



# Highways and Infrastructure Detailed Design

C&A perform the complete range of highway and infrastructure detailed design disciplines for both commercial and residential developments. We use the latest design software, ranging from major bypass schemes to minor junction improvements.

## Highway & Private Civil Detailed Design

- > Section 38/278 negotiations and Technical Approvals with Highway Authorities
- > Pavement Design
- > Full Highway Designs to adoptable standards
- > Design of private driveway & courtyard parking areas
- > Tender Drawings & Specifications
- > Contract Documents
- > Pedestrian and cycle access
- > Car parking; both maximising provision through design (vehicle swept paths) or negotiating reductions with the local authority
- > 3D Earthworks modelling and design including cut and fill analysis and volumetric quantities
- > Provision of Highway Construction Details
- > Major Highway Designs to DMRB standards



# Sustainable Urban Drainage

At C&A, our engineers have extensive experience in drainage design and knowledge of the latest drainage design guidance (Sewerage Sector Guidance, The SuDS Manual, Building Regulations, NHBC etc). From feasibility investigations to detailed design, our services include:

## Sustainable Urban Drainage & Foul Drainage Detailed Design

- > Section 98/102/104/106 negotiations and Technical Approvals
- > Highway drainage design and approvals
- > Design of Sustainable Urban Drainage Systems (SuDS) e.g. Urban source control / infiltration etc
- > Foul and Surface Water Hydraulic modelling
- > Overland Flow routing
- > SuDS Verification Reports - post construction
- > Provision of Drainage and SuDS construction details