DESCRIPTION

The redevelopment of South West Reading began with the concept of a new business park and improved highway network linking the M4 to the Inner Distributor Road system.

The farmers who owned the Green Park land had begun looking at the development potential of the floodable farmland around 1984. The property crash of 1989 put the proposal on hold, however the interest of the developer and new commercial opportunities allowed proposals to begin in 1995.

A team of engineers and landscape architects worked on the master plan of approximately 180 acres of Green Park, ultimately providing 130 acres of development land raised above the 200 year flood level, 40 acres of flood storage and a balance of retained woodland and highway margins. A central water feature was designed with remodelled existing streams. Design work was carried out in consultation with the National rivers Authority (now the EA) to achieve increased biodiversity within and around the site.

Considerable research went into the development of the site, and the evolving needs of business park users. Sports and child care facilities, dedicated bus links to Reading station, eating facilities and shopping were seen as essential support infrastructure.

DISCUSSION

The Green Park development is an excellent example of how the integration of water sensitive urban design principles into a development can provide many benefits.

The development successfully treats the flood storage areas on site as an amenity and recreation feature, used by the tenants on site, as well as residents from neighbouring areas.

Remodelled existing watercourses transport and treat stormwater throughout the development, and also increase biodiversity.

Installation of a wind turbine shows that sustainable urban developments contribute to their own power, rather than using off-site power generation.

PROJECT INFORMATION

Drivers

Business Park development was a commercial growth area with a new ‘use class’ in the planning system. The use Class B1 was introduced in 1987 for offices, and research and development uses which recognised emerging high-tech development sometimes connected to a university campus, as seen in Cambridge.

There was national support for high-tech developments as a use sitting between offices and industry, and for the encouragement of clean industry. This enabled development to occur when industry would not have been seen as an acceptable use.

Capital cost

By 2002 £58m was spent on infrastructure including over £24m for off-site highways and service diversions, and £3.5m on electricity reinforcement. Individual buildings had individual budgets on a plot-by-plot basis.

Funding source

The major funding came from Prudential Assurance but other contributions came from the developers of the football stadium and retail complex, the new office development at the M4 A33 junction, the local authority and other contributions came in the form of land to allow the development to proceed with profit sharing. There were eight signatories to the agreement for Green Park alone.

Delivery time frame

Initial design work was carried out from around 1984 to provide the basis for a planning application. Planning conditions and partnership agreements...
were discussed between 1988 and 1992. Final planning consent was given in 1995. Main development platforms were finished by 1999 as well as the first building and the A33 relief road. Other development quickly followed.

Communication
Numerous engagements were made with schools through the park development and lectures at other events. Regular school visits are made to the wind turbine interpretation centre where a dedicated park member explains the issues of sustainability.

Ongoing monitoring
The Park biodiversity action plan is monitored and updated. A team of ten staff provide full time management of the landscape from a base on the Park.

Challenges
The development was in a floodplain, and had to retain the same volume of water on site and not displace it and cause problems downstream. In addition, building within a flood plain was difficult due to flooding during the construction phase.

A new link to the M4 motorway was constructed to gain site access, and a total upgrade of service infrastructure was required.

The creation of a new landscape setting in place of flat farmland required considerable planning and design.

The development had to mitigate the effects of existing and proposed adjoining developments, including the remodelling of a former rubbish dump, the new Reading Football Stadium and a new retail complex.

Expansion to the west of the Green Park area into Kennet Valley Park has stalled due to various obstacles in the planning process.

OPPORTUNITIES
The Green Park site’s accessible location, with excellent road and rail links and airport access, meant the development was available to a high number of users. Green Park is part of the UK ‘Silicon Valley’ and in an area of information technology (IT) growth with other major developments at Stockley Park near Heathrow and other IT clusters such as Winnersh, Wokingham, Bracknell, Swindon and Newbury.

AUSTRALIAN CONTEXT
Development of flood-prone land in Australia is often contentious and avoided. The expense of treating stormwater on flood-prone land, using traditional ‘hard engineering’ infrastructure, can lead to public mistrust.

The Green Park development proves that development within flood-prone land can be successful and commercially viable.

Treating stormwater using water sensitive urban design (WSUD) features such as remodelling the stream on site, rather than hard infrastructure has improved the amenity of the surrounding area and helped attract key commercial clients to the development.

Commercial and industrial developments within Australia traditionally do not contain green space. This development proves that increased green space can attract residents and other consumers to the area; for example the restaurant located on site does 80 per cent of its trade from people living outside the park.

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ABOVE L-R: Presentation by the head designer around the scale model of the industrial estate. View from the lunch room of one Green Park business. WSUD car park within the industrial estate.

BELOW: The lake surrounding the estate with walking path network, viewing platforms and information signs.