

BATTLE M c C A R T H Y ©

Consulting Engineers & Landscape Architects



PROJECT:

Pribinova Riverfront Masterplan, Bratislava,
Slovak Republic

CLIENT:

Ballymore Properties Ltd

ARCHITECTS:

SOM (London); Murrayolaire (Dublin)

BM SERVICES:

Environmental Analysis

VALUE:

Classified

COMPLETION DATE:

October 2006

DESIGN BRIEF

To provide Environment Analysis to inform the sustainable design of a large mixed-use development in Bratislava.

The masterplan is retail-led and also includes residential, commercial and leisure space along the riverfront.

Phased construction is underway for what will eventually become a 200,000m² development in late 2006.

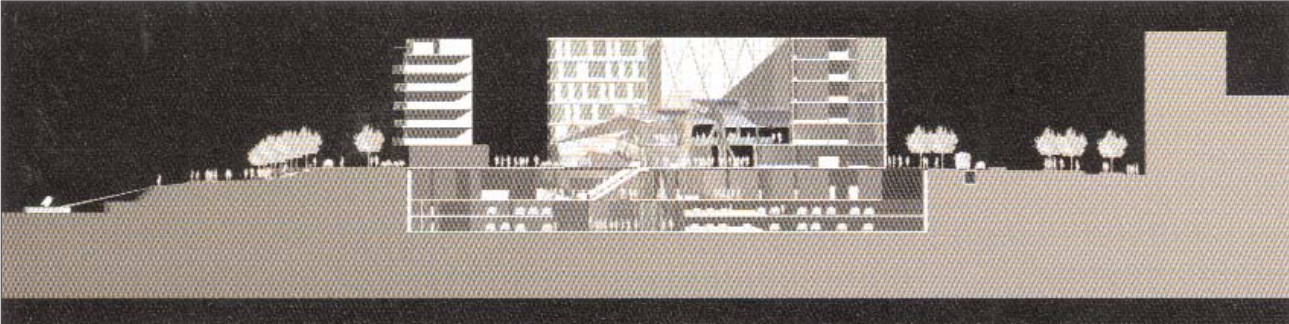
DESIGN INITIATIVES/ACTIONS UNDERTAKEN

The Pribinova Riverfront Master Plan has been designed according to the highest standards of sustainable design, focussing specifically on the following issues:

- A high quality environment, with appropriate levels of daylight in the office, residential and retail areas.
- Good solar access to the riverfront residential areas.
- A comfortable and reasonably responsive external environment giving particular consideration to wind environment and solar access issues
- The creation of highly comfortable Central Arcade yielding conditions appropriate for transit, shopping, leisure and recreation throughout the year.
- Significant energy reduction, through passive solar design and facade treatment
- Significant reduction in plant size requirements due to solar responsive design

The development has been designed to capture the positive climatic forces as seasonally appropriate. High levels of daylight are achieved throughout the year, solar access is encouraged during the winter period to both internal and external spaces. Wind movement is encouraged throughout the site in summer to remove heat gains and increase thermal comfort. Conversely, in summer it is attempted to reduce solar heat gains to the internal spaces and reduce wind permeability in winter.

London UK Office
T: +44 (0)20 7440 8282
F: +44 (0)20 7440 8292
E: admin@battlemccarthy.com
www.battlemccarthy.com



The following design strategies have been implemented in the following areas:

Office zones

Primarily aligned to on an east-west axis, with narrow floor plans to minimise solar heat gains in summer. The narrow plan allows excellent daylight penetration, with high quality daylight being achieved on the north and minimised levels of glare on the south. The spacing between the building has been carefully designed to maximise daylight penetration to all office areas. The floor arrangement will allow both cross ventilation to open plan areas and single sided ventilation to cellularised zones.

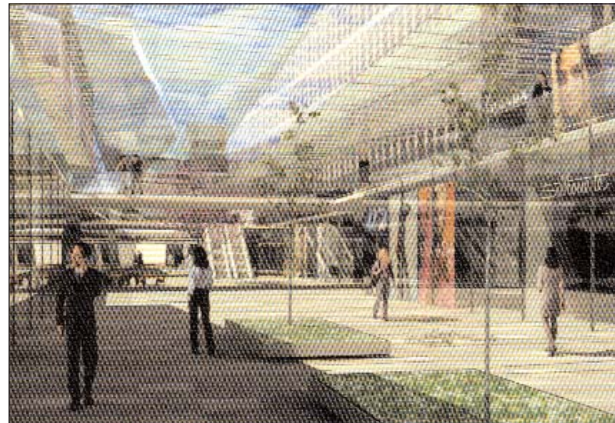
Residential zones

Located along the riverfront with an east-west axis, these zones have been designed to:

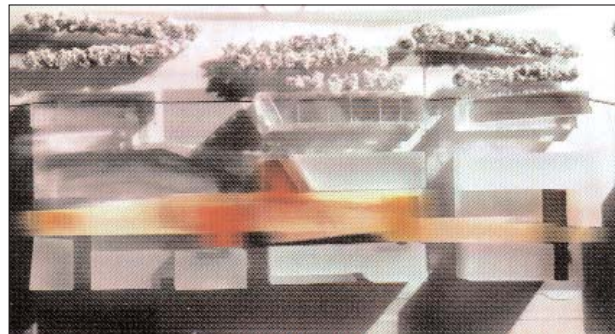
- Maximise solar penetration and winter passive solar heating
- Provide access to the cleaner wins channelled along the river
- Minimise the impact of noise and pollution from the surrounding city of the development

Retail Area & Central Arcade

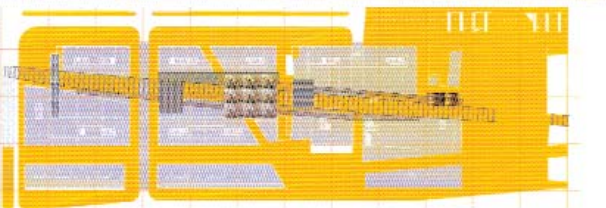
The central covered arcade has been conceived to work in synergy with the adjacent shop units. The covered roof and the low intensity background heating systems provide reasonably comfortable conditions, capitalising on heat exhaust from the shops. Natural daylight is filtered through the street roof into the adjacent retail area.



View from the covered gallery



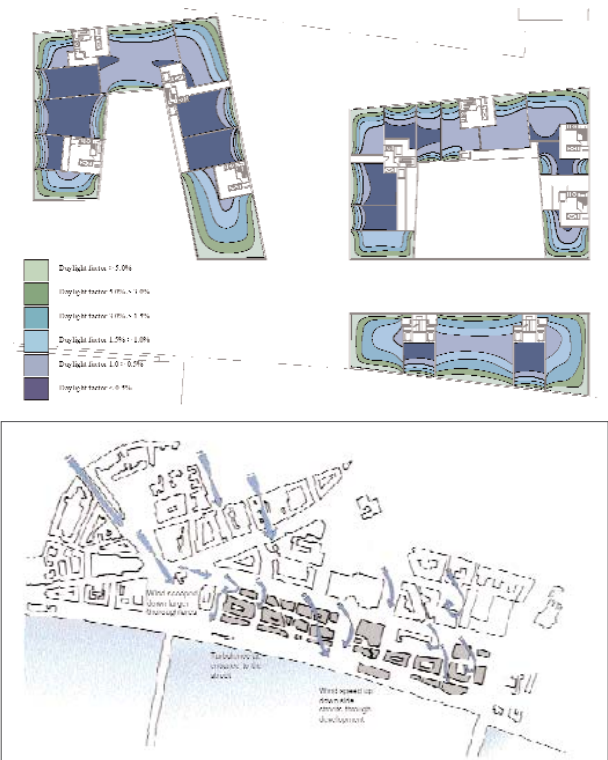
Model of covered gallery which links all the urban blocks and public spaces



Model of covered gallery which links all the urban blocks and public spaces



The masterplan includes leisure and retail facilities such as a cinema



Extensive environmental analysis was used to inform the design process