

demonstration project



Refurbished Rotherhithe Estate

Rotherhithe Estate: The first refurbishment project to achieve EcoHomes Excellent

Contractor: Durkan

Client: William Sutton Housing Association (WSHA)

Case Study Ref: 291
Project Number: 1272
Publication Date: May 2007
Region: London
Sector: Housing
Contract value: £11m

Contract value: 1999 (design start) to February 2007 **Themes:** Improving existing stock, design and

customer satisfaction, sustainability

The Rotherhithe Refurbishment Project involved the modernisation of seven three-storey blocks of flats that were built around 1915. The Project was developed under a partnering agreement between the client, contractor and consultants. The Project design work started in 1999 and the final phase was completed in February 2007.

The same partnering team was awarded Demonstration Project status by The Housing Forum on its first partnering project on the St Quintin Park Estate, North Kensington between 1999 and 2002. Here the team was commended for its innovative approach to early collaboration by the Employer, Contractor and Designers, (see *Demonstrating Excellence - An Evolution of the Programme of Demonstrations*).

The partnering team has applied the same collaborative principles on the Rotherhithe Project and in so doing has been able to demonstrate tangible improvements in cost certainty, predictability and tenant satisfaction on conclusion of each modernisation phase. Where the Rotherhithe Project differs from its predecessor, however, is in the significant improvements that have been secured in environmental sustainability and in the elimination of fuel poverty.

The programme of work

There were between 14 - 20 flats per block after the work was completed. This is a reduction on the number of flats per block (i.e. an increase in the size of each flat). For example on the Biddenham block the number of flats was reduced from 22 to 14. Typically there is an average additional living space of around 26% per unit. The allocation of flats comes from the client on a block by block basis. A total of two weeks was allowed as downtime between phases so that residents could be moved out of their homes into temporary accommodation on the estate. This has necessitated a close relationship with the client's estates management team.

Block name	Completed	Units	
Graveley	April 2002	16 flats	
Freswick House	March 2002	16 flats	
Empingham House	February 2003	15 flats	
Deanshanger House	February 2004	17 flats	
Codicote House	February 2005	17 flats	
Biddenham House	February 2006	14 flats	
Ayston House	February 2007	20 flats	

The project required that each block be stripped down to its structural walls with new internal walls being erected to facilitate the improved flat layouts.

The team felt that there was a real sense of continuous improvement on the project, with the programme period for each block remaining the same despite an incremental increase in the size of each block. Furthermore, benefits derived through supply chain management and collaborative working enabled the client to introduce specification enhancements on progressive phases within the programme of modernisation.

The first six blocks in the modernisation programme attracted a mixture of funding from both the Housing Corporation and the Royal Borough of Kensington & Chelsea (out of borough funding). The final phase, Ayston House, was funded in its entirety by the client Association.

Specification changes

Over time the specification for each block of flats was altered. The specification for the Codicote block, which was completed in March 2005, was far better than that of Graveley, the initial block. An example of these improved specifications was that it was not until the third block that window replacement began to be an integral part of the works. Another example of the improvement in specifications over time is the installation of individual thermostatic showers in the flats in the later blocks.

Insulation improved in line with Parts E and L of the Building Regulations. The Project has consistently achieved 10% better performance than those required by the Building Regulations even though the Regulations have become more onerous during the life of the project.

Gas central heating boilers were installed, the supplier having been selected directly by WSHA due to their ability to get savings from economies of scale. In fact, WSHA negotiated a number of similar favourable purchasing agreements with major suppliers of kitchens, central heating systems and sanitary ware. Significant savings on costs have been secured through these arrangements. Whole life costs were assessed in selection of supplies and materials. Developing long-term relationships with sub-contractors and suppliers from phase to phase also led to improvements in quality of workmanship and price certainty, as well as providing the guarantee of long-term work.

Show flats were produced at the end of each phase providing residents with the opportunity to look around. This created an issue in that residents of the earlier blocks were sometimes unhappy that the specification had improved in the meantime.

Defects

The client's expectations on the project were well established at the outset with zero defects identified as a critical factor for success. A number of the key trades on the project, such as the plumber, carpenter, electrician and decorator, were involved from the outset and this ensured there was an awareness on their part of the client's key drivers. Durkan undertook a vigorous internal snagging procedure with the intention that when the building was offered to the client for inspection, there would be zero defects.

Resident consultation

The project team organised a residents' open day during each phase in order to provide the tenants with information on the work that was due to take place. At these events the proposals for kitchen layouts were given to the tenants and they were able to choose colours and tiles. The open days also provided an opportunity to pick up on any special requirements that residents may have had, for instance with disabled access. The project team also committed to altering their designs to provide bespoke solutions for tenants who had particular needs, such as the ability to sensibly fit any large pieces of furniture that they owned into the redesigned flats.

Security was an issue on the estate, and much effort was put into the design to help manage this – including video entry phones at the entrances to some blocks to prevent unwarranted access.

A regular newsletter was produced throughout the programme which allowed Durkan to stay in touch with the residents. Durkan were also based on site, sharing an office with WSHA's Estate Manager, which allowed tenants access to the contractor's team, as well as enabling easy communication between the client and contractor on the ground.



Rotherhithe Estate under development

Tenant satisfaction

WSHA and Durkan both carried out reviews of tenant satisfaction. Questionnaires were delivered to tenants on a block by block basis during the defects inspection. Responses were then reported to the project core group which met quarterly. The customer satisfaction process was based on a short paper questionnaire after the completion of the internal works. There has generally been a good response rate to these.

Block	Return	Overall	Satisfaction
	rate	satisfaction	with client
Graveley	44%	57%	Not measured
Freswick House	75%	89%	Not measured
Empingham House	47%	74%	62%
Deanshanger House	59%	87%	90%
Codicote House	35%	84%	100%
Biddenham House	43%	92%	92%
Ayston House	To be co	mpleted Janua	ary 2008

Moving forward, WSHA is looking to establish a tenants' focus group to consider the whole estate, both inside flats and around the wider environment of the estate, in order to better engage the residents.

Sustainability

WSHA in its Corporate Plan for 2001 - 2011 agreed the objective to 'Provide Good Quality Affordable Homes' and adopted the following 2 key strategies to achieve this:

- The provision of homes that are affordable
- The aim for high standards of energy efficiency.

Over the duration of the Rotherhithe Refurbishment Project, the partnering team has worked together to demonstrate its commitment to the above objectives. In so doing the team realised significant improvements in its performance on environmental sustainability and in striving towards eliminating fuel poverty.

Prior to modernisation, the flats on the Rotherhithe Estate were found to be deficient in a number of areas, including that of energy efficiency.

Phase by phase the partnering team sought to incorporate additional measures to improve:

- The energy efficiency rating of the completed dwellings
- The tenants' overall satisfaction with their homes
- The affordability of heating and lighting.

Overall the team achieved the following energy savings on the most recently completed refurbished block:

- The SAP (Standard Assessment Procedure) rating on an unmodernised dwelling changed from a low 39 to 91, an increase of 233%
- The NHER (National Home Energy Rating) rating of 4.9 on an unmodernised dwelling changed to 9.2 (out of 10), an increase of 188%
- The underlying improvements for the residents is that the highest annual fuel bill has changed from £613.23 to £334.88, a decrease of 45% in a property that has typically increased in size by 26%. This has been achieved through the choice of boiler and an improvement in the quality of insulation
- These efforts from the project team meant an increased capital cost for William Sutton, but a marked societal improvement.

These phase by phase improvements culminated in Codicote House being awarded an EcoHomes rating of Excellent, the highest achievable. It is believed that this is the first time an Excellent rating has been awarded for a refurbishment project.

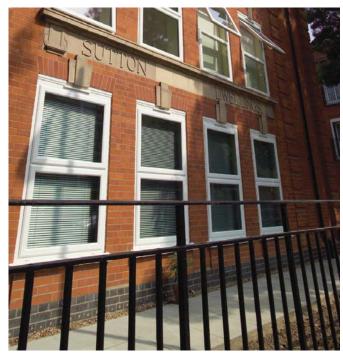
Subsequently Biddenham and Ayston Houses achieved an EcoHomes rating of Very Good. This downturn was due to the new-build element for the work on each block which necessitated the removal of some open green space.

Recognition of success in sustainability and the fuel cost savings achieved were recognised by the award to WSHA of the 'George Plucknett Award' from the National Home Improvement Council, for Codicote House. Commenting on the project at Rotherhithe, the judges said, "It is probably the embodiment of all that is important about home improvement and urban regeneration. The housing association has sacrificed space to create far superior accommodation than the buildings previously provided and, at the same time, has taken on board new sustainable technologies that help contribute towards better, more economical lifestyles."

Training

Unfortunately, the take up of apprenticeships on the project stalled when the organisation with which there was a strong relationship, Women's Education in Building, based in Surrey Quays, ceased to exist. Prior to this, the organisation had up to three female apprentices placed on the project at any one time. Many of the apprentices placed by another organisation Building Work for Women, are still working for Durkan or their sub-contractors and Durkan even assisted a number of decorators to set up their own business which has been subsequently employed as a sub-contractor on other projects.

Later in the programme, Durkan started to take apprentices from Lewisham College, although this proved more problematic as the phases of the work on-site did not fit comfortably with the times when apprentices from the college were available.



Refurbished Rotherhithe Estate

The use of local labour was encouraged although not stipulated. Advertisements were placed on the estate for local tradespeople but there was very little take up.

Integration

There is a feeling within the entire project team that this has been a true partnership - not at all like a typical client/contractor relationship.

The project was even able to overcome a change in Project Manager after the Codicote House phase. Responsibility shifted from WSHA's technical department to Pierce Hill, who had been involved as cost consultants for the lifetime of the project. The continuity in working with Pierce Hill enabled a seamless transfer between Project Managers.

Real efforts were made at the outset of the project in 1999 to ensure successful integration. A number of partnering workshops were held which sought to build up an awareness for each member of the Project Team of the other participants' drivers. These workshops tried to be as inclusive as possible, with participation of the London Boroughs encouraged.

The project also tried to be as fair as possible in financial terms, with no holding of retentions and final accounts for the main contractor agreed within two weeks of practical completion. Sub-contractors also benefited from the lack of retentions.

Lessons learned

"Everybody bought in at all levels. It only takes one person not to do so and then it may not work."

Bob Barton, Durkan

"Early collaboration on design was absolutely key."

Margaret Ewan, William Sutton Housing Association



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