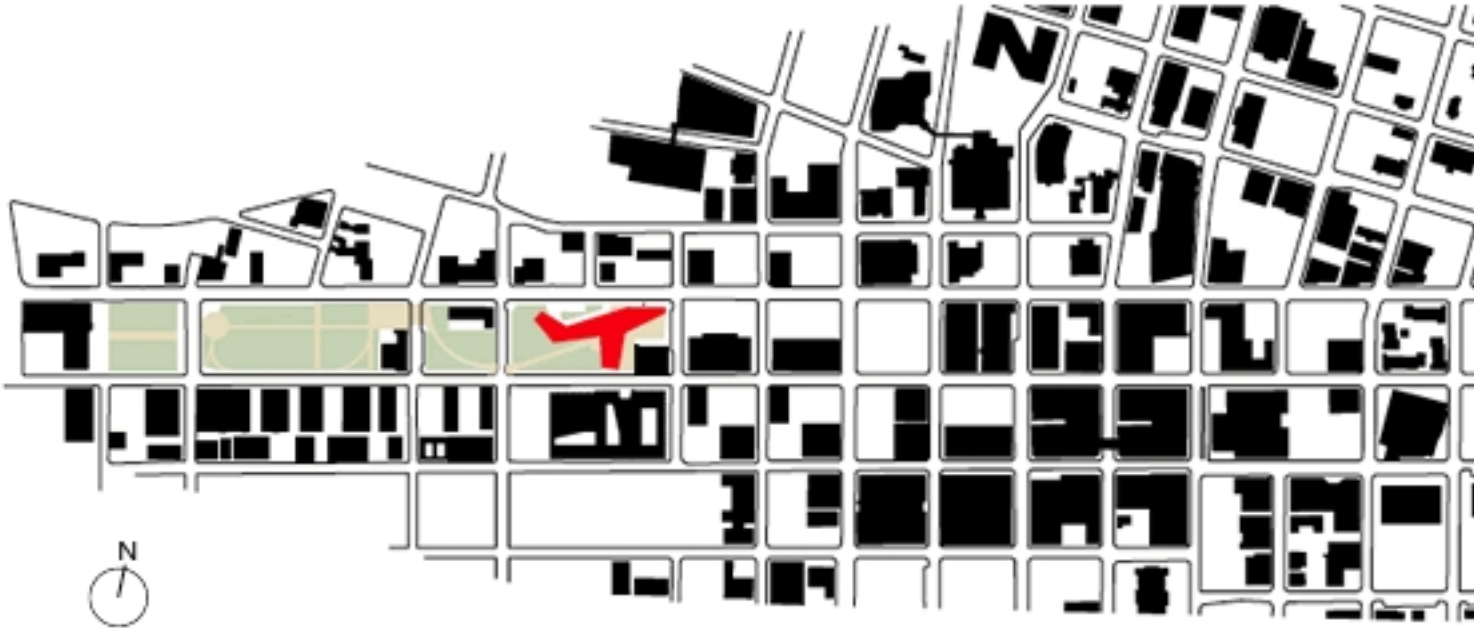
The library forms an integral part of the new Des Moines 'Western Gateway Park'. This area of the city is currently undergoing extensive redevelopment and the new library and park will become a centrepiece for the urban renewal of Des Moines.

All Photographs are courtesy David Chipperfield Architects and Des Moines Public Library / Photographer Farshid Assassi.

Located at the east end of the park, the new library acts as a link between downtown Des Moines and the park. On the one hand, it responds to the city block, but at the same time it stretches out into the parkland, floating in the surrounding landscape, thus creating outside spaces of different character while conveying to the visitor the feeling of sitting in the park while reading a book.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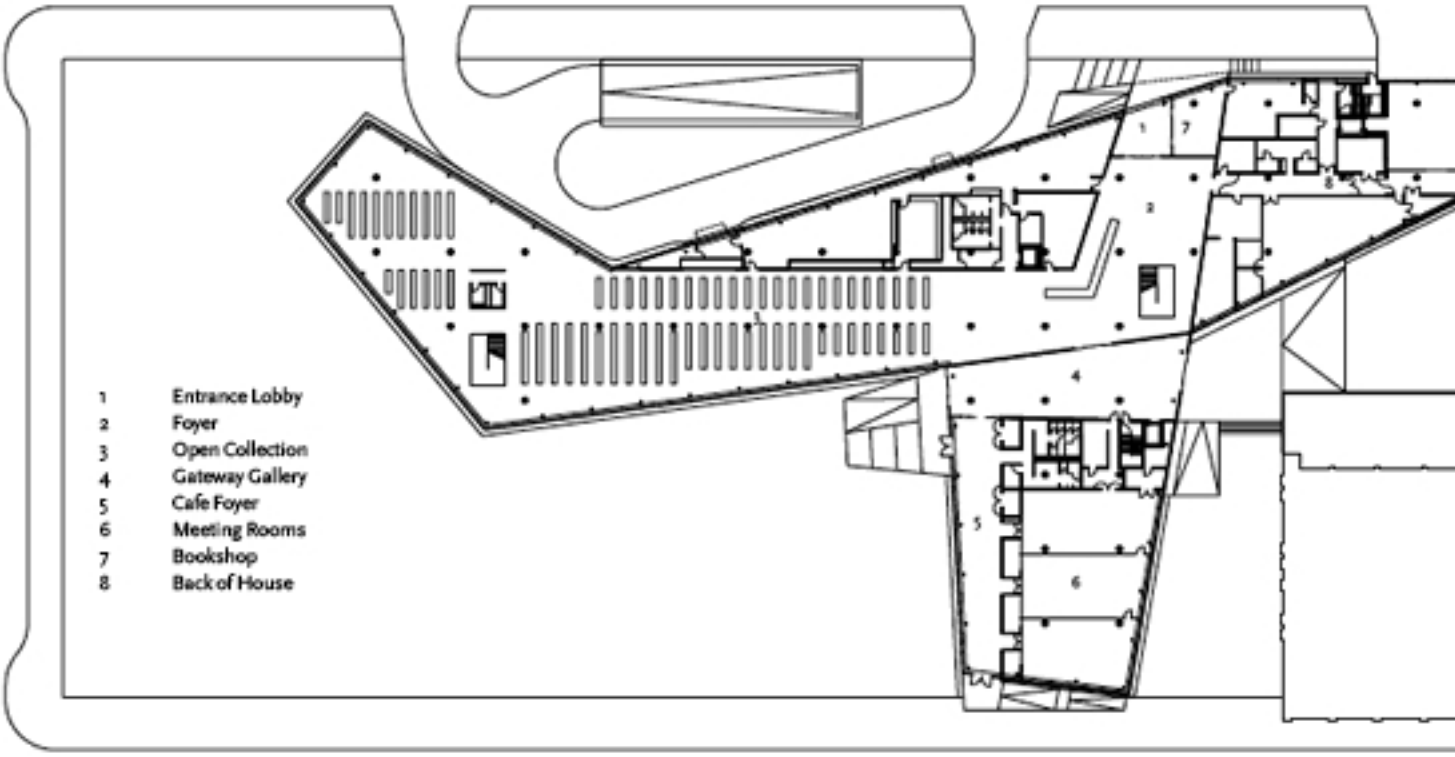
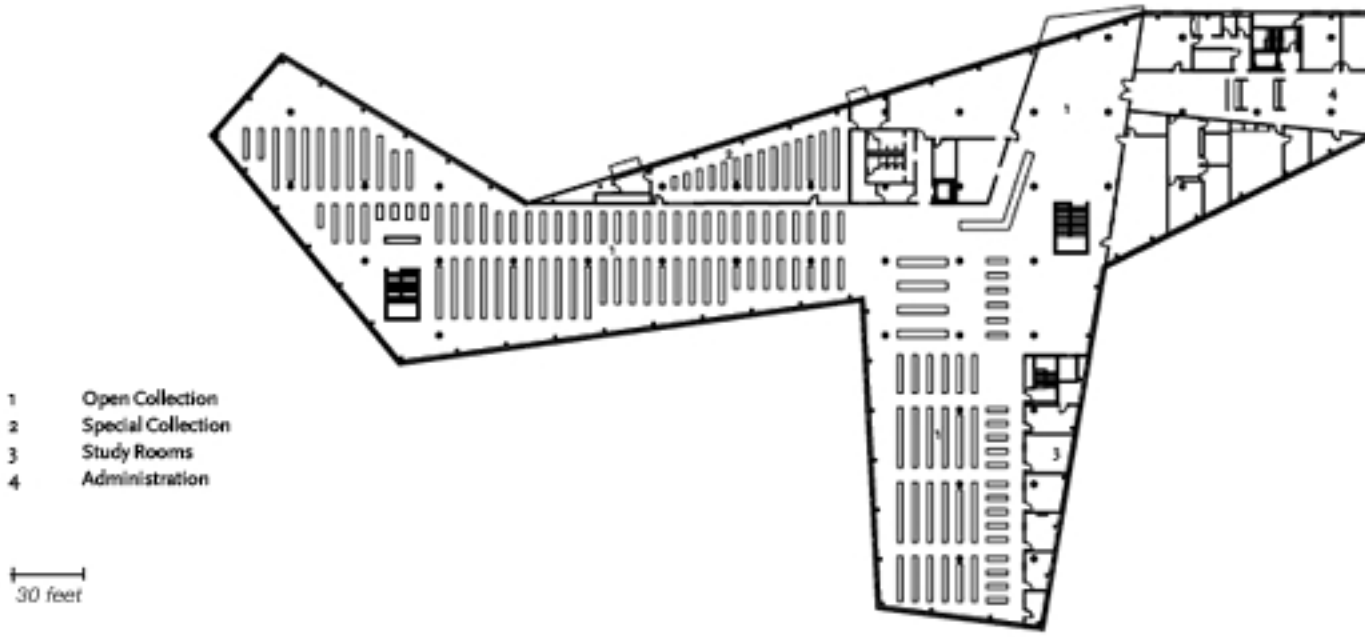




Tangible Measures for a Sustanable Design:

Glass façade with integrated metal mesh

The façade consists of triple glazing units with an integrated metal mesh. The

three-dimensional quality of the mesh allows for good views out of the building but reduces the solar gain through the façade by 80%, thus significantly reducing the building's cooling load.

Green Roof

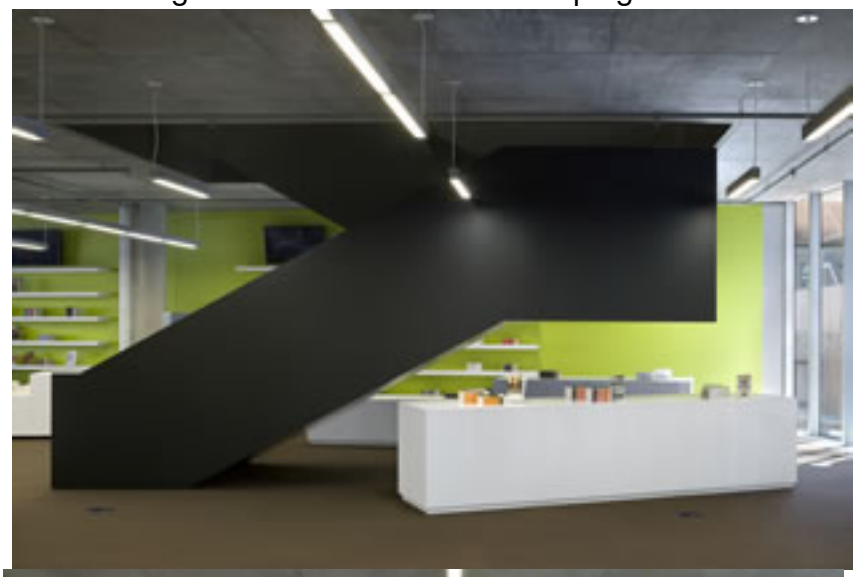
The green roof both improves the visual and the physical environmental impact of the building.
- For views from the surrounding buildings it gives a sense of a visual continuation of the surrounding park
- The roof helps retain rainwater and thus minimises the impact of the large roof on the sewer system.
- The green roof increases the building's mass and therefore mitigates peaks in temperature resulting in a reduced heating and cooling load.

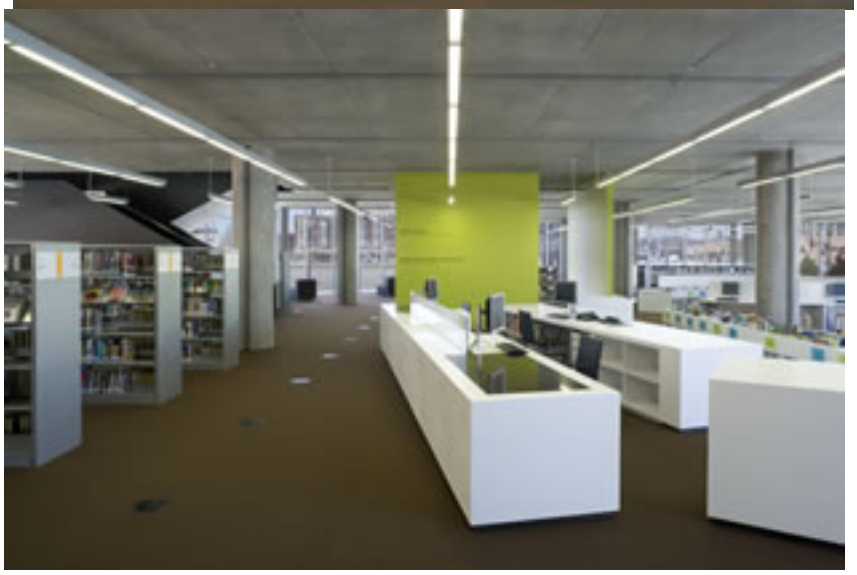
Exposed Concrete Soffits

All suspended ceilings have been omitted exposing the concrete soffit of the floor slabs. As the slabs are exposed, their building mass can be activated to reduce the building's cooling load.

Daylight

The elaborate building shape helps connecting the inside and outside and maximises the use of natural daylight. Integrating mesh in the full-height glazing furthered the effectiveness of the daylight. The mesh mitigates the sometimes harsh qualities of daylight thus minimising the use of artificial light to avoid contrast and helping to illuminate the depth of the space.





The cumulative effect of these measures have lead to an excellent energy rating with the local energy supplier and given the library a significant cost rebate in addition to annual savings on their energy bill.

More on David Chipperfield Architects:

Profile

Projects

America's Cup Building

The America's Cup Building 'Veles e Vents' (Sails and Winds) and accompanying park were the social focal point for the 2007 America's Cup – the world's premier offshore racing competition, staged in Europe for the first time in over 150 years. The Louis Vuitton Cup started in April 2007 and the climax, the 32nd America's Cup match, commenced at the end of June 2007.