

COMPANY

Dalcour Maclaren

LOCATION

Global

SOFTWARE

Autodesk AutoCAD

MAPThat

Win more bids and transform your data with the power of GIS



Whether it's in the form of gas, water, or electricity, routing utility supplies across the UK is a challenging and often contentious occupation.

Dalcour Maclaren are, in essence, land strategists: they offer expert advice to utility companies on all aspects relating to viable route options across the landscape - corridors. Like many others, it's an area of business that's taken advantage of digital technology.

"We spend a lot of time looking at plans and maps" explains their director Andrew Barker, "We've used AutoCAD MAP since the company was formed in 2003, and originally it was simply used as the link between the clients preferred corridor designs – for a pipeline for example – the relevant hard copy Land Registry title data for that corridor and our digital map data. We'd draw the corridor onto our maps, use that to set the parameters of the Land Registry search, and then draw the hard copy title data from the Land Registry onto the map as basic polygons, simply depicting the boundaries of ownership with no intelligence or attribute data behind them. For us, GIS was in its infancy b

back then, but we knew there had to be a slicker way of handling the data. Even when title data became available from the Land Registry digitally, which meant we could import it directly onto our digital maps and no longer had to draw it all manually – a huge time saving - it was still frustrating because we could not make full use of the available attribute data because we didn't have GIS functionality". Barker set out to change this and approached three leading GIS consultants. Each was given the brief and detailed requirements and asked to respond with a proposed solution. Eventually Cadline was chosen. "We just felt there was a good fit" says Barker, "they demonstrated a clear understanding of the kind of data we were handling and its relationship to the projects we were involved in, and importantly they made us feel that we were able to deal with them as equal partners, that we would get the right level of attention".

AutoCAD MAP remained as the core system, with Cadline developing their own technology specifically for Dalcour Maclaren. A key part of the brief was to provide web GIS controlled by a new spatial database, as Barker explains. "Our Mapping team by this time had grown to such an extent it had become practical to centralise it. We started recruiting GIS Analysts to complement our CAD technicians, but we had to enhance how we produced plans which had historically just been in PDF format or printed, which meant

that our surveyors in other offices as well as our clients could only see those maps as PDFs – just the drawing, basically with no intelligence. We resolved this by taking on Cadline’s MapThat tool, which they customised for us, and allows us to offer our surveyors and clients, wherever they are, fully interactive maps, with options to display a full range of mapping data in the background as well as the specific project layers. We can highlight, analyse and interrogate particular parcels of land, or turn project layers on and off for example and they get to see it, live. Everything that’s available to us centrally can be available to the surveyors on site. It’s revolutionised the way we work! “



In addition, Cadline designed and developed a sister product for MapThat, a bespoke front end to Dalcour Maclaren’s spatial database which Barker refers to as the Land Referencing Forms. Put simply, this allows them to display the attribute data – title data, ownership details, contact data etc. – as web forms. Barker puts it into context: “Coordinating access for surveys is a central part of the vast majority of the projects we do. What we used to do back in 2003 was to use an excel spread sheet listing every landowner on the project, and alongside that, in a second column, a traffic light system, showing whether we had been granted access for surveys. It was ineffective using a spread sheet to make the mental connection to a map, for example to identify whether a particular land parcel, showing in red on the excel sheet, was a very small part of the corridor, or whether they were linked through ownership to other parcels of land and made up 10% of the overall corridor. And the bigger the project the more difficult this becomes. Land Referencing Forms allows the surveyors to add, update and view the attribute data via MapThat, and show for example all the related parcels along what may be a ninety-kilometre corridor, and the key milestones they have reached such as survey access status.

In addition, surveyors can record events and correspondence against specific parties and or parcels through the portal and in that way are able to produce simple reports and statistics showing progress and activities. That’s great for the surveyor, on site, but we can now also allow clients to dial in to the same data, which is presented to them in real time, as access rights, for example, are updated. Some of our projects involve thousands of landowners. It just couldn’t be done using excel, the client just wouldn’t ‘get it’. It’s a huge step forward and for us brings much greater efficiency and accuracy of the whole operation”.



Barker sees a future where data, its creation, storage, and communication is central to their strategy, and he’s seen benefits in the Cadline relationship here too, as he explains. “We have a vision of what we’d like to achieve with the GIS systems we have in place: bringing improved and increased data to clients and enhancing the way we handle statistics and use the data to improve project management, as well as linking GIS to our other back-office systems, and naturally we work with Cadline on these aspects. But we recognised early on that they have a valuable amount of real-life experience to share with us too. In areas where they have already been, but we are about to embark on – future database policy decisions and cloud versus local technology usage, for example. They are happy to share this insight with us, and have been a valuable sounding board, as part of the service element of the relationship outside of mapping technology, and we’re happy to learn from them. As I said earlier, we’re a good fit”.