

Case Study – Dorset Drainage

Introduction

In 2009 Wilson Pym May were contracted to provide a GIS and digitising service for Dorset County Council which involved digitising all of their current drainage data. This case study is an example of the use of GIS, asset management, digitising and IT Services being used to provide an effective solution.

Problem

The problem faced by Dorset County Council was not that their system was not capable of storing the vast amount of drainage data but much of the data had not been added to the current asset management system and was simply in hard copy format (paper maps, CAD drawings). A second problem was that this data was not stored centrally but spread amongst stakeholders such as Private companies, Local Authorities, and Dorset County Council itself. Dorset County Council required one central database containing all of the information which could be shared across a network using Dorset Explorer and their current EXOR system.

Solution

After consultation between Dorset County Council and Wilson Pym May a new database structure was created in line with the needs of the client. It was based on the Highways Directive 43/04 and adapted to meet the exact needs of Dorset County Council.

Over 3,000 documents containing drainage information were then handed over to Wilson Pym May from a range of key stakeholders from across the county. One of the main sources of information being Section 38 agreements which were converted into PDF's for easy access.

The GIS team then began digitising, quickly processing pipes, gullies, culverts, and other drainage items into the new database as well as moving and editing existing data.

As the database developed ESRI ArcGIS applications were created to increase the speed of digitising through pre-set numbers and automated values. EXOR data was also added and spatially referenced to the road network. All assets were also hyperlinked back to electronic copies of the original data to allow immediate interrogation.

Outcomes

Dorset County Council have been provided with a new GIS solution for their highways drainage assets which has been extensively designed around their needs, to follow best practice and to accommodate data from a range of sources. Dorset County Council have also been awarded the status of Regional Champion and benefited from additional funding to utilise the drainage information for future investigation.

There are many advantages to using this package of solutions to solve the problem faced by Dorset County Council, these include:

- The customised software allows the quick capturing of a large amount of data.
- They have a complete, digital dataset of drainage items across the county.
- The database is compatible with both Dorset Explorer and their current EXOR database.