

Rail: Evert reef over sheep pens
Bracken Beck
Undershull
Millom
Cumbria LA18 5HA

'Rockland'
Lady Hall
Millom
Cumbria LA18 5YJR

08/06/2020

Flood Risk Assessment

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

• Copy of OS map, scale 1:2500 showing:

- Position of sheep pen reef, identified **RED**
- 0.5 level 3010 (6.1m) located at centre of highway adjacent Bracken Beck house. coloured **PINK**
- Open & culverted gutter, known as 'Bracken Beck' coloured **ORANGE**
- Estuary tidal protection embankment, coloured **GREEN**
- Access road, coloured **YELLOW**

• Copy of gov.uk flood risk information showing area is LOW RISK.

- From the OS level of 6.1 (3) adjacent Bracken Beck house, previous levels taken for earlier site development shows the yard - exist building floor levels are 6.15 AOD.
- An open gutter (C) passes under the road via a 0.6 wide x 0.9 high stone culvert adjacent Bracken Beck house & at its exit point, the bed of the gutter is 1.53 below the road datum level. This normally easily carries any rainwater away.
- The estuary embankment (D) was completed in 1963 & extends from Millom to Biddon Bridge with the only large interruption being where the 'Black Beck' enters the estuary at Green Road station. (the embankment returning both sides of the beck inwards as far as the railway line embankment) This embankment is believed to have been constructed by the owners of 'Lowthor estates', & is approx 7.0 AOD.
- All drainage gutters flow into a main gutter running inward & parallel to the embankment & exits into the estuary underneath via sluices, which appear to be kept in good working order.
- During heavy spells of rain, the fields throughout this land plane have water standing in hollows, & all gutters do fill up fully, especially when tides coincide & the sluices are closed - causing back up, but causes no problems.
- From previous 'environment agency correspondence, the plot calm tidal flood levels in this area are as quoted below.

1 in 100 yr undepended modelled flood level =	5.97 AOD.
1 in 200 yr	" " = 6.22 AOD.
1 in 1000 yr	" " = 6.63 AOD

→ one model result, allowing for climatic change, predicted for the year 2115

1 in 200 yr undepended modelled flood level = 7.0 AOD

This being the approx height of the existing embankment (B) any wind/gale backed high tide would cause overlapping of the same. Overlapping does happen even now at such times, & the embankment was breached in 2 places near Lady Hall during Feb 2002.

7) The enclosed Gov. UK Flood risk information dated 23/10/2018, taking into account existing flood defences show the risk of flood from rivers & sea is Low & from surface water - Very Low.

[These maps are the same as EA Flood map (see planning, which shows Flood zone 3 benefiting from flood defences)]

- 8) The proposals rest over the sheep pens, leaves the sides open on the NW & SW. elevations - as now. This allows any flood water to enter & exit freely, & the existing concrete floor is approx 6.15 AOD as per the yard & buildings
- 9) The applicant is aware of the possibility of total flooding in the future if the embankment is breached or overlapped.

Yours Faithfully

Basic view Detailed view

Location



Extent of flooding



Extent of flooding



Extent of flooding

Exit full screen ✕

Flood risk



High



Medium



Low



Very low



Location you selected



