

## ***AN INVESTIGATION OF THE SUSTAINABLE USE OF RESOURCES IN CONJUNCTION WITH THE DEVELOPMENT OF A CANALSIDE COMMUNITY AT MEGALOUGHTON LANE DERBY***

In the past the 10 acre site has been a private, controlled landfill with planning consent. A new arrangement to remove surface water sludge was implemented about 5 years ago. The present owners Acetate Products Limited (ACP) want to sell the 10 acre site for redevelopment. There is an opportunity to create a small community in a sustainable location where there is immediate access to Train (Spondon Stn), Road and Bus A52, Potential Cycle (Towpath to Pride (Business) Park and Derby City Centre) and Footpath connections to Asda and Spondon Village as well as Pride Park.

There is an alternative route for the restored canal which would run through the middle of the landfill site in association with The Derby and Sandiacre Canal Society Trust which is working towards the full restoration of the canal linking in into the Grand Union Canal. The Trust is an influential and capable charity with a large membership, full time staff and with a vision of sustainable communities and activities promoted by being alongside the canal and appreciating what it has to offer back to the community. They have been developing a funding model for sites such as this and it is possible that the Trust may be involved in the future working with the owners in the promotion, management and development of the site.

ACP and the Environment Agency are both concerned to ensure that development of the site removes their liabilities and achieves a satisfactory end use for the site. ADDC Architects are keen that the design issues should follow the principles considered within the BRE GreenPrint framework. One of the key areas of the framework with impact on sustainability is the promotion of the sustainable use of resources, particularly including water, materials and waste, both in construction and operation. GreenPrint compliments the Code for Sustainable Homes, BREEAM methodologies and other industry recognised tools and standards such as Secured by Design and Lifetime Homes.

The Sandiacre and Derby Canal Trust has, as an early objective, the intention to provide a cycle towpath throughout the 12 mile length of the canal corridor. It is hoped that this can be constructed early next year following approval of their current planning application. It is thought that up to half the landfill material could be encapsulate into a suitable concrete paving and used to create the 12 miles of cycle route and footways, using a small batching plant on the site and being viewed as a very sustainable solution. Agreement for the Trust to do this would have to be obtained from Sustrans – a government sponsored agency which promotes footpath and cycle routes and which may be a further source of funding for the Project. They would undertake the testing at the Centre for Paving Excellence and then be in a position to assist with negotiations with the EA over what would be an innovative way of removing the landfill material from the site and the subsequent surrender of the land owner's Waste Management Licence.

In addition to creating a use for the material in the cycle Towpaths it will be necessary to establish other ways of using the remaining waste material preferably on the construction project proposed for this site or on infrastructure for the canal. This will enable, following the surrender of the licence, the 'void' to be filled again with inert material some of which might arise from the construction work on the canal. Imports of approx 50,000cu.m will bring the site levels up to the best profile for the canal to pass through the housing area. and would be permitted, under the regulations involving new construction work, without the need for a further licence.

The collaboration over this 'investigation' would enable innovative solutions to be devised for the disposal of waste material and become a model for low cost sustainable solutions which could be proposed elsewhere.

The construction project has been designed and devised by ADDC Architects who wish to collaborate with Derby University's Built Environment Program and Northampton University's Environmental Science Waste Recovery Program. It is a particular consideration that the land owner ACP has a responsibility for the existing licence and will decide whether the material will be used in the manner proposed. It is also important to understand that the Canal Trust will decide whether to accept the material on their project. However there is a sufficient spirit of cooperation for both parties to welcome the benefits that this study can bring.