

Location of the Pichelsberger Tip



Situated **10 km due west of the Brandenburger Tor**, the Olympic Park sits on a triangular plateau that rises 30 meters above the Havel River to the west. **Deep cuts of the urban transit line of the S-Bahn** in the west and south, the metro or U-Bahn in the east and the **wooded valley of Murellenschlucht** in the north-west isolate the plateau from the **surrounding residential areas** of the Berlin district Charlottenburg - Wilmersdorf. An overwhelming part of the plateau is taken up by the Olympic Park of the 1936 XI Olympic Games. Almost untouched by the ravages of the Second World War the Park has retained its original substance and appearance.

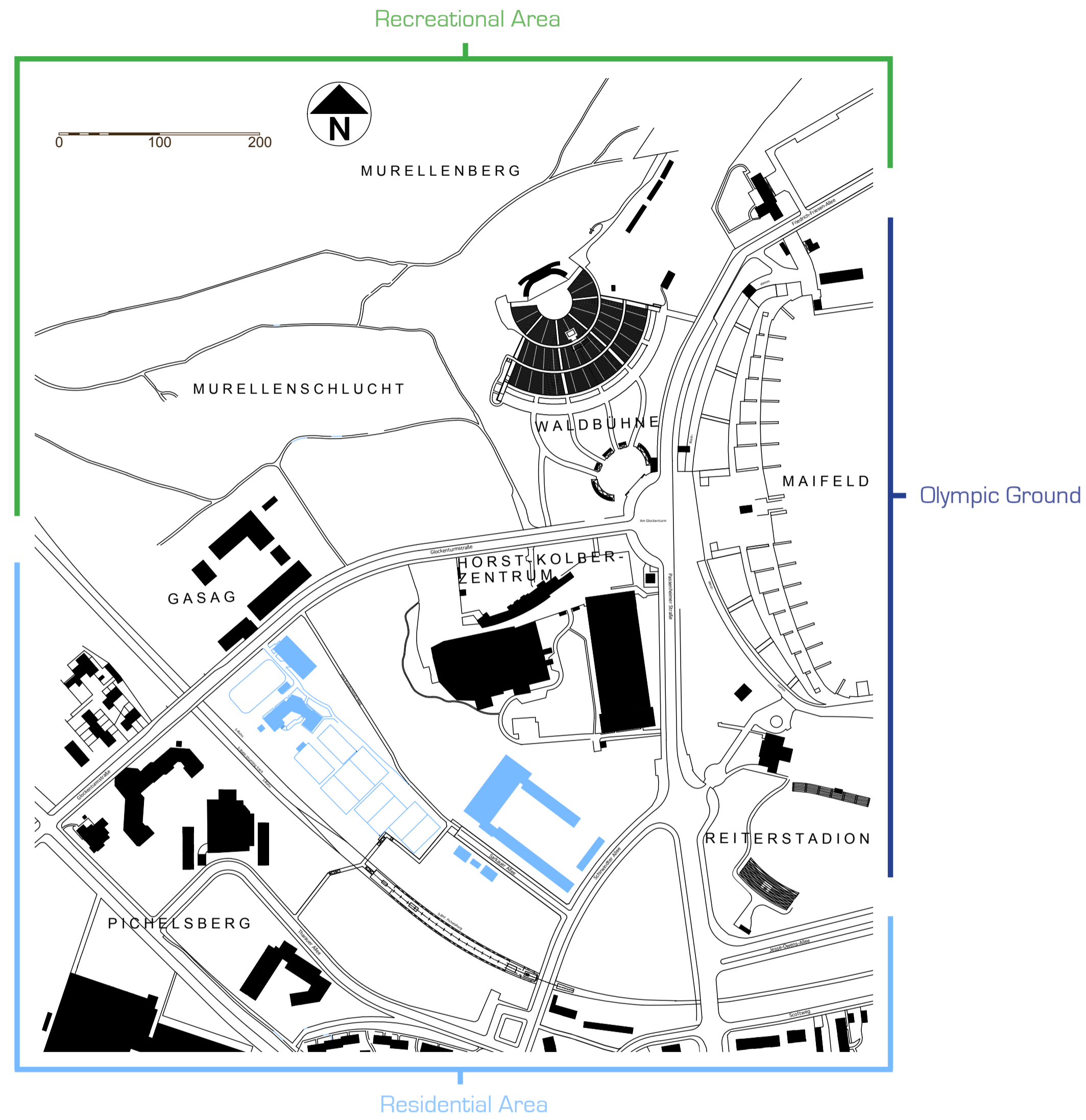


Competition Task

While the original Olympic Park on the central and eastern part of the plateau follows the grandiose urban development schemes of Hitler's architects, the **triangular Pichelsberger Tip** at the west of the Olympic ground underwent a rather haphazard development which gives it a **clustered appearance devoid of any urban order** or scheme. The run down state of some of its facilities, the lack of adequate access and the project for a new hockey stadium on the last remaining uncluttered space are reason enough to wish for a new master plan and new designs for this area.

The aim of the competition was to **restructure** the complete area by introducing new pathways, **redesigning** and potentially relocating the U-Bahn station. Attention was required to be given to the urban net as well as the public spaces within. The **principles of ID shall be used at all levels** of the design to overcome the typical site problems as shown later. The monumental arrangement of a main street to the central axis of the site and all attraction were to include in a new masterplan. An accessible hotel and U-Bahn station was to be designed and new pathways connecting different points on site were to be created.





site plan demolition - nts



CLUSTERED SITE

The site is lacking an overall strategy and unifying elements. The unorganized cluster results in confusion of the visitor and a less pleasant experience, when visiting the area.

SURROUNDING AREA

The surrounding area is split in three major sections:

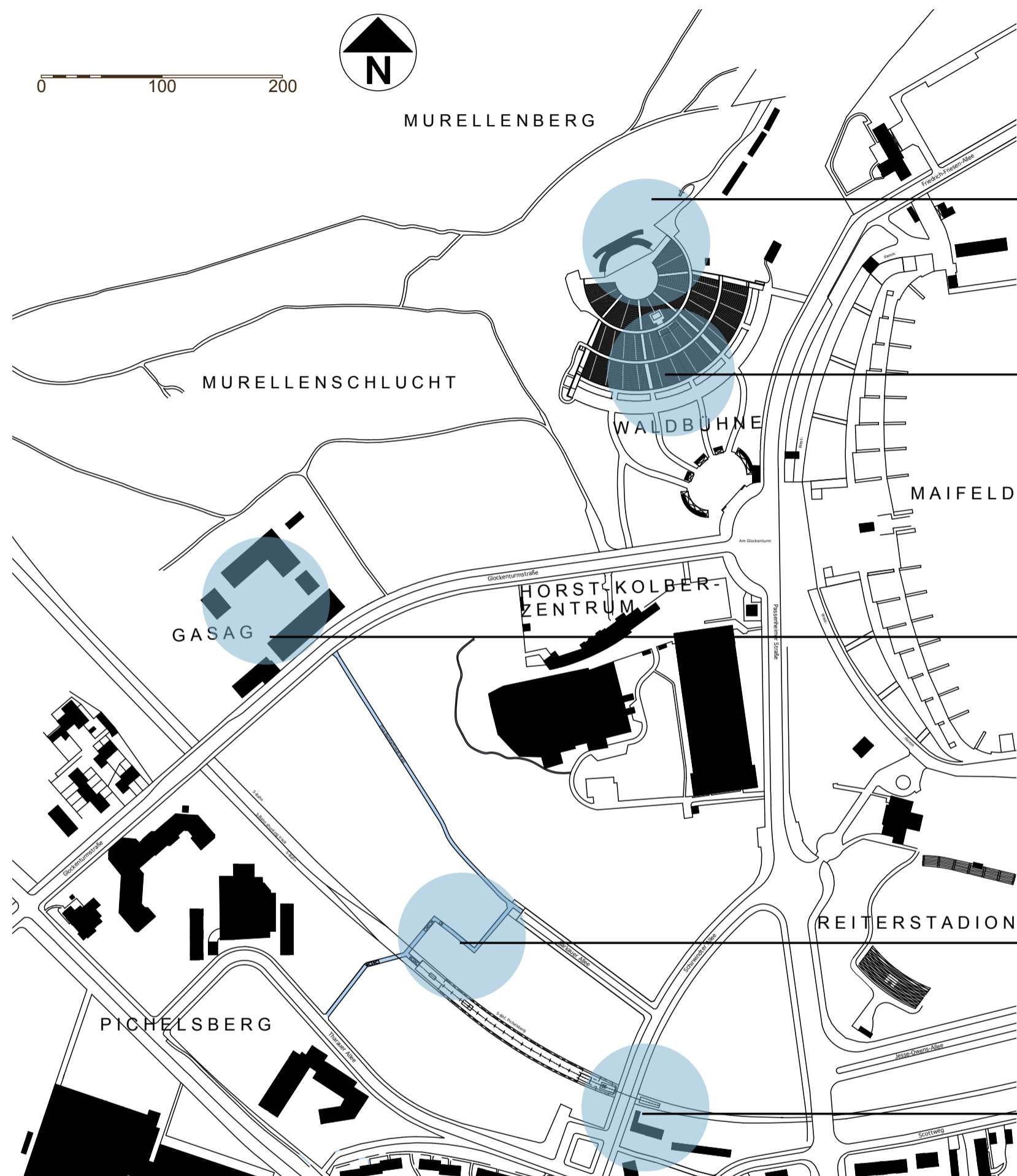
- the woodlands around the Murellenschlucht to the North
- the residential quarter to the South
- The olympic ground to the East

PROPERTIES ON SITE

The site is dominated by sports facilities. Those include Riding, the Horst-Kolber-Sports-Zentrum a planned hockey ground and tennis courts. The new masterplan shall focus on making this a new urban sports center including the facilities named above and leaving the potential to expand.

The Glockenturm as a landmark and the existing Waldbuehne shall be included in the new design. Both attractions, different to the sports centers, need to be easily found and reached by a first-time visitor.

COMPETITION TASK: HOW TO BRING ORDER TO THIS CLUSTERED SITE?



BARRIERS TO MOVEMENT ON SITE

Access to the stage is difficult for lorries, which have to maneuver through residential area and woodlands. There are also hardly any facilities for the artists, especially the lack of disabled facilities is noticeable.



The whole area of the Waldbühne is covered with uneven ground and steps and is a difficulty to cross for the less able, but can be dangerous for everybody. There is no aid for vertical circulation along the seats. Guidance between the rows and stalls is missing.



The GASAG property seems alien to the site. The heavy fencing gives a rather non-welcoming feeling. Pedestrian ways overall are in a poor state with trees rooting through the asphalt.



Access to the U-Bahn is either far away or via smaller bridges and steps. They are neither ideal for disabled visitors nor for the crowds visiting the cultural events.

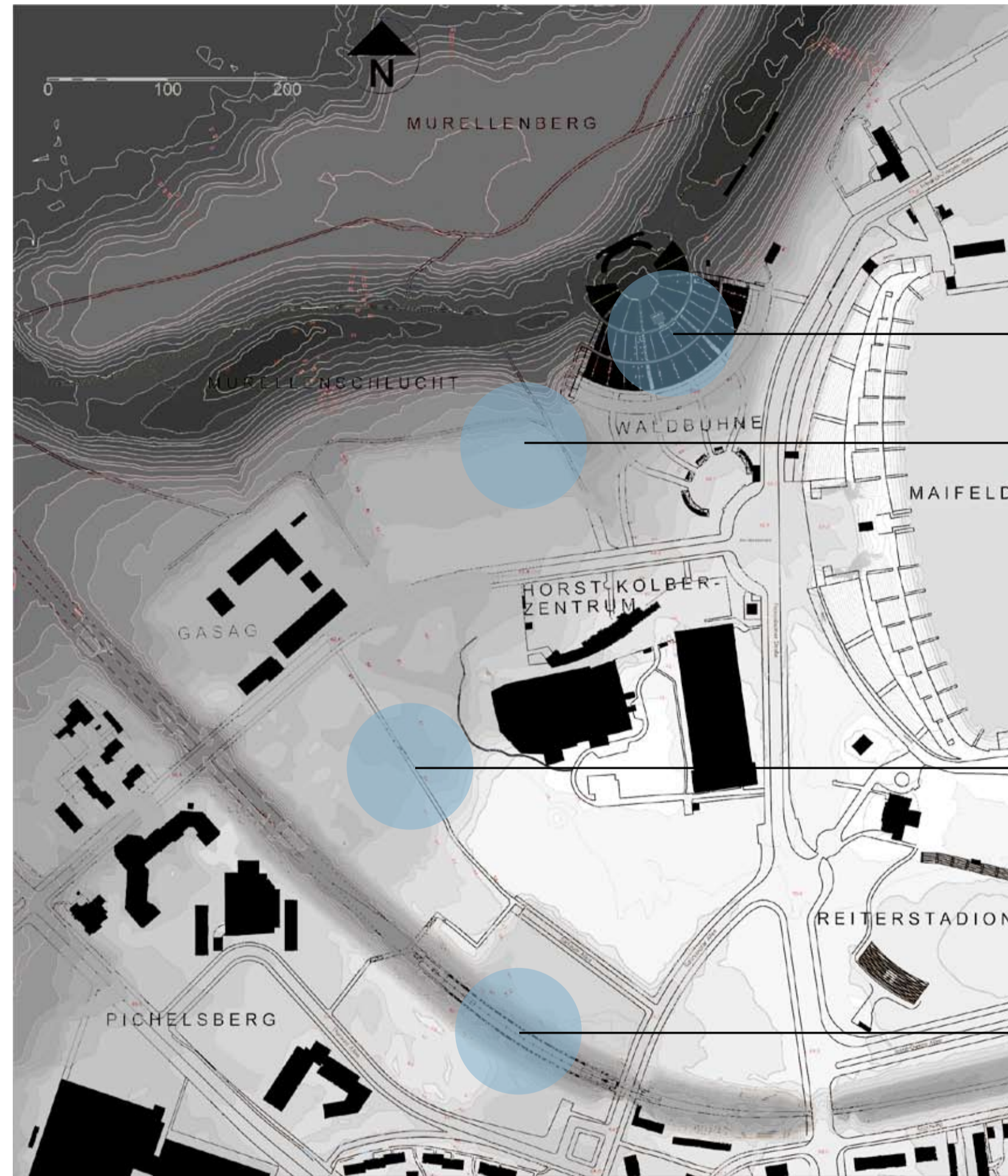


The only entrance via lift at the station is at the far end away from the activities and attractions. No direct route from the small platforms to the landmarks is existing. Using a wheelchair the whole site needs to be surrounded to reach the Waldbühne: a journey of almost a kilometer.



Great distances together with a hilly setting and an unorganized site, finding his way around is difficult. Furthermore pathways are old and uneven. Car parks are distributed over the whole site with no indication of the nearest attraction and no signpost to U-Bahn or other destinations.

site plan shortcomings - nts



site plan topography - nts

BARRIERS THROUGH TOPOGRAPHY

The site is lacking an overall strategy and unifying elements. The unorganized cluster results in confusion of the visitor and a less pleasant experience, when visiting the area.

Theater uses the fall of the Murellenschlucht. Unfortunately it is very difficult to reach: trucks will have to go through residential area to reach the stage and visitors will face steep pathways all the way through.

There are pedestrian ways along the road to connect the residential side with the plateau. Nevertheless the only pedestrianized way leads parallel to the S-Bahn, not connecting any crucial points and therefore not being very useful.

The exit of the existing S-Bahn station bridges the valley in which the S-Bahn is running. Nevertheless all exits are face towards the end of the residential area and forcing people that come to make sports or see the attractions to walk a far way out. The pedestrian way is difficult to find and once found, difficult to master.



Fall of the Murellenschlucht - black line as indicative section



Position of the S-Bahn tracks and parallel, hidden the pedestrian way. The blue dot indicates the exit of the station away from the attractions, activities and the major part of the residential area.



Curriculum Vitae

Kristina Voigt was born in 1982 in Brandenburg, Germany. Since birth she has had a neuro-muscular disease characterized by the degeneration of motor neurons, resulting in progressive muscular atrophy and weakness. She must use a wheelchair to get around. Ms Voigt moved to nearby Berlin in 2003 to study at the Humboldt University. But after struggling to find an internship because of barriers and mobility complications, she became interested in sports science and barrier-free planning and construction. Her personal experience of being confronted with barriers in everyday life gave her useful insights into what is necessary for a barrier-free environment, and she started attending lectures on barrier-free planning and construction at the Technical University of Berlin. Since 2007, Ms Voigt has been working as a project manager and advisor to organizations focused on disability issues. For the Disabled Sports Association Berlin (BS), she manages a program called "Let's get started" aimed at promoting young talents for paralympic sports, and provides web site support and handles the organization office at the annual International German Swimming Championships for the Disabled. She also advises architects and organizations on barrier-free planning, and is a member of the advisory group of the Department for Urban Development of the Berlin Senate, where she acts as a reference person for barrier-free construction.

Special needs

Since 1992, Ms Voigt has used an electric wheelchair, which gives her a certain degree of independence. However, using Berlin libraries, for instance, is difficult because they are not designed for wheelchair users - workstations are too high, lack space and have inaccessible electrical sockets. Ms Voigt describes visiting the reading rooms as an "adventure" because she must use a separate entrance. This means summoning the facility manager to get a special key or to get permission to use an elevator that is not in public service. Her current wheelchair will take her 15 km, at a maximum speed of 12km/h. She needs a space of at least 1.3 m to turn around.



Curriculum Vitae

Joe A. Manser was born in 1954 in Zurich, Switzerland. At the age of two, Mr Manser was paralyzed by cerebral palsy and has since been confined to a wheelchair. Despite his disability, he studied Architecture at the Swiss Institute of Technology. He is married and is the father of two teenage daughters. Currently he heads the Swiss Center of Accessible Building for Disabled People in Zurich, which he cofounded in 1981. He is also engaged professionally in politics as a long-standing member of the City Council of Zurich, where he acts as commissioner for urban development.

Mr Manser is an expert in barrier-free design and has made a significant contribution to improving the built environment for people with disabilities. Drawing on his own personal experience as well as his participation in many international committees, he has written extensively on the subject and was instrumental in initiating the norms and regulations that form the basis of the Swiss Building Codes concerning disabilities. These codes have since been distributed to all architectural offices throughout Switzerland.

Mr Manser is a member of the Committee of Experts for the "European Manual for an accessible built environment", and he represents Switzerland in the ISO-Commission for a barrier-free environment. Despite his disability, Mr Manser has traveled extensively throughout Europe, Asia and the Americas and has first-hand experience of the extent to which building codes are implemented in different parts of the world.

Special needs

Thanks to his tractor and other helpful tools, Joe A. Manser can generally manage his daily life without having to rely on others. The cerebral palsy that he contracted as a child has paralyzed his entire body: His legs cannot support his weight, and he has little strength in his arms. He cannot reach anything located more than 1.10m above the ground, so may experience difficulties reaching doorbells, telephones and other everyday items. He is able to push an ordinary wheelchair for a distance of up to 50m, provided the incline is no more than 3% at most. However, with his battery-powered tractor, Mr Manser is able to travel distances of up to 30 km. The device can also propel him up a slope of max 25%. To turn around, he needs an outer radius of 1.90m because the total length of the tractor and the wheelchair measures 1.80m.



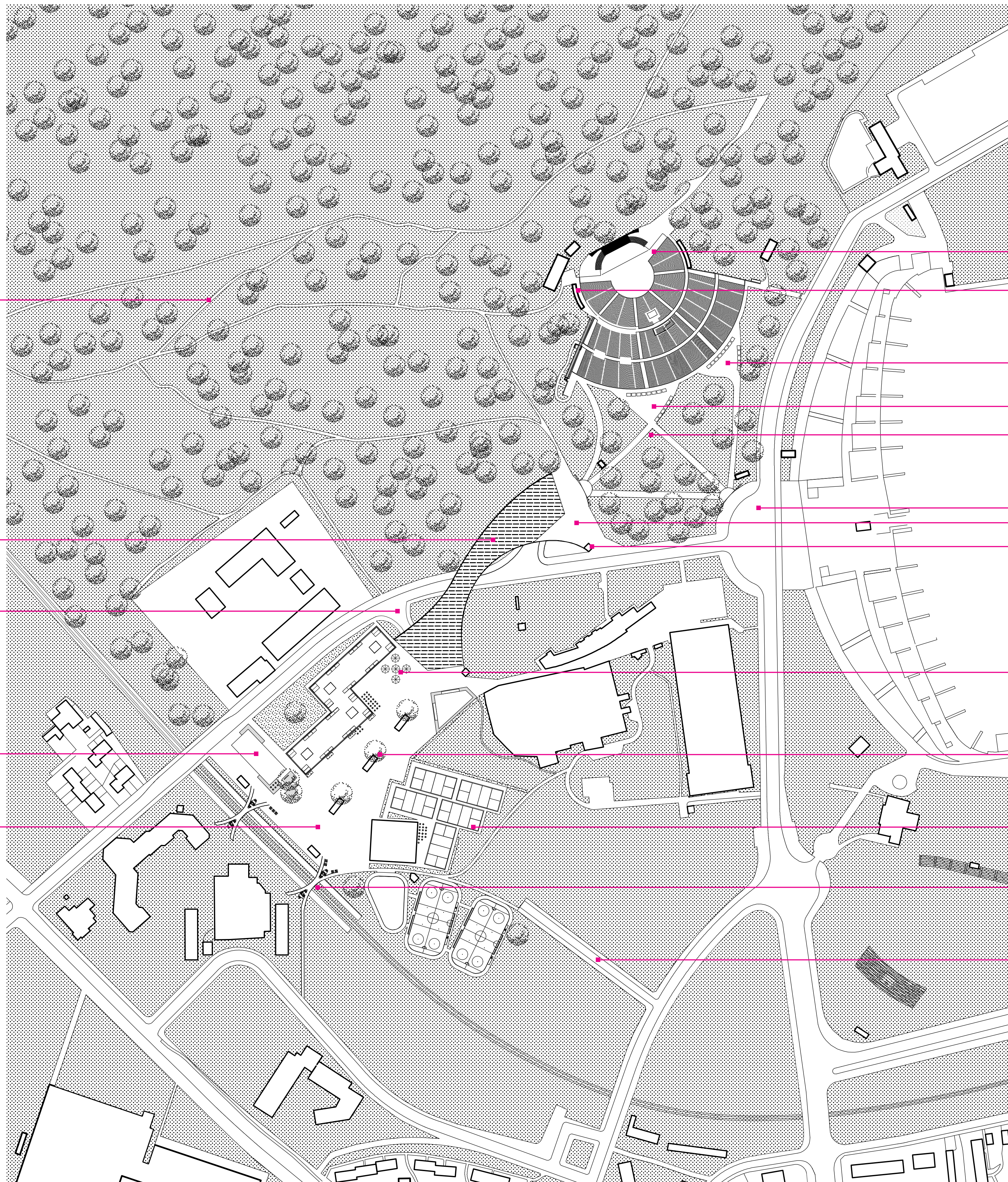
Curriculum Vitae

Klaus-Dieter Wüstermann was born in 1937 in Wuppertal, North-Rhine Westphalia, Germany. He first noticed problems with his eyes in 1990, and was diagnosed with macula degeneration, a condition which results in the loss of vision in the central visual field, leaving those afflicted with only peripheral vision. Mr Wüstermann is an expert in barrier-free building. He studied architecture in Stuttgart and Berlin worked for many years in architectural practices in Berlin. Since 1974, he has been an advisor on building standards (national and international) for the German Institute for Standardization (Deutsches Institut für Normung / DIN). From 1995 to 1997 in his last two years with DIN he was also responsible for the committee "Barrier-free building" and its standards DIN 18024 and DIN 18025. He also initiated the revision of these standards in 1995/96. Since 2002, Mr Wüstermann has run a consulting office for barrier-free mobility, focused on the needs of the visually impaired, and has written extensively on the subject (see www.i5b.de, German only). He also represents the association of the blind and visually impaired

of Brandenburg (BSVB), focusing primarily on making public spaces accessible. Mr Wüstermann is currently working towards a doctorate in engineering science at Berlin's Technical University, with a dissertation entitled: "Barrier-free building for people with visual impairments".

Special needs

Important for Mr Wüstermann is that barrier-free building in terms of universal design is understood as more than simply providing wheelchair access. For the blind and visually impaired, the biggest obstacle in terms of mobility, and the greatest danger when using public transport, comes from difficulties with orientation. Mr Wüstermann is able to read and understand information that is presented in graphical form.



connecting, less steep pathways supply accessible ways to the Murellenschlucht

the bridge across the main road is elevated; the site can be seen from the top and visitors use the view for orientation; no map or other signage is needed (this is not a replacement for signage, but a considerate addition to the traditional mapping)

cars enter the underground parking from all sides and access to all facilities is given from underground; crossing the site by car is therefore not usually required and it is automatically tranquilized

shopping and sports facilities attract locals; the mixed flair between hotel guests and locals will create a friendly atmosphere

a clear, attractive passage leads from the station to all attraction, while crossing the viewing point onto the bridge

the commercial areas are spread out on different heights and sides of the theatre; visitors with impairments can therefore reach refreshments easier and the crowds will be less, the experience better for everybody; toilets are near all the commercial facilities; disabled toilets to have a good standard

pathways are designed to be no steeper than 1:20; the allowed steepness for disabled access varies throughout Europe with 1:20 being the least steep access

generous areas to meet and queue

entrances/exits to the underground parking is spread over the whole site; the buildings partly have lifts directly into down to the parking

several venues with outdoor seating invite to stay and give the possibility to rest and get refreshments or a simple break

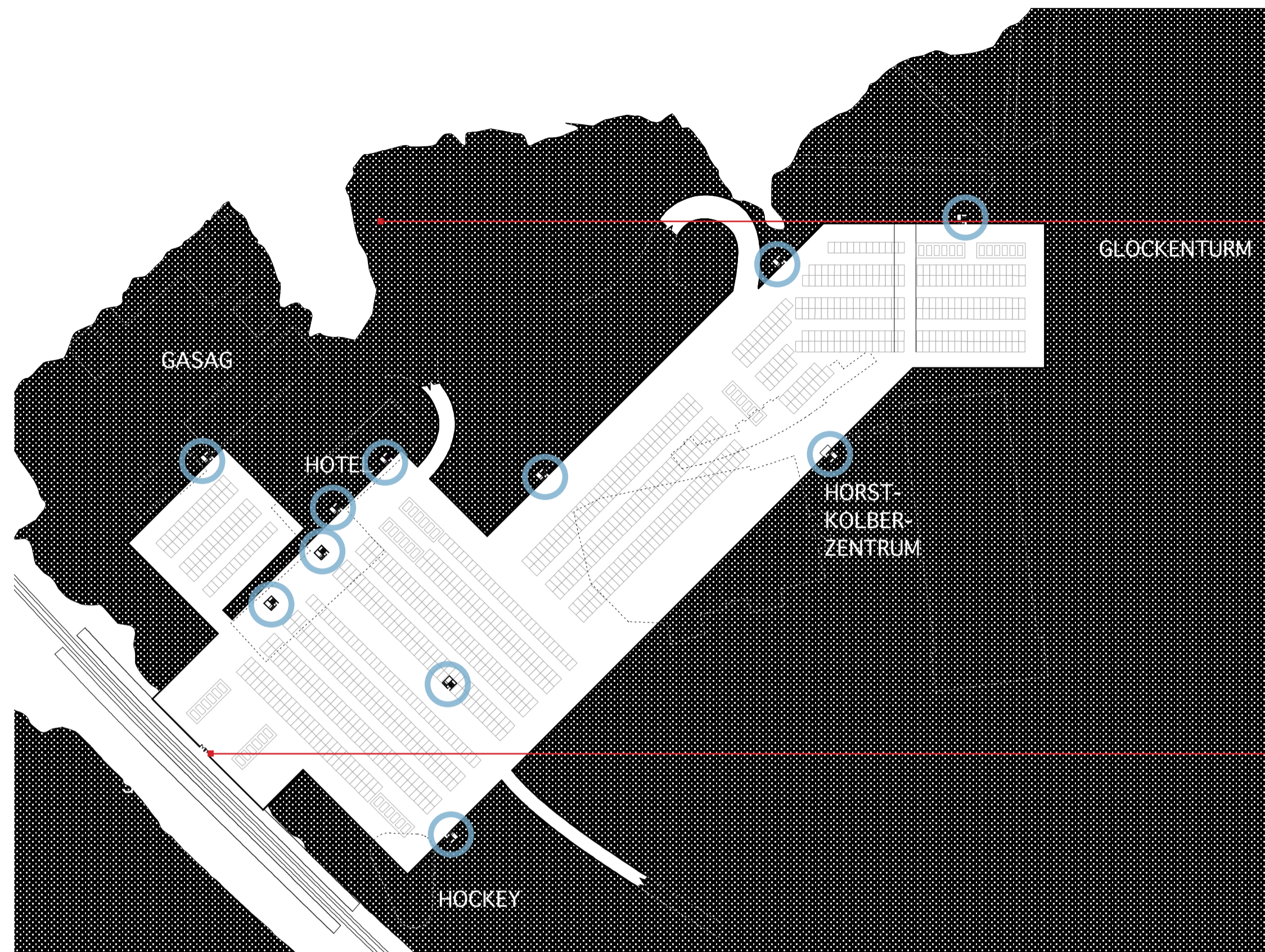
areas with shadow and seating are necessary in every accessible public space

tennis and hockey courts can not be reached any other than through the main entrance, but a distanced view is given to encourage passersby to participate in the sports

several entrances in all directions and 4 lifts and both ends of the platform keep ways short and accessible

the existing street is leading to the underground parking and caters for deliveries to the sports grounds

masterplan - scale 1:2000

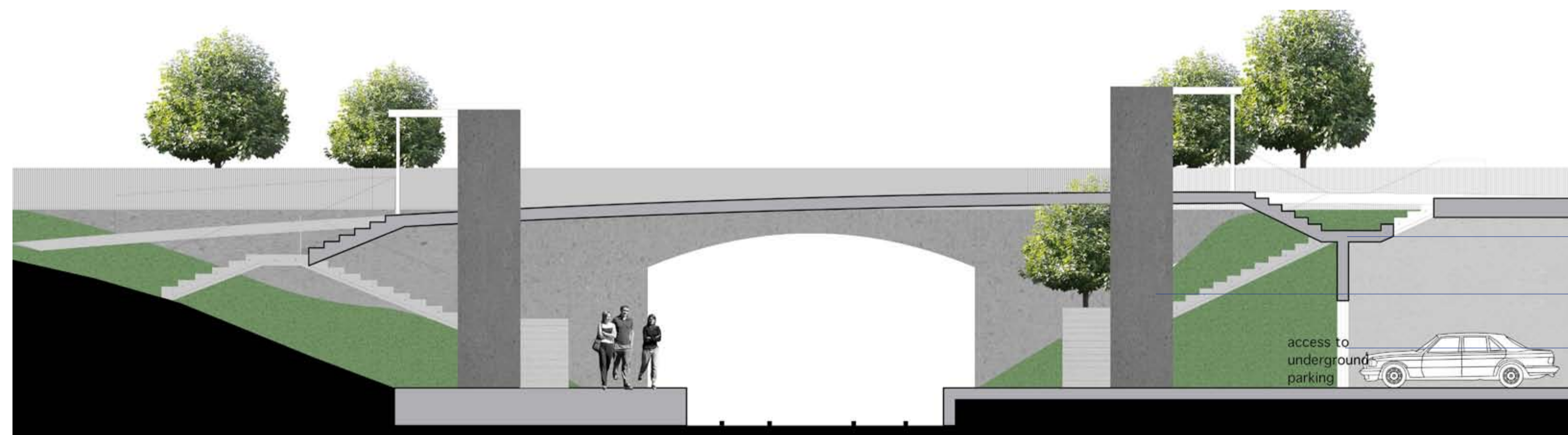


plan underground parking - scale 1:2000

entrances at all the crucial points; lifts in the hotel go down to the underground parking. no long walks will be required. The underground parking can also be used in case of rain to cross underneath in dry conditions

the parking area is located underneath the higher sections of the plateau (the end of soil line is identical to the topography line)

direct access from the underground parking to the platform (then to the opposite platform via lift)



section through the S-Bahn station - scale 1:200

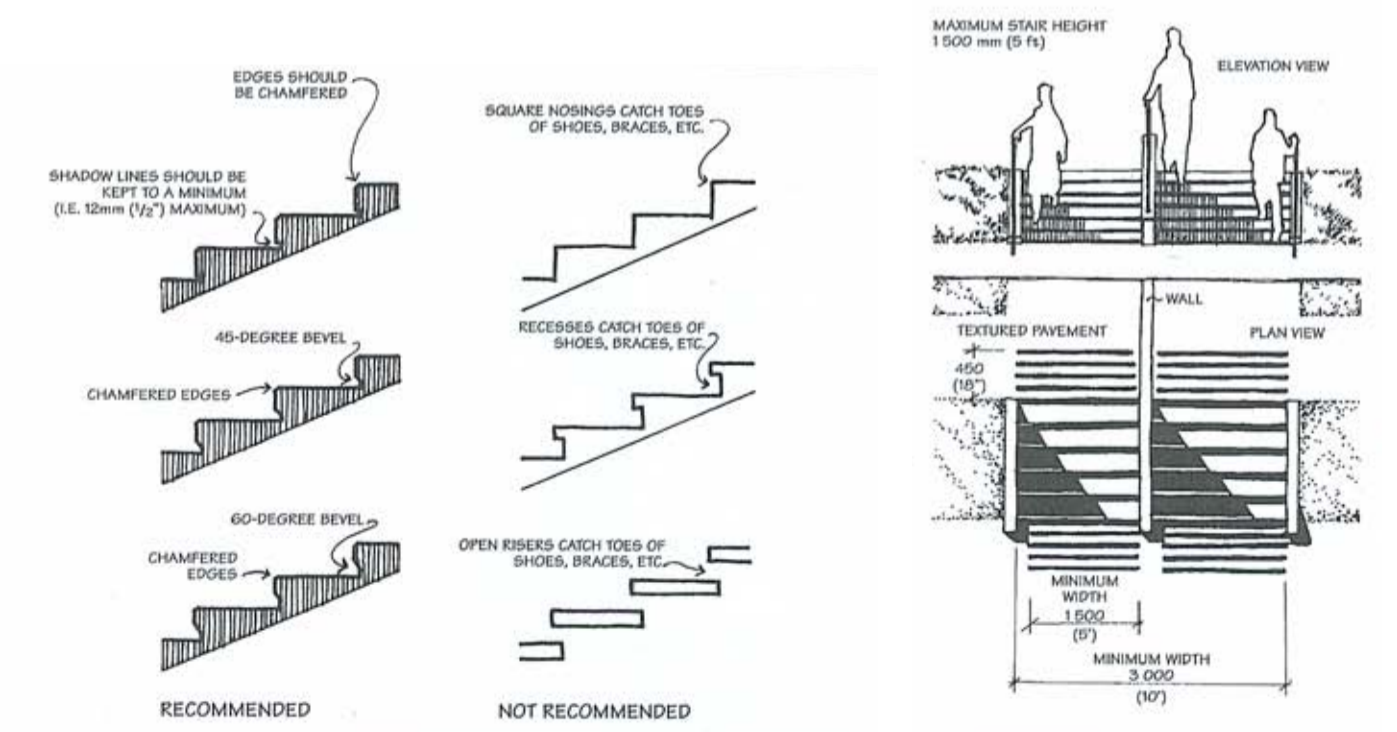
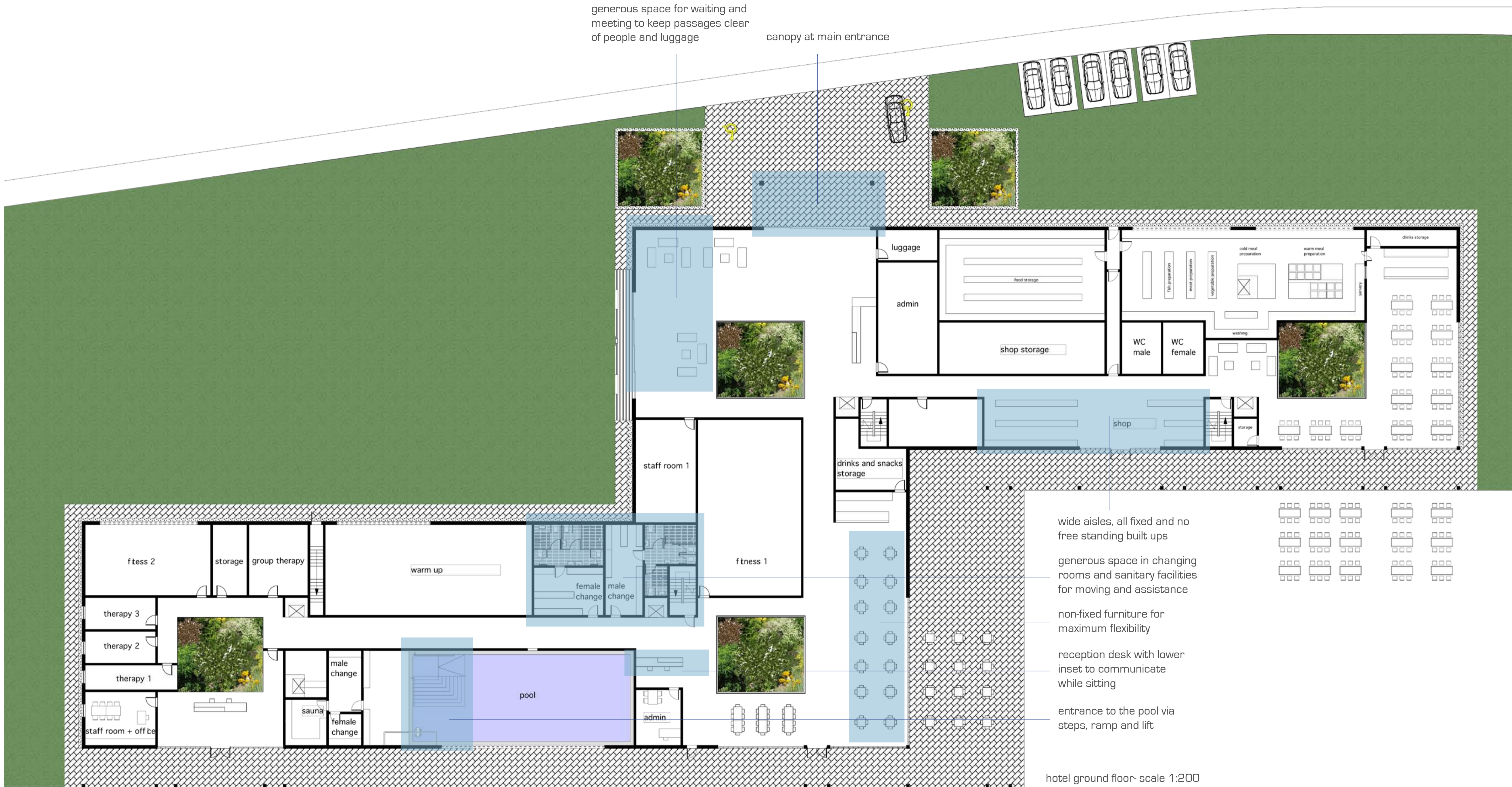


Figure 240-8. Outdoor step types. Steps should be designed to safely accommodate those who will use them. Careful attention to nosing and shadowline details is especially important.

Figure 240-9. Stairway landings. Vertical height between stairway landings should be minimized to accommodate individuals with limited strength. Note that minimum widths do not include the thickness of walls.



Following considerations were made regarding ID:

wide, covered entrance with over ground parking for disabled people

vast amount of daylight for good visibility and a generous floor plan encouraging movement and communication of groups and gives wheelchair users space to turn and move freely

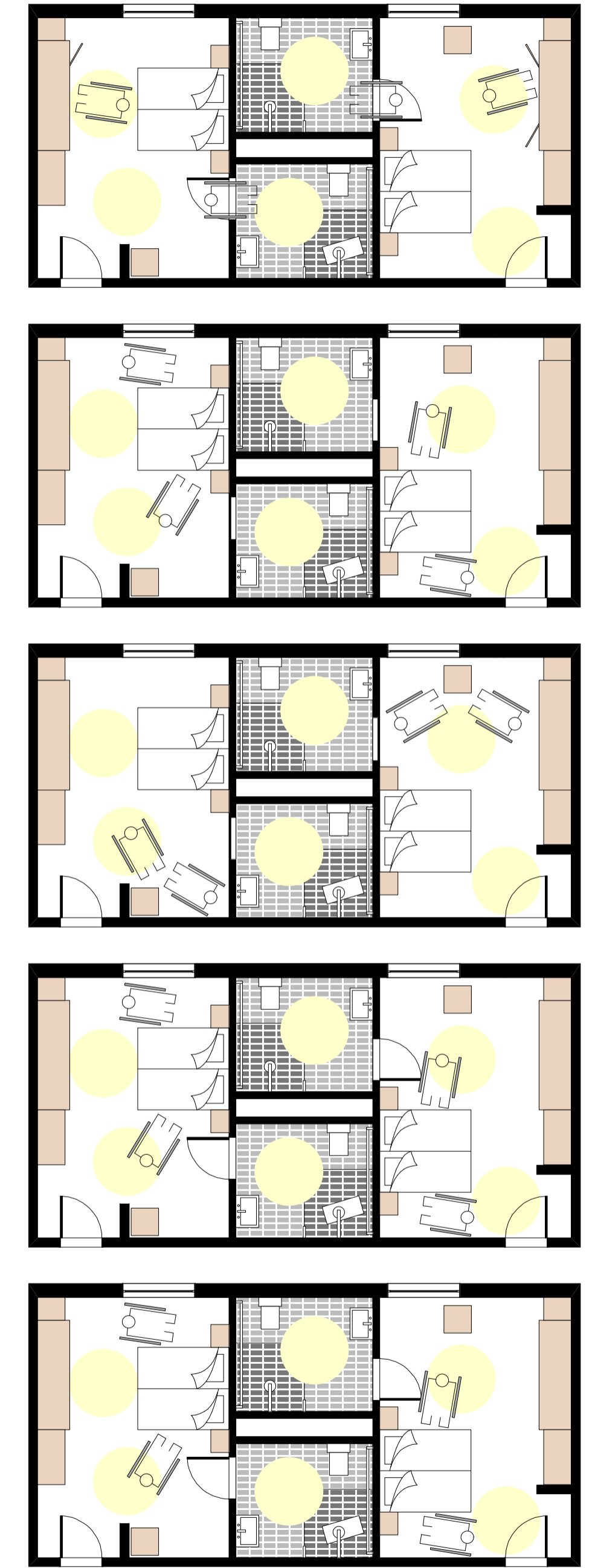
lifts directly from the rooms into the dining areas or into the spa (no unnecessary exposure)

no thresholds, but open wide floor plan on one level only

not doors but walls, lift shafts and light wells are used as partitions, so free movement is possible



hotel typical floor- scale 1:200



room layouts- scale 1:100

accessible rooms: see on the right

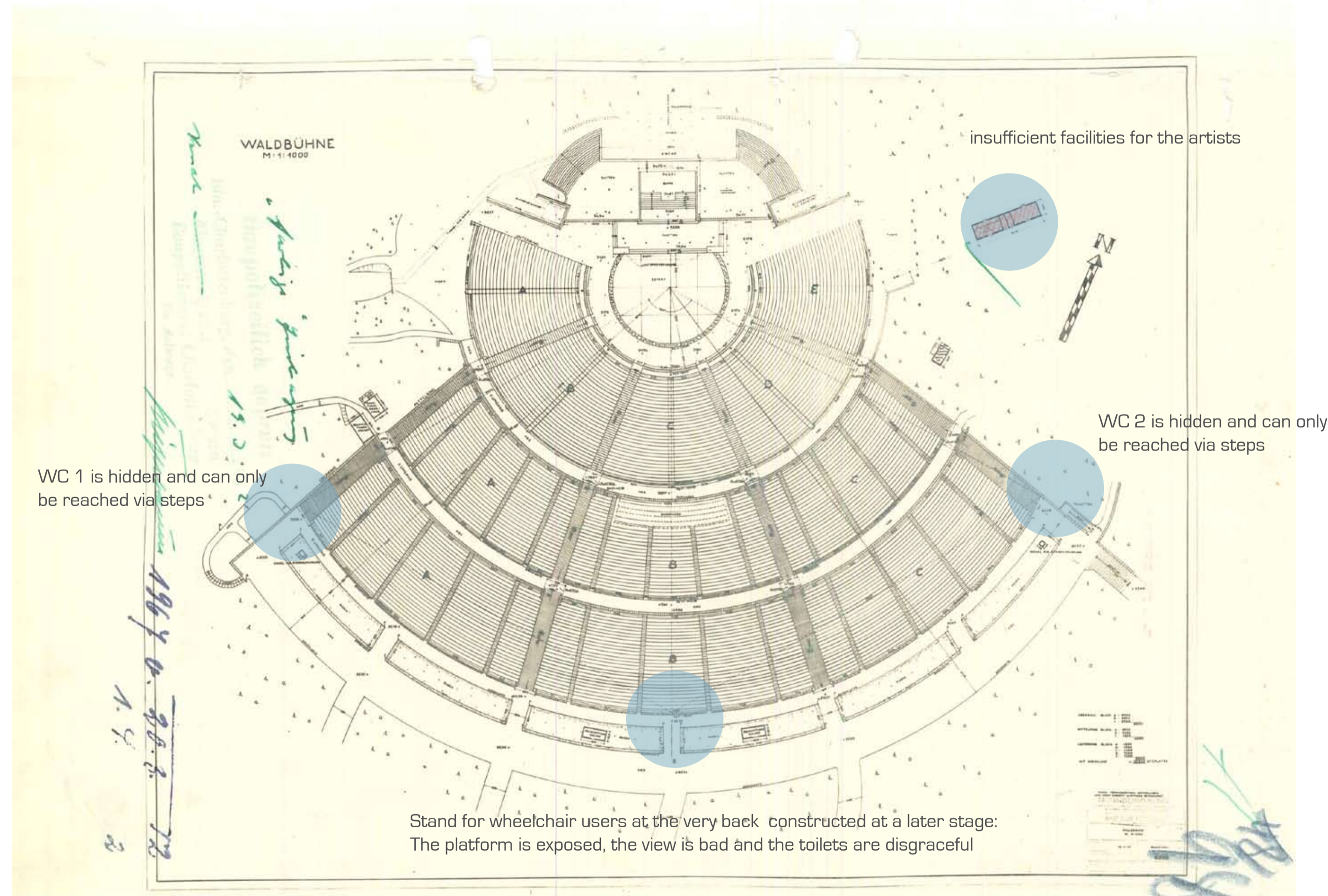
bright and generous space to meet, rest and orientate himself

storage room for assistive gear to be on every floor

emergency exits are well lit and facing the main areas

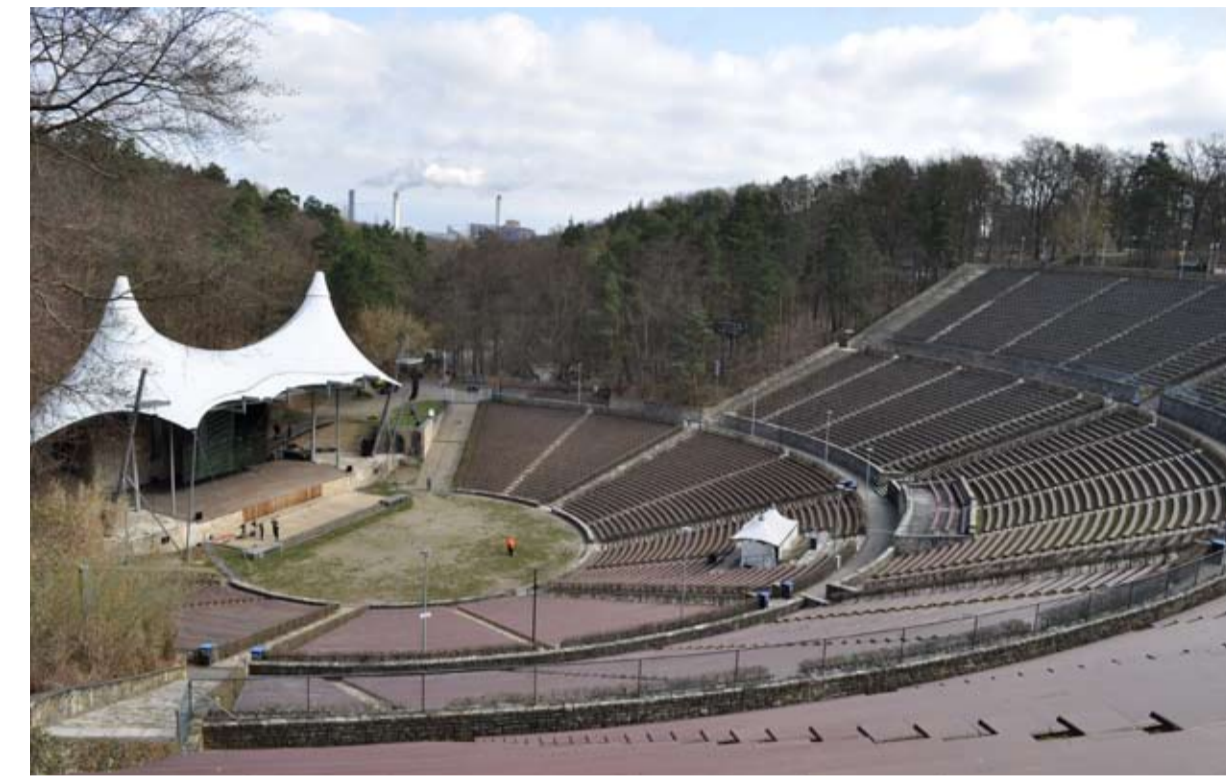
Accessible rooms:

The room size is determined by the minimum width required by a wheelchair passing bed and wardrobe (or alternatively bed and coffee table or wardrobe and coffee table, ...) The diagrams show how flexible accessible rooms need to be. One floor plan needs to enable various actions throughout the day. Space to maneuver is a must. The room size is a normal standard 3 star hotel room, nevertheless, the bathroom is bigger.



Shortcomings

The seating layout



The seats are placed onto the natural slope of the Murellenschlucht. The austere seats have no back to lean on and rest. Entering the small paths between the rows it means that no support is given and walking will be difficult for many. There is no help for vertical circulation. Who cannot master steps has to stay at the very top where the view is poor.

The toilets

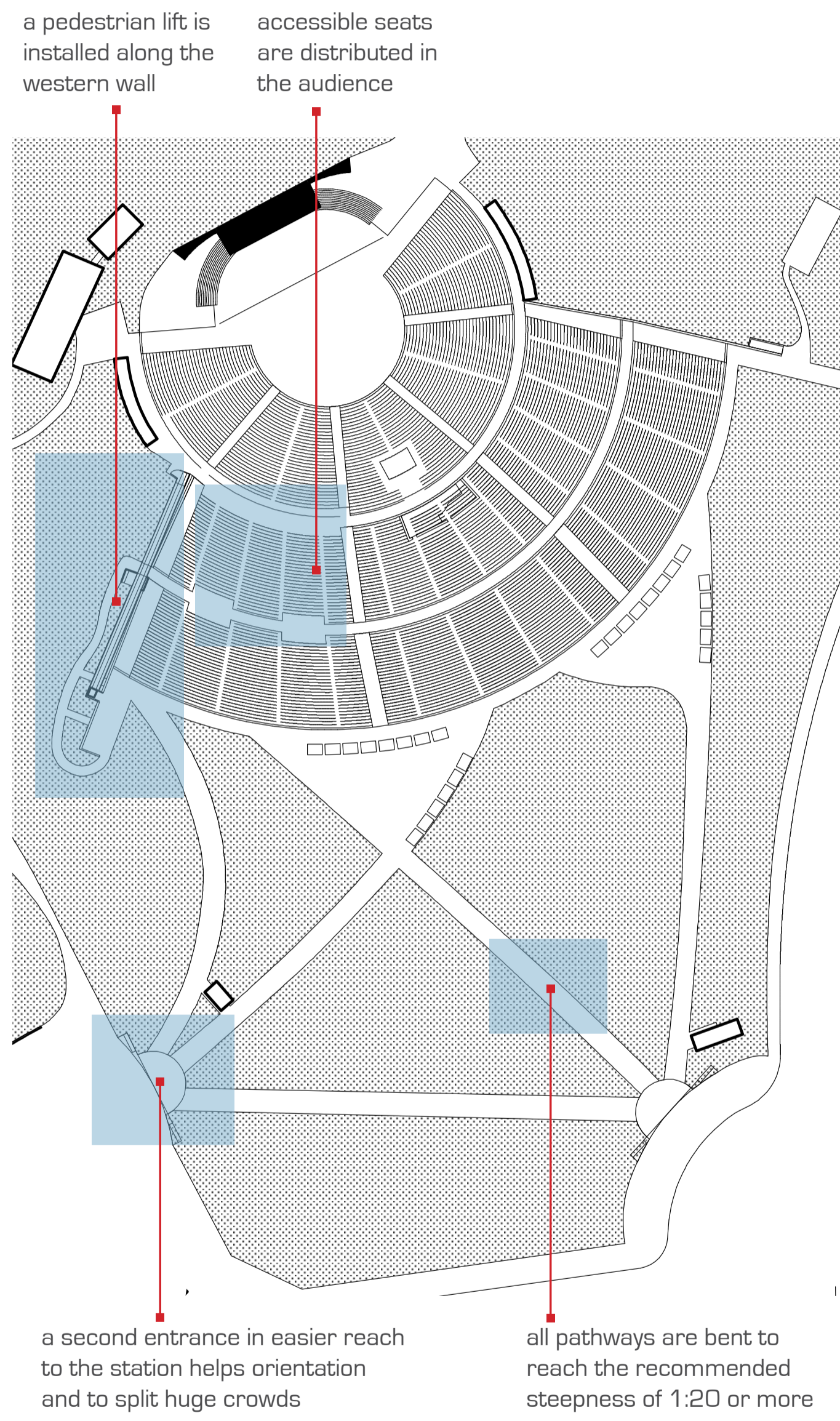


Toilets are places outside the seating area underneath the seating. They again can only be reached through stairs. There is only a limited amount of signage and being tucked away, they are difficult to find. At major events the pathways leading to the toilets are too narrow.

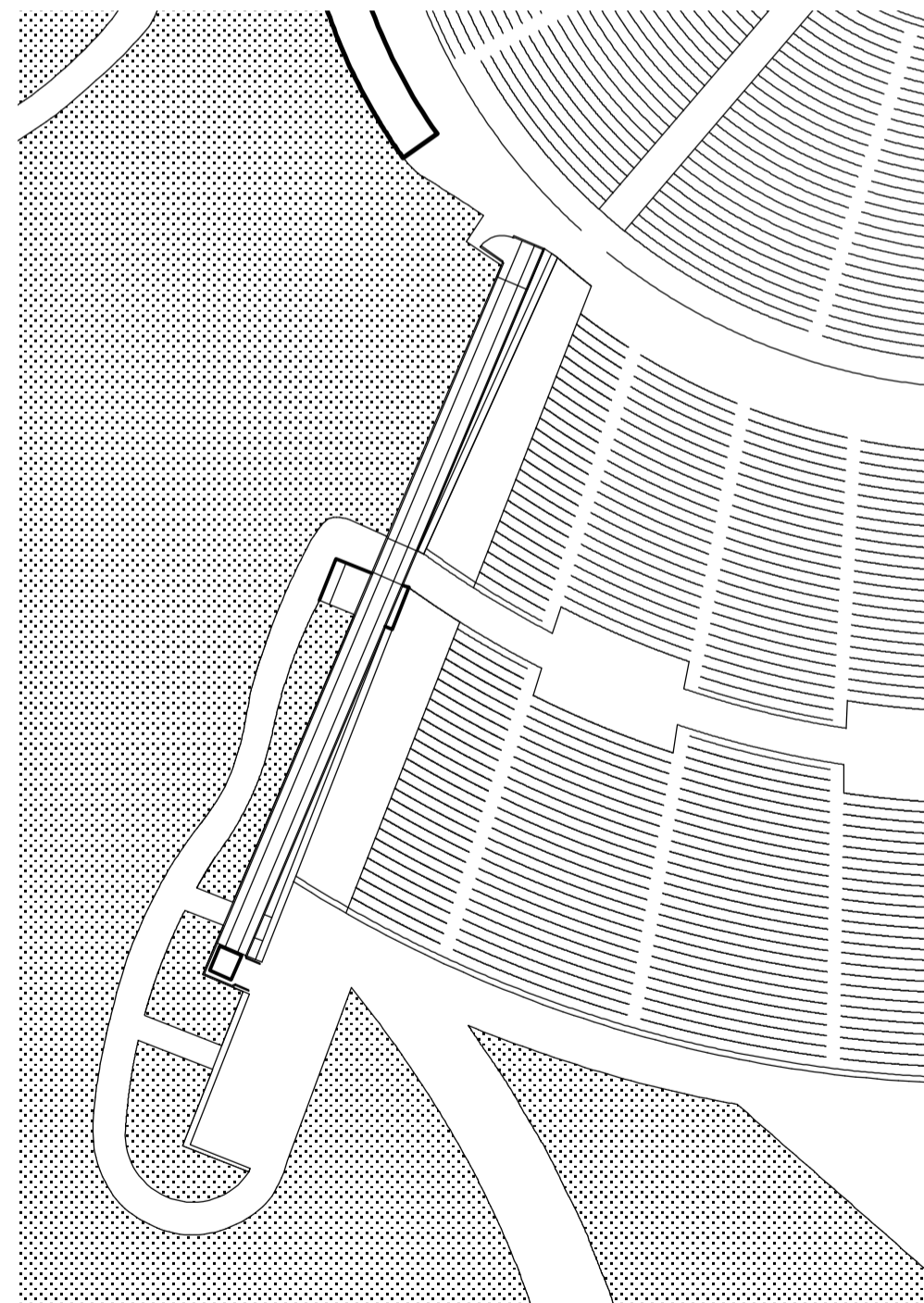
The disabled toilets



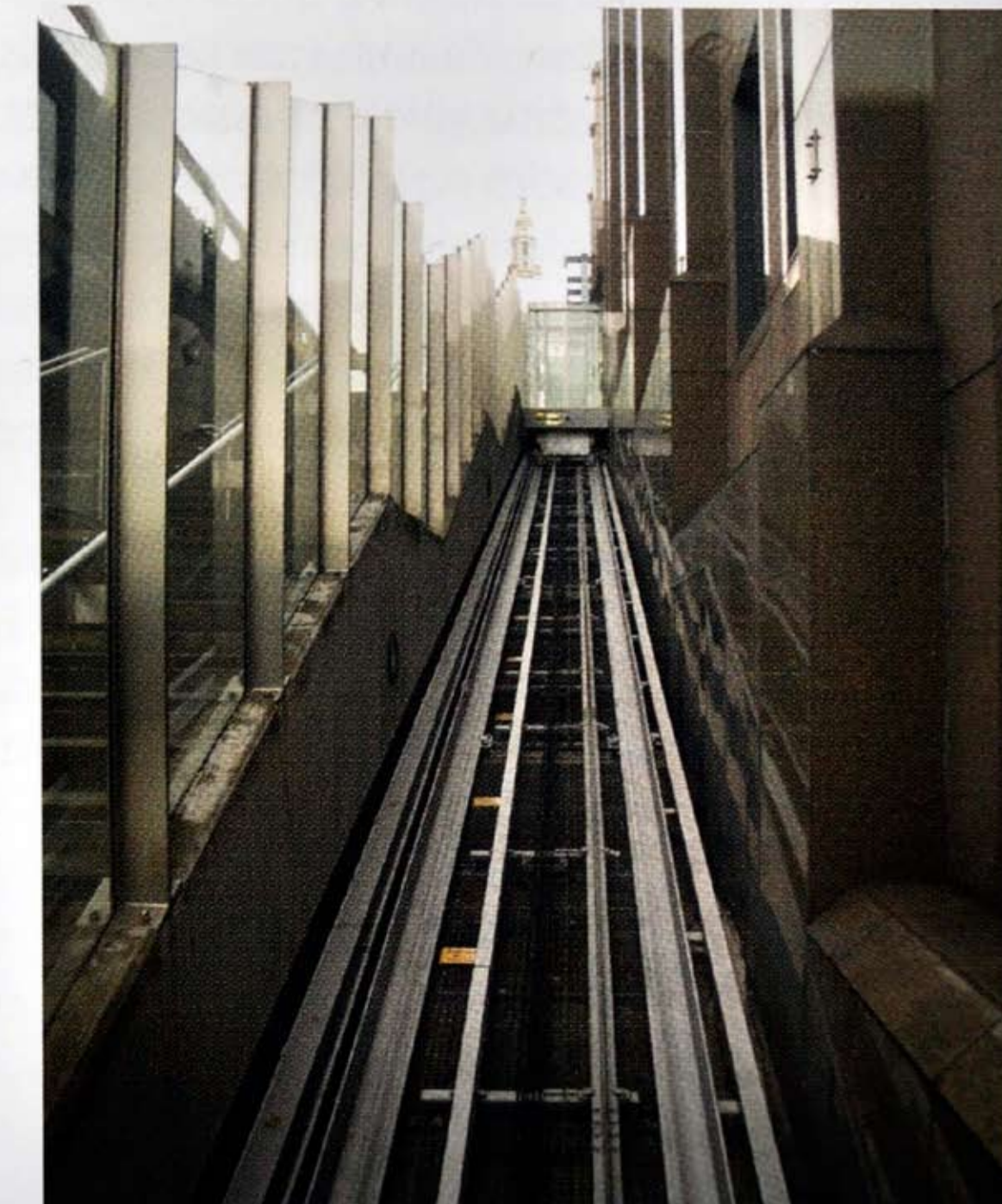
The disabled toilets are located in the center of the stage approach. They are in reach of the wheelchair platform but are lacking any private sphere and there is no space for assistance.



new plan of the Waldbuehne - scale 1:1000



the new platform lift - scale 1:500
[above: wall along which the lift shall be installed]



example for a pedestrian platform lift: Millenium Bridge in London