ENVIRONMENTAL STATEMENT

Mancetter Quarry
Warwickshire

Planning Application

Proposed Lateral Extension to the existing quarry, creation of permanent landform features, consolidation and regularisation of existing operations and associated ancillary development.
PROPOSED LATERAL EXTENSION TO THE EXISTING QUARRY, CREATION OF PERMANENT LANDFORM FEATURES, CONSOLIDATION AND REGULARISATION OF EXISTING OPERATIONS AND ASSOCIATED ANCILLARY DEVELOPMENT

ENVIRONMENTAL STATEMENT

SEPTEMBER 2014
REPORT TITLE: Proposed Lateral Extension to the Existing Quarry, Creation of Permanent Landform Features, Consolidation and Regularisation of Existing Operations and Associated Ancillary Development. Environmental Statement

CLIENT: Lafarge Tarmac Trading Limited

JOB No: 2081

ISSUE STATUS: Final

ISSUE DATE: 05/09/2014

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<th>Status</th>
<th>Issue Date</th>
<th>Author/s</th>
<th>Checked</th>
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<td>07/07/2014</td>
<td>DP/JW</td>
<td>DP</td>
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<tr>
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<td>14/07/2014</td>
<td>DP/JW</td>
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<td>05/09/2014</td>
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1. INTRODUCTION

1.1 The following Environmental Statement has been prepared on behalf of Lafarge Tarmac Trading Limited (‘Lafarge Tarmac’) to accompany an application seeking planning permission for a lateral extension to the existing quarry, creation of permanent landform features, consolidation and regularisation of existing operations and associated ancillary development, at Mancetter Quarry. The application is made in accordance with section 58(1)(b) of the Town and Country Planning Act 1990, as amended (TCPA1990), which relates to the granting of planning permission on application to the planning authority.

1.2 An Environmental Impact Assessment (‘EIA’) has been carried out and this Environmental Statement (ES) prepared, in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (‘EIA regulations’), by suitably qualified and experienced professionals.

1.3 A Non-Technical Summary has also been produced in accordance with the EIA regulations, providing the information contained within the ES in a more accessible format.

Scope of the Environmental Statement

1.4 The Scope of the ES is in accordance with Schedule 4 of the EIA regulations. Although the EIA regulations require that certain aspects of the environment are considered, not all of these issues require technical assessments.

1.5 David Jarvis Associates Ltd sought a formal ‘Scoping Opinion’ from Warwickshire County Council on the 5th October 2011. On the 21st of November 2011, Warwickshire County Council advised that the EIA should address:

- Traffic and Transport
- Public Rights of Way
- Visual Impacts
- Archaeology
- Flood Risk Assessment
- Noise
- Air
- Vibrations

1.6 A copy of the Scoping Opinion is contained at Appendix 1.

Format of the Environmental Statement

1.7 The ES is divided into a number of sections. First, there is a brief description of the Regulatory and Policy Background, followed by a brief description of the current permitted operations which generally form the baseline for the assessment, and a detailed description of the proposed development. This is followed by a consideration of alternatives and then by the various environmental considerations including, where considered as being required, summaries of the detailed investigations and technical assessments, the reports of which are included in the appendices. The final section draws together the results of the individual environmental considerations and any proposed mitigation, drawing conclusions about the overall impacts associated with the development.
The ES is therefore structured as follows:

- Introduction
- Regulatory and Policy Background
- Description of the Existing and Proposed Development
- Consideration of Alternatives
- Environmental Considerations
  - Highways and Traffic
  - Landscape and Visual Impact
  - Ecology
  - Noise
  - Blast Vibration
  - Air Quality and Dust
  - Water Environment
  - Archaeology and Cultural Heritage
  - Soils and Agricultural Land Quality
  - Public Rights of Way
- Impact and Interactions
- Summary and Conclusions.

The preparation of the ES draws upon the expertise of a range of specialist consultants, including planners; highway consultants; landscape architects; ecologists; noise, vibration and air quality experts; geotechnical, hydrogeological, hydrological and soils experts; and, cultural heritage experts; along with input from representatives of Lafarge Tarmac Trading Limited, including the quarry manager.

The following technical assessments prepared by independent consultants are included in the Appendices as referenced in the relevant sections of this statement:

- Highways and Traffic – The Hurlstone Partnership
- Landscape and Visual Impact Assessment – Playdell Smithyman
- Ecology – SLR Consulting Ltd
- Noise Assessment – Walker Beak Mason
- Blast Vibration Assessment – Vibrock Limited
- Air Quality and Dust Assessment – Dustscan
- Hydrology and Hydrogeology – BCL
- Archaeology and Cultural Heritage – Andrew Josephs Associates

Copies of the Environmental Statement and Non-Technical Summary

The Planning Application, including the Environmental Statement and the Non Technical Summary can be viewed at the offices of Warwickshire County Council and online at www.warwickshire.gov.uk.

Hard or Digital copies of the Planning Application, Environmental Statement and the Non-Technical Summary can be obtained from:

David Jarvis Associates Limited,
1 Tennyson Street,
Swindon,
Wiltshire,
SN1 5DT.

Telephone: 01793 162173
Fax: 01793 613625
E-mail: mail@davidjarvis.biz

1.13 David Jarvis Associates Ltd will charge for copies of the ES to cover the cost of reproduction and postage. A charge of £15 will be made for a digital copy. The following charges apply to the supply of hard copies:

- Planning Application Supporting Statement - £50 including VAT;
- Environmental Statement - £150 including VAT;
- Non-Technical Summary - £25 including VAT.
2 REGULATORY AND POLICY BACKGROUND

Regulatory Background

Town and Country Planning (Environmental Impact Assessment) Regulations 2011


2.2 Schedule 4 of the EIA regulations outlines the information to be included in an ES, including:

- A description of the development;
- An outline of the main alternatives;
- A description of the aspects of the environment likely to be significantly affected by the development, including, population, fauna, flora, soil, water, air, climatic factors, architectural and archaeological heritage, landscape and the inter-relationship between these factors;
- A description of the likely significant effects of the development on the environment, including the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the development;
- A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment;
- A non-technical summary; and
- An indication of any difficulties encountered in compiling the required information.

2.3 Although the EIA regulations require all of the above environmental considerations to be addressed, different developments result in different impacts. As a result, not all of the various environmental aspects require detailed consideration.

Management of Mining Waste

2.4 The development scheme has been prepared in consideration of the relevant requirements of Environmental Permit (England and Wales) Regulations 2010 and associated guidance from the Department for Environment, Food and Rural Affairs (DEFRA) and from the Environment Agency (EA). Those regulations transpose the requirements of Directive 2006/21/EC1 on the management of waste from extractive industries (commonly referred to as mining waste), whose overall objective is to prevent or reduce any adverse effects on the environment or risk to human health from the management of that waste.

2.5 Operations in the extension area will include the progressive stripping of soils and the reuse of those soils in restoring parts of Mancetter Quarry. Those soils are not considered to be mining waste.

2.6 In common with the existing operations at Mancetter Quarry, the extension will give rise to other unsalable excavation materials (principally the overburden and shales that are referred to throughout this document as being excavated to release underlying diorite mineral). The volume of those materials generated and the composition of the materials would reflect both the site production rates and the nature of the geological resource being excavated at any particular time. A proportion of the materials arising will be placed within the quarry.
void to create the restoration landform and rehabilitating parts of Mancetter Quarry. Those materials are not considered to be waste.

2.7 A larger proportion of the material is to be permanently placed outwith the quarry void in the western landform. The material is likely to be regarded as ‘mining waste’ and would be placed in the western landform during Phases 1, 2 and 3 of the development, over a period of around 3 years. The management of that material would therefore comprise a ‘mining waste operation’ and the western landform would be a ‘mining waste facility’ to which the relevant permitting requirements of the Environmental Permit (England and Wales) Regulations 2010 will apply.

2.8 The EA is the environmental regulator for permitting mining waste operations and it is anticipated that a bespoke permit for the mining waste aspects of the quarry extension will be required. A permit for a mining waste facility cannot be granted by the EA unless the necessary planning permission is in force. A permit application will though be progressed conterminously with the planning application with a view to having it issued shortly after the grant of a planning permission. The permit application will include submission of a Waste Management Plan (WMP) to conform to the requirements of the Environmental Permit (England and Wales) Regulations 2010 including details on quantities of mining waste involved, categorisation of the mining waste and classification of the mining waste facility.

Other Regulatory Regimes

2.9 The operation of the quarry is the subject of numerous regulatory regimes that are separate to the planning process. These include various environmental authorisations, discharge consents and schemes for the management of mining waste. The Environment Agency (EA) oversees certain activities on the site such as the discharge of water from the quarry under discharge consents T/19/35436/T and T/19/35437/T and the management of mining waste.

Planning Policy

2.10 Planning policy is addressed in the supporting statement accompanying the planning application. Where relevant to each of the individual technical assessments undertaken, planning policy is addressed in the technical reports.

National and Local Designations

2.11 This information is derived from mapping facilities on the English Heritage¹ website and the Natural England² website, from the Warwickshire Local Geological Sites website³, the North Warwickshire Borough Council online mapping⁴ and from online National Monuments Records⁵.

2.12 Mancetter Quarry is not the subject of any built heritage designations. The nearest heritage designations include:

¹ http://list.english-heritage.org.uk/
² http://www.natureonthemap.naturalengland.org.uk/map.aspx
³ http://wgcg.freehostia.com/LoGS/LoGS-home.html
⁵ http://www.pastscape.org.uk/MapSearch.aspx
• A grade II listed milestone between bridges 34 and 35 of the Coventry Canal
• A grade II listed bridge (bridge 33) on the Coventry Canal
• Several listed buildings at the settlement of Mancetter
• Roman camps, a villa and settlement, which are scheduled ancient monuments, at Mancetter
• The site of an iron age hillfort on the site of the current Oldbury Reservoir, which adjoins the site
• The site of the Oldbury Priory on the site of the current Oldbury Reservoir, which adjoins the site
• A find of Mesolithic flint implements at Outwoods Farm.

2.13 Both Purley Quarry and Oldbury Quarry are designated as Local Geological Sites. Other nearby designations include:

• A country park and ancient woodland at Hartshill Hayes
• A footpath which skirts the western boundary of the operational quarry (AE108) and within the proposed site
• A bridlepath which is located west of the operational quarry (AE109X) and within the proposed site
• An ancient woodland, which is a Site of Special Scientific Interest, at Bentley Park Wood to the north-west of the site
• An ancient woodland flanking Purley Quarry
• Three SSSIs, two of which are in old quarries, around Hartshill.

2.14 There are three Biodiversity Action Plan Priority Habitats in the area, although these are not within the site. The sites listed include an area of undetermined grassland adjoining Purley Quarry, an area of grazing marsh east of the Coventry Canal and an area of lowland meadow to the west of the site.

2.15 The site and the adjoining area are not the subject of an Area of Outstanding Natural Beauty designation and are not in a Special Landscape Area, as per the key diagram in the Warwickshire County Structure Plan. The site and the adjoining area are not the subject of any ecological designation such as a Special Area of Conservation. Although some of the site is included in the National Inventory of Woodland and Trees, these areas are not listed as ancient woodland.

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6 http://www.pastscape.org.uk/hob.aspx?hob_id=336255
9 http://wgcg.freehostia.com/LoGS/LoGS-map.html
11 http://magic.defra.gov.uk/website/magic/viewer.htm?startTopic=magical&chosenLayers=ancwoodIndex%2CniwtIndex&xygridref=430703,295407&startScale=10399
3. **EXISTING AND PROPOSED DEVELOPMENT**

**Existing Development**

**Description and Context**

3.1 Mancetter Quarry is located near Atherstone in North Warwickshire. The Mancetter Quarry complex includes the operational quarry known as Oldbury Quarry, the restored Jubilee Quarry and the partially restored Purley Quarry, which is located across the road (Purley Chase Lane) from Oldbury Quarry and Jubilee Quarry.

3.2 The site has a combined area of approximately 96 hectares, with 73 hectares constituting the existing quarry area, and approximately 23 hectares constituting the proposed extension. Most of the site, including the operational area of Oldbury Quarry and the restored Jubilee Quarry, is located south of Purley Chase Lane. Part of the site, Purley Quarry, is located north of Purley Chase Lane. The site is accessed by Quarry Lane, which leads from the B4111/ Nuneaton Road. Heavy goods vehicles (HGVs) egress the site via Purley Chase Lane.

3.3 Atherstone is approximately 2km to the north of the site, Hartshill is approximately 1.6km to the south-east of the site, the village of Ridge Lane is approximately 1.3km to the west of the site and Mancetter, which is contiguous with Atherstone, is c.1.5km to the north-east.

3.4 Nearby properties include farm dwellings on Purley Chase Lane to the west, which are approximately 440m and 610m from the site, The Purley Chase Centre, which is approximately 220m to the north of the site, a farm dwelling on Quarry Lane which is approximately 330m east of the processing area of the quarry, a dwelling on Purley Lane, which is c.280m north east of the processing area and a cluster of dwellings, including a nursing home, which is c.240m to the south at Oldbury.

3.5 The surrounding area largely comprises agricultural/open land. There are also some commercial enterprises in the area, including a golf course, small fishery and a self-storage business.

3.6 Mancetter Quarry has been in existence for in excess of 100 years. The first Ordnance Survey map in 1887 shows that quarrying took place at Mancetter at that time. There is also some evidence that small quarry pits were dug in the area at several earlier points in the past. The 1887 Ordnance Survey map also shows a tramway running from the quarry to a wharf on the Coventry Canal. Beyond the canal is the railway (now the West Coast Mainline), built in 1848, running from London to Glasgow with a spur off which subsequently allowed for the loading and transportation of quarried rock. Unusually, the quarry was used for motor racing speed trials in the 1940s and 1950s.\(^{12}\)

3.7 Mancetter Quarry is a source of diorite, which is a rare hard stone, with high anti-skid properties. The stone has a high polished stone value (PSV) and is used in specialist surfacing materials, including on roads near school crossings, roundabouts and motorway junctions.

3.8 There is only one other quarry in the West Midlands that produces such aggregate, and owing to its particular properties and rarity, the mineral at Mancetter Quarry is recognised as being a resource of national importance.

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3.9 The routes of various public rights of way in the local area are shown on plan reference M095/00045. The development will directly affect public rights of way AE108 and AE109 where they run through the extension area between Purley Chase Lane in the north and Oldbury Road in the south. Both of these routes will be affected from commencement of the extended operations until restoration of the western landform is complete. A strategy for managing those routes and maintaining appropriate levels of access throughout the development is outlined in this document and will be secured through a combination of legal orders to be promoted by Lafarge Tarmac.

3.10 Water supply pipes that are operated by Severn Trent Water (STW) runs along the boundary between the existing quarry and the extension area, following the alignment of public right of way AE108 through the application site. This apparatus will require to be diverted and relaid within the application site, in advance of the quarry faces being developed in the extension area. The acceptability of the route and configuration of the diversion has been discussed with STW.

Planning History

3.11 As noted, Mancetter Quarry has been in existence for in excess of 100 years. Details in relation to the site’s more recent planning history associated with the quarrying operations at the site are outlined below. The most significant planning permissions are ref. NW20/00CM001, which governs the general operation of the quarry and appeal ref. APP/H3700/A/11/2147480, which amended the operating hours of the site.

NW/83/0857

3.12 On the 26th July 1983, Warwickshire County Council granted permission for the retention of a stone coating plant.

NW/87/1278

3.13 The applicant withdrew an application made in relation to the erection of a roadstone coating plant.

NW/95/CM020

3.14 On the 28th November 1995, Warwickshire County Council refused permission to extend the diorite workings at Purley Quarry.

NW/99/CM102


NW20/00CM001

3.16 On the 13th February 2002, Warwickshire County Council granted permission for the extension and consolidation of Mancetter Quarry.

3.17 The grant of permission included various conditions:
• requiring the submission of a scheme for the retention of trees, hedges and habitat areas;
• requiring the submission of a scheme for the identification and protection of protected species on the site;
• relating to the restoration of the site;
• restricting operating hours;
• limiting output to 400,000 tonnes per year;
• relating to the stripping and storage of soils;
• relating to access;
• relating to noise limits;
• relating to dust control;
• restricting blasting operations.

NW/03/CM017

3.18 On the 13th October 2003, Warwickshire County Council refused permission to vary condition 17 of NW20/00CM001, to permit the operation of the secondary crusher until 10pm for 18 months.

NW/04/CM032

3.19 On the 27th October 2004, Warwickshire County Council refused permission to vary condition 17 of NW20/00CM001, to permit the supply of high PSV asphalt on 25 occasions per year, between the hours of 5.30pm and 4am. The reason for refusal was that the proposal would cause unacceptable harm to the amenities of local residents.

NW/04/CM033

3.20 On the 27th October 2004, Warwickshire County Council refused permission to vary condition 17 of NW20/00CM001, to permit the supply of high PSV asphalt on 25 occasions per year, between the hours of 6am and 5pm, with the coating plant starting at 5am. The reason for refusal was that the proposal would cause unacceptable harm to the amenities of local residents.

NW/04/CM034

3.21 On the 27th October 2004, Warwickshire County Council refused permission to vary conditions 17, 25 and 26 of NW20/00CM001, to permit the supply of high PSV asphalt on 25 occasions per year, between the hours of 5.30pm and 4am and the supply of high PSV asphalt on 25 weekends per year between 6am and 5pm, with the coating plant starting at 5am. The reason for refusal was that the proposal would cause unacceptable harm to the amenities of local residents.

APP/H3700/A/05/1178973 & APP/H3700/A/05/1178976 & APP/H3700/A/05/1178978

3.22 The applicant appealed the refusal of applications NW/04/CM032, NW/04/CM033 and NW/04/CM034. On the 28th September 2005, the inspector dismissed the appeals in relation to NW/04/CM032 and NW/04/CM034 and permitted the appeal in relation to NW/04/CM033, for a period of two years.
On the 27th July 2005, Warwickshire County Council granted permission to vary condition 17 of NW20/00CM001, to permit the supply of asphalt on 25 weekends per year for the remaining life of the planning consent, between the hours of 6am and 5pm with the coating plant starting at 5am.

On the 14th October 2010, Warwickshire County Council refused permission to vary permission NW20/07CM005, to remove the restriction on asphalt production at the weekend. The applicant appealed this decision (appeal ref. APP/H3700/A/11/2147480) and on the 15th June 2011, the Planning Inspectorate determined that the operation of the asphalt plant at the weekend would not result in any demonstrable harm to the environment or local amenity. A new condition relating to the operation hours of the site was imposed.

Mineral is currently extracted in Oldbury Quarry. Purley Quarry and Jubilee Quarry are no longer operational, with Jubilee Quarry having been fully restored, and Purely Quarry partly restored.

Mineral extraction at Mancetter is undertaken by drilling, blasting, crushing and screening rock into graded aggregate sizes. Historically, rock blasted from the face has been transported by dump truck to a processing plant located within the quarry curtilage at the northern end of the quarry void, where it is tipped onto a covered surge pile and is then crushed and screened into graded aggregates. The processing plant is contained within a series of clad structures. There are also two asphalt plants, a weighbridge and administrative facilities on the site.

At present, the site has a remaining life of approximately three years at an output of approximately 300,000 – 400,000 tonnes per annum. The applicant proposes to extend the quarry to the west of the site, as per the enclosed drawings, referenced M095/000044 – M095/00050. It is anticipated that this would extend the life of the existing quarry by seven to eight years. This will ensure that the quarry can operate until 2025, as per the current permission.

The extension to the site requires the removal of soils and overburden shales, which are proposed to be utilised to create an attractive permanent landform feature to the west of the extension area.

The application also seeks to consolidate the current permissions governing this site (which would establish a new parent permission and negate the requirement for a ROMP application in 2017) and regularise ancillary operations at the site.

The applicant proposes to operate the quarry at the same rate of output, using the same access arrangements and environmental mitigation measures and complying with the same conditions governing the current operations. The applicant does not seek to amend the
current operations in any way, other than to extend the life of the quarry, by enlarging the lateral extent of the quarry.

Volumes of Materials

3.31 The proposed extension area is anticipated will release in the region of 2 million tonnes of additional mineral reserves (diorite stone).

3.32 In order to reach these mineral reserves, approximately 2 million m$^3$ of in situ overburden and shales are required to be removed$^{13}$.

3.33 The majority of these materials will be utilised to create the proposed western landform feature, which requires approximately 1.5 million m$^3$ of materials for its creation.

3.34 The remaining materials will be used for the restoration of the southern area of the existing quarry, adjacent to Oldbury Reservoir or deposited within the existing quarry void.

Operations

Mineral Extraction and Processing

3.35 Mineral extraction at Mancetter is undertaken by drilling, blasting, crushing and screening rock into graded aggregate sizes. Historically, rock blasted from the face has been transported by dump truck to a processing plant located within the quarry curtilage at the northern end of the quarry void, where it is tipped onto a covered surge pile and is then crushed and screened into graded aggregates. The processing plant is contained within a series of clad structures. It is proposed that the extension area would be worked using the same extraction method currently employed.

Soils and Overburden Removal

3.36 Soils and overburden would be stripped sequentially and used either in the construction of the western landform feature, the restoration of the southern end of Oldbury Quarry adjacent to Oldbury reservoir or placed in the existing void, for final restoration purposes.

3.37 The shales would be broken using a ripper and dozer and loaded into articulated dump trucks, by an excavator, to be transported to their intended destination. A dozer would be used in the placement of the materials for the creation of the final restoration landforms.

Roadstone Coating Plants and Ancillary Development

3.38 Existing value added plant at the site includes two roadstone coating plants which are located within the plant area adjacent to the processing facilities. These would continue to operate as at present and in accordance with the existing conditions and associated environmental permits. Associated weighbridge and administrative facilities are also located within this area and are proposed to remain (as currently permitted) as part of the development proposals.

$^{13}$ Excludes bulking up factor
3.39 The coated roadstone plants also utilise Recycled Asphalt Product (RAP), which is introduced into asphalt to replace virgin stone and bitumen. This has significant financial and sustainability benefits.

3.40 RAP is generated from processing either road planings from worn out carriageways or waste asphalt arising from coating plants, and Mancetter has a demand for up to 30,000 tonnes of RAP per year.

3.41 RAP processing is currently carried out in a small area within Purley Quarry, on a campaign basis, using mobile plant brought in by outside contractors. Some RAP processing is undertaken on an ad hoc basis within a small area to the west of the plant site using mobile plant operated by the applicant.

3.42 A crushing campaign typically lasts for two weeks with the maximum stock holding of raw RAP around 8000 tonnes. Typically between two and four processing campaigns are undertaken per year.

3.43 In order to be used on the plant, the raw RAP (plant waste or planings) need to be crushed to -25mm and screened into -10mm and 10/25mm products. An excavator loads the mobile crusher which in turn feeds the screen to make three products, -10mm, 10/25mm and +25mm. The +25mm is re-introduced back through the crusher as 25mm is the largest size needed.

3.44 The site currently operates under an exemption from the Environmental Permitting (England & Wales) Regulations 2010 in relation to the RAP processing operations.

Export of Materials

3.45 All materials from the site are exported via road. The current permission is subject to a legal agreement containing a vehicle routing clause. This requires all unladen HGVs to enter the site via Quarry Lane (from the B4111) and all HGVs to exit the quarry via Purley Chase Lane (to Pipers Lane and the B4114 Coleshill Road).

3.46 Whilst there is no current restriction on the number of vehicles utilising the site, there are restrictions on the volumes of materials permitted to be exported from the site. These restrictions limit the quarry to an annual output of 400,000 tonnes, and a monthly limit of 40,000 tonnes.

3.47 It is not proposed to alter either the vehicle routing agreement or the annual or monthly output limits of the quarry as part of this application.

Phasing of Development

3.48 The proposed development provides for the extraction of mineral and the progressive restoration of the site. In order to provide an outline of the progression of the proposed development, the scheme has been presented over a number of phases as detailed on plan numbers M095/0045 to M095/0049.
Preparation Works - Plan Reference M095/00046

3.49 It would be necessary to undertake site preparation works in advance of the proposed extraction operations. Plan reference M095/00046 incorporates the extent of these operations in the Phase 1 scheme. The preparation works would take 6 to 9 months to complete and would include the following key tasks:

- diversion of the STW pipeline apparatus diversion corridor south and west of the extraction area and east of the western landform;
- diversion of right of way AE108 to same diversion corridor of STW pipeline, followed by closure of current route;
- diversion of right of way AE109 around periphery of western landform, followed by closure of current route; and
- establishment of internal haul routes and ramps from existing workings to the Phase 1 extraction area.

Phase 1 – Plan Reference M095/00046

3.50 Phase 1, as detailed on plan reference M095/00046, provides for the initial development of the extension area to the west, the commencement of works to the proposed western landform and restoration of the southern area of the existing quarry adjacent to Oldbury Reservoir (indicated as Phase 1 restoration on the plan). This includes:

- the stripping of overburden and shales to expose the diorite deposit in Phase 1;
- the stripping of soils and deposition of overburden to commence creation of the southern section of the new landform to the west of the extraction area, with works progressing from north to south;
- the deposit of mineral wastes in the existing extraction void;
- the deposit of materials and restoration of the southern portion of the existing quarry adjacent to Oldbury reservoir;
- Ongoing extraction of mineral from the existing quarry and from the proposed extension area in a westerly and northern direction;
- The processing and transportation of mineral extracted on the site;
- The restoration of Purley Quarry;
- The permanent diversion of Public Bridleway AE108 and the creation of a temporary crossing point for material movements;
- The temporary diversion of the existing bridleway AE109 to the west of the site around the new landform feature being created;
- Soft landscape planting;
- Ongoing landscape management and aftercare.

3.51 Phase 1 releases approximately 1.5-2 years’ supply at current output rates. These continue to be extracted over phase 2.

3.52 It involves the removal of approximately 553,000m$^3$ of *in situ* overburden and shale materials$^{14}$. Of these, approximately 323,000m$^3$ $^{15}$ will be utilised in the western landform, with the remainder distributed between the Phase 1 restoration area (adjacent to Oldbury

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$^{14}$ Excluding bulking up factor
$^{15}$ Including bulking up factor of 10%
Reservoir) and the existing quarry void. This will be undertaken over a time period of approximately 9 months.

Phase 2 – Plan Reference M096/00047

3.53 Phase 2, as detailed on plan reference M095/00047, is contiguous with Phase 1, and provides for the continued development of the extension area moving northwards with the continuation of works to the proposed western landform. This includes:

- the continued stripping of overburden and shales to expose the diorite deposit in Phase2;
- the stripping of soils and deposition of overburden to commence creation of the northern section of the new landform with works progressing north to south;
- the final restoration of the southern section of the new landform;
- the deposit of mineral wastes in the existing extraction void;
- Ongoing extraction of mineral from the existing quarry and from the proposed extension area continuing in a northerly direction;
- The processing and transportation of mineral extracted on the site;
- The creation of a second temporary crossing point for material movements across Public Bridleway AE108;
- The continuation of the temporary diversion of the existing bridleway AE109 to the west of the site around the new landform feature being created;
- Soft landscape planting;
- Ongoing landscape management and aftercare.

3.54 Phase 2 releases approximately 2-3 years’ supply at current output rates\textsuperscript{16}. These continue to be extracted over phase 3.

3.55 It involves the removal of approximately 718,000m\textsuperscript{3} of in situ overburden and shale materials\textsuperscript{17} with all of these materials being utilised in the western landform. This will be undertaken over a time period of approximately 11 months.

Phase 3 – Plan Reference M095/00048

3.56 Phase 3, as detailed on plan reference M095/00048, is contiguous with Phase 2, and provides for the continued development of the extension area moving northwards with the continuation of works to the proposed western landform. This includes:

- the continued stripping of overburden and shales to expose the diorite deposit in Phase3;
- the stripping of soils and deposition of overburden to finalise the central section of the new landform with works progressing north to south;
- the final restoration of the northern and western section of the new landform;
- the deposit of mineral wastes in the existing extraction void;
- Ongoing extraction of mineral from the existing quarry and from the proposed extension area continuing in a northerly direction;
- The processing and transportation of mineral extracted on the site;

\textsuperscript{16} This is a theoretical volume as operations are contiguous and the full release of mineral in phase 2 will not be fully realised without operations being undertaken in phase 3.

\textsuperscript{17} Excluding bulking up factor
• The creation of a third temporary crossing point for material movements across Public Bridleway AE108 and removal of the first temporary crossing point;
• The continuation of the temporary diversion of the existing bridleway AE109 to the west of the site around the new landform feature being created;
• Soft landscape planting;
• Ongoing landscape management and aftercare.

3.57 Phase 3 releases approximately 2.5-3 years’ supply at current output rates. These continue to be extracted over phase 4.

3.58 It involves the removal of approximately 656,000m$^3$ of in situ overburden and shale materials$^{18}$. Of these, approximately 370,000m$^3$ $^{19}$ will be utilised in the western landform, with the remainder deposited within the existing quarry void. This will be undertaken over a time period of approximately 10 months.

Phase 4 – Plan Reference M095/00049

3.59 Phase 4, as detailed on plan reference M095/00049, is contiguous with Phase 3, and provides for the continued extraction of the mineral reserves released through Phase 3, with the finalisation of works to the proposed western landform. This includes:

• the final restoration of the central and eastern section of the new landform;
• the continued deposit of mineral wastes in the existing extraction void;
• Ongoing extraction of mineral from the existing quarry and from the proposed extension area continuing in a northerly direction;
• The processing and transportation of mineral extracted on the site;
• The continued use of the two temporary crossing points for material movements across Public Bridleway AE108;
• The ending of the temporary diversion of the existing bridleway AE109 and reinstatement along a route over the western landform;
• The creation of additional public access across the western landform, including a viewpoint location;
• Soft landscape planting;
• Ongoing landscape management and aftercare

Restoration – Plan Reference M095/00050

3.60 The proposed development enables the consideration of a revised and enhanced, landscape scale restoration proposal for the site.

3.61 The proposed concept for the final restoration of the site is detailed on plan reference M095/00050.

3.62 The aims of the proposed restoration are:

• To establish a landform together with land use features and elements capable of integration and enhancement of the local landscape character and its wider setting;

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$^{18}$ Excluding bulking up factor
$^{19}$ Including bulking up factor of 10%
• To increase local amenity use and value of the site and make connections into the local footpath/bridleway network;
• To create new wildlife habitats throughout the site that can be sustainably managed and maintained to promote and increase the potential for biodiversity; and
• To return land back to productive agricultural use.

Purley Quarry Restoration

3.63 The proposals see Purley Quarry restored largely to areas of agricultural land/neutral grassland areas (approximately 7ha) and acidic grassland/heathland (approximately 8ha with 50% anticipated to represent heathland). The scheme includes a strong element of woodland planting (approx. 6.4ha) to tie in with surrounding woodland areas. An element of this planting has already been undertaken. Around 646 linear metres of hedgerows are also provided.

3.64 The Rawn Brook will be reinstated to surface level, with the inclusion of water management storm balancing and treatment lagoons, with aquatic margins, extending to approximately 0.4ha.

3.65 Public rights of way are restored across the site, which connect to the existing network.

Jubilee Quarry Restoration

3.66 Jubilee Quarry has already been restored largely to areas of acidic grassland/heathland (approximately 2ha) with blocks of woodland planting extending to approximately 2.4ha.

3.67 The existing public right of way is retained through the site, with the gradient of the path having been slightly amended.

Oldbury Quarry Restoration

3.68 The extraction void at Oldbury is proposed to be reinstated to open water as a lake feature, extending to around 15 hectares with the water level controlled at 122m AOD. Areas of extensive shallows suitable for reedbed terrace or other aquatic/semi-aquatic habitats will be allowed to form on the south eastern periphery of the lake (extending to approximately 1.2ha).

3.69 Areas of exposed rock and shale faces will be retained around the southern and western perimeter of the former void, extending to approximately 1ha with the faces left to naturally regenerate.

3.70 The existing water management lagoons will be reinstated to wildlife habitat ponds, surrounded by areas of acidic grassland and an element of woodland planting.

3.71 The southern landform and eastern ridge will be returned to woodland to form a strong ridge woodland to reflect local landscape characteristics. An area of acid grassland/heathland will be retained around Oldbury Camp Reservoir to maintain the setting of the Scheduled Monument.

3.72 The existing quarry plant will be removed and a series of bentonite or similar lagoons will be created in the former plant area, with reedbed and acid water management. A minor water
control channel from the lake will be cut from 122m to 121m AOD. This will control the water level in the lake, and connect the lake feature to the water management lagoons. The channel will pass through the site to the existing outfall channel which formed part of the existing permitted scheme.

3.73 The remainder of the plant and stocking areas of the site, following regrading, will be left to naturally regenerate.

3.74 In total these areas will provide for approximately 5ha of grassland/heathland (with 50% anticipated to represent heathland), 11ha of woodland (with 1.5ha already existing), 65 linear metres of hedgerows and 14ha left to naturally regenerate.

3.75 An access track will be retained onto Quarry Lane for the purposes of site management and maintenance.

3.76 A network of paths will be created around the void, connecting to the existing public rights of way network which is associated with Hartshill Hayes Country Park, the panoramic viewpoint associated with Oldbury Camp and the site of Hartshill Castle. They will also facilitate circular walks around the lake feature as well as provide a new network of paths and circular routes linking Atherstone, Mancetter, Oldbury and Hartshill Green together as well as linking to the long distance footpath of Centenary Way.

Restoration of New Western Landform

3.77 The proposals see the restoration of the western landform feature created as part of the development restored largely to areas of acidic grassland/heathland (approximately 9ha with 50% anticipated to represent heathland) with a significant woodland block extending to approximately 5ha, across the ridge of the landform and flanking the sides in some areas.

3.78 On the western flank of the landform feature, across the shallower gradients, two areas will be reinstated to agriculture. The northern area adjacent to Oldbury Farm will also be reinstated to agriculture, in total providing approximately 4.5ha of agricultural land. Approximately 759 linear metres of hedgerows will also be provided.

3.79 A drainage ditch will be retained around the perimeter of the landform, which will outfall into the lake in the Oldbury Quarry, and a number of small wildlife ponds will be created providing in total approximately 0.1ha of aquatic habitat.

3.80 The landform has been designed to recreate the rolling landform and sloping ground currently present within this area and to blend in with the new landform within Oldbury Quarry.

Hours of Operation

3.81 The current hours of operation are governed by condition 1 of appeal ref. APP/H3700/A/11/2147480. This condition states:

“None of the operations hereby permitted shall take place except:
a) **During the following hours on days other than Sunday Bank Holidays or Public Holidays (with the exception of the operation of the coating plant and deliveries of coated stone as referred to below):**

*Mineral extraction, processing, servicing, maintenance or testing of plant and restoration works:*

- **0700 – 1730 Mondays to Fridays**
- **0700 – 1200 Sundays**

*Tip removal, soil stripping and overburden removal:*

- **0800 - 1730 Mondays to Fridays**
- **0800 – 1200 Saturdays**

*Blasting operations*

- **1000 – 1600 Mondays to Fridays**
- **1000 – 1200 Saturdays**

*Operation of the coating plant*

- **0400 – 1730 Mondays to Fridays**
- **0400 – 1700 Saturdays**
- **0500 – 1700 Sundays**

*Vehicle movements*

- **0600 – 1730 Mondays to Fridays**
- **0600 – 1200 Saturdays**
- **1200 – 1700 Saturdays (coated stone deliveries only)**
- **0600 – 1700 Sundays (coated stone deliveries only)**

b) **As otherwise agreed in writing by the Minerals Planning Authority;**

c) **In emergencies to maintain safe quarry working (which shall be notified to the Minerals Planning Authority as soon as practicable); or**

d) **Subject to an average of no more than 5 loads of coated stone per hour leaving the quarry between 1200 and 1700 on Saturdays and 0600 and 1700 on Sundays.**

The applicant proposes to retain these hours of operation, which were determined by the Planning Inspectorate in June 2011 as being appropriate.

**Public Rights of Way**

3.82 The configuration of the existing footpath network surrounding the application site is shown on plan reference M095/00052 with the alignment and numbering of each route being taken from the Worcestershire County Council Definitive Map. Footpaths in the area have been subject to previous alterations resulting from the existing working scheme, which includes commitments to restore and create additional routes following the cessation of quarrying operations. The effects on the network during phases 1 to 3 of the development, covering a period of around 3 years are shown on plan reference M095/00053 and the final restored situation is shown on plan reference M095/00054.
3.83 In so far as the proposals will affect the footpath network the applicant has engaged in consultation with Worcestershire County Council and other stakeholders. It is envisaged that diversion requirements can be achievable through a combination of legal procedures that would be progressed at appropriate stages through the planning process. The necessary orders will be secured and development works put in place ahead of the closure of any routes. Pre-application consultation has identified the necessity for diversions, the appropriateness of the proposed diverted routes and the legal process to securing diversions. The planning application strategy takes cognisance of the consultation advice received.

3.84 In addition to consultation with Worcestershire County Council, the proposals have benefited from being subject to two consultation events where members of the public and other interested parties were given the opportunity to comment on the proposals. In addition to the public, the events were also advertised locally and members of user groups were invited to attend. The outcomes of that consultation are described in the Planning Statement which accompanies the planning application submission.

3.85 The proposals will directly affect:

- AE108 that skirts the western boundary of the operational quarry and within the proposed site; and
- AE109 that is located west of the operational quarry and within the proposed site.

3.86 In designing the development proposals the applicant has treated both routes as bridleways due to the previous Section 106 agreement obliging these routes to be upgraded as such. This is despite no formal process or dedication being made by Worcestershire County Council.

**Interim Position – Plan Reference M095/00053**

3.87 As part of the preparation works AE108 would be permanently diverted between points A and B on plan reference M095/00053, around the western limit of the proposed extraction. The diversion would increase this section of AE108 in from 645m to approximately 755m. Upon having the diversion confirmed, the original route will be excavated as part of the extension operations.

3.88 The diversion would be formed within a fenced corridor beyond the extended quarry face, at the toe of the western landform. During the initial 3 phases of development (approximately 3 to 4 years) it would be necessary to establish up to 3 crossing points to allow heavy vehicle movements between the extraction area and the western landform for placement of overburden on the western landform. Locations of these crossing points are shown indicatively on plan reference M095/00053. Such crossings are not an uncommon feature within quarries and are manageable. The crossing points would be hard surfaced and will have gates for pedestrians and horse riders at either end complying with BS5709:2006. It is envisaged that the gates will be constructed will be secured with a hook and chain at the top of the gate or if a mid-height latch is used then the latch will have a handle extending above the top rail of the gate. The catch or hook and chain will be accessible by not only by horse riders but also pedestrians and wheel chair users. The detailed specification, precise location and specification of the crossing points would be specified during the order making period. Traffic management would be arranged to ensure clear visibility for both crossing vehicles.
and bridleway users. Signage will warn users of crossing vehicles, where vehicles will give way to users of the right of way.

3.89 The stretch of AE109 between points C and D on plan reference M095/00053 is proposed to be temporarily diverted for the duration of activities on the western landform (approximately 3 to 4 years). The diverted route would be temporarily diverted around the western perimeter through points ‘C’ to ‘E’ to ‘F’ to ‘D’, increasing length along this route from approximately 470m to approximately 780m.

**Restored Position – Plan Reference M095/00054**

3.90 Plan reference M095/00054 shows the configuration of rights of way after full restoration of the quarry.

3.91 AE108 is retained in its diverted position beyond restoration of the quarry

3.92 Upon restoration of the western landform (after 3 to 4 years) AE109 is to be restored from its diverted route to a suitable route and as far as practical to its original route between points ‘C’ and ‘D’. The route shown on plan reference M095/00054 has been designed to accommodate the rise in the western landform from along its route.

3.93 The final restoration plan for the quarry incorporates new permissive routes including a linkage between AE108 and AE109 and the creation of a steeper trail to a ridge viewpoint on the western landform. A network of paths and trails are also proposed within the restored quarry. These proposals incorporate all of the improvements that are currently committed within the existing Section 106 agreement.

**Construction Details**

3.94 Routes AE108 and AE109X have been designed to a nominal width in the order of 4m to 5m, with 2m to 3m of which shall be stoned). The routes have been designed to a maximum gradient of circa 1:12 as per The British Horse Society’s Advice on Specifications and Standards recommended for equestrian routes in England and Wales. More precise details of the construction of these routes are to be specified in the necessary order making process, however, the design requirements have been built into the design model for the proposed development. Additionally, the design of crossing points shall be specified in the order process and will be informed by The British Horse Society Advice on Gaps, Gates and Vehicle Barriers, January 2013.

3.95 Advice received from WCC to date has confirmed that route AE108 can be secured through a Diversion Order under the provisions of Section 257 of the Town and Country Planning Act 1990. For the temporary diversion of route AE109X the necessary orders could be progressed through a combination of a Temporary Diversion Order under the provisions of Section 261 of the Town and Country Planning Act 1990, or/with under a Temporary Traffic Regulation Order (TTRO). The necessary orders will be secured through further consultation with WCC in advance of all necessary applications.
Employment

3.96 The quarry currently provides employment opportunities for 46 people, providing direct employment for 26 people and supporting a further 20 jobs through its fleet of vehicles operated by contracted hauliers.

3.97 The majority of the staff currently employed at the site live within the local area.

3.98 These positions will be safeguarded through the continued operation of the quarry.
4. CONSIDERATION OF ALTERNATIVES

No Further Development

4.1 As previously noted, the purpose of this application is to extend and consolidate the existing operations at Mancetter Quarry.

4.2 If the application is not permitted, the applicant may try and preserve the resource as long as practicable, however it is likely that the current operations would cease within the next 3 years at current rates of output. It would no longer be possible to supply a nationally important mineral resource. This site has been in operation since the 1800s; it provides a rare and important resource for road surfacing and makes an important contribution to the economy. The quarry also provides significant local rural employment opportunities. The site is also an important asset for Lafarge Tarmac, which has invested significantly in the site.

4.3 Given that the need for such mineral resources is recognised in national and local policy; that the site has been operational for many years; that the site can be operated without significant impacts on the environment and amenity; and that the site can be adequately restored; it is submitted that it is appropriate to ensure that extraction can continue on this site, until to 2025.

Development in Alternative Locations

4.4 The location of mineral development is constrained by geology; that is, mineral can only be worked where it is found. Warwickshire County Council acknowledges that the extension of existing mineral sites can be more sustainable than the development of greenfield sites. This approach minimises the impacts of mineral extraction in the county and ensures the sustainable use of a finite resource. In addition, the current Minerals Local Plan acknowledges the rarity of the resource at Mancetter Quarry.

4.5 Mancetter Quarry is an existing site and the necessary infrastructure is already in place. The mineral resource at this site is a proven, economical resource which has been worked for a considerable time period and is utilised in a variety of products at a local, regional and national level. The site provides important employment opportunities and assists in strengthening both the local and regional economy. The site is also an important asset for Lafarge Tarmac, which has made considerable investment in the site and its operations.

4.6 Given both that mineral development is constrained by geology, that the resource at Mancetter Quarry is particularly rare and that the draft Mineral Core Strategy supports the extraction of a necessary resource on existing sites over the development of greenfield sites, it is considered that an alternative location is not a practical consideration at present.

Alternative Methods for Working the Site

4.7 The existing method of drilling and blasting is the most efficient and effective method for the extraction of hard rock. This method has been tried and tested during the existing extraction operations over a considerable time period and will be carefully managed and monitored to reduce potential impacts on the environment and on amenity. It is not considered that there is an alternative method for working the site.
4.8 Appropriate designs have been proposed in terms of both the areas of working and phasing of operations in order to meet modern geotechnical requirements, provide safe access to the areas of working, allow for progressive restoration and maintain continuity of supply of stone.

4.9 The impacts of mineral extraction on the environment and amenity of the area are considered in full, in the ES.

**Alternative extent of development**

4.10 Geology dictates the proposed location of the quarry extension and of the current site location. The extent of the extraction area is determined by the geology, and the need to ensure the operations are economically viable. Given the diorite sill dips in this location, the mineral reserve is overlain by a reasonably extensive layer of overburden. The requirement to remove this overburden and position it somewhere to enable extraction operations, partly determines the extent of the western landform feature to be created, and its location.

4.11 Allied to this are the impacts arising as a result of these operations, particularly with regard to the landscape and restoration proposals achievable for the site.

4.12 It is intended that the proposed processing works will continue at the existing location. The processing works will, therefore, take place at a location that is already deemed suitable for such development. As a result, any negative environmental impacts resulting from processing will be contained at the existing location.

4.13 It is considered that the proposals carefully balance the various economic, social and environmental factors in reaching the most appropriate extent of development for the extension of the quarry and the extraction of material.

**Alternative Access Arrangements**

4.14 A review of the various committee reports relating to this site since 2004 shows that a number of alternative access arrangements have been suggested by the public. At present, access arrangements are the subject of a section 106 agreement, which requires that all lorries access the site via Quarry Lane and egress the site via Purley Chase Lane. It is not proposed to change this arrangement as part of this application.

4.15 Suggested alternatives to the current arrangements include:

- An alternative route for quarry traffic;
- A designated haul road to avoid the Green, Mancetter;
- Repairing the canal bridge at Quarry Lane to allow HGVs to egress via Quarry Lane.

4.16 It has been suggested that quarry traffic should follow an alternative route. The A5 is part of the Warwickshire Advisory Lorry Route, which links with the national road network. The purpose of the advisory lorry route is to ensure that HGV traffic is concentrated on the largest roads that have the capacity for HGV traffic. If HGV traffic is routed away from Mancetter, it will be obliged to follow a very lengthy and circuitous route on narrow country roads, through small settlements in order to reach the A5. The existing route through Mancetter is the most direct route to the A5. This route is relatively short and ensures that
4.17 It has been suggested that a designated haul route should be provided to avoid the Green, Mancetter. Presumably, such a route would branch off the A5, cross the Nuneaton Road and rejoin Quarry Lane to the south of Mancetter. The area between the A5 and north of Nuneaton Road is the site of a Scheduled Ancient Monument consisting of the Manduessedum Roman villa and settlement with an associated industrial complex. The Roman settlement at Mancetter is of particular importance because of the survival of a large number of Roman features within the landscape. It is submitted that the provision of a haul road through this area would be inappropriate and would not be delivered quickly owing to the extensive archaeological work that would be required. A haul route from another point on the A5 would go through the existing residential areas of Mancetter and Atherstone, would be extremely long and is unlikely to be financially viable. It is submitted that the provision of a designated haul route would result in significant impacts on the environment, heritage and amenity for a relatively short lived operation that is only permitted until 2025. It is submitted that the harm would outweigh the benefits.

4.18 It has been suggested that by repairing the weight restricted bridge at Quarry Lane, it would be possible to use Quarry Lane to both access and egress the site. It is submitted that such an undertaking is unlikely to be of long term benefit to the quarry operation, given that the site does not have permission to operate beyond 2025. Such a proposal could also result in additional environmental impacts.

4.19 In addition, the applicant previously proposed to re-route all night-time traffic via Purley Chase. On appeal, the inspector stated:

“This method for dealing with quarry lorry traffic into and out of the site would not be appropriate. The distribution of HGV traffic between the various routes enables the noise and disturbance to be “shared” and avoids a concentration along one road...a variation... as sought by the appellants would result in too great an intensity of noise and disturbance along Purley Chase Lane.”

4.20 It is submitted that, conversely, routing all HGV traffic along Quarry Lane would result in an undue burden on residents in that area. The repair/replacement of the canal bridge on Quarry Lane and the routing of all HGV traffic down Quarry Lane would not provide a feasible or appropriate alternative to the existing arrangements.

4.21 The existing access arrangements are considered the best option for accessing and egressing the site. The alternatives, such as repairing the bridge and routing all traffic via Quarry Lane, providing an alternative haul road and using an alternative lorry route, would result in negative environmental, heritage and amenity impacts that are unlikely to exceed any benefits, particularly given that the quarry does not currently have permission to operate beyond 2025.

21 APP/H3700/A/05/1178973 & APP/H3700/A/05/1178976 & APP/H3700/A/05/1178978
22 Paragraph 16
5. ENVIRONMENTAL CONSIDERATIONS

General

5.1 The proposed development has been considered against its potential to cause significant environmental effects in relation to:

- Highways and Traffic
- Landscape and Visual Impact
- Ecology
- Noise
- Blast Vibration
- Air Quality and Dust
- Water Environment
- Archaeology and Cultural Heritage
- Soils and Agricultural Land Quality
- Public Rights of Way

5.2 Summaries of the technical assessments undertaken are provided. The detailed technical reports of the relevant topics are contained within the Appendices as referenced in the appropriate section of the ES.

5.3 Where appropriate, an analysis of the likely significant effects of the development on the environment, resulting from the existence of the development, the use of natural resources, the emission of pollutants, the creation of nuisances and the elimination of waste is included in the technical reports.

5.4 Generally, it is considered that the current permitted operations provide the baseline against which the environmental impacts will be assessed. Short term effects will be associated with the ongoing operations in accordance with the existing planning permission for the site including ongoing landscape management and aftercare, alongside elements of the proposed development, including the creation of the western landform. Medium term effects will be associated with the ongoing extraction and processing operations. Long term effects will be associated with the finalisation of operations and final restoration of the site.

5.5 The short and medium term effects associated with the operational development will generally be considered to be temporary in nature, mineral development representing a temporary use of the land. Long terms effects arising from the finalisation of the operations and final restoration will generally be considered to be permanent in nature.

Technical Difficulties

5.6 No technical difficulties were encountered in compiling the required information.

Population: Proximity, Numbers and Amenity

5.7 There are several settlements near the quarry. Atherstone is approximately 2km to the north of the site, Hartshill is approximately 1.6km to the south-east of the site, the village of Ridge Lane is approximately 1.3km to the west of the site and Mancetter, which is contiguous with Atherstone, is c.1.5km to the north-east. Nearby properties include farm dwellings on Purley Chase Lane to the west, which are approximately 440m and 610m from...
the site, The Purley Chase Centre, which is approximately 220m to the north of the site, a farm dwelling on Quarry Lane which is approximately 330m east of the processing area of the quarry, a dwelling on Purley Lane, which is c.280m north east of the processing area and a cluster of dwellings, including a nursing home, which is c.240m to the south at Oldbury.

5.8 Mancetter Quarry is located in the parish of Mancetter, which covers an area west of the A5, east of Ridge Lane, north of Hartshill Hayes Country Park and south of Coleshills Road. The parish incorporates part of the built up area of Mancetter, the quarry and a large area of open land. The parish of Mancetter had a population of 2,449 at the time of the census in 2001.

5.9 The potential impacts of the proposed development on the amenity of the nearby population will principally relate to transport, visual, dust, vibration, and noise. These issues are addressed in detail in the relevant technical reports. The proposed development is not expected to affect population numbers and it is not considered necessary to address this issue in detail. As outlined by the technical reports, the proposed development is unlikely to have significant effects on amenity, and good practice will be implemented in the operation of the quarry.

Highways and Traffic

5.10 The proposed development provides for the continued extraction of mineral at the current rate of output. As a result, the proposed development will not result in any change to the current number of Heavy Goods Vehicles (HGV) accessing and egressing the site.

5.11 The impact of HGV movements on residential amenity, highway safety and highway capacity, at the permitted and therefore proposed rate, was considered by the Planning Inspectorate (planning application ref. NWB/10CM009 and appeal ref. APP/H3700/A/11/2147480), as recently as the 15th June 2011. The Highway Authority did not raise any highway safety issues. The Council accepted that the proposed HGV movements would not result in any significant highway safety or capacity impacts. As stated in a report to the Regulatory Committee dated 12th October 2010:

“In highway safety terms the development has been carefully assessed and whilst it is fair to say that the highway network is inadequate it must also be stressed that this is a relatively lightly used road network and there is not a record of accidents or other transportation problems which would justify an objection to this development on highway safety grounds.”

5.12 In addition to highway safety and capacity, this application (ref. NWB/10CM009) also addressed the impact of HGV movements on residential amenity. A noise assessment was submitted with the application, which indicated that the proposed development would not have unacceptable impacts on residential amenity. The Environmental Health Officer was consulted and advised that he/she concurred with the noise assessment. The Council refused the application on the basis that it would negatively impact residential amenity. The inspector found that there was no evidence to support the assertion that the proposed HGV movements would result in any significant impacts on residential amenity and determined that the appeal should be allowed. In addition, the inspector noted that the site has

http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=800166&c=Mancetter&d=16&e=15&g=493120&i=1001x1003x1004&m=0&r=1&s=1321280836922&enc=1&dsFamilyId=779
operated for many years and is a fundamental part of the character of the locality. It is evident, therefore, that HGV movements at the permitted, and therefore proposed, rate will not have any significant, negative impacts on residential amenity.

5.13 The movement of HGVs is the subject of a section 106 agreement, in accordance with reference NW20/00CM001. The routing agreement requires all empty HGVs to enter the site via Quarry Lane and all HGVs to exit the site via Purley Chase Lane. As noted by the Inspector in the Appeal Decision:

“The routing agreement ensures that the noise and disturbance of the HGV traffic is shared between the adjacent roads and a concentration of vehicle noise and disturbance avoided. This is necessary because a number of houses and bungalows along the route lie very close to the roadside, particularly in the built-up part of Mancetter, where the gradient is also likely to cause gear changes and acceleration”.

5.14 The section 106 agreement also requires the applicant to pay an annual highway maintenance contribution of £11,000.

5.15 The District Council in responding to the scoping opinion request considers that the proposed development will increase the operational life of the quarry and will therefore extend the duration of HGV movements associated with the site. There are, however, no proposals to extend the life of the current permission, this being until 2025. The baseline for the assessment is therefore the currently permitted level of vehicle movements. In the absence of the extension being approved, the site is still permitted to operate within this level of vehicle movements up to 2025. Under such a scenario, the operations at the site could legitimately be tailored in order to conserve the remaining reserve and obtain the maximum economic benefit from it. This could involve maintaining the output through the export of the mineral from the site in smaller loads, through the utilisation of value added plant at the site, for example through provision of a higher proportion of asphalt.

5.16 There may also be a perception that the quarry is the main source of HGV traffic in the area and that the extension of the site would in some way be an unreasonable burden on the community. As noted in the inspector’s report, the site is in a rural area and many of the local businesses, including farms, produce HGV traffic. These HGV movements are not the subject of any restrictions, Section 106 agreements or conditions. As a result, HGV traffic that does not originate in the quarry is free to travel through the area at any time, generating similar impacts to those generated by the quarry traffic.

5.17 Notwithstanding this, The Hurlstone Partnership Limited has undertaken a review of the proposed development in terms of its potential highway impact and produced a transport statement. A copy of the technical report is contained at Appendix 2.

5.18 Having considered the circumstances of the case, it became apparent that the proposed development effectively represents a continuation of existing activities at current output levels throughout the consented period of the existing planning permission.

5.19 Whilst there would be an overall increase in total traffic movements between now and 1st January 2025 as a result of the proposed development, there would be no increase over and above what may already take place during any given hour, day, week, month or year.
5.20 Therefore, other than the potential increase in wear and tear on the highway owing to the cumulative increase in vehicle numbers over the permitted life of Mancetter Quarry, in terms of impact on a day to day basis, there would be no change from the currently permitted situation.

5.21 Following consultation with the Local Highway Authority (LHA) a review of the local road network and its safety record was undertaken. It was also requested that the condition of the local road network be reviewed with the Highway Authority in order to establish whether the existing annual contribution towards maintenance payable under the existing planning permission was adequate for ongoing, future maintenance.

5.22 The applicant is content to review the condition of the highway network with the LHA to establish whether the existing contribution is sufficient. It is suggested that this appraisal could be undertaken during either the consultation period or following a resolution to grant planning permission subject to the signing of the S106 agreement, which is a common way forward in such cases.

5.23 The review of the road network and accident data revealed that the existing highways safely accommodate the existing HGV activity in the area. There was only one recorded collision involving a HGV in the area when it was hit by a car whose driver had lost control on Pipers Lane in 2006.

5.24 Having considered the local highway network, its excellent safety record in terms of HGV activity, the long history of activities at Mancetter Quarry and the existing planning permission, it is concluded that the proposed development would be acceptable in terms of highway impact.

Landscape and Visual Impact

5.25 A Landscape and Visual Impact Assessment (LVIA) of the effects of the proposed development has been carried out by Playdell Smithyman Limited, and a copy of the technical report is included at Appendix 3.

5.26 The methodology for the assessment is based on the Guidance for Landscape and Visual Assessment- 3rd Edition. The assessment process utilises the collection and analysis of baseline information including desktop studies corroborated by fieldwork. From this, potential landscape and visual effects have been identified and assessed and measures then designed to either avoid or mitigate any significant adverse effects including landscape enhancement which forms an integral part of the overall development scheme.

5.27 The report concludes that the proposed development was found likely to only cause significant levels of landscape and visual effects to receptors in close proximity to the western landform during the initial construction period. However, the phasing of the development will help minimise the extent and length of these effects, which is not expected to last for more than 2.5 years. The completed landform will also help to link and unify the site into the local landscape character. Following completion of this landform, effects during the remaining operational life of the quarry would reduce to either minor or neutral levels of effect.

5.28 Following final restoration, the revised proposals were assessed as likely to give rise to higher levels of beneficial effects than the currently permitted scheme owing to the
increased levels of landscape enhancement and integration of the whole site within the locality. This is also achieved by an increase in visual quality, an increase in public amenity as greater public access is provided and enhanced wildlife potential and biodiversity as new habitats are created and managed.

**Ecology**

5.29 The proposed extension area is not the subject of any statutory ecological site designations (i.e. as SSSI or Local Nature Reserve). Part of the application site falls within the Oldbury Reservoir/Mancetter/Purley Quarries Complex Ecosite 49/39 (part Local Wildlife Site or potential site), which is a non-statutory designation of sites of local value.

5.30 An Ecological Impact Assessment has been undertaken by SLR Consulting Ltd and a copy of the technical report is included at Appendix 4.

5.31 During 2011, surveys were undertaken to record the presence of protected species and wildlife habitats by experienced and licensed ecologists. The surveys have been updated during 2014 and following initial habitat appraisals (i.e. update Phase 1) and consultation, have focused on recording great crested newts, reptiles, breeding birds, badger and bats.

5.32 The surveys have indicated that the site supports protected animal species including badger; bats; great crested newt; reptiles and breeding birds.

5.33 The proposed extension would result in the loss or disturbance (followed by restoration to a western landform) of approximately 12 ha of arable farmland, 7.5 ha of improved grassland with semi-improved banks, 1.1 ha of golf course (semi-improved grassland with scattered trees) and 0.5ha of woodland and approximately 850m of native hedgerow. A small number of trees associated with hedgerows, of which most are semi-mature, would also need to be removed.

5.34 Impacts on habitats valued about those of a local level have not been predicted and would be more than compensated for by the scale of habitat creation (c.14ha) proposed for the western landform, which includes significant areas of new woodland, ponds and heathland/acidic grassland mosaic. The proposed western landform would be one element of the final restoration scheme for the whole quarry whereby further gains to habitats and wider ecological continuity (e.g. links between Purley/Jubilee Quarry and Hartshill Hayes Country Park) would be achieved and substantial progress and encouragement of wildlife recording has already been made in this respect.

5.35 Mitigation schemes in respect of protected species (great crested newt, badger and reptiles) will be required, where necessary under licence, and the removal of vegetation timed appropriately to avoid impacts on nesting birds. A dedicated area to the south of the quarry away from quarrying impacts has been identified as an Ecological Mitigation Area for use prior to the establishment of replacement habitats on the western landform.

5.36 The reports have concluded that there are no overriding reasons why the proposed development should not proceed subject to a number of recommendations suggested by the ecological specialists and to any other conditions which may be reasonably imposed by the planning authority to ensure the continued protection and enhancement of wildlife.
Noise

5.37 The current planning permission for Mancetter Quarry contains conditions which restrict operations to certain hours and sets noise limits for daytime and night-time operations for noise sensitive locations and a separate limit for private gardens and public open spaces.

5.38 With regard to noise the National Planning Policy Framework (NPPF) contains various aims including that noise from a new development should avoid giving rise to significant adverse impacts on health and quality of life, and that other adverse impacts should be mitigated and reduced to a minimum including through the use of conditions.

5.39 Technical guidance on noise was provided in more detail in the accompanying document “Technical Guidance to the National Planning Policy Framework”, dated March 2012, which was superseded in March 2014 by the Planning Practice Guidance.

5.40 The proposed development will bring extraction operations and overburden placement closer than currently permitted operations to Delamere Fisheries, and a few dwellings on Purley Chase Lane, Ridge Lane and Oldbury Road. The proposed extraction operations will be slightly further away than currently permitted extraction areas from dwellings in Mancetter about 2 km to the north and from Oldbury village to the south east of the quarry. The overburden material from the extension area will be placed in landforms to the west of the extension area or within previously worked areas of the quarry, with the stone transported by dump truck to the existing processing plant site.

5.41 Mineral site noise does not appear to have any significant impact on fauna in the vicinity of working sites. Mineral sites are well recognised as breeding sites for species such as badgers and even shy species of birds.

5.42 A noise assessment has been undertaken by Walker Beak Mason and a copy of the technical report is included at Appendix 5.

5.43 Baseline noise surveys were originally undertaken in October and November 2011. Further baseline noise surveys were undertaken in May and June 2014 to supplement the baseline noise survey data obtained in 2011.

5.44 The report does not address the noise arising from HGV movements on the local road network owing to the fact that the output of the quarry will be similar to the current output with no significant change in quarry related HGV traffic. Neither does the report provide a detailed assessment for the use of the asphalt plants in extended hours of operation and at weekends, since that has been the subject of a planning appeal by Tarmac in 2011 which was upheld.

5.45 The overall potential impacts from the extension area that have been considered relate to noise from the excavation, processing and overburden activities and the movement of material within the site, affecting the nearest noise sensitive locations to the proposed extension area.

5.46 Noise limits at dwellings and for Delamere Fisheries for quarry site noise associated with the extension area and proposed landform are suggested in the report, based on the guidance contained within the Planning Practice Guidance and having regard to the existing planning
permission and measured background noise levels at locations representative of the nearest noise sensitive locations to the site.

5.47 In this situation, where the occupant of one of the nearest dwellings to the extension boundary is the landowner, it would not be appropriate to suggest site noise limits at that dwelling, Oldbury Farm, which would impose an unreasonable burden on the mineral operator. At the same time, in preparing a noise report covering a planning application or carrying out work for an environmental assessment on noise, it is usual to suggest conditions which would ensure that the operations comply with environmentally acceptable noise limits at all times.

5.48 The report’s author considers that it would not normally be appropriate to require a daytime limit below 45 dB LAeq, 1 hour, free field at dwellings when background noise levels are below 35 dB LA90, 1 hour, free field as such a limit should prove tolerable to most people in rural areas. The following noise conditions are therefore proposed as a basis for discussion:

“For routine extraction and processing operations, the free-field Equivalent Continuous Noise Level, dB LAeq, 1 hour, free field, due to daytime operations on the site, shall not exceed a site noise limit of between 45 and 50 dB LAeq, 1 hour, free field at the dwellings, as set out in the table below. Measurements taken to verify compliance shall have regard to the effects of extraneous noise and shall be corrected for any such effects.”

<table>
<thead>
<tr>
<th>Position</th>
<th>Location Description</th>
<th>Site Noise Limit dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Westwood Road</td>
<td>49</td>
</tr>
<tr>
<td>2</td>
<td>Outwoods Farm</td>
<td>45</td>
</tr>
<tr>
<td>3</td>
<td>Quarry Farm</td>
<td>50</td>
</tr>
<tr>
<td>4</td>
<td>Oldbury Farm</td>
<td>45</td>
</tr>
<tr>
<td>5</td>
<td>Oldbury Village</td>
<td>45</td>
</tr>
<tr>
<td>6</td>
<td>Ridge Lane</td>
<td>45</td>
</tr>
<tr>
<td>7</td>
<td>Delamere (Fisheries)</td>
<td>45</td>
</tr>
</tbody>
</table>

“For temporary operations, the free-field Equivalent Continuous Noise Level, dB LAeq, 1 hour, free field, due to daytime operations on the site associated with the formation of the Proposed Tip, shall not exceed a site noise limit of 60 dB LAeq, 1 hour, free field at Oldbury Farm or 55 dB LAeq, 1 hour, free field at all other dwellings. Measurements taken to verify compliance shall have regard to the effects of extraneous noise and shall be corrected for any such effects.”

“For temporary operations such as site preparation, soil and overburden stripping, bund formation and final restoration, the free-field noise level due to work shall not exceed 70 dB LAeq, 1 hour, free field at the dwellings. Temporary operations shall not exceed a total of eight weeks in any calendar year for work close to any individual noise sensitive property where the suggested noise limit for routine operations is likely to be exceeded.”

5.49 Site noise calculations have been undertaken for selected receiver locations for a variety of combinations of activity in the extension area. The calculated site noise levels are presented for inspection and comparison with the suggested site noise limits for the noise sensitive locations.

5.50 Mitigation measures are identified in order to reduce the potential noise impact of the proposed operations in the extension area on the dwellings and Delamere Fisheries principally restriction on the hours of operation for some of the activity.
5.51 The assessment concludes that the suggested daytime, night-time and temporary operation site noise limits, based on recommendations in the Planning Practice Guidance, are met for most of the proposed operations in the extension area at the selected locations.

5.52 For some of the time a lower daytime noise limit, based on not exceeding background noise levels by more than 10 dB(A), would be met. However, it is considered that attempting to demonstrate compliance with the lower daytime limit would impose unreasonable burdens on the mineral operator and would not be appropriate in these circumstances.

5.53 On the basis of calculated site noise levels at acceptably low level for quarrying in the extension area and sensible restrictions on the hours of operation associated with the western landform, the report concludes that noise from the proposed site operations should be rated as satisfactory at the dwellings.

**Blast Vibration**

5.54 Blasting is currently controlled at the site by conditions 38 and 39 of the parent permission ref NW20/00CM001. Condition 38 states that no blasting shall take place unless an audible warning has been sounded. Condition 39 states that blasting operations shall be carried out in such a manner to minimize vibration, noise and over air pressure and peak particle velocity attributable to any blast shall not exceed 6mm per second in 95% of all blasts.

5.55 The blasting regime in the proposed extension area will be similar to that used in the existing quarry. The optimum blast design may vary from blast to blast and will necessarily be decided by the quarry operator with reference to the site specific conditions and in order to comply with the recommended vibration criteria. It is important to realise that for any given blast it is very much in the operator’s interest to always reduce vibration, both ground and airborne to the minimum possible in that this substantially increases the efficiency and hence economy of blasting operations.

5.56 The fact that the human body is very sensitive to vibration can result in subjective concern being expressed at energy levels well below the threshold of damage.

5.57 A person will generally become aware of blast induced vibration at levels of around 1.5mms$^{-1}$, although under some circumstances this can be as low as 0.5 mms$^{-1}$. Even though such vibration is routinely generated within any property and is also entirely safe, when it is induced by blasting activities it is not unusual for such a level to give rise to subjective concern. Such concern is also frequently the result of the recent discovery of cracked plaster or brickwork that in fact has either been present for some time or has occurred due to natural processes.

5.58 Virtually all complaints regarding blasting arise because of the concern over the possibility of damage to owner-occupied properties. Such complaints are largely independent of the vibration level. In fact, once an individual's perception threshold is attained, complaints can result from 3% to 4% of the total number of blasts, irrespective of their magnitude.

5.59 An assessment of the environmental impact of blasting has been undertaken by Vibrock Limited and a copy of the technical report is included at Appendix 6.
5.60 The assessment commenced with an inspection of the site and monitoring of a production blast in November 2011. The blast design employed on that day is typical of production blasting at Mancetter Quarry. The blast was monitored using twelve instruments which were sited in a field adjacent and to the south west of the current extraction area. The instrumentation was located at varying distances from the blast. The data obtained was used to generate a regression curve plot for blasting at Mancetter Quarry.

5.61 The report recommends a criterion for restricting vibration levels from production blasting in order to address the need to minimise annoyance to nearby residents. The recommended criterion is 6 mms^{-1} for 95% of events, from the current planning conditions, which represents a satisfactory magnitude for vibration from blasting at Mancetter Quarry.

5.62 All blasts at Mancetter Quarry, both those within the proposed extension area and those within the present quarry shall be carried out in such a manner as to comply with a vibration criterion of 6 mms^{-1} peak particle velocity at a 95% confidence level as measured in any of the three planes of measurement.

5.63 All vibration will be of a relatively low order of magnitude and would be entirely safe with respect to the possibility of the most cosmetic of plaster cracks. All vibration will also be well below those levels recommended for blast induced vibration as being satisfactory within the previously discussed British Standard Guide BS 6472-2: 2008.

5.64 With such low ground vibration levels, accompanying air overpressure would also be of a very low and hence safe level, although possibly perceptible on occasions at the closest of properties.

5.65 With regards to the pipelines, these are to be rerouted to the south west such that there will be a minimum 75 metre standoff zone from blasting operations. Given that the overburden depth is 65 metres, the actual closest distance of blasting operations to the pipelines is a minimum of approximately 100 metres. Vibrock recommend a vibration limit of 75 mms^{-1}, as recorded on the pipeline.

5.66 In relation to Air Overpressure, Vibrock’s considerable past experience of air overpressure measurement and control leads them to the firm conclusion that it is totally impracticable to set a maximum air overpressure limit, with or without an appropriate percentile of exceedances being allowed, simply because of the significant and unpredictable effect of variable weather conditions. However With a sensible ground vibration limitation the economics of safe and efficient blasting will automatically ensure that air overpressures are kept to reasonable levels. Vibrock therefore recommend that in line with the current best accepted modern practice in the extraction industries 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.

5.67 The report concludes that if Lafarge Tarmac follows the recommendations given in the report, there is no reason why blasting operations within the future extraction area at Mancetter Quarry will give rise to adverse comment due to induced vibration at any of the dwellings or structures in the vicinity.
**Air Quality and Dust**

5.68 Dust is controlled at the site through conditions attached to the substantive permission, specifically condition number 15 which required the submission of a scheme for the suppression of dust arising from quarrying activities including from vehicle movements, and provision of a method of dealing with any complaints. The scheme was submitted to and approved in writing by the Mineral Planning Authority.

5.69 The Air Quality Regulations (AQR) prescribe National Air Quality Strategy (NAQS) objectives to be achieved for a range of pollutants. These include nitrogen dioxide (NO2), which is usually associated with exhaust emissions from traffic, and fine particulate matter (PM10), which can arise from many sources including traffic but also from industrial activities such as quarrying.

5.70 Dust is generally regarded as particulate matter up to 75 µm (micron) diameter and can be considered in two categories. Fine dust, essentially particles up to 10 µm, is commonly referred to as PM10 and is measured to agreed standards and forms part of Air Quality Objectives (AQO). Coarser dust (essentially particles greater than 10 µm) is generally regarded as ‘nuisance dust’ and can be associated with annoyance, although there are no official standards (such as AQO) for dust annoyance. Nuisance dust is more readily described than defined as it relates to the visual impact of short-lived dust clouds and the long-term soiling of surfaces.

5.71 Although it is a widespread environmental phenomenon, dust is also generated through many human activities. This includes at minerals sites and surface mines, also by heavy industry, waste management, construction and demolition, agriculture (especially arable farming) and road transport.

5.72 For a hard rock quarry, experience indicates that nuisance effects of dust arising from hard rock quarries may extend up to 500 m from the source although, as noted in various guidance documents, residents’ concerns are most likely to be experienced within 100 m of the dust source, or sources.

5.73 An Air Quality and Dust Assessment has been undertaken by Dustscan and a copy of the technical report is included at Appendix 7.

5.74 The report was prepared with reference to current minerals industry best practice guidance, including the National Planning Policy Framework and associated Planning Practice Guidance relating to Air Quality and recent guidance regarding dust assessment produced by the Institute of Air Quality Management (IAQM).

5.75 As set out in the request for a scoping opinion, the proposed extension to Mancetter Quarry would not result in any increase in total output from the quarry. Importantly, it is not proposed to alter the operation of the two existing roadstone coating plants, which lie within the quarry, and there would be no change to the scale of operations on site or to the number or type of vehicles exporting materials from the site.

5.76 Consequently, the assessment concentrates on potential air quality and dust impacts arising from mineral extraction and restoration associated with the proposed quarry extension, including the RAP operation, which takes place largely on a campaign basis within the Purley Quarry section of Mancetter Quarry.
5.77 Some quarry processes are regulated under environmental legislation. PGN 3/08(12) states that some mineral processing activities, such as crushing, grinding, screening and grading are prescribed under LAPC/LAPPC (Local Air Pollution Control/Local Air Pollution Prevention and Control) in relation to emissions of particulate matter (dust) but, as stated in PGN 3/08(12), are “...not normally likely to result in the release into air of particulate matter except in a quantity which is trivial...”.

5.78 Also the roadstone coating plants are separately controlled by Environment Agency Permit and the RAP facility currently operates under a separate exemption from the Environmental Permitting (England and Wales) Regulations 2010. Emissions relating to the roadstone coating operations were therefore not considered further in the report.

5.79 The assessment notes that there is a potential for dust emissions to occur at various stages of the operation, but these can generally be controlled by good practice. Potential sources or site activities likely to give rise to dust at Mancetter Quarry are:

- Soil stripping, storage and reinstatement;
- Overburden removal, storage and reinstatement;
- Drilling and blasting;
- Mineral extraction;
- Mineral processing;
- RAP processing;
- Mobile plant (both on-site and off-site vehicle movements); and
- Wind scouring of exposed surfaces and stockpiles.

5.80 The assessment considered the potential impacts on the Air Quality Objectives (AQO) and ‘nuisance’ dust arising from the proposed quarry extension, and from Recycled Asphalt Product (RAP) processing, which also takes place at Mancetter Quarry. The assessment also considered the impacts of exhaust emissions from Heavy Goods Vehicles (HGV) and other vehicles associated with the quarry extension.

5.81 The assessment concludes that there would be essentially no adverse impacts on AQO arising from the proposed extension.

5.82 With regard to dust impacts on nearby receptors, the assessment notes that the quarry is generally well screened by woodland and most receptors are unlikely to be affected by dust arising from the proposed operations, although without mitigation, impacts are possible at Quarry Farm due to traffic using the site access road and at Oldbury Farm due to materials’ handling during Phase 3 of site restoration.

5.83 The proposed extension would be operated in accordance with Lafarge Tarmac’s Environmental Management System (EMS) for the existing quarry, which is accredited to ISO 14001. The control of dust emissions, including the current dust management scheme, forms an integral part of the EMS. Mitigation measures have also been set out in the report for specific activities likely to be associated with dust emissions arising as a result of the proposed extension. These include:

- Minimising working of soil in very dry, windy conditions, by reducing drop heights at material transfer points and controlling vehicle speeds;
- Wetting down exposed surfaces with the existing water bowser (retained at the site) if necessary, especially in periods of dry, windy weather;
• Ensuring that existing dust control measures on the plant are properly operational;
• Using only mobile plant with upward or sideways exhausts;
• Ensuring all site haulage keeps to designated haul routes;
• Sheet ing vehicles leaving the site and checking them for loose deposits that could fall onto the public highway;
• Ensuring any spillages from vehicles are cleared as quickly as possible by appropriate means to prevent unnecessary track-out onto the public highway;
• Keeping unmade access roads in good repair with vehicle speed limits being determined by the Quarry Manager according to the site and weather conditions pertaining at the time;
• Where practicable, managing stockpiles to maintain a smooth profile to minimise the spreading of loose materials and disturbing them as little as possible to encourage the formation and stabilisation of a surface crust;
• Where possible, adjusting conveyor discharge heights to minimise drop heights. It might be necessary to wet down stockpiled mineral to reduce the risk of wind-blow from exposed surfaces;
• reducing or suspending site operations causing visible dust emissions across the site boundary towards a sensitive receptor until the emissions can be controlled; and
• Empowering site personnel to take appropriate action whenever visible dust emissions are observed, or appear likely to occur, as a result of any operation or process on the site.

5.84 With mitigation, impacts are unlikely at Oldbury Farm but there remains, as with current operations, a moderate level of risk for nuisance impacts at Quarry Farm. The report notes that particular care should be taken in very dry and dusty conditions to minimise the risk of adverse dust impacts at Quarry Farm by ensuring that the site access road is kept as clean as possible and that vehicle speeds are kept within the 15 mph site speed limit.

Water Environment

5.85 An assessment of the water environment at Mancetter Quarry has been undertaken by BCL Consultant Hydrogeologists Limited via a hydrogeological and hydrological assessment and a flood risk assessment. BCL has also produced a technical note concerning the content of heavy metals in the discharge waters at the quarry (entitled Biotic Ligand Modelling of Heavy Metals (Cadmium, Nickel and Zinc) in the Discharge Waters). Copies of all three technical reports are included at Appendix 8.

5.86 The hydrogeological and hydrological report notes that the site falls within the catchment area of the River Anker but that there is no risk of fluvial flooding. Oldbury Stream receives all ingress waters pumped via treatment lagoons from the Purley and Oldbury workings and also takes rainfall runoff from the plant site in a process which has been ongoing for many years. The estimated rate of pumping is to remain at current levels, namely 300m³ per day. Rainfall runoff and seepage from the western landform will be intercepted by a perimeter ditch which has capacity for the 100-year storm and which will be detailed to discharge into the Oldbury void.

5.87 An increase of 20m will be required to the depth of dewatering drawdown required to maintain dry workings in the Oldbury void (with an associated radius of influence of circa 165m). This will not impinge on local water supplies. The average daily rate of pumping will increase in the deepened and extended void, particularly during winter months, but the increased rate will comply with the existing consented volumetric constraint.
5.88 During a 100-year storm, a rise of circa 1.75m is predicted in the water level in the vicinity of the Oldbury sump as a result of water runoff. However, as the development is classed as ‘less vulnerable’ in terms of flood risk, any backing up of water around the sump during storm conditions is deemed acceptable. Following abatement of the storm, water would be pumped from the quarry at the designated rate based upon the requirement to maintain dry workings under average conditions. The water from the sump would continue to be directed into the two existing two-stage treatment lagoons situated at the northern end of the Oldbury void. Calculations show that these lagoons will provide effective silt settlement.

5.89 The flood risk assessment notes that the application area falls within flood risk zone 1 but that the various elements of the proposed development are considered to be appropriate activities for this zone (even when accounting for the assumed changes of climate change). The assessment considers there to be negligible potential for significant flooding of the site from rainfall runoff from adjacent lands; similarly, the risk posed by flooding from groundwater is deemed manageable. The assessment also considers the risk of flooding that may be posed elsewhere within the catchment by implementation of the development and concludes that the proposals are acceptable in this regard as the rates of discharge from the proposed development will not increase.

5.90 The technical note regarding the content of heavy metals in the discharge waters comments that whilst the concentration of cadmium, zinc, nickel and aluminium in the groundwater up-gradient of the quarry is shown to exceed the relevant environmental standards, the issue with regards to Oldbury Stream is considerably diminished when viewed in the context of various key factors, namely: the natural background metal loading that would have been apparent in the pre-quarry setting; the long history of quarrying (in excess of 100 years) such that the ecosystem of the stream will have adjusted to the heavy metal content; the difference between total metal content and bioavailable fraction; and the dilution capacity afforded by the River Anker.

5.91 Nonetheless, various measures are suggested (such as limestone drains and cover materials for the western landform) to be undertaken by the quarry operator to adjust water quality in order to move away from what has prevailed over the last 100 years towards generic environmental quality standards. This will have the added benefit of providing a timely trial of various methods which may be appropriate for water management in the final restoration.

5.92 Overall, the reports conclude that there are considered to be no overriding hydrological or hydrogeological related reasons why the proposed development should not proceed in the manner described in the application subject to the recommendations advanced and any other conditions which may be reasonably imposed by the planning authority.

**Archaeology and Cultural Heritage**

5.93 Cultural heritage is represented by a wide range of features that result from past human use of the landscape. These include historic structures, many still in use; above ground and buried archaeological monuments and remains of all periods; artefacts of anthropological origin; and evidence that can help reconstruct past human environments. In its broadest form, cultural heritage is represented by the landscape and townscape itself.
5.94 A Cultural Heritage Assessment has been undertaken by Andrew Josephs Associates and a copy of the technical report is included at Appendix 9 of the Environmental Statement.

5.95 The scope of work was discussed and agreed with Anna Stocks of the County Archaeological Service and discussions have continued throughout the project. A site walkover was carried out with Ms Stocks on 19th May 2014. Consultations were also held with English Heritage. It was agreed that there was no archaeological potential within the working and worked quarry areas and that this assessment should concentrate on the proposed extension area and the setting of designated features in the vicinity.

5.96 The Warwickshire Historic Environment Record (WHER) and online databases maintained by the National Monuments Record were searched for documented sites and monuments within the Proposed Extension Area and a 3km radius surrounding it. This was considered an appropriate distance to place the extension area within its archaeological context and allow an assessment of potential effects upon designated assets to be undertaken.

5.97 The Warwickshire County Record Office (WCRO) was visited in order to check historic maps of the area, as well as any other pertinent documents and local history books.

5.98 No designated features of cultural heritage importance lie within the proposed extension area.

5.99 There are three scheduled monuments within 3km of the extension area. These comprise:

- Oldbury Camp - located approximately 410m southeast of the extension area at an elevation of c.178m OD;
- Round Barrow - situated near the entrance to Hartshill Hayes Country Park approximately 1.50km to the southeast of the extension area; and
- Hartshill Castle - located approximately 1.92km southeast of the extension area.

5.100 There are six listed structures within 3km of the extension area. These comprise:

- Ansley Hall
- Ansley Barn
- Hartshill Castle Ruins
- Bridge 33, Coventry Canal
- Milestone between Bridges 34 and 35 Coventry Canal
- Crossing Keepers Cottage

5.101 There are no Conservation Areas within the 3km area surrounding the extension area.

5.102 There are no World Heritage Sites, Registered Parks and Gardens or Registered Battlefields within 3km of the extension area.

5.103 In total, some 108 archaeological sites, findspots, buildings and other landscape features are recorded for the 3km area surrounding the extension area. These include evidence for Upper Palaeolithic and Mesolithic activity, Neolithic and Bronze Age findspots and flint scatters, Romano-British and medieval settlement around Mancetter and Hartshill, and numerous quarries, mines and other industrial features reflecting the area’s rich industrial heritage. Evidence for Iron Age and Anglo-Saxon settlement within the area is limited to a small
number of archaeological sites and findspots. Only two locations occur within the immediate vicinity of the extension area.

5.104 No sites, finds or features are recorded within the extension area, and the map regression has indicated that ploughing and the removal of field boundaries from the late 18th century onwards would have disturbed much of the area and severely damaged or destroyed the upper levels of any archaeological features or deposits occurring within it.

5.105 A walkover survey was carried out in March 2012. The walkover covered the whole of the extension area and was designed to assist in defining the presence/absence of archaeological remains within the area and the potential impacts of existing and proposed land use on their survival and condition.

5.106 The walkover survey found no artefacts, features or other archaeological evidence predating the late 20th century and the pasture fields show evidence of improvement.

5.107 The evidence would suggest that the extension area has only a low potential for archaeology. However, this may reflect a lack of systematic field-based examination and it may be more accurate to conclude that the overall potential is moderate.

5.108 The topography of parts of the extension area would have been potentially desirable to settlement in pre-modern times with far-reaching views to the north-east and it has been agreed with Warwickshire County Council that some pre-determination archaeological evaluation should take place in part of the area. The archaeological evaluation will comprise detailed geophysical survey and trial-trenching carried out on approximately 8ha, within an arable field.

5.109 The results of the geophysical survey would inform the location of trenches. In the absence of geophysical anomalies being identified, a random but stratified trench layout would be employed. The results would be provided to Warwickshire County Council before the determination of the planning application in order to allow an informed decision to be made in relation to the significance of any archaeology identified.

5.110 The field-based evaluation will assist in identifying whether sub-surface archaeology survives, its condition and significance. It is considered unlikely that archaeology of such importance as to require preservation in situ will be identified.

5.111 The scope of any mitigation will be directly related to the results of the evaluation but it is likely that, as national planning policy recognises, should archaeology of less than national importance be identified, an acceptable alternative is preservation by record through targeted archaeological excavation, recording, analysis and publication appropriate to the significance of the archaeological resource.

5.112 In the event that no archaeology is identified by the evaluation, it may not be necessary for a watching brief to be carried out.

5.113 Oldbury Camp Scheduled Monument lies at its nearest point approximately 410m southeast of the extension area. Both Warwickshire County Council and English Heritage in their scoping responses requested that the setting of the Camp be assessed against the potential impacts of the proposed extension.
5.114  A visit took place in March 2012 before the trees were in leaf and this may be considered an optimal time to assess effects. A further visit was carried out in December 2013.

5.115  The Oldbury Camp Scheduled Monument is an example of an Iron Age Hillfort. The integrity of the monument has been compromised by the construction of a reservoir within it and it is unlikely that any significant archaeological deposits survive within the interior. The rampart and ditch surviving on three sides appear relatively intact. It is overgrown with trees and undergrowth. The current quarry, which at its closest point lies immediately adjacent to the scheduled boundary, has affected its setting.

5.116  There is no intervisibility with the extension area from the earthworks of the monument due to the woodland within the monument and a buffer of trees, shrubs and brambles between the monument and the current quarry. At one point on the scheduled boundary, but beyond the extent of earthworks, a view is possible across the current quarry. However, should the woodland ever be removed, views towards the extension area would be clear within the middle distance.

5.117  The monument is not discernible from the extension area, although its location can be seen as a wooded hill. It is considered that the effects of working the extension area upon the setting of Oldbury Camp is slightly adverse.

5.118  However, the extension area would produce overburden that would partly be placed within the south-eastern extent of the current workings adjacent to the scheduled monument to restore the ground-levels to pre-quarry contours. A buffer of at least 100m of heathland will be maintained near the monument under the proposed restoration scheme and an opportunity exists to place an interpretation panel on the restored bridleway close to the monument’s boundary. This would be a positive impact of slight magnitude upon the setting of the monument.

5.119  The assessment concludes that the slightly adverse effects upon the setting of Oldbury Fort scheduled monument created by extraction within the extension area will be offset by the early restoration of the quarried area nearest the monument. The overall effect could therefore be considered to be neutral.

5.120  There is no evidence of any significant archaeological sites within the extension area.

5.121  The proposed development will have no significant effects upon known archaeology or cultural heritage assets and therefore fully accords with both local and national cultural heritage policy.

Soils and Agricultural Land Quality

5.122  An assessment of the soil resources and agricultural quality and use of the area associated with the proposed extension and western landform feature has been undertaken by Land Research Associates. A copy of the technical report is included at Appendix 10 to the Environmental Statement.

5.123  The report is based on a soil and agricultural desk study, and a survey of the land in June 2014.
In terms of existing use, the land in the north is a grass field used for fattening cattle. The southern fields are in arable use, one ploughed and bare ground, and the other growing winter barley. The land is not subject to any agri-environment scheme.

The field survey was based on observations at intersects of a 100 m grid, giving a sampling density of one observation per hectare. During the survey soils were examined by a combination of pits and augerings to a maximum depth of 1.2 m.

The survey shows a mixture of heavy textured soils developed in till, clay and mudstone, and lighter textured soils occurring on sandstone bands.

The heavy soils are mainly slowly permeable, and are likely to be affected by winter wetness due to water ponding over the clay layers. They are limited in the range of food and fibre production they can support, being mainly limited to autumn sown crops and grass, and have a poor capacity to absorb excess winter rainfall. They provide moist, neutral habitats for plant communities.

The lighter, loamy, soils are mainly permeable in their upper layers, and where over sandstone drain freely (wetness class I). Over slowly permeable clay, water drains quickly laterally on the steep slopes, and the soils suffer only minor winter wetness. They can potentially support a fairly wide range of food and fibre production, but very steep slopes make cultivation difficult. They provide moist, neutral habitats for plant communities.

In terms of Agricultural Quality the assessment notes that the agricultural quality in the survey area is determined partly by wetness caused by slow drainage over slowly permeable subsoils where the soils are heavier, and partly by droughtiness limitation where the soils are over sandstone. Slope is also an important factor.

Seasonal wetness is the principal limitation to agricultural land quality in the heavy land and the majority is of moderate quality in sub-grade 3b. The loamier soils give best and most versatile land in subgrade 3a where the slopes are less steep, but gradient is a limiting factor over some of the site.

In terms of soil handling and restoration the report recommends 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.

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. 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.

Public Rights of Way

There are short term localised negative impacts of low significance during the period of around three years whilst AE109X is temporarily diverted and route AE108 is subject to
managed crossing points. Beyond this period and upon restoration of the wider Mancetter Quarry complex there are significant opportunities for enhancement to the network through the creation of additional routes and paths of greater variety to the end users. The short term diversions required to mitigate affects and restoration proposals can be satisfactorily secured through a combination of orders and a Section 106 planning agreement to ensure delivery.
6. INTERACTIONS AND EFFECTS

6.1 Potential interactions and effects have been considered in detail in the accompanying technical reports. As outlined, the proposed development is not anticipated to present any insurmountable environmental difficulties. The implementation of best practice and appropriate mitigation measures will ensure that any effects are minimised. It is also considered that the previous operations on this site demonstrate that an appropriate balance can be achieved.

6.2 It is considered that the implementation of the proposed development in conjunction with the current operations on the site will not result in significant adverse cumulative effects. The proposed development is designed to operate in conjunction with the existing operations on the site, and extend the life of the operations only insofar as the extant planning consents for the site already allow (i.e. to January 2025).

6.3 The potential short term effects of the continued excavation and processing of mineral on the site will include traffic, noise, vibration and dust emissions and landscape and visual impacts.

6.4 As outlined, the proposed development provides for the progressive restoration of the scheme and it is considered that in the long term, the visual impact will be minimised. The excavation and processing of mineral will inevitably result in an increase in traffic above a non-operational baseline. As outlined, however, the operations will continue at the current rate of output and the impact of HGV movements on amenity was considered in detail by a recent appeal. Dust and noise effects will be minimised and mitigated. This site has been in operation since the early 1800s and it is considered that continued operations at the same rate of output will not create additional nuisance.

6.5 The interaction of HGV traffic and the creation of dust and noise has the potential to create a nuisance, if not properly addressed. As outlined, mitigation will avoid and minimise the effects. In addition, such effects are temporary and medium term in nature.

6.6 Generally, the short and medium term impacts of the extraction operations are considered to be temporary and largely neutral due to the undertaking of operations in accordance with existing planning permissions and through the implementation of additional mitigation measures where necessary. Operations associated with the creation of the western landform are also temporary in nature and will largely lead to medium and long term benefits on the landscape, visual amenity and ecology. The restoration of the site in the long term will result in positive, permanent impacts, including habitat creation and enhanced visual and landscape impacts.
7. **SUMMARY AND CONCLUSIONS**

7.1 This Environmental Statement has been prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2011, to accompany a planning application seeking planning permission for a lateral extension to the existing quarry, creation of permanent landform features, consolidation and regularisation of existing operations and associated ancillary development at Mancetter Quarry.

7.2 The preparation of the ES draws upon the expertise of a range of specialist consultants, including planners; highway consultants; landscape architects; ecologists; noise, vibration and air quality experts; geotechnical, hydrogeological, hydrological and soils experts; and, cultural heritage experts; along with input from representatives of Lafarge Tarmac Trading Limited, including the quarry manager.

7.3 The EIA has demonstrated that the proposed development will not give rise to any significant adverse effects.
Appendix 1 - Warwickshire County Council Scoping Opinion
Appendix 2 - Transport Statement
Appendix 3 – Landscape and Visual Impact Assessment
Appendix 4 – Ecological Impact Assessment
Appendix 5 – Noise Assessment
Appendix 6 – Assessment of the Environmental Impact of Blasting
Appendix 7 – Air Quality and Dust Assessment
Appendix 8 – Hydrogeological and Hydrological Assessment and Flood Risk Assessment
Appendix 9 – Cultural Heritage Assessment
Appendix 10 – Soil Resources and Agricultural Quality