Sand and Gravel Study Summary

Lancashire County Council along with Blackburn with Darwen and Blackpool Borough Councils recently contracted Entec UK Ltd. to undertake work on stage 1 of a 2 part study into sand and gravel resources in Lancashire. This initial stage is now complete.

Background

The study was commissioned in response to a recommendation made by the Inspector in his report on the Inquiry into the Lancashire Minerals and Waste Local Plan, (LMWLP, adopted in December 2001)\(^1\).

In his report, the Inspector commented that “current reserves of high quality sand and gravel are likely to be exhausted towards the end of the current Minerals Local Plan period (2006)”\(^1\). He recommended further examination of potential reserves of sand and gravel be undertaken before the Plan is reviewed. Furthermore, with the revised apportionment figures released by the Office of the Deputy Prime Minister (ODPM) in Mineral Planning Guidance (MPG) Note (6 June 2003), Lancashire needs to have identified additional reserves of 7.1 million tonnes of sand and gravel by 2016.

The study has been conducted in line with the sequential approach identified in Policy 48 of the LMWLP. The Areas of Search identified in the Plan have also been included in this study to ensure all reserves identified have been evaluated in relation to the primary constraints set out in Section 3 of the report.

Status of the Report

This initial study was a desk based sand and gravel resource study, assessing the degree to which any identified and significant mineral deposits are constrained. The study does have limitations as outlined below:

1. Practicality including land interests.
2. Variations of the level of mapping available, especially in the Carnforth area.

The findings of this report will feed into Stage 2 of the work. This stage will involve more detailed assessments of the areas identified in Stage 1 as having the greatest potential for containing high quality sand and gravel resources.

Study Findings

Entec partnered the British Geological Survey (BGS) to complete this task. The BGS provided the baseline geological data for Lancashire, Blackburn with Darwen and Blackpool. They further refined this data to identify those sand and gravel deposits that represented “high quality” material by investigating and interrogating all available data sources.

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There are 33 areas identified in total, which have been broken down into the following categories. The number of areas found in each category is indicated in brackets:

1. River Valley sand and gravel (11);
2. Estuary and Foreshore sand and gravel (2);
3. Fluvio-glacial sand and gravel (10);
4. Concealed Glacial/Fluvio-glacial sand and gravel (5); and
5. Potential alternative material: Weathered Permo-Triassic sandstone (5).

The extent of these areas is shown in Figure 2.1 of the report. Entec applied a number of planning constraints to the identified areas. The constraints comprised of the following 2 elements:

1. Primary constraints – geological, physical, economic and higher tier planning constraints; and
2. Positive criteria – factors that could positively contribute to a deposit being considered suitable e.g. access to primary road network.

A full listing of the constraints applied can be found in Tables 3.1 and 3.2 of the report. For the purpose of this initial stage, airfield safeguarding zones were not included as a primary constraint; however, they have been identified in the report to assist in stage 2 of the study.

The impact of the constraints applied is shown in Figure 4.1, and at more localised level in Appendix D.

A summary of each identified resource, for which any associated key constraints are shown, is in Table 4.1 of the report. This table identifies 3 key areas with the greatest potential (least constrained), they are:

1C – Cocker Valley: East of Crookhey Hill – River Valley sand and gravel
1D – Cocker Valley: Hey Carr – River Valley sand and gravel
4C – Hardhorn to Staining – Concealed glacial and/or fluvio-glacial sand and gravel

An additional 7 areas with potential are also identified, they are:

1E – Brock/Wyre confluence – River Valley sand and gravel
1F – Brock: Brock to Walmsley Bridge – River Valley sand and gravel
1G – Catterall Calder: around Sandholme Mill – River Valley sand and gravel
3D – Euxton – Glacio/fluvio-glacial sand and gravel
3J – Cleveley Bank – Glacio/fluvio-glacial sand and gravel
4A – Coppull – Concealed glacial and/or fluvio-glacial sand and gravel
4D – Esprick to Wesham – Concealed glacial and/or fluvio-glacial sand and gravel

These areas are identified as having potential for high quality sand and gravel resources, but may be subject to more constraints than areas 1C, 1D and 4C, therefore are described as marginally constrained sites within this report.
In addition to the above, 3 sites have been identified as having potential alternative material (Weathered Permo-Triassic sandstone), they are:

5A – Ormskirk Golf Course
5D – Barton
5E – Hill House

To identify possible extraction areas for stage 2, each resource area identified by BGS and Entec was mapped to show any unconstrained areas, i.e. areas not affected by primary constraints. These additional maps are found in Appendix E of the report.