FLOOD RISK ASSESSMENT



This document is in support of the planning application reference TA/2021/946, installation of new septic tank at Burney, the green.

REF: TA/2021/946

IN SUPPORT OF PLANNING APPLICATION:

NEW SEPTIC TANK, BURNEY.

Enclosed documents:

- Copy of OS MAP Scale 1:2500 showing:
 - o A) Position of proposed septic tank relative to existing buildings - RED
 - B) Access route. YELLOW
 - C) Flood defense banking GREEN
- EA Flood Map for planning showing:
 - Location within flood zones 2 and 3 benefitting from flood defenses and flood banking – GREEN
- Gov.uk (Longterm flood risk information) showing:
 - Location of proposed septic tank RED
- Environment Agency letter of support.



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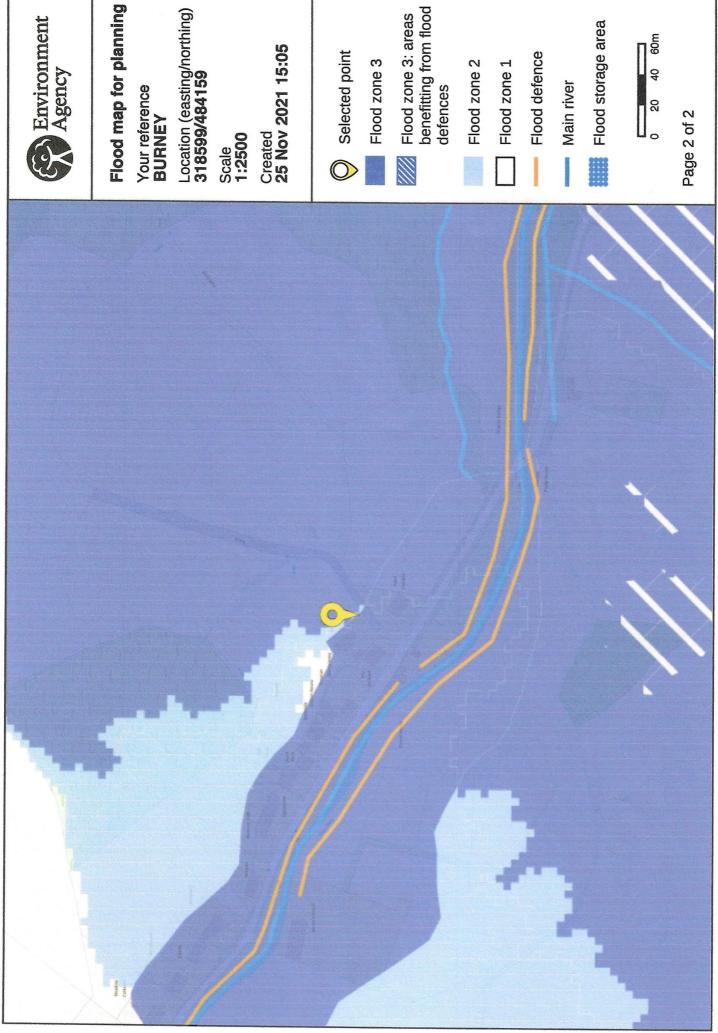


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BURNEY, THE GREEN, MILLOM, CUMBRIA, LA 18 51B

Flood Risk Assessment.

- I) In the absence of O.S levels or bench marks in the local area, we assess the general field level to be approximately 5.7m AOD. This seems to be an average field plane along the fields of the Duddon Estuary. The bridge at the Pump House is 7.3m AOD. The field for the location of the septic tank is lower this level although it is higher than the measured fields of 5.5m AOD nearest to Green Road Station.
- 2) Based on existing environment agency correspedance in the Millom Without area, the flat calm tidal flood levels in this area are quoted as:
 - a. A I in 100 year undefended modelled flood level 5.97 AOD.
 - b. A I in 200 year undefended modelled flood level 6.22 AOD.
 - c. A I in 1000 year undefended modelled floor level 6.63 AOD.
 - d. On modelled result, allowing for climate change, predicted for the year 2115: a 1 in 200 year undefended modelled flood level - 7.0 AOD.
- The flood defences mention on the E.A Map consist of a coastal embankment which was completed in 1963 and extends from Millom to Duddon Bridge with the only large interruption being where the "Black Beck" enters the estuary at the 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 "Lowther estates" to protect their then owned farms and is approximately
- 4) While the height of the defence embankment being approximately the same height of the predicted 1 in 200 year modelled flood level in 2115 of 7.0 AOD any wind/gale backed high tides would cause overlapping of the same. This has happened before and the embankment was breached in 2 places near Ladyhall during February 2002. There was no flooding experienced at the proposed site.
- 5) The neighbouring property to Burney (Pictaria) is habited by a resident who has lived there for 65 years. In no time during their occupancy has the property ever flooded.
- 6) The outlet flow of the septic tank will discharge from the water treatment plant into the main water flow that passes through field. This ultimately will flow into the Black Beck. This water course is always flowing all year round.
- 7) To prevent the water treatment plant from backfilling with water from the water course a series of non-return valves will be installed either side of the water treatment plant. This will ensure that if the water course does back up that the treatment plant will be less susceptible to flooding and in turn will also reduce the likelihood of the pipes from the property also backfilling with
- The water treatment plant is fitted with a seal access hatch (hatch used for inspection and emptying).
- The water treatment plant will undergo regular inspection and maintenance to ensure that its integrity is always maintained.
- 10) There is no detrimental effect on the water treatment plant if it was to full submerged in flood water.



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