

Barrington Quarry - Restoration Project

Environmental Considerations 2



Site of Special Scientific Interest - Photograph - Richard Small



Geology

The whole of Barrington Quarry is identified as a Site of Special Scientific Interest -SSSI for its geological interest. It is also a Geological Conservation Review (GCR) site. These designations reflect the site's national and international importance in showing all the scientific elements of the Earth heritage of Britain. The quarry is important for two reasons, firstly for the exposure of Cambridge Greensand in parts of the quarry floor. Secondly, the quarry face is considered to be of stratigraphic importance for the study of the Upper Cretaceous of eastern England. Given this status, it was key that any restoration scheme respected the site's importance as a geological resource.

At the project's inception the company discussed its plans with Natural England, the government body responsible for SSSIs. It was agreed that, provided a representative section of quarry face was retained for scientific study and the exposed Cambridge Greensand was stripped from the quarry floor and stored where it would not be further disturbed, then the remaining quarry void could be restored to adjacent ground level using imported restoration material. To achieve this, a 200 metre length of the current quarry face in the site's north east corner will be retained at its current depth with only minor reprofiling to improve long term stability and safe access. In addition, all the exposed Cambridge Greensand will be excavated from the quarry floor and carefully stored in a location where it will not be subject to further disturbance as a result of the restoration project and will be available for further scientific evaluation.

Noise Monitoring at Crossing - Photograph - Walker Bear Mason



Noise and Vibration

No changes in the noise and vibration environment relating to the site's restoration have been identified except for additional housing being constructed on the footprint of the decommissioned cement plant.

As a result, the company proposes continued compliance with both the noise and vibration limits established by the current planning permission and adopt the same criteria for the proposed housing site. The company also propose to simplify the way in which noise and vibration are monitored both at the quarry itself and on the branch line in order that results can be presented to the County Council more quickly.



Monitoring has revealed that the noise limit set for Foxton Exchange Sidings prior to 0700 is unrealistically low. The company is exploring with both its advisors and the Council a realistic level that complies with Government guidance relating to noise from quarry developments prior to 0700 and that would still allow rail transport to be used to facilitate the quarry's restoration.

Landscape

The cement works and quarry have been part of the local landscape for many years. It is important, therefore, that this final phase of the work's life both complements its surrounding environment once complete and minimises any intrusiveness whilst the final restoration scheme is being realised.

The working scheme has been specifically designed to minimise visibility of the restoration works from outside the quarry, including that from the proposed houses on the works site. This is to be achieved by restoring North Pit pursuant to the current restoration permission as soon as possible, and creating a bund along its northern shore from imported restoration material to screen restoration works taking place behind it. The outer face of the bund will then be soiled and restored, presenting the outward observer with a review of a restored bank.

Beyond this bund restoration material will be placed in layers until operations start to become visible, at which point the bund will be extended and restored to screen activity behind it. This methodology will be employed for the early phases of the restoration, ensuring that views into the quarry are minimised.

The restored landform itself has been designed to blend into the surrounding contours of the land to the extent that this is possible, and acknowledging the need to retain access to the SSSI. Once completed and the restoration starts to mature, it is the intention that the site will, with the passage of time, become indistinguishable from the undisturbed land around it.



View of Quarry from Public Right of Way - Photograph - D B Landscapes

