



New Islington Development

New Islington Millennium Community Remediation and Infrastructure Works

Project team Client:	English Partnerships, New East Manchester, Urban Splash, Manchester City Council
Contractor:	Volker Stevin
QS:	Davis Langdon
Engineer:	Martin Stockley Associates
Architect:	Alsop Architects
Landscape Architect:	Grant Associates
Case Study Ref:	310
Project No:	2860
Publication date:	January 2008
Region:	North West
Sector:	Housing and Regeneration
Contract value:	£18 million
Project timescales:	August 2003 – current
Themes:	Mixed Communities Innovation in the supply of new homes New financial models for investing in regeneration

The New Islington Millennium Community is a development on a 12.5 ha (29 acre) site at Ancoats, East Manchester. It was the third Millennium Community to be identified as part of English Partnerships' national programme.

The development site included the former Cardroom Estate, which was built in the late 1970s. By the 1990s, the estate's community was suffering the effects of massive depopulation, poor services and high levels of crime. Only half the 204 homes were occupied when the site was identified for development as a Millennium Community.

The clients, along with the Housing Corporation and Great Places Housing Group, as well as the local community, worked to develop the new vision, which is to reinvent the previously neglected and rundown estate with cutting-edge architecture, new waterways and new housing. A key objective for the project was sustainability and ensuring the project was undertaken in an environmentally sensitive way.

Getting the site ready for development, a job undertaken by civil engineering and building contractor Volker Stevin, has involved work to remove chemical and metal by-products left over from former canal-side industries. This took place on-site, where materials were cleaned and reused; which ensured that no earthworks materials were sent to landfill.

Volker Stevin has delivered the environmental improvements and new infrastructure through Early Contractor Involvement, working with the design team and the local community and through employing and training local people.

The purpose of the remediation and infrastructure work was to rejuvenate the area by building new infrastructure including public realm areas, canals and a water park, as well as building plots on which a new sustainable community can be built.

The works included:

- **Remediation and Earthworks** – demolition of houses and redundant premises, management of the in-situ bio-remediation works and a major earthworks exercise to form new ground levels.
- **Canals and Water Park** – construction of a new water park with islands, new canals, links to the canal network and canal fingers, reed beds and new footbridges.
- **Public Realm Infrastructure** – extensive public highway works, footpaths, hard and soft landscaping, street lighting, street furniture, sewer diversions and utility diversions.

Land Remediation and Earthworks

The first aspect of the work was to clear the site and manage large volumes of materials including contaminated materials. A Ground Treatment Area was established within the site to collect and treat a range of materials from within the works and from adjacent construction sites.

Over 70 houses and disused commercial premises were demolished during the work with special care taken to phase the work in such a way that disruption to the residents within the site was minimised and a single move was possible.



Full site view

All of the demolition materials were crushed and recycled within the site reducing the need for disposal to tip and reducing the need to use newly quarried materials – a key sustainability strategy. Around 10,000 m³ of contaminated materials were treated on site, including heavy metals using bio-remediation.

Canals and Water Park

The new landscape is now unrecognisable from the neglected environment that was inherited.

A series of new water features have been built including several hundred metres of new navigable canals. Constructed to British Waterways standards, they will tie in to the Ashton and Rochdale canals at each end of the site. The canals are constructed from reinforced concrete and sheet steel piles. Each pre-cast concrete coping was unique in shape.

Canal fingers separate plots for new housing, creating a pleasant outlook for modern urban living and mooring facilities for boats. There is a new water park with public access to a series of five islands linked by timber walkways across extensive areas of reed beds and soft landscaping. The islands are linked by a series of swing bridges. The "Rock" is a unique landscaping feature.

In keeping with the sustainability objectives of the site, a new potable water supply has been established by tapping into the underlying water table rather than into the ordinary water main. This was achieved following extensive testing both of the reliability of the supply and its quality.



Benches

Public Realm Infrastructure

The new infrastructure provides an innovative and unusual approach to public highways and the urban landscape. Old Mill Street, the main street through the New Islington development, has been constructed using small element paving in a Dutch style using different colours to separate traffic and pedestrians rather than changes in level (much better for wheelchair users and parents with prams and pushchairs). This area includes unique street lighting features and inset pavement cast iron circles, to provide artistic interest and create a hierarchy for placing street furniture.

Work included extensive sewer diversions in open cut, headings and pipejacking to accommodate the new bridge on Old Mill Street above the canal link. Management of extensive utility diversions also formed part of the contract and a 310m reinforced concrete retaining wall was built to the boundary with the retail park. Minor building works were also completed to existing buildings.

The extensive hard and soft landscaping also features unusual timber seating, extensive tree planting, ornamental shrubs and planters. Interest is provided by a unique topiary dinosaur feature adjacent to the first new houses and "Touching Stones" in the shape of birds and animals.

"We are very proud of what is being created in New Islington and Volker Stevin has been instrumental in making our vision a reality. I have been particularly impressed with their work with the local community and the sustainable nature of the scheme. Their experience and innovation have helped make New Islington an exemplar regeneration project."

Eddie Smith, Deputy Chief Executive of New East Manchester.

The Contract

Volker Stevin was selected as the contractor through a series of stages – pre-qualification, interview and tender.

The work is an excellent example of the clients, the design team and the contractor working together as a team from the earliest stage. Volker Stevin's tender was not the lowest price, but the requirements set out in the EU advertised tender made it clear that price was only part of the overall judging criteria.

The attitude of the project management team handling the contract and the open relationships established early in the contract enabled all parties to agree objectives, share an agenda and work together to provide the best possible solutions.

The work was let under a series of nine Works Orders and the whole team contributed to developing the programme to minimise costs and ensure completion to agreed dates.

There were a number of residents living within the site throughout the first three years of construction so the project team worked with the existing community to phase the work in such a way as to minimise disruption and avoid the need for people to move house twice.

This had to be managed at the same time as finding ways of adding value under the sustainability objectives of the contract and always ensuring safety for staff and operatives, residents and the general public.



The 'Rock' and swinging bridge

Benefits of the Work

The project has rejuvenated contaminated brownfield land and a run down estate to provide a unique and sustainable setting for a new community and new public open space in east Manchester.

Volker Stevin's commitment to the development of the future construction workforce also meant that the team worked with local school children, as well as employing three local young people on formal apprenticeship schemes. Volker Stevin was accredited with the Action For Young People Kite Mark for its work on this site.

The new water park will draw a mix of people from surrounding areas and add to the vibrant atmosphere of the area.

In construction terms there were a number of key sustainability objectives built into the contract. The following are a few of the key areas:

- Re-use and recycling of materials
- Creation of habitats for birds
- Creation of new green areas
- Creating a new sustainable potable water supply for the area

Conclusion

New Islington is one of the key urban regeneration schemes in the North West and has been successful for a number of reasons:

- **Sustainability** – The management of this site has balanced the environmental, economic and social needs of the area better than most construction projects and is one of the first major construction schemes to really consider sustainability in both process and outcomes.
- **Environment** – The New Islington project improved the environment and the outcome is a greener place that will function better for the community. The construction processes always considered environmental issues; Volker Stevin is one of only two contractors in the UK with EMAS accreditation, which sets standards above and beyond those generally accepted in the industry.
- **Safety** – For many years safety has been at the top of the construction agenda and this site presents excellent safety performance statistics. One point that sits well with the open and proactive attitudes employed throughout is that all staff and operatives have been encouraged to report near misses so that continuous improvement can be maintained.

- **Innovation** – By working together in the early stages of design the design team and contractor were able to introduce a number of original design ideas and innovative construction methods.
- **Relationships** – The New Islington project is an excellent example of a project team working together to realise an ambitious project through new ways of thinking about construction and the relationships between all the parties involved.
- **Community Involvement** – This site has realised the social requirements of construction in the public sector and there has been community involvement in the annual festival, the planning of the construction process and local training and employment.

The most important lesson from this work is the way all the parties have worked together to a common goal. By involving the contractor, Volker Stevin, at the early stages of the scheme the project team developed excellent working relationships over a four year period, in which time all of the key individuals have remained the same. The team were also able to work closely with existing residents and community groups.

In this environment the client, the design team and the contractor can all offer innovations and ideas with the comfort of knowing that this is part of a collaborative process from which everyone benefits.

If there was an area where future contracts could be improved then it may be that a greater contribution still could have been made to the community and social requirements by making these a bigger part of the pre-qualification process and involving the contractor earlier in these issues.

Awards

Constructing Excellence awarded the New Islington Millennium Community the North West Regional Construction Award for Infrastructure 2007. The project team then went on to compete nationally and won the National Constructing Excellence Award for Project Leadership 2007.

"The New Islington work to date has really set the standard for the project – quality, innovation, proper team working and an end result which looks better than the drawings! It has been a pleasure working with the whole team."

Richard Hattan, Associate Director at Urban Splash.



Timber walkways



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