Non-Technical Summary

Shenington Review of Minerals Planning Permission (ROMP), Shenington, Banbury, Oxfordshire

The Trustees of the Needler D4 Settlement

August 2011











Introduction

The aim of this Non-Technical Summary is to briefly describe the main points discussed in the Environmental Statement in a clear manner, without the use of technical jargon and phraseology.

Significant reserves of minerals were discovered in the Shenington area during the middle of the 20th century which resulted in a planning application being submitted seeking permission to extract them. In 1957 the Minister of Housing and Local Government granted planning permission for the extraction of minerals at several sites around the Shenington area that were contained in that planning application. The Trustees of the Needler D4 Settlement (The Trustees) submitted a Review of Minerals Permission (ROMP) application to Oxfordshire County Council in 1997 to update that 1957 planning permission by providing a set of planning conditions that accorded with up to date environmental standards.

It was confirmed by Oxfordshire County Council in 2008 that an Environmental Statement (ES), which assesses the effects of the proposals on the environment, needed to be submitted to accompany the 1997 application. The Trustees have subsequently submitted an ES. Copies of the ES and all the planning application documentation can be inspected at Oxfordshire County Council offices and Cherwell District Council's offices, as well as on their respective websites www.oxfordshire.gov.uk and www.oxfordshire.gov.uk as a provide a summary of the ES using non-technical language.

The ES that accompanies this ROMP covers eight separate areas:

- ☐ Site 1 North Land East of Uplands Farm;
- ☐ Site 1 South Land South of Quarry Road;
- ☐ Site 2 Land East of Alkerton Hill, Balscote;
- ☐ Site 3 Land at Middle Hill Farm, Epwell Road;
- ☐ Site 4 Land to the North and East of Shenington Road, Epwell;
- ☐ Site 6 Land to the South and West of Sugarswell Farm:
- ☐ Site 7 North Land at Quarry Farm, Rattlecombe Road; and

☐ Site 7 South — Land South of Rattlecombe Road.

These areas were granted planning permission for the extraction of minerals by the then Minister of Housing and Local Government in 1957, along with other areas that have either now been extracted, or are not considered in this ES for a variety of reasons. The areas that are being considered in this ES, known as the Review Areas, are shown on **Figure 1** in blue. Those areas within the red lines but not shaded in blue are not being reviewed. The planning permission for minerals in those unshaded areas which still exists is therefore being relinquished by The Trustees.

The Government states that minerals are essential to the nation's prosperity and quality of life. The Government also states that minerals development is different from other forms of development because minerals can only be worked (i.e. extracted) where they naturally occur.

The ES has considered the likely significant environmental effects of the Proposed Development. Effects have been assessed using a variety of techniques including:

- ecological site surveys;
- □ landscape and visual appraisal including the preparation of photographs from local viewpoints;
- ☐ air quality assessments;
- predictions of noise levels;
- ☐ traffic impact assessment;
- flood risk and drainage assessments;
- ☐ desk based and site walkover archaeological research;
- □ agricultural land and soils;
- hydrological surveys; and a
- □ socio-economic assessment.

The ES identifies the significant environmental effects arising from the proposals on the environment. The extraction of minerals has the potential to cause effects on the environment.

Project Description

Planning permission has already been granted in 1957 and this ES has been submitted to accompany the Review of Minerals Planning Permission application submitted in 1997. The planning application and ES falls within the jurisdiction of Oxfordshire County Council.

The Proposed Development will affect land which is predominantly rural with a number of agricultural fields, farms and outbuildings as well as a business park, an airfield, other buildings and a number of settlements in the vicinity including Shenington, Alkerton, Balscote, Shutford, Epwell, Upton and Hornton.

Some work may be required prior to extraction starting. This could include tree survey work in order to avoid damage to trees or their root protection areas or remedial pruning for management reasons. In addition, Sites 1 North and 1 South do not face on to the highway and prior to extraction recommencing at these sites separate planning permission will have to be applied for and granted for an acceptable access route; indicative access routes are shown on the plans that are contained within the ES.

Mineral Extraction and Processing Scheme

All of the sites will be worked using a broadly similar extraction method. The minerals will be extracted using a mechanical excavator, before being transported off site on to the local highway network in 20 tonne trucks, or Heavy Goods Vehicles (HGVs).

Extraction at Sites 2, 3, 4, 6, 7 North and 7 South has been split into phases so that the whole of each site will not be subject to extraction at the same time. Also, each phase will not necessarily be fully excavated immediately but minerals will be extracted dependent on weather, ground conditions and market conditions subject to demand. This will help to reduce any environmental effects at any one time.

In addition, each site will require a site office (probably of portacabin design), a small fuel storage depot, a weighbridge (to weigh vehicles on entry and exit to determine how much minerals they are transporting) and a wheelwash facility (to clean the wheels of the HGVs so that they do not transport dirt from the sites on to the public highway network).

The following hours of operation are proposed for each site:

- □ 7:00am 7:00pm Monday Friday (excluding Bank Holidays)
- □ 7:00am 1:00pm Saturday

■ No work on Sundays

The planning permission under review covers approximately 122.1 hectares and will yield a total of approximately 4,811,000 tonnes of saleable minerals from eight separate sites. The eight sites are described below:

Site 1 North (Land east of Uplands Farm)

Site 1 North covers 2.2ha and the proposed extraction area covers 1.1ha. It will involve the initial removal of approximately 24,600m³ of soil before the minerals are reached. The site contains approximately 76,000 tonnes of saleable mineral and extraction will take under 1 year to complete. The amount of minerals extracted per annum is called the extraction rate. The typical rate of production will involve 3,800 HGV movements from the site per year, which is based on the extraction rate, the capacity of the local highway network to accommodate additional traffic and the capacity of the trucks used to transport minerals off site (20 tonne HGVs loaded with minerals).

Site 1 South (Land south of Quarry Road)

Site 1 South covers 3.7ha and the proposed extraction area covers 1.8ha. It will involve the initial removal of approximately 38,900m³ of soil before the minerals are reached. The site contains approximately 142,000 tonnes of saleable mineral,

with extraction taking between 1 and 2 years. The typical rate of production will be between 87,500 and 142,000 tonnes per annum and will result in between 4,375 and 7,100 HGV movements from the site per year.

Site 2 (Land east of Alkerton Hill, Balscote)

Site 2 covers 9.8ha and the proposed extraction area covers 5.5ha. It will involve the initial removal of approximately 122,200m³ of soil before the minerals are reached. The site contains approximately 350,000 tonnes of saleable mineral and extraction will occur over a period of between 1 and 4 years. The typical rate of production will be between 87,500 and 350,000 tonnes per annum and will involve between 4,375 and 17,500 HGV movements from the site per year.

Site 3 (Land at Middle Hill Farm, Epwell Road)

Site 3 is split into 3 phases and, in total, covers 21.0ha with the proposed extraction area covering 16.2ha. Accounting for all phases, it will involve the removal of approximately 298,200m³ of soil before the minerals are reached. The site contains approximately 1,057,400 tonnes of saleable mineral and extraction will occur over a period of between 2 and 12 years. The typical rate of production will be between 87,500 and 700,000 tonnes per annum and will involve between 4,375 and 35,000 HGV movements from the site per year.

Site 4 (Land to the north and east of Shenington Road, Epwell)

Site 4 is split into 3 phases and, in total, covers 29.7ha with the proposed extraction area covering 22.9ha. Accounting for all phases, it will involve the removal of approximately 408,400m³ of soil before the minerals are reached. The site contains approximately 1,244,000 tonnes of saleable mineral and extraction will occur over a period of between 2 and 14 years. The typical rate of production will be between 87,500 and 700,000 tonnes per annum and will involve between 4,375 and 35,000 HGV movements from the site per year.

Site 6 (Land to the south and west of Sugarswell Farm)

Site 6 is split into 3 phases and, in total, covers 26.2ha with the proposed extraction area covering 18.5ha. Accounting for all phases, it will involve the removal of approximately 344,300m³ of soil before the minerals are reached. The site contains approximately 813,000 tonnes of saleable mineral and extraction will occur over a period of between 2 and 10 years. The typical rate of production will be between 87,500 and 700,000 tonnes per annum and will involve between 4,375 and 35,000 HGV movements from the site per year.

Site 7 North (Land at Quarry Farm, Rattlecombe Road)

Site 7 North is split into 3 phases and, in total, covers 20.2ha with the proposed extraction area covering 13.6ha. Accounting for all phases, it will involve the initial removal of approximately 240,700m³ of soil before the minerals are reached. The site contains approximately 811,000 tonnes of saleable mineral and extraction will occur over a period of between 2 and 10 years. The typical rate of production will be between 87,500 and 700,000 tonnes per annum and will involve between 4,375 and 35,000 HGV movements from the site per year.

Site 7 South (Land south of Rattlecombe Road)

Site 7 South is split into 2 phases and covers 9.3ha with the proposed extraction area covering 5.3ha. Accounting for both phases, it will involve the initial removal of approximately 114,700m³ of soil before the minerals are reached. The site contains approximately 318,000 tonnes of saleable mineral and extraction will occur over a period of between 1 and 4 years. The typical rate of production will be between 87,500 and 318,000 tonnes per annum and will involve between 4,375 and 15,900 HGV movements from the site per year.

Environmental Effects

The ES sets out the potential effects of the Proposed Development and the actions necessary to minimise any effects on the environment. The significant environmental effects and the measures to reduce any adverse effects, if required, are set out below. In addition, a number of planning conditions, which are requirements that the Council will place on the planning permission that the operator, which is the company who will undertake the physical work of extracting the minerals, will have to adhere to before and during extraction, where appropriate.

Socio Economics

It is anticipated that up to 40 full time equivalent (FTE) jobs could be created if extraction occurs at all eight sites at the same time. This comprises approximately 3 FTE jobs on the smaller sites (Sites 1 North, 1 South, 2 and 7 South), and approximately 6 – 7 FTE jobs on the larger sites (Sites 3, 4, 6 and 7 North).

In addition, it is anticipated that an increase in local employment will indirectly assist the local economy by those employees spending in the local retail establishments.

It is therefore considered that the Shenington ROMP will have a minor beneficial effect on the Socio Economic status of the local area.

Traffic and Transport

The main period for traffic movements will be during extraction when the minerals are transported from each site. This will involve generating Heavy Goods Vehicle traffic movements on local roads in the vicinity of each site before vehicles reach the A422 and beyond. However, these effects would be temporary.

The number of HGVs using the local highway network will depend on how quickly the minerals are extracted and transported off site. If the minerals are extracted quickly then the HGV movements will generally be higher per day/ week/ month and year, but shorter term. If the minerals are extracted more slowly then the HGV movements will generally be

lower per day/ week/ month and year, but longer term.

The HGVs will be directed away from travelling through the surrounding villages as much as possible, along routes to be agreed with Oxfordshire County Council. Also, it is anticipated that once the HGVs reach the main roads locally (the A422) then they will go in different directions, so not all the HGV traffic will go through Banbury or Stratford on Avon for example.

A number of planning conditions have been suggested by The Trustees to minimise any effects in the sites or on the surrounding area arising from Traffic and Transport associated with mineral extraction. The Council could also impose a number of planning conditions to ensure this and the operator will have to adhere to those planning conditions if and when extraction recommences.

It is therefore considered that the Shenington ROMP will have a minor adverse effect on Traffic and Transport during extraction of the minerals.

Noise and Vibration

The extraction of minerals has the potential to have an effect on local properties and the surrounding area in terms of noise and vibration associated with extraction activities. Noise levels have been predicted at a number of local properties, previously agreed with the Council, to determine the effects extraction would have at those properties. These results show that the soil removing and restoration (see 'Landscape and Visual' section below) phases will be able to be carried out and stay within the recommended noise levels at those local properties as set out in Government guidance.

These results have also informed the design of the extraction. The soil that lies above the mineral that needs to be removed before the minerals are reached, as set out in 'Project Description' above, will be formed into piles called bunds, and located in specific locations on site boundaries to assist in minimising any noise arising from the extraction of the minerals. New machinery would be used

where possible; there will be regular liaison with local residents to inform them of operations on sites and the site manager will monitor noise throughout extraction.

A number of planning conditions have been suggested by The Trustees to minimise any effects in the sites and on the surrounding area arising from Noise and Vibration from mineral extraction and associated activities. The Council could impose a number of planning conditions to ensure this and the operator will have to adhere to those planning conditions if and when extraction recommences.

It is therefore considered that the Shenington ROMP can operate in accordance with the Government guidance.

Landscape and Visual

The extraction of the minerals has the potential to have an effect on the landscape and views in and around the surrounding area. Assessments have been made on the visual impact from a number of residential properties, other non residential properties, Public Rights of Way and some local roads. There will be some adverse effects during the extraction phases when soil will be removed and stored to allow the minerals to be extracted, as well as hedgerows and trees being removed. These adverse effects will remain during the temporary extraction period.

When the extraction is completed restoration must occur. Restoration is the requirement that after extraction of the minerals has been completed, the site shall be restored with the previously removed soil.

Once restoration has taken place then aftercare must occur. Aftercare is the requirement that steps shall be taken to bring the previously excavated and now restored land back to the required standard for one or all of the following uses: agriculture, forestry or amenity. In this instance, the land, which is currently predominantly in agricultural use, will be returned to predominantly agricultural use.

More hedgerows and trees will be replanted than

would have been removed to allow extraction to occur so there will be a gain in the length of hedgerows and the number of trees compared to the current situation.

A number of planning conditions have been suggested by The Trustees to minimise any effects arising from extraction and associated activities on Landscape and Visual Impact in the sites and on the surrounding area. The Council could impose a number of planning conditions to ensure that this will happen and the operator will have to adhere to those conditions if and when extraction recommences.

It is therefore considered that the Shenington ROMP will not have a long term adverse effect on the Landscape or Visual Impact on the residential properties, non residential properties, Public Rights of Way or local roads that were assessed.

Air Quality

The extraction of minerals has the potential to have an effect on air quality through dust generated during extraction, emissions from machinery on site and emissions from traffic accessing the sites to transport minerals from the site.

A number of assessments have been made on the effects that extraction could have on a number of properties that are located close to the sites, as well as effects on some of the roads that the Heavy Goods Vehicles are predicted to use most when travelling to and from the site.

These assessments have concluded that extraction of minerals in the Shenington ROMP will have a negligible effect on air quality on the locations assessed.

A number of planning conditions have been suggested by The Trustees to minimise any effects on Air Quality in the sites and the surrounding area arising from extraction of minerals and associated activities. The Council could impose a number of planning conditions to ensure that there will be no more than a negligible effect on the locations assess and the operator will have to adhere to those

conditions if and when extraction recommences.

It is therefore considered that the Shenington ROMP will have a negligible effect on air quality.

Ecology and Biodiversity

The extraction of minerals has the potential to have an effect on flora (plant life), fauna (animal life), including on their habitats or sites of designated ecological status.

A number of surveys have been undertaken to establish what flora and fauna may be affected, or have the potential to be affected, by the extraction of minerals at the sites.

In this instance these include, in particular, effects on designated Local Wildlife Sites, bat, badger, hazel dormouse, barn owl, other breeding and wintering birds, reptiles, amphibians, broadleaf woodland and trees, arable (agricultural) land, grassland, hedgerows, wetland and invertebrates.

The assessments have identified a number of measures that can be undertaken to reduce or avoid short or long term effects on the above, and these are proposed in an Ecological Management Plan, which would need to be submitted to and approved in writing by the Council before extraction recommenced. In summary, these include:

	Protection of confirmed bat roosts;
	Precautionary checks at potential bat roost
	locations;
	Compensation for loss of potential bat roost locations;
	Precautionary checks at potential hazel dormouse habitats;
_	•
ш	Avoidance of disturbance and/ or destruction to active bird nests;
	Avoidance of killing and injury to common reptile species;
_	• •
u	Precautionary checks for amphibians during extraction; and

☐ Removing and replacing species-rich hedgerows

during the restoration period to reduce the

amount of time it will take for these hedgerows to become established.

The effects on badger are also assessed and contained in a confidential Badger Report attached as an Appendix to the Environmental Statement.

A number of planning conditions have been suggested by The Trustees to minimise any effects on Ecology and Biodiversity arising from mineral extraction and associated activities in the sites and the surrounding area. The Council could impose a number of planning conditions to ensure that these measures are undertaken throughout the course of extraction and during the restoration phase after extraction has been completed. The operator will have to adhere to these planning conditions, which will ensure that once they have been completed there will be a minor beneficial effect on bat, hazel dormouse, barn owl, other breeding and wintering birds, reptiles, amphibians, broadleaf woodland and trees, hedgerows, wetland and invertebrates, with a negligible effect on Local Wildlife Sites, Arable land and grassland.

Hydrology and Hydrogeology

Hydrology and Hydrogeology is the study of the movement, distribution and quality of water throughout the earth. The extraction of minerals has the potential to have an effect on hydrology and hydrogeology in terms of the effects on:

Surface water quality;
Surface water quantity;
Groundwater quality; and
Groundwater quantity.

The assessments have included potential effects of increased sediment released into watercourses during extraction, accidental release of fuel or oil into watercourses during extraction, surface water drainage patterns being altered during extraction, flood risk, contaminants infiltrating groundwater and increases in the regime of the groundwater supply.

Measures to minimise the chance of any of the above occurring include soil mounds constructed at sites

with necessary drainage incorporated within them and replacing soil removed from the storage mounds during restoration which, once seeded and stabilised, will allow for water to be retained within the ground which, during extraction, would previously have been retained in the voids created by the extraction.

In addition, a pond in the western edge of Site 4 which is currently proposed to be removed during extraction will be replaced during restoration. A bunded fuel tank will be constructed at each site which will offer 110% protection if leakage were to occur and any other fuelling points would be suitably bunded or protected to prevent contamination into surface water and ultimately downstream watercourses.

Chemical mats can neutralise accidental spillages in higher risk areas, and use of oil traps (traps to capture oil discharge) can prevent accidental spillage being caught with water running off site.

A number of planning conditions have been suggested by The Trustees to minimise any effects on Hydrology and Hydrogeology arising from minerals extraction and associated activities in the sites and surrounding area. The Council could impose a number of planning conditions to ensure that these measures are undertaken throughout the course of extraction and during the restoration phase after extraction has been completed to minimise any effects that the extraction of minerals at the sites will have on Hydrology and Hydrogeology. The operator will have to adhere to these conditions if and when extraction recommences.

Soils and Agriculture

Given that temporary removal of soil will occur to access the minerals underneath, and that the existing land use of most of the sites is agriculture, this has the potential to have an effect on soils and agriculture by:

- ☐ Temporary loss of agricultural land from productivity during extraction;
- □ Loss of soil structure as a consequence of soil handling and storage of soil during extraction;

- Potential disruption to agricultural drainage within the sites; and
- □ Soil rehabilitation through restoration and aftercare management with associated beneficial effects through improving soil infrastructure.

A detailed soil survey was undertaken and the information was used to classify the soil in accordance with the 'Agricultural Land Classification of England and Wales: Revised guidelines and criteria for grading the quality of land' (MAFF, 1988). The term 'best and most versatile' agricultural land is used to mean agricultural land of grades 1, 2 and 3a as defined in the above guidelines; land classified as subgrade falls within grades 3b, 4 and 5 and has lesser significance with respect to Government guidance.

In total, mineral extraction would result in the temporary disturbance of approximately 75ha of 'best and most versatile' subgrade 3a agricultural land, 24.9ha of grade 3b agricultural land and 8.3ha of grade 4 agricultural land as a consequence of soil handling prior to extraction. Soils would be removed and then replaced as part of the restoration scheme once extraction has ceased and many of the sites would be worked in phases, therefore, at any one time the loss of agricultural land would be considerably less.

The restoration of the sites will be predominately to agriculture, and soils would be replaced through the adoption of restoration techniques which will reduce the duration of soil storage. This would include, where possible, the direct replacement of 'best and most versatile' soils back to where they were originally removed from. In addition, the effect of the temporary disturbance is further decreased due to the eight sites being designed to work independently, and not disturbing a single large area of agriculture.

Overall, the proposed mineral extraction would result in the temporary loss of 107.9ha, of which 75ha is of the 'best and most versatile' agricultural land classification subgrade 3a. This comprises the following amounts per Ste:

Ш	2.1ha within Site 1 North;
	3.3ha within Site 1 South;
	8.5ha within Site 2;
	There is no best and most versatile agricultura
	land present within Site 3;
	19.6ha within Site 4;
	20.7ha within Site 6;
	14.3ha within Site 7 North; and
	6.4ha within Site 7 South

All topsoil would be protected from short term handling and storage effects by adopting appropriate techniques to minimise any effects. Excavation would also occur in such a way so as to prevent, minimise or control agricultural drainage within the sites and in the adjoining fields.

A number of planning conditions have been suggested by The Trustees to minimise any effects on Soils and Agriculture arising from mineral extraction and associated activities in the sites and surrounding area. The Council could impose a number of planning conditions to ensure that these measures are undertaken throughout the course of extraction and during the restoration phase after extraction has been completed to minimise any effects that the extraction of minerals at the sites will have on Soils and Agriculture. The operator will have to adhere to these conditions if and when extraction recommences.

Archaeology and Cultural Heritage

The extraction of minerals in the Shenington ROMP has the potential to have an effect on archaeology and cultural heritage assets in and around the sites.

A number of heritage assets have been identified in and around the sites during a walkover survey and a desk based assessment of historical records. These include a number of designated assets (heritage assets that are nationally designated such as listed buildings or scheduled monuments), none of which are actually within any of the sites but are outside them, and undesignated assets (heritage assets recorded on local or County lists, but not considered important enough to be nationally designated),

some of which are within some of the sites and some outside.

It is not considered that the extraction will have a significant effect on designated assets outside the sites, but in close proximity to any of the sites, such as the Grade II* registered Upton Park, a Grade II listed barn in close proximity to Site 1 South, the Balscote Conservation Area, the Shenington with Alkerton Conservation Area, two Grade II listed buildings in close proximity to Site 3, a Grade II listed house and barn in close proximity to Site 4 and a Scheduled Monument (SAM181) in close proximity to Site 7 North, given the distances involved from the sites, other buildings in the vicinity that already affect their setting, the position of storage mounds, the nature of the extraction and the routeing of HGV traffic.

There are a number of undesignated assets within some of the sites which would be destroyed by mineral extraction, but as they are considered of low importance this is not considered to lead to a significant effect. Mineral extraction will not have a significant effect on other undesignated assets outside the sites. A Victorian pump house located within Site 7 North will not be affected during extraction.

There is potential to discover previously unrecorded assets of heritage importance during excavation. A number of planning conditions have been suggested by The Trustees to minimise any effects on Archaeology and Cultural Heritage arising from mineral extraction and associated activities in the sites. The Council could impose a number of planning conditions to ensure that these measures are undertaken throughout the course of extraction to ensure this, which the operator will have to adhere to if and when extraction recommences.

It is therefore considered that the extraction of minerals will not have a significant effect on archaeology and cultural heritage.

Conclusion

Government guidance states that 'Minerals are essential to the nation's prosperity and quality of life, not least in helping to create and develop sustainable communities'. Government guidance also states that 'Minerals development is different from other forms of development because minerals can only be worked where they naturally occur'.

Planning permission was granted in 1957 by the Minister of Housing and Local Government for the extraction of minerals for the sites mentioned above, including some other sites which have since been extracted. This 1957 planning permission, and many others like it throughout the country, was not subject to many planning conditions to control and minimise the effects of extracting minerals on the local area when it was granted.

New legislation has been published by the Government which requires many of these old minerals planning permissions to be reviewed so that they can operate in accordance with a set of planning conditions that are in accordance with up to date environmental standards.

This Environmental Statement has been prepared in order to assess the environmental effects of extracting the minerals that have planning permission at Shenington in a manner that minimises any potential effects on the sites and the surrounding area. As such, a set of conditions, in accordance with up to date environmental standards, have been proposed, based on the assessments undertaken in the preparation of this Environmental Statement, to ensure that extraction of minerals can recommence without any significant adverse effects on the local area. These are contained within each chapter of the Environmental Statement, where appropriate, and a separate composite list has also been submitted to accompany the Environmental Statement.

Consequently, it is considered that, subject to the imposition of these suggested planning conditions by Oxfordshire County Council, minerals extraction and associated activities at the Review Areas detailed within this Shenington ROMP and shown on **Figure**1 in this Non-Technical Summary can recommence without any significant adverse effects arising.



