

Virtual Whitehaven set for Regeneration

Copeland Borough Council, in partnership with the urban regeneration company West Lakes Renaissance, are leading the economic revival of West Cumbria. The market town and historic port of Whitehaven has a bustling town centre where people come to relax and have fun. The town is notably famous for the invasion by the US Navy in 1777 by John Paul Jones and his fleet during the American War of Independence.

While significant improvements have already been made to the historic harbour and the shopping streets around it, there is scope for more work to bring the rest of the town centre up to a similar high standard. So, backed by West Lakes Renaissance, Copeland BC offered to tender the construction of a 3D virtual model of the town and Pow Beck Valley area, together with a software package for viewing and editing. CDR Group were subsequently chosen along with the Environ Planner software application suite from Virtual Outlooks Ltd.

A survey team from CDR Group spent time measuring the height of every building within the designated regeneration area (using laser equipment) together with digital photographic images of key building facades. The model was then constructed using Environ Builder and Environ Communicator back in the Peak District offices of CDR Group using the three key datasets already available to Copeland. Namely:

The Ordnance Survey MasterMap™ building footprints

BlueSky aerial photographic imagery

NextMap™ digital terrain data

The Environ Builder application will construct the 3D model from the various components, with some global settings like automatically setting building heights and roof types. The Projects Team at CDR were then able to amend individual building characteristics and assign images to facades within the Environ Communicator application. Added to the model also were trees, bollards, street lights, traffic lights, fencing and walls. The bare earth terrain model also required some editing in certain places using the sculpting tool in the software.

The completed model and software was handed over to Copeland BC for use in public consultation exercises. Julia Jackson, GIS Manager at Copeland BC said, "This 3D model will help the Council immensely with the planning process of regenerating Whitehaven and showing the public what development schemes are in the pipeline. We have now taken over the maintenance of the model ourselves, so we can add more detail and planned development scenarios as they arise."