



GCA



Structural and Civil Engineering
Industrial and Commercial Projects

Selected Industrial and Commercial Commissions.



Finning Workshop
Environmental Test Facility
Royal Derby Hospital
Freight Monorail - Brazil
Sainsbury's
Npower
Alpha Rail
Tallow Tank Farm
Milbrook Water Treatment Works
BMW
Cinecitta – Rome
Centurion House
University Hospital of North Stafford
Coventry Incinerator Waste Disposal
Derby City Council
Spar Shop
Rugeley Power Station
Stoke Waste to Energy Plant
Radlett Railway Station
Huntingdon Railway Station
Snowhill Station
Toyota
Weston Super Mare Pier
RAF
Bagnolo Power
Corton Wood Retail Park
BT Tower
Starbucks
Fort Dunlop
Horwich Fire Station
Heathrow Airport
Birmingham International Airport
HPL Pronto
Shirley Library
Uponor
Jolliffe Street Car Park
Network Rail
A1 Dairies
Chemring Defence



GCA Consulting Engineers provide creative, economic and practical designs for Industrial and Commercial projects throughout the UK.

Established in 1975, GCA has gained wide experience working on factories, water treatment works, energy and power plants and other industrial sites. Our commercial experience includes retail units, offices and light industrial works.

We pride ourselves on the quality of our design services, delivered by Chartered Engineers to maximise opportunities for our Clients.

GCA (UK) Ltd offers the following:

- Condition Surveys and Reports.
- Specification of Repairs for Existing Defects. e.g. Corroded Steel.
- Creative Structural Solutions for New Build or Extensions to Existing Industrial Buildings.
- Refurbishment or Remodelling Works to Existing Structures.
- Calculations and Designs to Justify Changes of Use.
- Complex and Challenging Projects.
- Foundation Underpinning, Increased Loads.
- Surveys of Derelict or Fire Damaged Properties.
- Infrastructure, Drainage, Highway Design and Landscaping.
- CDM Co-ordination.
- Party Wall Surveying.
- Expert Witness Work.
- Site Access Roads and Highways Work.

Case Study: JCB Rocester



GCA Consulting Ltd have worked on JCB sites around Rocester for over 30 years, providing a wide range of Engineering Services including:

- Development and Modification of Site Roads.
- Planning for over 800 Parking Spaces.
- Design of New Factory Facilities.
- Strategic Assessment of Site Drainage.
- Upgrading of Petrol Interceptors.
- Design, Tender and Site Supervision.
- Extensions to Service Yards.
- Alterations and Extensions.
- Design of Sculptural Artwork.

Coventry and Solihull Waste Disposal Company



GCA provided Structural Design, Site Visits and Inspections for the installation of new Burner Platforms at the Coventry Incinerator Site. The burners significantly increased the energy efficiency of the site, cutting running costs.

This complex building had been extensively modified during its life, and it was a significant challenge to determine existing load paths and devise safe modifications to the existing steelwork.

GCA designed the new steelwork, developed calculations and determined safe methods of installation for the new platforms. The installation was checked on completion and site visits made at short notice to deal with construction challenges.



Oleo International, Product Testing Tower, Coventry



Oleo is a leading expert in designing and manufacturing energy absorption solutions for the rail, elevator and industrial sectors. Oleo wished to extend their ability to conduct energy absorption product testing and GCA Consulting were engaged to design a piled test-tower foundation.

The design provided by GCA's Engineers had to withstand a variety of testing loads, as well as the dead-weight of the tower itself. At 35m in height, the tower also generated significant wind loads which were to be absorbed by the foundations, within agreed movement tolerances.

GCA developed detailed drawings and calculations to satisfy the statutory requirements for safe building design.



Draka Site, Alfreton Road, Derby



GCA Consulting have been involved with this large industrial site for many years, undertaking multiple commissions for the previous owners, Crompton Cables, and in turn for Draka when the site was bought. GCA were used for both major and minor Civil and Structural works at the site for over 20 years.

Specific projects have included:

- Extensions to factory buildings.
- Drainage alterations and new layouts.
- Roof alterations to Laboratory buildings.
- Structural design for new Stores buildings
- Construction of new Office buildings.
- Design of machine bases for heavy plant.
- Site investigation, including boreholes.
- New floor slabs over existing ducts.



Joint Services Centre, South Normanton



'The Hub' was devised as a joint service facility to bring multiple council services under a single roof. GCA Consulting delivered a full, multi-disciplinary design service for this £15m development which covered Infrastructure, Drainage, Structural, Transport and Highway design.

Throughout the design process, GCA co-ordinated a wide range of Engineering disciplines through a single point of contact to ensure the Contractor, Client and Architect had access to all the relevant design information.

Throughout the design and construction process, GCA adapted the design solutions to changing client requirements, ensuring that Highways and Infrastructure remained co-ordinated throughout the design process.



Onyx Retail Park, Wrath-Upon-Dearne



Onyx Retail Park is built on the former Manvers Colliery at Wath-Upon-Dearne, midway between Barnsley and Rotherham. The area has been regenerated into a popular shopping and eating destination and has so far led to the creation of around a hundred new jobs.

GCA provided a full steelwork design service for the construction of retail space on the site, including portal frames, secondary steel and the design of bespoke 'sail' structures at the front of each retail unit.

GCA worked directly for the steel fabricator on an extremely tight program, with only four weeks between our appointment and issue of information. Working closely with the Contractor, Architect and Fabricator's detailer, our designs were accurate, economic and delivered on time.



Eggleston Brothers Ltd, Derby



GCA provided a complete design and project management service for the extension of a factory to provide additional work space for Eggleston Brothers Steel Fabricators. The provision of new working space, as well as overhead gantry cranes and storage areas, required a detailed assessment of the design loads, and the provision of an economic steel portal frame.

GCA provided Engineering Design for the construction works including superstructure and foundations but also undertook Architectural Design, obtained Planning Consent for the works, Tendered and Administered Contracts and provided Site Supervision.

GCA took responsibility for the entire design and project management package. This gave the client a single point of contact and ensured that all parts of the works were co-ordinated.

