CONSTRUCTION WASTE CASE STUDY





How contractors recognise the benefits of using recycled aggregate materials in utilities maintenance and development works.

The Utilities industry in the UK is one of the largest users of labour, materials and transport – working across the country to excavate cable and pipe networks to repair, remediate or renew the complicated underground utilities provision to communities and businesses.

It is estimated that the industry produces approximately 4.8 million tonnes of construction and demolition waste from excavation of trenches alone.

Considering the nature of the work - digging a trench to uncover cable and pipe networks - this produces a significant level of groundworks waste which needs disposal. When the work is complete, the contractor needs to fill the site with pipebedding and sub base. This work is happening all over Wales every day and raises two serious waste management issues.

Without compliance with the waste hierarchy, contractors would excavate and dispose of C&D waste at landfill and then reinstate the trench with natural resources from quarries.

PROJECT DETAILS

The benefits of using recycled aggregates in projects in Wales.

Best practice theme:

 Waste minimisation and the use of recycled aggregates in construction projects



PROJECT TEAM

Client:

Planners, surveyors and project commissioners from the Utilities sector in Wales

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From 2008, many large utilities companies committed to the Utilities Industry Agreement regarding the use of the recycled aggregates in projects. Smaller, lower tier contractors lacked awareness and understanding about the use of the recycled materials and the importance of sustainable methods of disposal and reuse.

One of the largest utilities contractors, May Gurney was involved in the Agreement at early stages. Sustainability manager Thomas Macagno said:

"The agreement sets the foundation for the industry to co-operatively tackle site waste.

We seek to reduce waste, and maximise material reuse and recycling through vigorous waste management. The agreement supports our efforts by promoting the use of recycled and stabilised materials."

To support and promote the Agreement and work with aggregate recycling and products providers on a local level, Constructing Excellence in Wales worked closely with lower tier utilities companies in Wales to raise awareness about sustainable disposal options and alternative materials.

CEW held presentations and meetings providing neutral opinion and information clarifying options for contractors in Wales to transport the trench excavation waste to recycling locations where the material can be disposed of and processed into washed and graded recycled aggregate material for use in reinstating trenches.

This project established an industry specific closed loop of disposal, recycling and reuse and highlighted the responsibilities of contractors and showcased a number of quality suppliers of recycled aggregate materials in Wales.

The project outcomes estimated that working alongside lower tier contractors alone, the intervention could have the impact of diverting at least 300,000 tonnes of C&D waste to be diverted from landfill per annum. Within the first year of the intervention 60,000 tonnes of C&D waste was actually diverted and a sustainable relationship created between utilities contractor and recycled aggregate providers.

