

Appendix A - Flood Mitigation for Threestoneburn

Contents

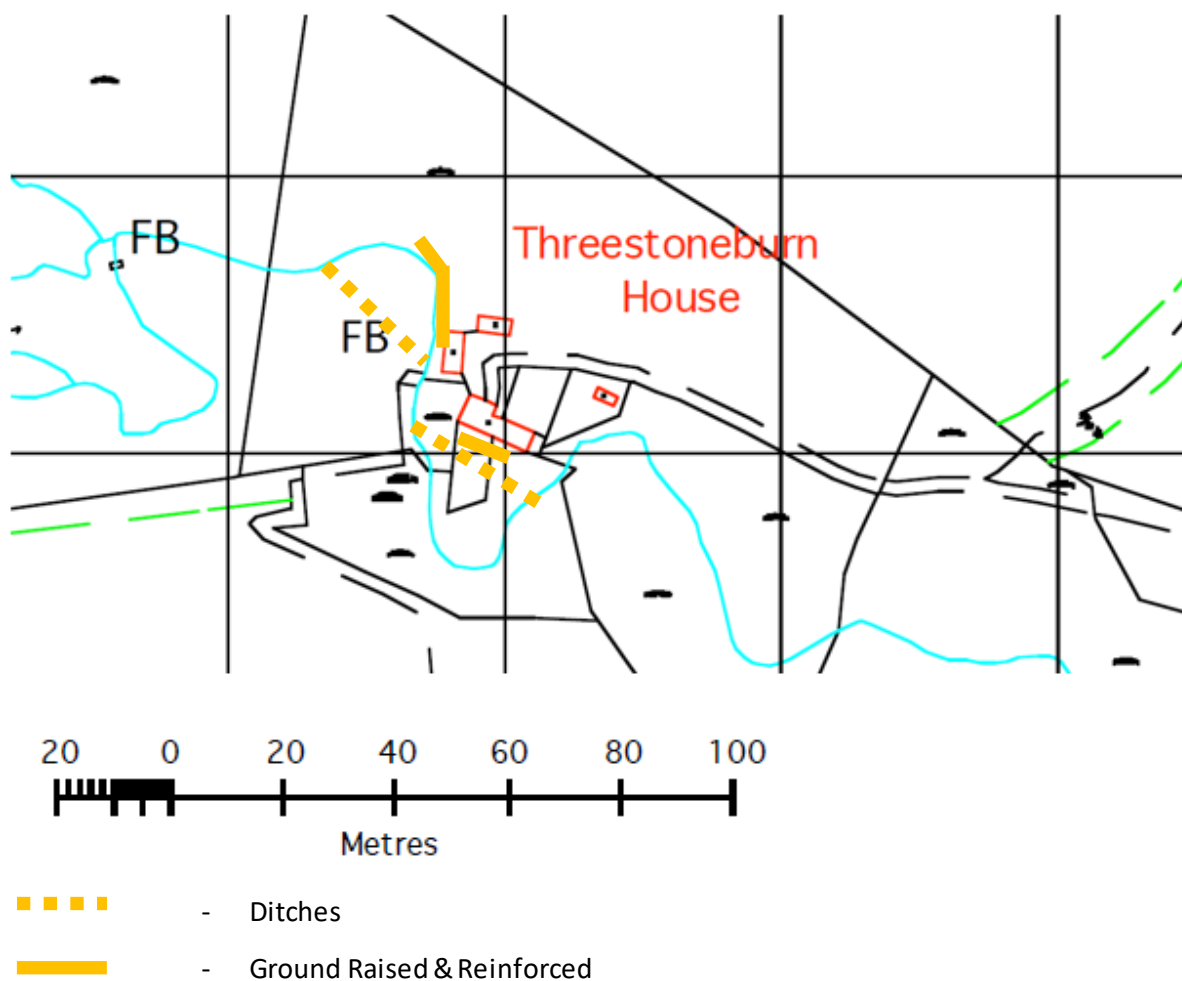
Overview.....	2
Planned Works (now completed as pictures below demonstrate	3
Large straight ditch to minimise flow in flood across the first curve of the S.....	4
Reinforce and raise the height of the banks at the lowest part along the bank next to the barn.....	6
Provide a large straight ditch to minimise flow “in flood” across the second curve of the S, raising the height of the ground in front of the house.....	8
Drain to pipe run off from the hill downstream of the house	9
Ensure the yard area drains well	12

Overview

There were four main schemes of work completed as part of the Flood prevention scheme for Threestoneburn:

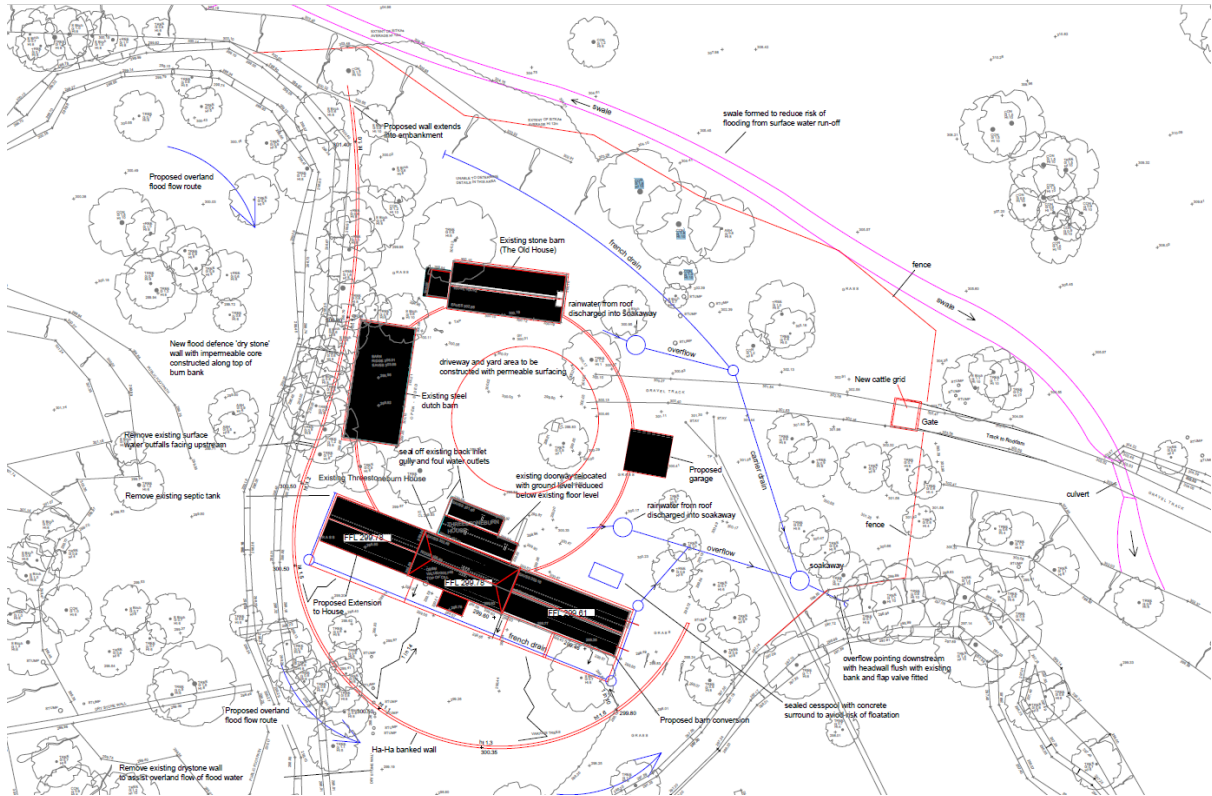
- Provide a large straight ditch to minimise flow “in flood” across the first curve of the S
- Reinforce and raise the height of the banks at the lowest part along the bank next to the Dutch barn
- Provide a large straight ditch to minimise flow “in flood” across the second curve of the S, raising the height of the ground in front of the house
- Drain to pipe run off from the hill downstream of the house
- Ensure the yard area drains well

All of these have been installed in 2009/10 and are successfully performing their job



Planned Works (now completed as pictures below demonstrate)

As from previous application



ABINGTON CONSULTING ENGINEERS LTD.	
CHARTERED CIVIL & STRUCTURAL ENGINEERS	
<small>4 Collieston Lane Huddersfield West Yorkshire Huddersfield</small>	
<small>Tel: 01484 702481 Fax: 01484 702482 e-mail: abington@abington.co.uk</small>	
Client: James Wright	
Project: Threestoneum House, Nr. Roddam	
Site: Proposed Flood Risk Mitigation Works	
Drawn: JKB	Proj No: 06112102 A
Check: WSB	Scale: 1:200
Client: JKB	
Date: 05/07	

Large straight ditch to minimise flow in flood across the first curve of the S
NOTE – all pictures show Grass is flattened where water has flown through

1st Mitigation Ditch (point of entry just after burn enters Property –



Middle of first mitigation ditch x2



Exit from first ditch coming towards the house



Exit from first ditch away from the house



Reinforce and raise the height of the banks at the lowest part along the bank next to the barn

Curve of the first S reinforced with large stones



Further round the same bend, bank is reinforced with large stone and height of bank increased x2



Provide a large straight ditch to minimise flow “in flood” across the second curve of the S, raising the height of the ground in front of the house

New ditch through Garden with raised ground clearly visible



Extension of Ditch – Again grass throughout is washed flat by recent floods



Exit of second ditch to burn



Drain to pipe run off from the hill downstream of the house

Ditch with last section covering large 18' pipe with gravel and pipe entering covered culvert





And the Pipe crossing the track (to Roddam) followed by the exit of the pipe from underground to the burn downstream of the house (track visible in the background on higher ground)



Ensure the yard area drains well

Below shows the new drains installed to stop run off hitting the yard, the new permeable gravel covering in the yard and drainage exit into the burn.

