

COMPANY  
**AECOM UK**  
LOCATION  
**Global**  
SOFTWARE  
**Autodesk AEC Collections**  
**Autodesk Civil 3D**

# Driving efficiencies within road design projects using Autodesk Civil 3D

## Customer Challenge

The highways team at the AECOM office in Glasgow, UK had found success in adopting Autodesk Civil 3D to deliver better projects more efficiently, following a companywide programme of learning and development. However, it identified a number of areas that would benefit from the further development of specific workflows, content and training to deliver additional efficiencies and standardised ways of working. David Lewis, the Cadline Customer Success Manager (CSM) assigned to the team, prepared a plan that allowed the team to undertake a series of activities that would deliver the targeted improvements and support additional service offerings.

## Project Goals

The overall goal was to develop a series of workflows and accompanying training activities that would remove repetitive, time-wasting tasks from some of the core design activities delivered by the team. Specifically, the design of drop kerbs was disproportionately inefficient and lent itself to being partially automated, if the user had access to the right content and skills. We anticipated that the time to deliver the associated tasks could be reduced by at least two thirds allowing the team to be more competitive as well as adding increased flexibility to design optioneering.

## Solutions

We developed a programme of work specific to highways design at AECOM to accommodate different user capabilities, roles and responsibilities. Our training activities supported the introduction of new skills as well the levelling up across the department of the core Autodesk Civil 3D skill set. These activities were delivered in a virtual environment and underpinned by post training support and access to a dedicated CSM. David, the CSM responsible for the successful delivery of the programme,

worked closely with our delivery specialists to ensure that the programme was agile and could be adapted to meet changing personnel and project requirements. Part of his role was to plan the next phase of the programme with a view to supporting the progression deeper into multiproduct workflows following the successful adoption of workflows from each series of training.

## Business Outcomes

A significant improvement in design efficiency by empowering users to be able to produce elements of their design in a third of the time that they were able to previously. The success of the programme has allowed us to work with the team at AECOM to identify more areas for improvement when using Autodesk Civil 3D on highways design projects and introduce additional design and collaboration technology. The next phase of the programme will introduce Autodesk InfraWorks into the early-stage design workflow as well as extending the training activities to include management awareness courses.

“Attendees of the advanced course have adopted more efficient workflows into their projects, allowing for aspects of designs to be completed in a shorter timeframe. The advanced course allows for a deeper understanding of Civil 3D and allows AECOM to provide a customised experience for our clients.”

## Conclusion

Our customer success approach of maintaining close relationships the teams at AECOM and monitoring the outcomes of the activities we deliver, allows us to further develop the plans together that produce continuous improvements at AECOM. As we find success in specific areas such as drop kerb design by introducing sub-assembly composer skills, we are able to extend these new technology skills into other activities that are suited to automation.