Raf! Erect roof over midden stone. Waterblean Farm The HU! Millon LA185HA

"Rockland" Lady Hall Millom Cumbria LA18 5HR

Flood Risk Assessment

25/04/204

Enclosed: (o showing main features mentioned later in the assessment)

- (1) Copy of 05 map, scale 1:5000 showing
 - A) Location of proposed building marked REO
 - B) Access trade, identified YELLOW
 - c) Estrang Tidal protection embankment, identified GREEN.
 - D) Farm boundary, identified BLUE
- (2) Copy of Environment agency flood map, scale 1:2500, showing
 - E) Location of proposed building marked REO
 - F) Extent of flood Zone 3, benefitting from flood defences (ie & above) - identified HATCHED.
 - a) Acoss track identified town.
- · The Location of the proposed building, along with all the modern existing. farm buildings lie in a glossed plain is Zone 3; as identified on E.A. map
- · All the land on the west side of the Duddon estrany is protected by an embankment (c) which was completed in 1963, a extends from Millom to Duddon Bridge, with only one large interruption being where the Black Beck' enters the estrany at Green Road station. (The embankment returning both sides of the beck as fair as the railway enbankment). This enbankment is believed to have been constructed by Lowther estates. From levels taken for an earlier assessment, the hieght of the enbankment is aprox 7:0 AO.O.
 - All the drawnage gutters serving the level land, run + flow to main gutters running inward + parallel to the enbankment, + exit into the estivary inderneath, at various points, na sluices which appear to be kept in good working order.
 - · During heavy spells of roun, the fields throughout this land plane, have water standing in hollows + all gutter do fill up to almost full, especially when tides coincide, + the sluces are closed, cowsing back up, but cause no problem.
 - · From previous ienvironment agency correspondance, the flat colmitudal flood levels in this are as quote botow !-

In 100 yr undefended modelled flood level = 597 AOD In 200 yr " - 6-22 AOD In 1000 yr " - 6-63 AOD

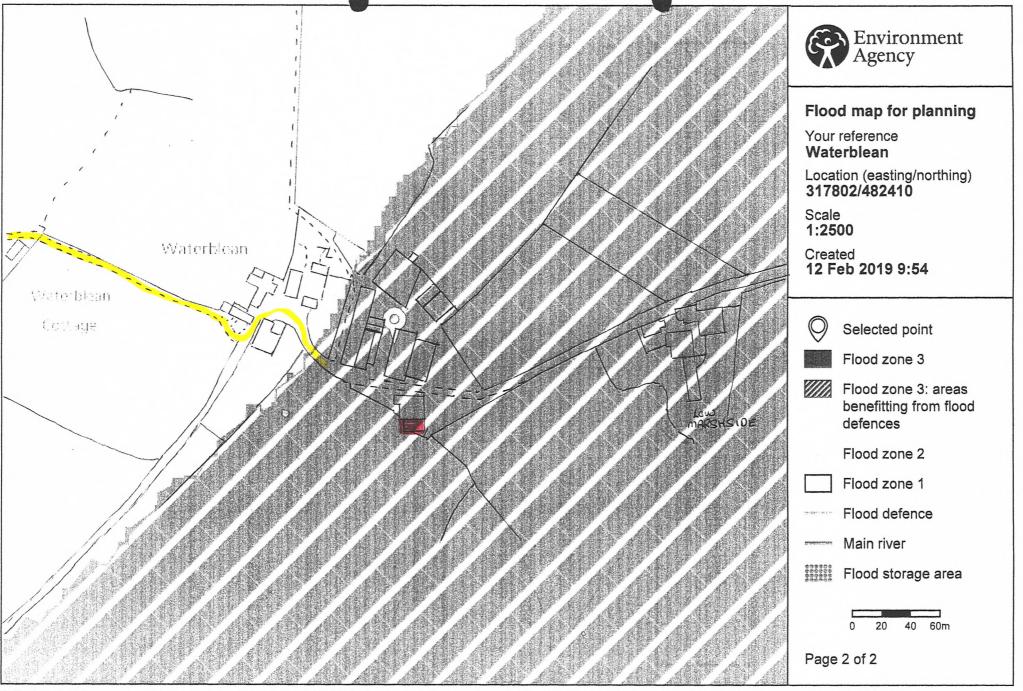
In 200 yr indefended modelled flood level: 7-0 m ADD.

This being the approx hieght of the existing enbankment (c) any wind/gale backed high tide would cause overlapping of the same.

Overlapping does happen even now at such times in places where the banking has sunk following culvest repairs etc, The enbankment was breeched in 2 places near Lady Hall during Feb 2002, a rebuilt after.

- The applicant is aware of the possibility of tidal flooding in the future if the enbankment is breeched or overlapped, or as do all the farmers in this area, use the tide trables regorously because their sheep have to be collected a brought off the marsh at each high tide.
- The proposed boilding is open at the east end, so flood water can freely enter a exit without effecting the structure.

 This area has never been flooded since the enbankment was enested
- Regarding any danger to livestock housed in the existing buildings, it would be possible to quickly nove cattle a short distance to higher fields or yards immediatly to the west, as the ground rises quickly on this side.



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