

2011

Batashewala Complex

CONSERVATION & LANDSCAPE RESTORATION

TASK:

- Securing the Batashewala Complex.
- Preparing a detailed conservation proposal for the conservation of Batashewala-Mughal tomb complex towards implementing conservation.

PURPOSE:

- Reversing the disfigurement of the historic character by the Bharat Scouts who occupied this area for several decades
- Conservation to ensure long term preservation and possible eventual inclusion of the complex within the extended boundaries of the Humayun's Tomb World Heritage Site
- To integrate with the Sunder Nursery site for seamless access by future visitors to Sunder Nursery.

ACTION TAKEN:

- Several years of effort by AKTC ensured that the land was transferred to the ASI allowing an opportunity to carry out urgently needed conservation and landscape restoration.
- Detailed architectural documentation, condition mapping and the landscaping proposal for the 17 acre complex has been prepared.
- Conservation Plan was approved by the Director General, ASI in early 2011. This was further discussed at Core Committee meetings.
- ASI carried out demolition of over 100 structures built by Bharat Scouts within the complex and used for carrying out illegal activities.
- Conservation works commenced in November 2011 with scientific clearance of earth to reveal the foundation of missing portions of the enclosure wall.
- The entire extent of the enclosure wall has been established though foundations in certain sections were missing as new structures were built over these, thus destroying even the foundations discovered at eight feet depth.
- The Outstanding Universal Value of the Humayun's Tomb World Heritage site is understood, amongst other factors, to be an ensemble of 16th century tomb-gardens. Thus the reconstruction of missing portions of the enclosure wall that defined the significance of the complex will enhance the historic character.



NEXT STEPS:

Conservation work now will start on the monuments and the enclosure wall

2012

BATASHEWALA ENCLOSURE

Standing north of the Humayun's Tomb-garden stands a 17 acre complex comprising two 16th century tomb-gardens. After persistent efforts of the project, the land was transferred to the Archaeological Survey of India allowing urgently needed conservation works to commence.

Reconstruction of collapsed portions of the enclosure wall as well as restoring the ornamentation - to the extent of available evidence - on the three monuments of national importance that stand here and landscaping the complex are some of the planned works over a three year period following which visitor access from the adjoining Sundar Nursery will be possible.

In keeping with the OUV of the World Heritage Site, within the buffer zone of which this structure stands, the conservation works aim at restoring the structural integrity as well as the original appearance of the structures.

As part of the larger project it is proposed to link the Batashewala Complex - Mughal tomb to the adjoining Humayun's Tomb complex and Sundar Nursery monuments, creating a heritage zone, of unmatched scale, value and visibility in the city of Delhi.

Humayun's Tomb ▼



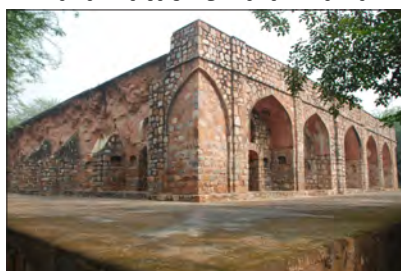
Unknown Mughal Tomb ►



Chota Batashewala Mahal ►



Bara Batashewala Mahal ▲



Batashewala Tomb - Garden : Proposed
Watercolour illustration by Himanish Das ▲

BATASHEWALA TOMB - GARDEN

Securing 17 Acres

The Batashewala tomb-garden enclosure includes the centrally protected monuments of Bara Batashewala Mahal and the Chotta Batashewala Mahal yet the 12 acre complex was itself given in perpetuity to Bharat Scouts and Guides. Though this was on the condition that no commercial use was permitted, over 150 structures were built here, including by demolition of the enclosure walls and rampant misuse included setting up of a club here, building a college, providing space to tent-house owners to store material, etc.

ACTION TAKEN:

- On account of the illegal commercial activity rampant in the Batashewala complex, the Supreme Court Monitoring committee sealed the area.
- This followed by the L&DO re-entering the land and taking it in its possession.
- On the request of the ASI the land was transferred to the Archaeological Survey of India.
- Following court permission all structures built in 1989 for a six month duration were demolished including structures in use illegally.
- The ASI kept one shed like structure – used as a college – to house security personnel employed across Delhi for a period of almost one year. Later alternate structures were built for security guards and this structure converted to a project site office for the Urban Renewal project.
- The entire Batashewala area is now included within the Buffer Zone for the World Heritage Site.
- The ASI is now in the process of notifying as protected the entire 12 acre enclosure as the historic garden setting of the protected monuments.
- In 2008 an acre of land south of the adjoining unknown tomb was given to the Delhi Jal Board as temporary office for two years. This has now been vacated in November 2012 after prolonged persuasion.

NEXT STAGE:

- An LPG store on land transferred to the ASI in 2003 remains to be demolished and around it at least two encroachments have come up of squatters.
- ASI land has also been built upon by the BSF and repeated requests to fence this parcel of land have not been followed up.
- Similarly, the adjoining New Horizon school has encroached upon land transferred to ASI by the L&DO.





RECONSTRUCTING THE ENCLOSURE WALL

Batashewala Tomb - Garden

On the demolition of the 150+ illegal structures built on this land by the Bharat Scouts & Guides the southern enclosure wall was revealed. The entire stretch of the wall was also visible in early 20th century photographs taken from the roof of Humayun's Tomb. To respect the Outstanding Universal Value of the Humayun's Tomb World Heritage Site, which lies in the complex being an ensemble of 16th century garden-tombs, it was agreed to reconstruct missing portions of the enclosure wall.



▲ On the north-east corner of the enclosure walls a historic well was discovered and this has been desilted to its original depth, conserved and enclosed within the enclosure

ACTION TAKEN:

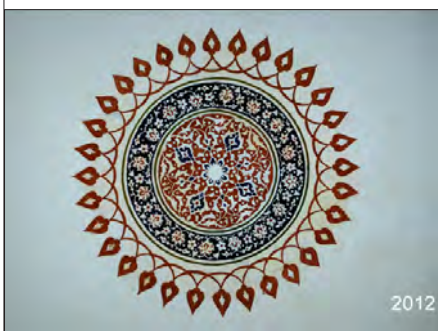
- Following the land being transferred to the ASI, 150+ structures built here since the 1980's were demolished. The ASI auctioned material and except for cement concrete blocks all material was thus removed by contractors.
- On the approval of the Conservation Plan for the Batashewala Complex by the Core Committee and the same being forwarded to the Judiciary works here commenced by removal of debris to reveal 560 m of the foundation of the enclosure wall.
- It was discovered that the walls were not a perfect square/ rectangle as clearly the orientation depended on other, earlier enclosed gardens that were built here, including that of the 'Unknown Mughal tomb' abutting the enclosure to the east.
- Any trees found to be standing over the wall were allowed to remain; this occurred both in the northern section and in the south-eastern corner.
- On the north-west corner, the excavated foundations, found only in parts, had a significant offset and after much deliberation, it was agreed to follow the alignment of the discovery with the priority being to restore a sense of enclosure for the Batashewala complex.
- The northern stretch of the enclosure wall has been rebuilt in Delhi quartzite random rubble masonry in lime mortar by master craftsmen using traditional building techniques.



BATASHEWALA TOMB - GARDEN

Conservation of Bara Batashewala Mahal

Though the word 'mahal' is included in the name given to the structure it is a Mughal era tomb of a plan similar to the adjoining Sundarwala Mahal. The structure suffers from significant structural failure with the western side largely collapsed. The southern façade has been inappropriately reconstructed in an earlier 'Conservation' attempt in 2002-4 wherein the half-domed alcoves have been restored by simple arches. Much of the original ornamentation has deteriorated and collapsed though the patterns are still discernible. Conservation works aim at restoring the structural integrity as well as the original appearance of the structure without resorting to conjecture.



▲ Reconstruction of the missing incised plaster pattern on the dome ceiling

ACTION TAKEN:

- The structure has suffered on account of severe water penetration from the roof above and significant collapse and deterioration have resulted from limited access for ASI officials while the adjoining land was with Bharat Scouts & Guides.
- The monument is significant for its decorative plaster works which include incised plaster works in the dome medallions, wall medallions, walls and arch intrados. Significant amount of decorative plaster works have in the past been replaced with cement plaster and sections were hidden under dust and soot deposits.
- At the onset of conservation works, all surviving decorative patterns were traced and documented to be used to make templates for undertaking their conservation and restoration.
- The existing patterns were cleaned using water based techniques and soft brushes to remove the added layers of dust and soot deposits. After cleaning of the decorative surfaces, original colours of the plaster were revealed and included lime white, red polychromy and indigo blue colour.

- Conservation works started with the removal of the inappropriate layers of the cement plaster laid on the wall and ceiling surfaces. These layers were dismantled carefully to ensure original without harming the existing decorative surfaces
- Decayed and cement plaster layers are replaced with lime plaster works which is done in layers, as per original details. Base layers were applied using coarse lime mortar with a finish layer of fine lime mortar.
- The conservation of the internal decorative surfaces is now ongoing which includes medallions on the dome ceiling, medallions on both the arches and niches, arch intrados and bands. Work is undertaken following the guidelines mentioned below:
 - o Construction of the missing portions of the decorative works based on the existing design in the same panel
 - o Construction of the partially missing small portions in between the large areas
 - o Construction of the completely missing patterns based on the existing designs on other symmetrical wall.
 - o All the profiles are under repair using matured lime putty, fine sand and brick dust. After incising the decorative profiles, these are finished with lime punning, red polychromy and blue indigo as per original designs.
- The missing bands running on the walls and the arches, arch profiles, niche profiles have been restored which were distorted due to material deterioration as well as new inappropriate repair works.
- During works, an arched opening into the tomb chamber from the eastern and western sides was reopened after it was discovered to have been inappropriately blocked during past repairs.

NEXT STAGE

Conservation works on the Bara Batashewala Mahal will continue through 2013 and will include restoration of the western façade, demolition of inappropriate repairs of southern façade and reconstruction as per original details. A red sandstone flooring will be introduced.

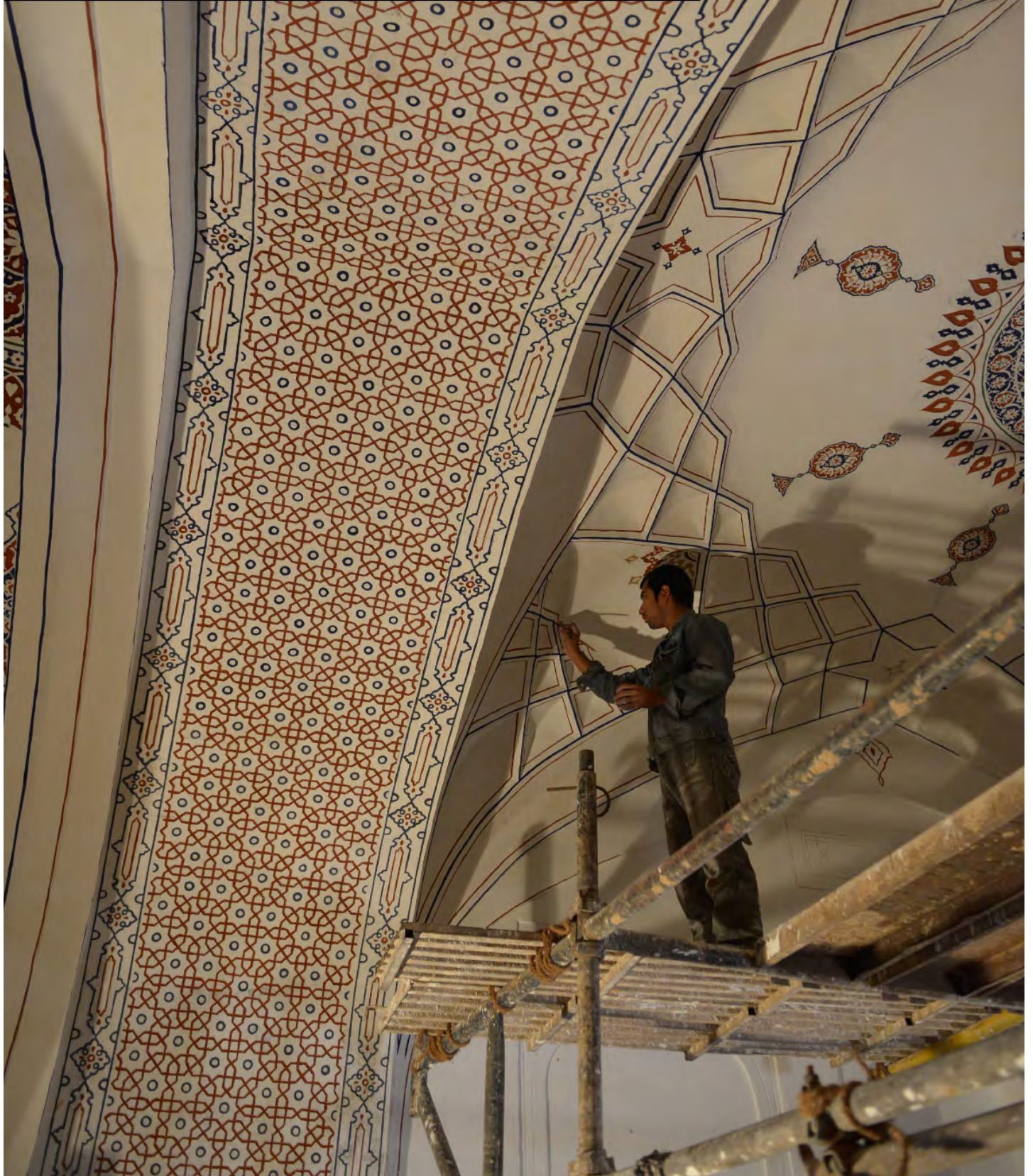


▲ Reconstruction of the missing incised plaster pattern on the dome ceiling, arch soffits and internal wall surfaces

2013

BATASHEWALA GARDEN-TOMB

To the north of the Humayun's Tomb enclosure stands the 16th century Batashewala complex. For several decades the complex was in the control of Bharat Scouts and Guides who had built over 100 structures here – many of which continued to be in illegal and inappropriate use. Following over a decade's effort the land was recovered from Bharat Scouts and returned to the ASI allowing AKTC to undertake major conservation works.





CONSERVATION OF ENCLOSURE WALL

Archival photographs from the 20th century clearly show the complete extent of the garden enclosure walls of which only half the southern side had remained standing with most portions having been demolished in the 1980's when Bharat Scouts constructed almost a 100 'temporary' structures roofed with geodesic domes.

ACTION TAKEN:

- The Outstanding Universal Value of the Humayun's Tomb World Heritage site is understood, amongst other factors, to be an ensemble of 16th century Tomb-Gardens. The Batashewala complex stands within the Buffer Zone of the World Heritage Site. Thus the reconstruction of missing portions of the enclosure wall that defined the significance of the complex was considered necessary.
- Protection of the original context and boundaries of the complex along with the open spaces revive the original context of the Batashewala Complex. The protection of the whole complex and restoration of the historic and architectural character will strengthen the case for a potential World Heritage Site extension to include this land.
- Conservation works commenced in November 2011 with scientific clearance of earth to reveal the foundation of missing portions of the enclosure wall.
- Underpinning works were required on the southern enclosure wall of the Batashewala complex and masonry walls required to be built from a depth of 2 m.
- The entire extent of the enclosure wall has been established though foundations in certain sections were missing as new structures were built over these, thus destroying even the foundations – mostly discovered at eight feet depth.
- On the north-east corner of the enclosure wall of Batashewala Complex, a historic well was discovered.
- After proper de-silting to its original depth, the well is now conserved and enclosed within the enclosure.

*(Left) Restoration of decorative ceiling patterns and motifs in Mirza Muzaffar Hussain's Tomb,
(Above) Consolidation of the enclosure wall of the Batashewala Complex*

MIRZA MUZAFFAR HUSSAIN'S TOMB

The tomb of Mirza Muzaffar Hussain was built in AD 1605 and was in a poor state of preservation with much of the western façade in a state of collapse and the southern façade reconstructed by the ASI in 2002-4 to an inappropriate design thus requiring to be demolished prior to an accurate reconstruction.

ACTION TAKEN:

- The Tomb of Mirza Muzaffar Hussain is a square structure with each of its four sides being identical. The northern façade was the best preserved.
- Rebuilding of the collapsed western façade, dismantling the inappropriately restored southern façade prior to restoration are the major works carried out to this 16th century Tomb building.
- During ongoing conservation works the inappropriate reconstruction carried out in previous conservation attempts by the Archaeological Survey of India was carefully dismantled followed by reconstructing the half-domed profile on each of the five bays on the southern façade and two bays of the eastern facade. The wall surfaces were built on the original foundations that also required strengthening by grouting of lime mortar.
- The five half-domed bays on the western façade were in an advanced state of collapse and as with the southern façade were reconstructed to the original height of 5.7 m raising the wall levels from the existing 1.4 m level.
- The internal wall and ceiling surfaces were found to be covered with soot, algae, and lime wash thereby disfiguring the historic appearance and accelerating the decay process. Portions of the wall surfaces had also been re-plastered in cement mortar.
- Craftsmen carefully removed the cement patches, exposing blocked openings in four instances. Similarly, using water and soft brushes the wall surfaces have been cleaned off all soot.



(Left) Consolidation of the collapsed portions and (Below) View of South facade of Mirza Muzaffar Hussain's Tomb during conservation





(Above) Before & After Conservation views of the internal chambers of Mirza Muzaffar Hussain's Tomb after the restoration of missing geometric patterns in incised plasterwork on the interior wall and roof surfaces

- The surfaces have now been re-plastered with traditional lime mortar after careful removal of the Cement plaster.
- The plastering layers included coarse lime mortar for the base layer and fine lime mortar for the top layer. Lime Plastering works on the internal wall surfaces including the final 1 mm coat of lime punning which comprises 1:1 ratio of lime and marble dust.
- The geometric patterns done in ornamental plasterwork have been restored where these were missing on the interior wall and roof surfaces. It was finished using fine layer of Lime punning works.
- After careful inspection and documentation of all the arched openings, it was found that the lattice screens installed during the 2002-4 repairs varied considerably in size and were poorly crafted. Furthermore, these had disturbed the opening sizes. New lattice screens using 7.5 cm thick red sand stone prepared individually by the master craftsmen using traditional tools have now been installed in the arched openings.
- The conservation works have included dismantling existing concrete on the flooring and preparing base using lime concrete which helped in revealing the original floor levels. The red sandstone of required quantities for the platform had been procured and the hand dressed red sandstone flooring was provided along the length of the platform and in the internal chambers.
- During the ongoing conservation works the inappropriate past repairs carried out on the terrace like undulating multiple layers of cement concrete were manually removed and surface prepared for providing traditional lime based terrace.
- After completely removing the added cement layers from the terrace, the terracing work had been carried out using the lime concrete comprising lime mortar and brick aggregate.
- Traditional organic additives such as *Bael* fruit pulp, jaggery are added to make the surface water tight and as per original slopes and details.

NEXT STAGE:

The plastering of all the external surfaces will be done in lime of the entire monument. Sandstone rain water spouts are also to be added of a design similar to those found on the structure.



UNKNOWN GARDEN-TOMB

Located in the north of Humayun's Tomb, the enclosure wall of this Garden Tomb has been reconstructed and conservation works have just commenced on the Tomb structure itself.



2014

Batashewala Complex

Standing to the north of the Humayun's Tomb World Heritage Site, the 11 acre "Batashewala Complex" includes two Mughal era tomb-garden enclosures within which stand three tombs, of national importance, and protected by the Archaeological Survey of India (ASI). The conservation effort supported by the US Ambassador's Fund for Cultural Preservation, since 2011, has aimed at recovering the architectural integrity of the monuments. This has been achieved with the use of traditional materials and building techniques in order to replace 20th century alterations that were carried out with modern materials, such as cement.



Mirza Muzaffar Hussain's Tomb
Before conservation in 2010



Chota Batashewala
Before conservation in 2010



Mughal Tomb
Before conservation in 2010

Tomb of Mirza Muzaffar Hussain

Popularly known as Bara Batashewala Mahal and built in AD 1603, Mirza Muzaffar Hussain's square tomb stands on a raised platform with five half-domed arched entrance bays on each side. Parts of the striking plaster ornamentation have survived on some of the internal wall surfaces, providing the evidence required to restore missing portions. Ornamental plaster medallions and intricate *muqarna* patterns on the half-domed arched entrance bays symbolise the highest craft traditions of the period. The central grave chamber, several feet below the ground, is surrounded by eight rooms, making this an example of the "hasht-bihist" plan, representing eight spaces of paradise as described in the Quran.

Restoration of Lime Plaster

Action Taken:

- The internal wall and ceiling surfaces were found to be covered with soot, algae, and lime wash thereby disfiguring the historic appearance and accelerating the decay process.
- Portions of the wall surfaces had also been plastered in cement mortar.
- Trained art conservators carefully removed the cement patches, exposing blocked openings in four instances. Similarly, using water and soft brushes the wall surfaces have been cleaned off all soot.
- The surfaces are now plastered with lime mortar as per original patterns.
- The Tomb had a profusely ornamented interior though much of the interior ornamentation was lost due to neglect, water seepage and inappropriate past repairs wherein plain cement plaster was used on wall and ceiling surfaces that were originally decorated.
- After a careful documentation of the existing remains of original incised plaster work, restoration work of the decayed decorative patterns was undertaken.
- Completion of the restoring the decorative plasterwork included decorative lime plastering along with lime punning.
- The external façade of the monument had ornamented alcoves, medallions and *muqarnas*, though much of the ornamentation was lost due to neglect over the years. These decorated surfaces were repaired in plain cement plaster which leads to the loss of most of the decorated plasterworks.
- After careful documentation of the existing remains, the original patterns were discerned. The restoration of the incised plasterworks was carried by the master-craftsmen and the restoration of the decorative plasterwork includes decorative lime plastering along with the lime punning and application of red polychromy.



(Right) Mirza Muzaffar Hussain's Tomb is symmetrical along its central axis and thus any half facade is repeated 8 times. Conservation of the collapsed western facade was largely carried out on the basis of the standing eastern arcade.





Reconstruction of Missing *Kangura* Patterns

Action Taken:

- The southern and western façade repair works included reconstruction of all the 12 incorrectly built half domed bays as per original constructional details till parapet level.
- As part of this reconstruction, the *kangura* patterns on the parapet were reconstructed by replicating from the existing patterns and finished in red polychromy and turquoise tiles.
- The *kanguras* on the north and eastern façade were broken at many places and the conservation works required consolidating the *kangura* patterns. After consolidation of these patterns, the works were completed by application of red polychromy and tile works.



(Above) Tiles, where missing, on the parapet were restored as per the original design and specifications

Restoration of Terrace

Action Taken:

- Manual removal of the added layers of the concrete to a depth of 20cm from the terrace. This removal exposed masonry and differential levels on the roof of which there was no earlier indication.
- During the on-going conservation works the inappropriate past repairs carried out on the terrace like undulating multiple layers of cement concrete were manually removed and surface prepared for providing traditional lime based terrace.
- After completely removing the added cement layers from the terrace, the terracing work has been started using the lime concrete comprising lime mortar and brick aggregate. Traditional organic additives such as Bael Fruit pulp, jaggery are added to make the surface water tight and as per original slopes and details.
- In the absence of water spouts, rainwater was percolating into the masonry as well as causing deterioration of the wall plaster.
- Red sandstone water spouts have now been hand chiselled and four have been fixed on each of the four façade.

(Left) Cement concrete layers on the roof of the tomb were found to be of poor strength and inappropriately laid, therefore allowing water percolation; (Right) This was carefully and manually dismantled and lined with a traditional layer of lime concrete with brick aggregate and traditional additives and adequate slopes



Restoration of Sandstone Lattice Screens

Action Taken:

- After careful inspection and documentation of each arched openings, it was found that the lattice screens installed during earlier repairs varied considerably in size and are poorly crafted. Furthermore, the opening sizes were also disturbed. New sandstone lattice screens prepared individually by the master craftsmen using traditional tools have been installed in the arched openings.
- After the installation of all the hand chiselled lattice screens in the arched openings, the sandstone door frames were provided in all the central openings of all the four facades.
- Wooden doors were then installed in these openings.
- The remaining eight openings are provided with metal screens to prevent the entries of dogs and pigeons while permitting ventilation.

Restoration of Flooring

Action Taken:

- It included dismantling existing concrete and preparing base using lime concrete which helped in revealing the original floor levels.
- The red sandstone of required quantities for the platform had been procured and the red sandstone flooring was provided along the length of the platform and in the internal chambers.
- The flooring works have now been completed.
- A 3m wide Delhi quartzite plinth protection is provided around the entire length of the platform. After laying the foundation, a lime concrete base was provided over which the Delhi Quartzite stone was laid.
- The Plinth protection works are now complete.

(Below) Sandstone screens, visible in archival photographs had been removed from the monument – possibly for the antique market. These have been restored as has the traditional sandstone flooring.





Conservation of Enclosure Wall

Action Taken:

- The Outstanding Universal Value of the Humayun's Garden Tomb Complex World Heritage Site is now recognized as this being part of an ensemble of Mughal era garden-tombs. Each of the tomb complexes was enclosed in masonry enclosure walls. The large complex of Batashewala shares this value of being a Garden Tomb Enclosure and stands within the Buffer Zone of the World Heritage site.
- The tomb garden complex of Batashewala is enclosed within an enclosure wall of 796 m.
- The large portions of the enclosure wall measuring approximately 540m was completely missing. Also the existing portions of the wall were plastered in cement and devoid of any detail.
- A large portion of the enclosure wall of Batashewala Complex, measuring 740 m has been repaired, rebuilt and reconstructed. The excavations were made to find the original foundations. At some places underpinning works were carried out and the masonry wall was required to be built from a depth of 2M.
- The plinth protection in red sandstone has been provided along the entire length of enclosure wall.
- The conservation works on the enclosure wall is now complete.

Restoration of the Garden

- After the completion of all the conservation works, the works of garden restoration started in Batashewala Complex.
- All the sandstone pathways are now laid and Mango tree plantation is in progress.

(Bottom Left) Stretches of the garden enclosure walls, were demolished in 1989 by Bharat Scouts and Guides. The foundations of missing portions were excavated in order to guide the reconstruction of these sections as per the design and structure of standing portions to restore the tomb - garden enclosure.





Garden

Action Taken:

- The red sandstone of 7.5 cm thickness has been provided as 3M plinth protection along the length of the enclosure wall of the monument.
- A water channel and tank discovered to the east of the tomb was exposed and repaired.
- The Delhi Quartzite stone was provided as 4.5 M plinth protection around the entire Plinth.
- Completion of all conservation works was then followed by garden restoration where sandstone pathways were laid and Neem trees were planted.

(Left) The Mughal Tomb Complex, before landscape restoration in 2011; and (Right) during landscape restoration in 2014.



2015

Supported by:



US Ambassador's Fund for Cultural Preservation

Batashewala - Mughal Garden Tomb Complex

Prior to Conservation

In the 1950s, the ownership of this complex was given to the Bharat Scouts & Guides to serve as a camping ground. This led, in 1989, to the construction of 150 structures. Enclosure walls were demolished, disfiguring the landscape and the historic character. The levelling of land required to build the buildings also led to collapse of the Chota Batashewala – a protected monument – when its foundations were exposed. Following twelve years of effort by the ASI and the Aga Khan Trust for Culture (AKTC), the ownership was restored to the ASI in 2010, allowing systematic conservation and landscape restoration to be undertaken by the AKTC.

Post Conservation in 2015:

A grant from the US Ambassadors Fund for Cultural Preservation allowed an intensive three year conservation programme on the three monuments and their garden enclosures. On 18-April 2015, a completion ceremony of the project was presided by Mr. Ravindra Singh, Secretary, Ministry of Culture (Government of India) and held in the presence of Dr. Michael Pelletier, Deputy Chief of Mission, US Embassy.

With the completion of conservation works on this significant ensemble of sites, a proposal for inclusion of the Batashewala Complex in the expanded Humayun's Tomb World Heritage Sites will be submitted.



Mirza Muzaffar Hussain's Garden - Tomb

ACTION TAKEN:

Popularly known as the Bara Batashewala Mahal and built in AD 1603, Mirza Muzaffar Hussain's square tomb stands on a raised platform with five half-domed arched entrance bays on each side. Parts of the striking plaster ornamentation have survived on some of the internal wall surfaces, providing the evidence required to restore missing portions. Ornamental plaster medallions and the intricate *muqarna* patterns on the half-domed arched entrance bays symbolise the highest craft traditions of the period. The central grave chamber, several feet below the ground, is surrounded by eight rooms, making this an interesting example of the "hasht-bihist" plan – which represents the eight spaces of paradise as described in the Holy Quran.

The collapsed eastern facade was restored while the southern facade – inappropriately reconstructed only a decade ago – required dismantling and reconstruction as per the original design. Similarly, the roof, which had deteriorated, was required to be re-laid with lime concrete to create an adequate slope.

Long stretches of the garden enclosure walls, visible in archival photographs, were demolished in 1989. The foundations of missing portions were excavated in order to guide the reconstruction of these sections. The building techniques, tools and materials employed by the original builders were also used. The bends in the wall indicate other garden enclosure walls – such as those of the adjacent domed Mughal tomb – which clearly pre-date this enclosure.

