

THE LANDSCAPE ARCHITECTURE

The building and green spaces as elements
of sustainable urban development

ECOLOGICALLY EXEMPLARY

Building and green spaces set new standards

A new public park runs diagonally along the western side of the site, connecting the adjacent residential areas with the main train station. Setting up fencing was deliberately avoided to allow the public to access, walk through and use this park.

The external areas are laid out predominantly with native plants or designed as areas of natural succession. These patches of meadow were grown from different blends of seeds and are mown once a year. The mowings are left on the ground for some time for reseeding.

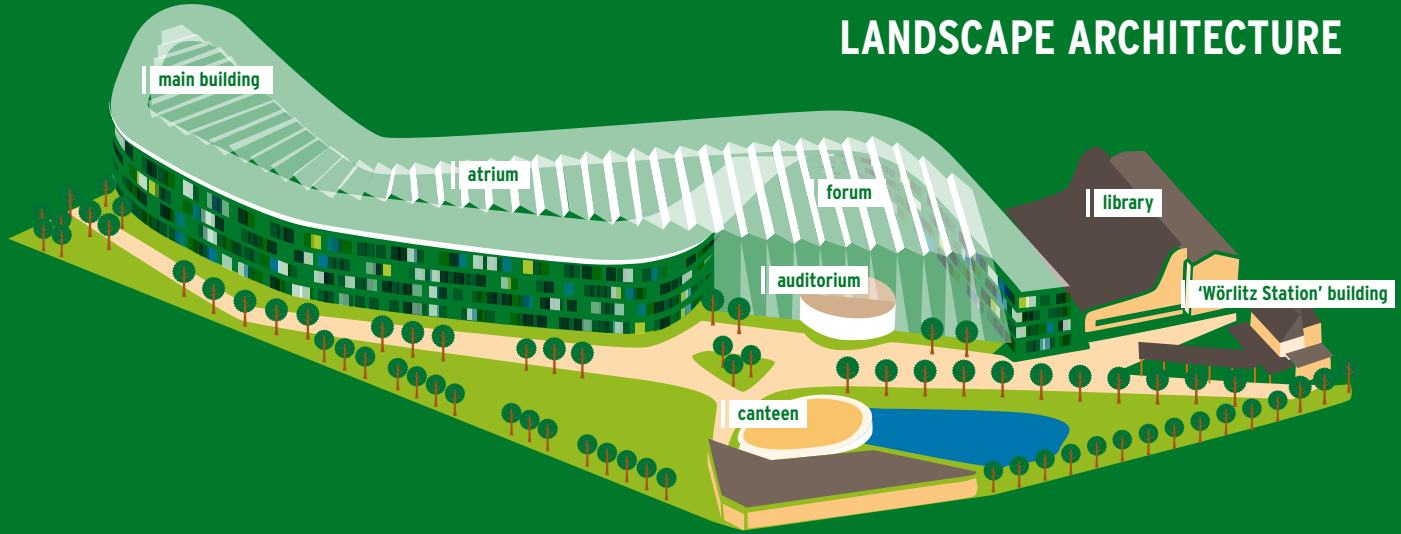
A windfall area made up of the trunks of different trees made to stand tall, with a nesting box high above the ground, provides a habitat for rare animal species like the kestrel. Insects occupy and give life to a hedge of dead branches in the north corner of the site.

Next to the canteen a pond has been created, which collects rainwater from the roof surfaces. Its edges are lined with reeds and bushes. The adjacent wasteland of demolition material – a symbol of the transience of the one-time industrial quarter – sprouts a green mantle of plants over the course of the year. It too has been equipped with nesting aids for different bird species.

The compact, pyramid-shaped yew sculpture in the middle of the park, across from the canteen, separates paths leading in different directions.

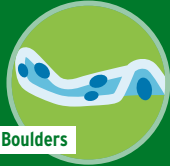
Some 11,7000 trees, hedges, ground-cover plants, climbers, water plants and cuttings were planted on the 27,293 m² site. The delivery zone is paved with concrete blocks and the parking lot has spaced paving with grass jointing. An asphalted path functions as an emergency access road.

LANDSCAPE ARCHITECTURE



Nesting boxes in façade

Nesting boxes are integrated into the brick façade of the library.



Boulders

Five 'boulders', constructed of bush-hammered concrete, are part of the park landscape extending inwards.



Water basin/pond

An outside pond and a water basin in the Atrium reflect sunlight and make for a pleasant atmosphere.



Hotel for insects

Insects occupy and give life to a hedge of dead branches.



Nesting boxes

Nesting boxes are installed at different locations within the park.

ATRIUM AND FORUM

Green spaces within the building

The building is entered via the Forum, which is conceived as part of the exterior space. The spacious atrium opens up behind the security checkpoint. It contains a series of small landscapes as well as communicating staircases and bridges. The amorphous green areas have a bed of mineral substrate on which plants suited to the specific indoor climate grow. The islands of planted vegetation create a pleasant atmosphere and help improve comfort.

In the centre of the atrium, at its narrowest point, two water basins at different heights reflect sunlight and the sound of running water provides a pleasant acoustic backdrop. Surfacing consisting of crushed recycled glass accentuates the artistic character of the building. A tactile orientation system for visually impaired persons highlights the lines of movement through the building.



A PLACE WITH A HISTORY

The *Wörlitzer Bahnhof* as gateway

Still standing on the site, the old *Wörlitzer Bahnhof* was once the starting point of the Dessau-Wörlitz railway and marked the boundary between town and countryside. The station building was once the gateway, right in the middle of town, to an area of landscaped gardens and farms known as the *Dessau-Wörlitzer Gartenreich*. Today, it is the gateway to the headquarters of the Federal Environment Agency and a new public park which adjoins existing urban green strips and takes in the old foot and cycle path, lined with chestnut trees, along the former track of the Dessau-Wörlitz railway. The park's design and the fact that it is easily crossed have turned it into an integral part of the town.





DIFFICULT STARTING CONDITIONS

Site clean-up as a pre-condition for new construction

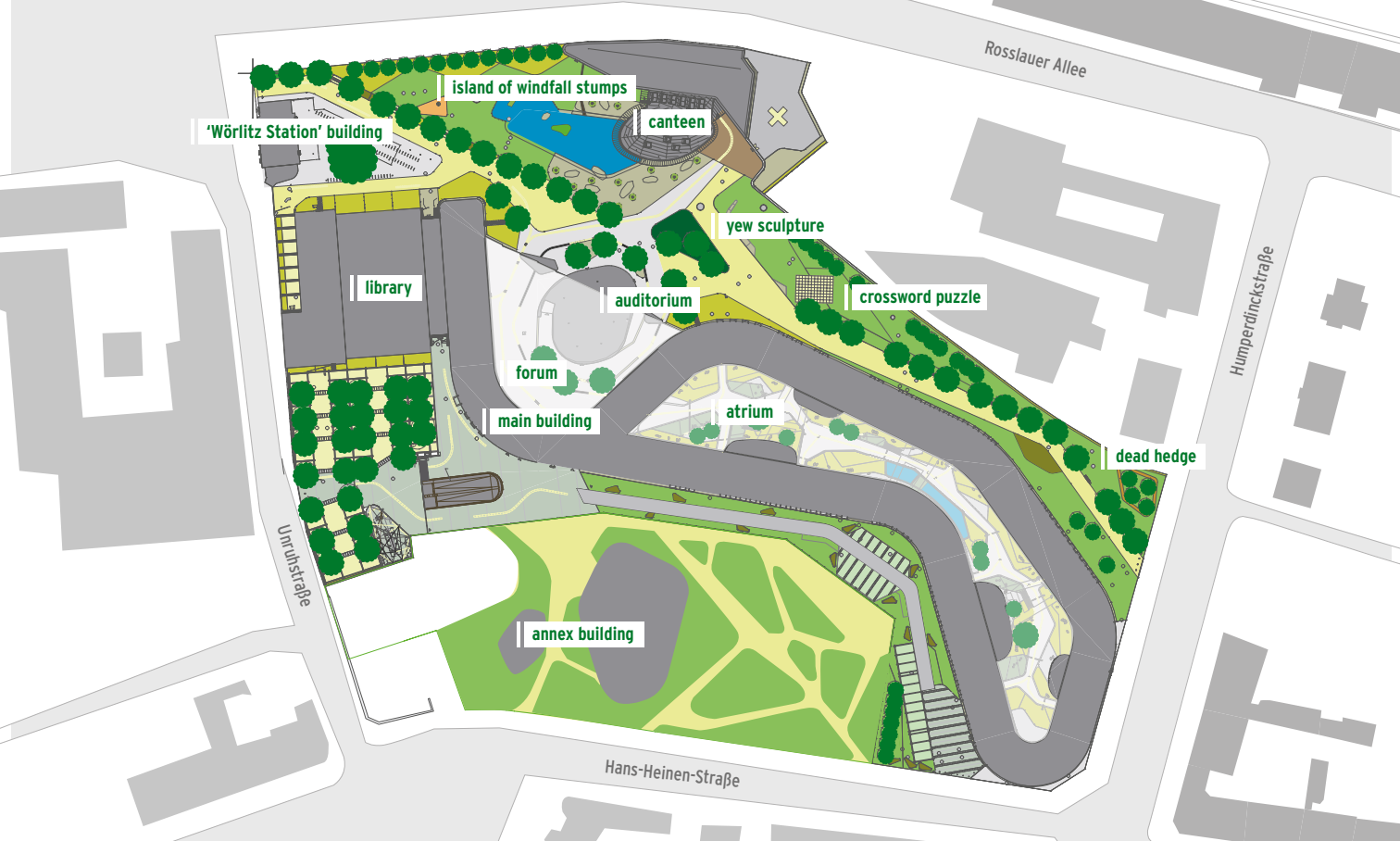
Following German reunification, the independent Commission on Federalism decided in 1992 that the new federal states should be strengthened by locating federal authorities in them. The Federal Environment Agency was to be located in the federal state of Saxony-Anhalt.

Conceived as a complementary project to EXPO 2000, the erection of the new headquarters of the Federal Environment Agency in Dessau, on land once occupied by a factory for gas appliances, was intended to promote sustainable urban development. This industrial wasteland in the heart of Dessau which was heavily contaminated with heavy metals, oils and other pollutants was to be reclaimed. To this end, extensive soil and groundwater remediation was carried out. Today the site is a place of work for some 930 people and integrated in the adjoining parts of the town.



COLOURED 'SNAKE'

The flowing band of the building is broken up by the coloured surface of its facade. The facade comprises nine horizontal stripes – alternating bands of larch wood and glass. 35 % of the facade surface is glass. Seven 'families' of colour are distributed across the facade in such a way that each part of the building reacts chromatically to its immediate environment. Thus, the foyer is enclosed in blues which echo the sky seen through its glazed roof and the pond outside. The angular form beside the park takes on two sets of green, and the part of the building opposite the former factory is dressed in the purple-reds of the old building's brickwork.



'Wörlitz Station' building

island of windfall stumps

canteen

library

yew sculpture

auditorium

crossword puzzle

forum

main building

atrium

dead hedge

annex building

Rossauer Allee

Humperdinckstraße

Hans-Heinen-Straße

Unruhstraße

PRACTICAL EXPERIENCE

Maintenance and use of green spaces

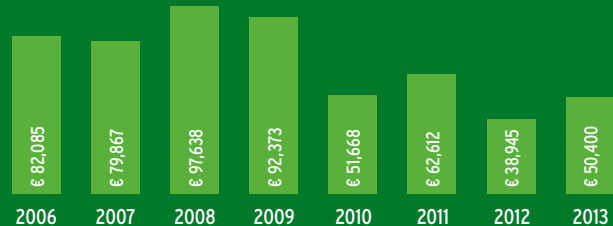
Although plants were chosen with a view to their suitability to the specific natural conditions, maintaining the green spaces presents a challenge. This is especially true of the green spaces in the atrium with its own special climate and artificial irrigation. One particular problem is that, due to increasing temperature extremes and substantial temperature changes over the course of the year, not all vegetation in the atrium can be counted on to make it through the winter. This makes finding plant varieties that are well adapted to these conditions an ongoing task.



Overall, user surveys attribute high amenity value to the site's green spaces. They are regarded as a valuable habitat in harmony with the easy accessibility of the building. Feedback from the some 5000 people who visit the site each year confirms this positive assessment.

It proved possible to reduce maintenance costs when the contract was retendered after expiry of the guarantee period. They vary mainly as a function of weather conditions over the course of the year.

Costs for maintaining green spaces and outside facilities and for maintaining/servicing the water basins and sprinkler system





PLANTS AT THE SITE

Aesculus hippocastanum (common chestnut), *Populus simonii* (Simon's poplar), *Salix aurita* (eared willow), *Genista tinctoria* (dyer's broom), *Taxus baccata* (European yew), *Alchemilla mollis* (lady's mantle), *Lonicera pileata* (privet honeysuckle), *Helleborus niger* (Christmas rose), *Hedera helix* (common ivy), *Euonymus fortunei* (fortune's spindle), *Albizia julibrissin* (Persian silk tree), *Cornus Canadensis* (Canadian dwarf cornel), *Tricyrtis hirta* (toad lily), *Asarum europaeum* (European wild ginger), *Ficus pumila* (climbing fig) ...



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The forum (entrance hall) is open to visitors during the building's opening hours:

Mon to Fri 6:00 am to 10:00 pm

Sat 6:00 am to 4:00 pm

Sun/hols 8:30 am to 4:00 pm

The visitors room (information material) and the library in the forum are open:

Mon to Weds 9:00 am to 3:30 pm

Thu 9:00 am to 5:00 pm

Fri 9:00 am to 2:00 pm

Visitors who would like to learn more about the architectural and ecological design of the new building and visit the atrium can join a guided tour. For more information about this, ask at our visitors centre or visit our website (www.umweltbundesamt.de).

Photo credits: Marcus Bredt, Reinhard Görner, Jan Bitter

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