Appendix C

Criteria for Cultural Heritage Impact Assessment

(1) Baseline Study

- 1.1 A baseline study shall be conducted to identify and compile a comprehensive inventory of sites of cultural heritage within the proposed project area, which include:
 - (i) all sites of archaeological interest;
 - (ii) all pre-1950 buildings and structures;
 - (iii) selected post-1950 buildings and structures of high architectural and historical significance and interest; and
 - (iv) landscape features include sites of historical events or providing a significant historical record or a setting for buildings or monuments of architectural or archaeological importance, historic field patterns, tracks and fish ponds and cultural element such as *fung shui* woodlands and clan grave.
- 1.2 The baseline study shall also include a desk-top research and a field survey.

1.3. Desk-top Research

- 1.3.1 Desk-top searches should be conducted to analyse, collect and collate extant information. They include:
 - a. Search of the list of declared monuments protected by the Antiquities and Monuments Ordinance (Chapter 53).
 - b. Search of the list of deemed monuments through the Antiquities and Monuments Office (AMO) of the Leisure and Cultural Services Department.
 - c. Search of the list of sites of cultural heritage identified by the AMO.
 - d. Search of publications on local historical, architectural, anthropological, archaeological and other cultural studies, such as Journals of the Royal Asiatic Society (Hong Kong Branch), Journals of the Hong Kong Archaeological society, Antiquities and Monuments Office Monograph Series and so forth.
 - e. Search of other unpublished papers, records, archival and historical documents through public libraries, archives, and the tertiary institutions, such as the Hong Kong Collection and libraries of the Department of Architecture of the University of Hong Kong and the Chinese University of Hong Kong, Public Records Office, photographic library of the Information Services Department and so forth.
 - f. Search of any other unpublished archaeological investigation and excavation reports kept by the AMO.
 - g. Search of historical documents in the Public Records Office, the Land Registry, District Lands Office, District Office and the Hong Kong Museum of History and so forth.
 - h. Search of cartographic and pictorial documents and maps of the recent past in the Maps and Aerial Photo Library of the Lands Department.
 - i. Study of existing geotechnical information (for archaeological desk-top research).
 - i. Discussion with local informants.

1.4 Field Survey

1.4.1 The potential value of the project site with regard to the cultural heritage could be established easily where the site is well-documented. However, it does not mean that the site is devoid of interest if it lacks information. In these instances, a site visit combined with discussions with appropriate individuals or organisations should be conducted by those with expertise in the area of cultural heritage to clarify the position.

1.4.2 Historic buildings and structures survey

- a. Field scan of all sites of cultural heritage, including relics, historic buildings, structures and graves within the project area.
- b. Photographic recording of each historic building or structure including the exterior (the elevations of all faces of the building premises, the roof, close up for the special architectural details) and the interior (special architectural details), if possible, as well as the surroundings of each historic building or structure.
- c. Interview with local elders and other informants on the local historical, architectural, anthropological and other cultural information related to the historic buildings and structures.
- d. Architectural appraisal of the historic buildings and structures.

1.4.3 Archaeological Survey

Appropriate methods of field evaluation, comprising terrestrial and marine archaeological investigations, should be applied to assess the archaeological potential of the project area:

Terrestrial Archaeological Investigation

- a. Definition of areas of natural land undisturbed in the recent past.
- b. Field scan of the natural land undisturbed in the recent past in detail with special attention paid to areas of exposed soil which were searched for artifacts.
- c. Conduct systematic auger survey/shovel testing to establish the horizontal spread of cultural materials deposits.
- d. Excavation of test pits to establish the vertical sequence of cultural materials. The hand digging of 1 x 1 m or 1.5 x 1.5 m test pits to determine the presence or absence of deeper archaeological deposits and their cultural history.
- 1.4.4 If the field survey identifies any additional sites of cultural heritage within the study area that are of potential historic / archaeological importance and not recorded by AMO, the AMO should be informed as soon as possible. The historic / archaeological value of the items will be further assessed by AMO.

1.5 The Report of Baseline Study

1.5.1 The study report should have concrete evidence to show that the process of the above desk-top research and field survey have been satisfactorily completed. This should take the form of a detailed inventory of the sites of cultural heritage supported by full description of their cultural significance. The description should contain detailed geographical, historical, archaeological, architectural, anthropological, ethnographic and other cultural data supplemented with illustrations and photographic and cartographic records.

1.5.2 Historic Buildings and Structures

- a. A map in 1:1000 scale showing the boundary of each historic building or structure.
- b. Photographic records of each historic building or structure.
- c. Detailed record of each historic building or structure including its construction year, previous and present uses, architectural characteristics, as well as legends, historic persons and events, and cultural activities associated with the structure.

1.5.3 Archaeological Sites

- a. A map showing the boundary of each archaeological site as supported and delineated by field walking, augering and test-pitting;
- b. Drawing of stratigraphic section of test-pits excavated which shows the cultural sequence of a site.

1.5.4 A full bibliography and the source of information consulted should be provided to assist the evaluation of the quality of the evidence. It is expected that the study and result are up to an internationally accepted academic and professional standard.

(2) Impact Assessment

- 2.1 Culture heritage impact assessment must be undertaken to assess the impacts, both direct and indirect, on the sites of cultural heritage by the proposed project based on the result of desktop research and field evaluation. The prediction of impacts and an evaluation of their significance must be undertaken by an expert in cultural heritage. The impacts shall include, but not limited to, the direct loss, destruction or disturbance of an element of cultural heritage, impact in its settings causing impingement on its character through inappropriate siting or design, potential damage to the physical fabric of archaeological remains, historic buildings or historic landscapes through air pollution, change of water-table, vibration, recreation pressure and ecological damage by the project. A detailed description and plans should be provided to elaborate to what extent the sites of cultural heritage will be affected.
- 2.2 Preservation in totality must be taken as the first priority. Detailed requirements of the impact assessment are contained in section 2 of Annex 10, sections 2.6 to 2.9 of Annex 19 and other relevant parts of the Technical Memorandum on Environmental Impact Assessment Process (the TM).

(3) Mitigation Measures

- 3.1 It is always a good practice to recognise the sites of cultural heritage early in the planning stage and site selection process, and to avoid it, i.e. preserve it in-situ, or leaving a buffer zone around the site. Avoidance of built heritage sites and landscapes are preferred over preservation unless it can be shown that there is a need for a particular project which is of paramount importance and outweighs the significance of the heritage features.
- 3.2 If avoidance of the site of cultural heritage is not possible, amelioration can be achieved by reduction of the potential impacts and the preservation of heritage features, such as physically relocating it. If the project causes visual intrusion to the site of cultural heritage and affects its character, measures such as amendments of the project siting, visual screening and specific detailed design of the project may be required to lessen the project's degree of visual intrusion.
- 3.3 All the assessments should be conducted by an expert in cultural heritage and further evaluated and endorsed by the AMO and the Antiquities Advisory Board.
- 3.4 With reference to sections 2.10 to 2.14 of Annex 19 and other relevant parts of the TM, proposals for mitigation measures should be accompanied with a master layout plan together with all detailed treatment, elevations, and landscape plan. A rescue programme, when required, may involve preservation of the historic building or structure together with the relics inside, and its historic environment through relocation, detailed cartographic and photographic survey or preservation of an archaeological site "by record", i.e. through excavation to extract the maximum data as the very last resort.
- 3.5 A programme for implementation of agreed mitigation measures should be provided in the EIA report, as required by section 6.7 in Annex 20 of the TM. In particular, the implementation programme of mitigation measures should list out clearly the proposed mitigation measures to be implemented, by whom, when, where, to what requirements the measures are to be implemented, and the implementation responsibilities of various parties. A comprehensive plan and programme for the protection and conservation of the partially preserved site of cultural heritage, if any, during the planning and design stage of the proposed project must be sufficiently detailed to provide the above information.