MARTIN CUTHFIL

ARCHITECTURAL SERVICES

FLOOD RISK ASSESSMENT

19 April 2023

Project:

Proposed wind turbine for generation of power for Grindal House, St. Bees

FRA:

The proposal is for a pole mounted wind turbine and security fence enclosure in the field belonging to Grindal House.

The proposal sits in flood zone 2. The flood patterns to this area are caused by Pow Beck which follows the north western boundary of the field.

Although parts of the field are outside the flood zone 2 area it would be less desirable in planning terms to move the turbine closer to residential properties. The turbine has been positioned to suit the most appropriate location for the local landscape, wind patterns and accessibility for servicing. The route to the turbine will be across the existing field. There will be no adjustment to levels or surfacing of the field.

Conclusion:

The structure, compound and ground works are all flood resilient. Any low level switch gear will be raised and mounted on the pole base rather than directly at ground level.

There will be no risk to human health as the structure will not require access during a flood event.

The structure will not have any significant affect on flood patterns. The enclosure will be metal security fence so will allow flood water to pass through the compound area.