD8; and

9.8.4 A full breakdown of policies that are relevant to this planning application and ES can be found at Appendix 3. The thrust of these policies encompasses the advice in the NPPF which highlights the need to protect and enhance public rights of way and access.
Existing Network

9.8.5 A number of Public Rights of Way cross the site (Drawing No. HPL/COLLY/004). Footpath MX18 crosses the site from north to south along its eastern boundary, joining a number of other Footpaths to the south of the site. Footpath MX12 joins MX18 and heads west across the site towards the A43 and into Duddington. Footpath MX14 also joins MX18 further south and runs north west out of the site towards the A43 road and into Duddington. Footpath MX17 runs along the site’s southern boundary from west to east and will largely be unaffected by the proposals in terms of direct impact.

9.8.6 All Public Rights of Way (MX12, MX18 and MX14) within the site boundary are to be closed for the total duration of the development and will be diverted around the site perimeter to ensure that public access around the area can continue.

9.8.7 There are a number of other footpaths within close proximity to the application area, which will be largely undisturbed by the works proposed. None of these paths will be directly affected by the development proposals but the outlook of users from some locations will change as the scheme progresses. All impacts to users of the PROW across the site are temporary and although regular users of the site will experience inconvenience, the proposed mitigation measures will reduce this impact as far as possible.

Proposed Diversions

9.8.8 The proposed diversion of the footpaths affected by the extension of the quarry will involve rerouting around the western boundary of the site. The proposed route is shown on Drawing No. HPL/COLLY/004. The diverted route will join existing footpath MX17 to the south of the site and follow the western boundary behind the soil storage bund before joining existing footpath MX18 to the north. This route will cause minimal disturbance to users of the PROW, who will still be able to gain access to the area without any major increase in travel time.

9.8.9 An application under Sections 257 and 261 of the Town and Country Planning Act 1990 for temporary diversions of the legal routes will be made to Northamptonshire County Council (NCC).
Consideration of Potential Impacts

9.8.10 Potential impacts from the development proposals upon Public Rights of Way have been considered in terms of the direct and indirect impacts. Direct impacts would be caused by any activity that removes, disturbs or destroys a PROW, whereas an indirect impact would broadly relate to the development’s potential effect upon the amenity of the Right of Way.

9.8.11 As minerals can only be worked where they are found, the direct impacts of the scheme on the Rights of Way network in the area will require some diversions to footpaths, as described in the above section. Due to the nature of the operations proposed, the Rights of Way that cross the site will be closed for the duration of the development. However, the introduction of diversions will mean that access around the wider area is retained.

9.8.12 During the course of the operations, although the proposals will maintain access to the area along public footpaths outside of the site boundary, there will be some impact upon the amenity of users of the PROW. The main issues that have the potential to impact upon the amenity of the PROW network in close proximity to the site will include noise, dust, vibration and visual considerations. Blasting operations will potentially impact most heavily in this regard, however these impacts will only be noticeable for a temporary period and blasting will be restricted to working hours. The potential impacts upon the amenity of the Footpaths is discussed below.

Visual Amenity

9.8.13 A change in the landscape of the site during operations has the potential to impact on views from the PROW in close proximity to the proposed Collyweston extension site. There will be open views over parts of the site from some of the PROW and this will result in impacts to the visual amenity of those that are affected. Visual impacts will be transient and mitigated where possible. Due to the area already containing a number of quarry operations, including the existing Collyweston Quarry, the additional visual impact of the western extension upon users of the PROW is unlikely to be of major significance.

Noise

9.8.14 The potential impact of noise on the PROW in close proximity to the site will be as a result of blasting and the operating of machinery and vehicles. A certain level of noise is inevitable due to the nature of the operations on site, however this will be
reduced through mitigation. The level of impact will depend on the proximity of the PROW to noise generating operations and the level of noise. However, the proposed extraction site should be able to be worked within the noise criteria in the NPPF to be normally justified for mineral extraction operations. Blasting will only be required once every ten days and during operational hours so the impacts upon the surrounding uses will be temporary and infrequent.

_Dust_

9.8.15 Dust can be generated by numerous activities associated with mining and quarrying and has the potential to impact on users of PROW. However, dust emission potential will be reduced through the adoption of a range of mitigation measures and should be minimal due to the high moisture content typically associated with limestone.

9.8.16 Technical Appendices to the Environmental Statement describe the potential impacts of the scheme to the local area in more detail and set out proposed mitigation. The specific mitigation measures proposed to minimise impacts upon users of the PROW are described below.

_Consideration of Potential Mitigation during Operations_

9.8.17 The potential disturbance to Public Rights of Way that will arise as a result of the development proposals has been considered from the outset of the scheme formulation, and measures have been taken to both minimise the amount of disturbance, and to mitigate for any losses that cannot be avoided.

9.8.18 The three footpaths that fall within the Application Area require temporary diversion due to the nature of the operations proposed at the site. These diversions have been described above under the consideration of potential impacts. New footpaths and diversions will be constructed at the earliest opportunity to ensure disturbance to the PROW network in the area is minimised. Applications will need to be made to divert the PROW and this will be undertaken in liaison with the Rights of Way Team at Northamptonshire County Council.

9.8.19 The main mitigation measures during operations will be introduced through the operational design and include diversions and screening. Diversions will ensure that access to the area is maintained and the impact upon users of the PROW in close proximity to the site is minimised. All potential diversions will be temporary and original footpaths reinstated at the earliest opportunity following restoration of the site. Although diverting footpaths will impact upon the PROW users to some extent,
the proposed diversion has been designed to provide the best possible route that will have minimum negative impact upon users of the PROW.

9.8.20 The impact of noise as a result of onsite operations will be restricted to the hours of operation, and reduced through screening from the soil storage bund. The soil storage bund has been designed to provide noise screening along the proposed diversion. The use of low noise versions of equipment will also reduce the impact of noise upon the PROW. Blasting will be used at the site, however this will only be required once every ten days and during operational hours. The impacts upon the surrounding uses will therefore be temporary and infrequent. Control measures will be employed, as necessary on site in accordance with BS 5228-1: 2009, such as

- Avoid unnecessary revving of engines and switch off equipment when not required;
- Keep internal haul routes well maintained;
- Minimise drop heights of materials;
- Ensure machinery is regularly well maintained;
- Ensure perimeter bunds are to the required height, with no gaps or inconsistencies.

9.8.21 A ground vibration limit will be implemented at the site to reduce any potential impacts on surrounding uses from blasting operations. A criterion for restricting vibration levels from production blasting has been recommended in order to address the need to minimise annoyance to nearby uses. Accordingly, the blasting assessment attached to the Environmental Statement recommends that a vibration criterion of 10 mms\(^{-1}\) for 95% of events, as detailed within MPG 9 and MPG 14 and in line with the current site vibration criterion, as a satisfactory magnitude for vibration from blasting at Collyweston Quarry.

9.8.22 In considering the mitigation of potential impacts, the measures proposed to minimise the generation of airborne dust are set out in the Collyweston Quarry Dust Control Plan. The potential for impacts from dust on the PROW in close proximity to the site will be minimised through the adoption of these measures at the site. Site design considerations will also reduce the dust emission potential at Collyweston Quarry, including maintaining the existing screening by processing within the quarry void; placing storage bunds along the western boundary; and material storage piles located within the sheltered quarry area. In general, dust mitigation requirements
should be minimal due to the high moisture content typically associated with limestone.

9.8.23 Visual impacts will be minimised where possible through the screening from soil storage bunds around the site’s boundary and the phasing of operations. Grassed perimeter soil storage bunds will be constructed from the outset of the development that will obscure most of the views of extraction operations. Phasing the onsite operations will ensure that any potential impacts to the surrounding Rights of Way are limited to the areas of working.

Restoration

9.8.24 On completion of the development, the site will be returned to its current ground levels and the diverted footpaths will be reinstated to their original routes. Improvement in the Footpaths through and around the site will also be undertaken as part of the restoration scheme.

9.8.25 The proposals within the restoration scheme (as shown on drawing no. 5526-L-02 contained in the Landscape and Visual Impact Assessment) include the reinstatement of the site to agriculture and an upgrade of the current Footpath network across the site. The upgrade will include the creation of a more clearly defined network of Footpaths across the site. It is considered that the proposals will have a land use benefit of improving the access to the countryside. Diversions are only required for the duration of the operations at the site and the reinstatement of these Footpaths will be undertaken at the earliest opportunity.

9.8.26 It is considered that the criteria set out within Section 261 of the Town and Country Planning Act 1990 for the restoration of a temporary diversion is clearly met and ‘the footpath or bridleway can be restored, after the minerals have been worked, to a condition not substantially less convenient to the public’.

Conclusions

9.8.27 There will be temporary impacts to users of Public Rights of Way during the operation of the site. All PROW that are to be closed for the duration of operations on the site will be diverted for a temporary period until they can be reinstated post-development. There will be no permanent diversions as part of the proposals and all temporary diversions will be reinstated to their original routes at the earliest opportunity.

9.8.28 It is considered that the proposed development will have transient effects on users of the PROW. The diversion of the route would not make any significant difference
to the current situation. All connections will be maintained and the route will continue to extend alongside an active quarrying site but separated by a perimeter mound. In this regard the physical change to the route will be minimal.

9.8.29 The temporary route provided as part of the proposals will be safe, convenient and easy to follow. A process of liaison and consultation with the Northamptonshire County Council Rights of Way Team during the course of the Application will ensure that all options for the diversion of the PROW have been considered and the best possible package of routes is introduced.

9.8.30 The proposed restoration scheme will see an improvement to the footpaths through and around the site and provide improved access across the site and to areas of restored land. The restoration proposals will provide some benefits to the area which will mitigate the impact of the operations during the course of the development. The development is temporary and the site will be restored to a high standard. Therefore the restoration proposals have the potential to lead to an improvement to the long term countryside environment and an enhanced PROW system.

9.8.31 All impacts upon the amenity of users of the PROW in close proximity to the site will be mitigated to the highest standard possible to ensure that the development has minimal effect upon the continued use of this area.

9.8.32 The LVIA states that the resultant significance of the effect upon the existing PROW routes has been assessed as negligible/ minor adverse.

9.8.33 Taking account of the proposed diversion, restoration scheme and potential mitigation measures, the Collyweston Quarry extension scheme can be worked without posing unacceptable harm to Public Rights of Way. The development does not introduce a new use to the area as a number of quarries are currently being worked, including the existing Collyweston Quarry adjacent to the proposed site. Therefore, with mitigation, the disturbance is considered to be acceptable when the post-development restoration enhancements to footpaths and the local landscape are considered.
9.9 Archaeology

9.9.1 An assessment of the archaeological potential of the land has been undertaken by CgMs Ltd. As stated previously, following the submission of the original planning application and a meeting with Northamptonshire County Council on 25th September 2014, the County Archaeologist requested that in order to assess the potential for heritage assets within the site it would be appropriate to test this potential by the use of geophysical survey. Therefore, Stratascan were commissioned to carry out a Geophysical Survey of the proposed western extension.

9.9.2 The Desk-Based Archaeological Assessment along with the Geophysical Survey Report can be found contained within the Technical Appendices to his Statement at Technical Appendix 10, Appendices A and B.

Policy Context

9.9.3 The Environmental Impact Assessment Directive (85/337/EEC) states that the direct and indirect effects of development should be assessed in terms of their impact on specific factors. Based on the factors identified in Article 3 of the EIA regulations, the direct and indirect effects of potential noise from the proposals on potential archaeological remains have been assessed.

9.9.4 The NPPF, Northamptonshire Minerals and Waste Development Framework, and North Northamptonshire Core Spatial Strategy all contain policies and text concerning the potential for impact on archaeological features as a result of development proposals. In particular:

- NPPF Section 12, paragraphs 128 and 132-135 and Annex 2;
- Northamptonshire Minerals and Waste Development Framework (MWDF) Core Strategy Policy CS14 and Objective 10;
- Northamptonshire Minerals and Waste Development Framework (MWDF) Control and Management of Development Policies CMD4, CMD7 and CMD8; and
9.9.5 A full breakdown of policies that are relevant to this planning application can be found at Appendix 3. The thrust of these policies seek to ensure that the proposals do not give rise to adverse impact on features of archaeological importance. Where there is impact it should be mitigated to acceptable levels through appropriate monitoring/investigation.

Consideration of the Potential for Impact

9.9.6 The archaeological and cultural heritage impact of the proposals has been assessed by CgMs Consulting, who has undertaken an Archaeological Desk-Based Assessment as part of the EIA. The report by CgMs forms part of the Environmental Statement and can be found at Technical Appendix 10, Appendix A.

9.9.7 The assessment comprises an examination of evidence in the Northamptonshire Historic Environment Record (HER), historic map sources and online resources. Information regarding Scheduled Monuments, Registered Parks and Gardens, Registered Battlefields and Listed Buildings was obtained from English Heritage's National Heritage List for England; information on Conservation Areas was sought from East Northamptonshire District Council. The assessment incorporates published and unpublished material and charts historic land-use through a map regression exercise.

9.9.8 Previous phases of development at Collyweston Quarry in 1998 and 2005 were also accompanied by extensive programmes of archaeological survey. Fieldwalking, geophysical survey and trial trenching within the original quarry site. Geophysical survey and trial trenching has also been undertaken in the more recent eastern extension. Further archaeological trial trenching and archaeological area excavation was undertaken immediately east of the study site in advance of quarrying in 2001. All previous work has uncovered no finds of any significance. The locations of these previous archaeological investigations are shown in Figure 5 of the Archaeological Assessment attached at Technical Appendix 10, Appendix A.

9.9.9 Data obtained from English Heritage and the local authority confirms that there are no Designated Heritage Assets (World Heritage Sites, Listed Buildings, Scheduled Monuments, Registered Battlefields, Parks and Gardens, Conservation Areas) within the study site, or immediately adjacent to it.
9.9.10 A Conservation Area has been designated covering the historic core of Duddington village to the west of the study site. The closest part of the Conservation Area is located around 200m west of the western edge of the study site, and is separated from it by the A43 road in a cutting and mature hedgerows.

9.9.11 Within the village, a total of 27 buildings and structures are designated as Listed Buildings. None of the Listed Buildings within Duddington or the Conservation Area are characterised as having a wide setting which might include the study site. Duddington Bridge at the western edge of the village, is designated as a Scheduled Monument. The setting of all these designated heritage assets is formed by the built area of the village.

9.9.12 The locations of these designated heritage assets within the search area are shown in Figure 2 of the Archaeological Assessment attached at Technical Appendix 10, Appendix A.

9.9.13 The data provided by the HER does not include any records for the study site.

9.9.14 The site of a 20th Century Royal Observer Corps post is recorded in the HER 100m west of the study site (HER 8510); however map sources suggest the HER location is slightly inaccurate and the post was actually located within the study site. The significance of the former ROC monitoring post (HER 8510) relates to the historic interest of site and its role in the Cold War of the second half of the 20th Century. This has been demolished and therefore does not form a constraint on development.

9.9.15 Including the Royal Observer Corps post, the HER data identifies a total of 310 individual records within the surrounding 1000m radius search area. These records are grouped in the HER under 43 separate ‘Monument Complexes’ (roughly equivalent to individual ‘archaeological sites’). Large numbers of records relate to individual buildings within the core of Duddington village (HER 2888) and elements of the Post-Medieval/ early Modern landscape (HER 9169, 9170, 9171, 9172, 9173 & elements).

9.9.16 The assessment has also considered the potential for as-yet undiscovered archaeological remains within the site. It has established that the study site has a moderate potential for the presence of early Prehistoric finds. On topographical grounds the site has a moderate potential for below-ground archaeological
evidence of Bronze Age funerary monuments; depending on their state of preservation, such monuments are likely to be of local or regional importance.

9.9.17 The site is considered to have a high potential for Iron Age or Roman iron production evidence, and a moderate potential for Saxon period iron production. Any such archaeological evidence could contribute to understanding of this regionally important industry, but would not be of sufficient importance to prevent development.

9.9.18 The site has a high potential for Medieval and Post-Medieval cultivation evidence. Such evidence is considered to have limited archaeological interest.

9.9.19 In view of the extremely shallow soils and overburden across most of the site, any such archaeological evidence will have been truncated by the continued ploughing of the site (shallow soils 0.1 – 0.3 metres depth). The only archaeological evidence that will survive will be those parts of features which were cut sufficiently deeply into the bedrock. This truncation has reduced the level of significance of any surviving archaeological features.

9.9.20 Soil stripping and quarrying of underlying rock will remove any archaeological evidence that might currently survive within the site.

Further Assessment and Development Design Iteration

9.9.21 As stated previously, following the submission of the original application and a meeting with Northamptonshire County Council on 25th September 2014, the County Archaeologist requested that in order to assess the potential for heritage assets within the site it would be appropriate to test this potential by the use of geophysical survey.

9.9.22 Stratascan were commissioned to carry out the geophysical survey of the proposed western extension with the work undertaken in February 2014 (Technical Appendix 10, Appendix B). The objective of the survey was to locate any features of possible archaeological origin in order that they may be assessed prior to development.

9.9.23 The geophysical report and all fieldwork have been conducted in accordance with both the English Heritage guidelines outlined in the document: Geophysical Survey in Archaeological Field Evaluation, 2008 and with the Institute for Archaeologists document Standard and Guidance for Archaeological Geophysical Survey. Detailed
magnetic survey (gradiometry) was used as an efficient and effective method of locating archaeological anomalies.

9.9.24 The detailed magnetic gradiometer survey has not identified any anomalies that can be characterised as being either of a probable or possible archaeological origin.

9.9.25 As outlined above, the desk-based work had identified a relatively high potential for evidence of Iron Age, Roman and Saxon metal-working within the local area. However, no evidence for such features has been identified within the survey data. The English Heritage guidelines for geophysical survey deem magnetometry an appropriate method for detecting hearths, kilns and furnaces and that surveys over limestone geology, such as that at Duddington, will typically produce a good response.

9.9.26 Other modern and natural features have been identified including agricultural activity, magnetic disturbance, areas of magnetic debris, natural geological variation and isolated magnetic spikes. The former site of a Royal Observer Corps (R.O.C) monitoring post is present in the centre of the site, and this is visible within the survey data in the form of an area of strong magnetic disturbance and debris.

**Consideration of Potential Mitigation**

9.9.27 In considering the mitigation of potential impacts on unrecorded archaeological remains within the proposed extension area, in light of the geophysical survey results, it is considered that a watching brief during site strip would be a reasonable back-stop mitigation measure.

**Conclusions**

9.9.28 In accordance with the Scoping Opinion issued by Northamptonshire County Council in January 2013 along with matters raised by the Council, statutory consultee responses received and local residents as part of the consultation process carried out in preparation for resubmission of the planning application, a full desk based assessment and geophysical survey has been undertaken of the historic landscape in consideration of the potential indirect impacts on the setting of nearby landscapes and Listed Buildings. The Environmental Statement also sets out appropriate mitigation measures.
The desk-based assessment has established that there are no designated heritage assets within the study site and no potential impacts on the setting of any designated heritage asset in the surrounding area.

Previous phases of development at Collyweston Quarry in 1998 and 2005 were accompanied by extensive programmes of archaeological survey with them having made no finds of any significance.

The study site is known to contain only shallow depths of soil and overburden above the limestone bedrock, and there is evidence that cultivation of the site has scarified the upper surface of the bedrock. This has truncated any below-ground archaeological evidence within the study site and reduced the level of significance of any surviving archaeological features.

The detailed magnetic gradiometer survey conducted has not identified any anomalies that can be characterised as being either of a probable or possible archaeological origin.

The desk-based work had identified a relatively high potential for evidence of Iron Age, Roman and Saxon metal-working within the local area. However, no evidence for such features has been identified within the geophysical survey data. Therefore, in terms of cultural heritage, the proposed extension will not cause an unacceptable impact on material assets and the cultural heritage in accordance with EIA regulations.
9.10 Blasting

9.10.1 An Assessment of Environmental Impact from Blasting has been undertaken by Vibrock Limited. The full assessment can be found contained within the Technical Appendices to this Statement at Technical Appendix 2.

9.10.2 Further to the Blasting Assessment, as a result of consultation exercises carried out by Bullimores, in order to clarify the proposed method/system of working of the proposed western extension, a Working Method Statement (WMS) has been developed (Technical Appendix 1) which includes a Blast Management Plan (BMP). The details of the BMP along with the Blasting Assessment are summarised below.

Policy Context

9.10.3 The Environmental Impact Assessment Directive (85/337/EEC) states that the direct and indirect effects of development should be assessed in terms of their impact on specific factors. Based on the factors identified in Article 3 of the EIA regulations, the direct and indirect effects of the proposals and the potential for impact from blasting on the local environment and residential amenity have been assessed.

9.10.4 The NPPF, Minerals Planning Guidance, Northamptonshire Minerals and Waste Development Framework, and North Northamptonshire Core Spatial Strategy all contain policies and text concerning the protection of amenity and pollution control with development proposals. In particular:

- NPPF paragraph 144;
- Minerals Planning Guidance 9 and 14;
- Northamptonshire Minerals and Waste Development Framework (MWDF) Control and Management of Development Policies CMD4, CMD7 and CMD8; and

9.10.5 A full breakdown of policies that are relevant to this planning application can be found at Appendix 3. The thrust of these policies seek to ensure that the proposals do not give rise to adverse or detrimental impact from blasting.
Consideration of the Potential for Impact

9.10.6 The blasting assessment and BMP have had regard to the nature, location and scale of the proposed development and the potential sensitivity of the surrounding land uses and in particular 3 sensitive locations. The locations chosen for the purposes of the assessment are those which are the closest residential inhabited property within the neighbouring village of Duddington during the various phases of working.

9.10.7 The 3 locations are as follows:

- Robinswood
- The Pines
- Oak Cottage

9.10.8 All blasts at Collyweston Quarry shall be designed in order to comply to a vibration criteria of 6 mms$^{-1}$ peak particle velocity at a 95% confidence level as measured in any of the three planes of measurement. This is in line with Government guidance within Minerals Planning Guidance (MPG) 9, 1992 and MPG 14, 1995.

9.10.9 All vibration will be of a low order of magnitude and would be entirely safe with respect to the possibility of the most cosmetic of plaster cracks.

9.10.10 All vibration will also be well below those levels recommended for blast induced vibration as being satisfactory within the British Standard Guide BS 6472-2: 2008.

9.10.11 All vibration will conform to MPG 9 and MPG 14 where illustrative figures of 6 to 10 mms$^{-1}$ at 95% confidence are given.

9.10.12 If Bullimores Sand and Gravel Limited follow the recommendations given, there is no reason why blasting operations within the proposed extraction area at Collyweston Quarry will give rise to adverse comment due to induced vibration at any of the dwellings or structures in the vicinity.

Further Assessment and Development Design Iteration

9.10.13 As outlined above, as a result of the consultation exercises carried out by Bullimores, in order to clarify the proposed method/system of working of the proposed western extension, a WMS has been developed (Technical Appendix 1) which includes a BMP.

9.10.14 The WMS sets out that it is not in Bullimore’s commercial interest to carry out
quarry blasting any more than is necessary and there are fundamental benefits to the Company in avoiding blasting, both in terms of specific costs of blasts and also the fact that blasting results in greater volumes of limestone waste and thus reduces aggregate production.

9.10.15 It is Bullimore’s objective to seek to minimise and reduce any vibration and disturbance potentially generated by the quarry operations to acceptable levels for local residents whilst enabling effective, efficient extraction and processing of limestone and slate log.

9.10.16 In light of local concerns over potential impact and to help achieve the objective to minimise and reduce vibration and potential disturbance to acceptable levels, Bullimores propose to work the western extension using a 45 tonne excavator rather than a lower capacity machine. The Company would accept a planning condition to formally control/require this.

9.10.17 Whilst the Company considers this will minimise the need for blasting, there is always some potential that they might need to carry out some limited quarry blasting if they were to encounter particularly hard or consolidated limestone material.

9.10.18 The Company would accept a planning condition worded along the following lines:

"Unless otherwise agreed in writing or in an emergency, there shall be no more than 15 quarry blast events in any given 12 month period" (The reason is to minimise potential impact on local amenity).

9.10.19 When carrying out the quarry blasting, the Company would adhere to a “Blast Management Plan (BMP)”. The objective of the BMP is to ensure blasting activities are carried out in order to minimise any public concerns in relation to ground vibration and air blast overpressure whilst enabling effective, efficient extraction and processing of limestone and slate log.

9.10.20 In formulating the BMP various approaches adopted elsewhere both overseas and in the UK as well have been looked at as well as consulting with blasting experts Vibrock who produced the Blasting Assessment submitted as part of the Planning Application/Environmental Statement. Furthermore, guidance produced by Leicestershire County Council has also been consulted.
Consideration of Potential Mitigation

9.10.21 The Blasting Assessment along with the BMP set out the recommendations in order to minimise the vibration impact of blasting operations from Collyweston Quarry to nearby residents and structures, these are summarised as follows:

*Ground Vibration - Inhabited Property*

9.10.22 It is recommended that a ground vibration limit is chosen that not only is perfectly safe for the integrity of structures, but also takes into account the physiological effects on adjacent neighbours. As such we recommend a vibration limit of 6 mms$^{-1}$ peak particle velocity. The limit of 6 mms$^{-1}$ is lower than the current planning conditions at Collyweston Quarry (10 mms$^{-1}$), is lower than the relevant British Standard 6472-2: 2008 and will ensure that no individual blast will exceed 12 mms$^{-1}$.

*Air Overpressure*

9.10.23 Vibrock have advised that no air overpressure limit exists within MPG 9 & 14 approved guidance due to the unpredictable effect of meteorological conditions which are out of the control of the mineral operator. To impose a limit would conflict with MPG 9 & 14 and inflict an unreasonable burden on the operator.

9.10.24 However, within the Leicestershire County Council Guidance ([Appendix 1 of the WMS](#)) with regards air overpressure, it states that Leicestershire county Council have generally adopted a maximum air overpressure limit of 120 dB peak linear, as part of the conditions covering blasting within modern Planning Permissions. The guidance goes on to state that relatively rarely do air overpressures exceed 125 dB. Within a range of values of + or −15 dB some 7% of values are found to be in excess of that figure.

9.10.25 In line with the current best accepted modern practice in the extraction industries, it is recommended that safe and practical measures are adopted that ensure the minimisation of air overpressure generated by blasting at source, considering such factors as initiation technique. Furthermore, an air overpressure limit will be established – when measured at an agreed potentially sensitive location - that not only is perfectly safe for the integrity of structures, but also takes into account the physiological effects on adjacent neighbours. In this case for at least 93% of all blast
As can be seen from the previous blast monitoring results, in terms of air overpressure, results have ranged from between 105 dB to a maximum of 113 dB. Therefore, although it is proposed to introduce a vibration limit of 120 dB peak linear, previous blasts have not come anywhere close to this level.

**Monitoring and Control**

9.10.26 The mineral operator will design blasting operations taking into account the BMP.

9.10.27 Blasting will be restricted to between the hours of 10.00am to 03.00pm weekdays (special circumstances aside). Sentries will be placed to prevent any inadvertent access to the site when blasting. Neighbours to the quarry will be advised as soon as is known (normally within 1 to 2 days) of the date and expected time for a forthcoming blast by the quarry. The method of notification will take the form of one of the following:

- Phone
- Email
- Text

9.10.28 Signage will also be erected on nearby public rights of way to advise users that they are approaching the vicinity of a quarry site where occasional blasting occurs (e.g. monthly, for a few seconds).

9.10.29 Quarry management will adopt modern blasting technology (leading industry practices) and blasting risk management practices including securing of the site during the blast. Only suitably experienced and qualified blasting personnel will be employed to provide blasting services.

9.10.30 A blast plan shall be prepared for each blast shot and shall describe shot hole layout, initiation sequence, charging, stemming type and height, charge weight and any other design element required for good blasting practice.

9.10.31 The blast plan shall include actions to be taken if levels of induced air overpressure or ground vibration approach maximum permissible levels set out above.

9.10.32 Further blast management procedures and practice are set out in detail in the
With the above control recommendations implemented and the exercise of reasonable engineering control over quarry blasting operations, it is envisaged that the proposed western extension will work within the recommended vibration criteria and without undue annoyance to local residents.

Conclusions

The blasting assessment along with the BMP contained in the WMS have demonstrated that the proposed extension will not result in any significant impacts upon sensitive locations in the surrounding area.

With the above control measures implemented and the exercise of reasonable engineering control over quarry blasting operations, it is envisaged that the proposed western extension will work without undue annoyance or risk to local residents.

With the proposed mitigation measures in place the quarry extension can be worked without posing unacceptable harm in carrying out blasting. The objectives of the NPPF, the Development Plan and other material policy considerations are met.
10 Alternatives

10.1 Introduction and Background

10.1.1 An assessment of alternatives has been carried out focusing on two key facets. Firstly, the broad principle of mineral extraction from Collyweston Quarry and secondly, the scheme design specifics of the proposal which have evolved as an iterative process taking account of the findings of the EIA assessment work along with matters raised by the Council, statutory consultees and local residents as part of the consultation process carried out in preparation for resubmission of the planning application.

10.2 Planning Policy Context

Introduction

10.2.1 An outline of the main areas of national and local policy relating to the assessment of alternatives is considered below, a full breakdown of policies that are relevant to this planning application and ES can be found at Appendix 3.

National Policy

10.2.2 Schedule 4 (Part II, section 4) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 provides that the information for inclusion in Environmental Statements should include “An outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for his choice, taking into account the environmental effects”.

10.2.3 The NPPF (at para 143) requires Mineral Planning Authorities, when preparing Local Plans, to include policies for the extraction of mineral resources of local and national importance.

10.2.4 The NPPF (para 145) makes clear the benefits of the requirement to plan for the maintenance of a steady and adequate supply of aggregates, including those of a specific type or quality, which have distinct markets.

Development Plan Policy

Northamptonshire Minerals and Waste Core Strategy

10.2.5 Policy CS5 seeks to ensure provision over the plan period for 7.9 million tonnes of crushed rock (an annual average of 0.39 million tonnes) provided from deposits
outside unworked river valleys or sites subject to old permissions upgraded to modern conditions. In addition a 10 year landbank of crushed rock will be sought from extensions to existing sites (if they meet the spatial strategy) and are assessed as meeting environmental, amenity and other requirements of the MWDF.

Northamptonshire Draft Minerals & Waste Local Plan

10.2.6 The draft Local Plan plans for providing an adequate supply of aggregates, and in particular makes reference to the maintenance of appropriate landbanks of at least 10 years for crushed rock (Policy 1).

10.2.7 Policy 5 sets out that a supply of crushed rock to contribute to meeting the provision of crushed rock (limestone) will be provided for by: production since 1 January 2011, sites with planning permission as at 1 January 2011, along with 3 allocated sites.

10.2.8 The draft Local Plan does not specifically include commitments (i.e. sites with planning permission or equivalent) for minerals-related development. However, it states that these commitments make a fundamental contribution in providing adequate supply of aggregates throughout the plan period, and for the Local Plan to meet its objectives.

10.2.9 Paragraph 4.58 states with regards building and roofing stone that it is not anticipated that further provision for roofing stone beyond that identified through the committed (Duddington) and allocated (Collyweston village) sites will be required.

10.3 Alternatives to Primary Aggregate

10.3.1 There are two alternatives to Primary Aggregates – Recycled Aggregates and Secondary Aggregates.

- Recycled Aggregates: derived from reprocessing materials previously used in construction. Examples include recycled concrete from construction and demolition waste material (C&DW) and railway ballast.

- Secondary Aggregates: usually by-products of other industrial processes not previously used in construction. Secondary Aggregates can be further subdivided into manufactured and natural, depending on their source. Examples of manufactured secondary aggregates are pulverised fuel ash (PFA) and
metallurgical slags. Natural secondary aggregates include china clay sand and slate aggregate.

10.3.2 In 2002, the WRAP (Waste & Resources Action Programme) Aggregates Programme funded by DEFRA was launched to minimise the demand for primary aggregates through promoting greater use of recycled aggregates.

10.3.3 To ensure demolition waste could be processed into Recycled Aggregate which was of an appropriate quality and conformed to the appropriate European aggregate product Standard, WRAP worked with the industry to formulate a Quality Protocol (QP). This QP, entitled “The Quality Protocol for the production of aggregates from inert waste”, was first published and implemented in 2004. It was reviewed and reprinted in 2008 to produce the current edition.

10.3.4 In summary, the Quality Protocol provides recycled aggregate suppliers with the following:

- A procedure to control the quality of recycled aggregates for sale as construction materials, or as constituents in a product, e.g. concrete, asphalt and unbound mixtures.
- Recommended minimum frequencies of inspection and testing conforming to the requirements of the European Standards for Aggregates (See references below).
- The means for suppliers to provide adequate assurance that their products conform to relevant technical specifications and certified characteristics.

10.3.5 The use of recycled and secondary materials in the GB aggregates market has increased rapidly since the early 1990s. The share of recycled and secondary materials in GB is the highest in Europe - 29 per cent compared with the European average of 10 per cent. This highlights the fact that the use of recycled and secondary materials in Britain is close to full potential. (Source: Mineral Products Association - The mineral products industry key facts at a glance).

10.3.6 The use of recycled and secondary aggregates is widely supported. However, they will never be able to wholly replace primary aggregates as there can never be a guarantee of supply of material of an appropriate quality to meet a specific demand. Therefore there still remains a need for the provision of primary
aggregate and this is reflected in the continuation of apportionment figures for primary aggregate and the provision of a landbank.

10.4 Alternative Sites within Northamptonshire

10.4.1 The main consideration is whether Collyweston limestone and Collyweston slate log provision can be met from other sources. It is relevant to consider the main policy documents, where it is acknowledged that existing commitments (i.e. sites with planning permission or equivalent) for minerals-related development make a fundamental contribution in providing adequate supply of aggregates throughout the plan period, and for the Local Plan to meet its objectives. As stated previously in this ES, the proposed western extension is to replace the permitted eastern extension, therefore effectively this is a swap of permitted mineral reserves that are needed to provide an adequate supply of aggregates throughout the plan period, and for the Local Plan to meet its objectives.

10.4.2 Collyweston Quarry produces limestone aggregate from the Lincolnshire Limestone, which is the better quality limestone present in Northamptonshire. It has superior quality over the Blisworth Limestones, which tend to be softer and have limited use in construction works.

10.4.3 Therefore, it would be inappropriate and potentially damaging, particularly from a sustainability point of view, if limestone from more remote locations of a lower quality were used as an alternative.

10.4.4 Furthermore, Collyweston Quarry not only produces crushed limestone rock aggregate, but also produces quantities of building stone as well as the particularly scarce “Collyweston Slate Log”. The Collyweston Log is used as a roofing material on specialist building conservation projects and can often be found on local Listed Buildings and in local Conservation Areas. It is a very important sustainable, local, natural resource. An extension to Collyweston Quarry will assist in meeting the demand for specialist building and roofing stones in the interest of both conserving existing buildings and maintaining local settlement character in the context of new development.

10.4.5 Both the adopted Minerals and Waste Core Strategy and the draft Local Plan recognise that traditional materials such as Collyweston stone slate help to play an important role in the restoration of historic buildings and are also used in new
buildings, extensions, and walling in order to preserve and enhance local distinctiveness and local building character.

10.4.6 Furthermore, the draft Local Plan states with regards allocations for building and roofing stone that it is not anticipated that further provision for roofing stone beyond that identified through the committed (Duddington) and allocated (Collyweston village) sites will be required. On this basis as this proposal is replacing the permitted eastern extension, this western extension should be permitted in order to maintain the provision of roofing stone.

10.4.7 It can be seen from a County wide perspective, within the planning policy documents, that the MPA are, as per the guidance contained within the NPPF, planning supply to local markets as a sustainable pattern of supply. It is unsustainable for local markets to be supplied from more remote sources, particularly from a transport perspective and the significant increases in haulage distance. In addition, more Collyweston slate log is of importance in preserving and enhancing the local distinctiveness of the local built environment.

10.4.8 In terms of alternative site, consideration has been given to Wakerley which has been allocated under Policy M2 of the Locations for Minerals Development DPD and according to Northamptonshire County Council’s website, an application for Extension to Old Quarry was approved at committee on 26 July 2011 subject to a Section 106 legal agreement being signed which is still being finalised (Application ref: 08/00026/MIN).

10.4.9 However, there are only limited prospects of Wakerley coming on stream in the short to medium term. The points to consider are:

- To facilitate the working of the limestone, a new planning permission has been pursued by the landowner. Whilst there is a resolution to grant planning permission, this awaits completion of a S106 agreement.

- Assuming the permission is issued, there are considerable “up front” costs in opening the site due to environmental considerations/constraints and the need for new transport/haulage infrastructure.

- Bullimores do not consider Wakerley to be viable as a standalone limestone aggregate supply site in the short to medium term when the above factors are set against the economic conditions and the market conditions for
limestone aggregate.

- Northamptonshire has a 0.39 mt of limestone supply per year. Currently Collyweston supplies 0.12 mt per year and expects to be closer to 0.15-0.20 in forthcoming years. Therefore Collyweston supplies from a third to a half of all limestone aggregate in Northamptonshire and it is the better quality Lincolnshire Limestone.

- The Development Plan includes potential additional limestone aggregate supply sites. The principal one (with a large potential reserve) is Wakerley. Taking account of the above points and the viability/deliverability doubts over the Wakerley site, it is evident that the maintenance of limestone aggregate supply in Northamptonshire at the 0.39 mt level in Policy CS5 is dependent on maintaining/sustaining supply from Collyweston Quarry.

10.4.10 The above broad level of assessment has demonstrated that there is no obvious/better alternative than as an extension to the existing quarry operation, particularly as the environmental assessment has demonstrated that any potential adverse impacts are acceptable.

10.5 Do Nothing Approach

10.5.1 In the light of the lack of an obvious alternative to the Collyweston Limestone and the Collyweston slate log, coupled with the fact the NPPF makes clear the benefits of the requirement to plan for the maintenance of a steady and adequate supply of aggregates, including those of a specific type or quality, which have distinct markets and furthermore that local policy states that existing commitments (i.e. sites with planning permission or equivalent) for minerals-related development make a fundamental contribution in providing adequate supply of aggregates throughout the plan period, and for the Local Plan to meet its objectives, there is a complete disadvantage of a do nothing approach.

10.5.2 The proposed western extension to Collyweston Quarry will replace the remaining permitted reserves contained in the eastern extension and is therefore needed in order to sustain and maintain a viable mineral supply from Collyweston Quarry, as envisaged by the previous planning permission for the eastern extension to the quarry.
10.5.3 Furthermore, limestone aggregate from Collyweston currently supplies between one third and half of the overall 0.39 mtpa crushed rock apportionment identified within Policy CS5. Current working in the eastern extension is becoming uneconomic due to the amount of overburden encountered. This application contains a similar extent of reserve to that already permitted from the eastern extension. If permission is not granted for the proposed western extension, Collyweston limestone will no longer be able to contribute to the County’s crushed rock requirements.

10.6 Alternative Methods of Working

10.6.1 Minerals are a resource which can only be worked where they are found. The location and extent of working identified as the extraction area as part of this application is based upon the geology and the location of the available reserve. In addition, the ability to access these reserves from the existing quarry to ensure continuity of extraction and supply in the most environmentally acceptable manner.

10.6.2 The proposed western extension to Collyweston Quarry will replace the remaining permitted reserves contained in the eastern extension and is therefore needed in order to sustain and maintain a viable mineral supply from Collyweston Quarry, as envisaged by the previous planning permission for the eastern extension to the quarry.

10.6.3 Therefore the western extension is the last option open to Bullimores at this location in order to sustain limestone aggregate supply, as well as the supply of building stone and the specialist Collyweston “slate log” from Collyweston Quarry.

10.6.4 As well as extensive borehole drilling to establish the extent of reserve, the scheme design has been an iterative and evolving process based on the findings of the EIA assessment.

10.6.5 The general direction of working allows for a continuation of extraction from the existing exposed faces. This has benefits from an environmental perspective as well as a functional/practical benefit to the operator.

10.6.6 The proposed perimeter soil bunds have been placed there initially to ease operations and reduce the need for double handling. In addition, the bunds provide visual and acoustic screening whilst extraction is at a higher level.
10.6.7 The scheme of working allows for mineral extraction alongside progressive restoration of the southern part of the quarry.

10.7 Alternative Means of Transport

10.7.1 Theoretically there are other options to transporting mineral other than by road. These are primarily rail and waterborne transportation. The issue with the alternatives relates primarily to market and the demand. The quarry and limestone reserves are located close to their intended end point of use. The final point of use is not a single location but a series of local construction sites. The site is used as a local collection point. To transport limestone to an alternative point of collection would be less sustainable. It is therefore not practical to utilise rail/water connections. In addition, the quarry is a relatively small scale and low key operation. The limestone extraction and revenues generated by the operation would not make rail connection/water transport a financially viable option.

10.8 Alternative Restoration Options

10.8.1 The proposed restoration scheme has been developed taking account of the three dimensions to sustainable development (NPPF, para 7). The site needs to perform an economic role to provide a level of income to sustain the long term management of the proposed ecological and nature conservation benefits. The restoration proposes a balance of environmental and economic considerations. Finally the end uses provide significant long term enhancements to ecology and nature conservation.

10.8.2 Restoration to agriculture provides the most versatile and economic option for the area and the landowner. The restoration scheme has been designed so that the land is returned to an appropriate standard to allow for the recommencement of agricultural practices on the land following restoration of the quarry.

10.8.3 An alternative to the restoration could be to leave the quarry void with no refill. However, this is not seen as a viable option due to the landowner requiring the land to be restored to agricultural use as well as infilling the site with inert fill provides economic benefits.

10.8.4 The restoration proposals therefore provide a balanced range of economic, social and ecological benefits meet the requirements of both landowner and statutory and
local stakeholders.

10.8.5 There have been a number of minor amendments to the working scheme and restoration proposals to take on board ecological sensitivities and improvements to the restoration.
11 Cumulative Impact Assessment

11.1 Introduction

11.1.1 The purpose of this report is to assess the potential cumulative impact generated by the proposed development. Throughout the Environmental Statement and associated technical appendices, the impacts that the development could potentially have on the site and the surrounding area has been assessed. This report draws together the findings of all the technical assessments along with the further work carried out in preparation for resubmission of the planning application and outlines whether any cumulative impacts may emerge from the interaction between different environmental impacts.

11.1.2 Cumulative impacts relate to the way in which different impacts can affect a particular environmental resource or location incrementally. In essence, cumulative impacts are those which result from incremental changes caused by other past, present or reasonably foreseeable developments, together with the proposed development. Therefore, the potential impacts of the proposed development cannot be considered in isolation but must be considered in addition to impacts already arising from existing or planned development.

11.2 Planning Policy Considerations

11.2.1 An outline of the main areas of national and local planning policy relating to the assessment of cumulative impact is considered below, a full breakdown of policies that are relevant to this planning application and ES can be found at Appendix 3.

11.2.2 The National Planning Policy Framework (NPPF) states that ‘local planning authorities should ensure, in granting planning permission for mineral development, that there are no unacceptable adverse impacts on the natural and historic environment, human health or aviation safety, and take into account the cumulative effect of multiple impacts from individual sites and/or from a number of sites in a locality (paragraph 144, emphasis added).

11.2.3 In terms of the Northamptonshire Minerals Core Strategy, Policy CS14 - Addressing the Impact of Proposed Minerals and Waste Development sets out a number of criteria that proposals for minerals and waste development must demonstrate that have been addressed. The assessment of potential impacts should include direct
effects and any indirect, secondary, cumulative, short / medium / long-term, permanent & temporary, positive & negative effects of the project.

11.3 EIA Scoping Response

11.3.1 In accordance with good practice and the guidance provided by the Department of Environment, Transport and the Regions (DETR) in Circular 02/99 entitled ‘Environmental Impact Assessment’ the Applicant has sought the Mineral Planning Authority’s (MPA) Scoping Opinion. To assist the MPA in their judgment a report was prepared which provided an outline of the development proposal and broad consideration of its likely impacts. The Scoping request was submitted to Northamptonshire County Council in December 2012.

11.3.2 The Scoping Report stated that regard would be had to the totality of the quarrying and restoration development, including the relinquishing of uneconomic mineral reserves in the eastern extension. General consideration would also be given to concurrent mineral developments in the wider area.

11.3.3 Northamptonshire County Council responded to the EIA Scoping request on 21st January 2013 where they set out their formal Scoping Opinion, including responses from the consultation exercise with a number of statutory consultees.

11.3.4 The Scoping Opinion from Northamptonshire County Council includes a specific section on cumulative impact. It states that;

"Your explanation of the consideration of the effects of the entire mineral working and infrastructure is welcomed and should be included in the ES. The ES should identify, describe and evaluate the effects that are likely to result from the project in combination with other projects, activities and plans for all types of development that are being, have been or will be carried out. This should include (where information permits) existing completed projects, approved but uncompleted projects, ongoing activities, plans or projects under consideration by the consenting authorities, and plans and projects which are reasonably foreseeable.

Peterborough City Council (Alan Jones, 01773 45440) has brought to the applicant’s attention, nearby development sites outside Northamptonshire that may need to be considered for in-combination effects, such as (from west to east as far as the A1); Cross Leys Quarry, Thornaugh I, Cook’s Hole, Thornhaugh II (including Thornaugh IIb
11.4 Assessment Approach and Methodology

11.4.1 Whilst the NPPF requires consideration of cumulative effects there is no national or local guidance as to how this should be carried out.

11.4.2 In the absence of any such policy guidance, what constitutes a robust assessment of cumulative effects has been considered by the High Court in the case of The Queen (on the application of Leicestershire County Council) v. the Secretary of State for Communities and Local Government and UK Coal Mining Ltd (2007) EWHC Admin 1427. The case, known as the 'Long Moor judgement' was heard before Mr Justice Burton and was focused around the Secretary of State’s granting of planning permission on appeal for surface coal mining at UK Coal's Long Moor site in Leicestershire.

11.4.3 The background to the case was that Leicestershire County Council (the Mineral Planning Authority or MPA) had originally refused planning permission on the grounds of cumulative impact. At appeal however, the Inspector and the Secretary of State accepted that none of the individual effects was of sufficient dis-benefit to justify the refusal of permission and accepted that in the absence of a further ‘proper assessment’, there was nothing to suggest that the cumulative impact was such as to warrant the refusal of permission.

11.4.4 When the decision was challenged in the High Court, Mr Justice Burton criticised the MPA’s evidence as being based on conclusions which were simple value judgements, with no supporting reasons. Importantly, he concluded that reasons underpinning any conclusions on cumulative effects must be provided by the MPA for it to be considered a ‘proper assessment’. In paragraph 41 of his judgement he gives examples of such reasoning as including:

1. Even though each individual area of potential impact was not objectionable yet each such feature was close to objectionability that, although none could be said to be individually objectionable, yet because each was nearly objectionable, the totality was cumulatively objectionable; or

2. One, two, three or four of the particular features were close to being objectionable and that would be an important matter to take into account when looking at the totality; or
3. One particular combination of two or three otherwise unobjectionable features could cause objectionability in their totality; or

4. As was specifically addressed by the Interested Party and by the Inspector here, and found not to be the case, there could be some unusual feature or some unusual combination of features such as to render the combination objectionable when the individual feature was not.

11.4.5 The judgement of Mr Justice Burton therefore provides guidance as to how levels of objectionability should be assessed and, how, then they might be considered in combination.

11.4.6 Following on from this case the Secretary of State granted planning permission on appeal in respect of the ‘Telford case’ (Huntington Lane) which involved a proposal by UK Coal to extract 900,000 tonnes of coal and 250,000 tonnes of fireclay near Telford. The Planning Inspector in this case considered that “There are three categories of cumulative impact to consider: namely (i) successive effects (ii) simultaneous effects from concurrent developments, and (iii) combined effects from the same development.”

11.4.7 The methodology for assessing cumulative impact in regard to this proposal therefore takes account of the above cases and specifically adopts the approach taken by the Inspector in the Telford case. This is the most recent case to deal with this issue and, in terms of approach, has also received the approval from the Secretary of State.

11.4.8 In that regard, this assessment of cumulative effects will have regard to:

- successive effects;
- simultaneous effects from concurrent developments, and
- combined effects from the same development.

11.4.9 Regard will also be had to the potential for the proposal to give rise to a series of benefits (positive impacts) which could potentially offset or outweigh any harm which might be brought about by the proposed development. In this regard the cumulative impact assessment will therefore consider the potential cumulative benefits of the scheme.
11.5 **Scope of the Assessment and Potential Receptors**

11.5.1 The main impacts of the Collyweston scheme will be confined to the area in closest proximity to the development site, namely Duddington.

11.5.2 However, as part of the ‘proper assessment’ of cumulative impacts it is necessary to consider the potential successive and simultaneous effects of the development on the general locality. For the purpose of this assessment the ‘general locality’ is takes account of the Zone of Visual Influence set out in the Landscape and Visual Impact Assessment (see Technical Appendix 4, Appendix A).

11.5.3 In considering potential receptors, regard has been had to the contents of Schedule 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 1999 (as amended). Schedule 4 seeks to ensure that the impacts upon the following aspects of the environment are considered:

- Population
- Soils, Flora and Fauna
- Air and Climatic Factors
- Archaeological Heritage
- Landscape

11.5.4 The assessment has had regard to the potential successive, simultaneous and combined cumulative effects of the development proposal, taking account of their impact upon the above receptors.

11.6 **Successive Effects**

*Introduction*

11.6.1 Successive effects comprise the impacts caused by the proposed development in conjunction with other developments that occurred in the past, present or are likely to occur in the foreseeable future.

*Approach and Methodology*

11.6.2 The assessment of successive effects has considered past quarrying in various time brackets (i.e. 5 years previous, 10yrs previous, 15 years previous and 20+ years
previous) to allow a professional judgement to be reached on the potential for successive cumulative impacts to be experienced in the locality as a result of granting the development proposal.

Assessment of Successive Effects

11.6.3 Limestone extraction at Collyweston Quarry has been carried out for a number of decades. Operations have been more active since the grant of planning permission by Northamptonshire County Council in the early 1980s.

11.6.4 A southern extension to the original quarry was granted planning permission by Northamptonshire County Council on 14th December 1998. This permission – reference EN/97/802C – provided for the continued extraction of limestone and backfilling of the quarry with inert waste materials.

11.6.5 An eastern extension to the quarry was granted planning permission on 2nd November 2006 – reference EN/06/1279C. This provided for an additional area of extraction with backfilling and restoration facilitated by the importation of inert waste.

11.6.6 In terms of the entire Collyweston Quarry, the operations over the lifespan of the quarry have had a minimal impact on Duddinton in terms of both environmental and amenity impacts.

11.6.7 The western extension will therefore not be adding to an existing problem. The western extension to Collyweston Quarry is a logical extension driven by the better geological prospects and as demonstrated within this Environmental Statement, is environmentally acceptable and the restoration proposals provide environmental benefits. The restored landform will provide ecological enhancement with the creation of habitats absent from the survey area. Although the western extension moves the quarry closer to Duddington, visual and acoustic screening will be provided as part of the proposals to protect the amenity of the residents of Duddington.
11.7 Simultaneous Effects

Introduction

11.7.1 Simultaneous effects comprise the impacts arising from multiple developments, occurring at different locations in the locality. Separately, such individual projects may not create an unacceptable degree of adverse impact but collectively the results may potentially be significant.

Approach and Methodology

11.7.2 As part of the assessment of simultaneous effects a targeted search of Northamptonshire’s planning application register was undertaken to identify any major minerals and waste operations granted permission in the locality or pending decision. The Northamptonshire Minerals and Waste Core Strategy, the Northamptonshire Draft Minerals and Waste Local Plan and Annual Monitoring Reports were also analysed to identify any current or proposed future minerals and waste sites in close proximity to the proposed development site. Furthermore as outlined in Northamptonshire’s Scoping Opinion, nearby development sites outside Northamptonshire have been considered for in-combination effects, such as Cross Leys Quarry, Thornaugh I, Cook’s Hole, and Thornaugh II (including Thornaugh IIb).

Assessment of Simultaneous Effects

11.7.3 There are a number of quarries either currently in operation, worked out or planned to come forward in the general locality. These include Cross Leys Quarry (worked out), Thornaugh I (worked out), Cook’s Hole (recently commenced), Thornaugh II (appeal allowed for waste infilling – May 2013) and Thornaugh IIb (to be worked) within Peterborough. Within Northampton, Wakerley is allocated under Policy M2 of the Locations for Minerals Development DPD and according to Northamptonshire County Council’s website, an application for Extension to Old Quarry was approved at committee on 26 July 2011 subject to a Section 106 legal agreement being signed which is still being finalised (Application ref: 08/00026/MIN). King’s Cliffe Landfill Site, King’s Cliffe Industrial Estate and Stonehill Quarry are also located to the east/south east of the application proposal.

11.7.4 With regards Wakerley, to facilitate the working of the limestone, a new planning permission has been pursued by the landowner. Whilst there is a resolution to grant planning permission, this awaits completion of a S106 agreement.
11.7.5 Assuming the permission is issued, there are considerable “up front” costs in opening the site due to environmental considerations/constraints and the need for new transport/haulage infrastructure.

11.7.6 Bullimores do not consider Wakerley to be viable as a standalone limestone aggregate supply site in the short to medium term when the above factors are set against the economic conditions and the market conditions for limestone aggregate.

11.7.7 In terms of the sites outlined above in Peterborough, Cross Leys Quarry, Thornaugh I and Thornaugh II (appeal allowed for waste infilling) have been worked out.

11.7.8 The Peterborough sites together with Wakerley, King’s Cliffe Landfill Site, King’s Cliffe Industrial Estate and Stonehill Quarry, represent a series of sites on the A43/A47 corridor accessing the A1 corridor. One of the main characteristics they all share is that they can all connect to the strategic highway network.

11.7.9 All can access A Class roads which are designed and capable of accepting that level of traffic with the roads having both the capacity and geometry required.

11.7.10 In terms of the proposed Collyweston Quarry western extension, the nearest sensitive receptor is Duddington. However, in terms of impact from the other identified quarries and sites, there is considered to be minimal direct impact with it being physically and visually well screened and separated.

11.7.11 The main impact of the quarries and sites considered would be from traffic; however, the majority of this goes towards the A1 with none going directly into Duddinton village.

11.7.12 Furthermore, none of the identified sites are particularly large scale and they are quite remote from the Collyweston main receptor i.e. Duddington. Therefore it is considered that there is no clear evidence to suggest that there would be an unacceptable level of cumulative impact resulting from the proposed western extension.

11.7.13 In terms of the simultaneous effect of extending the Collyweston Quarry and the potential cumulative impact of the existing operations and proposed extension area being worked at the same time is unlikely to increase the degree of impact to unacceptable levels. This combined with the strategic location of soil bunds, direction of working, progressive restoration which have been developed into the
proposed method of working will minimise the impact upon the landscape and visual amenity to nearby properties and users of the land. This has been the conclusion reached by each of the independent environmental specialists, the findings of which are set out in the technical reports.

11.8 Combining the Potential Environmental Impacts

11.8.1 In order to assess the combined effects of the environmental impacts, it is necessary to consider whether some or all of the individually acceptable effects are so close to being unacceptable, that when combined together, the totality is unacceptable. The potential benefits of the proposal must also be considered into the cumulative planning balance.

*Landscape and Visuals*

11.8.2 No simultaneous or successive cumulative landscape and visual impacts are foreseen as a result of the proposal.

11.8.3 In terms of the quarrying operations and landfill sites set out in paragraph 11.7.3 above, none of these are situated within the Zone of Visual Influence (ZVI) of the Western Extension proposal and consequently, there would be no cumulative visual effects. In landscape terms, the location of these proposals in the much wider context of the site also means that any effects on the landscape would be none or negligible.

11.8.4 The existing quarrying site immediately to the east of the site will however remain active for a period of time whilst works on the proposed Western Extension are commencing. Consequently, this arrangement has the potential for some cumulative effects. However, the combined projects are most likely to be perceived in both landscape and visual terms as a single working operation and overall the cumulative simultaneous effect would be negligible.

11.8.5 In successive terms, the Western Extension proposal would be perceived as extending the timescale of quarrying operations at this general location. Whilst the combined effect of the proposed and current operations would not have a discernible effect, the successive change would potentially increase some of the cumulative visual effects due to the extended duration of operations.
11.8.6 The nature of this change would have the greatest effect upon those visual receptors with the clearest views towards both sites. This would comprise the public rights of way closest to the site and in particular the public footpath that extends along the western side of the current working site and that to be diverted as part of the proposed development. The cumulative successive effect upon these rights of way would be minor adverse for those rights of way with the clearest views and negligible for all others.

11.8.7 In landscape terms, the successive effect would arise from the extended time period over which there would be change to the character of the site and local landscape. The nature of the landscape change would not differ, it would just be the duration of the effects of the quarrying operations at this location. The Western Extension proposal would not however, introduce a different type or nature of development but would essentially be the same as currently operational immediately to the west of the site. The successive landscape effect would be negligible or minor adverse at worst.

11.8.8 Overall, the landscape and visual effects are considered to be predominantly localised and contained. The most notable landscape effects arise from changes to the landscape character of the site and its local context and from the loss of a relatively small number of trees and vegetation. In visual terms, the effects are contained, although there would be some notable yet short term adverse effects upon the immediately adjoining PROW. Similarly, these adverse effects will only occur for the duration of the operations and following the landscape restoration of the site there will be no visual effects once the planting and habitats establish and mature.

Ecology

11.8.9 In terms of potential ecological and nature conservation impacts, it is not considered that the loss of the site for development would be ecologically significant in the wider context, or that there would be cumulative impacts associated with the proposed activities when considered within the context of the wider environment.

11.8.10 The main ecological impacts associated with the development are a result of the loss of habitats on site (including hedgerows, arable land etc.) and increased
disturbance (i.e. noise and dust from site operations/vehicle movements) to various species of fauna.

11.8.11 In the medium to long term, the restoration proposals, which would be secured by the imposition of planning conditions, would enhance the ecological and biodiversity value of the site. The ecological impact of the proposal would not therefore make a substantial contribution to cumulative harm. For the purposes of cumulative impact assessment there will be ecology and nature conservation impacts but the balance of negative and positive effects indicates that these impacts are not close to being objectionable.

_Amenity Impacts (i.e. noise, vibration, dust etc.)_

11.8.12 The potential impacts of the development proposal upon residential amenity (i.e. in relation to noise, vibration, dust etc.) are not considered to be significant.

11.8.13 As set out above in terms of vibration and blasting, it is not in Bullimore’s commercial interest to carry out quarry blasting any more than is necessary. It is Bullimore’s objective to seek to minimise and reduce any vibration and disturbance potentially generated by the quarry operations to acceptable levels for local residents whilst enabling effective, efficient extraction and processing of limestone and slate log.

11.8.14 In light of local concerns over potential impact and to help achieve the objective to minimise and reduce vibration and potential disturbance to acceptable levels, Bullimores propose to work the western extension using a 45 tonne excavator rather than a lower capacity machine.

11.8.15 In line with the current best accepted modern practice in the extraction industries, safe and practical measures are proposed that ensure the minimisation of ground vibration and air overpressure generated by blasting.

11.8.16 The blasting assessment along with the BMP contained in the WMS have demonstrated that the proposed extension will not result in any significant impacts upon sensitive locations in the surrounding area.

11.8.17 The Noise Impact Assessment has found that with appropriate mitigation measures the relevant site noise limits, based on NPPF Guidance, are met and concludes that noise from the proposed site operations will not cause an unacceptable impact.
Furthermore, the Dust and Air Quality Assessment has found that with appropriate mitigation measures the impacts of dust and air quality should be negligible.

11.8.18 Mitigation measures are proposed in each case to minimise potential negative effects and ensure that any impacts are controlled to an acceptable level. Whether considered individually or in their totality, the potential effects on amenity do not come close to the thresholds of unacceptability.

Soils and land quality

11.8.19 In terms of the potential effects upon soils and agricultural land quality, the development will have a relatively low order magnitude and the proposed mitigation measures will ensure that the site is completely reclaimed. The potential effects do not come close to the thresholds of unacceptability and no cumulative impacts are foreseen in respect of soils and land quality.

Archaeology and Cultural Heritage

11.8.20 There are no designated heritage assets within the study site and the proposed development is considered to have no potential impacts on the setting of any designated heritage asset in the surrounding area.

11.8.21 As outlined above, the desk-based work had identified a relatively high potential for evidence of Iron Age, Roman and Saxon metal-working within the local area. However, no evidence for such features has been identified within the geophysical survey data.

11.8.22 In considering the mitigation of potential impacts on unrecorded archaeological remains within the proposed extension area, in light of the geophysical survey results, it is considered that a watching brief during site strip would be a reasonable back-stop mitigation measure. On the whole the potential impact upon archaeological interest would not be near to objectionable in terms of effects and the corresponding weight in the cumulative balance is considered to be slight.

Water Resources

11.8.23 The hydrological and flood risk assessments have found that there will be no adverse impact in terms of flood risk, surface water flow or quality in the surrounding water environment during the operation of the proposed scheme or
following restoration. The potential effects do not come close to the thresholds of unacceptability.

**Transport and Traffic**

11.8.24 The proposed western extension to Collyweston Quarry would result in a continuation of the current levels of HGV traffic generated from the site on the local network. The highway network has sufficient capacity to accommodate the proposed levels of HGV traffic.

11.8.25 The present number of vehicle movements (in/out) equate to approximately 70 per day. However, for the purposes of the environmental assessment, peak production levels have been used to demonstrate a worst case scenario. Therefore vehicle numbers equate to 92 per day or approximately 9 per hour, based on a 250,000 tonnes per annum over a 270 day working year. There are no proposals to increase this as part of the current planning application.

11.8.26 Overall, it is concluded that the overall effect of a continuation of HGV movements would not be significant and would only be for an additional period of around two years. The highway impacts from the proposal would not be unacceptable in themselves and would not make a substantial contribution to any cumulative effect.

11.9 **Conclusions on the Potential Impacts**

11.9.1 In terms of individual areas of potential impact, it is concluded that there would be no individual areas of objectionable environmental impact arising from the proposal. Potentially the most substantial effect that could contribute the most to cumulative harm is the impact upon the landscape character and visual appearance of the site during the course of the temporary operation. In the longer term, however, the restoration of the site would bring about overall improvements in landscape character and ecological enhancement. Assessment of the Combination of Potential Impacts

*Introduction – Methodology (Mr J. Burton)*

11.9.2 In his judgement (reference EWHC Admin 1427 2007) Mr Justice Burton took the view that to make an assessment of cumulative impact on the basis of simple value judgements with no supporting reasons is inappropriate. In order for a 'proper
assessment’ to be carried out in the context of MPS 2 he outlined four possible tests that could be employed.

11.9.3 The assessment of the combined potential negative effects of the Lodge House extension proposals therefore generally follows Mr Justice Burton’s approach and is set out below.

Test 1 - Even though each individual area of potential impact was not objectionable yet each such feature was close to objectionability that, although none could be said to be individually objectionable, yet because each was nearly objectionable, the totality was cumulatively objectionable.

11.9.4 In the above section, it has been considered that each individual area of potential impact is not, on balance, objectionable. Although the potential noise, traffic, vibration, landscape, visual and ecological impacts of the scheme would give rise to some negative impacts during the course of the operations, there would be no direct conflict with development plan policy and these individual issues would not come close to being objectionable. Similarly, the potential impacts on interests related to the water environment, archaeology and soils/land quality are not considered to come close to being objectionable on an individual basis.

11.9.5 Therefore, overall, none of the individual areas of potential impact is considered to be close to being objectionable. Whilst it is accepted that other individual areas would give rise to varying degrees of negative impact during the course of the permission, they would not come close to being objectionable on an individual basis. It is therefore concluded that, because none of the impacts come close to being objectionable or conflict with Development Plan Policy, the totality would not be objectionable.

Test 2 - One, two, three or four of the particular features were close to being objectionable and that would be an important matter to take into account when looking at the totality.

11.9.6 In this case it is considered that none of the individual areas of potential impact is considered to be close to being objectionable. Therefore, any combination of particular features that are considered to be important matters that could give rise to objections in regard to test two.

Test 3 - One particular combination of two or three otherwise unobjectionable
features could cause objectionability in their totality.

11.9.7 In consideration of this matter there are individual features (impacts) which are related in terms of subject matter or in regard to the receptors in which they have the potential to impact upon and could therefore be considered in combination, namely:

1. Landscape/Visual Impact and Ecological Impact;

2. Local Amenity impacts such as Noise, Dust, vibration and Traffic

11.9.8 In relation to point one, as discussed above, neither the predicted landscape and visual effects nor the ecological impacts are considered to be close to being objectionable. Any short to medium term negative impacts would be mitigated by the long term overall improvements in character and visual interest of the landscape. It is therefore considered that in combination their totality would not amount to being objectionable.

11.9.9 In relation to the second suggested combination (local amenity impacts), none of the individual features are likely to give rise to direct conflict with development plan policy or exceed nationally recognized thresholds of potential nuisance related impacts. No major concerns are predicted in regard to HGV traffic resulting from the proposal. It is considered that because the potential impacts of noise, dust, vibration and traffic on local communities and individual properties (i.e. the nearest sensitive receptors) individually would each be well within the thresholds of objectionability their combined totality would not be objectionable.

11.9.10 In the light of the above it is concluded that there are no particular combination of two or three otherwise unobjectionable features that could cause objectionability in their totality.

Test 4 - As was specifically addressed by the Interested Party and by the Inspector here, and found not to be the case, there could be some unusual feature or some unusual combination of features such as to render the combination objectionable when the individual feature was not.

11.9.11 For the most part, the site and surroundings are typical in relation to the potential sensitive receptors, the issues and the potential impacts that tend to arise from mineral development of this nature. It is not considered that there are any unique
(or unusual) feature in the surrounding area that would be impacted on by the proposed development.

11.9.12 In the light of the above as it is considered that there are no unusual features or a combination of features in the surrounding area, it is concluded that that could give rise to objections in regard to test four.

Conclusions

11.9.13 It is considered the approach and methodology to assessing the combined negative effects is thorough and robust. Following an assessment of each of the four tests it has been concluded that no objectionable combined negative effects would be brought about by the proposed western extension of Collyweston Quarry.

11.10 Beneficial Effects of the Proposal

11.10.1 The potential benefits of the scheme can be summarised into three main areas:

- Need for mineral supply;
- Economic benefits; and
- Land use benefits.

Need for Mineral Supply

11.10.2 The NPPF makes clear the benefits of the requirement to plan for the maintenance of a steady and adequate supply of aggregates, including those of a specific type or quality, which have distinct markets. The proposed western extension to Collyweston Quarry will replace the remaining permitted reserves contained in the eastern extension and is therefore needed in order to sustain and maintain a viable mineral supply from Collyweston Quarry, as envisaged by the previous planning permission for the eastern extension to the quarry.

11.10.3 The draft Local Plan states that existing commitments (i.e. sites with planning permission or equivalent) for minerals-related development make a fundamental contribution in providing adequate supply of aggregates throughout the plan period, and for the Local Plan to meet its objectives. As stated previously, the proposed western extension is to replace the permitted eastern extension, therefore effectively this is a swap of permitted mineral reserves that are needed to provide an adequate supply of aggregates throughout the plan period, and for the
Local Plan to meet its objectives.

11.10.4 Both the adopted Minerals and Waste Core Strategy and the draft Local Plan recognise that traditional materials such as Collyweston stone slate help to play an important role in the restoration of historic buildings and are also used in new buildings, extensions, and walling in order to preserve and enhance local distinctiveness and local building character.

11.10.5 Furthermore, the draft Local Plan states with regards allocations for building and roofing stone that it is not anticipated that further provision for roofing stone beyond that identified through the committed (Duddington) and allocated (Collyweston village) sites will be required. On this basis as this proposal is replacing the permitted eastern extension, this western extension should be permitted in order to maintain the provision of roofing stone.

11.10.6 The western extension to Collyweston Quarry is a logical extension and as demonstrated within this Environmental Statement is environmentally acceptable and the restoration proposals provide environmental benefits. It will replace the uneconomic mineral reserves in the permitted eastern extension and is therefore needed to sustain and maintain the supply of limestone and Collyweston Slate Log from Collyweston Quarry.

Economic Benefits

11.10.7 As demonstrated by the socio-economic assessment (see section 21 of this ES), the proposal would secure a number of positive social and economic benefits to the local and regional area.

11.10.8 The proposal would create 37 no. employment opportunities (as outlined in paragraph 12.6.11 of this statement) at a time when unemployment is at relatively high levels. Additionally, the proposal would provide £40-50,000 per annum to Northamptonshire County Council in rates at a time when there has been significant public sector cuts.

11.10.9 Significant weight should be attached to the economic benefits of the proposal, particularly in the light of the overall downturn in the economy in recent years. The NPPF states that ‘local planning authorities should give great weight to the benefits of mineral extraction, including to the economy’ (paragraph 144).
Land Use Benefits

11.10.10 In addition to the social and economic benefits of the proposal, a number of environmental enhancements are proposed as part of the restoration scheme for the site.

11.10.11 Whilst the development proposal would result in moderate to minor adverse landscape impacts in the short term, in the long-term, the scheme will provide a number of landscape and visual enhancements. Following implementation of the proposed mitigation measures, the development would result in a slightly beneficial landscape and visual impact in the long term. In the long term the development has the potential to result in a moderately beneficial effect, subject to careful management of the restored landscape.

11.10.12 The development proposal will bring about a number of ecological and biodiversity benefits in the long-term. The restored landform will provide ecological enhancement with the creation of habitats absent from the survey area, which have the potential to develop significant nature conservation interest.

11.10.13 The key features included in the restoration proposals are the planting of hedgerows and woodland/scrub and the creation of areas of calcareous grassland, which could represent a significant increase in both habitat and botanical diversity relative to the current baseline.

Conclusions

11.10.14 The benefits of the proposal which make a positive contributing factor to a national priority of supporting development which provides economic growth are considered to provide a moderate positive impact, which acts as a counter weight to the negative impacts.

11.11 Overall Conclusions – Cumulative Impact, Combined Positive and Negative Effects

11.11.1 In accordance with the NPPF, the Development Plan and the County Council’s Scoping Opinion, a cumulative impact assessment has been carried out as part of the Environmental Statement. The approach to assessing cumulative impact has followed the advice of Mr Justice Burton (in the Long Moor case) by considering the three categories of potential cumulative effects: successive effects; simultaneous effects from concurrent developments; and combined effects from the same
development and then sets out reasoning behind the judgements reached.

11.11.2 The assessment of cumulative impact has had regard to positive and negative effects to ensure that an overall balanced judgement is reached. The potential positive impacts are particularly relevant when considering the combined effects from the same development.

11.11.3 The assessment of successive effects has concluded that no significant adverse cumulative impact would occur as a result of the development proposal. Furthermore, it is unlikely to give rise to unacceptable levels of environmental or local amenity impact.

11.11.4 The assessment of simultaneous effects has concluded that there are no other mineral extraction sites in the area (or similar operations such as landfill) which are likely to give rise to an unacceptable level of cumulative impact. Furthermore, it is unlikely that any large-scale planned developments will give rise to simultaneous impacts in the lifespan of the proposed extension. No objectionable concurrent effects are therefore likely to arise.

11.11.5 In terms of the combined effects, no environmental impact is considered to come close to the thresholds of being objectionable. Therefore given that no feature is close to the thresholds of objectionability, and having regard to the fact that none of the environmental features have a synergistic effect, their combined impact is not objectionable. This conclusion has been reached having regard to the four tests recommended by Mr Justice Burton.

11.11.6 In the light of the above, it is concluded that the cumulative impact of the scheme does not weigh against the scheme to a degree that the MPA should form a cumulative reason to object to the proposal.
12 Socio Economic Assessment

12.1 Introduction

12.1.1 The assessment describes current economic and social conditions in the area around Collyweston Quarry as a precursor to considering likely impacts on the local economy and its population if the proposed extension is or is not approved.

12.1.2 No evaluation has been made of any effects on the existing social infrastructure (e.g. schools, health facilities etc), which would be expected to be very small.

12.2 Description of the proposed development scheme

12.2.1 The proposal involves a western extension to the existing Collyweston Quarry and would release an additional 2 million tonnes of saleable limestone aggregate. This proposed extension will replace the remaining permitted reserves contained in the eastern extension of the quarry, currently being worked under planning permission reference EN/06/1278C. The proposal is fully described in both the application documents and this Environmental Statement (ES).

12.3 Geographical scope of assessment

12.3.1 The Collyweston Quarry is located within the Fineshade electoral ward. The immediately surrounding area is defined by the 5 no. wards which surround the proposed quarry extension within East Northamptonshire, Corby, Peterborough City and Rutland County namely:

- Fineshade;
- King’s Forest;
- Weldon and Gretton (Corby);
- Glinton and Wittering (Peterborough City); and
- Ketton (Rutland County).

12.3.2 To provide a wider context, statistics have also been considered for the District of North Northamptonshire. The statistics, which have been collected from the 2011 Census, describe the current economic and social conditions in the area around the proposed site and are useful in considering the likely impacts on the local economy and its population.
12.4 Baseline local economic and socio-economic indicators

12.4.1 The economic and socio-economic data which describes conditions around Collyweston Quarry are drawn from a range of sources. Unfortunately different sources use different geographical reporting units, and report data from different years. Nevertheless, taken in conjunction they provide a clear picture of the local economy.

Population and Employment

12.4.2 The 5 wards have a population of 17,541 which although not all are in Northamptonshire represents about 20% of the population of East Northamptonshire.

12.4.3 In line with the national trends, unemployment in East Northamptonshire as a whole has risen during the economic downturn although there has been a slight improvement in the local figures. Figures from October 2011 – September 2012 contained in the Profile of the District and East Northamptonshire Council document issued in January 2013 shows that approximately 3700 (6.8%) people of working age were unemployed. In percentage terms, this was lower than the regional (8.2%) and British average (7.9%).

Social conditions

12.4.4 The Index of Multiple Deprivation (IMD) is a metric used by Government to measure overall deprivation at the local level, by combining a number of specific indicators chosen to cover a range of economic and social (e.g. health, housing and crime) issues. The resulting IMD score shows where the local area concerned lies on the continuum from most deprived (a score of 1) to least deprived (a score of 354 when the measure is being made at local authority (district or unitary authority) level).

12.4.5 East Northamptonshire has an IMD score of 229 and ranks as the second least deprived Northamptonshire Local Authority with South Northamptonshire being the least deprived and Corby being the most deprived. Statistics reveal that 9% of the District’s population live in the most deprived areas of Northamptonshire.

Quarrying’s role within the wider economy

12.4.6 It is necessary to turn to national data to obtain a better picture of the relative weight and importance of quarrying in the wider economy.
12.4.7 Table 1 provides data on gross value added (GVA) and employment, by sector of the economy. GVA is widely accepted as a good measure of economic productivity, together with the calculated GVA per employee. This last column of figures is important for any assessment of the effects of changes in quarrying output.

12.4.8 The employment data in Table 1 are based on 2010 Labour Market Figures from the Office for National Statistics. Due to changes in the categorising of the employment sectors, 2007 figures have been used for transport and communication, finance and business services and other services. The GVA figures are for 2008 and are taken from the National Statistics Blue Book: 2010 Edition.

Table 1: Structure of the UK Economy

<table>
<thead>
<tr>
<th>Sector</th>
<th>GVA at Basic Prices (£ million)</th>
<th>Employment ('000)</th>
<th>GVA per employee (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>9,715</td>
<td>475</td>
<td>20,453</td>
</tr>
<tr>
<td>Mining and Quarrying</td>
<td>37,718</td>
<td>62</td>
<td>608,355</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>150,298</td>
<td>2549</td>
<td>58,964</td>
</tr>
<tr>
<td>Electricity, gas and water supply</td>
<td>21,342</td>
<td>135</td>
<td>158,089</td>
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<tr>
<td>Construction</td>
<td>80,756</td>
<td>2128</td>
<td>37,949</td>
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<tr>
<td>Wholesale and retail trade</td>
<td>147,150</td>
<td>4776</td>
<td>30,810</td>
</tr>
<tr>
<td>Hotels and Restaurants</td>
<td>36,427</td>
<td>1917</td>
<td>19,002</td>
</tr>
<tr>
<td>Transport and communication</td>
<td>91,347 *</td>
<td>1,849</td>
<td>49,403</td>
</tr>
<tr>
<td>Finance and business services</td>
<td>419,980 *</td>
<td>6,608</td>
<td>63,556</td>
</tr>
<tr>
<td>Public administration and defence</td>
<td>65,090</td>
<td>1,612</td>
<td>40,378</td>
</tr>
<tr>
<td>Education, health and social work</td>
<td>171,268</td>
<td>6,342</td>
<td>27,005</td>
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<tr>
<td>Other services</td>
<td>65,563 *</td>
<td>1,976</td>
<td>33,180</td>
</tr>
<tr>
<td>Total/average</td>
<td>1,296,654</td>
<td>30,429</td>
<td>41,612</td>
</tr>
</tbody>
</table>

Source: National Statistics Blue Book 2010 and ONS Labour Market Figures 2010 (* indicates 2007 figures)

12.4.9 As can be seen, the extractive industries are much more capital intensive than any other sector of the British economy, with very high levels of labour productivity (measured by GVA per employee) as a consequence.

12.4.10 Table 2 shows how the different sectors of the British economy interact with each other. Each column in Table 2 shows where the particular sector of the economy spent its money (on both capital investment goods and operating costs) in order to generate its own outputs. These purchases of goods and services are known as ‘intermediate consumption’. Thus, for example, it shows that in order to produce a GVA figure of £37.7 billion (see Table 2), the mining and quarrying sector purchased a total of £12.9 billion’s worth of intermediate consumption, spending £1 million in the agriculture, forestry and fishing sector; £3.9 billion in the mining sector itself; £2.5 billion in the manufacturing sector; etc.
12.4.11 This data is important, since it allows an estimate to be made of the indirect effects of extending quarrying at Collyweston Quarry, including how the additional expenditure generated from this activity is likely to be distributed across other parts of the local economy, and hence how many jobs could be retained or generated in these sectors.
<table>
<thead>
<tr>
<th>Industry Group</th>
<th>Intermediate Consumption (£ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry and fishing (AFF)</td>
<td>3.43</td>
</tr>
<tr>
<td>Mining and Quarrying (MQ)</td>
<td>2.73</td>
</tr>
<tr>
<td>Wholesale and retail trade (WTR)</td>
<td>2.03</td>
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<tr>
<td>Transport and communication (Transp)</td>
<td>1.82</td>
</tr>
<tr>
<td>Construction (Const)</td>
<td>1.77</td>
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<tr>
<td>Agriculture, forestry and fishing (AFF)</td>
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<tr>
<td>Finance and business services (FBS)</td>
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<tr>
<td>Public administration and defence (PAD)</td>
<td>1.20</td>
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<tr>
<td>Manufacture (Mfr)</td>
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</tr>
<tr>
<td>Agriculture, forestry and fishing (AFF)</td>
<td>0.94</td>
</tr>
<tr>
<td>Wholesale and retail trade (WTR)</td>
<td>0.90</td>
</tr>
<tr>
<td>Construction (Const)</td>
<td>0.87</td>
</tr>
</tbody>
</table>

**Table 2: Intermediate consumption by industry group (sector-to-sector sales) at the national level.**
12.5 **Socio Economic Policy Issues**

National Planning Policy Framework

12.5.1 The National Planning Policy Framework (NPPF) was adopted in March 2012 and sets out the Government’s planning policies for England and how these are expected to be applied.

12.5.2 Paragraph 6 of the NPPF states that, ‘The purpose of the planning system is to contribute to the achievement of sustainable development.’ The NPPF (paragraphs 18-219) taken as a whole constitutes the Government’s view of what sustainable development in England means in practice for the planning system.

12.5.3 Paragraph 7 states that ‘there are three dimensions to sustainable development: economic, social and environmental. These dimensions give rise to the need for the planning system to perform a number of roles:-

- an economic role – contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure;

- a social role – supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community’s needs and support its health, social and cultural well-being; and

- an environmental role – contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimize waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy.’

12.5.4 Paragraph 8 states that ‘to achieve sustainable development, economic, social and environmental gains should be sought jointly and simultaneously through the planning system’.
12.5.5 A presumption in favour of sustainable development is at the heart of the NPPF and ‘should be seen as a golden thread running through both plan-making and decision-taking’ (paragraph 14).

12.5.6 Paragraph 18 confirms that the Government is committed to securing economic growth ‘in order to create jobs and prosperity, building on the country’s inherent strengths, and to meeting the twin challenges of global competition and of a low carbon future.’ The NPPF seeks to promote economic growth and Paragraph 19 states that ‘the Government is committed to ensuring that the planning system does everything it can to support sustainable economic growth. Planning should operate to encourage and not act as an impediment to sustainable growth. Therefore significant weight should be placed on the need to support economic growth through the planning system.’

12.5.7 Paragraph 142 of the NPPF states that ‘minerals are essential to support sustainable economic growth and our quality of life. It is therefore important that there is a sufficient supply of material to provide the infrastructure, buildings, energy and goods that the country needs. However, since minerals are a finite natural resource, and can only be worked where they are found, it is important to make best use of them to secure their long-term conservation.’

12.5.8 Paragraph 144 sets out the criteria for determining planning applications for minerals development and states that local planning authorities should ‘give great weight to the benefits of the mineral extraction, including to the economy’. Paragraph 147 confirms that MPAs should indicate any areas where coal extraction and the disposal of colliery spoil may be acceptable.

12.6 **Assessment of the development proposal and its implications for future economic and social conditions**

12.6.1 This section seeks to estimate the economic impacts of extending quarrying activities at Collyweston Quarry. Although no additional jobs will be created, because the scheme is essentially a way of replacing a resource which will soon be worked out, existing jobs will be protected for approximately a further 13-15 years. The appropriate comparison is therefore between the extension and doing nothing (with an inevitable winding down of quarrying activity over time, starting relatively soon).
12.6.2 As well as the direct benefits to Bullimores Sand and Gravel Ltd and the employment effects which benefit their workforce, there will be a series of spin-off benefits which are referred to as ‘indirect effects’.

12.6.3 These arise because Bullimores Sand and Gravel Ltd’s expenditure induces their suppliers to sustain their production to meet the needs of Collyweston Quarry. In a ‘virtuous circle’, any sales made by Collyweston Quarry’s suppliers generate more business for the firms which in turn supply them. These effects are referred to as ‘indirect effects’ and occur down the supply chain.

12.6.4 Finally, there are ‘induced effects’, which arise from the income earned by local employees being spent on household and personal goods and services within the local economy. The extent of this effect is a matter of some debate, and is usually recognised by multiplying the direct and indirect effects by a further factor (typically about 1.1).

12.6.5 In an assessment of purely local effects it is also important to recognise that some of the benefits (direct, indirect and induced) will not accrue to the local economy (by, for example, Collyweston Quarry purchasing a major item of capital equipment from overseas, or by some of the workers and their families spending their wages on holidays in the Lake District, or Spain). Such effects are referred to as leakage, displacement, and substitution of benefits.

12.6.6 Leakage refers to the proportion of outputs that benefit persons and companies outside the local area. Displacement reflects the degree to which retained production at Collyweston Quarry is offset by reduced opportunities for expansion elsewhere. Substitution occurs when a firm substitutes one activity for a similar activity (such as recruiting a jobless person while another employee loses a job, to take advantage of public sector assistance). These factors should be taken into account when estimating the local impacts of the direct, indirect and induced effects of any development. Guidance provided by English Partnerships in their ‘Additionality Guide - Third Edition’, dated October 2008, is often used to estimate the appropriate factor by which indirect and induced effects should be reduced in order to estimate the local impacts of a development scheme.
**Direct Economic Effects**

12.6.7 By extending the quarry, 10 jobs (quarrying, haulage and support staff) that would otherwise eventually be lost will be protected.

12.6.8 In addition, Collyweston Quarry has an average spend of approximately £1 million per year on external suppliers on goods and services over the period, as well as contributing to the national and local tax base.

**Indirect Economic Effects**

12.6.9 In theory it would be possible to allocate this figure of £1 million to different economic sectors (manufacturing industry, utility services, construction etc), using a different multiplier for each sector. In practice, because many of the main suppliers span different sectors (by providing design advice and maintenance services as well as hardware), this is potentially misleading, and it has been concluded that it would be more appropriate to use an average factor which applies across all economic sectors (namely the figure of £41,612 GVA per employee – as outlined in Table 1: Structure of the UK Economy (Source: National Statistics Blue Book 2010 and ONS Labour Market Figures 2010). This is a lower figure than would apply to manufacturing industry, transport and communications and finance and business services, but higher than that applicable to construction, wholesale and retail trade, and other services.

12.6.10 The simple calculation of £1 million/£41,612 per employee generates a figure of 24 (no.) employees further down the supply chain whose jobs depend to some degree on Collyweston Quarry. This is not to suggest that the closure of Collyweston Quarry would lead to the loss of 24 (no.) not least because there is an expectation that Collyweston quarry’s output would be provided from elsewhere in Northamptonshire for a time at least, given the nature of the minerals planning system, but at the very least, some disruption to employment would be expected.

**Induced Effects**

12.6.11 In the absence of detailed data on the consumption patterns of local employees, it is usual to estimate induced effects by making use of the same guidance from English Partnerships as referred to above. This suggests that an uplift figure of 10% should be used. Hence if the direct employment effect is to retain 10 jobs, and the indirect effect is to retain 24 (no.) indirectly affected jobs, then uplifting this total by
10% would provide a reasonable estimate of 3 (no.) jobs for the induced employment benefit.

**Overall employment effects**

12.6.12 The overall local employment significance of Collyweston Quarry is therefore estimated as 10 plus 24 (no.) plus 3 (no.) = 37 jobs. As explained above, were non-quarrying jobs at Collyweston Quarry, and other jobs more widely in Northamptonshire, to be lost the effects of this would be much greater.

12.7 **Conclusions**

12.7.1 The National Planning Policy Framework (NPPF) states that if development is to be sustainable it must not only contribute to protecting and enhancing the environment, but also contribute socially and economically. As the three dimensions to sustainable development given within the NPPF - economic, social and environmental factors should be weighed equally when considering the sustainability of a development. As well as being environmentally acceptable, it is considered that the Collyweston Quarry extension proposals include a series of positive economic and social contributions. These factors should be given appropriate weight.

12.7.2 The NPPF states that ‘the Government is committed to ensuring that the planning system does everything it can to support sustainable economic growth’ (Paragraph 19). The proposed Collyweston Quarry extension will have a positive impact upon the local economy without creating any unacceptable environmental impacts. There will be economic benefits provided to the local and wider regional economy. Therefore, the development has the potential to help meet the Government’s national planning policy objectives for economic growth.

12.7.3 Although very few new jobs are likely to be directly or indirectly generated by the proposed extension to Collyweston Quarry, it will enable employment to be maintained across a range of industries, many of which depend directly upon quarrying, including Collyweston Quarry, for business.

12.7.4 In addition to the direct and indirect benefits of the proposal, it will also induce benefits to the local and national economy through a multiplier effect.

12.7.5 In addition to the positive impacts of the development upon the economy, the restoration of the site will see beneficial end uses and an overall enhancement to
the local landscape. The restoration scheme will restore the site to its original uses as well as providing new and varied habitats throughout an enhanced landscape. This is considered to be a long-term benefit of the scheme and will mitigate any disturbance to the area during the onsite operations.
13 Conclusions

13.1.1 The Environmental Statement (ES) has been prepared in accordance with the Town and Country Planning (Environmental Impact Regulations) 2011. It sets out baseline and background environmental information and also sets out the details of the development having regard to the location scale and nature of the proposals.

13.1.2 The ES identifies the most relevant development plan policies that will be used in the determination of the application. In this regard the proposal is considered to be compliant with the main planning policy tests set out in the development plan and advice set out in national planning policy.

13.1.3 The ES has considered the main potential negative environmental and local amenity effects of the proposal and has concluded that, subject to the imposition of conditions/obligations to secure appropriate mitigation measures, no unacceptably adverse impacts will arise. In terms of main constraints the assessment work has concluded that the proposal will not affect any nationally or regionally important designations (such as SSSI, SPA, AONB, etc).

13.1.4 The proposed scheme will bring about a number of environmental and economic benefits which act to offset some of the potential negative impacts, including meeting a continued need for limestone and Collyweston Slate Log, benefits to the local economy from the jobs sustained and local expenditure, improvements in future land quality and ecological.

13.1.5 The Applicant has also considered the need for the development and considered its option in terms of alternatives and concluded that this proposal represents the most sustainable option and accords with planning policy requirements.

13.1.6 The western extension to Collyweston Quarry is a logical extension and as demonstrated within this Environmental Statement is environmentally acceptable and the restoration proposals provide environmental benefits. It will replace the uneconomic mineral reserves in the permitted eastern extension and is therefore needed to sustain and maintain the supply of limestone and Collyweston Slate Log from Collyweston Quarry.

13.1.7 Limestone aggregate from Collyweston currently supplies between one third and half of the overall 0.39 mtpa crushed rock apportionment identified within Policy
Current working in the eastern extension is becoming uneconomic due to the amount of overburden encountered. This application contains a similar extent of reserve to that already permitted from the eastern extension. If permission is not granted for the proposed western extension, Collyweston limestone will no longer be able to contribute to the County’s crushed rock requirements.

13.1.8 There are no landscape features within the local landscape of high sensitivity or national importance. There are no views into the site afforded from properties in closest proximity to the site. There will be a direct impact upon a number of footpaths that cross the proposed extension area. None of the impacts upon visual amenity are assessed as being significant.

13.1.9 The strategic location of soil bunds, direction of working, progressive restoration have been developed into the proposed method of working to minimise the impact upon the landscape and visual amenity to nearby properties and users of the land.

13.1.10 The resultant landscape character effects arising from the proposed development would vary between negligible (for the effects upon the very broad landscape character areas) to minor/ moderate adverse (for the operational effects upon the site’s landscape character). The specific effects of the proposed development upon landscape features within the site would vary between negligible and moderate adverse during construction and between minor adverse and moderate beneficial upon completion of the proposals. The local beneficial effects upon the landscape character and features would increase over time with the maturing and management of the conserved and restored landscape strategy proposals.

13.1.11 Overall, the landscape and visual effects are considered to be predominantly localised and contained. The most notable landscape effects arise from changes to the landscape character of the site and its local context and from the loss of a relatively small number of trees and vegetation. In visual terms, the effects are contained, although there would be some notable yet short term adverse effects upon the immediately adjoining PROW. Similarly, these adverse effects will only occur for the duration of the operations and following the landscape restoration of the site there will be no visual effects once the planting and habitats establish and mature.
13.1.12 The proposed western extension area mostly consists of arable land bounded by hedgerows and fences. Ecological sensitivities over much of the extension area are therefore low. Consequently, the proposed extension area does not contain any nationally or locally designated sites of ecological interest. A number of hedgerows will be removed but these are assessed as species poor. The loss of these hedgerows may have an impact on the foraging patterns of local bats and the removal of hedgerows also removes potential nesting and foraging habitat for local birds of woodland and scrub.

13.1.13 It is proposed that Species-rich hedgerows with hedgerow trees could be planted in advance of quarrying operations so they begin to establish as viable bat commuting and foraging routes before the hedgerows within the site are removed. The restored landform will provide ecological enhancement with the creation of habitats absent from the survey area.

13.1.14 Noise and dust are the two factors most likely to have a direct impact upon residents in proximity to the proposals. Noise and dust impacts can arise from operations being located too close to sensitive receptors or not being undertaken in accordance with recognised good practice and being a cause for nuisance.

13.1.15 Assessments for both noise and dust have been undertaken. The assessments conclude that given the implementation of appropriate mitigation including screening bunds and good operational practices, as currently undertaken, noise and dust levels can be kept to within recognised acceptable levels and not be a cause for nuisance or health risk to nearby residents.

13.1.16 The proposed extension will lead to the temporary loss of agricultural land, almost 90% is which is of moderate or poor quality, mainly subgrade 3b but with a small area of grade 4. The rest is of best and most versatile quality in sub-grade 3a. The available soil resources have been identified and they will be stripped and stored in accordance with best practice and used in the restoration of the site so that the soil resource is not lost from the site.

13.1.17 There are no identified significant effects on the archaeological and heritage resource as a result of the proposed quarry extension. There are no designated heritage assets within the study site and no potential impacts on the setting of any designated heritage asset in the surrounding area. There are no heritage assets of
sufficient significance to prevent development or which might require physical preservation to safeguard their significance.

13.1.18 The desk-based archaeological assessment had identified a relatively high potential for evidence of Iron Age, Roman and Saxon metal-working within the local area. However, no evidence for such features has been identified within the geophysical survey data.

13.1.19 In light of the geophysical survey results, it is considered that a watching brief during site strip would be a reasonable back-stop mitigation measure.

13.1.20 There will be no significant impact on water resources from the proposed development. Precautionary construction techniques, monitoring, good practice and management will ensure that the construction and operation of the facility does not release potential contaminants to the water environment.

13.1.21 The proposed extension area is located in Flood Zone 1 (low risk) and is not considered a significant flood risk. There is currently negligible risk of pluvial flooding at the site (prior to development as a quarry/landfill). It is considered that, upon commencement of quarrying operations, the excavated void has the potential to experience ingress of surface water although flooding is not considered likely due to the presence of unsaturated but highly-permeable underlying geological deposits (Northampton Sand).

13.1.22 The site benefits from direct access onto the A47(T) concentrating road freight onto the strategic network, avoiding residential and environmentally sensitive areas, minimising the transport impact on the local area. HGV movements will not increase as a result of the proposals.

13.1.23 Alternatives to road based transport including using rail and waterborne transportation were considered. However, due to the material won at Collyweston Quarry serving the local region and a variety of end users the practical ability of using the waterborne or rail is limited.

13.1.24 The proposal will not cause demonstrable harm to the function of the highways network. The existing site access will continue to operate satisfactorily. HGVs will continue to travel to and from the quarry along the A47(T), not through nearby villages, in the interest of highway safety and local amenity.
13.1.25 A number of Public Rights of Way cross the site. Footpath MX18 crosses the site from north to south along its eastern boundary, joining a number of other Footpaths to the south of the site. Footpath MX12 joins MX18 and heads west across the site towards the A43 and into Duddington. Footpath MX14 also joins MX18 further south and runs north west out of the site towards the A43 road and into Duddington. Footpath MX17 runs along the site’s southern boundary from west to east and will largely be unaffected by the proposals in terms of direct impact.

13.1.26 All Public Rights of Way within the site boundary are to be closed for the total duration of the development and will be diverted around the site perimeter to ensure that public access around the area can continue. There will be no permanent diversions as part of the proposals and all temporary diversions will be reinstated to their original routes at the earliest opportunity.

13.1.27 The proposed restoration scheme will see an improvement to the footpaths through and around the site and provide improved access across the site and to areas of restored land.

13.1.28 In terms of blasting, the WMS (Technical Appendix 1) sets out that it is not in Bullimore’s commercial interest to carry out quarry blasting any more than is necessary and there are fundamental benefits to the Company in avoiding blasting, both in terms of specific costs of blasts and also the fact that blasting results in greater volumes of limestone waste and thus reduces aggregate production.

13.1.29 It is Bullimore’s objective to seek to minimise and reduce any vibration and disturbance potentially generated by the quarry operations to acceptable levels for local residents whilst enabling effective, efficient extraction and processing of limestone and slate log.

13.1.30 Ground vibration and air overpressure limits will be implemented at the site to reduce any potential impacts on surrounding uses from blasting operations. A criterion for restricting vibration levels from production blasting has been recommended in order to address the need to minimise annoyance to nearby uses. Accordingly, the BMP contained in the WMS attached to this Planning and Environmental Statement recommends that a vibration criterion of 6 mms$^{-1}$ for 95% of events, as a satisfactory magnitude for vibration from blasting at Collyweston Quarry. Furthermore, in line with the current best accepted modern practice in the extraction industries, an air overpressure limit is proposed of 120 dB peak linear.
13.1.31 An assessment of the socio-economic impact has confirmed that the proposal will have a positive effect on the local and regional economy. It will sustain jobs and provide a significant contribution in local business rates at a time of considerable public sector cuts. The proposal is therefore considered to be compliant with the NPPF which encourages Authorities to look positively at development that provides sustainable economic growth.

13.1.32 A cumulative impact assessment has been carried out and concludes that the cumulative impact of the scheme does not weigh against the scheme to a degree that the MPA should form a cumulative reason to object to the proposal.

13.1.33 In overall conclusion, it is considered that potential residual negative environmental impacts will be capable of being made acceptable by the imposition of planning conditions and obligations. The potential environmental and local amenity impacts are therefore considered acceptable and the proposal is not considered to conflict with Development Plan policy.
APPENDIX 1 – Scoping Opinion from Northamptonshire County Council
Mr S Heaton  
Heaton Planning  
9a The Square  
Keyworth  
Nottingham  
NG12 5JT

By Email and Post

Dear Simon,

THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) (ENGLAND AND WALES) REGULATIONS 1999 (AS AMENDED): REGULATION 13 SCOPING OPINION

PROPOSAL: 12/00004/SOC – PROPOSED EXTENSION TO COLLYWESTON QUARRY – NR. DUDINGTON, NORTHAMPTONSHIRE

I am writing to you further to your letter and accompanying Scoping Report received on 13 December 2012. The scoping report has been the subject of consultation in accordance with the Environmental Impact Assessment (EIA) Regulations.

Overall I can confirm that the approach that you are advocating and the topics you address in the scoping report are considered to be acceptable and appropriate and this is reflected in the nature of the consultation responses. To avoid unnecessary repetition, detailed guidance provided by consultees has not been duplicated in this letter, but the general approach and salient points are detailed below. I have enclosed the relevant consultation responses.

Planning Policy
Consideration should be given to the National Planning Policy Framework (NPPF) and related technical guidance. The development will need to be considered in the context of the policies of the development plan, particularly the Northamptonshire Minerals and Waste Development Framework (MWDF) Core Strategy DPD (including Policies CS4, CS5, CS6, CS13 and CS14), the Locations for Minerals Development DPD and the Control & Management of Development DPD (including Policy CMD4, CMD7, CMD8 and CMD9). The assessment should refer to the need and demand for minerals and any inert waste disposal created by the development, and detail the quantities and balances of the existing site to be given-up against the proposed development. Currently the most up-to-
date position on the need for the supply of minerals and inert disposal capacity, is
published in the MWDF Annual Monitoring Report 2010-2011. This is soon to be
superseded by the 2011-2012 version.

At a more local level policies of the adopted North Northamptonshire Core Spatial Strategy
(June 2008) and the adopted Rural North, Oundle & Thrapston DPD (July 2011) should
be referenced and addressed where appropriate to the proposal.

Biodiversity & Green Infrastructure
Consultees (Natural England (NE), The Wildlife Trust (WT) and the Council’s Senior
Environmental Planner (SEP)) have emphasised the need for a full set of environmental
information including an Ecological Assessment to be available for consideration prior to a
planning decision being made, in accordance with the pertinent section of the NPPF and
other relevant guidelines. As a principle the applicant is advised to seek if possible to
avoid adverse impact on sensitive areas for wildlife and set out mitigation and
compensation as necessary.

NE has provided advice with respect to appropriate surveys on the site (equivalent to
Phase 2) and wider area (Extended Phase 1 surveys as required by the SEP and WT).
The WT refers the applicant to the Northamptonshire Biological Records Centre for
detailed records of designated sites, habitats and protected species within a 2 km radius,
 together with other groups that can be contacted. Consultees advise upon the need to
also consider species and habitats of principal importance, with desk study data
specifically including Ancient Woodland. The Local Biodiversity Action Plan details locally
important species and habitats.

The site lies within or close to the Sub-Regional Willow Brook Green Infrastructure
Corridor, designated under Policy 5 of the adopted North Northamptonshire Core Spatial
Strategy. The policy seeks to safeguard corridors through (inter alia) not permitting
development which compromises their integrity. In accordance with Policy 5, the Local
BAP and the NPPF the applicant is encouraged to provide for overall wildlife gain (such as
through Green Infrastructure) that could link habitats and designated sites, increase
priority habitats, and where possible include measures to help encourage people to access
the countryside. This should be the subject of an ecological and geological management
plan within the Environmental Statement, including appropriate provision for monitoring
and where necessary any obligations that may best be secured through a section 106
agreement.

Collyweston Quarry is designated a Regionally Important Geological Site. The ES should
therefore include an assessment of the impact of the proposals on geology. NE broadly
concurs with the approach in the Scoping & Screening Report for soils and agricultural
land quality & reclamation, although gives more detailed reference to policies and
guidance and the key points that the Statement would need to address.
Landscape Impact
The consideration of the environmental impact should include the impact of the area to be abandoned as well as the proposed new area. In considering the landscape and visual impact the latest available guidance on Landscape and Visual Impact Assessment methodology should be employed. The applicant should be aware that the Guidelines for Landscape and Visual Impact Assessment 3rd Edition is due to be published by the Landscape Institute and Institute of Environmental Management & Assessment on 3 April 2013. The Advice Note on ‘Photography and photomontage in landscape and visual impact assessment’ published in 2011 should also be used, particularly if the above guidelines are not available prior to preparation of the ES. Tina Cuss (the County Council’s Senior Environmental Planner) would be happy to agree a radius and points of assessment.

As a principle the applicant should look to enhance, not just preserve or mitigate the impact of the site through detailed landscape proposals. A commitment to the necessary planting should be made with the use of native species (of plants, shrubs and trees) only. Ideally, these species should be chosen as ones that are typical of that part of the County and they should be sourced from a local and a known provenance. Where possible the areas should be managed for the benefit of wildlife.

Environment & Amenity Impacts
The Environmental Health Officer has requested a Dust Assessment and Action Plan is submitted as part of the planning application. This document would need to include information about dust generation, any receptors and suitable mitigation measures that will be taken. NE points out that a priority action in the England Biodiversity Strategy is to reduce air pollution impacts on biodiversity. An assessment of impact on air pollution and quality should not be limited to effects on humans but should also consider potential direct and indirect impacts on the natural environment, sensitive ecological receptors and species and habitats of principal importance.

The ES should include a noise assessment and management plan in accordance with the requirements of the NPPF and technical guidance. This should include details of all plant, machinery, vehicles and processes to take place on the site. East Northamptonshire Council has requested an assessment of vibration. If screening bunds are required for mitigation of either noise, dust or landscape impacts then details of the height, location etc. should be included with the application. Given the proximity of the proposal to residential properties, I would request that the specific principles and detailed information with respect to the noise, dust and possible vibration assessment is agreed with the Environmental Health Officer at East Northants Council (Caroline Ellis on 01832 742161).

If any lighting is proposed then the application should include details of the position, luminescence and the light spread on a plan showing the contours in Lux, plotted on the site. There would also need to be consideration of the impact of any lighting on ecology.
The Water Environment
A consultation response from the Environment Agency is enclosed this focuses on matters related to the water Environment, which I will not repeat in detail. As you make clear in the Scoping Report there will be a need Flood Risk Assessment, which should be carried out in accordance with the methodology advised by the Agency. You are also requested to provide a sustainable drainage scheme using Sustainable Drainage Systems (SUDS).

Existing groundwater monitoring infrastructure of the adjacent permitted Inert Landfill Site may be affected by the proposed extension so the Environment Agency has requested a Groundwater Impact Assessment be submitted with the application to demonstrate how this would be managed. The ES would also need to include an assessment of private water supplies in accordance with the NPPF.

Archaeology & Cultural Heritage
It is noted that a desk based study is to be provided as a baseline study to provide an assessment of the impact of the proposed development on any heritage assets. A field evaluation would be necessary including the possibility of a geophysical survey and trial trenching. The information from the evaluation would have the potential to identify if any areas of national significance were present within the development area that would form a constraint on development. Policy and guidelines indicate that such information should be provided as part of the planning application. The County Archaeological Advisor would be happy to provide a brief for the evaluation (Lesley-Ann Mather, 01604 367909 or email: LMathert@northamptonshire.gov.uk).

The ES would also need to consider the impact of the proposal on nearby built heritage assets in accordance with policies and guidance in the NPPF. This should include considering the impact upon the character and setting of the Duddington Conservation Area and the setting of nearby Listed Buildings.

Highways & Public Rights of Way
It is noted that the proposal would not generate any additional HGV movements and would not result in day to day vehicle movements above historic traffic levels. The proposal to include a review of the existing transport arrangements is welcomed. You may wish to discuss the information requirements with Richard Hall (Principal Engineer) on 01604 364318.

The dashed lines showing the public rights of way on the drawing 002/Colly/Wst/HPL are slightly wrong and need correcting. Enclosed with the consultation response from the Highway Authority is a plan of the routes as currently shown on the Definitive Map. A temporary order for diverting several public rights of way expires no later than 31 December 2018 meaning that a new order would be required for the paths, which would revert to their original alignments and be affected by the proposals for the western extension. This would be effected by means of an application under Sections 257 and 261
of the Town and Country Planning Act 1990 for temporary diversions of the legal routes possibly accompanied by an order to formally rescind the current order.

Cumulative Impacts
Your explanation of the consideration of the effects of the entire mineral working and infrastructure is welcomed and should be included in the ES. The ES should identify, describe and evaluate the effects that are likely to result from the project in combination with other projects, activities and plans for all types of development that are being, have been or will be carried out. This should include (where information permits) existing completed projects, approved but uncompleted projects, ongoing activities, plans or projects under consideration by the consenting authorities, and plans and projects which are reasonably foreseeable.

Peterborough City Council (Alan Jones, 01733 454440) has brought to the applicant’s attention, nearby development sites outside Northamptonshire that may need to be considered for in-combination effects, such as (from west to east as far as the A1); Cross Leys Quarry, Thornhaugh I, Cook’s Hole, Thornhaugh II (including Thornhaugh IIb – permitted under the same permission as Thornhaugh II, but in different ownership and as yet un-worked).

Other Issues
The intention to consider alternatives to the development and the socio-economic impacts within the statement is welcomed.

Under each of the headings above in this letter or as a separate submission, the applicant may also wish to consider the content of any s.106 agreement which may be necessary, if the application is considered favourably.

Once you have had the time to consider the above, if you require a meeting with myself and/or the specialists who have provided observations, please don’t hesitate to contact me.

Yours sincerely,

Dan Szymanski
Principal Development Control Officer

Enclosures:
Letter from Duddington-with-Fineshade Parish Council dated 10 January 2013;
Letter from Natural England dated 8 January 2013;
Letter from the Wildlife Trust dated 4 January 2013;
Memorandum from Tina Cuss dated 4 January 2013;
Letter from the Environment Agency dated 4 January 2013;
Letter from Caroline Ellis (Environmental Protection Officer) of East Northamptonshire Council dated 9 January 2013;
Letter and delegated report from Carolyn Tait (East Northamptonshire Council) dated 11 January 2013;
Memorandum from Lesley-Ann Mather dated 8 January 2013;
Email and Accompanying Plan from Richard Hall dated 4 January 2013;
Letter from English Heritage dated 15 January 2013;
Mr Dan Szymanski
Development Control, Planning
Northamptonshire County Council
PO Box 163
County Hall
NORTHAMPTON
NN1 1AX

10 January 2013

Dear Mr Szymanski,

TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) (ENGLAND AND WALES) REGULATIONS 2011: REGULATION 13 SCOPING OPINION
12/00004/SCO – PROPOSALS FOR SCOPE AND CONTENT OF AN APPLICATION FOR PLANNING PERMISSION FOR A PROPOSED EXTENSION TO COLLYWESTON QUARRY, DUDDINGTON PARISH, NORTHAMPTONSHIRE

Further to your letter dated 19 December 2012 and our subsequent telephone conversation when you agreed to an extension to the response time until 11 January 2013, Duddington-with-Fineshade Parish Council has considered the above and I submit its comments as follows.

The Parish Council has concerns over problems arising from dust that is expected to be generated by the proposed development given its close proximity to the village and also noise from the work and the visual impact. To mitigate these effects, it will be necessary for a high standard of screening to be provided around the site.

It is accepted that the operation will entail blasting, (this is probably preferable to drilling which may be nosier), but this should be restricted to a maximum of one day per week.

The new development must use the existing access.

Yours sincerely

Richard Reed

Richard Reed
Clerk to the Council.
Dear Mr Szymanski

Environmental Impact Assessment Scoping consultation (Regulation 15 (3) (i) of the EIA Regulations 2011): Extension to Collyweston Quarry
Location: Collyweston Quarry, Peterborough Road, Duddington, Northamptonshire, PE9 3QA

Thank you for seeking our advice on the scope of the Environmental Statement (ES) in your consultation dated 19 December 2012 which we received on the same day.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Case law\(^1\) and guidance\(^2\) has stressed the need for a full set of environmental information to be available for consideration prior to a decision being taken on whether or not to grant planning permission. Appendix A to this letter provides Natural England's advice on the scope of the Environmental Impact Assessment (EIA) for this development.

Should the proposal be amended in a way which significantly affects its impact on the natural environment then, in accordance with Section 4 of the Natural Environment and Rural Communities Act 2006, Natural England should be consulted again.

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us. For any queries relating to the specific advice in this letter only please contact Wilbert van Vliet on 0300 060 1199. For any new consultations, or to provide further information on this consultation please send your correspondences to consultations@naturalengland.org.uk.

We really value your feedback to help us improve the service we offer. We have attached a feedback form to this letter and welcome any comments you might have about our service.

Yours sincerely

Wilbert van Vliet
Land Use Operations

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\(^1\) Harrison, J in R. v. Cornwall County Council ex parte Hardy (2001)
Annex A – Advice related to EIA Scoping Requirements

1. General Principles
Schedule 4 of the Town & Country Planning (Environmental Impact Assessment) Regulations 2011, sets out the necessary information to assess impacts on the natural environment to be included in an ES, specifically:

- A description of the development – including physical characteristics and the full land use requirements of the site during construction and operational phases.
- Expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the proposed development.
- An assessment of alternatives and clear reasoning as to why the preferred option has been chosen.
- A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the interrelationship between the above factors.
- A description of the likely significant effects of the development on the environment – this should cover direct effects but also any indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative effects. Effects should relate to the existence of the development, the use of natural resources and the emissions from pollutants. This should also include a description of the forecasting methods to predict the likely effects on the environment.
- A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.
- A non-technical summary of the information.
- An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information.

It will be important for any assessment to consider the potential cumulative effects of this proposal, including all supporting infrastructure, with other similar proposals and a thorough assessment of the ‘in combination’ effects of the proposed development with any existing developments and current applications. A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.

2. Biodiversity and Geology

2.1 Ecological Aspects of an Environmental Statement
Natural England advises that the potential impact of the proposal upon features of nature conservation interest and opportunities for habitat creation/enhancement should be included within this assessment in accordance with appropriate guidance on such matters. Guidelines for Ecological Impact Assessment (EclA) have been developed by the Institute of Ecology and Environmental Management (IEEM) and are available on their website.

EclA is the process of identifying, quantifying and evaluating the potential impacts of defined actions on ecosystems or their components. EclA may be carried out as part of the EIA process or to support other forms of environmental assessment or appraisal.

The National Planning Policy Framework sets out guidance in S.118 on how to take account of biodiversity interests in planning decisions and the framework that local authorities should provide to assist developers.

2.2 Internationally and Nationally Designated Sites
The ES should therefore thoroughly assess the potential for the proposal to affect designated sites. European sites (eg designated Special Areas or Conservation and Special Protection Areas) fall within the scope of the Conservation of Habitats and Species Regulations 2010. In addition
paragraph 169 of the National Planning Policy Framework requires that potential Special Protection Areas, possible Special Areas of Conservation, listed or proposed Ramsar sites, and any site identified as being necessary to compensate for adverse impacts on classified, potential or possible SPAs, SACs and Ramsar sites be treated in the same way as classified sites.

Under Regulation 61 of the Conservation of Habitats and Species Regulations 2010 an appropriate assessment needs to be undertaken in respect of any plan or project which is (a) likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and (b) not directly connected with or necessary to the management of the site.

Should a Likely Significant Effect on a European/Internationally designated site be identified or be uncertain, the competent authority (in this case the Local Planning Authority) may need to prepare an Appropriate Assessment, in addition to consideration of impacts through the EIA process.

**Sites of Special Scientific Interest (SSSIs) and sites of European or international importance (Special Areas of Conservation, Special Protection Areas and Ramsar sites)**

The development site is adjacent to the following designated nature conservation site:

- Collyweston Great Wood & Easton Hornstocks SSSI

- Further information on the SSSI and its special interest features can be found at [www.natureonthemap.naturalengland.org.uk](http://www.natureonthemap.naturalengland.org.uk). The Environmental Statement should include a full assessment of the direct and indirect effects of the development on the features of special interest within this site and should identify such mitigation measures as may be required in order to avoid, minimise or reduce any adverse significant effects.

**2.3 Regionally and Locally Important Sites**

The EIA will need to consider any impacts upon local wildlife and geological sites. Local Sites are identified by the local wildlife trust, geoconservation group or a local forum established for the purposes of identifying and selecting local sites. They are of county importance for wildlife or geodiversity. The Environmental Statement should therefore include an assessment of the likely impacts on the wildlife and geodiversity interests of such sites. The assessment should include proposals for mitigation of any impacts and if appropriate, compensation measures. Contact the local wildlife trust, geoconservation group or Local Sites body in this area for further information.

**2.4 Protected Species - Species protected by the Wildlife and Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2010**

The ES should assess the impact of all phases of the proposal on protected species (including, for example, great crested newts, reptiles, birds, water voles, badgers and bats). Natural England does not hold comprehensive information regarding the locations of species protected by law, but advises on the procedures and legislation relevant to such species. Records of protected species should be sought from appropriate local biological record centres, nature conservation organisations, groups and individuals; and consideration should be given to the wider context of the site for example in terms of habitat linkages and protected species populations in the wider area, to assist in the impact assessment.

The conservation of species protected by law is explained in Part IV and Annex A of Government Circular 06/2005 *Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System*. The area likely to be affected by the proposal should be thoroughly surveyed by competent ecologists at appropriate times of year for relevant species and the survey results, impact assessments and appropriate accompanying mitigation strategies included as part of the ES.

In order to provide this information there may be a requirement for a survey at a particular time of
year. Surveys should always be carried out in optimal survey time periods and to current guidance by suitably qualified and where necessary, licensed, consultants. Natural England has adopted standing advice for protected species which includes links to guidance on survey and mitigation.

2.5 Habitats and Species of Principal Importance
The ES should thoroughly assess the impact of the proposals on habitats and/or species listed as as ‘Habits and Species of Principal Importance’ within the England Biodiversity List, published under the requirements of S41 of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act 2006 places a general duty on all public authorities, including local planning authorities, to conserve and enhance biodiversity. Further information on this duty is available in the Defra publication ‘Guidance for Local Authorities on Implementing the Biodiversity Duty’.

Government Circular 06/2005 states that Biodiversity Action Plan (BAP) species and habitats, ‘are capable of being a material consideration...in the making of planning decisions’. Natural England therefore advises that survey, impact assessment and mitigation proposals for Habitats and Species of Principal Importance should be included in the ES. Consideration should also be given to those species and habitats included in the relevant Local BAP.

Natural England advises that a habitat survey (equivalent to Phase 2) is carried out on the site, in order to identify any important habitats present. In addition, ornithological, botanical and invertebrate surveys should be carried out at appropriate times in the year, to establish whether any scarce or priority species are present. The Environmental Statement should include details of:
- Any historical data for the site affected by the proposal (eg from previous surveys);
- Additional surveys carried out as part of this proposal;
- The habitats and species present;
- The status of these habitats and species (eg whether BAP priority habitat);
- The direct and indirect effects of the development upon those habitats and species;
- Full details of any mitigation or compensation that might be required.

The development should seek if possible to avoid adverse impact on sensitive areas for wildlife within the site, and if possible provide opportunities for overall wildlife gain.

The record centre for the relevant Local Authorities should be able to provide the relevant information on the location and type of BAP habitat for the area under consideration.

2.6 Contacts for Local Records
Natural England does not hold local information on local sites, local landscape character and local or national biodiversity priority habitats and species. We recommend that you seek further information from the appropriate bodies (which may include the local records centre, the local wildlife trust or other recording society and a local landscape characterisation document).

3. Access and Recreation
Natural England encourages any proposal to incorporate measures to help encourage people to access the countryside for quiet enjoyment. Measures such as reinstating existing footpaths together with the creation of new footpaths and bridleways are to be encouraged. Links to other green networks and, where appropriate, urban fringe areas should also be explored to help promote the creation of wider green infrastructure. Relevant aspects of local authority green infrastructure strategies should be incorporated where appropriate.

Rights of Way, Access land, Coastal access and National Trails
The EIA should consider potential impacts on access land, public open land and rights of way in the vicinity of the development. We also recommend reference to the relevant Right of Way
Improvement Plans (ROWIP) to identify public rights of way within or adjacent to the proposed site that should be maintained or enhanced.

4. Soil and Agricultural Land Quality and Reclamation

Impacts from the development should be considered in light of the Government's policy for the protection of the best and most versatile (BMV) agricultural land as set out in paragraph 112 of the NPPF. We also recommend that soils should be considered under a more general heading of sustainable use of land and the ecosystem services they provide as a natural resource in line with paragraph 109 of the NPPF.

Soil is a finite resource that fulfils many important functions and services (ecosystem services) for society, for example as a growing medium for food, timber and other crops, as a store for carbon and water, as a reservoir of biodiversity and as a buffer against pollution. It is therefore important that the soil resources are protected and used sustainably.

The following issues should therefore be considered in detail as part of the Environmental Statement:

1. The degree to which soils would be disturbed/harmed as part of this development and whether any ‘best and most versatile’ agricultural land would be affected.

If required, an agricultural land classification and soil survey of the land should be undertaken, normally at a detailed level (eg one auger boring per hectare supported by pits dug in each main soil type), to confirm the soil physical characteristics of the full depth of soil resource ie 1.2 metres.

For further information on the availability of existing agricultural land classification (ALC) information see www.magic.gov.uk. Natural England Technical Information Note 049 - Agricultural Land Classification: protecting the best and most versatile agricultural land also contains useful explanatory information.

2. Proposals for handling different types of topsoil and subsoil and the storage of soils and their management whilst in store.

Reference could usefully be made to MAFF’s Good Practice Guide for Handling Soils which comprises separate sections, describing the typical choice of machinery and method of their use for handling soils at various phases. The techniques described by Sheets 1-4 are recommended for the successful reinstatement of higher quality soils.

3. The method of assessing whether soils are in a suitably dry condition to be handled (ie dry and friable), and the avoidance of soil handling, trafficking and cultivation during the wetter winter period.

4. A description of the proposed depths and soil types of the restored soil profiles;

5. The effects on land drainage, agricultural access and water supplies, including other agricultural land in the vicinity.

6. The impacts of the development on farm structure and viability, and on other established rural land use and interests, both during the site working period and following its reclamation.

7. A detailed Restoration Plan illustrating the restored landform and the proposed afteruses, together with details of surface features, water bodies and the availability of outfalls to accommodate future drainage requirements.
Further relevant guidance is also contained in the Defra Guidance for Successful Restoration of Mineral and Waste Sites.

5. Air Quality
Air quality in the UK has improved over recent decades but air pollution remains a significant issue; for example over 97% of sensitive habitat area in England is predicted to exceed the critical loads for ecosystem protection from atmospheric nitrogen deposition (England Biodiversity Strategy, Defra 2011). A priority action in the England Biodiversity Strategy is to reduce air pollution impacts on biodiversity. The planning system plays a key role in determining the location of developments which may give rise to pollution, either directly or from traffic generation, and hence planning decisions can have a significant impact on the quality of air, water and land. The assessment should take account of the risks of air pollution and how these can be managed or reduced. Further information on air pollution impacts and the sensitivity of different habitats/designated sites can be found on the Air Pollution Information System (www.apis.ac.uk). Further information on air pollution modelling and assessment can be found on the Environment Agency website.

6. Cumulative and in-combination effects
A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.

The ES should include an impact assessment to identify, describe and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out. The following types of projects should be included in such an assessment. (Subject to available information):

a. Existing completed projects
b. Approved but uncompleted projects
c. Ongoing activities
d. Plans or projects for which an application has been made and which are under consideration by the consenting authorities
e. Plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess the likelihood of cumulative and in-combination effects.
Mr Dan Szymanski, Principal Development Control Officer  
Planning Services, Floor 3  
Northamptonshire County Council  
Guildhall Road Block  
County Hall  
Northampton  
NN1 1DN

Dear Mr Szymanski

RE: Application No. 12/00004/SCO: Scoping Opinion Request: For a proposed extension location; at Collywesson Quarry, Peterborough Road, Duddington.

COMMENT.

Thank you very much indeed for consulting The Wildlife Trust in respect of the above Scoping Opinion Request for a proposed new extension area lying on the western side of the existing Collywesson Quarry site near the village of Duddington.

We refer now to your Consultation Covering Letter, dated 19th December 2012, about this same matter, as received via email, and also to the associated documents which accompanied it, as listed on your Authority’s own website.

The Wildlife Trust is also of the opinion that, for a project of this scale and nature, an Environmental Impact Assessment would indeed be required. You may also wish to consider a Sustainability Appraisal too.

New developments, as stated in National, Regional and Local planning policy, should both protect and enhance local biodiversity as an integral part of any proposal. Alongside an assessment of the existing ecological value of the site, we would like to see the identification of opportunities for such enhancement.

Ecological surveys and information.

Adequate baseline surveys should be completed to assess the value of the proposed development site and its surrounding areas. The Wildlife Trust recommends that at least an Extended Phase 1 Habitat Survey be carried out, and that all Statutory and Non-Statutory sites, protected species and other relevant species and habitats be fully investigated and evaluated. Information on wildlife records for the area should be obtained as part of this from the Northamptonshire Biodiversity Records Centre (NBRC); contact details below. A list of additional local contacts for Northamptonshire is also enclosed below.
For information, with reference to Drawing No. 002/Colly/Wst/HPL, dated 12th December 2012, entitled "Proposed Western Extension Area", as contained within Heaton Planning Consultants' "Screening and Scoping Report" documentation, the proposed footprint for this proposed quarry extension area has the following features:

- There are several instances of existing site designations, of varying categories, lying inside an overall assumed zone of approximately 2 kilometres around it. These are a National Nature Reserve (NNR), Sites of Special Scientific Interest (SSSI), Local Wildlife Sites (LWS), Potential Wildlife Sites (PWS), and there is even a Local Geological Site (LGS) immediately adjacent to it too.

- Within this same, assumed, 2km radius Zone of Interest, there are also several areas of Ancient Woodland habitats too.

- The Wildlife Trust is aware of a good number of historical records of sightings of 'protected species matters' within a distance of 2 kilometres away from the outline boundary of this proposed development area.

In addition, consideration may well need to be given to the issue of whether or not there is going to be any significant degree of increased artificial lighting levels occurring as a result of the delivery of this proposed development scheme, and if so, the ways in which it might have an impact upon the local biodiversity – such as bat species, for example.

**Enhancement of biodiversity and Green Infrastructure.**

Opportunities for the enhancement of biodiversity include linking and buffering existing wildlife sites and habitats through habitat creation and incorporation of Green Infrastructure (GI). Reinforcement of this is found in the East Midlands Regional Plan, the NPPF, NERC Act (2006) and Local Development Plans. The EIA should include proposals for ecological mitigation linked to the during- and post-construction impacts and should suggest the content of Planning Conditions and ecological sections of S106 Agreements if applicable.

Northamptonshire’s Local Biodiversity Action Plan gives details and targets on locally important species and habitats (www.northamptonshirebiodiversity.org).

In addition, we would draw the Applicant’s attention to the recently-produced “Biodiversity SPD” document which has been ratified by the North Northamptonshire Joint Planning Unit, and by other Authorities too.

We strongly recommend that a GI approach be followed. This process should be incorporated as an integral part of the EIA analysis. The key ecological aspect of GI that we would expect to see is the linking of existing and/or potential wildlife habitat within the site and connections out of the site to create more sustainable ecosystems.
The construction of such a development scheme in this location has the potential to contribute towards the opportunities for re-connecting habitats areas in the swathe of countryside in this part of East Northants District in the future. Increasing connectivity of habitats should be a top priority for all areas of the county in order to provide for both sustainable and robust areas of the countryside under suitable ecological management and for a joined-up ‘Living Landscape’ that will allow species and habitats to better adapt to the effects of climate change.

Please be aware that this proposed development site lies entirely within the body of a major, strategic Sub-Regional GI Corridor routes (trending roughly N-S).

It will therefore have the potential to provide a valuable addition to these corridors in terms of biodiversity along with the nearby existing sites. Policy 5 of the Core Spatial Strategy states that "Sub-Regional Green Infrastructure corridors will connect locations of natural and historic heritage, green space, biodiversity or other environmental interest. They will be safeguarded through: Not permitting development that compromises their integrity and therefore that of the overall green infrastructure framework."

The Wildlife Trust is of the view that, in line with the policy and guidance given within national and regional policy (East Midlands Regional Plan – Policy 1, 28, 29) documents, mitigation measures to address any potential negative impacts upon established biodiversity assets must be brought forward, and Conditioned as necessary.

The emerging development proposals here should look at the possibilities for delivering both county Biodiversity Action Plan target objectives (see www.northamptonshirebiodiversity.org) and the provision of a Green Infrastructure network contribution, as already discussed above. The project should indeed be aiming to deliver a nett biodiversity gain for the local area as a result of its delivery on-the-ground.

Landscaping and ecological mitigation are only of worth to wildlife if properly managed. Therefore, the EIA should consider the long-term management of all green spaces.

In our opinion, it is important to not introduce any non-native or invasive species into either terrestrial or aquatic environments. Therefore, any soft landscaping elements that it is intended to include within this development proposal should be provided for by the use of native species (of plants, shrubs and trees) only. Ideally, these species should be chosen as ones that are typical of that part of the county and they should all only be sourced from a local and a known provenance. These areas should be managed for the benefit of wildlife.

Analysis of cumulative effects.

The Wildlife Trust recommends that, in addition to addressing any potential direct / indirect impacts as a sole result of their own development scheme, the Applicant also be required to include, in the appropriate section(s) of the supporting documentation, a comprehensive review of just what the likely effects of the provision of their facilities is going to be upon the existing biodiversity at this location in combination with all of the other relevant encroaching development pressures in this area of the District.
Feedback in respect of Applicant’s Scoping Report document.

With reference to the “Screening and Scoping Report” document, dated December 2012, from Heaton Planning Consultants, please note that, given both the nature of this proposed development scheme, and its location, it is our view that this forthcoming Application for a new quarry extension area must be required to produce an appropriate Ecological / Geological Management Plan document in association with it which will provide for the detailed management prescriptions and monitoring programme needs that must be applied to this site and its environs. Perhaps this objective might best be achieved through the use of relevant Planning Conditions and / or the insertion of suitable clauses into a S106 Agreement, if appropriate.

The Wildlife Trust would welcome an early opportunity to review any ecological appraisal work already being carried out by consultants in respect of this same project.

We hope that the above comments are useful to you. We look forward to reviewing the relevant sections of any Environmental Impact Assessment statement that might be submitted. Please do not hesitate to contact The Wildlife Trust again if you have any questions about the above points.

We look forward to reviewing the relevant sections of any Environmental Statement that might eventually be submitted.

Yours sincerely,

Alan J.G. Smith
Planning & Biodiversity Officer – Northamptonshire.
Email: alan.smith@wildlifecbn.org

The Northamptonshire Biodiversity Records Centre (NBRC);
➢ Lings House, Billing Lings, Northampton, NN3 8BE;
   Tel: 01604 400448; Email: nbrc@wildlifecbn.org.

Other potential local consultees
➢ The Northamptonshire Bat group (Phil Richardson, prichabat@aol.com)
➢ The Northamptonshire Badger group (Wellingborough, Kettering, Corby, East Northants) (Peter Edwards, settrecorder@northnorthandsgers.co.uk)
➢ The West Northamptonshire Badger Group (Northampton, Daventry, South Northants) (Steven Jackson, Steve@badgers.org.uk)
➢ The Northamptonshire Barn Owl Group (Paddy Jackson, paddy@paddyjackson.co.uk)
➢ The Hawk and Owl Trust (http://www.hawkandowl.org/)
➢ The British Trust for Ornithology (BTO, http://www.bto.org/index.htm)
➢ The RSPB (Colin Wilkinson, colin.wilkinson@rspb.org.uk)
➢ Northamptonshire Moth Recorder (John Ward, bjward@btinternet.com

www.wildlifecbn.org  @wildlifecbn  /wildlifecbn
The Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire.
Registered Office: The Manor House, Broad Street, Great Cambridges, Cambridge CB23 6DH.
Registered in England 2534145. Registered Charity No. 1000412
memo
To: Dan Szymanski
From: Tina Cuss
Ref: 12/00004/SCO
Date: 4 January 2013
cc:

TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2011 SCOping REQUEST CONSULTATION - REGULATION 13 PROPOSED DEVELOPMENT: PROPOSALS FOR SCOPE AND CONTENT OF AN APPLICATION FOR PLANNING PERMISSION FOR A PROPOSED EXTENSION LOCATION: Collyweston Quarry, Peterborough Road, Duddington, Northamptonshire, PE9 3QA

I would recommend that the desk study for protected species, designated sites and species and habitats of principal importance should include all relevant local biological data and should not be limited to just nationally available sources. The desk study data should include Ancient Woodland that may not currently be nationally or locally designated. I would recommend that all of the data and results of ecological sites surveys that are proposed should be submitted together with the Planning Application or Environmental Statement (ES).

Any Extended Phase 1 Habitat Survey and Ecological Assessment that is submitted should include assessment of both potential direct and indirect impact on any species or habitats of principal importance and an assessment of negative and positive effects on biodiversity and surrounding habitats affected. I would recommend that in accordance with local and National planning policies, mitigation proposed for ecological features should aim to achieve an overall net benefit to biodiversity rather than just meet legislative requirements. The ecology assessment should ideally include any proposals for enhancements of landscape and biodiversity as well as full details on avoidance, mitigation and compensation proposals and monitoring.

Dust and Air Quality
The assessment of impact on the environment on air quality must not be limited to effects on humans but must properly consider potential direct and indirect impacts on the natural environment, sensitive ecological receptors and species and habitats of principal importance.

Landscape and Visual Amenity
I would recommend that the latest available guidance on Landscape and Visual Impact Assessment methodology is employed. The applicant should be aware that the Guidelines for Landscape and Visual Impact Assessment 3rd Edition is due to be published by the Landscape Institute and IEMA on 3 April 2013. The Advice Note on ‘Photography and photomontage in landscape and visual impact assessment’ published in 2011 should also be used, particularly if the above guidelines are not available prior to preparation of the ES.
Cumulative Effects
The assessment of cumulative impacts should not be limited only to local mineral and waste operations but adopted plans and permitted projects likely to have an in-combination or cumulative impacts on the local environment.

Other Considerations
I do not consider that socioeconomic effects or need and supply should be included in an Environmental Impact Assessment but that they should rather be assessed as part of the Planning Application within the Planning Statement or other appropriate supporting information.

Collyweston Quarry is designated at a Regionally Important Geological Site. The ES should therefore include an assessment of the impact of the proposals on geology.

I would be happy to provide clarification or further detailed advice on ecology, landscape impact, landscape and ecological enhancement and management and mitigation proposals while the ES is in preparation.

Tina Cuss
Senior Environmental Planner
Northamptonshire County Council
Planning Services, Floor 3
Guildhall Road Block
County Hall
Northampton
NN1 1DN

Our ref: AN/2012/116284/01-L01
Your ref: 12/00004/SCO
Date: 04 January 2013

FAO Dan Szymanski

Dear Sir

Request for a scoping opinion for proposed extension to Collyweston Quarry
Collyweston Quarry Peterborough Road Duddington Northamptonshire PE9 3QA

Thank you for consulting us on the scoping opinion for the proposed extension to
Collyweston Quarry, which was received on 19 December 2012.

The focus of our response is on the following environmental topics for which we are responsible:

1) Flood risk management;
2) Land contamination and groundwater.

Our technical comments detailing the information we consider should be included in
the Environmental Statement are provided on the following pages.

Technical comments and advice

1.0 Flood risk management

1.1 Flood Risk Assessment guidance
The application lies within Flood Zone 1 defined by the Technical Guide to the
National Planning Policy Framework (NPPF) as having a low probability of flooding.
However the proposed scale of development may present risks of flooding on-site
and/or off-site if surface water run-off is not effectively managed. Footnote 20 of
paragraph 103 of the NPPF requires applicants for planning permission to submit an
Flood Risk Assessment (FRA) when development on this scale (sites greater than
1ha) is proposed in such locations.

Surface water calculations which support the FRA should be carried out using
ADAS-365 as the quarry will not be producing impermeable areas only modifying the
topography and geology of the slopes and soil characteristics through the extraction

Environment Agency
Nene House (Pytchley Lodge Industrial Estate),
Pytchley Lodge Road, Kettering, Northants, NN15 6JQ
Email: planningkettering@environment-agency.gov.uk
www.environment-agency.gov.uk

Cont'd..
1.2 Sustainable Drainage Systems
Surface water run-off should be controlled as near to its source as possible through a sustainable drainage approach to surface water management (SuDS). The drainage scheme proposed should provide a sustainable drainage strategy to include SuDS elements with attenuation, storage and treatment capacities incorporated as detailed in the CIRIA SuDS Manual (C697).

SuDS are an approach to managing surface water run-off which seeks to mimic natural drainage systems and retain water on or near the site as opposed to traditional drainage approaches which involve piping water off site as quickly as possible. SuDS involve a range of techniques including soakaways, infiltration trenches, permeable pavements, grassed swales, ponds and wetlands. SuDS offer significant advantages over conventional piped drainage systems in reducing flood risk by attenuating the rate and quantity of surface water run-off from a site, promoting groundwater recharge, and improving water quality and amenity.

Approved Document Part H of the Building Regulations 2000 establishes a hierarchy for surface water disposal, which encourages a SuDS approach. Under Approved Document Part H the first option for surface water disposal should be the use of SuDS, which encourage infiltration such as soakaways or infiltration trenches. In all cases, it must be established that these options are feasible, can be adopted and properly maintained and would not lead to any other environmental problems. For example, using soakaways or other infiltration methods on contaminated land carries groundwater pollution risks and may not work in areas with a high water table. Where the intention is to dispose to soakaway, these should be shown to work through an appropriate assessment carried out under Building Research Establishment (BRE) Digest 365. Second tier is discharge to water course. Only if infiltration and connection to watercourse are not possible should discharge to sewer be considered.

The variety of SuDS techniques available means that virtually any development should be able to include a scheme based around these principles. Flow balancing SuDS methods which involve the retention and controlled release of surface water from a site may be an option for some developments at a scale where uncontrolled surface water flows would otherwise exceed the local greenfield run off rate. Flow balancing should seek to achieve water quality and amenity benefits as well as managing flood risk.

1.3 Maintenance
The FRA should focus on surface water management for the lifetime of the site as well as the reinstatement of the site once quarrying has been completed.

2.0 Land contamination and groundwater

2.1 Groundwater impact assessment
The existing groundwater monitoring infrastructure of the adjacent permitted Inert Landfill Site may be affected by the proposed extension to Collyweston Quarry. A Groundwater Impact Assessment must therefore be submitted with the full application to demonstrate how this will be managed.

Should you require any additional information, or wish to discuss these matters further, please do not hesitate to contact me on the number below.
Yours faithfully

Jennifer Moffatt
Planning Liaison Officer

Direct dial 01536 385165
Direct e-mail jennifer.moffatt@environment-agency.gov.uk

Awarded to the Environment, Planning & Engagement
Department, Anglian Region, Northern Area
Dear Mr Szymanski

TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2011: REGULATION 13 SCOPING OPINION

12/00004/SCO – Proposals for scope and content of an application for planning permission for a proposed extension at Collyweston Quarry, Peterborough Road,uddington, Northamptonshire, PE9 3QA

Heaton Planning on behalf of Bullimores Sand & Gravel Ltd has formally requested a Scoping Opinion to determine the type and extent of information required for inclusion within an Environmental Statement to accompany a planning application for the above proposal.

I have read through the environmental statement document and would request a dust assessment and action plan is submitted as part of the planning application. This document would need to include information about dust generation, any receptors and suitable mitigation measures that will be taken.

If you need to contact me I am in the office all day on Mondays, all day on Tuesdays and Wednesday mornings. If I am not in the office please leave a message and I will contact you on my return. Alternatively contact another member of the Environmental Protection team.

Yours sincerely

Caroline Ellis
Environmental Protection Officer

c.c. Carolyn Tait, East Northamptonshire Council, Development Control Officer

Council for the District of East Northamptonshire
Dear Sir/Madam

TOWN AND COUNTRY PLANNING ACT 1990

Proposal: Consultation on Scoping Opinion for quarry extension at Collyweston Quarry Peterborough Road Duddington Northamptonshire PE9 3QA

Thank you for your consultation on the above matter which was received on 19 December 2012 and was allocated the reference: 12/02048/NCC.

I would advise you that this authority has no objection to the proposals in principle subject to the following comment(s) (if any):

Your attention is drawn to the following notes:

1. That NCC be advised that East Northamptonshire Council have no objection to the approach taken in the submitted scoping request, subject to the following issues being included as part of the Environmental Impact Assessment:
   o An appropriate assessment with regards to the potential for harm in terms of dust, in accordance with advice given in the NPPF.
   o An appropriate noise assessment, including vibration, in accordance with advice given in the NPPF and the Council’s Environmental Protection Officer.
   o An appropriate assessment with regards to the impact of the development on neighbouring private water supplies, in accordance with advice given in the NPPF.
   o An appropriate landscaping and visual impact assessment with commitment given towards providing planting or other sympathetic screening. This should also assess the potential impacts to the identified public Rights of Way.
   o An appropriate traffic assessment to include trip numbers, route agreements and hours of operation.
   o An appropriate ecological assessment, in accordance with advice given in the NPPF.
   o An appropriate investigation into the effects of the proposal on any archaeological remains and any heritage assets, in accordance with advice contained in the NPPF.
   o An appropriate light assessment.
I trust that the above observations (if any) can be taken into consideration during the determination of the application but should further information be required regarding this matter please contact direct the Case Officer, on Direct Line 742321.

Yours faithfully

[Signature]

Rob Back
Head of Planning Services
dcpecraz
Delegated Report
Printed: 10 January 2013

Case Officer: Carolyn Tait

Date received: 19 December 2012  Date valid: 19 December 2012  Overall Expiry: 9 January 2013  Ward: Fineshade  Parish: Duddington With Fineshade

Applicant: Heaton Planning
Agent: Northamptonshire County Council - Mr D Szymanski
Location: Collyweston Quarry Peterborough Road Duddington Northamptonshire PE9 3QA

Proposal: Consultation on Scoping Opinion for quarry extension

1. Summary of recommendation

1.1 That NCC be advised that East Northamptonshire Council have no objection to the approach taken in the submitted scoping request, subject to the following issues being included as part of the Environmental Impact Assessment:
   - An appropriate assessment with regards to the potential for harm in terms of dust, in accordance with advice given in the NPPF.
   - An appropriate noise assessment, including vibration, in accordance with advice given in the NPPF and the Council's Environmental Protection Officer.
   - An appropriate assessment with regards to the impact of the development on neighbouring private water supplies, in accordance with advice given in the NPPF.
   - An appropriate landscaping and visual impact assessment with commitment given towards providing planting or other sympathetic screening. This should also assess the potential impacts to the identified public Rights of Way.
   - An appropriate traffic assessment to include trip numbers, route agreements and hours of operation.
   - An appropriate ecological assessment, in accordance with advice given in the NPPF.
   - An appropriate investigation into the effects of the proposal on any archaeological remains and any heritage assets, in accordance with advice contained in the NPPF.
   - An appropriate light assessment.

2. The Proposal

2.1 The scoping request is for a proposal to extract Limestone and Collyweston Slate Log from Collyweston Quarry in Duddington.

2.2 Limestone extraction currently takes place at the quarry and in 2006 permission was granted for an extension to the east of the site to extract more limestone. Recently it has been discovered that it is no longer viable to carry on with extraction to the east of the site and extraction there will cease. Therefore, an extension to the west is proposed.

2.3 It is estimated that the site will produce 2 million tonnes of Limestone over 8 years, with the potential for further extraction over a period of 10-13 years depending on how much is removed per year, as well as the addition of Collyweston Slate Log which may be present.
3 The Site and Surroundings

3.1 The application site is situated off the A43 and A47 to the east of Duddington.

3.1.1 The site has an overall area of 18 hectares and extraction will take place on approximately 15-16 acres of this. The haul road is off the A47. The extent of the site is shown on drawing 002/Colly/Wst/HPL 'Proposed western extension area.

3.1.2 The site is currently in use as agricultural land and sits within a mosaic of arable fields. The site is bordered with The A43 to the west, the A47 to the north, the existing quarry to the east and open countryside to the south.

3.1.3 The topography of the land slopes downward from the eastern boundary to the western boundary from 80 m AOD to 66-72 m AOD.

3.1.4 The village of Duddington is located to the west. This village is classified as a conservation area and is protected by an Article 4 Direction which removes all permitted development rights. There are a number of listed buildings within the village which should be addressed within any Environmental Statement as the proposal could impact upon their settings.

3.1.5 There are a number of public Rights of Way in and adjacent to the site. These include MX12, MX14 and MX18.

4. Policy Considerations

National Planning Policy Framework
Minerals Policy Guidance 1 - Planning and Minerals
Minerals Policy Guidance 2 - Controlling and mitigating the environmental effects of mineral extraction in England.

East Midlands Regional Plan

On 10th November 2010 the High Court ruled that the Secretary of State's decision to revoke Regional Spatial Strategies was unlawful as it had been taken without primary legislation. A statement was then issued by the Government reiterating their intention to remove RSSs and that this should be treated as a material consideration. Despite a further legal challenge, it has now been confirmed that the Government's intention to abolish RSSs is a material consideration which should be taken into account when determining a planning application. Whilst the Localism Bill has now received Royal Assent, Regional Strategies have not yet been revoked.

Policy 1- Regional Core Objectives
Policy 2- Promoting Better Design
Policy 11- Development in the Southern Sub-Area
Policy 18 - Regional Priorities for the Economy
Policy 20 - Regional Priorities for Employment Land
Policy 26 - Protecting and Enhancing the Region's Natural and Cultural Heritage
Policy 27 - Regional Priorities for the Historic Environment
Policy 28- Regional Priorities for Environmental and Green Infrastructure
Policy 29- Priorities for Enhancing the Regions Biodiversity
Policy 31- Priorities for the Management and Enhancement of the Regions Landscape
Policy 32- A Regional Approach to Water Resources and Water Quality
Policy 36- Regional Priorities for Air Quality
Policy 37- Regional Priorities for Minerals
Policy 38- Regional Priorities for Waste Management
Policy 39- Regional Priorities for Energy Reduction and Efficiency
Policy 43- Regional Transport Objectives
Policy 45- Regional Approach to Traffic Growth Reduction
Policy 48- Regional Car Parking Standards
North Northamptonshire Core Spatial Strategy

Policy 11 - Distribution of Jobs
Policy 13 - General Sustainable Development Principles
Policy 14 - Energy Efficiency and Sustainable Construction

Rural North, Oundle and Thrapston Plan

Policy 11 - Enhancing Biodiversity

The Northamptonshire Minerals and Waste Development Framework (MWDF)

CS1 - Northamptonshire’s Waste Management Capacity
CS2 - Spatial Strategy for Waste Management
CS14 - Addressing the Impact of Proposed Minerals and Waste Development
CMD2 - Development Criteria for Waste Disposal
CMD7 - Natural Assets and Resources
CMD10 - Layout and Design Quality
CMD14 - Implementation

5 Relevant Planning History

5.1 85/01355/NCC Building for use as refrigeration unit. PERMITTED.

5.2 88/00809/CRA Extension of limestone quarry and backfilling with inert waste. PERMITTED.

5.3 92/00434/CRA Continuation of inert filling of quarry void. PERMITTED.

5.4 98/00374/CRA Extension of time to continue quarrying operations. PERMITTED.

5.5 00/00341/CRA Modification of condition no.9 to change the hours of working. PERMITTED.

5.6 01/00034/CRA Sorting, recycling and transfer of waste, including covered pad, composting area and ancillary site infrastructure. PERMITTED.

5.7 06/01279/EXT Extension to Collyweston Quarry. PERMITTED.

6 Consultations and Representations

6.1 Northamptonshire County Council are responsible for consultation and East Northamptonshire Council is not obliged to consult on the scoping request. Nevertheless, internal consultations have been made to the Council's Environmental Protection Team and their response is as follows:

6.1.1 "I have read through the environmental statement document and would request a dust assessment and action plan is submitted as part of the planning application. This document would need to include information about dust generation, any receptors and suitable mitigation measures that will be taken".

6.1.2 "Limestone will be extracted using a hydraulic excavator and processed in the base of the quarry. This should help to mitigate any effects on nearby properties from noise, dust, light pollution and vibration. However, the EIA will need to carefully consider the above to ensure the quarry is operated so as not to cause nuisance to the nearby properties. We would expect to see within the EIA an assessment of the likely sources of noise, dust etc and measures taken to mitigate their effects. This should be incorporated into a quarry management plan agreed with Northamptonshire County Council in consultation with East Northamptonshire Council prior to the development commencing. To prevent confusion it would be worthwhile agreeing the scope of any
assessments with NCC and ENC before they are undertaken”.

7 Evaluation

7.1 Introduction

7.1.1 Due to the size and nature of the proposals, NCC requested that a scoping request be submitted for consideration, in accordance with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (as amended), prior to the submission of a formal scoping opinion.

7.1.2 As determining authority, NCC is required to assess the applicant's scoping request. The pertinent issues examined within the scoping request include: landscape and visual effects; effects on ecology and nature conservation interests; effects on archaeology and cultural heritage interests; effects of noise; effects of dust and the effects on local air quality; effects on soil resources; effects on public Rights of Way and traffic impacts.

7.1.3 This authority must consider whether the proposals highlighted within the scoping request documents would have any significant or unacceptable environmental, social or economic impacts upon the district of East Northamptonshire.

7.2 Policy Context

7.2.1 As outlined above, whilst the proposal includes the creation of a quarry, Northamptonshire County Council (NCC) would be the determining authority for this application due to the level of minerals extraction which is a County matter. However, it is appropriate for East Northamptonshire Council as the local planning authority and consultee, to assess the policy context and principle of the development at this preliminary stage.

7.3 Principle of Development

7.3.1 National guidance recognises the importance of minerals planning and highlights that extraction can only take place where the mineral naturally occurs.

7.3.2 MPS1 encourages the extraction of materials close to the point of demand so as to reduce the need for extensive transportation and to avoid transferring potentially adverse environmental impacts.

7.3.3 Northamptonshire County Council will consider the need for development in meeting current and future demand and maintaining land banks. The location of the site within the Milton Keynes/South Midlands Growth Area suggests that significant demand will exist however.

7.4 Impact on Visual Amenity

7.4.1 At this stage a visual impact assessment has not been carried out; but it has been identified that a landscape and visual assessment would be submitted within an Environmental Statement as part of any future planning application for this proposal. The assessment will identify short and long range views of the site and will assess the visual impacts on the village of Duddington.

7.4.2 The screening and scoping report states that the landform of the proposed extension area and its relationship to the surrounding land and communities will be taken into account. The report does identify that the majority of the site is not visible from the A43 and Duddington to the west.

7.4.3 East Northamptonshire Council do not raise any objections at this stage to the proposal on the grounds of visual impact. However, it is crucial that a visual impact assessment
is submitted as part of any Environmental Statement. This should focus on the visual impact of the proposal within the district of East Northamptonshire, particularly the village of Duddington which is a conservation area and the visual impact of the proposal on nearby public Rights of Way.

7.5 Impact on Residential Amenity

7.5.1 As part of the scoping request, the impact of noise, dust, and impact on private water supplies has been considered. Accordingly, the ENC Environmental Health Officer (EHO) has been consulted on the proposed development with the response included at section 6.2 of this report.

7.5.2 Given the distance between the site and the nearest residential neighbour, the proposed development would not result in any overshadowing or overbearing impact.

7.5.3 The Environmental Protection Officer has recommended that dust, noise, light and vibration be considered and assessed as part of any Environmental Statement.

7.5.4 East Northamptonshire Council does not raise any objection to the content of the scoping report subject to any Environmental Statement fully assessing all of the issues identified within the submitted screening and scoping report, as well as those issues identified by the Council’s Environmental Protection Officer.

7.6 Ecological Impacts

7.6.1 The nature of the development means that it falls within Schedule 2 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2011. Northamptonshire County Council has determined that an Environmental Impact Assessment (EIA) should be carried out to accompany the planning application.

7.6.2 The onus is on the County Council to consider the ecological impact of the development based upon Natural England’s standing advice and in accordance with the NPPF. NCC must be satisfied that the proposal would not be harmful in this respect.

7.7 Highway Safety

7.7.1 The screening and scoping report identifies that the proposal would generate no more trips than the existing site as works carried out in the eastern extension would cease and work would transfer to the proposed western extension. However, any Environmental Statement should carry out a full assessment of traffic including routes, hours of operation, number of vehicles etc.

7.7.2 The onus will fall to the local highway authority and NCC to ensure that there would not be a negative impact on the highway as a result of the proposed development.

7.7.3 The impact of any additional traffic on local roads will be considered in detail by the Highway Authority and, subject to them being satisfied that there will be no detrimental impact on the local highway network or local amenity, East Northamptonshire Council does not raise any objection.

8. Other Issues

8.1 Economic considerations: The proposed development would provide a number of skilled jobs for local people and would provide an additional commercial business within the district.
9 Informatives

- That NCC be advised that East Northamptonshire Council have no objection to the approach taken in the submitted scoping request, subject to the following issues being included as part of the Environmental Impact Assessment:
  - An appropriate assessment with regards to the potential for harm in terms of dust, in accordance with advice given in the NPPF.
  - An appropriate noise assessment, including vibration, in accordance with advice given in the NPPF and the Council's Environmental Protection Officer.
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  - An appropriate investigation into the effects of the proposal on any archaeological remains and any heritage assets, in accordance with advice contained in the NPPF.
  - An appropriate light assessment.

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Date: 10/01/2013

Date: 01.01.13
memo

To: Dan Szymanski
From: Lesley-Ann Mather
Ref: 12/00004/SCO
Date: 8th January 2013
cc:

Dan

TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2011 SCOPING REQUEST CONSULTATION - REGULATION 13

PROPOSED DEVELOPMENT: PROPOSALS FOR SCOPE AND CONTENT OF AN APPLICATION FOR PLANNING PERMISSION FOR A PROPOSED EXTENSION LOCATION: Collyweston Quarry, Peterborough Road, Duddington, Northamptonshire, PE9 3QA

Thank you for consulting on the EIA Screening and Scoping Report.

I note from the consultation documents that the applicant intends to provide information regarding Archaeology and Cultural Heritage Interests within their forthcoming Environmental Statement. A desk based search is to be provided as an initial starting point. I note that this is to provide an assessment of the impact of the proposed development on any heritage assets. However in order for the assessment to provide the required information field evaluation will be necessary. I would envisage this to comprise of geophysical survey (if appropriate) and trial trenching.

The information from the evaluation would have the potential to identify if any areas of national significance were present within the development area that would form a constraint on development. Current policy and guidelines indicate that this information should be provided as part of the planning application in order to allow the MPA to make a balanced and informed decision as to the archaeological potential of the area.

I will be happy to provide a brief for the evaluation.

Regards

Planning Services
Room 271 County Hall
w. www.northamptonshire.gov.uk
t. 01604 367909
f.
e. lmathen@northamptonshire.gov.uk
L Mathe

Lesley-Ann
Dan

I am responding on behalf of Terry Chapman to your consultation letter of 19 December 2012 regarding the above proposal.

Public Rights of Way

The dashed lines showing the public rights of way on the drawing 002/Colly/Wst/HPL are slightly wrong and need correcting. I attach a PDF of the routes as currently shown on the Definitive Map.

However the temporary order for diverting several public rights of way expires no later than 31 December 2018 meaning that a new order will be required for the paths which would revert to their original alignments and be affected by the proposals for the western extension. This would be effected by means of an application under Sections 257 and 261 of the Town and Country Planning Act 1990 for temporary diversions of the legal routes possibly accompanied by an order to formally rescind the current order.

Quarry Traffic

It is noted that the proposal would not generate any additional HGV movements and will not result in day to day vehicle movements above historic traffic levels.

The proposal to include a concise review of the existing transport arrangements is welcomed.

Richard
Richard Hall | Principal Engineer – Development Management
Highways, Transport & Infrastructure | Northamptonshire County Council | Tel: 01604 364318

Unless explicitly stated to the contrary, the contents of this email are the views, observations and recommendations of an officer issued in good faith based on information available to them at that time. As such they are not binding on the officer or the County Council. Any views, observations or recommendations are issued without prejudice to any views observations or recommendations of Northamptonshire County Council as Local Highway Authority.
Mr Dan Szymanski  
Leicestershire County Council  
Environment and Heritage Services  
County Hall  
Glenfield  
Leicestershire  
LE3 8RA

Direct Dial: 01604 735400  
Direct Fax: 01604 735401  
Our ref: PA00128504  
Your ref: 12/00004/SCO

15 January 2013

Dear Mr Szymanski

Request for Pre-application Advice

COLLYWESTON QUARRY, PETERBOROUGH ROAD, DUDDINGTON, NORTHAMPTONSHIRE, PE9 3QA

Thank you for your email of 19 December 2012 requesting English Heritage's pre-application advice on the Scoping Opinion for Environmental Statement relating to the extension of Collyweston Quarry. Our specialist staff have considered the information received and we do not wish to comment in detail on the Scoping Opinion. We advise that the scope of the Environmental Statement should be agreed in accordance with national and local policy guidance, and on the basis of your detailed specialist conservation advice. We also advise consultation with the County Archaeologist on the scope of the archaeological assessments.

It is not necessary for us to be consulted again on the Scoping Opinion. However, if you would like further advice, please contact us to explain your request. We can then let you know if we are able to help further and agree a timetable with you.

Yours sincerely

D. Dishon
Principal Inspector of Historic Buildings and Areas  
E-mail: dale.dishon@english-heritage.org.uk
APPENDIX 2 – Non Technical Summary
PLANNING APPLICATION FOR A PROPOSED WESTERN EXTENSION TO THE EXISTING COLLYWESTON QUARRY

ENVIRONMENTAL IMPACT ASSESSMENT – NON TECHNICAL SUMMARY

May 2014
Introduction

This Non-Technical Summary (NTS) is based on the Environmental Statement (ES) which presents the findings of an Environmental Impact Assessment (EIA) of a Planning Application for a proposed extension to the west of the existing Collyweston Quarry. The proposals are for the extraction of an additional 2 million tonnes of saleable limestone aggregate along with a proportion of building stone and the specialist Collyweston slate log. This proposed extension will replace the remaining permitted reserves contained in the eastern extension of the quarry that is currently being worked under planning permission reference EN/06/1278C.

In preparing the NTS regard has been taken to the contents of Schedule 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011. Therefore the NTS gives a summary of:

- the proposed development;
- the main elements of the proposals that have the potential to impact positively and/or negatively on the environment and local residents; and
- potential mitigation measures to prevent, reduce and where possible offset any significant adverse effects on the environment.

The main topic areas for the EIA/ES were established through consultation with Northamptonshire County Council and set out within a formal EIA Scoping Opinion received on 21st January 2013.

A planning application was originally submitted to Northamptonshire County Council in August 2013. However, after negotiations with the Council, Bullimores temporarily withdrew the application whilst some further assessment work was carried out, along with the clarification of a number of points raised by Council Officers. Additionally, Bullimores have carried out further public consultation which has led to some careful consideration and assessment of the matters raised by local residents.

Site and its Surroundings

The existing Collyweston quarry lies approximately 500 metres to the east of Duddington village within Northamptonshire. The proposed quarry extension area (to replace the remainder of the eastern extension) is located on land to the west of the existing quarry and measures approximately 17.11 hectares. The extension area falls within the administrative boundary of East Northamptonshire District Council. Access to the quarry is gained via an access off the A47 (T) situated to the north-east of Duddington village.
The area surrounding Collyweston Quarry is predominantly agricultural with mixed arable crops. The Collyweston Great Wood and Easton Hornstocks National Nature Reserve (NNR) and Site of Special Scientific Interest (SSSI) are located 750 east of the extension area.

There are no known land-use activities sensitive to mineral development surrounding the site and no industrial or commercial manufacturing activity. The closest residential properties are located on the eastern edge of Duddington approximately 250m from the extension area.

**Background to the Development**

An eastern extension to Collyweston Quarry was granted planning permission on 2nd November 2006 – reference EN/06/1279C. As workings have progressed in the eastern extension during the last 3 years, increasing thicknesses/quantities of overburden have been encountered by the Company. These geological conditions, combined with the escalating costs of overburden removal (to access the rock) are now reaching a point where it has become un-economic to continue to extract from this area. Therefore, in order to sustain limestone aggregate supply, as well as the supply of building stone and the specialist Collyweston “slate log” from Collyweston Quarry, the Company needs to access more economically viable limestone reserves. Given that the actual mineral reserves are similar, the Company is now proposing to switch extraction and mineral supply from the eastern extension area of working to a new western extension, thus giving up the un-economic mineral reserves in the existing permitted extension, in exchange for the ability to extract and supply minerals from a new, viable western extension.

**Description of the Proposed Quarry Development**

The proposed western extension covers an area of approximately 17.11 hectares, located to the west of the existing Collyweston quarry. The area contains an estimated 3 million tonnes of limestone rock, with the potential to realise approximately 2 million tonnes of saleable mineral.

The proposed quarry extension will be worked in a phased manner from south to north over 11no. phases with progressive restoration following on from the extraction of limestone. The depth of working will be consistent with that in the existing quarry, with face heights not exceeding 12 m approx. As the limestone extraction progresses in the extension, backfilling and infilling will be carried out on a progressive basis to reclaim the quarry and restore the land to its current landform.
A Working Method Statement (WMS) has been developed (Technical Appendix 1 to the Planning and environmental Statement) in order to clarify the proposed method/system of working of the proposed western extension.

It is Bullimore’s objective to seek to minimise and reduce any vibration and disturbance potentially generated by the quarry operations to acceptable levels for local residents whilst enabling effective, efficient extraction and processing of limestone and slate log.

The Company proposes to work the extension area using a 45 tonne excavator rather than a lower capacity machine. The excavator will pull the limestone from the working face and will feed the rock directly through a mobile crushing and screening plant located on the worked quarry floor.

Whilst the Company considers the use of the 45 tonne excavator will minimise the need for blasting, there is always some potential that they might need to carry out some limited quarry blasting if they were to encounter particularly hard or consolidated limestone material.

Based on the geology confirmed by the borehole data and taking a potential “worst case” view, it is considered that around 12 blasts per year may be required. Based on the Company’s past experience, employment of the 45 tonne excavator is likely though to reduce this worst case potential further.

When carrying out the quarry blasting, the Company would adhere to a “Blast Management Plan (BMP)”. The basic purpose of the BMP is to achieve the above objective. The suggested content and the approach to managing the quarry blasting is set out in section 3 of the WMS.

Crushed and screened rock will produce a limestone aggregate for sale and export to construction projects. The screened limestone aggregate will be stockpiled on the quarry floor prior to sale and being transported off site. Collyweston Slate Log will be extracted during suitable dry, frosty conditions in the winter months. The operating hours of the quarry working and export of minerals in the proposed extension area would be - 0700-1800 Mon to Fri with some Saturday mornings 07.30-13.00. There would be no mineral working or export of minerals from the proposed extension area on Sundays or public/bank holidays.

The access to the existing public highway and the route used by vehicles for transporting limestone will remain unaltered from current operations at the site. The level of traffic movements in and out of the site will also remain unaltered.
Restoration of the site will be undertaken progressively using imported waste material to restore each phase to the levels required to receive the final soil placement. The site will be returned to its current use and ground levels following the extraction operations.

**Geology**

The British Geological Survey (BGS) 1:50,000 online mapping records the surface bedrock within and around the study site as Limestone of the Lower Lincolnshire Limestone Member (mapapps.bgs.ac.uk).

Borehole information provided by Bullimores Sand and Gravel indicates that there are generally very shallow depths of overburden above the bedrock: thicknesses of 0.3m, 0.2m or 0.1m are recorded over the majority of the site. It is only within a narrow band crossing east-west through the centre of the site that there is more than 1.0m of soil and overburden material above the bedrock.

**Assessment of Potentially Significant Environmental Effects**

The following summarises the main topic areas that have been assessed in the preparation of the ES. The assessment of the topic areas has been undertaken by employing a wide range of independent specialist consultants. Full technical reports relating to the evaluation of the potential impacts have been prepared and form part of the ES.

**Landscape and Visual Considerations**

*Landscape Character*

No specific landscape designations have been identified within or in close proximity to the proposed site. The landscape character of the site is largely defined by the areas of open farmland. The site lies within the northern part of the National Character Area number 92 ‘Rockingham Forest’ of the Countryside Character Initiative.

Overall, the landscape effects of the development would generally vary between minor/moderate adverse and minor beneficial throughout the course of the scheme and its restoration. These varying landscape effects reflect the different phases of development on the sensitivities of the site’s landscape character and related features. The adverse effects would significantly reduce after the initial construction phase and in the longer term due to the restoration and maturing of the landscape.

*Visual Impact*

Given the nature of the proposed development, the visual effects arising during the operational phase would vary. Early construction of the perimeter mounding would be
carried out and will be followed by the progressive quarrying of the site. Many of the more distant receptors or those with more limited views towards the site may only be able to glimpse part of the construction activity for the short period of time whilst this phase is completed. During the operational phase the visual receptors will have differing degrees of views towards the workings, although for some the extent of the view will be very limited. Once the operational phase is completed, the land will be restored to principally farmland.

Those receptors likely to experience the most notable adverse effects during construction will comprise the immediately surrounding and diverted PROW. In terms of views from properties and settlement, there will be no major or moderate adverse visual effects.

Views towards the operation of the works from properties within Duddington will be limited to only a very small number of properties. This settlement is very effectively screened from the site by a combination of the landform and the mature trees and hedgerows surrounding the village and lining the A43 road corridor.

Overall, the operational effects on the surrounding visual receptors will vary from negligible to moderate adverse with the receptors with the closest and clearest views towards the construction activity experiencing the most significant visual effects at the peak of construction activity.

In terms of potential mitigation, in addition to the replacement of the planting that was lost initially, there is a proposal to create a woodland edge area with scrub planting to the north of the site and a grassland margin to the eastern boundary of the site where the PROW will pass through the restored farmland. To the perimeter of the site, a bund will be constructed to mitigate the views where possible from the surrounding areas. These will become covered in vegetation over time and sit more comfortably within the landscape. They will be removed once the quarry has finished extracting material.

**Nature Conservation and Ecology**

The ecological impact assessment has demonstrated that the planned mineral extraction can be undertaken without there being a likely significant effect on designated European and nationally important nature conservation sites.

The extraction area at Collyweston Quarry has been designed to avoid woodland habitats of National- and Local-level importance. The quarry has also been designed to avoid as many hedgerows as possible. The impact assessment has indicated that there will be a potential minor positive impact of minor significance on hedgerow, if the restoration is successful.

There are mature trees within the site that have features that could be of interest to bats. The transect surveys recorded low numbers of bats commuting across the site and there
were no physical signs that bats were roosting in these trees. Immediately prior to removal
dusk emergence and/or dawn re-entry surveys on these trees will be undertaken.

Site clearance works will take place between August and March in order to avoid any
disturbance to birds while breeding. It is necessary to ensure that badgers from social
groups in the wider area have not moved onto the site before site clearance begins.

Mitigation of impacts on ecological interest features will be used to further reduce the
potential for impact caused by the proposed development. The key aims of mitigation
measures are to:

- Create new habitats in quarry restoration of equal or greater value than the
current baseline; and
- Mitigate for the loss of hedgerow and scrub habitat on site and maintain
habitat connectivity across and around the site; and
- Avoid or reduce off-site impacts on surrounding habitats or species during
the operational phase of the development.

The restored landform will provide ecological enhancement with the creation of habitats
absent from the survey area. The primary focus of ecological mitigation efforts in site
restoration is to create BAP priority habitats suited to the location and to create habitats
suitable for species of conservation interest.

The impact assessment has not identified any impacts on surrounding habitats of greater
than minor significance. Nevertheless, dust suppression and noise reduction measures will
be followed in order to reduce the magnitude of impact further.

The key features included in the restoration proposals are the planting of hedgerows and
woodland/scrub and the creation of areas of calcareous grassland, which could represent a
significant increase in both habitat and botanical diversity relative to the current baseline.

**Noise**

A series of noise predictions have been made to three noise sensitive locations around the
proposed extraction area and these have been assessed against criteria in the NPPF. It
should be noted that the predicted noise levels in the Noise Impact Assessment refer to
worst case scenarios and these worst case noise scenarios may only last for a few weeks or
even days throughout the envisaged working life of the proposed extraction area.

All predictions have been calculated with the combinations of plant working (including
hydraulic breaking) at the closest point to the prediction location.
From the results it is apparent that calculated worst case noise levels from mineral extraction operations:

a) Normal operations do not exceed the 55 dB LAeq,1h criterion considered as an upper limit for mineral extraction operations in the NPPF.

b) Without exception do not exceed the 70 dB LAeq,1h criterion considered a normally justifiable limit for temporary operations, such as soil stripping and bund construction at mineral extraction sites in the NPPF.

c) Backfilling operations do not exceed the 55 dB LAeq,1h criterion considered as an upper limit for such operations in the NPPF.

The site has been designed with the potential impact for noise and the location of sensitive receptors in mind. The site will continue to operate within the hours of operation currently employed on the existing site.

With the exercise of reasonable engineering control over general site operations, the proposed extraction site should be able to be worked within the noise criteria in the NPPF to be normally justified for mineral extraction operations.

An Assessment of Environmental Impact from Blasting has also been undertaken as part of the Environmental Statement. All vibration will be well below the levels recommended for blast induced vibration as being satisfactory within the British Standard Guide BS 6472-2: 2008.

**Air Quality and Dust**

The proposed extension area moves mineral operations closer to Duddington. However, no receptors designated as having high sensitivity to dust were identified. There are no known high sensitivity land-use activities surrounding the site and no industrial or commercial manufacturing activity.

As the potential for air emissions from Collyweston Quarry are considered to be low, and the distance and meteorological susceptibility of neighbouring activities is very low, it is therefore highly unlikely that any of the surrounding areas will experience any change in air quality and the overall likelihood of any air quality impacts can be considered to be very low.

In general, dust mitigation requirements should be minimal due to the high moisture content typically associated with limestone. The proposed standoff distance from extraction operations, the erection of soil screening bunds and the prevailing south westerly winds all factor in minimising the impact of dust upon sensitive receptors. Measures proposed to
minimise the generation of airborne dust have been set out within the ES and such mitigation measures would be outlined in a dust management scheme to be used at the site. Mitigation includes site design considerations and the adoption of measures for site operations as set out in the Collyweston Quarry Dust Control Plan.

Consideration has also been given within the Air Quality and Dust Assessment to pertinent air pollutants as defined within the UK National Air Quality Strategy. No properties are located within 200m of the proposed extension area and the 2006 Air Quality Screening Assessment undertaken by East Northamptonshire Council identified Collyweston Quarry as an active mineral working, and confirmed that it was unlikely to lead to PM$_{10}$ or NO$_2$ concentrations exceeding the air quality objectives.

**Soil, Land Quality and Agriculture**

The 1:50,000 BGS geological information shows the area is underlain by Lower Lincolnshire Limestone, with no recorded drift cover. The national soil map at 1:250,000 scale shows that the land mainly has soils of the Elmton 1 Association comprising shallow well drained brashy soils over limestone, with some similar deeper soils.

The agricultural quality in most of the survey area is determined by the ability of the soils to provide adequate moisture for crop growth. Land of grades 3 and 4 agricultural quality exists on the site. The areas occupied by the different grades of land are shown below:

<table>
<thead>
<tr>
<th>Grade/sub-grade</th>
<th>Area (ha)</th>
<th>% of agricultural land</th>
<th>% of the site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-grade 3a</td>
<td>1.6</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Sub-grade 3b</td>
<td>11.8</td>
<td>82</td>
<td>73</td>
</tr>
<tr>
<td>Grade 4</td>
<td>0.9</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Other land</td>
<td>1.8</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>16.1</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

In terms of soil handling and restoration all soil resources are easily damaged by being stripped or moved when wet. Consequently, stripping should only take place in the driest parts of the year, using the excavator and dumper method as described by Sheet 1 in the MAFF Good Practice Guide for Handling Soils.

Over most of the site it will only be possible to restore the land to moderate quality by placing 300 mm of topsoil over limestone. The very stony topsoil resource would be improved by screening to remove at least the large stones. Small areas could be restored to best and most versatile quality by adding a 250 mm layer of the subsoil resource below the
The Impact on Water Resources

There are no surface watercourses that are intercepted by the proposed quarry extension and therefore the only significant source of water ingress into the site is via direct rainfall. However, no surface water accumulation within the quarry void is expected due to the permeable nature of the quarry floor (sand deposits). Consequently, there is no requirement for water management operations at the site.

The proposed development site is located within the EA indicative Flood Risk Zone (FRZ) 1. FRZ1 has an annual likelihood of <0.1% of being inundated by rivers – i.e. the site is considered not susceptible by inundation by any river flood event of less than (more frequent than) a one in one thousand year return period. No flooding has been recorded at the site by the EA (records dating back to 1947). The area to the west of the site, between the site and the River Welland, is considered to have a moderate to high susceptibility to groundwater flooding. No such zones exist on-site.

It is considered that, upon commencement of quarrying operations, the excavated void has the potential to experience ingress of surface water. Flooding is not considered likely due to the presence of unsaturated but highly-permeable underlying geological deposits (Northampton Sand).

Waste will be disposed at the site up to almost pre-quarrying ground levels and the site finished with the original topsoil (it having been used in formation of on-site bunds) to the pre-excavation levels given at Appendix B of the Water Management Report (Technical Appendix 8, Appendix A). No increase in run-off potential is envisaged with and therefore no consequent impacts are likely to arise from surface water run-off west of the site.In order to minimise impact upon water resources the following is recommended with regard to water environment:

- Additional groundwater monitoring boreholes should be drilled along the western limit of the proposed quarry extension area.

- A sump should be constructed within the quarry floor, along with levelling of the quarry floor and grading towards the sump, in the event that surface water accumulation does occur (not envisaged).

- Due to the likely high permeability of the quarry floor (sand) and its proximity to the watertable, a simple action plan should be formulated to minimise the potential impact on the water environment of any oil (or other chemical) spillage within the
With the proposed mitigation measures in place the quarry extension can be worked without posing any risk to the water environment.

**Rights of Way**

There will be some impacts to users of Public Rights of Way during the operation of the site. All Public Rights of Way (MX12, MX18 and MX14) within the site boundary are to be closed for the total duration of the development and will be diverted for a temporary period until they can be reinstated post-development. There will be no permanent diversions as part of the proposals and all temporary diversions will be reinstated to their original routes at the earliest opportunity. All impacts upon the amenity of users of the PROW in close proximity to the site will be mitigated to the highest standard possible to ensure that the development has minimal effect upon the continued use of this area. The main mitigation measures during operations will be introduced through the operational design and include diversions and screening. The proposals within the restoration scheme include the reinstatement of the site to agriculture and an upgrade of the current Footpath network across the site.

**Archaeology**

Data obtained from English Heritage and the local authority confirms that there are no Designated Heritage Assets (World Heritage Sites, Listed Buildings, Scheduled Monuments, Registered Battlefields, Parks and Gardens, Conservation Areas) within the study site, or immediately adjacent to it. A Conservation Area has been designated covering the historic core of Duddington village to the west of the study site. The closest part of the Conservation Area is located around 200m west of the western edge of the study site. Within the village, a total of 27 buildings and structures are designated as Listed Buildings.

There is one non-designated heritage asset recorded within the study site, a former Royal Observer Corps monitoring post (HER reference 8510). This monitoring post has been demolished and will therefore not be a constraint to development. Including the Royal Observer Corps post, the HER data identifies a total of 310 individual records within the surrounding 1000m radius search area.

The desk-based assessment has also considered the potential for as-yet undiscovered archaeological remains within the site and identified a relatively high potential for evidence of Iron Age, Roman and Saxon metal-working within the local area. However, no evidence for such features has been identified within the geophysical survey data.
The desk-based assessment states that in view of the extremely shallow soils and overburden across most of the site, any such archaeological evidence will have been truncated by the continued ploughing of the site and this would have reduced the level of significance of any surviving archaeological features. Furthermore, the detailed magnetic gradiometer survey has not identified any anomalies that can be characterised as being either of a probable or possible archaeological origin.

Therefore, in considering the mitigation of potential impacts on unrecorded archaeological remains within the proposed extension area, in light of the geophysical survey results, it is considered that a watching brief during site strip would be a reasonable back-stop mitigation measure.

**Blasting**

An Assessment of Environmental Impact from Blasting has been undertaken by Vibrock Limited. Further to the Blasting Assessment, as a result of consultation exercises carried out by Bullimores, we have become aware of local resident concerns regarding blasting. Therefore in order to clarify the proposed method/system of working of the proposed western extension, a Working Method Statement (WMS) has been developed which includes a Blast Management Plan (BMP).

The WMS sets out that it is not in Bullimore’s commercial interest to carry out quarry blasting any more than is necessary and there are fundamental benefits to the Company in avoiding blasting, both in terms of specific costs of blasts and also the fact that blasting results in greater volumes of limestone waste and thus reduces aggregate production.

It is Bullimore’s objective to seek to minimise and reduce any vibration and disturbance potentially generated by the quarry operations to acceptable levels for local residents whilst enabling effective, efficient extraction and processing of limestone and slate log.

In light of local concerns over potential impact and to help achieve the objective to minimise and reduce vibration and potential disturbance to acceptable levels, Bullimores propose to work the western extension using a 45 tonne excavator rather than a lower capacity machine. The Company would accept a planning condition to formally control/require this.

Whilst the Company considers this will minimise the need for blasting, there is always some potential that they might need to carry out some limited quarry blasting if they were to encounter particularly hard or consolidated limestone material.

Potentially blasting, when carried out at Collyweston Quarry normally takes place every 2 weeks. Therefore the potential worst case based on these assumptions is around 12 blasts per year. Based on the Company’s past experience, employment of the 45 tonne excavator
is likely though to reduce this worst case potential further.

When carrying out the quarry blasting, the Company would adhere to a “Blast Management Plan (BMP)”. The objective of the BMP is to ensure blasting activities are carried out in order to minimise any public concerns in relation to ground vibration and air blast overpressure whilst enabling effective, efficient extraction and processing of limestone and slate log.

In formulating the BMP we have looked at various approaches adopted elsewhere both overseas and in the UK as well as consulting with blasting experts Vibrock who produced the Blasting Assessment submitted as part of the Planning Application/Environmental Statement. Furthermore, guidance produced by Leicestershire County Council has been consulted.

The Blasting assessment along with the BMP set out the recommendations in order to minimise the vibration impact of blasting operations from Collyweston Quarry to nearby residents and structures.

In terms of ground vibration, it is recommended that a ground vibration limit is chosen that not only is perfectly safe for the integrity of structures, but also takes into account the physiological effects on adjacent neighbours. As such we recommend a vibration limit of 6 mms$^{-1}$ peak particle velocity. The limit of 6 mms$^{-1}$ is lower than the current planning conditions at Collyweston Quarry (10 mms$^{-1}$), is lower than the relevant British Standard 6472-2: 2008 and will ensure that no individual blast will exceed 12 mms$^{-1}$.

In terms of air overpressure, in line with the current best accepted modern practice in the extraction industries, it is recommended that safe and practical measures are adopted that ensure the minimisation of air overpressure generated by blasting at source, considering such factors as initiation technique. Furthermore, an air overpressure limit will be established – when measured at an agreed potentially sensitive location - that not only is perfectly safe for the integrity of structures, but also takes into account the physiological effects on adjacent neighbours. In this case for at least 93% of all blast events, a maximum air overpressure limit of 120 dB peak linear is considered appropriate.

The mineral operator will design blasting operations taking into account the BMP. Therefore, with the control recommendations implemented and the exercise of reasonable engineering control over quarry blasting operations, it is envisaged that the proposed western extension will work within the recommended vibration criteria and without undue annoyance to local residents.
**Alternatives**

*Alternatives to Primary Aggregate*

There are two alternatives to Primary Aggregates supply – Recycled Aggregates and Secondary Aggregates. The use of recycled and secondary aggregates is widely supported. However, they will never be able to wholly replace primary aggregates as there can never be a guarantee of supply of material of an appropriate quality to meet a specific demand. Therefore there still remains a need for the provision of primary aggregate and this is reflected in the continuation of apportionment figures for primary aggregate and the provision of a landbank.

*Alternative Sites within Northamptonshire*

Collyweston Quarry produces limestone aggregate from the Lincolnshire Limestone, which is the better quality limestone present in Northamptonshire. It has superior quality over the Blisworth Limestones, which tend to be softer and have limited use in construction works. Therefore, it would be inappropriate and potentially damaging, particularly from a sustainability point of view, if limestone from more remote locations of a lower quality were used as an alternative. Furthermore, Collyweston Quarry not only produces crushed limestone rock aggregate, but also produces quantities of building stone as well as the particularly scarce “Collyweston Slate Log”. An extension to Collyweston Quarry will assist in meeting the demand for specialist building and roofing stones in the interest of both conserving existing buildings and maintaining local settlement character in the context of new development.

In terms of alternative site, consideration has been given to the Wakerley site which has been allocated under Policy M2 of the Locations for Minerals Development DPD. However, there appear to be only limited prospects of Wakerley coming on stream in the short to medium term.

There is no obvious/better alternative than an extension to the existing quarry operation, particularly as the environmental assessment has demonstrated that any potential adverse impacts are acceptable.

*Do Nothing Approach*

In the light of the lack of an obvious alternative to the Collyweston Limestone and the Collyweston slate log, coupled with the fact the National Planning Policy Framework (NPPF) makes clear the benefits of the requirement to plan for the maintenance of a steady and adequate supply of aggregates, there is a complete disadvantage of a do nothing approach. The proposed western extension to Collyweston Quarry will replace the remaining
permitted reserves contained in the eastern extension and is therefore needed in order to sustain and maintain a viable mineral supply from Collyweston Quarry. Furthermore, limestone aggregate from Collyweston currently supplies between one third and half of the overall 0.39 million tonnes per annum crushed rock apportionment identified within Policy CS5 of the Northamptonshire Minerals and Waste Core Strategy.

If permission is not granted for the proposed western extension, Collyweston limestone will no longer be able to contribute to the County’s crushed rock requirements due to the current working in the eastern extension becoming uneconomic.

**Alternative Methods of Working**

Minerals are a resource which can only be worked where they are found. The location and extent of working identified as the extraction area as part of this application is based upon the geology and the location of the available reserve. The scheme of working allows for mineral extraction alongside progressive restoration of the southern part of the quarry. This will ensure continuity of extraction and supply in the most environmentally acceptable manner.

**Alternative Means of Transport**

The issue with the alternatives (primarily rail and waterborne transportation) relates primarily to market and the demand. The quarry and limestone reserves are located close to their intended end point of use. The final point of use is not a single location but a series of local construction sites. To transport limestone to an alternative point of collection would be less sustainable and the limestone extraction and revenues generated by the operation would not make rail connection/water transport a financially viable option.

**Alternative Restoration Options**

The restoration proposals provide a balanced range of economic, social and ecological benefits that meet the requirements of both landowner and statutory and local stakeholders. Restoration to agriculture provides the most versatile and economic option for the area and the landowner. The restoration scheme has been designed so that the land is returned to an appropriate standard to allow for the recommencement of agricultural practices on the land following restoration of the quarry.

There have been a number of minor amendments to the working scheme and restoration proposals to take on board ecological sensitivities and improvements to the restoration.

**Potential Cumulative Impacts**

Cumulative impacts relate to the way in which different impacts can affect a particular
environmental resource or location incrementally. In essence, cumulative impacts are those which result from incremental changes caused by other past, present or reasonably foreseeable developments, together with the proposed development. Therefore, the potential impacts of the proposed development cannot be considered in isolation but must be considered in addition to impacts already arising from existing or planned development.

The assessment of cumulative effects has had regard to:

- successive effects;
- simultaneous effects from concurrent developments, and
- combined effects from the same development.

The assessment of successive effects has concluded that no significant adverse cumulative impact would occur as a result of the development proposal. Furthermore, it is unlikely to give rise to unacceptable levels of environmental or local amenity impact.

The assessment of simultaneous effects has concluded that there are no other mineral extraction sites in the area (or similar operations such as landfill) which are likely to give rise to an unacceptable level of cumulative impact. Furthermore, it is unlikely that any large-scale planned developments will give rise to simultaneous impacts in the lifespan of the proposed extension. No objectionable concurrent effects are therefore likely to arise.

In terms of the combined effects, no environmental impact is considered to come close to the thresholds of being objectionable. Therefore given that no feature is close to the thresholds of objectionability, and having regard to the fact that none of the environmental features have a synergistic effect, their combined impact is not objectionable.

In the light of the above, it is concluded that the cumulative impact of the scheme does not weigh against the scheme to a degree that the MPA should form a cumulative reason to object to the proposal.

**Socio-Economic Impacts**

The National Planning Policy Framework (NPPF) states that if development is to be sustainable it must not only contribute to protecting and enhancing the environment, but also contribute socially and economically. The three dimensions to sustainable development given within the NPPF are economic, social and environmental, and these factors should be weighed equally when considering the sustainability of a development.

In terms of the above, as well as being environmentally acceptable, it is considered that the Collyweston Quarry extension proposals include a series of positive economic and social
contributions. These factors should be given appropriate weight. Although very few new jobs are likely to be directly or indirectly generated by the proposed extension to Collyweston Quarry, it will enable employment to be maintained across a range of industries, many of which depend directly upon quarrying, including Collyweston Quarry, for business. By extending the quarry, 10 jobs (quarrying, haulage and support staff) that would otherwise eventually be lost will be protected.

In addition to the positive impacts of the development upon the economy, the restoration of the site will see beneficial end uses and an overall enhancement to the local landscape. The restoration scheme will restore the site to its original uses as well as providing new and varied habitats throughout an enhanced landscape.

**Conclusions**

This Non Technical Summary (NTS) summarises the findings of the full EIA/ES, and it considers the potential for impacts associated with a wide range of identified topic areas. Consideration of the issues within a planning context, the severity of the degree of any potential impact and the potential use of recognised mitigation measures has been undertaken.

No significant impacts have been identified in relation to residential amenity, air quality, designated archaeology, designated nature conservation sites, the water environment, landscape character, or the highway network.

The mitigation of potential impacts through the imposition of planning conditions and appropriate planning agreements is in accordance with development plan policy and national planning advice contained in guidance. The level of potential impact likely to arise from the proposed development is low and capable of being controlled to recognised, acceptable levels.

The proposed development provides identifiable benefits. It provides for final restoration with contributions to biodiversity; secures local employment; and secures the supply of regionally important limestone aggregate, building stone and Collyweston Slate Log.

The full Environmental Statement is available for viewing at Northamptonshire County Council offices during normal office hours. If you wish to purchase a copy of the Environmental Statement they are available from Heaton Planning Limited at the address given below, for a cost of £150 inc vat (paper copy). CD copies are available free of charge.
APPENDIX 3 – Planning Policy
Introduction

Section 38(6) Planning and Compulsory Purchase Act 2004 states that determination must be made in accordance with the Development Plan unless material considerations indicate otherwise.

The Planning and Compulsory Purchase Act 2004 defines the Development Plan as (a) the Regional Spatial Strategy for the region in which the area is situated, and (b) the Development Plan documents (taken as a whole) which have been adopted or approved in relation to that area. Adopted Structure and Local Plans retain development plan status and automatically became ‘saved’ policies for a period of three years from the commencement of the Act. For plans in preparation the three year period will commence from the adoption or approval of the draft plan.

On the 20th March 2013 the Secretary of State laid before Parliament a statutory instrument to revoke the Regional Strategy for the East Midlands. This came into force on 12th April 2013. As such the East Midlands Regional Plan no longer forms part of the Development Plan.

In reaching a decision on this application the first consideration is therefore whether the proposals accord with the Development Plan. Having done this it is then necessary to have regard to all other material considerations, which include all relevant policy considerations contained in the emerging Development Plan as well as the National Planning Policy Framework (NPPF).

The Development Plan consists of:

- Northamptonshire Minerals and Waste Development Framework Core Strategy – May 2010
- Location of Minerals Development – March 2011
- Control and Management of Development – June 2011
- North Northamptonshire Core Spatial Strategy – June 2008

Within the Development Plan and NPPF there are numerous policies that seek to
ensure development proposals protect the environment and where appropriate make contributions to enhance the environmental assets of the area within which they are proposed. The policies of relevance to these proposals that seek to protect and enhance the environment have been fully audited and assessed within the ES. The environmental policies of relevance to this planning application are those focussed on the following:

- Landscape and visual impact – ensuring that the proposed extension can be worked in a manner that does not cause an unacceptable impact upon the landscape or have an impact upon the visual amenity of nearby residents or users of the area;
- Impact upon ecology – including the protection of habitats and the protection of species;
- Protection of amenity – ensuring that levels of noise and dust are kept to within acceptable levels;
- Protection of soils and the promotion of an appropriate land use following mineral extraction;
- Protection of the water environment – ensuring that there is no pollution of groundwater or surface water resources, ensuring that there is no increase in flood risk;
- Impact of transport – ensuring that the highway network can accommodate HGVs associated with the quarrying operations;

1.1.7 A summary of the findings of the ES and assessment of compliance with planning policy can be found in Section 7 of the Planning and Environmental Statement.

1.1.8 As will be demonstrated, the Application is in accordance with the Development Plan and other material policy considerations.

1.2 The Development Plan

Northamptonshire Minerals Core Strategy – May 2010

Box CS2: Mineral Resources in Northamptonshire
Limestone

1.2.1 Lincolnshire limestone, found in the north of Northamptonshire, forms the principal limestone resource in the county. It is mainly used as a source of crushed rock aggregate, but also as a building stone. In the extreme north of the county, there is a local variation of the Lincolnshire Limestone, known as Collyweston Stone Slate; this material is used locally as stone slates for roofing and as a building stone. In the area to the east of Corby the upper part of the Lincolnshire Limestone has been worked as a high quality dimension stone; known locally as „Weldon Stone‟, this material is the only dimension stone from Northamptonshire to be employed extensively outside the region.

1.2.2 Blisworth limestone occurs extensively in the south and east of the county, often accessible beneath a clay cover. Generally of a lower quality than the Lincolnshire Limestone, it can be used both as an aggregate material and a building stone.

Paragraph 6.26

1.2.3 Paragraph 6.26 identifies that the expectation is that inert fill disposal will be at currently worked mineral extraction site for the purposes of high level restoration.

Policy CS3 – Strategy for Waste Disposal

1.2.4 Policy CS3 identifies that provision should be made to meet the following indicative waste disposal capacities during the plan period:

- Non-inert disposal (MSW, C&I and C&D) capacity of 657,000 and 709,000 tonnes per annum for 2016 and 2026 respectively, and
- Inert fill disposal capacity of 693,000 and 813,000 tonnes per annum for 2016 and 2026 respectively

1.2.5 Provision for inert waste disposal should be made at mineral extraction sites requiring restoration, unless it can be clearly demonstrated that an alternative location would not prejudice the restoration of these sites.

Paragraph 7.7

1.2.6 Substantial permitted reserves of crushed rock exist, in excess of the requirement of 7.9 million tonnes for the Plan period, but most is within a single site (Wakerley) the
yield from which it is not at present possible to estimate. Overall, 6.63 million tonnes of crushed rock provision needs to be identified in the Locations for Minerals Development DPD.

*Old Minerals permissions for crushed Rock (limestone Extraction)*

Paragraph 7.9

1.2.7 The supply of crushed rock as aggregate in Northamptonshire has traditionally been met through a combination of old minerals permissions and permissions granted specifically for limestone. However, sites with old permissions are effectively dormant and do not give a true reflection of what the approved supply, and therefore the landbank, is in reality.

*The Spatial Strategy for Mineral Extraction*

Paragraph 7.14

1.2.8 For crushed rock, site allocations in the Locations for Minerals Development DPD and decisions on proposals will be made having regard to the “factors to be addressed in site selection” set out below.

Factors to be addressed in site selection

1.2.9 In identifying sites for inclusion in the site-specific Locations for Minerals Development DPD, the following factors must be addressed:

- Impacts of mineral working such as visual intrusion, dewatering, water pollution, noise, dust and fine particles, blasting, transport, and access,

- Impact on landscape, agricultural land, soil resources, water resources (ground and surface), land instability, ecology and wildlife, including severance of landscape and habitat loss, and impacts on sites of geological and nature conservation, archaeological and cultural heritage value,

- Benefits such as providing an adequate supply of minerals to the economy and hence for society (including construction materials needed for the development of national infrastructure and the creation of sustainable communities), creating job opportunities, and the scope for landscape, biodiversity and amenity improvements through mineral working and
subsequent restoration,

- Methods of control through planning conditions or agreements to ensure that impacts are kept to an acceptable minimum,

- Level of existing activity and impacts, the duration and nature of proposals for new or further working, and the extent of impacts which a particular site, locality, community, environment or wider area of mineral working can reasonably be expected to tolerate over a particular or proposed period. With respect to an individual site, the effect of all relevant impacts (i.e. of noise, dust, traffic, on landscape, etc.) should be considered objectively, and

- Cumulative impacts of simultaneous and / or successive working of a number of sites in a wider area of commercially-viable deposits.

**Building and roofing stone**

Paragraph 7.19

**1.2.10** The use of locally sourced building and roofing stone has become a significant factor in the promotion of local identity and in creating a sense of place, and as such the demand for traditional building materials has increased.

**Policy CS4 – spatial Strategy for Mineral Extraction**

**1.2.11** The spatial strategy for minerals extraction within Northamptonshire is to focus extraction on the county’s pre-glacial and glacial deposits together with the reserves from the river valleys of the Nene (west of Wellingborough) and the Great Ouse.

**Policy CS5 – Providing for an Adequate Supply of Aggregates**

**1.2.12** Policy CS5 seeks to ensure provision over the plan period for 7.9 million tonnes of crushed rock (an annual average of 0.39 million tonnes) provided from deposits outside unworked river valleys or sites subject to old permissions upgraded to modern conditions. The maintenance of a landbank of at least seven years for sand & gravel, and at least ten years for crushed rock will be sought.

**1.2.13** This provision will come from both extensions to existing sites and new sites if they meet the spatial strategy for mineral extraction and are assessed as meeting environmental, amenity and other requirements of the MWDF. Allocations to meet
the required provision will be identified in the Locations for Minerals Development DPD.

Policy CS9 – Encouraging Sustainable Transport Movements

1.2.14 Policy CS9 seeks to ensure minerals and waste development minimises transport movements and maximises the use of sustainable or alternative transport modes.

Policy CS13 – Restoration and After-use of Minerals and Waste Development

1.2.15 Policy CS13 seeks to ensure all temporary minerals and waste development is progressively restored to acceptable condition and stable landform. Afteruse will be determined in relation to its land use context, environmental character and local requirements but on the basis it enhances biodiversity and the local environment and amenity and befits the local community and/or the local economy. Restoration to a lower level form will be acceptable if it is able to retain the integrity of the local landscape character and minimises overall traffic movements associated with extraction and restoration.

Policy CS14 - Addressing the Impact of Proposed Minerals and Waste Development

1.2.16 Proposals for minerals and waste development must demonstrate that the following matters have been addressed:

- minimising environmental impact and protecting Northamptonshire’s key environmental designations;
- protecting natural resources or ensuring that any unavoidable loss or reduction is mitigated;
- ensuring built development is of a design and layout that has regard to its visual appearance in the context of the defining characteristics of the local area;
- ensuring access is sustainable, safe and environmentally acceptable; and
- ensuring that local amenity is protected.
Proposals for the extraction of minerals from non-allocated sites (including extensions to existing sites and extensions to allocated sites) must demonstrate that the development:

- does not conflict with the spatial strategy for mineral extraction;
- where relating to aggregates, is required to maintain an adequate supply of minerals in accordance with sub-regional apportionment and/or the maintenance of a landbank;
- is required to meet a proven need for materials with particular specifications that cannot reasonably or would not otherwise be met from committed or allocated reserves;
- will maximise the recovery of the particular reserve whilst minimising waste through operational techniques employed; and
- promotes the most appropriate end-use of materials, and specifically ensure that building and roofing stone is used for high quality end-uses and not aggregate.

In addition to the above, proposals for the extraction of building and roofing stone must specifically demonstrate that:

- it supports the supply of locally sourced building materials (including varieties of limestone, ironstone, sandstone, and Collyweston slate); and the principal purpose of the extraction is for building and roofing stone (as such the proportion of stone and aggregate production should be identified).

Minerals and waste development should seek to (where possible) achieve a net gain in assets and resources, through:

- delivery of wider environmental benefits in the vicinity where development would adversely affect any regional or locally designated sites or other features of local interest,
• protecting and enhancing green infrastructure and strategic biodiversity networks, in particular the River Nene and other sub-regional corridors, and consider opportunities to contribute towards Northamptonshire Biodiversity Action Plan targets for habitats and species.

1.2.20 Proposals for minerals and waste development will be required to undertake an assessment (where appropriate) in order to:

• identify and determine the nature, extent, and level of importance of the natural assets and resources, as well as any potential impacts, and

• identify mitigation measures and/or requirement for compensation (where necessary) to avoid, reduce, and manage potentially adverse impacts.

*Policy CMD8 - Landscape Character*

1.2.21 Minerals and waste development should seek to reflect Northamptonshire’s landscape character. Development should mitigate potentially adverse impacts on the local character and distinctiveness of Northamptonshire’s landscape where necessary during the development, operational life, restoration, aftercare, and after-use. Opportunities for enhancement should be maximised through restoration, aftercare, and after-use.

1.2.22 Proposals for minerals and waste development will be required to undertake a landscape impact assessment (where appropriate) based on the landscape character assessment in order to identify:

• the presence of landscape values (including their nature, extent, and level of importance) and determine any potential impacts;

• any necessary measures to mitigate potentially adverse impacts; and

• opportunities to protect and enhance particular features that create a specific aspect of local distinctiveness or character.

*Policy CMD9: Historic Environment*

1.2.23 Where heritage assets of significance are identified, proposals should seek to enhance Northamptonshire’s historic environment through:

• careful management of heritage assets and their settings, including the
mitigation of potentially adverse impacts; and

- enhancement of specific features of the historic environment, including individual heritage assets or historic landscapes, as part of the restoration scheme.

1.2.24 Proposals for minerals and waste development involving a site which includes heritage asset (including development within the setting of an asset), particularly those with an archaeological interest, will be required to undertake appropriate desk based and/or field evaluations in order to:

- identify and determine the nature, extent, and level of the significance of each heritage asset, the contribution of its setting to that significance, as well as any potential impacts on the asset or its setting, and

- identify the requirement for a programme of post-permission works including any mitigation measures and long-term monitoring.

Policy CMD13: Restoration and after-use

1.2.25 The restoration of minerals and waste sites should meet the following requirements (where appropriate):

- sites previously comprising high-grade agricultural land or good-quality forestry use should be restored to the original land use and coupled with a secondary after-use objective;

- precedence should be given to the establishment of Biodiversity Action Plan habitat, strategic biodiversity networks, promotion of geodiversity, and enhancement of the historic environment & heritage assets where the specific conditions occur that favour such after-use objectives;

- sites connecting or adjacent to identified habitat areas should be restored in a manner which promotes habitat enhancement in line with BAP targets and green infrastructure plans;

- sites located near to areas identified as lacking recreational facilities should be restored in a manner that promotes such opportunities;

- sites located within river corridors should be restored to support water
catchment conservation and incorporate flood attenuation measures; and

- in specific instances, and where fully in accordance with policies in the local development frameworks, sites may be restored in a manner that promotes economic opportunities.

**Policy CMD14 - Implementation**

1.2.26 The implementation of minerals and waste development will be controlled and managed through the use of the following measures:

- planning conditions,
- planning obligations and / or legal agreements
- requirements by the owner and/or operator to monitor minerals extracted and waste managed
- including information on catchments, and to provide summaries of this information to the Minerals and Waste Planning Authority,
- monitoring of permitted operations by the planning authority to ensure compliance with planning conditions,
- establishment of a Local Liaison Group (where appropriate), and
- service of prohibition orders at minerals sites where winning and working has not been carried out for at least two years and where, in the planning authority’s opinion, working is unlikely to be resumed.

**Objective Two– Environment**

1.2.27 Enhance and manage the built and natural resources of North Northamptonshire in a sustainable and integrated manner and in the context of major growth and the challenges of climate change. To bring about a step change in biodiversity management and a net gain in Green Infrastructure; retaining and enhancing landscape and townscape character and distinctiveness, through the opportunities afforded by development and investment.
Policy 5: Green Infrastructure

1.2.28 A net gain in green infrastructure will be sought through the protection and enhancement of assets and the creation of new multi functional areas of green space that promote recreation and tourism, public access, green education, biodiversity, water management, the protection and enhancement of the local landscape and historic assets and mitigation of climate change, along with green economic uses* and sustainable land management. Proposals affecting the Upper Nene Valley Gravel Pits proposed Special Protection Area will need to satisfy the tests of the Habitats Regulations in order to determine site specific impacts of development and to be able to identify and avoid or mitigate against impacts where identified. Access and recreation in this area will be managed in accordance with advice from Natural England.

1.2.29 Sub-Regional Green Infrastructure corridors will connect locations of natural and historic heritage, green space, biodiversity or other environmental interest. They will be safeguarded through:

a) Not permitting development that compromises their integrity and therefore that of the overall green infrastructure framework;

b) Using developer contributions to facilitate improvements to their quality and robustness;

c) Investing in enhancement and restoration where the opportunities exist, and the creation of new resources where necessary.

1.2.30 Development will contribute towards the establishment, enhancement or ongoing management of a series of local corridors linking with the sub-regional corridors. Priorities for investment will be those areas where net gains in the range of functions can be improved, particularly those that improve access to the urban core and rural service centres and remedy local deficiencies in open space provision and quality.

Policy 13: General Sustainable Development Principles

1.2.31 Development should meet the needs of residents and businesses without compromising the ability of future generations to enjoy the same quality of life that the present generation aspires to. Development should:
Meet needs

a) Incorporate flexible designs for buildings and their settings, including access to amenity space, enabling them to be adapted to future needs and to take into account the needs of all users;

b) Seek to design out antisocial behaviour, crime and reduce the fear of crime by applying the principles of the “Secured by Design” scheme;

c) Maintain and improve the provision of accessible local services and community services, whilst focusing uses that attract a lot of visitors within the town centres;

d) Have a satisfactory means of access and provide for parking, servicing and manoeuvring in accordance with adopted standards;

e) Be designed to take full account of the transport user hierarchy of pedestrian-cyclist-public transport-private vehicle, and incorporate measures to contribute to an overall target of 20% modal shift in developments of over 200 dwellings and elsewhere 5% over the plan period;

f) Not lead to the loss of community facilities, unless it can be demonstrated that they are no longer needed by the community they serve and are not needed for any other community use, or that the facility is being relocated and improved to meet the needs of the new and existing community;

g) Not lead to the loss of open space or recreation facilities, unless a site of equivalent quality and accessibility can be provided, serviced and made available to the community prior to use of the existing site ceasing.

Raise standards

h) Be of a high standard of design, architecture and landscaping, respect and enhance the character of its surroundings and be in accordance with the Environmental Character of the area;

i) Create a strong sense of place by strengthening the distinctive historic and cultural qualities and townscape of the towns and villages through its design, landscaping and use of public art;

j) Be designed to promote healthier lifestyles and for people to be active outside their homes and places of work;
k) Allow for travel to home, shops, work and school on foot and by cycle and public transport.

Protect assets

l) Not result in an unacceptable impact on the amenities of neighbouring properties or the wider area, by reason of noise, vibration, smell, light or other pollution, loss of light or overlooking;

m) Be constructed and operated using a minimum amount of non-renewable resources including where possible the reuse of existing structures and materials;

n) Not have an adverse impact on the highway network and will not prejudice highway safety;

o) Conserve and enhance the landscape character, historic landscape designated built environmental assets and their settings, and biodiversity of the environment making reference to the Environmental Character Assessment and Green Infrastructure Strategy;

p) Not sterilise known mineral reserves or degrade soil quality;

q) Not cause a risk to (and where possible enhance) the quality of the underlying groundwater or surface water, or increase the risk of flooding on the site or elsewhere, and where possible incorporate Sustainable Drainage Systems (SuDS) and lead to a reduction in flood risk.

1.3 Material Planning Policy Considerations

National Planning Policy Framework – March 2012

1.3.1 The new National Planning Policy Framework (NPPF) was published on the 27th March 2012 and is the principle policy document which sets out the overarching planning policy that shall be implemented through the development plan and determination process.

1.3.2 Paragraph 6, ‘The purpose of the planning system is to contribute to the achievement of sustainable development.’ The NPPF (paras 18 to 219) taken as a whole constitutes the Government’s view of what sustainable development in England means in practice for the planning system.
1.3.3 Paragraph 7 identifies that there are three dimensions to sustainable development, economic, social and environmental, the planning system as a function should perform a number of roles;

1. ‘An economic role – contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places at the right time...’

2. ‘A social role – supporting strong, vibrant and healthy communities by providing the supply of housing required...’

3. ‘An environmental role – contribution to protecting and enhancing our natural, built and historic environment; and as part of this helping to improve biodiversity, use natural resources prudently, minimise waste and pollution and mitigate and adapt to climate change including moving to a low carbon economy.’

1.3.4 Paragraph 14 states:

At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking.

For decision-taking this means:

- Approving development proposals that accord with the development plan without delay; and

- Where the development plan is absent, silent or relevant policies are out of date, granting permission unless:
  - Any adverse impacts of doing so would significant and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or
  - Specific policies in this Framework indicate development should be restricted.

1.3.5 At paragraph 17 there are 12 Core Planning Principles that underpin the decision making process which are summarised below;
1. Plan-led

2. Be creative, enhance and improve the places people live

3. Proactively drive and support sustainable economic development and respond positively to wider opportunities for growth, set out clear strategies for allocating sufficient land which is suitable for development in their areas.

4. High quality design and good standard of amenity.

5. Take into account the different roles and character of different areas recognising the intrinsic character and beauty of the countryside and supporting thriving rural communities.

6. Support the transition to a low carbon future in a changing climate. Taking full account of flood risk and coastal change and encourage reuse of existing resource.

7. Contribute to conserving and enhancing the natural environment and reducing pollution.

8. Encourage the effective use of land.

9. Promote mixed use development and encourage multiple benefits from the use of land in urban and rural areas, recognise that some open land can perform many functions (such as for wildlife, recreation, floodrisk, mitigation, carbon storage or food production)

10. Conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations.

11. Actively manage patterns of growth ...and focus significant development in locations which are or can be made sustainable; and

12. Take account of and support local strategies to improve health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities and services to meet local needs.

1.3.6 NPPF includes various sub headings which contribute to the definition of sustainable development those of relevance to this development are summarised below;
1.3.7 Supporting a prosperous rural economy - Policies should support economic growth in rural areas in order to create jobs and prosperity by taking a positive approach to sustainable development, support the sustainable growth and expansion of all types of business and enterprise in rural areas and promote the development and diversification of land-based rural businesses.

1.3.8 Promoting sustainable transport – Transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives. All development that generates significant amounts of movements should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether opportunities for sustainable transport modes have been assessed and if improvements can be undertaken within the transport network that cost effectively limit the significant impacts of development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe. Development should be located to efficiently deliver goods and supplies.

1.3.9 Requiring good design – Great importance is placed on the design of the built environment. Good design is a key aspect of sustainable development and should contribute positively to making places better for people.

1.3.10 Promoting healthy communities – As part of facilitating social interaction and creating healthy, inclusive communities we should aim to deliver social, recreational and cultural facilities and services the community needs. Access to high quality open spaces and opportunities for sport and recreation can make an important contribution to health and well being of communities. Policies should protect and enhance public rights of way and access.

1.3.11 Meeting the challenge of climate change, flooding and costal change – Proactive strategies to mitigate climate change taking full account of flood risk coastal change, water supply and demand considerations. Developments should be located in a manner which reduce greenhouse gas emissions and actively support energy efficiency, landform, layout, orientation, massing and landscaping. New development shall be planned to avoid increased vulnerability to the range of impacts arising from climate change. Development should take account of the impacts of climate change by; applying the sequential test, if necessary exceptions
test, safeguard land from development that is required for current and future flood management and use opportunities offered by new development to reduce the causes and impacts of flooding. Development should not cause flood risk elsewhere.

1.3.12 Conserving and enhancing the natural environment – The planning authority should contribute to and enhance the natural and local environment by; protecting and enhancing valued landscapes, geological conservation interests and soils; recognising the wider benefits of ecosystems services; minimizing impact on biodiversity and providing net gains in biodiversity where possible reducing the decline in biodiversity; preventing new and existing development from contributing to or being put at unacceptable risk or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability. Proposals should propose remediate and mitigate despoiled, degraded, derelict, contaminated and unstable land where appropriate. Account should be taken of the economic and other benefits of best and most versatile agricultural land. Great weight should be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty which have the highest status of protection, taking into consideration wildlife and cultural heritage conservation. Planning permission should be refused for major development in these designations except in exceptional circumstances and where it can be demonstrated they are in the public interest and have assess the need (including National considerations) impact upon local economy, cost and scope of developing elsewhere or meeting the need in another way. Proposals should assess any detrimental effect on the environment, landscape and recreational opportunities.

1.3.13 When determining planning applications the development should aim to conserve and enhance biodiversity this may be undertaken through the implementation of adequate mitigation measures, compensation. Proposed development on land within or outside of a Site of Special Scientific Interest that has an adverse impact shall only be permitted where the benefits clearly outweigh both the impact and the features which constitute the SSSI. Development proposals where the primary objective is to conserve or enhance biodiversity should be permitted; opportunities to incorporate biodiversity in and around development should be encouraged. Planning permission should be refused for development resulting in the loss or
deterioration of irreplaceable habitats, including ancient woodland, loss of aged or veteran trees unless the need or benefit of the development clearly outweighs the loss. Presumption in favour of sustainable development does not apply where development requiring appropriate assessment is necessary.

1.3.14 Planning polices and decisions should aim to; avoid adverse impact by means of noise; mitigate and reduce noise impacts. Take into account the presence of Air Quality Management Areas and the cumulative impacts on air quality from any new development and individual sites in a local area. Encourage good design to limit light pollution upon local amenity and nature conservation.

1.3.15 Conserving and enhancing the historic environment – A planning application should describe the significance of any heritage assets affected including any contribution made by their setting; the level of detail shall be proportionate to the assets importance and no more than is sufficient to understand the potential impact of the proposal on their significance. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeology interest local planning authorities should required developers to submitted an appropriate desk-based assessment and, where necessary, a field evaluation.

1.3.16 When consideration is given to the impact of a heritage asset great weight will be given to conservation, the more important the asset the greater weight should be given, significance can be harm or lose through alteration, destruction of the heritage asset or development within its setting. Substantial harm to a grade II listed building, park or garden should be exceptional. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset it should only be permitted if the public benefits outweigh that harm or loss.

1.3.17 Non designated archaeological assets of interest that are demonstrably of equivalent significance to schedule monuments, should be considered subject to the policy for designated heritage assets which include:

- The nature of the heritage asset prevents all reasonable uses of the site; and
- No viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and
• Conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and

• The harm or loss is outweighed by the benefit of bringing the site back into use.

1.3.18 Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

1.3.19 Developers should record any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.

1.3.20 Facilitating the sustainable use of minerals – “Minerals are essential to support sustainable economic growth and our quality of life”. NPPF recognises the importance of sufficient supply of material to provide the infrastructure, buildings, energy and goods that the country needs and that minerals can only be worked where they are found. When proposals are determined the following points shall be considered:

• Great weight shall be given to the benefits of mineral extraction to the economy

• Where practical provide for the maintenance of landbanks of non energy minerals from outside National Parks, the Broads, Areas of Outstanding Beauty and World Heritage Sites, Scheduled Monuments and Conservation Areas.

• No unacceptable adverse impacts on the natural and historic environment, human health and aviation safety and take into account the cumulative effect

• Avoid noise, dust and particle emissions are any blasting vibrations through mitigation and removal of sources and appropriate control levels.

• No peat extraction
• Provide for restoration and aftercare at the earliest opportunity to be carried out to high environmental standards through planning conditions (bonds and financial agreements shall only be sought in exceptional circumstances)

• Conserve mineral resources within safeguarding zones where possible so not to constrain potential future use.

1.3.21 The local plan should provide for a steady and adequate supply of aggregate by preparing an annual local aggregate assessment based upon a rolling average of 10 years sales data and other relevant data and all supply options (recycled sources). Landbanks should be a minimum of 7 years within the local plan for sand and gravel. Landbanks should provide a stock of permitted reserves to support the level of actual and proposed investment required for a new or existing plant and the maintenance and improvements needed. Longer landbanks may be appropriate to take account of the need to supply a range of types of aggregates, locations of permitted reserves relative to markets, and productive capacity of permitted sites.

1.4 Potential Material Considerations


1.4.1 The emerging Draft Minerals & Waste Local Plan for Northamptonshire is at an advanced stage and some weight is likely to be given to the policies and site (mineral extraction) allocations contained within it.

1.4.2 Objective 9 seeks to Support the distinctive local identity of Northamptonshire through the supply of locally sourced building materials (including varieties of limestone, ironstone, sandstone and Collyweston stone slate) and encourage their use within the county for the purposes for which they are most suitable.

Policy 1 (Policy CS5): Providing for an adequate supply of aggregates

1.4.3 Policy 1 seeks to ensure provision over the plan period 2011 to 2031 for 7.8 million tonnes of crushed rock (an annual average of 0.39 million tonnes) provided from deposits outside unworked river valleys or sites with old permissions upgraded to modern conditions. The maintenance of a landbank of at least ten years for crushed rock will be sought.
1.4.4 This provision will come from both extensions to existing sites and new sites if they meet the spatial strategy for mineral extraction and are assessed as meeting environmental, amenity and other requirements of the Local Plan.

Policy 2 (Policy CS4): Spatial strategy for mineral extraction

1.4.5 The spatial strategy for minerals extraction within Northamptonshire is to focus extraction on the county’s pre-glacial and glacial deposits together with the reserves from the river valleys of the Nene (west of Wellingborough) and the Great Ouse.

Policy 3 (Policy CMD4): Development criteria for mineral extraction

1.4.6 Proposals for the extraction of minerals from non-allocated sites (including extensions to existing sites and extensions to allocated sites) must demonstrate that the development:

- does not conflict with the spatial strategy for mineral extraction;

- where relating to aggregates, is required to maintain an adequate supply of minerals in accordance with the adopted Local Plan apportionment and/or the maintenance of a landbank;

- is required to meet a proven need for materials with particular specifications that cannot reasonably or would not otherwise be met from committed or allocated reserves;

- will maximise the recovery of the particular reserve whilst minimising waste through operational techniques employed; and

- promotes the most appropriate end-use of materials, and specifically ensure that building and roofing stone is used for high quality end-uses and not aggregate.

1.4.7 In addition to the above, proposals for the extraction of building and roofing stone must specifically demonstrate that: it supports the supply of locally sourced building materials (including varieties of limestone, ironstone, sandstone, and Collyweston slate); and the principal purpose of the extraction is for building and roofing stone (as such the proportion of stone and aggregate production should be identified).
1.4.8 Provision of building and roofing stone should be made for its use in:

- the restoration and renewal of existing historic buildings and structures, or
- new buildings in conservation areas, or
- the enhancement of local character and distinctiveness in other sensitive locations.

1.4.9 This provision will come from both extensions to existing sites and new sites subject to being assessed as meeting environmental, amenity, and other requirements of the Local Plan. Allocations that will contribute to meeting provision are identified in Policy 7 of the Local Plan.

1.4.10 Building and roofing stone will be provided for by: sites with planning permission as of 1 January 2011, the following allocated sites, and by any other site that comes forward in line with Local Plan policies.

MA10: Pury End South (limestone and building stone) 150,000 tonnes (approximately)

MA11: Collyweston Village (roofing stone) 50,000 tonnes (approximately)

1.4.11 If there is a need to manage the provision of building and roofing stone, allocated sites will be given preference for extraction over non-allocated sites.

1.4.12 Proposals for minerals and waste development must demonstrate that the following matters have been considered and addressed:

- protecting Northamptonshire’s natural resources and key environmental designations (including heritage assets),
- avoiding and / or minimising potentially adverse impacts to an acceptable level, specifically addressing air emissions (including dust), odour, bioaerosols, noise and vibration, slope stability, vermin and pests, birdstrike,
litter, land use conflict and cumulative impact,

- impacts on flood risk as well as the flow and quantity of surface and groundwater,
- ensuring built development is of a design and layout that has regard to its visual appearance in the context of the defining characteristics of the local area,
- ensuring access is sustainable, safe and environmentally acceptable, and
- ensuring that local amenity is protected.

1.4.13 Where applicable a site-specific management plan should be developed to ensure the implementation and maintenance of mitigation measures throughout construction, operation, decommissioning and restoration works.

Policy 23 (Policy CS9): Encouraging sustainable transport

1.4.14 Policy 23 seeks to ensure minerals and waste development minimises transport movements and maximises the use of sustainable or alternative transport modes.

Policy 24 (Policy CMD7): Natural assets and resources

1.4.15 Minerals and waste development should seek to achieve a net gain in natural assets and resources, through:

- protecting and enhancing international and national designated sites,
- delivery of wider environmental benefits in the vicinity where development would adversely affect locally designated sites or other features of local interest,
- protecting and enhancing green infrastructure and strategic biodiversity networks, in particular the River Nene and other sub-regional corridors, and
- contributing towards Northamptonshire Biodiversity Action Plan targets for habitats and species.

1.4.16 Proposals for minerals and waste development will be required to undertake an assessment (where appropriate) in order to:

- identify and determine the nature, extent, and level of importance of the
natural assets and resources, as well as any potential impacts, and

- identify mitigation measures and / or requirement for compensation (where necessary) to avoid, reduce and manage potentially adverse impacts.

Policy 25 (Policy CMD8): Landscape character

1.4.17 Minerals and waste development should seek to reflect Northamptonshire’s landscape character. Development should mitigate potentially adverse impacts on the local character and distinctiveness of Northamptonshire’s landscape where necessary during the development, operational life, restoration, aftercare and after-use. Opportunities for enhancement should be maximised through restoration, aftercare and after-use.

1.4.18 Proposals for minerals and waste development will be required to undertake a landscape impact assessment (where appropriate) based on the landscape character assessment in order to identify:

- the presence of landscape values (including their nature, extent and level of importance) and determine any potential impacts,

- any necessary measures to mitigate potentially adverse impacts, and

- opportunities to protect and enhance particular features that create a specific aspect of local distinctiveness or character.

Policy 28 (Policy CS13 and CMD13): Restoration and after-use

1.4.19 Policy 28 seeks to ensure that all minerals and waste related development of a temporary nature must ensure that the site is progressively restored to an acceptable condition and stable landform.

The after-use of a site will be determined in relation to its land use context, the surrounding environmental character and any specific local requirements, but on the basis that it:

- enhances biodiversity, the local environment and amenity, and

- benefits the local community and / or economy.

The restoration of minerals and waste sites should meet the following requirements (where appropriate):
• sites previously comprising high-grade agricultural land or good-quality forestry use should be restored to the original land use and coupled with a secondary after-use objective,

• precedence should be given to the establishment of Biodiversity Action Plan habitat, strategic biodiversity networks, promotion of geodiversity, and enhancement of the historic environment and heritage assets where the specific conditions occur that favour such after-use objectives,

• sites connecting or adjacent to identified habitat areas should be restored in a manner which promotes habitat enhancement in line with BAP targets and green infrastructure plans,

• sites located near to areas identified as lacking recreational facilities should be restored in a manner that promotes such opportunities,

• sites located within river corridors should be restored to support water catchment conservation and incorporate flood attenuation measures, and

• in specific instances, and where fully in accordance with policies in the local development frameworks, sites may be restored in a manner that promotes economic opportunities.

Sites for mineral extraction in river valleys should not be restored to a predominantly open water based form. Restoration of mineral sites elsewhere in the county to a lower level form will be acceptable if it is able to retain the integrity of the local landscape character and minimises overall traffic movements associated with extraction and restoration of the site.
APPENDIX 4 – Waste Catchment Area Plan
Catchment Area for Waste Imports to Collyweston Quarry
Waste to Woolfox Quarry

Catchment for Waste Imports

Bullimore Sand and Gravel Ltd

Waste Catchment Plan

Collyweston Quarry Extension

October 2013

HPL/COLLY/005