PLANNING PERMISSION APP/Y9507/C/15/3133267

The operational development comprising the winning and working, sales and exporting of minerals on land at Heath End Quarry, Station Road, Heath End, Petworth, West Sussex GU28 0JG

Discharge of Condition 4 (i) (e)

Scheme setting out the method of working and extraction

NOVEMBER 2016
INTRODUCTION

Condition 4 (i) (e) of Planning Permission APP/Y9507/C/15/3133267 requires that within 3 months of the date of the decision (8 September 2016) the following scheme shall be submitted for the written approval of the planning authority, namely,

A scheme setting out the method of working and extraction across the site

This scheme is being submitted to discharge this Condition.

METHOD OF WORKING AND EXTRACTION

Reference should be made to Drawing DG/HEQ/Scheme/16-02 Method of Working and Extraction which is included with this scheme.

This drawing shows the area where future sand extraction will occur across the site. This area is shown edged with a broken, blue line and is stippled in blue.

The boundary of extraction mirrors the original phases as shown on Drawing H47/62A which was first approved under Planning Permission DNPW/94/2569 (5 July 2996) and approved in subsequent permissions. The planning permission granted on appeal does not refer to this original working drawing, requiring, in recognition of the proposed change to the method of working, a new working scheme to be submitted for approval.

The working drawing submitted with, and forming this scheme, excludes further sand extraction from the westernmost section of the current lake area (immediately to the south of the ridge).

The submitted scheme does not propose sand extraction from specifically defined phases (as was the case with the originally permitted working scheme). This is because with the exception of the northern-most area (land on which the processing plant area is currently located) the remaining permitted reserves lie beneath the current lake area. The extraction of the remaining reserves from beneath the current lake area will be undertaken using a dredger. Using a dredger will allow the site to be worked “wet”, that is without the need for pumping away the naturally occurring ground water. The sand will be extracted using a slow-moving, hydraulic rotating head, with teeth which cut into and break-up the sand. The resultant sand/water mixture will be “sucked” into the suction pipe and pumped to a storage “sump” in the north-west corner of the lake. The sand will then be lifted from this storage area using a long-reach back-actor shovel and then transported to the plant area for processing/screening. The finished products will be stockpiled in the processing plant area from where they will be collected and taken off-site and distributed by road using the existing access onto the A285.
Sand will be extracted down to the Folkestone Bed/Sandgate Bed geological boundary, as shown on Drawing H47/63 Geological Plan. The maximum depth of extraction is shown on Drawings H47/64B and H47/65A. The dredger will extract in a number of “sweeps” running back and forth across the footprint of the current lake area. Positioning of the dredger to ensure efficient underwater extraction is undertaken using a GPS positioning system, and underwater surveys will be commissioned to check lake-bed levels.

The dredger was built to the company’s own specification by a UK manufacturer some years ago. The unit at Heath End Quarry has one main Scania V8 550hp power unit with belt drive to the dredging pump. The cutter head and winches are hydraulic, driven from the crankshaft and are self-sufficient. The dredger has a small, standby engine fitted in the case of emergencies or main engine failure to allow it to travel back to shore.

Once all remaining sand has been extracted from within the current lake area, the final reserves, which currently underlie the processing plant, will be worked. This will necessitate the removal of the existing fixed plant and at this point the sand will be processed using mobile plant. Using mobile plant will provide the necessary flexibility both to keep the plant close to the working area and to allow ease of movement as the working area changes. The sand in this final area may well be able to be worked using a long-reach excavator as the deposit thins to the north of the site.

On completion of mineral extraction, the site will be restored in accordance with the approved restoration scheme.