Extension to Time and Area

ENVIRONMENTAL STATEMENT: NON-TECHNICAL SUMMARY

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# Brinklow Quarry Non-Technical Summary

# Introduction

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1. **Introduction**

This document is the Non-Technical Summary of the Environmental Statement for Brinklow Quarry and is intended to support two planning applications. The first is to allow the continued operation of Brinklow Quarry beyond May 2016 and a second is to extend the extraction area of the Quarry.

This document presents the findings of a number of environmental assessments that have sought to determine the potential environmental impact of the proposed extension of time and area of the operational quarry. In essence this is a continuation of the quarry and not an intensification of the quarry; although a new area will be accessed this will not result in an increase in activity, which has been shown throughout all of the assessments.

1.1.1 About Brinklow Quarry

The Applicant, Brinklow Quarry, is a valued resource for the local construction industry and a supplier of aggregates to local residents and the wider county. Founded by the late Mr. Tony Aston as a diversification of the family's arable farm, the quarry now supplies materials from building sand to clay to major UK companies. The business is managed Tony Aston's sons, Mark and Dale, who run the quarrying operations alongside their family arable farm. The Brinklow Quarry site is located approximately 1 kilometre south west of the village of Brinklow, 7 kilometres east of Coventry and 9 kilometres west of Rugby, as shown in the map below.

*Figure 2-1 - Location of the existing quarry area and proposed quarry extension*

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1.1.2 The approach to the Environmental Impact Assessment

Before an Environmental Impact Assessment may take place the Mineral Planning Authority and the Applicant have to agree the scope of the Environmental Impact Assessment (EIA). The Applicant is required to set out the scope of the
development and what the likely effects this may have on the environment, and between them they agree what specific environmental assessments should be included in the EIA. The EIA is prepared accordingly with a Non-Technical Summary to form an Environmental Statement which is to be submitted as part of the planning application. This document is the Non-Technical Summary of the EIA.

The EIA has been undertaken in line with relevant legislation and best-practice guidance, and considers the sources of potential impacts, the potential receptors of those impacts, and the pathways by which the impact might be transmitted. The magnitude of the effect and the sensitivity of the receptor or receptors have been considered in each case to determine the significance each potential impact.

Each of the aspect-specific technical assessments that have been undertaken have been done so by a specialist consultant, as set out in Table 1-2.

*Figure 1-2 – Specialist consultants*

<table>
<thead>
<tr>
<th>EIA Chapter</th>
<th>EIA Appendix</th>
<th>Type</th>
<th>Produced by</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>-</td>
<td>Policy</td>
<td>PT-CE Ltd</td>
</tr>
<tr>
<td>5</td>
<td>-</td>
<td>Highways and Traffic including Public Rights of Way</td>
<td>Sustainable Direction Ltd (SDL)</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>Landscape and Visual Impact</td>
<td>White Young Green Ltd</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>Ecology (Habitats and Protected Species)</td>
<td>Just Ecology Ltd</td>
</tr>
<tr>
<td>8</td>
<td>-</td>
<td>Archaeology and Cultural Heritage</td>
<td>SDL</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>Noise</td>
<td>ACCON Ltd</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
<td>Air Quality and Dust</td>
<td>Gair Consulting Ltd</td>
</tr>
<tr>
<td>11</td>
<td>6</td>
<td>Ground and Surface Waters</td>
<td>ACCON Ltd</td>
</tr>
<tr>
<td>12</td>
<td>-</td>
<td>Socio-economic Impact</td>
<td>SDL</td>
</tr>
<tr>
<td>13</td>
<td>-</td>
<td>Agricultural Land Assessment</td>
<td>SDL</td>
</tr>
<tr>
<td>14</td>
<td>-</td>
<td>Airport Safeguarding</td>
<td>SDL</td>
</tr>
<tr>
<td>16</td>
<td>-</td>
<td>Restoration</td>
<td>PT-CE Ltd</td>
</tr>
</tbody>
</table>

All other elements and the overall management and authorship of the Environmental Statement, and this Non-Technical Summary, have been prepared by Sustainable Direction Ltd (SDL).

Each specialist consultant / author has produced a detailed technical report and a draft chapter for the Environmental Statement (ES). The draft chapter has been progressed into the level of detail for the ES, reducing information but not changing the report method or conclusions. This Non-Technical Summary has been prepared in a similar way, using the conclusions of the technical assessments to present the likely environmental impacts in a non-technical way.
2. Project Description

2.1 Project Description

Brinklow Quarry is a regionally significant sand and gravel quarry located on a deposit of Dunsmore Gravel underlying agricultural land in Brinklow, Warwickshire. The Quarry produces a range of primary and recycled aggregates for sale to the construction industry and has been operational since 1994.

The current planning permission (R687/1547/1486/P) is dated 13th May 1991. It is a condition of that permission that the extraction of sand and gravel shall cease no later than 25 years from the date of that permission; 13th May 2016. Brinklow Quarry wish to extend this this timescale.

In addition, Brinklow Quarry proposes an extension to the operational area of the quarry of an additional 31 hectares, to be able to produce a further 3.1 million tonnes of usable sand and gravel.

2.1.1 The Need for the Proposed Development

Strong competition from now-closed competitors, an unprecedented economic downturn – particularly in the construction industry – and Brinklow Quarry’s increasing use of recycled materials all mean that the existing 69.2 hectares of quarry still have a remaining aggregate reserve of 1.7 million tonnes, from an initial reserve of 3.5 million tonnes (in 1991).

Warwickshire County Council has produced a Draft Local Aggregate Assessment (2014), which has identified that the county is not meeting its required sand and gravel 'apportionment' of 1.043 million tonnes per year. Sales of sand and gravel have only met this apportionment once in the period 2003-2012, and in 2012 sand and gravel sales were only one third of this quantity. Brinklow Quarry is the only site in the county producing sand and gravel, with few other deliverable sites in the pipeline. This means that the continued operation of Brinklow Quarry is highly important to the county as well as nationally.

Brinklow Quarry is the largest single employer in the area, employing more than 40 staff directly and supporting other businesses more indirectly. The continued operation of the quarry will provide secure employment for these people.

The purpose of the quarry is to extract materials that are in demand on the market. The materials available from the site are different in different parts of the quarry. The part of the site that is currently being worked – that which is subject to the extension of time application – largely comprises mixed sand and gravel. The part of the site subject to the proposed extension of area is largely composed of dryscreen sand. Dryscreen sand is in high demand at present, as it is required for the construction of houses and other types of construction projects.

Therefore, the extension of area is needed to access materials that are highly in demand in the county and nationally. Without the proposed extension of time, all operation at Brinklow Quarry would be forced to cease by May 2016.

2.1.2 Operational Plan

Quarrying operations will continue the extraction of sand and gravel from the remaining phases of the existing quarry area (designated as Phases A to F on the Phasing Plan (see Figure 2-2)). This is the subject of the application to extend the time of the existing quarry, and is expected to occur over a timescale of approximately ten years, extracting a further 1.7 million tonnes of gravel. Phases 1-4 are the subject of the extension of area application, which would occur over an approximately 20 year timescale and would allow access to 3.1 million tonnes of useable dryscreen sand and gravel. Excavated material would be processed in the existing quarry plant area. These phases would be accessed as market forces
dictate which material is most in demand; there would be no change in intensity of operations, simply the locations accessed.
Figure 2-2 - Extraction Map with Current Permission and Extension of Area Shown
2.1.3 Restoration and After-care

The Restoration Scheme is designed to ensure that as much of the quarried area is returned to agricultural production, the landscape and the ecological habitats are improved through tree planting and wetland creation. The scheme aims to deliver high-quality restoration and long-term agricultural and landscape benefits. The final Restoration Scheme is shown in Figure 2-4 overleaf.

The main benefits of the Scheme are as follows:

i. The return of quarried areas progressively to agricultural production during the operational lifetime of the quarry and thereafter,

ii. The development of specific habitats to encourage diversification and proliferation of wildlife during and beyond the operational lifetime of the quarry, including for great crested newts, sand martins, reptiles, hedgerow species and others.

iii. The creation of a harmonious landscape in keeping with the surrounding agricultural land uses and

iv. The retention of existing features and to provide continuous amenity to the local area.

2.1.4 Consideration of Alternatives

Without the proposed extension of time, Brinklow Quarry’s operation would need to cease by May 2016.

Alternative locations include the location proposed in the current adopted Minerals Local Plan for Warwickshire 1995 (saved policies). Inset map PA4 of this document shows the preferred area for sand and gravel under this adopted plan, reproduced as Figure 3-3. This area however does not contain dryscreen sand, which is currently in high demand:

*Figure 3-3 – Current Preferred Area of Sand and Gravel Extraction (Minerals Local Plan for Warwickshire 1995)*
Figure 2-4 – Restoration "After" Map if both applications approved
2.2 Schedule of Works

The development is expected to last a total of 30 years (excluding five years aftercare). On Figure 2-2, Phases A-F are expected to last another 10 years, and 1-4 20 years. However the phases will be worked in sequence and accessed according to market conditions, and are likely to be as follows:

*Table 2-1 – Phasing of Works*

<table>
<thead>
<tr>
<th>Phase</th>
<th>Operations</th>
<th>Reinstatement</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Arnolds Phase, A</td>
<td>α</td>
<td>July 2015</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Arnolds Phase</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B &amp; 1</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C, D &amp; 2</td>
<td>B, C &amp; 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E, F &amp; 3</td>
<td>C, D &amp; 2</td>
<td></td>
</tr>
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<td></td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>December 2045</td>
<td></td>
</tr>
</tbody>
</table>

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3. **Development Site Description**

Brinklow Quarry is located in the village and parish of Brinklow, in the Rugby district of Warwickshire (CV23 0NJ). The site is located approximately 1 kilometre south west of Brinklow village, 7 kilometres east of Coventry and 9 kilometres west of Rugby. The site is accessed directly from the B4027 (Coventry Road), with the quarry and associated recycling and manufacturing operations sharing a single entrance.

*Figure 3-1 - Aerial view of the existing operational quarry area (taken in 2010)*

Brinklow Quarry was founded by the late Mr. Tony Aston as a diversification from the family arable farm which was started in 1963. Planning Permission Ref: R687/1547/1486/P was granted for the quarry in 1991.

Over the past two decades the quarry has developed into both a valued resource for the local construction industry and a supplier of aggregates to local residents and Warwickshire. Brinklow Quarry currently has contracts with major UK companies to supply materials ranging from building sand to clay. The existing quarry had a total estimated tonnage of 3.5 million tonnes of material in-situ with approximately 1.7 million tonnes of the remaining aggregate available for future extraction. An aggregates recycling operation at the quarry has extended the estimated life span of the quarry whilst also performing a valuable service for the county and making a significant contribution to Central Government's hierarchical approach to waste management.

The business is now managed by Tony Aston's sons, Mark Aston and Dale Aston, who continue to run the quarrying operations alongside the large family arable farm.

A site check report using DEFRA's web-based environmental database Magic.gov.uk shows that the site and its surrounding environment is:

- In a Nitrate Vulnerable Zone;
- Has been granted Green Belt status by Rugby Borough Council;
- The Local Landscape Character is designated Dunsmore and Feldon, with a provisional agricultural land classification of Grade 2 or 3;
Brinklow Quarry Non-Technical Summary
Development Site Description

- Mixed farming is listed as the primary land use around the project;
- The site lies within the SSSI Impact Risk Zone for Combe Pool SSSI;
- Within 2km there are three ancient woodlands, Birchley and New Close Wood, High Wood and Little Wood;
- There are no other internationally designated sites within 10km of the site; and
- The Environment Agency shows no recorded pollution incidents onsite or nearby.

3.1 Main Conclusions on Issues of Likely Concern

This Non-Technical Summary outlines the main impacts of the quarry on the surrounding environment and what the project will propose to do about these to address it (called "mitigation measures").

A public engagement event was held. As a quick reference here are the issues people are mainly concerned with:

Table 3-1 - Concerns from the Public Engagement

<table>
<thead>
<tr>
<th>Issue</th>
<th>Initial Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Quality</td>
<td>For all receptors considered, the risk of air quality impacts was assessed to be negligible or slight.</td>
</tr>
<tr>
<td>Traffic</td>
<td>The proposed extensions to time and area would not lead to additional HGV movements. The assessment concludes that the impact on traffic levels of the two proposals would not be significant.</td>
</tr>
<tr>
<td>Noise</td>
<td>Noise from quarry as part of the extension to time and/or area would not cause significant impacts on nearby noise-sensitive receptors.</td>
</tr>
<tr>
<td>Landscape</td>
<td>Within and immediately adjacent to the site major adverse impacts would be experienced, however in the broader landscape only a small to negligible impact. Following restoration, the developments would have a beneficial impact.</td>
</tr>
</tbody>
</table>

In essence this is a continuation of the quarry and not an intensification of the quarry; although a new area will be accessed this will not result in an increase in activity, which has been shown throughout all of the assessments.
4. **Meeting Planning Policy Requirements**

The full planning policy review can be found in Chapter 4 of the ES. This chapter provided an assessment of the relevant policy framework pertinent to the determination of the proposed developments. It includes a review of UK national policies, strategic mineral and waste policies and local plan policies relevant to the proposal. The following policy instruments relate specifically to the proposals:

- National Planning Policy Framework
- Warwickshire Minerals Local Plan 1995 (Saved Policies)
- Warwickshire Waste Core Strategy – Adopted Local Plan (2013 - 2028)
- Rugby Borough Council Core Strategy 2011

Also relevant to the proposal are the following:

- WCC - Minerals Core Strategy, Revised Options (2009)
- Waste and Minerals Planning Practice Guidance
- Referendum Version of the Coton Forward Neighbourhood Development Plan 2014-2026

From the assessment it was clear that the existing Brinklow minerals and waste site is of strategic importance to the county and plays an important role in meeting the county and region's sand and gravel apportionment and waste management requirements. The current operations take place in accordance with the Development Plan and do not generate unacceptable impacts on local communities or the environment. The proposed quarry extension would also go some way to meeting the County’s sand and gravel requirements and the current shortfall in capacity represents an overriding need for the proposed extension. The economic benefits arising from the current site should be afforded considerable weight, with 35 direct full time employee equivalents relying on the Brinklow site, in addition to indirect posts allied to the operations.

It is considered that the proposals are in conformity with the Development Plan policies, that the minerals and ancillary waste operations are not unacceptable developments in the Green Belt and that there are no material considerations, which would warrant a refusal.
5. **Impact on Highways and Public Rights of Way**

An assessment of the transport related impacts of the proposed extensions to time and area was conducted, to determine whether the impacts would be significant. The assessment sets an increase in traffic of 5% or greater that the current background level as significant, i.e. needing further study.

The existing quarry has permission for 100 vehicles per day (200 in-and-out movements). The assessment has concluded that the proposed extensions to time and area would not lead to additional HGV movements.

The assessment considered an over-and-above worst-case scenario, where 100% of the 100 vehicles permitted were treated as Heavy Goods Vehicles (HGVs). Under this highly unlikely scenario, the percentage increase in traffic that could be caused by the proposed development in 2016 at local traffic monitoring stations is shown in Figure 5-20. These percentages would decrease on a year-on-year basis as background traffic levels gradually increase.

HGV traffic would be dissuaded from passing through the village of Brinklow.

*Figure 5-20 - Percentage of total projected traffic movements in 2016 associated with the proposed development*

The assessment concludes that the impact on traffic levels of the two proposals would not be significant. **This means that users of the roads would not see a detectable change** with either or both developments.

In respect to the Public Rights of Way (PROW) surrounding the quarry area, none would be moved, closed or encroached upon by the proposed developments. There would be an impact on the views from some sections of public footpaths and roads. This varies from great for views from PROW within the site to small/none.
for PROW outside the site. The risk of air quality impact on PROW was established to be slight for either or both developments. This is discussed further in Chapter 6.
6. **Landscape and Visual Impact Assessment**

A landscape and visual impact assessment (LVIA) was conducted for the two proposed developments, to establish the potential effects on features important to the scenery, or effects on the character of the landscape. The assessment considered potential effects on vegetation, landscape character, publically accessible routes, settlements and designated sites.

There are no internationally designated sites relating to landscape value close to the site, though it lies within Green Belt land. Landscape designations within 3km of the site are shown in Figure 6-1.

The impacts of the proposed extension to time and area (either considered separately or together) are dependent upon the distance of the receptor from the quarry.

The impact on landscape character and vegetation within and immediately adjacent to the site would be **major adverse** during operation. The planned restoration is shown in Figure 2-4 (page 9) and would involve the planting of grassland, individual trees, woodland, hedgerows and lake margin. This would benefit the site by increasing its native tree and shrub cover, and have a **major beneficial** impact on the landscape character and vegetation of the site.

Beyond the immediate locality, impacts on landscape character reduce to **minor adverse/negligible** depending upon how large the quarry is in the particular view. Vegetation would not be impacted outside the site itself. There would only be **slight** negative impact on the Green Belt as a whole during the operation of the quarry, and a slight beneficial impact following restoration.

There would be **moderate adverse** impacts to the property at Woodhill Farm during the operation of the quarry, and **minor adverse** impacts on the properties at Highwood Lodge and the houses on Heath Lane. There would be no impact on properties to the east of the site due to the screen bund, and no impact on residential properties in Brinklow village. Following restoration there would be **negligible/minor beneficial** impact on public access routes and settlements.

Impact on ‘visual amenity’, or the perceived view of the site, was found to also be dependent on distance from the site, however generally **none** with some areas experiencing **slight** negative impact during operation, but **slight** positive impact following restoration. No mitigation is required.

These conclusions apply to either development considered separately or both together.
Figure 6.1 - Landscape Designations within 3km of site
7. **Ecology**

The potential ecological impacts of the two proposed developments were assessed. The surrounding landscape is composed of arable and grazed pastures, with large areas of woodland and fields bordered by woodland strips. The Smite Brook is located approximately 1 km to the north, and the River Avon is located approximately 1.9 km to the south. The large woodland of Birchley Wood lies adjacent to the south west and connects with another large wood at New Close wood.

Warwickshire Biological Records Centre (WBRC) provided records of all Local Wildlife Sites and Ecosites within 1km. These include ancient woodland, pools, species-rich grassland, a brook, flood meadows and hedgerows, and of particular note Combe Pool SSSI.

The most ecologically significant of the above habitats are hedgerows and waterbodies, so these have been the focus of the assessment.

Several surveys were conducted to establish the ecological baseline, including great crested newt surveys, bat activity surveys, bat tree assessments and building inspections, dormouse tube surveys, reptile surveys and hedgerow surveys. The site was found to have the potential for a range of species, the key species which could be impacted by the development being birds, bats, hazel dormice, amphibians and reptiles. The hazel dormouse, great crested newt and bat species are European Protected Species.

A 1km zone of influence was considered in the assessment, as the main cause of impact on ecology outside of the site boundary itself would be dust deposition, which would decrease with distance from the site.

The assessment highlighted that a scheme with no environmental mitigation measures could have significant negative effects on a number of valued ecological receptors both onsite and nearby. An impact of particularly high importance was predicted at Combe Pool SSSI due to the potential for water pollution. Of medium importance would be the potential for dust pollution at Woodhill Spinney and Verge Ecosite, the loss of onsite waterbodies, the pollution of nearby waterbodies, noise disturbance to dormice, and the potential for reptiles to the injured or killed. Low significance impacts include those on bats, birds, amphibians and great crested newts.

Mitigation measures have been identified which would reduce or eliminate these predicted impacts, and where possible enhance the site for ecology. These measures include establishing wildlife habitats and features as part of the restoration. This includes wildlife ponds and lakes, scrub and tussocky grassland, a hibernaculum, a sand martin bank and bird and bat boxes. Certain wildlife features would also be retained where possible during operation and following restoration, for example ponds, hedgerows, scrub, woodland strips and sand martin nest sites.

Rigorous pollution prevention measures would be followed during the operation of the quarry, including restricted operating hours and vehicle movements, and the adoption of sensitive working practices.

To ensure that these mitigation measures are implemented to good effect, advice and input would be taken from a suitably qualified ecologist.

The proposed mitigation measures were deemed in the assessment to reduce the significance of most impacts to **no impact**, or a **positive impact** once enhancements are made. However, during operation and prior to restoration, some impacts of **medium to low significance** would remain.
These conclusions apply to both the extension of time and area considered separately and both proposals considered cumulatively, however the extent of the impacted area would be greater should both developments receive planning permission.
Cultural Heritage

Cultural heritage is the legacy of physical artefacts and intangible attributes that are inherited by a group or society from past generations, and are preserved for the benefit of future generations. The UNESCO World Heritage Convention (1972) provided a formal definition:

For the purposes of this Convention, the following shall be considered as "cultural heritage":

- **monuments**: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;
- **groups of buildings**: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;
- **sites**: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view.

The cultural heritage assessment for this EIA looked at the potential impacts of the proposed developments on designated assets, including Scheduled Monuments, listed buildings and conservation areas, and undesignated assets of value because of their archaeological or historical interest.

Brinklow Quarry has a number of statutory cultural resources within 2km of its quarry workings. These are displayed in Table 8-1 along with their proximity of the quarry operations:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Distance from Quarry Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combe Abbey</td>
<td>820m North West</td>
</tr>
<tr>
<td>Brinklow with Listed Buildings</td>
<td>1400m East</td>
</tr>
<tr>
<td>Motte and Bailey Castle, 30m E of St John the Baptist's Church</td>
<td>2000m East</td>
</tr>
<tr>
<td>Nearest Listed Building – Woodhill Farm</td>
<td>760m North</td>
</tr>
<tr>
<td>East Lodge</td>
<td>935m North</td>
</tr>
</tbody>
</table>

The impacts of the proposed developments were assessed as part of other assessments contained in other chapters of the EIA. The conclusions of these are shown in Table 8-2.

<table>
<thead>
<tr>
<th>Potential Impact Source</th>
<th>Location in ES where this is dealt with</th>
<th>Summary of Conclusions with regards to the asset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise</td>
<td>Chapter 9 – Noise Assessment</td>
<td>Noise levels for the existing and future quarrying operations are and will continue to be within statutory limits</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Potential Impact Source</th>
<th>Location in ES where this is dealt with</th>
<th>Summary of Conclusions with regards to the asset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust</td>
<td>Chapter 10 – Air Quality Assessment</td>
<td>The developments will not create dust or have an impact on these local resources.</td>
</tr>
<tr>
<td>Visual Impact</td>
<td>Chapter 6 – LVIA</td>
<td>Neither of the developments can be viewed from these locations.</td>
</tr>
</tbody>
</table>

In summary, the developments would not have any significant impact on the cultural resources outlined above.

These conclusions apply to either development considered separately or both together.
9. **Noise**

The potential noise impacts of the operation of Brinklow Quarry as part of the two proposed developments have been assessed against measured background noise levels. This was determined using a detailed noise measurement study, which also identified potential noise-sensitive receptors. These are shown in Figure 9-1. Figure 9-2 shows where background noise was measured.

*Figure 9-1 - Existing Quarry Area and Identified Noise Sensitive Receptors*

*Figure 9-2 - Background Noise Monitoring Locations*
An additional hour of operation is proposed:

<table>
<thead>
<tr>
<th></th>
<th>Current operating hours</th>
<th>Proposed operating hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon – Fri</td>
<td>8am to 6pm</td>
<td>7am to 6pm</td>
</tr>
<tr>
<td>Sat</td>
<td>8am to 1pm</td>
<td>7am to 1pm</td>
</tr>
</tbody>
</table>

This was taken into account when the noise assessment was conducted.

The assessment showed that noise from the existing quarrying operations are below the criteria set out in Planning Practice Guidance, which sets out that the generated noise level should not exceed 10 decibels above the existing background noise level. This means that noise from the quarry as part of the extension to time and/or area would not cause any significant impacts on nearby noise-sensitive receptors without any further mitigation. These conclusions apply to either development considered separately or both together.

Mitigation of noise would occur by restricted working hours, engine silencers, vehicle speed restrictions and proper maintenance of equipment.
An assessment was undertaken to establish the potential impacts on air quality of the two proposed developments. Dust was identified as an air-related impact from quarrying activities, which has the potential to cause an annoyance by the deposition of particles on neighbouring properties, damage to vegetation or sensitive sites by deposition, or a health impact from airborne particles. For this reason, the assessment focused on the impact of dust annoyance, human health and habitat sites.

Council records show that there have been no complaints relating to dust as a result of the quarrying operation since its beginning in 1994.

Air quality could also be impacted by traffic, and it has been established that a maximum of 200 vehicle movements into and out of the site can occur.

The assessment was carried out by identifying sensitive human receptors and habitat sites, and using air dispersion modelling to predict the potential impacts of the two proposed developments. Using the sensitivity of the receptor and the magnitude of the impact, the overall risk of air quality impact was established.

The sensitive receptors within 1km of the quarry boundary are shown in Figure 10-1. Table 10-6 shows the overall risk of air quality impact.

Figure 10-1 – Sensitive receptors within 1km of the quarry boundary
Table 10-6 – Summary of the risk of air quality impacts arising from the operation of the existing quarry

<table>
<thead>
<tr>
<th>Reference</th>
<th>Name</th>
<th>Sensitivity of Receptor</th>
<th>Magnitude of Air Quality Impact</th>
<th>Risk of Air Quality Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>Combe Abbey</td>
<td>High</td>
<td>Slight</td>
<td>Slight</td>
</tr>
<tr>
<td>R2</td>
<td>Woodhill Farm</td>
<td>Low</td>
<td>Slight</td>
<td>Negligible</td>
</tr>
<tr>
<td>R3</td>
<td>Birchley Farm</td>
<td>High</td>
<td>Slight</td>
<td>Slight</td>
</tr>
<tr>
<td>R4</td>
<td>Sunrise Farm</td>
<td>High</td>
<td>Slight</td>
<td>Slight</td>
</tr>
<tr>
<td>R5</td>
<td>Hill Farm</td>
<td>High</td>
<td>Slight</td>
<td>Slight</td>
</tr>
<tr>
<td>R6</td>
<td>Cottage Farm</td>
<td>High</td>
<td>Slight</td>
<td>Slight</td>
</tr>
<tr>
<td>R7</td>
<td>Brinklow Village</td>
<td>High</td>
<td>Slight</td>
<td>Slight</td>
</tr>
<tr>
<td>R8</td>
<td>Longacre</td>
<td>High</td>
<td>Slight</td>
<td>Slight</td>
</tr>
<tr>
<td>R9</td>
<td>Highwood Farm</td>
<td>Low</td>
<td>Moderate</td>
<td>Slight</td>
</tr>
<tr>
<td>R10</td>
<td>Allotment Gardens</td>
<td>Low</td>
<td>Slight</td>
<td>Negligible</td>
</tr>
<tr>
<td>R11</td>
<td>East Lodge</td>
<td>High</td>
<td>Slight</td>
<td>Slight</td>
</tr>
<tr>
<td>R12</td>
<td>Highwood Bungalow</td>
<td>High</td>
<td>Slight</td>
<td>Slight</td>
</tr>
<tr>
<td>R13</td>
<td>Properties B4029</td>
<td>High</td>
<td>Negligible</td>
<td>Negligible</td>
</tr>
<tr>
<td>R14</td>
<td>Riding Stables</td>
<td>Low</td>
<td>Moderate</td>
<td>Slight</td>
</tr>
<tr>
<td>R15</td>
<td>Centenary Way</td>
<td>Low</td>
<td>Slight</td>
<td>Negligible</td>
</tr>
<tr>
<td>R16</td>
<td>Local footpath</td>
<td>Low</td>
<td>Substantial</td>
<td>Slight</td>
</tr>
<tr>
<td>R17</td>
<td>Local footpath</td>
<td>Low</td>
<td>Substantial</td>
<td>Slight</td>
</tr>
<tr>
<td>R18</td>
<td>Local footpath</td>
<td>Low</td>
<td>Substantial</td>
<td>Slight</td>
</tr>
<tr>
<td>R19</td>
<td>Coventry Way</td>
<td>Low</td>
<td>Slight</td>
<td>Negligible</td>
</tr>
<tr>
<td>R20</td>
<td>Local footpath</td>
<td>Low</td>
<td>Substantial</td>
<td>Slight</td>
</tr>
<tr>
<td>R21</td>
<td>Local footpath</td>
<td>Low</td>
<td>Slight</td>
<td>Negligible</td>
</tr>
</tbody>
</table>

For all receptors considered, the risk of air quality impacts was assessed to be **negligible or slight**. These conclusions apply to either development considered separately or both together.

The potential impacts of the developments would be mitigated and managed through Dust Management Procedures in the quarry operational management plan, and dust levels impacts will be monitored on a daily basis.
11. Flood Risk Assessment

A flood risk assessment (FRA) was carried out to determine the potential for the existing site to flood within the extension of time application, and the proposed area of extension. The Environmental Agency Floor Risk Map indicates that the site falls within Flood Zone 1. This rating is the lowest vulnerability possible to flooding and all types of development are appropriate. The areas prone to flooding are shown on the map in Figure 11-1. Areas of flood risk are shown in pink, blue and turquoise, none of which cover the Brinklow Quarry site.

Figure 11-1 - WCC SFRA Flood Risk Mapping

In addition to surface flooding, the JBA Canal Failure Map indicates that the site is not located in an area liable to canal failure, and the British Geological Society Groundwater Flood Map indicates that the site is not located in an area at risk of groundwater flooding.

The assessment found that the proposed developments would not have any impact on flooding, and no mitigation measures are proposed.

These conclusions apply to either development considered separately or both together.
12. **Socio-economic Impact Assessment**

Socio-economic factors are those relating to or concerned with the interaction of social and economic facets of a subject. An assessment has been conducted that considered the baseline socio-economic conditions that exist within Rugby Borough and the potential impacts of the proposed developments on these conditions.

The proposal is to extend the life of the quarry by a further 30 years and this, alongside the proposed extension of area, will allow it to produce a further 4.8 million tonnes of product. This will deliver long-term security of supply of sand, gravel and aggregate materials in the region to meet both existing and developing markets, and support associated sustainable economic development.

Brinklow Quarry is the largest single employer in the area, employing approximately 0.08% of the employed workforce in Rugby Borough, and 100% of the population employed in quarrying and/or mining. The quarry can continue to play an important role in the local economy; while the proposal will not create additional jobs, it will secure approximately 40 existing full-time positions and maintain steady employment for the local workforce.

As well as direct benefits to the employees of Brinklow Quarry, there will be indirect socio-economic benefits along Brinklow Quarry’s supply chain, and also income earned through employees’ expenditure in the local economy. Continued operation at Brinklow Quarry will enable employment to be maintained across a range of industries, many of which rely upon quarrying, including Brinklow Quarry, for business.

These conclusions apply to either development considered separately or both together.
13. **Agricultural Land**

An agricultural land assessment has been conducted. Planning Authorities are expected to consider the economic and other benefits of the best and most versatile agricultural land. Where development of agricultural land is necessary, poorer quality land should be used in preference to high quality agricultural land.

The assessment of the quality of Brinklow Quarry’s land for agriculture was assessed using guidance form the Ministry of Agriculture, Fisheries and Food, the Post 1988 Agricultural Land Classification, and the Dudley Stamp Land Use Inventory.

*Table 13-1 - Gradings of Agricultural Land according to MAFF Guidance 1988*

<table>
<thead>
<tr>
<th>Grade</th>
<th>Summary</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 1</td>
<td>Excellent quality</td>
<td>Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.</td>
</tr>
<tr>
<td>Grade 2</td>
<td>Very good quality</td>
<td>Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.</td>
</tr>
<tr>
<td>Grade 3a</td>
<td>Good quality</td>
<td>Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.</td>
</tr>
<tr>
<td>Grade 3b</td>
<td>Moderate quality</td>
<td>Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.</td>
</tr>
<tr>
<td>Grade 4</td>
<td>Poor quality</td>
<td>Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.</td>
</tr>
<tr>
<td>Grade 5</td>
<td>Very poor quality</td>
<td>Land with very severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.</td>
</tr>
</tbody>
</table>

The land at the Brinklow Quarry site lies between Grade 2 and Grade 3b, which is considered very good to moderate quality.

The impact of the proposed developments would be the removal of soils and subsoils to expose the sand and gravels underneath. This would not happen all at once but successively; no area will be stripped and left for long periods of time. Also, the proposed development is not permanent, and an integral part of the project will be the gradual restoration of the site to agricultural land in keeping with the surrounding land. With time it is felt that the land would recover to Grade 2 or 3a status.
14. **Airport Safeguarding**

Airport safeguarding is the process established to ensure that all appropriate measures are taken to secure the safety of aircraft when taking off, landing or flying within the vicinity of an airport.

Birmingham International Airport (BIA) is located in Solihull Metropolitan Borough close to the Warwickshire County boundary, and provides scheduled services to numerous domestic and international destinations. Coventry Airport is considerably smaller than BIA and is currently used for domestic and European freight traffic.

Coventry Airport is located at Baginton in Warwickshire, close to the County boundary with Coventry. The facility is considerably smaller than BIA and was used primarily for domestic and European freight traffic, along with some recreational flying and training. In 2003/4 new owners of the airport began to operate and expand scheduled passenger services to a number of European destinations. These terminated in 2008 after planning permission for a new permanent passenger terminal was refused. However, in 2010 new owners were found for the airport and a licence was subsequently granted for the operation of leisure, business and freight flights.

The creation of lakes as part of the Restoration Scheme have the potential to attract wildlife. This could lead to a potential birdstrike issue for Coventry Airport by increasing the bird hazard risk. This is a design issue, where the restoration lakes can be designed not to attract air-strike species or designed to target mainly non-bird or small bird aquatic species. Some examples of how this may be achieved include deep water, steep banks, fencing and dense vegetation. These considerations shall be integrated into the designs of the lakes.
Quarrying operations will be conducted to continue the extraction of sand and gravel from the residual phases of the existing quarry area (designated as Phases A to F on the Phasing Plan on Figure 2-2 ). This is the subject of the planning application to extend the time of the existing quarry. Phases 1-4 are the subject of the extension of area application. These phases would be accessed as market forces dictate which material is most in demand.

Under the current 1991 Planning Permission, restoration arrangements permitted include a lake and agricultural land. However, this application includes a revised Restoration Scheme which reflects a more sustainable location for the water bodies. If only the extension to time is approved, the existing Restoration Scheme will stand, although the suboptimal positioning of the lake means that water would need to continually pumped there to maintain a water body. The new restoration scheme shown in Figure 15-3 shows an improved scheme that works with the water table to maintain a natural lake.

The restoration would occur in phased steps, with the topsoil and overburden removed to expose the mineral deposit being re-spread to restore the landform to an agreed restoration profile. This progressive approach ensures that the minimum possible area remains unrestored at any given time.

The scheme is designed to return the quarried area to agricultural production with tangible benefits to all areas in terms of landscape improvement and habitat diversification through tree planting and wetland creation. The scheme aims to deliver high-quality restoration and long-term agricultural and landscape benefits. Additional hedgerows and wildlife corridors will be planted and maintained.

The main benefits of the Scheme are as follows:

i. The return of quarried areas progressively to agricultural production during the operational lifetime of the quarry and thereafter,

ii. The development of specific habitats to encourage diversification and proliferation of wildlife during and beyond the operational lifetime of the quarry, including for great crested newts, sand martins, reptiles, hedgerow species and others.

iii. The creation of a harmonious landscape in keeping with the surrounding agricultural land uses and

iv. The retention of existing features and to provide continuous amenity to the local area.

The impacts of the restoration scheme are assessed in the individual study chapters.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecology</td>
<td>During restoration quarry features used by wildlife may be lost as the land is converted back to arable. Where possible, features of importance to wildlife will be retained. Taken together, the ecological mitigation measures outlined will help to reduce the impacts from the proposed developments.</td>
</tr>
<tr>
<td>Landscape and Visual Impact</td>
<td>The restoration would have a major beneficial impact to the site, and a</td>
</tr>
<tr>
<td>Topic</td>
<td>Impact</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Agricultural Land</td>
<td>The site will be returned to agricultural production of a similar Grade to the current land</td>
</tr>
<tr>
<td>Airport Safeguarding</td>
<td>Mitigation measures will be put in place to prevent birdstrike and safeguard local airports</td>
</tr>
</tbody>
</table>

*minor beneficial* impact to the surrounding area
Figure 15-2 – Progressive Restoration Map with Current Permission and Extension of Area Shown

Arrows indicate direction of overburden from the phase to be worked onto the proceeding phase.

To be restored to a lake

Restored to agricultural land

Wildlife corridor

Hibernaculum area

Remains as landscaped area
Figure 15-3 - Restoration “After” Map if both applications approved
16. **Summary**

In conclusion, the developments are a continuation of the existing operations, and not an intensification. As such the local authority can expect “more of the same” from the Brinklow Quarry developments. This ES concludes that the impacts of the quarry are not significant.