The historic urban wall below the Darassa Hills is the south-eastern segment of Cairo’s Ayyubid fortifications, which were partially exposed during the works carried out by the Aga Khan Trust for Culture (AKTC) in the creation of the new Azhar Park. The wall measures over 1300 metres in length, running north from al-Wazir Gate to al-Azhar Street, and forms the boundary between the Darb al-Ahmar district of historic Cairo and the new park.

Built as part of the city’s fortifications in the twelfth and thirteenth centuries by Salah al-Din and his successor, this portion of the city wall was Cairo’s eastern boundary for centuries. Over time, the wall’s role changed: although it continued to be a defining element for the city, it long ago ceased to serve as a defensive structure. This shift in function meant that the city gradually spread to the very edge of the wall, following an accretive process common to historic cities everywhere.

From the fifteenth century, the area just outside the wall began to be used as a dumping ground and the wall was gradually buried under the debris, where in fact it remained protected from the ravages of time and weather. Today, following the interventions to create the park, the outer face of the historic wall is once again exposed to view and to the elements, while, on the city side, private development pressures as well as institutional requirements raise complex urban development issues. Current interventions must consider not only the preservation of the wall, but also how best to intervene in the surrounding urban context. Thus, comprehensive planning and design policies are needed both with regard to the residential fabric abutting the wall as well as the points of access and the pedestrian promenade along the western edge of the new park.

HISTORICAL BACKGROUND
Construction of the Ayyubid wall was begun in 1176 by Salah al-Din, a Kurd of the Ayyubid clan who came to Cairo from Syria and overthrew the Fatimid caliphate in 1171. Salah al-Din’s fortifications were built to contain Cairo, his citadel and the pre-Fatimid settlements (Fustat, al-
Askar and al-Qata’i) within a single system. These new fortifications were far more ambitious and sophisticated than the earlier Fatimid walls, which had been limited to enclosing the palace area and were more ceremonial than defensive. Although Salah al-Din’s best known architectural achievement in Egypt is the Citadel he built on a spur of the Moqattam Hills, his idea of a single wall surrounding the much expanded metropolis would also prove a long-lasting legacy.

The new project incorporated rebuilt portions of the Fatimid fortifications and added extensive new sections. Salah al-Din pushed the northern city wall west to the Nile, and the eastern wall south to the Citadel, from where it continued south-west around Misk-Fustat, the settlement developed by the Arab conquerors who invaded Egypt in the seventh century. The new city walls were built entirely of stone and made use of new advanced defensive techniques imported from Syria, with bent entrances and arrow slits reaching to the floor.

The east wall seems to have remained important for some two centuries after its construction. Aslam al-Silahdar, a Mamluk prince and sword bearer to the sultan in the mid-fourteenth century, built a mosque just inside Bab al-Mahruq, an indication that the eastern gateways still functioned. This would also seem to signify that the prestige of this part of the city was still such that a prominent member of the court would choose this location for a monumental religious complex in his name.

Soon after, as the threat posed by crusader armies and other invaders declined so did the importance of maintaining the defensive walls. The result was that, where urban growth was vigorous, the city walls were rapidly obliterated by subsequent construction, as was the case on the western side of Cairo. However, on the eastern side, where urban expansion virtually stopped, the walls continued to mark the limits of the old city. It was already during the late Mamluk and early Ottoman periods, that the area
outside these walls became a dumping ground, a practice that continued unabated during the fol-
lowing centuries.

A description by the French traveller Jean de Thévenot mentions, as early as 1658, the height of
the debris, which nearly hid the high walls of the city:

[these walls] are at present all covered in ruins which are so high that I have passed over some places where they
wholly hide the walls, and are much above them; and in these places one would think that there were no wall
[...] and though it would be very easy to clear the rubbish, and, by repairing what is wanting, make the walls
appear beautiful and high, yet the Turks make no reparations; but suffer all to decay...²

A century and a half later, the maps drawn during the Napoleonic era show that buildings in al-
Darb al-Ahmar were generally built right up to the edge of the city at the time of the French oc-
cupation around 1800. Many buildings actually abutted the Ayyubid wall and additional rooms
were constructed into and indeed on top of the one-time fortifications, an accretive process com-
mon in many Middle-Eastern and European cities where the old defensive systems had lost their
significance.

During the nineteenth century an increasing number of travellers came to Egypt, who sketched
and photographed what they saw. In 1839, the artist David Roberts drew the southernmost por-
tion of the walls, which appear partially buried and with numerous houses constructed along the
city side.³ A series of panoramas taken by French photographer Pascal Sebah⁴ in 1880 provide one
of the most valuable visual documents of the eastern Ayyubid wall, showing that much of the
original stonework, including the crenellations, still existed at that time.

In 1882, the government established the Comité de Conservation des Monuments de l’Art Arabe
to preserve Egypt’s Islamic and Christian architectural heritage. In 1902, the Comité employed
Edouard Matasek, an architect, to document the city walls with a view to restoring them at a later
stage. Matasek produced elevations, sections and sketches of the east wall towers, but does not seem
to have drawn the wall itself.

Although the Comité repaired the city walls from time to time during the first half of the twenti-
eth century, it was not until 1950 that they undertook a major campaign. This consisted of a re-
construction of the two towers no longer standing (towers 3 and 4) along with extensive replace-
ment of the missing facing stonework in several areas of the flank wall. This work was documented
with photographs taken before, during and after the interventions.

For the next almost fifty years no further repairs or restoration was undertaken. The Ayyubid wall
remained, as it had been for centuries, the eastern boundary of the densely built up Darb al-
Ahmar district of historic Cairo. The continued dumping of rubbish meant that the mounds of debris, now known as the Darassa Hills, had buried the outer face of the wall all the way up to the level of the crenellations. It was only after AKTC began moving earth for the future Azhar Park that the accumulated debris was removed. The re-grading brought to light not only the buried section of the wall known through early photographs and historic maps, but also the northern section, unrecorded even on Napoleon’s map of 1798, and probably buried since Mamluk times.

**PRINCIPLES OF CONSERVATION**

The restoration works carried out by the AKTC started in 1999 with a comprehensive study and the launching of pilot interventions on limited sections of the wall, and gradually extended to increasingly greater portions of the monument. Currently, approximately 450 metres of the historic wall are under restoration, while an additional 300 metres are due to be completed by the end of 2004. The principles underlying the interventions can be summarised as follows:

- to research and document all evidence, including physical, archival and historical information, before, during and after intervention;
- to respect the cumulative age-value of the structure by recognising the stratification of human activity and displaying the passage of time and the different materials and techniques, as well as the changing cultural beliefs and values;
- to safeguard authenticity as a cultural value associated with the original actions of the making or re-making of the object or site, recognised as the embodiment of authorship or the record of a time and place;
- to avoid harm to the monument, either by minimising physical interference to re-establish structural and aesthetic legibility and meaning, or by intervening in ways that will allow other options and further treatment in the future.
These tenets are rooted in internationally recognised and accepted standards of conservation, namely the Athens Charter (1931) and the Venice Charter (1964). The Venice Charter in particular emphasises the importance of context, the discouragement of reconstruction except in cases of anastylosis (the re-assembling of collapsed elements), and the integration of modern scientific technology where appropriate and useful. More recent charters, such as the Burra Charter of 1981, established by ICOMOS Australia, point out that the ultimate aim of conservation is to retain or recover the cultural significance of a place and provide for its security, maintenance and future survival.

In line with these general principles, the intervention guidelines applied by the AKTC team to the conservation of the historic wall express a preference for the retention or compatible repair of the original fabric over reconstruction. The AKTC's recommendations for intervention on the surrounding urban fabric advocate respect for the changes accrued over time in order to preserve the integrity, scale, and significance of the wall in its current configuration and context. Ultimately, the proposed interventions promote continuity rather than transformation. The long-term goal is to integrate and harmonise the remnants of a valuable past with present realities and future needs in ways that are compatible and sustainable.

PHYSICAL ASSESSMENT AND CONSERVATION ACTIONS
The first step in the conservation process was a comprehensive study of the wall's physical condition followed by a detailed assessment of each part of the monument that would be subject to intervention. The general study documented the wall's overall condition, including an analysis of the masonry and identification of areas of significant deterioration, distinguishing between the loss of facing stonework and the total loss of the wall. It also documented the presence and extent of previous repairs. The subsequent detailed condition survey provided a fuller quantitative analysis, complemented with a qualitative assessment of the causes and effects of deterioration. Severity of loss, for example, was classified according to the extent and depth, as well as whether the
process was still active or inactive. In addition, samples were taken for laboratory testing to ascertain the exact nature of the materials and their conditions and problems.

Together, the field survey, graphic documentation and laboratory work yielded a comprehensive record of the construction of the wall and its present state of conservation, as well as the diagnostic tools needed to formulate an intervention programme. Recommended measures included archaeological investigation, emergency stabilisation, masonry treatments (including cleaning, removal of salt and biological growth, grouting, consolidation of deteriorating stone and selective stone replacement) as well as limited reconstruction where needed to maintain the structural stability or visual continuity of the wall. The resulting policies and guidelines for masonry intervention were designed to achieve maximum retention of the original historic fabric while ensuring the visual and functional continuity of the wall as an urban element.
In particular, the following intervention guidelines for masonry works are being followed in response to the different conditions found along the historic wall:

- where the original Ayyubid masonry is still in place, fallen stones are re-instated by anastylosis (as in the case of the fallen crenellations), and missing or structurally unsound veneer stones are replaced using similar stones, dimensions and coursing as in the original Ayyubid construction;

- where the original Ayyubid wall veneer stonework is mixed with subsequent repair stonework, the missing stones are replaced in the manner of the repair, except where the number of missing stones is extensive and the repaired area is in very poor condition; in this latter case, the replacement stonework is carried out in the original Ayyubid manner;

- where the wall is in a ruinous state, with only the masonry core and no surviving veneer stonework, the ruin is stabilised;

- where the Ayyubid wall has totally disappeared, reintegration is effected by building a visually and structurally compatible new wall rather than through a hypothetical reconstruction of the original structure.

The survey, assessment, and conservation treatments along the approximately 450 metres designated for completion during Phase I are being carried out with the help of professionals and conservators recruited by the Trust and its local company, the Aga Khan Cultural Services-Egypt (AKCS-E). These activities also include a training component for Egyptian professionals, junior staff of the Antiquities Department and local craftsmen, and will continue after the opening of the park as an ongoing process of restoration, repair and long-term maintenance.

INTERVENING ON THE ADJOINING URBAN FABRIC

In addition to documenting the condition of the monument itself, the general survey analysed the wall’s relationship with the adjoining urban fabric. Over the centuries, the houses and monuments built up against the wall on the city side became an integral part of Cairo’s urban and social history. While selective removal of encroaching elements may be necessary, wholesale demolition of the historic housing stock attached to the city wall would contradict international conservation philosophy and practice. Demolition would also be likely to introduce undesirable development pressures. Therefore, the project team made a careful plot-by-plot study of the fabric along the his-
toric wall, defining appropriate modes of intervention for each building within the larger framework of the Darb al-Ahmar conservation and rehabilitation plan.

The extent and configuration of the abutting houses was recorded by the team and assessed with regard to use, condition, date of construction, architectural integrity, and significance. In addition, in a series of typical sections, the team documented the physical connection between the wall and the adjacent buildings, and, in particular, whether these structures are built up against, on top of, or into the wall at the lower levels. Special attention was given to recording all cases where adjoining buildings pose a specific threat to the structural integrity of the wall, as a result of damaging industrial activities or water seepage from plumbing installations.

These various analyses were complemented by an in-depth investigation of the social and housing conditions in the strip of urban fabric along the wall, and became the basis for the interventions currently under way. The latter include the removal of incongruous, detrimental or structurally unsound additions and accretions, the retention and rehabilitation of selected historic buildings, and the improvement of housing conditions in order to avoid the displacement of residents. In parallel, the AKTC planning team is working to introduce new building regulations to selectively modify the current antiquities legislation so that buildings or structures within immediate proximity of a monument are not automatically cleared, thus allowing for the preservation of the surrounding historic context. Altogether, the plans and ongoing interventions advocate the con-
Fig. 75. Three examples illustrating the types of encroachment encountered along the Ayyubid wall.

...ervation and harmonious integration of the Ayyubid wall within the traditional urban fabric and contemporary life of al-Darb al-Ahmar.

THE WALL AS A CULTURAL RESOURCE AND VISITOR DESTINATION

Together, conservation of the original wall structure and preservation of the living city fabric in and around it should be seen as the best antidotes against further decay as well as the destructive commercialisation that comes with excessive numbers of visitors and uncontrolled tourism. Certain risks to the wall and al-Darb al-Ahmar can be foreseen following the opening of the park in 2004. Too often cultural resources around the world have become mere commercial commodities to be consumed by mass tourism. The result is that genuine historic places are compromised and emptied of meaning and the local residents become overly dependent on an unpredictable tourism service economy.

Contrary to the above scenario, the historic wall can and should be turned into a resource and an opportunity to deepen the public's appreciation and understanding of the city's cultural heritage and the traditional social fabric associated with it. In pursuing this alternative, some questions become immediately relevant in planning for the future role of this important landmark: how can a forgotten and long-buried monument be re-introduced into a rapidly evolving new context without losing its significance? How can it be re-invented as a living component of today's historic Cairo? And, more generally, how can tourism generated by Azhar Park be reconciled with the traditional life of the Darb al-Ahmar community? Answering these questions is not just an academic exercise, but must be part of a pragmatic search for new meanings, functions, and activities around and within the wall. In particular, future actions to ensure that the historic wall maintains its original significance and is properly re-integrated into its contemporary context are anchored in four concepts, listed below.
Designing pedestrian access and circulation along the western side of the park to enhance the perception of the historic wall as a dynamic edge and meeting point, rather than as a barrier between the community and the park. The proposed access and circulation system identifies the locations of the former city gates as the natural and historically appropriate connections between the park and al-Darb al-Ahmar. Three gates or entrances are being revived: al-Barqiyya, close to the main traffic artery of al-Azhar Street, to serve as the main access from the north-western edge of the park; al-Mahruq, the vanished gate that is currently the subject of an archaeological excavation, to create a mid-point entry; and al-Wazir at the south-western corner of the park, to provide access close to the main religious sites and historic monuments along the southern stretch of al-Darb al-Ahmar Street. In addition, two more connections are proposed in conjunction with the visitors' exhibits and circuits at Shoughlan Street and al-Mahruq Tower. All of these links are conceived as meeting points to foster visitor and community interaction and sustain carefully planned venues into the daily life of al-Darb al-Ahmar.

Establishing didactic programmes and experiences in order to enhance appreciation of the wall as a monument and as an important urban feature of historic Cairo, to explain its changing role in the development of the city, and to introduce visitors to the life of the community that inhabits the adjoining district. Planned initiatives include visitors' circuits and exhibits through the Shoughlan Street School and along the ramparts and interior galleries between towers 4 and 5, and in al-Mahruq Tower, featuring the presentation of the archaeological, historical, military, cultural, and social aspects related to past and contemporary uses of the wall. In addition, a major archaeological park is also being planned for the northernmost area, between towers 14 and 15, where there is a unique opportunity to explore the archaeological remains along the city side of the wall, which has been buried since Mamluk times. Finally, the establishment of a space for exhibitions and other cultural activities is planned in the Khayrbek complex next to the southern edge of the historic wall. This facility will offer a focal point for the community and provide visitors with a better understanding of the local culture and traditions.

Introducing activities that are relevant to promoting a deeper understanding of the cultural heritage among visitors and residents and the development of local skills and abilities to preserve and protect historic Cairo. The wall offers great opportunities in this respect, both as an arena to demonstrate the aims and methods applied to its discovery and conservation, and as an ongoing training ground where local craftsmen,
national bodies, and international institutions can come together to explore and identify appropriate restoration techniques. These experiences will also promote the creation of a manpower base specialised in traditional building crafts, modern restoration techniques and small enterprise development, all of which are needed throughout historic Cairo. Conservation can thus be linked to programmes that foster economic development and future employment opportunities for the local community.

Ensuring the future management and long-term sustainability of the wall through the establishment of permanent repair and maintenance programmes and the monitoring of future changes and transformations. In order to be successful in the particular context of the historic wall, sustainability must be considered as a dynamic process of public participation, achieved through dialogue and consensus, that ultimately leads to better stewardship of the monument. Future programmes must therefore ensure that the long-term benefits are understood and enjoyed also by the surrounding community, as it is one of the principal stakeholders in ensuring the continued life and appropriate use of the structure. In future, a refuse collection system, open space maintenance, repair of the wall, and rehabilitation of the surrounding buildings, should not be implemented against the will of the community, but with its direct involvement and participation.

This shift in perceiving the historic wall as an abstract, isolated monument to its re-invention as part of a larger urban programme, together with the gradual implementation of the plans and activities described above, can turn this obsolete structure, buried for centuries and removed from the city's mainstream development, into a cultural asset and vital component of the rehabilitation of historic Cairo. The challenge ahead lies in safeguarding the remains and true significance of the historic Ayyubid wall, while shaping its new role in the years to come.