

**MEMORANDUM FOR MEMBERS OF THE
ANTIQUITIES ADVISORY BOARD**

PROGRESS REPORT ON ROCK CARVINGS CONSULTANCY STUDY

PURPOSE

This paper informs Members of the progress of the Rock Carvings¹ Consultancy Study and implementation of the recommendations of the consultancy reports.

BACKGROUND

2. There are currently eight rock carvings and one rock inscription in Hong Kong which have been declared as monuments under the Antiquities and Monuments Ordinance (Cap. 53). The eight rock carvings are Rock Carving at Big Wave Bay, Rock Carvings on Po Toi, Rock Carving on Tung Lung Chau, Rock Carving at Shek Pik, Rock Carving on Kau Sai Chau, Rock Carvings on Cheung Chau, Rock Carving at Lung Ha Wan and Rock Carvings at Wong Chuk Hang. They form a homogeneous group with basically geometric patterns, some of which give hints of human or animal images. It is difficult to establish when, how and by whom the carvings were made. Since their patterns resemble strikingly those on the Bronze Age stamped pottery and bronze vessels unearthed locally, it is believed that the rock carvings belong to Hong Kong's Bronze Age, i.e. about 3 000 years ago. As regards the Rock Inscription at Joss House Bay, it is the oldest dated inscription in Hong Kong recording a visit by an officer in charge of the salt administration during the Southern Song Dynasty. The rock

¹ The term "rock carving" in the study is referred to as "rock engraving" or "petroglyph" in international rock art literature which describes a motif that has been pecked into the bedrock resulting in a lowering of the surface to form the motif. "Rock carving" is commonly used in general publications.

carvings and inscription are scattered mainly along the coastal areas and have undergone weathering for many years. Brief information on the rock carvings and inscription is at **Annex A**.

3. In 1977, in order to arrest the weathering process and to improve the physical stability of the rock carvings on Po Toi, Mr. Richard L. Thomas, an expert in geotechnical engineering, was commissioned to develop proposals for the preservation of the rock carvings. A further study covering all the rock carvings was conducted in 1979. Both studies recommended the construction of a surface channel to intercept groundwater and surface water flow, the provision of viewing platform and shelter to protect the rock face from wave attack and sea water spray, and the construction of concrete buttress to enhance the overall stability of the block of rock. In the light of the recommendations, the Antiquities and Monuments Office (AMO) implemented measures as recommended in the studies over the past decades to protect the declared rock carvings and inscription with assistance from the former Public Works Department, the Architectural Services Department (ArchSD) and the respective District Offices.

4. In October 2007, Mr. William Meacham, an AAB Member in 1987-1988, expressed his views on the inadequacy of the conservation measures adopted for the Rock Carvings on Po Toi and proposed a consultancy study to look into the issue. The Central Conservation Section of the Leisure and Cultural Services Department (LCSD) briefed Members of the Antiquities Advisory Board (AAB) on the conservation treatment of the rock carvings on 26 June 2008. The meeting concluded that Mr. Meacham be provided with relevant technical data and the results of scientific analyses, and an open attitude be adopted for further discussion with experts. On 25 September 2008, at the request of Mr. Meacham, AAB invited him to give a presentation to Members. Thereafter, AAB advised AMO to review the conservation measures of rock carvings by consulting international experts. AMO and the Central Conservation Section of LCSD subsequently prepared the specifications for the Rock Carvings Consultancy Study with the dual objectives of safeguarding the monuments and enhancing their significance as part of Hong Kong's heritage resources. A copy of the study brief is at **Annex B**.

PROGRESS OF CONSULTANCY STUDY AND IMPLEMENTATION OF RECOMMENDATIONS OF THE CONSULTANCY REPORTS

5. In July 2009, AMO identified four specialists, namely Dr. Richard Engelhardt, Mr. William Meacham, Prof. Clifford Price and Mr. Andrew Thorn with expertise in heritage preservation, local archeology, archaeological conservation and rock art conservation respectively, to conduct the Consultancy Study. Prof. Price withdrew in August 2009 due to personal reasons, and Dr. Valérie Magar, who is also a rock art conservation expert and was the Coordinator of the International Council of Museums - Committee for Conservation's Working Group on Mural Paintings, Mosaics and Rock Art, took up the consultancy in March 2010. AMO has reported the progress of the Consultancy Study at previous AAB meetings. Background information on the four appointed experts is at **Annex C**.

6. Each expert was asked to produce an independent report addressing each of the following main aspects of the rock carvings and inscription under their respective areas of expertise as set out in paragraph 5 above:

- (a) The present condition of the rock carvings/inscription and the potential hazards that will affect the well being of the monuments;
- (b) Review of the current preservation and conservation practice;
- (c) Enhancement of the preservation strategy;
- (d) Evaluation of the current display settings and their improvement measures; and
- (e) The management plan.

The consultancy reports were received from December 2009 to July 2010. They are attached in CD format at **Annex D**. The recommendations arising from the consultancy reports are summarized in **Annex E**.

7. According to the reports, the overall condition of all declared rock carvings and inscription is stable but improvement works are recommended to protect, preserve and manage them in a better way. AMO collaborated with the Central Conservation Section of LCSD, ArchSD and the Civil Engineering and Development Department (CEDD) to follow up the recommendations in the reports.

8. To examine the practicability of the recommendations of the reports, AMO, after receiving the consultancy reports, launched a number of studies by phases, including geological surveys of all the sites, hydrological assessments of two rock carvings (i.e. Rock Carvings on Po Toi and Cheung Chau) and analyses of environmental data to ascertain the micro-climate within the protective shelters. The Central Conservation Section of LCSD has also been studying the suitability of the recommended materials for the replacement of the water diversion dams above the rock carvings at Cheung Chau, Po Toi, Shek Pik and Wong Chuk Hang.

9. For the recommended short-term measures, ArchSD has assisted in removing the Perspex screen of the Rock Carving at Lung Ha Wan, the shelter for the Rock Carving on Kau Sai Chau and the cement water diversion dams above the Rock Carving at Big Wave Bay and the Rock Inscription at Joss House Bay. The Correctional Services Department has also cleaned up the surrounding area of the Rock Carving at Shek Pik and ArchSD will arrange renovation works for the refuse collection point for completion by end 2011 tentatively. As for the Rock Carvings on Cheung Chau, the Central Conservation Section of LCSD has removed the cement capping on the surface of the rock around the carving and the hotel located above the rock carving site has removed the plants above the rock carving to address the water seepage problem. Hydrological assessments of the rock carvings (except Rock Carvings on Po Toi and Cheung Chau, the assessments on which have been completed as mentioned in paragraph 8 above) and the rock inscription will be arranged in due course. Photos showing the work that has been completed are at **Annex F**.

10. For the recommended medium-term and long-term measures, the Central Conservation Section of LCSD has adopted the chemical treatment recommended by the consultants to arrest the bio-contamination on the rock surface and will assist AMO in monitoring the construction works for the replacement of the dams. AMO will commission a contractor to arrange 3D laser scanning for collecting information on the monuments and monitoring the rock carving surface. Appropriate measures will be arranged based on the scanning findings.

11. The consultancy reports also suggest enhancing visitor interpretation of each rock carving and its linkage with other rock carving sites in Hong Kong to

promote public awareness as well as the value of the rock carvings as public educational resources. AMO has recently commissioned the Community Project Workshop of the Faculty of Architecture, The University of Hong Kong to design new protection and visitor facilities for the sites. It is expected that the result of the design study will be available later this year.

12. AMO's responses to the recommendations of the consultancy reports, which have been reviewed and commented on by the consultants, are at **Annex E**.

WAY FORWARD

13. The Consultancy Study has furnished AMO with a blueprint to conserve and manage the declared rock carvings and inscription more effectively. Some of the recommendations have been implemented immediately while those requiring further study or planning are being followed up by AMO. Members are invited to offer their views on the recommendations in the consultancy reports and AMO's responses.

Antiquities and Monuments Office
Leisure and Cultural Services Department

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