

EXTENSION SPORTS HALL MONTESSORI SCHOOL

INGOLSTADT, GERMANY, 2009-2011

Client

Förderkreis für integrierte Erziehung in Kindergarten, Schule und Beruf e.V.

Architect

Behnisch Architekten, München

Planning and construction 2009-2011

Gross

480 m² / 5,167 sq.ft.

Volume

3.550 m³ / 125,367 cu.ft.

Address

Johann-Michael-Sailer-Str. 7 85049 Ingolstadt Germany The residential district Hollerstauden lies in the western suburbs of Ingolstadt; a number of public buildings define its centre.

It is here that the Montessori School, realised by Behnisch & Partner between 1993–1996, is located. This complex of buildings is home to a variety of community amenities, which include: a social centre, a therapy building, as well as a kindergarten, an elementary school and a middle school. In 1998 this complex was expanded by a single field sports hall.

The massing of the existing building and its impact upon the small school forecourt was reduced by lowering the hall and placing all ancillary spaces below ground. The greened roofs of the ancillary spaces can be used by pupils as outdoor space. In 2009, Behnisch Ar-

chitekten was commissioned with the extension of this small building into a double-sized sports hall.

The existing roof is a timber structure resting on slender steel pendulum columns around the perimeter of the hall. A large central timber beam allows for small section secondary trusses. The secondary trusses are supported by the lower flange of the main beam allowing for a low-lying roof form. A rooflight running along the entire length of the main beam allows daylight to stream into the interior, complementing the large clerestory glazing around the outer walls and permitting an even spread of light.

The existing hall is extended along the eastern side to accommodate a second sports field measuring 15 x 27m. The existing façade was

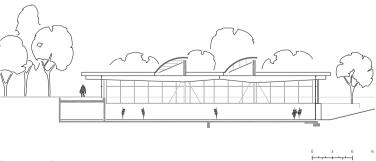


simply dismantled and then relocated 15m further to the east and the existing retaining / concrete support walls were lengthened by the width of one sports field. A curtain can be used to separate the two halls, when necessary.

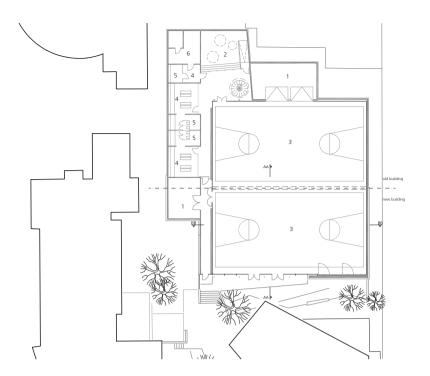
The original planning foresaw that the hall could be extended through replacing a row of columns along the longitudinal side with a second main beam. The new roof was developed as a "mirrored construction" to the existing roof, again with the timber structure supported by steel columns. Here, too, a second main girder running parallel to the existing girder replaces a second row of supports. Again, a rooflight running along the length of the new main beam allows for the additional sports field to be flooded with daylight and provides the building with a clearly recognisable identity.



East elevation



Long section



Level 1

1 - equipment room 2 - fitness room 3 - playing field 4 - changing room 5 - toilets/ showers 6 - technics

 \oplus



