



MEMORANDUM

To: Chief Officer – Ministry of Environment
From: Director – Department of Environment
Date: 16 June 2016

Subject: Crymble Landholdings Ltd – Proposed Excavation of Seabed

Further to the Department of Environment's (DoE) review of the above-mentioned coastal works application dated 24 March 2016, the applicant has issued a rebuttal statement to the Ministry of Environment, dated 2 June 2016. The DoE has been asked to provide comments on the rebuttal, which are outlined below.

The DoE's position remains unchanged after reviewing the applicant's rebuttal, namely:

- The rationale and justification for the proposed 'trial' excavation is not supported by the DoE. We are of the view that the trial investigations can be undertaken in a significantly less environmentally damaging manner. The information that the applicant has indicated is required can be obtained from hand-sized samples of beachrock (for Dr Jones' geological assessment) and cores obtained with a hand-held drilling system (to assess the profile of the beach rock). The 'trial' will not provide the information required to evaluate how this section of Seven Mile Beach will respond to the removal of the wider extent of beachrock, which is the ultimate goal of the applicant.
- Previous studies undertaken have consistently advised against lowering or removing the beackrock in this location due to the de-stabilising effect on the beach to the north which is being 'anchored' by the rock and the beach running parallel to the beachrock. The DoE is therefore very concerned about the impacts of conducting a 'trial' for a wider project involving removal of beachrock along an approximately 1,700 ft (0.5km) stretch of coastline which, in principle, is not supported by the DoE.
- The works are proposed within the Seven Mile Beach Marine Park and are contradictory to the long-established management policies for the Marine Park Zone, they will place additional stress on the nearshore marine resources and reflect badly on the Islands' commitment to conservation of marine resources. Furthermore, this is an active turtle nesting location.
- The principle of removing a naturally forming coastal geomorphological feature for aesthetic purposes sets a dangerous precedent for Seven Mile Beach and the Islands as a whole. This precedent would be extremely unfortunate especially for Seven Mile Beach which has been long recognized internationally for its natural beauty, recently receiving the award for the Caribbean's best beach from Caribbean Travel and Life magazine.

- The beachrock represents a unique attribute to Seven Mile Beach providing diversity to the attraction that appeals to numerous beach goers for whom easy access to the sea is not a priority or an obstacle.

In addition to the above points, the DoE offers the following comments in response to the applicant's rebuttal:

- a. **'Appointment of a Third Party Coastal Engineer'**: the applicant considers that it is unnecessary to instruct a third party coastal engineer for this application due to "*the limited area of the trial excavation*". The DoE does not agree. The 1,669 sq ft area of excavation is still a large area, particularly given the sensitivity of the area (Marine Park adjacent to an active turtle nesting beach). Furthermore, the applicant has indicated that the trial is intended to establish if the remainder of the beach rock can be removed. This trial will reveal nothing about the effects of the wider removal of the beachrock on the beaches to the north and south. If the coastal engineer confirms, as three previous consultants have done so, that removal of the beach rock along this coastline is going to have an irreversible negative impact on Seven Mile Beach, then the trial will have been pointless.
- b. **'Turtle Nesting'**: The impact of erosion on critical nesting beach habitat is a likely consequence of the proposed works. This cannot be mitigated by monitoring during or after the works. Furthermore, if the work is executed during active turtle nesting season, there is the potential for equipment and associated activities to interfere with, or deter, nesting.
- c. **'Benthic Habitat'**: The DOE believes the comparison of the ecological diversity represented by in situ beach rock to neighbouring patch reefs is inappropriate and should not be used to justify or support the removal. The beach rock represents a significantly more ecologically diverse environment and productive habitat than the resulting beach sand that will replace it once removed and it is this comparison that is appropriate. The addition of future coral enhancement strategies such as artificial reefs will require considerable review to establish if such an approach is feasible in these shallow water areas.
- d. **'Development and the Environment'**: We note Dart Realty's commitment to "*achieving a delicate balance between economic development and environmental management*" and that "*Dart Realty strives to deliver high quality sustainable development that aligns with the societal and ecological diversity of the Cayman Islands*". The DoE is certainly not opposed to the principle of hotel development along Seven Mile Beach, however this 'trial' is intended to provide the necessary information to allow for the wholesale removal of the beachrock ridge along a stretch of almost 0.5KM. Based on previous studies undertaken (outlined in the DoE's Coastal Works Review) this removal will have irreversible negative impacts for property owners along this stretch of Seven Mile beach (particularly to the north of the rock removal) and will remove an important and valuable ecological feature (both from a biological and recreational perspective). It is therefore difficult to see how this reconciles with the aspiration of ensuring that development aligns with the societal and ecological diversity of this location; the ecological feature is to be removed and its removal will have a long-term negative effect on those members of society that enjoy swimming and snorkelling along the beachrock, and property owners in the vicinity of the beach rock removal who will likely experience beach loss due to its removal.

In summary, the DoE maintains its objection to this application.

Technical Review Committee
For Director of Environment