

BROMLEY FARM EXTENSION, UPPER CUMBERWORTH

8.4 Hectare Easterly Extension

NON-TECHNICAL SUMMARY

Prepared by

SILKSTONE ENVIRONMENTAL LTD.

On behalf of



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NON-TECHNICAL SUMMARY

1.0 Introduction

- 1.1 Silkstone Environmental Ltd (SEL), on behalf of Wavin Ltd has submitted a planning application for an 8.4 hectare easterly extension to the former Bromley Farm Quarry, Upper Cumberworth. The proposed extension area is to be worked for fireclay and shale for the manufacture of vitrified clay pipes. Incidental coal will also be extracted from the site.
- 1.2 Bromley Farm Quarry ceased working mineral in 2014 and has since been restored by the importation of inert waste. The site was fully restored in early 2022 and is now in agricultural use for sheep grazing.
- 1.3 The Bromley Farm clay is a vital component in the blend mix for the Hazelhead Works factory in Crow Edge operated by Wavin and therefore a continuation of supply is essential to maintain current levels of employment at the factory which are approximately 95 in total.
- 1.4 The extension area is to be worked from west to east in five approximately 30 metre wide cuts at base. The area within the red line boundary is approximately 8.4 Hectares which includes the overburden storage area, settlement lagoon and the access road. The fireclay and shale reserves present have been calculated at approximately 760,000 tonnes which would equate to approximately 25 years supply at approximately 30,000 tonnes per annum.
- 1.5 Inert waste importation is required to restore the site back to original ground levels to enable restoration back to agricultural use with additional biodiversity enhancements.
- 1.6 The site is allocated as a mineral area of search, Ref MAS3 in the adopted Kirklees Local plan.
- 1.7 This non-technical summary provides a brief summary of the findings of the technical reports submitted with the planning application.

2.0 Summary of the Application

- 2.1 A brief summary of the application is as follows:
- The proposed 8.4 Hectare extension area consists of three fields in agricultural use lie within a larger allocated mineral site, Ref MAS3 in the Kirklees Development Plan (2019).
 - Extraction of fireclay and shales which is transported approximately 5km to the Wavin Hazelhead Works factory for stockpiling prior to being used for manufacture of clay pipes.
 - Backfill of the quarry void with inferior quality mineral and shale overburden and approximately 380,000 cubic metres of imported inert materials (subject to an Environmental Permit with the Environment Agency) to enable the site to be restored back to original ground levels to agricultural grassland with areas of species rich grassland, shrub and tree planting. Without waste importation, due to the underlying geology, a large open void would be the only restoration option which would inevitably fill with water over time and create a large lake feature.
 - The extension area would be worked to an average depth of approximately 16 metres.

- The reserves present have been calculated at approximately 760,000 tonnes which would equate to approximately 25 years supply. The 25 years would include infill by inert waste for restoration which could commence when extraction reaches cut 3 of the workings.
- Anticipated rates of extraction would be an average of 30,000 tonnes per annum but would fluctuate subject to market demand. The mineral would be extracted on a campaign basis, typically between March to September.
- The fireclays and shales would be lifted using a 360 hydraulic excavator and no blasting would be required. A dozer would also be utilised for the reinstatement of topsoil for restoration.
- A small volume of coal is estimated to be encountered of varying quality, estimated at approximately 10,000 tonnes. Inferior coal will be backfilled in the void. Any coal suitable for industrial use will be exported off site. This coal seam is classed as alienated by the Coal Authority and therefore not subject to royalty payments.
- The proposed operations would be an extension to a former quarry which is now fully restored. A new access into the extension area is proposed with the first 50m hard surfaced with concrete.

3.0 Need for the Mineral

- 3.1 The mineral extracted from Bromley Quarry Extension would be transported to Wavin Ltd, Hazlehead Works at Crow Edge where it is used to produce vitrified clay pipes. This process requires a raw feedstock formed by blending the Bromley Farm clays with other local clays each having different physical and chemical properties.
- 3.2 The mineral extracted from Bromley Farm Quarry is used for the blending and subsequent production of clay pipes at the Hazlehead Works site and is of high importance for use in adjusting the balance for material produced. The Bromley Farm clay composition makes the mineral a valuable component of the production blend.
- 3.3 The average output of mineral on site is subject to variation dependant on the demand for clay products. The site has always been worked on a campaign basis through the spring and summer months and this will continue for the remaining lifetime of the site.
- 3.4 It is estimated that approximately 95 jobs are directly associated with the manufacturing plant at Hazelhead Works in Crow Edge. Approval of an extension to Bromley Farm will ensure Wavin maintains stable levels of employment and is in the best possible position to achieve growth in the improving demand for its products for at least another 25 years.
- 3.5 The provision of a long term fireclay provision from Bromley Farm Extension will help safeguard a significant number of jobs within Wavin.
- 3.6 The proposal will reinforce a locally and regionally important facility. Although no additional jobs will be created, because the scheme is essentially a transfer of an existing facility to another site, existing jobs will be protected.
- 3.7 The NPPF encourages authorities to look positively at development that provides sustainable economic growth. The mineral supplied from Bromley Farm Extension would have a positive impact upon the long term economic stability of the company and at Hazelhead Works in particular, therefore meeting the Government's national policy objectives for economic growth.

- 3.8 The single most important influence on the capacity to meet demand and job security is the guarantee for supply of fireclay to the factory which has been identified by Wavin as a minimum of 25 years. Approval of the proposed extension in addition to their other operational quarry at Henperch, Denby Dale will enable the guarantee of supply for this period.

4.0 Description of Proposed Development

- 4.1 The geological reserve assessment has identified an economic mineral reserve of approximately 760,000 tonnes of clay and shale reserves plus a small volume of incidental coal which is estimated to be approximately 10,000 tonnes of varying quality.
- 4.2 The mineral would be extracted using a mechanical / hydraulic excavator and loaded directly into HGV lorries for transport off site.
- Excavation area. Mineral extraction proposed in 5 equal 30m cuts from west to east
 - Overburden storage area
 - Soil storage area
 - Access road.
 - Water treatment lagoons
- 4.3 All soils required for restoration would be stripped and stored around the northern and eastern boundaries to act as a visual and acoustic barrier and would remain in-situ until required for restoration of the site. Above ground overburden storage would be required as shown on the phasing plans. This storage areas would be located on the lowest parts of the site to the south to reduce the potential visual impact.
- 4.4 The mineral would be extracted using a mechanical / hydraulic excavator and loaded directly into HGV lorries for transport off site to Hazelhead Works.
- 4.5 It is proposed to continue the previous phased extraction that was devised to limit the quarry working area in the previous quarry and ensure that the quarrying operations have a minimum effect on the local environment. Mineral extraction operations are typically undertaken on a campaign basis, between March and September
- 4.6 In order to facilitate this method of working, it is necessary to store the excess overburden above ground until sufficient space is available in the quarry void to backfill behind.
- 4.7 The materials extracted at the site, both the economic mineral and the overburden for restoration do not require any treatment on site. Clay is extracted and loaded directly onto tipper trucks for export off site for the manufacture of clayware and overburden will be tipped directly into the void and compacted in layers until restoration levels have been achieved.

5.0 Environmental Effects

5.1 Ecology

- 5.1.1 The assessment concluded that no sites protected by statutory or non-statutory nature conservation designations would be directly or indirectly affected by the development proposals.

- 5.1.2 The biodiversity assessment concluded that, provided the impact avoidance and mitigation measures are implemented, the habitat loss as a consequence of the proposal would have only a very minor impact upon habitats of value.

5.2 Landscape and Visual Impact

- 5.2.1 The landscape and visual context of the application site has been described in relation to a desktop study of published information alongside a site walkover in accordance with guidance on landscape and visual assessment.
- 5.2.2 Potential landscape and visual impacts of the proposed development have been identified taking mitigation into account to reduce or eliminate adverse effects where possible.
- 5.2.3 A medium scale 8.4 Hectare extension to Bromley Farm Quarry will have a temporary effect on the landscape and visual character of the area, albeit for a long term duration of 25 years.
- 5.2.4 The magnitude of change as a result of the temporary quarry is considered medium resulting in a moderate visual effect for a long term period of 25 years due to the fact the site is only visible from close viewpoints to the north, east and west, a small number of residential properties and users of the PROW network but effective screening would mitigate this as much as is possible.
- 5.2.5 The landscape character assessment concludes that the landscape of the proposed development area is overall of low sensitivity to change mainly due to the detracting effect of the previous and existing quarries in the area.
- 5.2.6 When putting into context against the surrounding landscape of historic mineral extraction in the area and the proposed restoration scheme with additional planting to increase biodiversity and habitats on the site, it is considered that the proposals are acceptable and would not be adverse in terms of landscape or visual impact.

5.3 Traffic and Access

- 5.3.1 The volumes of shale / clay to be extracted is 760,000 tonnes which will be extracted and the quarry eventually restored over a 25-year period. The volume of inert waste required for restoration will be 690,000 tonnes.
- 5.3.2 It is anticipated that there will be a maximum of 120 HGV movements per day associated with the proposed quarry with 60 in and 60 out. This equates generally to a HGV movement along the access road leading from the A635 every 6 minutes or thereabouts.
- 5.3.3 The access is of adequate width at the access roads junction with the A635 to allow 2 HGV's to pass which will ensure that there will be no significant waiting on the major road to allow a large vehicle to egress the site.
- 5.3.4 The road leading to the site which also serves the recycling centre does narrow to some 5.3 metres some distance from the junction with the A635, however, beyond this point there are significantly wide passing bays, and the carriageway averages some 5.5 metres in width which would allow 2 HGVs to pass. This carriageway width also allows for a hgv to pass a private car with adequate clearance.

- 5.3.5 It is considered that the proposed development would not result in excessive vehicle trips that would be discernible from the daily fluctuations in flows that could be expected on the local public highway network.
- 5.3.6 Therefore, the level of traffic generated by the proposals can easily be accommodated and will have no material impact on the safe operation of the local highway and will not significantly add to any congestion at the peak times on the local network.
- 5.3.7 It is therefore concluded that there are no reasons on highways or transport grounds why the development proposals should not be granted planning permission.

5.4 Noise

- 5.4.1 The operations associated with quarrying at Bromley Farm Extension has the potential to generate noise which could cause nuisance.
- 5.4.2 Extractive operations will involve the use of heavy machinery, such as a 360° hydraulic excavator and 20 tonne dump trucks which will generate noise.
- 5.4.3 Noise prediction calculations confirm that the proposed development at Rudd Quarry Extension is unlikely to cause any significant noise impact at nearby noise sensitive properties.
- 5.4.4 Predicted noise levels from the proposed development were below the noise limit criteria as specified in the National Planning Policy Framework and Planning Practice Guidance at all noise sensitive properties.
- 5.4.5 Based on the findings of the noise assessment it was concluded that the proposed development would not have an adverse noise impact on nearby noise sensitive properties or the surrounding area.

5.5 Dust and Air Quality

- 5.5.1 With regards to the potential for dust nuisance occurrence, the predicted impacts on the communities near to the proposed Bromley Farm Extension are considered to be very low due to the wet nature of clay extraction.
- 5.5.2 The dust impact risk has been determined for each of the operational activities undertaken at the proposed extension.
- 5.5.3 The assessment considered whether the proposed development could significantly change air quality during the operational phase for local receptors.
- 5.5.4 The greatest potential for dust nuisance would be from the soil and overburden removal in dry and/or windy conditions. The dust control measures proposed and detailed below at the site would mitigate these effects to satisfactory levels.
- 5.5.5 The development may cause a slight adverse dust effect at local receptors. However, with the implementation of mitigation measures, the dust impacts from operations can be considered to be insignificant. Basic mitigation measures have been recommended which should be implemented as part of the scheme, if not already proposed, to ensure the risk of dust impacts at receptor locations is minimal.

- 5.5.6 There is, therefore no reason for this application to be refused on the grounds of dust

5.6 Water Resources

- 5.6.1 The Hydrogeological Risk Assessment has concluded that the proposed mineral excavations are unlikely to encounter any significant groundwater body and that excavation dewatering to remove groundwater will not be required. Perched groundwater from a shallow sandstone horizon may enter the workings as high level seepage.
- 5.6.2 Interception of small quantities of perched groundwater is unlikely to have any impact on groundwater resources outside the site boundary due to the limited lateral extent of the sandstone unit and the low potential for groundwater recharge.
- 5.6.3 The site will be restored by compacted backfilling to produce a stable platform for subsequent residential development. Due to the natural low permeability character of geological strata beneath the site it is anticipated that backfilling and restoration of the site will have no significant effect on local groundwater conditions or surface water runoff characteristics.
- 5.6.4 It is concluded that the proposed development does not represent a significant risk to groundwater resources and that, subject to the implementation of standard pollution control measures, no other mitigation measures are required or proposed.

6.0 Planning Policy

- 6.1 The National Planning Policy Framework (NPPF) sets out the government's planning policies for England and how these are to be applied, including the consideration and protection of environmental and amenity assets where necessary.
- 6.2 Section 2 of the NPPF looks at achieving sustainable development. The objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs.
- 6.3 Section 17 of the NPPF deals with the sustainable use of minerals including the need to "ensure that there are no unacceptable adverse impacts on the natural and historic environment ... and take into account the cumulative effect of multiple impacts from individual sites and / or from a number of sites in a locality", and "provide for restoration and aftercare at the earliest opportunity, to be carried to high environmental standards".
- 6.4 The site is located within the Green Belt. Section 13 of the NPPF covers Green Belt land. The guidance confirms that inappropriate development is that which is 'harmful' to the purpose of the Green Belt and is only approved in 'very special circumstances'.
- 6.5 The NPPF sets out that: 'The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence'.
- 6.6 Mineral extraction is in principle not inappropriate in the Green Belt provided it preserves openness and does not conflict with the purposes of Green Belt.

- 6.7 This proposal is in accordance with national and local policy for the extraction of minerals for the brick making industry.

7.0 Conclusions

- 7.1 It is estimated that approximately 95 jobs are directly associated with the manufacturing plant at Hazelhead Works in Crow Edge. Approval of an extension to Bromley Farm will ensure Wavin maintains stable levels of employment and is in the best possible position to achieve growth in the improving demand for its products for at least another 25 years.
- 7.2 The provision of a long term fireclay provision from Bromley Farm Extension will help safeguard a significant number of jobs within Wavin.
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