

# FITZNEWS



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## Sustainably Excellent new headquarters

Fitzpatrick's pioneering new corporate headquarters building in Hoddesdon is being hailed a great success by clients and staff alike, and has been acknowledged as one of the UK's most sustainable buildings after being granted a BREEAM 'Excellent' rating.

The 3,160m<sup>2</sup> three floor building – for which Fitzpatrick was client, designer, contractor and end user – was delivered on time and within budget. "We can honestly say we have been delighted with the project in all of those roles," said Managing Director Jim Elders. "It has been a unique and extremely informative experience to be able to view things from all parts of the supply chain at once, and we have gained insights into the client view in particular that should help us be even more client responsive in future."

The need for new and larger office accommodation has been created by the company's growth over the past few years, and the need for space to allow for further planned expansion. It was soon obvious that this was a project on which the Building Division could showcase its talents. "The design brief was to provide a structure that is good for staff to work in, pleasant for clients and others to visit, and which would enhance our corporate identity, showing that Fitzpatrick takes environmental and sustainability issues seriously," says Sustainability Director Ted Pilbeam.

"The project brief was for a pioneering sustainable office building and this was achieved by our in-house expertise supported by an environmental consultancy team. We were the client, contractor and end



Fitzpatrick's new corporate headquarters

user, but we had considerable support from the architects, engineers and environmental and ecology groups who we congratulate for their efforts."

A number of leading edge environmentally friendly features were installed which helped achieve the Excellent rating, including ground source heating, photovoltaic cells, ground air ventilation, rainwater harvesting, solar shading and intelligent power systems.

The carbon footprint has been measured to be some 70% more

efficient than our old headquarters.

The location of the new headquarters is a brownfield site previously used for storage by our Civils Group. Once the area had been cleared the basement level was excavated, the concrete slab cast and the steel structural frame erected.

"By using steel for the building's frame we were able to maximise the available office space by constructing an open plan environment with clear storey glazing on all elevations," explains Mr Pilbeam.

## University library wins two best building awards

Freewen Library has been named as the Best New Building at Portsmouth Society's Annual Design Awards following our extensive works to refurbish and extend the library of Portsmouth University. This is the second time the library has been awarded this title after first receiving it for the original building in 1993.

Chairman of the Portsmouth Society Celia Clark said: "There are many reasons why the library won the award. It is very beautiful – the light, the materials and

the fact that it is a green building."

The structure incorporates many environmental factors including natural stone and cedar cladding, a sedum roof and a system that recycles rain water for use to flush the toilets. The extension, which links to the old library by a central three storey high entrance hall, includes an IT suite for 181 students, a new cafe and seminar rooms.

Our team completed the £7.4M contract to build the library in 2006 ready for the opening in December of



that year. Librarian Ian Boner said: "We are very pleased with it, there are all sorts of design elements which make it a library fit for the 21st century."

### Guest editor



Patrick O'Meara  
Business in the Community

Many construction companies now recognise the growing expectations of local communities, society at large, clients and employees to embrace a responsible business agenda.

Some companies are working to improve their relationship with local communities to develop training and employment programmes that target people who are struggling to get work. Others are finding inventive ways to reduce their impact on the environment, which not only makes the business more sustainable for the future, but cuts costs today.

Like many companies, Fitzpatrick has always had a tradition of working in local communities as a part of its everyday business. Fitzpatrick is now looking at how it can develop a more strategic approach to being a responsible business. It is seeking ways to make the business stand out among its competitors on these merits.

As part of that process, I am delighted to welcome Fitzpatrick into membership of Business in the Community, a charity that helps business to achieve good. With more than 850 companies as members, we represent one in five of the UK private sector workforce and convene a network of global partners.

As a member, Fitzpatrick is committing to three things: to inspire others by sharing best practice; to work collaboratively on the most pressing social issues; and to integrate and measure responsible business.

Our members believe it is imperative to look at improving employee engagement, developing partnerships with local communities and reducing negative impacts on the environment. At its core, responsible business is good business.

We look forward to supporting Fitzpatrick on its responsible business journey.



# Biggest greenhouse project in UK heats up

One million cubic metres of earth are being moved in Thanet to prepare the ground for the UK's largest greenhouse development for growing fruit and vegetables.

Supermarket customers could soon be buying more locally grown produce thanks to seven huge greenhouses under construction in north Kent with Fitzpatrick as principal contractor. Each greenhouse at the 'Thanet Earth' development will cover an area equivalent to 10 football pitches and support the growth of hundreds of tonnes of fruit and vegetables every year.

Fitzpatrick's Environmental business is preparing the ground for each greenhouse, installing utility connections and diverting existing mains water and gas supplies that run through the site near Ramsgate. The contract includes overseeing a team of archaeologists who are working to preserve Bronze Age and Medieval remains found across the site.

Fitzpatrick is also managing sub contractors who are currently installing foundations, erecting the aluminium frame structures and fitting glass panels. Minor works being carried out on behalf of tenants include constructing asphalt and concrete hardstandings.

The work is being carried out under a construction, design and management contract worth £9M for client the Fresca Group.

Project Manager Deon Scholtz says: "This will be the largest glasshouse development in the UK when complete and will employ around 600 local people. Our role as principal contractor involves not only managing the interface between

everyone on site but carrying out earthmoving on an incredible scale."

Fitzpatrick started work last August to create a series of level platforms across the 93ha site. Heavy duty 45t excavators first strip a 300mm layer of topsoil to reveal a firm strata of chalk. Archaeologists follow closely behind to record evidence of historic activity. If nothing is found, chalk on higher ground is excavated and loaded into dumper trucks to be deposited at a lower part of the site, up to 2.5km away. Around 400,000m<sup>3</sup> of granular material is being moved this long distance, to ensure that no material has to go to landfill. Global Positioning Systems fitted to each piece of plant ensure that earth is placed and trimmed precisely in line with the agreed design.

The ground is being lowered by as much as 4m from the highest areas of the site before topsoil is replaced. A total of one million cubic metres of material including topsoil and chalk will have been dug by the time the



▲ Human remains found in a Bronze Age burial mound  
▶ Heavy duty plant is being used to move material and shape the site  
▼ Fruit and vegetables will grow suspended from the steel framed structures

▲ As seen from the sky, one of seven greenhouses under construction at the 'Thanet Earth' development

contract is complete this September.

Areas of the site found to contain historical artifacts are being mapped and archaeologists move in to carefully record and recover what they find. Remains of burial mounds dating from the early Bronze Age have been uncovered, as have sunken floored timber buildings dating from the Medieval period and a Women's Land Army badge from World War II.

Other earthworks have involved creating seven 10m deep ponds as well as three overflow ponds to collect rainwater from the glass roofs for reuse by the produce growers.

Fitzpatrick will improve access to the site by constructing a 2.5km access road, and is overseeing an electrical contractor replacing a pylon with a more sturdy version to support power cables serving a new substation.

Negotiations with the client have led to Fitzpatrick's Buildings division securing an additional contract to build a vegetable pack house on site.



## The 'Good Neighbour'



Operatives from Fitzpatrick planting new trees in Hackney, helped by a councillor and a member of the public

Sustainable construction implies being a Good Neighbour, something that Fitzpatrick has always taken pride in. New initiatives will make us even better.

Great strides are being made across the company with new schemes aimed at improving our social and environmental practice. As well as donating a percentage of group profits to charity each year, a Corporate Social Responsibility agenda is being developed by sharing Best Practice with like minded organisations, and a number of community minded projects are under way.

Fitzpatrick has become a member of 'Business in the Community' which brings together over 800 companies keen to make a positive impact on society. The initiative allows stakeholders to meet and give support to making a positive contribution to local communities and reduce the burden they place on the environment.

Last year Fitzpatrick set a target of reducing the company's fuel bill by 10% every year over three years, by encouraging employees to share

car journeys or take the train where possible. The company has a fuel bill in excess of £2M, so the initiative will represent a significant cost saving.

Framework Director Mark Thomas said this effort will represent not only a financial reward, but social and environmental gains as well. "As the price of fuel increases, it certainly makes economic sense to encourage savings where possible. But it is also of benefit to our staff if they can work on a train, rather than sit in a traffic jam. And the fewer car miles travelled by staff helps to reduce our impact on the environment," he said.

Fitzpatrick is also an associate member of the 'Considerate Constructors Scheme', which encourages construction firms to respect their neighbours and to keep sites clean. Mark Thomas added that companies with good local reputations can find it easier to attract staff.

Fitzpatrick has always been committed to working in a

## Bus route carved out in Kent

Widening arterial roads in north Kent has allowed a new public transport system to extend from Dartford and the landmark Bluewater shopping centre to Gravesend.

The Fastrack bus service is being developed in a series of phases, and Fitzpatrick has been working as main contractor on the first two on behalf of Kent Highway Services. Fastrack buses use dedicated and segregated lanes alongside newly widened carriageways, and pass through chalk cuttings like the one pictured (right), close to Northfleet.

"We had to excavate 8000m<sup>3</sup> of chalk to allow certain roads to be widened," said Site Agent Rab McLeod. "A combination of rock bolting and soil nailing techniques were used in cuttings to steepen the front face of

slopes. We also built mini piled walls in front of a pair of bridges so that earth embankments could be reduced in size to accommodate the bus lanes."

Chalk was taken to a nearby cement manufacturer for reuse, and street lighting beside the road was relocated. Elsewhere, the route crosses a municipal landfill and Fitzpatrick arranged for the ground to be improved using a technique known as dynamic compaction to avoid the need to remove large quantities of material.

The Fastrack bus service passes beside a development of large warehouses on a site known as 'The Bridge', adjacent to the M25 near the Dartford crossing. Fitzpatrick erected and clad two of these steel framed warehouses last year in a £35M contract for developer ProLogis.

## ' company

Understanding among young people of the work that Fitzpatrick carries out has improved in Hertfordshire after the donation of time and materials for two community focused projects.

The first project involved management of construction and installation of a piece of public art at the Sandringham secondary school in St Albans. Pupils designed a sculpture and seating area to brighten a forgotten corner of a courtyard and received guidance from Fitzpatrick engineers. The chosen design was built during May with the help of construction students from nearby Oaklands College.

For a second community scheme carried out at Great Amwell near Hoddesdon recently, we donated materials and resurfaced a car park on behalf of a local Scout group.

"These were nice community projects with a construction bias," said Mr Thomas. "It was good to give something back to the local area."

considerate manner for the benefit of people and the environment. It is recognised however that it is becoming increasingly important to agree formal strategies for targets like reducing energy consumption and the volume of waste sent to landfill, so that progress can be monitored. Working groups have been set up to gather information from sites to assess performance against a series of benchmarks.

Distribution of charitable donations by Fitzpatrick have also become more structured, so that the company's philanthropy can be recorded. "We have begun to donate 1% of the company's profits to charity through a central Community Fund, rather than support local good causes on an ad hoc basis," said Mr Thomas. "This allows us to demonstrate exactly where our donations are being made and to assess the effect our contributions are having."

# Airport skills are expanding

Fitzpatrick's growing expertise in delivering airport projects is on show at contracts involving management of many different activities. Concrete paving features heavily, as does asphalt surfacing, earthworks, drainage, services work and environmental engineering.

At Bristol Airport, successful reconstruction of concrete pavement has led to a negotiated repeat contract for more Pavement Quality Concrete (PQC). This contract was completed in 2007 while at Jersey Airport, South Apron reconstruction was following work on the North Apron.

Our Airports team within Fitzpatrick Civil Engineering finished the £7.3M rebuild of Jersey's North Apron in May 2007 and then started a larger, £9.1M contract including work on the South Apron in August last year. Work is now nearly finished, four weeks

ahead of the original programme. 67,800m<sup>2</sup> of PQC pavement has been built, with a new taxi way, cargo handling area and civil engineering for a new water treatment plant.

"Our capability for carrying out airport work has grown, in the UK and Ireland," says our Business Development Manager for Civil Engineering and Airports, Derek Lock. "We now often provide advice on the design needed and manage everything within packaged contracts."

In Ireland, reconstruction of the apron around the new Pier E at Dublin Airport is underway. Around 80,000m<sup>2</sup> of PQC and CBM (Cement Bound Material) pavement is being built, with earthworks, drainage and services installation – all part of Dublin Airport's £1.6Bn Terminal Two project.

Runway resurfacing is the main element of our work at Birmingham Air-

port, although because the concrete runway is being overlaid with 200mm of asphalt, all of the runway's services are being lifted by 200mm.

"We are working day and night between scheduled flights," says Project Manager Mark Williamson. "The team is repairing some of the concrete pavement before it is overlaid, and where the concrete is beyond economical repair it is being treated with crack and seal."

This technique breaks the worn out concrete pavement into roughly 1m<sup>2</sup> slabs with a large steel guillotine. The concrete is then compacted to create a sound base for the asphalt overlay.

Work started in March and is due to finish in October, by which time over 17,000t of regulating, binder and high friction asphalt surface courses will have been laid to give new life to Birmingham's main runway.

## Investment reinforces Paving's leading position

Everyone with good knowledge of the construction industry knows the name Fitzpatrick is synonymous with concrete paving. The link built over 40 years of road, runway and ports construction is still going strong – boosted by recent investment in £1M of the latest concrete paving plant and equipment.

Since 2006, our Paving Division has purchased two new slip form pavers, a dry lean paver and a new concrete batching plant. This has maintained a process of renewing our fleet of equipment which will continue over the next three years and help us keep our market leading position.

The concrete paving market is growing in the airfield and motorway barrier sectors in particular, whereas for ports and carriageway construction, CBM (Cement Bound Material) is popular for forming the base of high strength pavements.

Our new dry lean paver has recently been in use in Dundalk and at Dublin Airport, while in Cumbria, Paving Division has been laying CBM for carriageway of the Highways Agency's M6 Carlisle



Paving Division has been laying CBM in Cumbria

to Guardsmill project. Paving Division also has exactly the right equipment with bespoke moulds for slip forming the new concrete 'step barrier' for motorways.

The Highways Agency's Major Projects Director-

ate is replacing old barriers with this new, safer type of concrete barrier at all of its motorway widening and improvement projects. We have been slip forming step barrier on the M1 and the M4 and the safe bet is on Paving Division doing more.

## Bottling and bonding in Bristol

Britain's largest bonded warehouse has been built by Fitzpatrick on previously contaminated ground at Avonmouth near Bristol. The 82,000m<sup>2</sup> steel portal frame structure has been developed for drinks company Constellation Europe and features bottling and storage facilities as well as offices.

It is located close to a dockyard and will receive huge quantities of wine from overseas for packaging and distribution within the UK. The structure was erected in a 38 week

design and build contract, worth around £40M.

Fitzpatrick's work began last October to cut, fill and remediate the site, which previously housed a mustard gas producing factory built for World War One. A 450mm thick capping layer of stone and geotextile material were installed as part of the remediation strategy to cover ground that contains arsenic, cadmium and zinc.

The company oversaw the installation of around 11,000 foundation

piles to support floor slabs and supervised the erection of 2,860t of structural steelwork by Atlas Ward Structures. An elaborate stainless steel drainage system has also been built within the warehouse.

Project Manager Lee Forster said: "The bonded warehouse is a large unit with two main areas. The distribution side has a floor to ceiling clearance of 15m, and the production side has a 12m clearance."

Senior Surveyor Isidore Mahona added: "Developing a design for this structure was very complex. There were many variations to the original brief which had to be considered."



Dedicated bus lanes have been built in north Kent for the Fastrack scheme

## News in brief

Fitzpatrick's has taken delivery of a zero emission electric powered vehicle in an effort to reduce its carbon footprint. The 3.5t truck will be used by operatives on the company's highways term maintenance contract with the London Borough of Enfield.

Much of the company's reactive maintenance work is carried out in town centres and residential areas, so the firm is keen to promote its green credentials. The truck's livery will make it clear that it is an environmentally friendly vehicle.

"The initial outlay for an electric vehicle of this type is greater than a conventional vehicle; but it is exempt from road tax, does not have to pay the congestion charge if entering central London and benefits from reduced running costs," said Project Manager Steve Woolf. The vehicle is based on a Ford Transit chassis, has a range of up to 200km and costs less than £10 to recharge overnight. A regenerative braking system also supplied additional charge to the battery.

Employees are encouraged to support a fundraising initiative that aims to raise up to £20,000 to build a playground at a centre for both disabled children and children with behavioural difficulties.

The company's Midlands region has agreed to raise at least £4000 over the next year in support of Barnardo's Harris House near Birmingham. The region will also help source materials for the project and carry out the work.

The project is the focus of the region's Corporate Social Responsibility efforts over the next 12 months, and is being carried out in conjunction with the client and other stakeholders Turner & Townsend, White Young Green and BBLB Architects.

A 'property quiz' is set to be held to raise funds and strengthen relations between Fitzpatrick and the other parties. To lend your support to the quiz, or to suggest other fundraising initiatives, please email [stephen.jones@fitzpatrick.co.uk](mailto:stephen.jones@fitzpatrick.co.uk)



▲ From left to right: Debbie Ward of BBLB Architects, Shereen Khan of Harris House, Phil Clempson of Turner & Townsend, and Stephen Jones of Fitzpatrick Contractors

Fitzpatrick has been named as the best place to work in construction, among firms with over 500 staff, for the second year running. The company scooped the award at a ceremony organised by Contract Journal magazine at Lord's Cricket Ground in June.

Head of Training & Development Trina Hannam said: "I am absolutely thrilled for the company. This accolade is awarded on the basis of an anonymous questionnaire that is circulated to employees. Thank you to everyone who took the time to complete the form."

Ten members of staff were invited to the ceremony, including Anthony Clarke and Geoff Varey who project managed and facilities managed the construction of the company's new head office.

Since last year's win, the company has further improved the standard of staff welfare. An occupational nurse has been recruited and our new head office includes a gymnasium.

# Training scheme praised by Institution President



▲ ICE President David Orr (left) discusses training with Tim Dunnington, Richard Robinson and Alasdair Wilson-Smith



▲ Tom Ransley is proving to be a top young prospect

ICE President David Orr visited our new head office in April, part of his visit included hearing about our graduate training scheme and meeting some of those currently benefiting from it. Tim Dunnington, Richard Robinson and Alasdair Wilson-Smith are all on the training scheme and gave short presentations about their experiences.

"I am truly delighted to see a firm making a big investment in its employees through such a strong commitment to the ICE training scheme," said Mr Orr.

The ICE approved training scheme has been running for more than 20 years and is offered to all graduates joining the company. "The scheme is largely based on gaining experience," explains Delegate Engineer Euan Rintoul. "Individuals are given a series of objectives to achieve, they will keep records and write reports about their experiences. Every six months a mentor will assess their progress to see

which objectives have been achieved. Once all are met the individual will sit a Professional Review at the appropriate level to gain their qualification."

There are currently 20 members of staff following the approved scheme and a further five are on a non (ICE) approved training initiative. These include Site Engineers who are undergoing day-release courses to add to their qualifications before, hopefully, embarking on the approved scheme at a later date.

Fitzpatrick also offers sponsorship for students who join us during summer or industrial placements. "When a student joins us for a placement we can offer them a sponsorship which means when they return to university we pay them a reasonable wage with the aim of them joining Fitzpatrick when they graduate," says Euan.

"It is very important for the continued growth of the company to have these schemes in place to encourage graduates to join Fitzpatrick. Our

retention rate of graduates is high and that is, I believe, because of the development opportunities available."

Employees are also offered sponsorship and the necessary time off to complete day release courses and degrees, one individual taking up this option is Network Supervisor Tom Ransley who joined us in 2003. Tom is currently working on the Buckinghamshire Highways term maintenance contract and is studying for an MSc in Project Management at the University of Reading.

Tom is already achieving great results in his career having recently won the National Highways Best Value Benchmarking Club's graduate competition in a team with two other individuals - one from consultant Jacobs and another from client Buckinghamshire County Council. The team worked closely together to develop an innovative pot hole repair procedure, involving electronic transfer of work order information.



## Q&A Naeem Ahmad

**Job Title.** Quality Assurance Manager

**How did you get this job?** I previously developed quality control procedures on behalf of the company, and have considerable experience of engineering, procurement and construction (EPC) contracts.

**Outline your career progression.** I graduated with a B.Eng (Civils) in 1990, worked on oil, gas and infrastructure projects in the Middle East and joined

Fitzpatrick in 2005 after completing an MSc course in Construction Management.

**Where are you based?** Stratford, east London

**Which schemes or projects are you currently working on?** I divide my time between three projects connected with the London Olympic Games. They are the relocation of railway sidings at Orient Way, construction of a cycle circuit at Hog Hill and installation of a bridge at Stratford International station.

**What are your roles and responsibilities?**

I develop quality control procedures for the construction phase of projects to meet the client's quality assurance requirements, and carry out internal environmental assessments in my role as a CEEQUAL assessor.

**Describe the benefits of CEEQUAL and your involvement.** Measuring the environmental performance of a civil engineering project helps the company to demonstrate that it is considering and responding to the needs of local people and its surroundings.

**Talk me through a typical day.** I travel across east London to visit our sites and work with project teams.

**What do you enjoy most about your job?**

I enjoy being involved in a diverse range of projects

at any one time.

**Are there any drawbacks?** It can be hard to satisfy everyone and make sure I am dividing my time up equally.

**Is the job a challenge?** Certainly, but working with so many people is also very rewarding.

**On which other projects have you worked?**

Construction of a Eurostar train depot at Temple Mills on the route of the Channel Tunnel Rail Link.

**What have been your career highlights?**

Working on high profile schemes that many people recognise, such as the Olympic Games.

**What advice do you have for young people trying to get on in the construction industry?**

Develop a commitment to learning about the importance of quality management systems. They sort out the professional companies from petty contractors.

**Where do you see yourself in five years time?**

A hard question to answer! I suppose continuing to make a positive contribution to the company and delivering quality projects for our clients.

**How do you relax?** I enjoy driving and have a passion for high performance motor cars.



ProLogis's new Dunstable warehouses – completed on time, within budget and with an Excellent BREEAM rating

## Excellent result for Building's biggest

Building Division's largest project so far has been completed with great success by Eastern Region at Dunstable for developer ProLogis. Two warehouses totalling 72,000m<sup>2</sup> were completed on time and within ProLogis' budget under a £20M design and build contract. Like the new Fitzpatrick group headquarters at Hoddesdon, the ProLogis development has subsequently achieved the highest possible 'Excellent' rating through BREEAM – the Building Research Establishment Environmental Assessment Method.

This came partly through our cut and fill earthworks operation on the site and bioremediation and

reuse of 10,000m<sup>3</sup> of contaminated material, as well as the recycling of 50,000m<sup>3</sup> of concrete. The cut and fill operation involved moving around 180,000m<sup>3</sup> of material and dynamically compacting it to form new 'foot prints' for the buildings' pad foundations which Building Eastern then constructed on the strengthened ground.

Following that, Building Eastern managed the construction of steel frames, cladding, and external works including 25,000m<sup>2</sup> of concrete service yard and 22,500m<sup>2</sup> of asphalt car park. Landscaping work completed the project with additional fit out work for the developer's first tenant.

## Football fever for Fitzpatrick

A team of footballers from Fitzpatrick has been crowned East Anglia regional champions in a five-a-side tournament organised by the Institution of Civil Engineers. A squad of eight Fitzpatrick players, playing in rotation, battled hard to beat a team from Atkins Area 6 in the final in May, and overcame a two goal deficit to win 3-2.

The team had earlier progressed to the semi finals after coming first in its group heat; winning four and drawing one of its first six games. Goalkeeper Asad Naqui said: "We did very well to beat such a good team in the final, and the players gave it their all on what was a very hot day."

Fitzpatrick's team travelled to Newcastle the following weekend to represent East Anglia in a national final, and put up a valiant attempt before being knocked out in the group stages.



▲ Regional champions: Back row (left to right): Lee Ashdown, Chris Harrison, Asad Naqui and Patrick Selby. Front row: Nasir Milki, Liam O'Grady, Chris Griffiths and Nick Stears

A second five-a-side team from Fitzpatrick reached the semi finals of the 'Construction Charity 5s' tournament, held in Wimbledon in June. The team of six players won its first six games in the group stages, before being beaten by Skanska. Fitzpatrick's team included Brian Boehmer, Tony Cornwell, Andrew Stoney and Robbie Syrett, as well as Asad Naqui and Liam O'Grady.