Proposed Sand and Gravel Extraction and Associated Processing Operations with Restoration to a Mixture of Agriculture and Nature Conservation including Areas of Shallow Water at Hedgeley, Northumberland

NON-TECHNICAL SUMMARY

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NON TECHNICAL SUMMARY

1. INTRODUCTION

The planning application proposes the extension of sand and gravel operations at Hedgeley, near Powburn, Northumberland (see Figure 1).

The proposed development is considered to be a Schedule 2 project under The Town and Country Planning (Environmental Impact Assessment) Regulations 1999. An Environmental Impact Assessment (EIA) has, therefore, been carried out to assess and identify any potential impacts that the proposed development may have on the environment. Detailed findings of the EIA, are reported in full in the planning application and Environmental Statement (ES).

2. SITE DESCRIPTION

The application site is located at Hedgeley along the banks of the River Breamish (Grid Reference NU 069 180) and covers approximately 46.8 hectares including an extraction area of 37.2 hectares. The remainder of the application site (9.4 hectares) relates to the existing plant site located on the north bank of the River Breamish. The application area will form an extension to earlier sand and gravel workings and will utilise the established plant site for processing, storing and dispatching the extracted mineral.

The majority of the proposed extraction area comprises agricultural land, which is currently in permanent pasture for sheep grazing. The field boundaries are currently marked by hedgerows and post-and-wire fencing interspersed with mature parkland trees. The plant site is currently occupied by a fixed processing plant and associated infrastructure, with stocking areas and silt lagoons. Extensive tree cover in and around the plant site restricts views into this area.

The mineral deposit at Hedgeley consists of river terraces of sand and gravel underlain by glacial boulder clay. The underlying bedrock consists largely of mudstones and sandstones from the Lower Carboniferous period.

3. PROJECT DESCRIPTION

The extraction area will be worked in six phases yielding approximately 1,004,000 tonnes of saleable sand and gravel. The site will be operational for approximately six
to seven years with production rates of 150,000 to 200,000 tonnes per. The site will be progressively restored to a combination of agriculture and nature conservation after uses.

**Hours of Operation**

It is proposed that the site will be operational between the following hours:

- 0730 – 1800 Monday – Friday
- 0730 – 1200 Saturday
- No working on Sundays and public holidays

**Mineral Extraction**

Working will commence in the southern part of the extraction area and will continue in an anti-clockwise direction through to Phase 3. Working of phases 4 to 6 will follow in a clockwise direction (see Figure 2). Soils within each working phase will be stripped incrementally to reduce the extent of mineral exposed at any one time. Wherever possible, soils extracted from each phase will be directly placed to restore the mineral void. Where this is not possible, soils will be placed in temporary storage mounds around the site. The phases will be wet worked and no dewatering is proposed.

The fixed processing plant, located on the north bank of the River Breamish, will be largely replaced with modern mobile processing plant. This will be more efficient and quieter than the existing plant.

Mineral from the extraction area will be transported to the plant site via the existing bailey bridge over the River Breamish. Repair and maintenance works will be carried out on the bridge prior to use.

**Restoration**

The site will be fully restored within two years of mineral extraction ceasing. The restoration scheme incorporates agricultural land as well as areas for wildlife conservation (see Figure 3). Phases 1, 2 and 2a of the extraction area will be reinstated to high quality agricultural restoration. Phases 3 to 6 will be restored to nature conservation uses incorporating three shallow water bodies, which will flood in the winter months to create a single larger shallow water body. The restored
landscape will be attractive to birdlife and will extend the wetland habitat that has been successfully established on areas of land previously quarried. The plant site will be restored to agricultural grassland.

4. **ECOLOGY**

A series of surveys have been carried out to identify any ecological features of interest and any protected species. The development proposals are designed to provide appropriate mitigation measures during the operational phases and the restoration will provide benefits in terms of ecological enhancement and habitat creation. Protection of the River Breamish, which is a Site of Special Scientific Interest (SSSI) and falls within the catchment of the River Tweed Special Area of Conservation (SAC), will be achieved by leaving appropriate standoffs from the extraction area. Long term benefits on the river bank environment will include a reduction in grazing allowing habitats to develop further.

The shallow nature of the mineral deposit provides an opportunity to create wetland habitats that would not normally arise through the restoration of deeper sand and gravel deposits. In the wider context of the restored areas at the neighbouring Low Hedgeley and Powburn Quarries, the development offers potential to create an extensive area of riparian wetlands with significant nature conservation interest.

5. **LANDSCAPE AND VISUAL IMPACT**

Any impacts on the landscape will be short term and largely restricted to the extraction area, as the plant site is well screened by existing tree cover. The visual impact of quarrying operations will be minimised by progressive working and restoration techniques and will be confined to the immediate surroundings. There will be no significant impact on the wider landscape setting and specifically the National Park.

6. **WATER RESOURCES**

Surface and groundwater resources, including the River Breamish and Pow Burn, have been investigated and any potential impacts associated with the development have been considered. Appropriate mitigation measures during the operational phases of the development will eliminate any potential impacts on the water resources. These mitigation measures will include the use of settlement lagoons in
association with the processing plant; appropriate standoffs being left between the excavation area and watercourses; and ongoing monitoring of groundwater etc.

In the longer term, the restored wetland areas will provide increased flood storage capacity and improve surface drainage towards the River Breamish. Wetland planting along the southern fringes of the restored water bodies will ameliorate agricultural runoff by removing nitrates.

7. **NOISE**

Noise surveys have been carried out at noise sensitive locations around the application site. The closest residential property to the site is Tilesheds at Beanley (formerly Gamekeepers Cottage) and this is located approximately 220m to the east of the extraction area. The application site is in a relatively quiet rural location, however, modelling demonstrates that noise generated by the development can be controlled within acceptable levels and in accordance with Mineral Policy Statement 2 (MPS2), ‘Controlling and Mitigating the Environmental Effects of Minerals Extraction in England’.

8. **AIR QUALITY**

Air quality could potentially be affected by dust arising from soil stripping and storage; sand and gravel extraction; site haulage; mineral processing; backfilling and site restoration. However, the likely dust emissions from the site would be large particles which do not travel more than 100m from their source and there are no residential properties within this proximity to the application site. Wet working methods and dust suppression methods (e.g. dampening of haul roads and sheeting of vehicles) will generally reduce dust emissions arising from the development.

9. **ARCHAEOLOGY AND CULTURAL HERITAGE**

A thorough archaeological and cultural impact assessment has been carried out for the application area plus a wider study area extending to 2km from the site. There are no listed buildings within the site and no protected archaeological or cultural heritage sites will be affected by the proposed development.

A trial trenching exercise was undertaken within the site and no archaeological remains were found. The assessment concluded that there is limited potential for
anything other than post-medieval remains to be found within the site and a requirement for further mitigation during the development phases is not anticipated.

10. **SOILS AND AGRICULTURE**

No soils will be removed off site and they will be used in the progressive restoration of the application area.

The mineral extraction operations will result in the temporary loss of 21.6ha of Grade 2 agricultural land. However, the restoration proposals will reinstate 12.7ha of the extraction area to agricultural land. The plant site will also be reinstated to agriculture and, therefore, the overall loss of agricultural land will be negligible and can be offset by the benefits attached to the enhanced biodiversity that will be achieved by the restoration scheme.

11. **TRANSPORT**

Mineral will be transported from the site using heavy goods vehicles. There will be an average of 30 to 50 HGV movements per day (i.e. total movements in and out of the plant site). A Transport Assessment has analysed the existing traffic flows along the A697 together with highway accident records. The assessment concluded that the number of HGVs associated with the development will not result in any of the roads within the area reaching capacity and HGV movements will be well below the number that has been associated with neighbouring quarries over recent years.

12. **ACCESS AND RECREATION**

The impacts of the development on recreational amenity and public rights of way have been assessed. A bridleway currently runs through the proposed extraction area and this will be diverted prior to any development taking place. The diversion will be temporary and will create a new route around the southern boundary of the site. Screening bunds will be used to minimise the impacts of the quarry development on users of the diverted bridleway. Once extraction ceases and the site is fully restored, the bridleway will be reinstated along its original route and the diverted route will be retained to create a new circular route around the site.
13. CONCLUSIONS

The potential environmental effects of the proposed development have been assessed in the full planning application and Environmental Statement. Overall it can be concluded that the proposed development will increase the landscape and visual qualities of the area through the restoration of the site, whilst also providing ecologically diverse, species rich habitats. The local environment will be protected throughout operations on site and the amenity of local residents will not be adversely affected through the use of appropriate mitigation measures. The restored site will offer improved bridleway access around the site.