

Drainage Assessment



Planning Branch Ltd

Land nr Hallsenna, Holmrook, CA19 1YD

PROPOSAL:

**Reserved Matters Agricultural workers
dwelling**

APPLICANT: Mr Freeman

August 2020 revised

This report has been prepared by Planning Branch Ltd with all reasonable skill, care and diligence, within the terms of the Contract with the Client. This report is confidential to the Client and Planning Branch Ltd accept no responsibility of whatever nature to third parties to whom this report may be made known.

No part of this document may be reproduced or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, or stored in any retrieval system of any nature, without the prior written approval of Planning Branch Ltd.

© Planning Branch Ltd.

CONTENTS

INTRODUCTION 4

SITE 5

 Flood Map and existing drainage 5

 Soil Quality 6

PROPOSAL 6

FOUL SEWAGE..... 6

SOAKAWAY CALCULATIONS 6

SURFACE WATER..... 7

CONCLUSION 7

Appendix 1 – Percolation results..... 8

INTRODUCTION

This drainage statement is to accompany a reserved matter planning application for workers dwelling. Condition 4 requires a drainage system and hence this report provides this to allow this condition to be agreed as part of this submission. As a result of comments from Highways Authority a percolation test was carried out and details found in appendix 1.

4. Prior to the commencement of any development, a surface water drainage scheme, based on the hierarchy of drainage options in the National Planning Practice Guidance with evidence of an assessment of site conditions shall be submitted to and approved in writing by the Local Planning Authority.

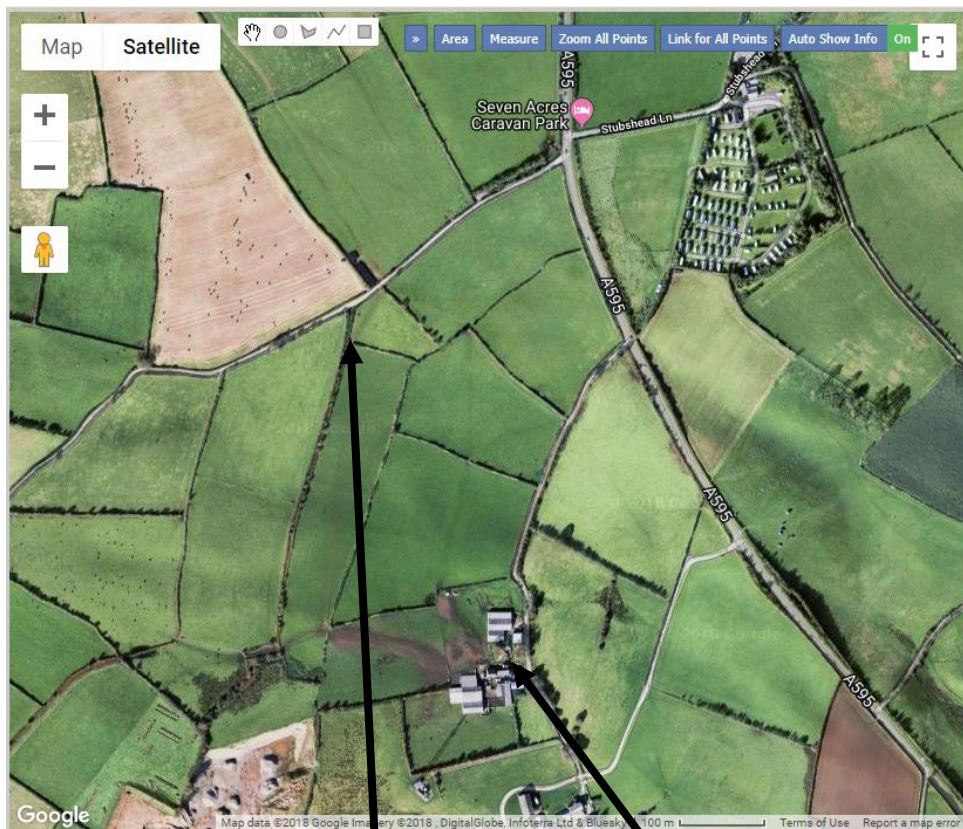
The surface water drainage scheme must be in accordance with the Non-Statutory Technical Standards for Sustainable Drainage Systems (March 2015) or any subsequent replacement national standards and unless otherwise agreed in writing by the Local Planning Authority, no surface water shall discharge to the public sewerage system either directly or indirectly.

The development shall be completed in accordance with the approved details.

Reason

To promote sustainable development, secure proper drainage and to manage the risk of flooding and pollution. This condition is imposed in light of policies within the NPPF and NPPG.

SITE

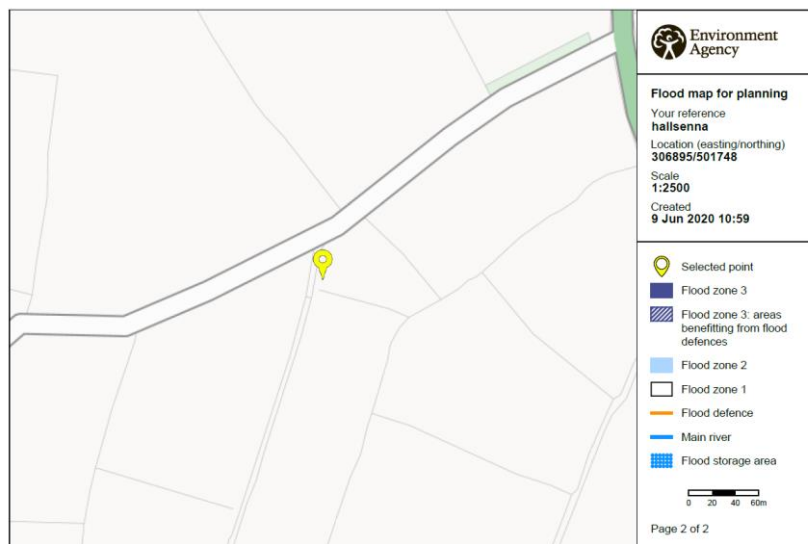


Proposed Application Site

High House Farm

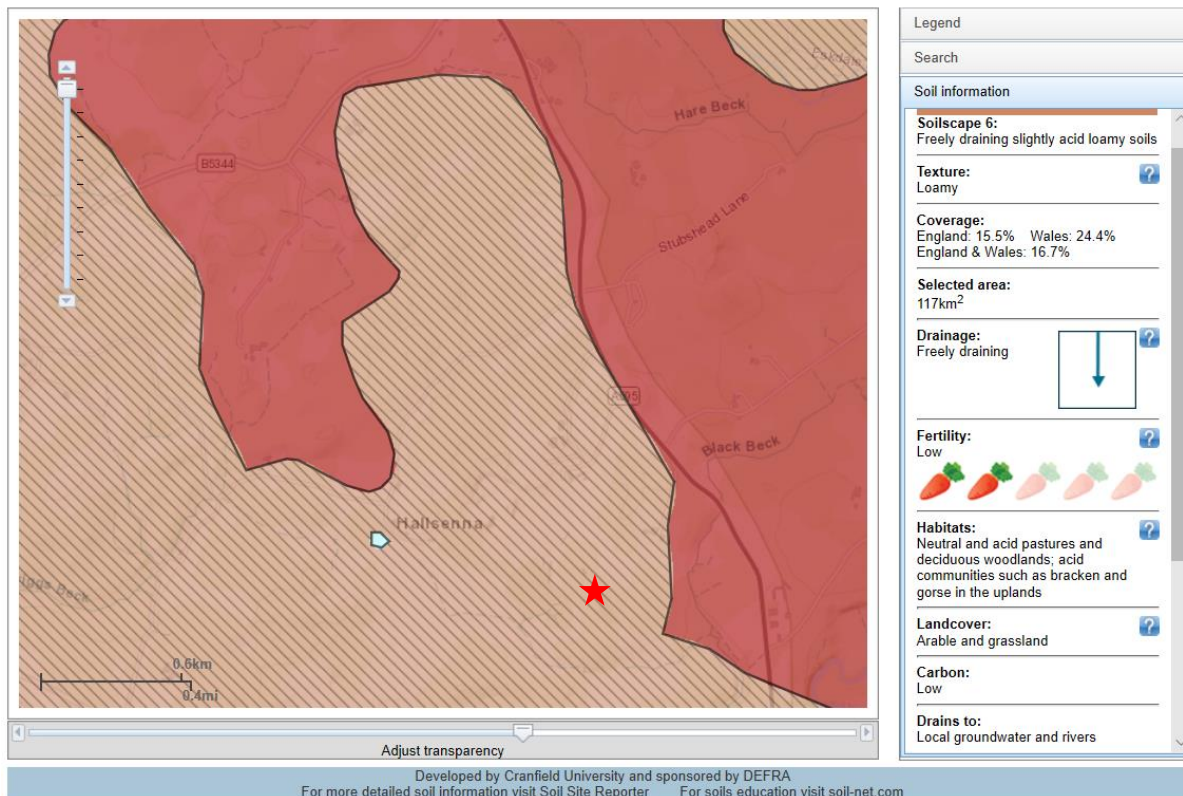
The site has been agreed as part of the outline approval and is indicated above.

Flood Map and existing drainage



As the above image indicates there are no mains rivers close to the site.

Soil Quality



Information from the Land Information System shows the site to lie within Soilscape 6 – freely draining slightly acid loamy soils.

PROPOSAL

The proposal is for the erection of a single dwelling for an agricultural worker dwelling.

FOUL SEWAGE

The application proposes a treatment plant such as a Kingspan BioDisc. The outlet will run from the treatment plant to a soakaway located in the southwestern corner of the application site. Due to the sandy nature of the ground the water drains with no issues.

SOAKAWAY CALCULATIONS

The percolation test calculations for a soakaway area as follows:

Area (A) = $V \times P \times 0.20$ for sewage treatment units.

V = the time in seconds for the water in the test hole to drop by 1mm.

P = the maximum number of persons that the unit is designed to serve

$18.5 \times 4 \times 0.20 = 14.8$ square metres soakaway trench.

SURFACE WATER

The application proposes a new dwelling. The surface water will be collected in a water butt or butts at the corner(s) of the dwelling for use in the garden, with any outflow from the butt(s) piped to the soakaway in the corner of the application site.

CONCLUSION

The ground condition allows for the water to soakaway into the ground and this proposal complies with the drainage hierarchy. The use of a treatment plant and soakaway also complies with the hierarchy.

Appendix 1 – Percolation results



JOHN JACKSON CONTRACTING
GROUNDWORKS & LANDSCAPING
 07791322992

Percolation test for Mark Freeman

Percolation Tests - Results and Drainage Field Calculation Form

I, (name) John Jackson on behalf of (applicant) Mark Freeman have carried out percolation tests in accordance with the guidance provided with this form on (date) 28/7/20 in respect of premises at:

High house Farm

The overall depth of the trial holes dug were: (state in metres/millimetres)

Trial Hole 1	Trial Hole 2
1.5m	1.85

I confirm that the water table did not rise to within 1 metre of the invert of the proposed land irrigation scheme.

The weather conditions on the day were Dry

The results of the percolation tests were:

Trial Hole 1				Trial Hole 2			
	Time in seconds		Vp		Time in seconds		Vp
Test 1	2580	-150	17.2	Test 1	2610	-150	17.4
Test 2	2800	-150	18.4	Test 2	2780	-150	19.5
Test 3	3200	-150	21.3	Test 3	2900	-150	19.3
Trial Hole 1 - Average Vp			19	Trial Hole 2 - Average Vp			18
Average Vp of Trial Holes 1 & 2				18.5			