



SUMMER 2011

Chailey - Celebrating 300 years of brickmaking

"Sussex clay be good and strong
to serve 'ee long and well
Be it bricks, pots or pipes
or strong tankards for good ale"

Traditional Sussex Verse

News from the Editor

Summer 2011

IBSTOCK DZINE MAGAZINE

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Front Cover: Blue Boulevard, The Quay, Hasselt, Belgium

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Environmental Report 2010

For many years Ibstock has been producing an Environmental Report on its business.

This warts and all overview for last year is now available to download from the Ibstock website - www.ibstock.com - but the following is a summary of what is currently being carried out.

People

Ibstock recognises that to ensure the future success of the Company it must be committed to the communities in which it operates.

It supports local rural communities where it is probably the single largest employer in some areas of the country. Some 58% of Ibstock's employees have more than 10 years' service.

The Ibstock Cory Environmental Trust distributes £450,000 pa to deserving community projects under the Landfill Tax Credit Scheme. Highlights include:

- The refurbishment of a community swimming pool in the ground of Gigs Mill Primary School. The funding of this valuable community facility means that the swimming pool is available for use by the school and local community all year round as opposed to the previous six weeks a year.
- The trust has given a grant to the Wildfowl and Wetland Trust which has enabled biodiversity works to be undertaken at Martin Mere Nature Reserve as part of the reserve's Canoe Safari.
- In Sevenoaks, the Trust purchased a piece of land which will enable the 4th Sevenoaks (St John's) Scouts to continue their scouting pursuits.

Did you know that the embodied energy in facing brick is 8.2MJ/kg which is less than general timber at 8.6MJ/kg?

Despite facing a financially difficult few years the Company has remained committed to the development of its employees and a new environmental awareness training package has been developed and presented to all employees in addition to offering The Institute of Environmental

Management and Assessment Foundation Training Course to senior managers.

All of Ibstock's suppliers are encouraged to follow in its footsteps and achieve ISO 9001 on Quality Management and ISO 4001 on Environmental Management or BES 6001 approval for responsible sourcing. Preference is given to suppliers who have achieved these ratings.

Did you know that using Ibstock bricks gains more points when assessed by the Code for Sustainable Homes as all Ibstock factories have achieved 'Very Good' in accordance with BES 6001 Responsible Sourcing of Construction Products?

The Environment

When you choose a product from Ibstock you can be sure that you are sourcing responsibly. The Company believes in monitoring the impact that it has on the environment and it continually tries to reduce its wastage and energy consumption and improve its recycling and water re-use.

All 20 of the factories hold BS EN 14001 for Environmental Management and Ibstock was the first brick manufacturer to achieve a 'Very Good' rating in BES 6001 for responsible sourcing and all factories now achieve a 'Very Good' rating.

The Company has a dedicated Environmental Continuous Improvement Working Group who meet throughout the year to discuss how the company can be more responsible and to ensure that progress is being made. During 2010 it was a major contributor on a Carbon Footprint for the UK brick industry which was third party accredited to PAS 2050.

With 20 factories situated throughout the UK, Ibstock is quite literally your local supplier. On average the bricks only travel 62 radial miles from where they are manufactured to where they are used, reducing traffic congestion and vehicle emissions.

Every year it recovers and sends for recycling approximately 50,000 litres of spent lubricating oils, 1,300 tonnes of scrap metals and 150 tonnes of wood from scrap pallets.

The Company has numerous biodiversity projects on the go including:

- Four biodiversity surveys to investigate the presence of bats.
- One biodiversity project to investigate the presence of badgers.

All waste produced up to the kiln firing stage is recycled. Once the firing process has taken place waste brick is either used for the Company's own purposes as an alternative to primary aggregate for building quarry access roads or it is sold for use as secondary aggregate. Approximately 45 thousand tonnes of primary aggregate is saved each year by using these non-saleable items.

Did you know that the average distance travelled by Ibstock bricks is 62 radial miles? The average distance for timber from Canada is 3000+ miles and from Scandinavia 1000+ miles.

The manufacturing process of the bricks includes using secondary or waste materials from other industries. This reduces the quantity of primary aggregate that Ibstock uses but also ensures that the majority of our products contain a recycled content - typically 12%.

Over 40% (26 million gallons) of all process water used throughout Ibstock is recovered water. No 'Red List' substances are discharged into the watercourse and all of our sites are fully compliant with the Oil Storage Regulations contained within the PPC Regulations.



Allerston Blend

Coughton Buff Blend

Otley Blend

Stokesay Blend

Tattershall Blend

The manor range



Ibstock's new 'Manor Range' is an attractive collection of bricks which have been specifically designed to replicate traditional finishes from the past. This unique style of brick is manufactured using an unusual technique which involves cutting back the upper most layer of clay before rolling it back on top, the end product of which is a distinctive three dimensional surface texture that is very different from anything else available in the market.

The Manor Range from Ibstock consists of five products, four red and one buff. All of the products in the range utilise this unique texture and are available in a palette of exciting colours which include the Allerston Blend, the Coughton Buff

Blend, the Otley Blend, the Stokesay Blend and the Tattershall Blend. These fine colourways create interesting street scapes for any development, helping buildings to sit perfectly within their environment.

Chailey Open Day

To celebrate its 300th anniversary of continuous production, Ibstock is holding an Open Day at Chailey on **10th August 2011**. Visitors will be able to see production at first hand, tour the site and see displays. An invitation is enclosed with this issue and if you would like to attend, please reply by **1st August 2011**.

Contract Management

Meet the new member of the Ibstock team.

Following Steve Poulter's retirement at the end of last year, David Shergold took over the role of National Contract Sales Management within Ibstock. David has been with Ibstock for over 26 years in various capacities, most recently as Architectural Sales Manager for the South West of England. We asked David exactly what Contract Management is?

Ibstock Contract Management has been set up to ensure that projects run smoothly and to agreed programmes. It is the effective management of a brick or cladding project from the initial design stage right through to site completion and involves the close liaison between all members of the construction team, both from our customers and Ibstock.

"My role at the design stage is to alert our production units, checking capabilities and production slots. Once the Contractor is appointed I will then look at schedules with the Contractor in conjunction with production units, to ensure products are available, packaged in accordance with site requirements and delivered within programme. A presentation is then carried out on site with Contractor and Sub-contractors covering the storage, handling, laying and protection of the product during the build. This is followed up by further regular site visits providing reports and recommendations and ensuring the completed brick building is one that everyone is proud of and a BDA award winner".

Contract Management gives peace of mind to the Architect, Contractor and Client when it comes to high profile complex projects using Ibstock bricks and cladding.

David can be contacted through the Cattybrook Sales Office on **0844 561 4570**.



The History of Chailey

CHAILEY TIME LINE

Site 1

1711
Richard Calchin has permission from the Manor of Warningore to operate two brick kilns at South Common in Chailey.

1721
John Pulman purchases the site.

1734
George Colvin acquires the site from John Pulman.

1762
John Billingham, a brick maker from Ditchling, becomes the owner. A lime kiln was also in existence at this time.

1792
Richard Norman, who already works at Chailey, buys the yard from the trustees. The business is then managed by successive generations of the Norman family until 1959.

(From 1890 until 1930 the Norman family also own a brickfield at Plumpton (approx 4 miles from Chailey).

1959
Business is bought by Sussex & Dorking United Brick Company Ltd, later Redland Bricks Ltd.

1996
Ibstock Brick Ltd acquire Chailey

2011
Site still in operation under Ibstock Brick Ltd.

Site 2

1730's
Probably the site of brick making for the Hooke estate in the 1730's.

1754
John Siffleet given a licence to dig clay.

1759
Thomas Alcorn takes over the yard after the death of John Siffleet. Yard run by successive generations of the Alcorn family until 1887.

1887
Site acquired by the Norman family (owners of Site 1)

2011
Site no longer in existence but land is still owned by Ibstock Brick Ltd.

History

For over 300 years brickmaking has been carried out on and about the Ibstock site at Chailey in East Sussex making it one of the oldest factories still in production in the UK.

In her book, 'Brickmaking in Sussex, A History and Gazetteer' by Molly Beswick, mention is made of the existence of a brickyard in South Common, Chailey being opened in the late 17th Century. However, the first recorded mention comes in 1711 when Richard Calchin was recorded in the Court Book of the manor of Warningore as being the tenant of the site.

In the 15th and 16th centuries bricks were usually made on the site of where they were building. As time went on bricklayers found it more convenient to have brick kilns of their own and when he died in 1690 Robert Calchin is described as a bricklayer but his son, Richard, is shown in 1711 as having two brick kilns and cottage on the site. Records show that the site was sold on to John Pullman in 1721 and again in 1734 to George Colvin.

The South Common site was acquired by John Billingham in 1762 - a brickmaker from Ditchling. John Billingham preferred to remain at his Ditchling yard and he leased the Chailey yard to Richard Norman who took over the lease on the understanding that on the death of John Billingham the beneficiaries of his will would sell the site to him provided he was willing to pay the price of £550.

In 1754 a second much smaller brickyard was opened to the north and John Siffleet was granted the licence as long as he did not take any brick earth from within a space of 60 rods of the brick kiln of George Colvin. In 1759 this site was acquired by Thomas Alcorn and it remained in the ownership of the Alcorn family until it was bought by the Norman family at the end of the 1880s.

“ Richard Norman, founded what became one of the most successful and widespread of the Sussex brickmaking dynasties. ”



John Norman 1808 -1880



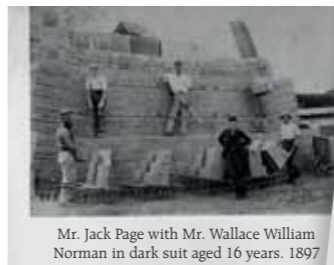
Ephraim Norman 1842 -1907

Richard Norman, founded what became one of the most successful and widespread of the Sussex brickmaking dynasties. On his death in 1818, management of the Chailey brickyard and what had now become a pottery as well, passed to his sons William and Richard. They, in turn, passed the brickyard to their sons, John and Richard and by 1882 a fourth generation – John's son Ephraim and his cousin, Richard were in charge and the firm had become known as E & R Norman.

The business survived both world wars under the control of Ephraim's son and then of his grandson, Wallace, who was the last member of the family to be involved before the yard was sold to Sussex & Dorking United Utilities Brickworks, later Redland Bricks Ltd in 1959.

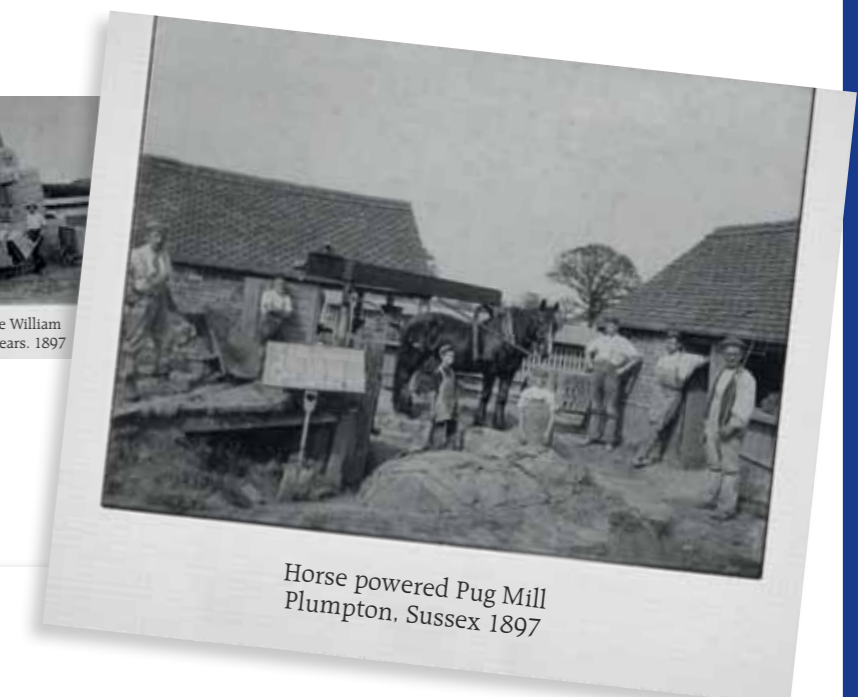


Clamp Yard Plumpton 1897 (Mr. Morley, Carter)

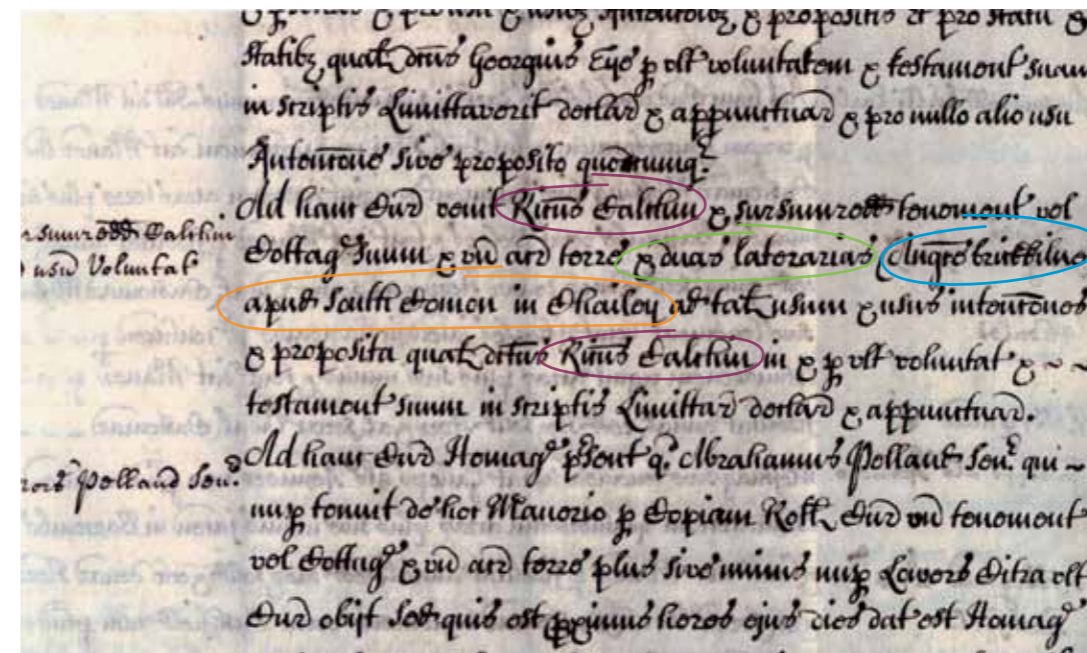


Mr. Jack Page with Mr. Wallace William Norman in dark suit aged 16 years. 1897

Ibstock Bricks acquired Redland Bricks in 1996 and the site still has the capacity to make around 14 million bricks per year.



Horse powered Pug Mill Plumpton, Sussex 1897



- Richard Calchin
- Two brick
- (Anglice, Brick Kilns)
- at South Common in Chailey

Extract from the records of the Manor of Warningore, 1711, taken from reference ADA 186, page 27. Reproduced by the kind permission of the East Sussex Record Office.

Production

On both sites bricks, tiles and pottery were in production from the early 18th century. An inventory of Siffleet's goods taken at his death in 1759 showed that he had unsold stock from the previous year of bricks, tiles, hollow tiles, paving tiles and gutter tiles showing the variety of goods that were being manufactured in the middle 18th century.

Small scale pottery production had also started in the 18th century producing domestic pottery to satisfy purely local demands but this expanded greatly in the late 19th century.

Manufacture of bricks and tiles was a seasonal activity – summer was the time for making bricks. Winter was the time for coppicing woods to produce faggots for use in the kilns and stockpiling clay for use in the summer.



Two types of clay were available in the area. A greenish-grey Weald clay that was (and still is) used for making bricks and a red clay. In the early 19th century this red clay was also used to make fine domestic earthenware.



Mr. George Cottingham
Chailey Potteries 1935



Mr. Waller
Chailey Potter 1935



W. W. Norman laying foundation stone
for new yard at Chailey 1946

Sussex Pottery

These were intricately decorated with white slip and with words, names or messages inlaid into the pot to commemorate special events. To achieve this unique Sussex style of decoration, bookbinders type and small cogwheels were impressed into the moist clay. Chailey was considered to be the major producer of some of the best quality pottery in the country, even being sold at Heal's in London.

In 1828, the letterhead of William and Richard Norman described them as "Manufacturers of all sorts of Bricks, Tiles and Brown Ware Pottery" and from the 1870s onwards the Victorian style of building encouraged them to turn to manufacturing chimney pots, crested ridge tiles, roof finials and also elaborate moulded terracotta ornaments as well.

Present day manufacture at Chailey concentrates on bricks and pavers which are still produced by the traditional clamp firing method.

This article has been produced using information researched by Mrs Molly Beswick and published in 2001 in her book "Brickmaking in Sussex, A History and Gazetteer" produced for the Sussex Industrial Archaeology Society. Information has also been used from the 1980 book written by John Manwaring Baines, entitled Sussex Pottery.

- 1900 Siffleet/Alcorn/Norman site
- until WW2 Norman pottery site
- 1946 onwards current Chailey site



Reproduced by kind permission of www.old-maps.co.uk



Mr. William Plummer
Making Roofing Tiles 1935



Making Land Drain Pipes
Mr. Cottington & Mr. Page 1935



Kiln for Pottery firing c. 1935
Messrs W. G. and W. W. Norman

Photos courtesy of the Sussex Archaeological Society

Chailey through the Ages

In the 18th and early 19th centuries bricks were generally made for use locally and one clear example of this was in the building of 'The Hooke Estate', Chailey in 1730s and the rebuilding in 1754-56, by Sir Henry Poole although some of the bricks may have been made off site. When the Earl of Chichester was undertaking the refurbishment of the tower at Laughton Place, nr Lewes in 1854, the terracotta ornamentation was ordered from J & R Norman of Chailey.

Henry and Thomas Pelham needed 1.25 million bricks to construct the interior of the house at Stanmer Park in 1720. Having unsuccessfully tried to produce bricks on site they called on the services of seven Wealden brickyards, including Chailey, which was contracted to make 200,000 bricks to make up the deficit. Such was the quality of the bricks that the brickyard charged a premium rate for this, of between 15/- to 17/6 (75p to 87p) per thousand compared to 14/- (70p) per thousand for those from Brighton, and this did not include the cost of carriage.

Chailey village

There are many buildings locally that have been constructed of Chailey bricks. The house called 'The Potteries' has a date inscribed in a brick at foundation level of 1851 and the letters JNO. This may possibly be the work of John Oden a builder from East Chiltington. Mary Oden (aged 14) was a servant in John Norman's house in 1861. The Potteries was converted from a cart and hay-store and may have been a stable as well. It was known to have been the office for the Potteries before it closed in 1939. It was converted into a house in 1952 and is of interest because of its original utilitarian function meant that many of the bricks used were not regarded as first quality, because they were discoloured, misshapen or cracked during firing.

Also, in the outer yard walls, there are bricks which are much larger than the standard building bricks and have grooves for metal bars. These, according to a previous owner of the house, are rejects from special bricks manufactured for building Lewes Prison.



The Potteries



Peter House

This house is a complete contrast to The Potteries. It was built for the owner of the brickyard John Norman, who clearly had spared no expense and showed off the products of his trade in the ornamental brickwork on the side of the house as well as many other distinctive and extravagant features.

The reason that the house is now called Peter House was because when the Norman family sold the house they took the original name with them (The Potteries) and transferred it to the house across the road, which used to be the factory offices.

The new owner named the house Peter Pan House as she was running a children's home there. When she sold it and moved, the Pan was dropped and it became known as Peter House.



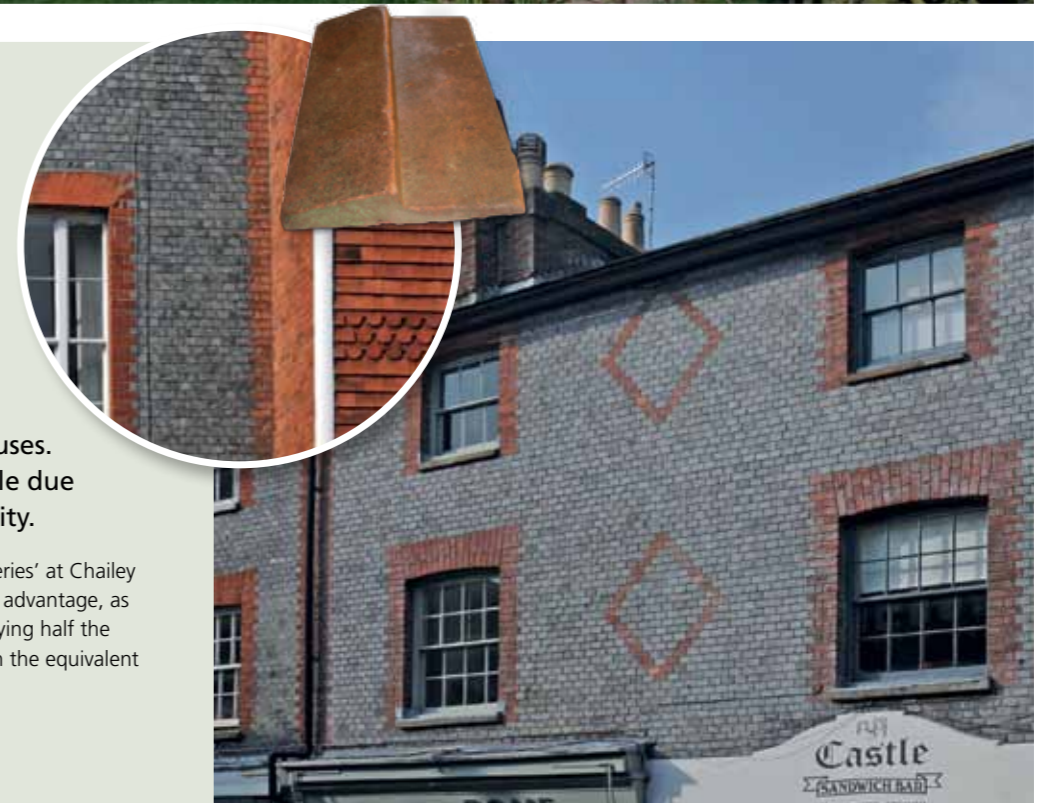
Local sites in the surrounding area are where Chailey's clamp fired modern brick range has also been used. These include; The Chailey Heritage School, St Peters Hospice, The Chailey Secondary school and the recently completed New Heritage site. The Chailey Stock brick was also used to re-build the flood wall defence system in nearby Lewes.



Mathematical Tiles

In towns, such as Brighton, Lewes and Rye, these specially-shaped tiles were used as an alternative to weatherboarding or plain tile-hanging for covering the façades of timber framed houses. They were particularly suitable due to their lightness and durability.

The tiles were produced mainly in 'potteries' at Chailey and Ditchling. Their lightness proved an advantage, as this reduced transport costs, tiles occupying half the space and weighing very much less than the equivalent quantity of bricks.



Two Houses, Killiney, Dublin

Architect: ABK Architects

Brick Type: Chailey Stock, Hamsey Multi Stock Paver

The project consists of two detached, five-bedroom houses on a steeply sloping, heavily wooded and southwest facing side of Killiney Hill in South Dublin. The site originally consisted of a poorly-built 1970s house, which was demolished as part of the redevelopment.



Photography Philip Lauterbach

The project is conceived of as two formal, cubic brick volumes linked by a landscape of clay paver terraces and retaining walls. The two houses form a clay-paved mews court accessed via a narrow, shared lane. The houses are joined by a retaining wall, which divides the site into an upper terrace and a lower wild garden.

Though similar in strategy and general disposition of rooms, each house responds differently to the differing site conditions. Both avail of the spectacular view to the Wicklow Mountains beyond.

The living spaces of the three-storey house form a link between a formal garden and wild woodland, while a lower garden-level study creates a world of quiet retreat. The two-storey house, set lower on the site to benefit from the natural site contours has a horizontal panorama and a broad brick terrace to the woodland beyond.



The expression and language of the project is one of composition and measured contrast. The solid, brick volumes are carved to form deep recesses at critical points. Entrance porches are deeply recessed and lined in brick to form cave-like transition spaces. Windows are set flush with the masonry surface creating a contrast between the textured surface of brick and the fluid-like nature of float glass. Mortar pointing is struck flush to emphasise the monolithic nature of the material. The robust, carved exterior reveals an interior of white plaster and Carrara marble; a pristine interior set within a brick carapace.

Throughout the project, brick is considered as an extension of the ground, forming a new, man-made landscape and a backdrop against which the white bark of the woodland birch trees is set.

“The expression and language of the project is one of composition and measured contrast.”



Blue Boulevard, The Quay, Hasselt, Belgium

Architect: De Gregorio & Partners
Brick Type: Cooksbridge Yellow Clamp Stock

The name Blue Boulevard was developed as a fusion of two of the key features of the site. The first was the Channel, a waterway which had its links to the quay, the original use of the site and the second was the Green Boulevard, an area that was created where residents might take a stroll.

The development of the Channel was foreseen when the Green Boulevard was originally planned. The Channel area was going to be a development around the water, with a wide avenue to allow residents to walk. The Old Guesthouse situated at the head of the Channel designed in 1996 with the co-operation of Aldo Rossi was the beginning of the reconciliation between the old buildings and the new. The architects wanted to bring together all these references into the project; strolling alongside the water and secure living with 'a view' within a stone's throw of pleasant city-bustle.

The first thing the architects did was to carry out an identity analysis of Hasselt. Hasselt is a baroque town which is synonymous with detail and grandeur. The "Hasselaar" (*) uses fine detail but often in an ordinary setting and the architects wanted to use that quality in the development.

(*) Residents of Hasselt

“ A town needs to buzz but its residents also need to be able to have their own space and peace. ”



A town needs to buzz but its residents also need to be able to have their own space and peace. The inside of the site consists of a semi-public square which will not only be a passage-way but also a place to relax and to talk, with benches - a green oasis.

The vicinity of water brought the idea of a Promenade: a raised dyke-road evoking a harbour atmosphere that gives the Hasselaar a genuine strolling Boulevard and a place to be seen. Strolling, in the Southern countries is a fixed evening ritual. A form of municipal theatre in which everybody, resident as well as visitor, is actor and spectator at the same time. The Promenade connects via a bicycle and pedestrian-bridge with the head of the Channel and the Green Boulevard.

The Quay adopts its identity from two contrasting public zones each with their own dynamics: the dyke-road/community-square and the mundane Promenade/cosy piazza.

Choice of material is crucial and "brick" was inevitable. The architecture of the flanking buildings surrounding the square is fixed and monumental, so contemporary sternness is reduced in using bricks evoking emotions from the past.

The Cooksbridge Yellow Clamp Stock combines old and new; handcrafting and modern building.

“ Hasselt is a baroque town which is synonymous with detail and grandeur. ”



Belgravia Place, Graham Terrace, London, SW1

Architect: Paul Davis + Partners
Client: Hutchison Whampoa Property
Contractor: YJL
Brick Type: Chailey Stock

Built on the site of the old Greycoat School, this development of 27 houses and 13 flats with underground parking was completed in 2000. The client brief was to create a high end residential development with a high density.

Roughly rectangular in shape the site is bordered on all sides by streets. This shape has allowed the architects to create an interesting mix of dwellings and access ways.

The layout of the development was created to fulfil the requirement for a high density development and uses terraces of buildings to make the best use of space. Some dwellings have gardens; others roof terraces to create outside space for the residents.

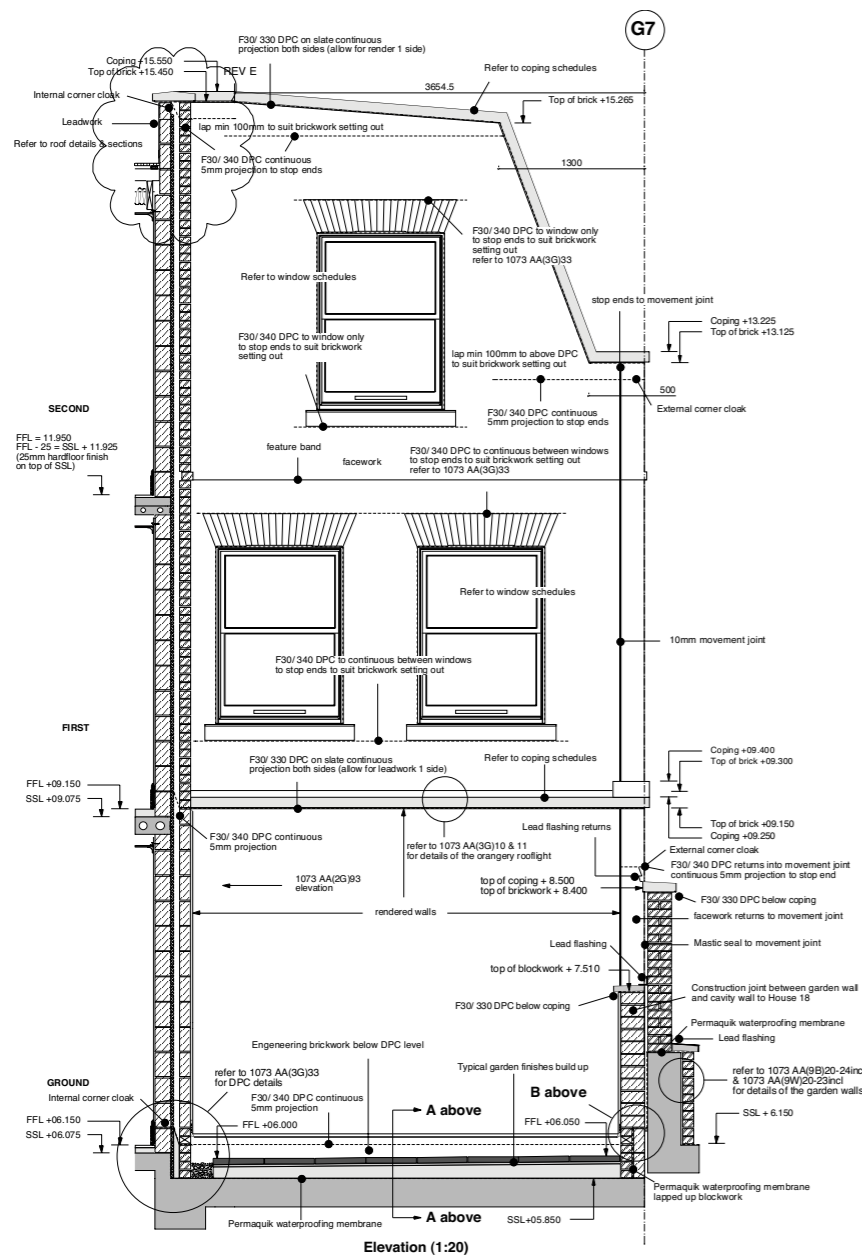
The choice of materials was again part of the client brief and in particular the external brickwork choice was also part of a planning condition. Chailey bricks were chosen to enable the new development to blend in with the surroundings. It was very important that it did not look contemporary but was complementary to the style, type and context of the surrounding street scene. The Local Authority Planning Department particularly wanted the new development to look like it had sat in its surroundings for some time, even when it was just completed.

Planning approvals in London are thorough and sample panels of the brick finishes had to be built before final approval was granted, which in fact, was gained very easily once the brick was viewed.

Ten years after completion the buildings still look almost as they did the day they were built - blending beautifully with their surroundings.



© Adam Parker photographer for Paul Davis + Partners architects



Hertford Regional College, Ware, Hertfordshire



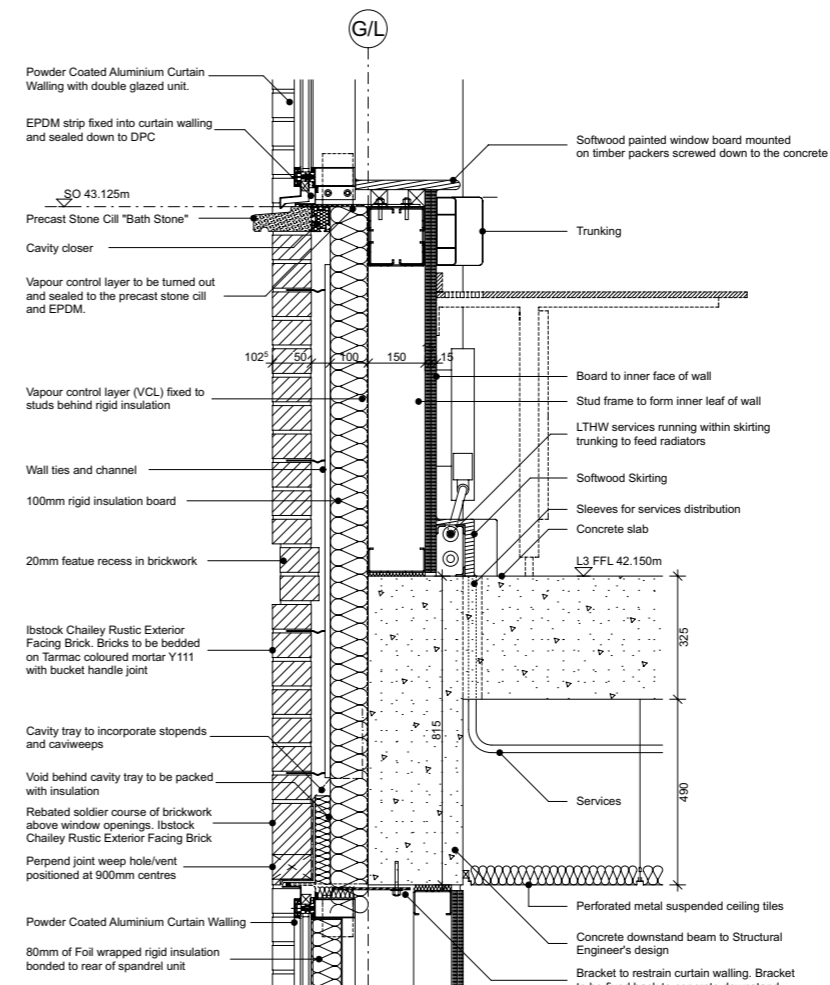
Architect: Bond Bryan Architects
Main Contractor: Morgan Sindall
Brick Types: Chailey Rustic & Staffordshire Blue

‘The old, recent and the newly completed facility at Hertford Regional College was linked through careful selection of the brick and detailing to create a cohesive yet contemporary whole.’

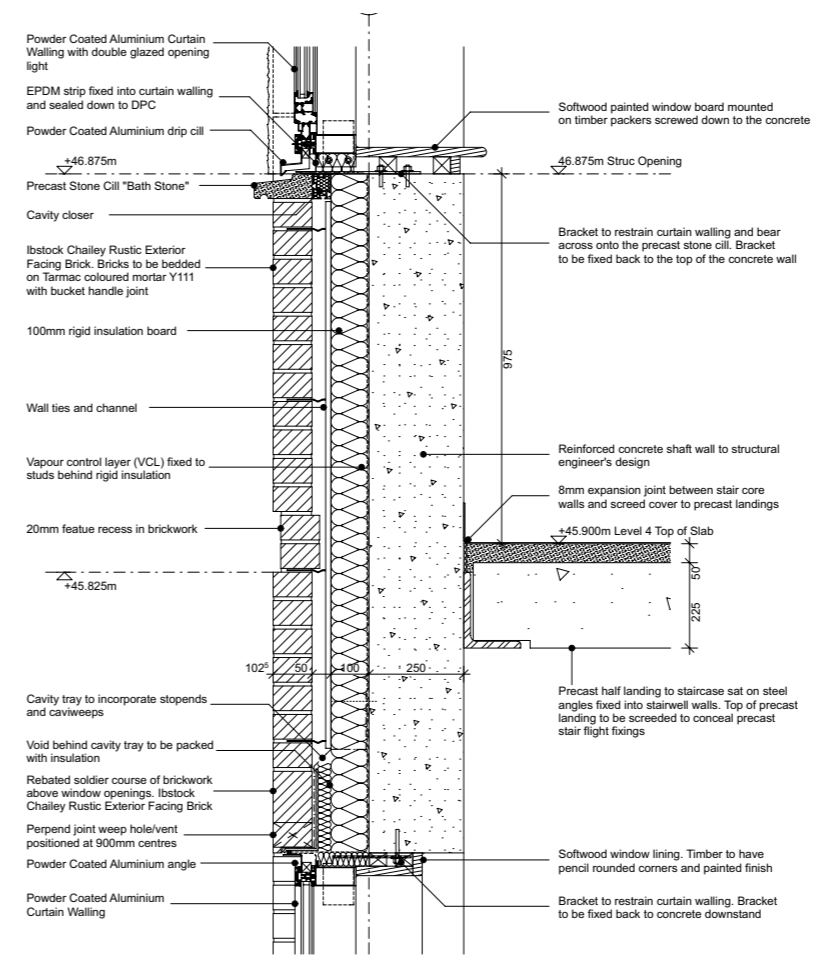
This project for the college creates; a new entrance, teaching spaces, a restaurant, Internet café and central learning resource facility for the whole campus. The new entrance space provides access to the whole campus and links the college’s existing facilities around an enclosed landscaped courtyard. The new building provides a teaching environment for the 21st century with modern educational working facilities which meet the highest standards. For example the new hair salons not only act as teaching spaces, but also have their own shop fronts to allow the students to offer treatments for the residents of Ware in a contemporary spa type setting.

The design is a modern thoughtful response, whilst relating to the rich history and heritage of Amwell House, the grade II

listed former manor house, which houses much of the college’s support accommodation. The project achieved planning consent in July 2006, following extensive consultation with the local planning authority, the Ware society, conservation officer and local stakeholders. Bond Bryan worked closely with the clients to achieve a high quality contemporary learning facility for the college on a very sensitive site. The first phase of the development, completed in September 2009, links the college’s other existing accommodation while dealing with changes in levels across the site of more than a storey. The second phase (not currently commenced) will enclose the central courtyard to provide a cloistered campus and allow the remaining existing accommodation to be demolished.



Edge Section



Edge Section

“The design is a modern thoughtful response, whilst relating to the rich history and heritage of Amwell House...”



The facing brickwork was selected as the main elevational material because of its human scale, warmth and texture which unified the development, not only with the existing college facilities but also with the adjacent smaller scale residential properties. A key aspect in the planning considerations was how to reduce the appearance of building mass that was required to deliver the scale of accommodation, in relation to the domestic scale of the older elements on the site and adjacent houses. The design was conceived as a series of pavilions set in the landscape, linked with open sections of fully glazed sections to break the building down into smaller units.

The social area and central library include a curved section inset with large horizontal windows. The higher sections of solid brickwork appear to float above the glazing, providing a play on the perceived solidity of the brickwork, yet allowing a free flowing ribbon of windows which in turn offer stunning views back over the town. This contrasts with the simpler ‘punched’ windows in the classroom blocks.



BARCOMBE MULTI STOCK |



PRIVATE HOUSE, ADDINGTON, SURREY



BEVERN DARK MULTI STOCK | PRIVATE HOUSING, GORING-ON-SEA, WEST SUSSEX



CHAILEY STOCK | PRIVATE HOUSING, LONDON



COOKSBRIDGE YELLOW CLAMP STOCK | APARTMENTS, BRISTOL, AVON



Inspirations

19



Inspirations

18





CHAILEY MULTI STOCK PAVER | HOTEL, LYNDHURST, HAMPSHIRE



CHAILEY STOCK | PRIVATE HOUSING, HULL, EAST YORKSHIRE



BECKLEY MEDIUM MULTI STOCK | RETIREMENT HOME, SHOREHAM-ON-SEA, WEST SUSSEX



CHAILEY STOCK AND HAMSEY MULTI STOCK PAVER | PRIVATE HOUSING, KILLINEY, DUBLIN



HAMSEY MIXED STOCK | PRIVATE HOUSING, LIGHTMOOR VILLAGE, TELFORD, SHROPSHIRE



Back to Basics

Clamp Firing



Bricks at the top of the clamp firing at night

Of all the brick factories currently manufacturing within Europe, Chailey is one of only four known sites that still fire the bricks using traditional clamp methods.

A clamp is the oldest method to fire bricks. Bricks are set and fired using the experience gained over many years as control of the kiln in modern sense is extremely limited. However, the end result is a product of unique appearance which is in demand from architects who are looking for a traditional appearance to the buildings they design. The clamps use no fans for draught (except those for the gas burners) and they have no exhaust stacks since the clamp is not a gas tight structure.

The Chailey factory has the capacity to manufacture approximately 14 million stock bricks per year by a soft mud moulding process and it can also manufacture traditional clay pavers.



Freshly de-moulded bricks



Clay is won locally in the quarry behind the factory, the clay is mixed with sand, coke breeze and pulverised fly ash (PFA) to obtain a mix which is then tempered with water to achieve a soft mud consistency for moulding.

Bricks are dried in gas fired dryers prior to setting into the clamp for firing. The unfired clamp is then covered with fired bricks which help to retain the heat within the clamp. The firing process is started by gas burners and the clamp continues to fire from the coke breeze fuel added to the bricks as it has done for 300 years. The distribution of temperature through the clamp can only be assessed upon completion of firing when the bricks are hand sorted by a small team of experienced sorters who pack the bricks according to their colours.

A typical Chailey clamp holds around 800,000 bricks and it usually takes around 8-10 weeks to complete the whole process

from clay preparation right through to the products being sorted, packaged and then sold.

The traditional clamp firing process at Chailey still manages to compete with other more modern brick factories. This is due to the unique appearance of the bricks and the skill of the current workforce, much of the knowledge has been handed down from the previous generations of brick makers at Chailey.

The attention to detail shown by the employees has enabled the site to evolve in many areas such as environmental management, health & safety, waste minimisation and product development. This has led to many internal factory achievements within Ibstock including the Continuing Improvement Most Improved Factory award the quality Award, and the Factory Of The Year Award for three consecutive years running.

The success gained at the factory has been achieved by combining old methods of brick making and traditional clamp firing with many new and innovative ideas and a working culture based on continuous improvement and sustainability. This concept is supported by Ibstock's philosophy of Improving Manufacturing Capability and the Total Productive Manufacture tools and techniques. The employees continue to take extreme pride in maintaining outstanding quality and exceptional service to their customers.

Since 2007 Chailey factory has also won recognised industry awards such as the Opus Design Award and the 'The Best International Project Award' for a building featuring both their bricks and their clay pavers. (see pages 10-11).

The factory and staff have contributed to the local community, and donated to many local schools and charities by taking part in fund raising events and supporting worthwhile local projects.

“...the traditional clamp firing process at Chailey still manages to compete with other more modern brick factories.”

With a site history of over 300 years and generations of knowledge and brickmaking experience, the factory's unique range of traditional bricks and pavers is as relevant to today's need to sustainable and environmentally sensitive products as it was when it produced its first bricks in 1711.



Individually sorted and hand selected bricks



A view down a fire hole into the heart of the clamp (where the temperature can reach in excess of 1050°C.)



A traditional hand set clamp

For more information contact one of the Ibstock Design Advisors on 0844 800 4576.

Wall to wall innovation no: 230



Elementix® is an innovative range of clay rainscreen cladding systems developed to offer an unrivalled choice in façade finishes.

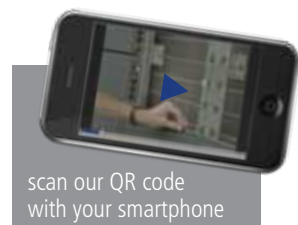
Elementix® Express is a cost effective and quick to build system in a range of the most popular size formats, natural clay colours and surface finishes.

Elementix® Colour offers a virtually unlimited palette of ceramic glazed finishes to make every project unique.

Elementix® Freedom is a uniquely sustainable cladding system. Its tiles are made from 93% recycled material and without the constraints of standard tile formats designers have the freedom to create beautiful building that are good for the environment too.

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