



Our Ref:02255A  
Your Ref: Purchase Order Number 376142

25<sup>th</sup> September 2014

Hastings Borough Council  
Aquila House  
Breeds Place  
Hastings  
East Sussex  
TN34 3UY

**For the attention of:** [REDACTED]

Dear [REDACTED]

**RE: Ecclesbourne Glen – Landslides - 2014**

We write in response to your enquiry for further information of earlier this month, namely: *notwithstanding any restrictions that may be imposed by others, what actions could be taken to prevent or reduce the likelihood of further slips at Ecclesbourne Glen and the effect that such may have.*

By this, we presume that you are referring to preventative actions on land within the Council's ownership/domain. We also presume that your enquiry above relates essentially to the larger landslide which extends into the Rocklands caravan park. In formulating this response, and to put in context, we refer also to our "Desk Study and Inspection" report of May 2014, which should be considered in conjunction. That report included several conclusions, summarised in Attachment A.

While the general form of the landslides has been defined by the inspection, and it has been determined that water is a significant factor/influence, it is not possible at this stage to identify definitively the driving mechanism and triggers without determining more detailed characteristics, such as ground and groundwater conditions, depths of movement, etc. Without such an appropriate model or understanding, the most appropriate/cost-effective remedial measures cannot best be selected or implemented.

Given that water is such a significant factor/influence, removing water from out of the middle and lower sections of the landslide mass (i.e. land within the Council's demesne) will almost certainly have a positive impact in enhancing the stability. However, as indicated above, without the detailed model and better understanding of the driving mechanism and triggers, that impact cannot be accurately quantified.

The installation of counterfort borehole or push-in drain (e.g. "Plati-Drain") or herring-bone land drainage could draw water out of the middle and lower sections of the landslide. The outfalls of such drainage are critical; they need to be carefully selected and designed so as not to cause or accelerate instability downslope of the current study area.

**Coffey Geotechnics Limited**

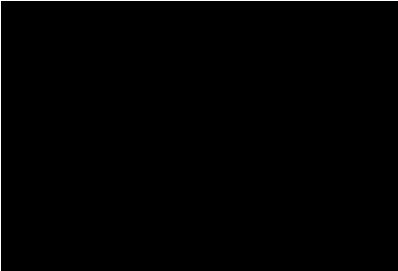
Atlantic House Atlas Business Park Manchester M22 5PR United Kingdom  
T (+44) (0) 161 499 6800 F (+44) (0) 161 499 6802 coffey.com

Registered Office: 1 Northfield Road Reading Berkshire RG1 8AH United Kingdom  
Registered in England No. 06328315

We trust this provides you with further guidance in relation to your enquiry, but appreciate this may not fully address your concerns.

Yours sincerely,

For and on behalf of Coffey Geotechnics Limited



## **Attachment A**

The conclusions of our “Desk Study and Inspection” report of May 2014 are summarised as follows:

- The inspection identified two recent landslides at Ecclesbourne Glen. The larger/main of these is located to the west and extends into the Rocklands caravan park, while the smaller is to the east, adjacent to the watercourse near the bottom of the glen. The occurrence of the landslides has resulted in the closure of several public footpaths crossing the study area.
- Both landslides are indicated to have been activated within the last couple of years, coincident with periods of extreme heavy rainfall. The larger landside appears to be complex and retrogressive, while the smaller appears to be shallow and translational in nature. Both landslides appear to be highly sensitive to water, and are inferred to be active; further movements are likely to occur associated with wet meteorological conditions.
- Recommendations were given in terms of short and intermediate to long-term actions in relation to the two landslides. These recommendations take account of activities and land-uses at and adjacent to the two landslides, and potential risks, but also take cognisance of the fact that the study area is located within a SSSI and SAC.
- The recommendations do not relate to major remedial works to stabilise the landslides; it would be more cost-effective to relocate and rebuild the footpaths and associated drainage which may assist in managing groundwater in the landslides/catchment zone.
- Further investigations should be undertaken in full co-operation with the owners/ management of the Rocklands caravan park, to manage adverse impacts upon the SSSI and SAC. To this end, details of the existing drainage systems and freshwater supplies at the caravan park need to be investigated and determined.