

InFocus - Autumn 2008 Earthworks

During this quarter period (September – December 2008) the focus of our construction team will be on “Bulk Earthworks”. Find out how this is planned, what activities are involved and what machinery is used below:

Preparation

The topsoil is stripped (removed in a thin layer approximately 300mm thick) and stored. This is used to create “bunds” which help to screen the site from potential noise and dust. The bunds are seeded with grass to support and help protect the soil. The top soil will be used for landscaping towards the end of the construction programme.



Excavation

Large machines called “excavators” are used for digging. These have tracks like army tanks rather than wheels so that they can move in my muddy conditions. The excavators have large buckets on the end of flexible arms which can move large quantities of earth quickly.



Drainage

Large open excavations require careful management of surface and ground water to ensure there is no risk to health or the environment and also to maintain efficient working. Large collection ponds are created to provide a holding area for water. We can then release the clean water back into the natural drainage watercourses at an appropriate rate of flow and water quality.

Transportation

Very large dumper trucks are used to move the excavated material around the site. These vehicles can carry around 35 tonnes of soil. Their wheels are nearly 2m in diameter. Smaller dumpers are used for minor activities such as carrying gravel for roads.



Storage / Disposal

We intend to re-use as much soil as possible on this project. The final landscaping will consist of sensitive bunds and contouring to screen the works. During the construction period we will temporarily store soil in adjacent fields to the site. Excess material will be removed from site and be transported to a local landfill site and used as capping material..

Health & Safety

Earthworks require considerable planning and control. Vehicle movements around the site must be restricted by speed / location. The sides of the excavations must be protected from persons and vehicles falling from height. Depending upon the nature and depth of the ground excavated, supports are required. These are carefully designed by Geotechnical Engineers.

