Federal Republic of Germany Project Tomb of Jan Baba at WHS Makli, Thatta Experts' Committee Meeting, 22-23 July 2015

REPORT

The Experts' Committee Meeting for the project of Preservation of Tomb of Jan Baba, was held on 22nd and 23rd July, 2015. The first day's deliberations were held at WH Makli, while the second day discussions took place at HF's Karachi Centre for finalizing the recommendations. The Experts' Committee consisted of Prof. Dr. Michael Jansen - RWTH Aachen University; Mr. David Punzelt, Consular Attache, Consulate General of Germany; Mr. Saleem- Ul Haq, Director, Culture Department Punjab; Engr. Amin Tariq, Amin Tariq Associates (ATA); Engr. Jamshed Danish, CEO, Consolidated Engineering Services (CES), chaired by Ar. Yasmeen Lari, CEO, Heritage Foundation of Pakistan (HF). Regrets were received from Mr. Qasim Ali Qasim, Director Sindh Archaeology. Ar. Ashfaq Ahmed, Heritage Coordinator, HF, Ar. Saba Samee, Heritage Architect, and Engr. Rabbiya Mukhtar were in attendance.

Day 1 of the Committee Meeting took place at the WHS Makli, the meeting started with a welcome by Ar. Yasmeen Lari and briefing about World Heritage Makli Site and the project of tomb of Jan Baba being funded by the Consulate General of Germany. The briefing was followed by presentations by Ar. Saba Samee and Ar. Ashfaq Ahmed. The presentations comprised 12 folios that included description of applicable Values, Architectural Drawings, Numbering



Tomb of Jan Baba with bamboo barriers and temporary roof providing protection.



Experts' Committee at WHS Makli.



Ar. Yasmeen Lari chairing the Experts' Committee Meeting.



Discussion on treatment of damaged stone steps. FRG- Makli



Prof. Dr. Michael Jansen, discussing the usage of types of stone in walls.



Examining the settlement of columns and central dome.

Systems, Photographic Documentation, Superimposition Drawings, Damage Assessment, Consultants' Assessments, Stone Damage types, and Area-wise Damage details. During discussion on values applicable to the site, Dr. Michael Jansen pointed out that as a living site, Criteria No. 6 for Wrold heritage nomination could be applicable and Pakistan should try and take this matter up with the World Heritage Centre. Additionally, due to large number of devotees that visited the site, it was important that any tourism master plan should be sensitive to religious, social, commemorative and communal values. As spiritual rituals were very much part of many of the shrines and tombs these needed to be carefully safeguarded in order that associated religious and spiritual rituals are not disrupted. In order to create greater relevance of identified values, it was important to contextualize specific values.

Dr. Jansen suggested that graphic scale be added to the detailed drawings that had been prepared, and drawings showing joints, their numbering and differentiation of kinds of damage may be incorporated (as had been done earlier for the Tomb of Jam Nizam al Din), along with a study of stone to identify different kinds of stone types. He also advised that the seuqence of construction should be studied and marked on the drawings and the principle of minimum intervention be followed and damaged stones should be retained without resorting to any replacements.

Subsequent to the presentations, the committee members visited the tomb of Jan Baba. On site various issues came under discussion and methodology of conservation was discussed. The test patches of various items that had been prepared were also examined. Considerable time was spent in working out ways to handle various issues related to damages that were identified. Detailed examination was was carried out of the graves canopy and especially where due to settlement, the joints of the dome stones have opened up and clear deflection of the stone beams is visible. Mr. Saleem ul Haq pointed out the need for careful handling and the importance of providing pointing to the the joints of stones in the dome that would be applied through and through. Engr. Amin Tariq and Engr. Danish pointed out that the settlement was not due to the soil conditions, but because of excavation and filling with loose soil which had been exposed to rains etc. It was decided that monitoring must be carried out in order to determine if there was any further movement in the structure. For this purpose HF will arrange for periodic readings.



Group photo at the Archaeological Bungalow.



The condition of graves under discussion.



Damaged floor stones under discussion.



Experts discussing conservation procedures.



Discussion regarding identification of stone types.

On Day 2, 23rd July the meeting was reconvened at HF Centre in Karachi to finalize the recommendaions in order to proceed with the work at site.

MONITORING ARRANGEMENTS

- Atmospheric data regarding rain, wind velocity & humidity to be collected.
- Surface temperature to be monitored.
- Wind directions to be recorded using weather station.
- Monitoring to be carried out for internal graves canopy for movement in the stone structure.
- Tell tales to be fixed in order to calculate the movement of stone structure at the settlement areas. The levels of the settled columns and their verticality tilts to be recorded for development and final rehabilitation treatment recommendations by geo technical engineer.
- The movement in the central dome above the grave canopy to be monitored by periodic examination and joints to be filled with matching grouting.

SITE WORKS

- Sample of deep struck re-pointing was approved to be used on joints of 1/4" to 3/8" thickness.
- The principle of minimum interventions is to be adopted; no stone replacement to be carried out.
- For the damaged stone at the steps wooden nosing may be used.
- Where possible remove cement used earlier for surface repair on columns. At highly damaged surfaces of columns matching mixture of mud and lime may be used.
- Matching lime sand water proof layer to be applied to damaged surfaces of stones above the entrance canopy. Proper drainage should be maintained to discharge on east side.
- Floor stone slabs in the enclosure and the grave canopy may be re-laid in order to ensure effective drainage.
- Because of the centrality of the entrance and lack of any access from the south side, wooden step may be added.
- The lintel to be lifted by hydraulic jack to its original position and vertical steel post with packing to support the lintel of Zanana doorway.
- In the Zanana enclosure corner stone to be realigned and parapet stones to be re-fixed and made water tight.
- A temporary roof structure sloping toward the east in bamboo, clearly identified as a reversible roof cover, above the Zananah walls may be constructed for safe-guarding of structure.
- In order to protect damaged stones silicates may be used at surfaces of stones. Only silicates that do not create glossy surface may be used. A test sample may be prepared using suitable chemical and its performance over the last several years may be ascertained.
- Sacrificial layer of mud plaster mixed with stone colour to be applied in places where layers of stone have spalled, or cracks have developed.
- The joints of the dome to be repointed through and through as a first priority. After interior pointing is completed, exterior plastering of the dome may be taken up.
- The two domes that are to be re-constructed, have to be recognizable as new structures. Bamboo reinforced lime concrete may be considered as an option after preparing a sample and examining its visual impact.
- A channel outside north enclosure wall, between the exernal grave platform may be created to ensure effective drainage.
- Instead of a plinth protection an unobtrusive arrangement for water drainage may be considered.



Loss of stones of the walkway being examined.



Material and tool samples placed in the porch.



Enclosure walls being discussed.



Studying the enclosure walls.



Examining the perimeter wall panels.



Identifying architectural elements in order to assess the sequence.

After lunch, a visit was made to other heritage sites being conserved by HF including the tomb of Sultan Ibrahim (under US Ambassador's Fund for Cultural Preservation), Mosque of Al-Ashabi being treated with L-EPI or Lari-Emergency Preventive Intervention, as well as the unique baoli or stepped well (both with support from Ms. Safeeyah Moosa of South Africa).

It was explained that the mosque was provided first aid at comparatively low cost and within comparatively short period. The value of L-EPI in providing stabilization to endangered structures in order to buy more time for the large number of structures that require immediate attention.



Examining the soffit of stone slabs in the entrance canopy.



Discussing the environs and site conditions.



Examining display of samples of materials.

In view of the importance of the tomb of Jam Nizam al Din, Dr. Michael Jansen and Mr. Saleem ul Haq spent considerable time in discussion with the structural and soil experts in developing an understanding for stabilization of the tomb.

The engineering experts explained that the ridge required stabilization and it was constantly being eroded. Unless immediate action was taken, many structures, including the tomb of Jam Nizam al-Din were in danger.

Ar. Yasmeen Lari agreed to get track monitors installed in order to monitor the movement in the structure, which she directed will be done in the subsequent week.



Tomb of Sultan Ibrahim - examining kashi samples.



Application of L-EPI on Mosque of Ashabi.



Yasmeen Lari pointing towards extant kashi portions.



Dr. Jansen and other experts examining the L-EPI application.



Experts discussing the cracks appearing in tomb of Jam NIzam al-Din



Tomb of Jam Nizam al-Din under discussion.



Discussion on installation of crack monitor.