HOW UNESCO MIGHT HELP RETURN THE METEORITE TO ITS IMPACT SITE

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It has been suggested that Shiid Birood (the meteorite) may not be safe if returned to Shiid Birood (its impact site) or to Somalia at this time. Perhaps it may be better to have the meteorite housed in a responsible public institution, where it can be conserved, displayed, photographed, digitized and further documented, while Somalis prepares to receive it?

Here is a plan that may eventually result in Shiid Birood (the meteorite), eventually being returned to Shiid Birood (its impact site). This would fulfill UNESCO's requirement that the object and the site comprise a unified whole.

Some conservation steps may be taken at the impact site of Shiid Birood soon, to protect it from looting, and to conserve and restore it, as much as possible, to its original condition before it was removed in 2020. During this protection, conservation and restoration, we can learn much more about its history and prehistory, by studying those things closest to it, without any further destruction. This will help us prepare for a scientific archaeological escavation. (see Phase 6.)

Phase 1: Mapping using MAXAR satellite imagery. Establishing permanent control points on the ground for topographic and surface feature mapping.

Phase 2: Test excavations to characterize the stratigraphy in the hectare centering on the impact site: rate of soil accumulation and/or depletion, evidence of floral, faunal and climate changes, radiocarbon dating of stratigraphic layers, etc. Since we know how far the meteorite was buried in the soil, that information may help us set some "older than" and "younger than" dates.

Phase 3: Salvage archaeology of the disturbed stratigraphy could proceed alongside of test excavations. We should establish two temporary storage area to be covered with geotechnical textiles, on which to place the disturbed back dirt, before and after processing. Processing should include careful screening in search of artifacts: hammerstones, metal fragments, and worked shell, wood and stone.

Phase 4: Process all of the excavated soil, including the back-dirt and soil which had fallen back into the pit during removal, until that pit is cleaned of all loose and disturbed materials. All the loose and disturbed soils should be screened and magnetically searched for artifacts as described above. Any metal fragments inset in bone or wood may provide important radiocarbon dates for the cultural mining-of-meteorites for metal. Soils, once processed, should be deposited on the second geotechnical textile.

Phase 5: Clean the walls of the excavated pit, and map, photograph and take samples of relevant features. Once cleaned, its walls may be consolidated, and then lined with another geotechnical textile, the pit refilled with the processed soil, and compacted. During this refilling

and compaction, consideration should be made for how the returned meteorite will be placed, either partially buried in its original 2020 position, elevated to its position at the time of impact, or raised high so that its entire mass is visible.

Phase 6: Once the impact site is stabilized and the processed materials are evaluated, proceed with the design of an interpretation center, physical security, and consideration of a standard research archaeological excavation project using appropriate sampling techniques. Much of this work should be done with local indigenous, village, and urban Somali and invited international researchers.