Bungalow for Mr A., Gill
Flood Risk Assessment

1) Introduction

The site characteristics have been discussed with the Environment Agency who has provided site specification information for this (low risk) area.

2) PPG25 requires that a Flood Risk Assessment must be prepared for all development within zones 2 & 3 in order to determine whether or not that development can be made safe from flooding and remain safe for its perceived lifetime taking into account the possible effects of climate change. PPG25 table B2 predicts a 20% increase in peak river flows over the next 100 years. The Agency's Upper Don Flood Model shows a 1 in 100 year (0.1% probability) flow 49.7m^3s at Penistone. Adding 20% to this gives a flow of 59.6m^3s which coincides with the modelled 1 in 200 year (0.5probability) flow. As such the 1 in 200 year (0.5% probability) level can be used as the 1 in 100 year plus climate change.

3) The Agency's Upper Don Flood Model at the upstream level of the site shows:

1 in 100 year (0.1% probability) flood level of 196.73 AOD
1 in 100 year (0.1% probability) plus climate change allowance flood level of 196.8m AOD

The Agency recommends that the site level should be a minimum of 197.1m AOD adjacent to any properties and that floor levels should be a minimum of 197.4 AOD.

4) The site has been surveyed and compared with the EA information (Drawing 20861s/1)

It can be seen that the basement floor level at 197.60 minimum meets this criteria and that all habitable space is approximately 3 metres above this level.

5) There is no risk to life or building. The entrance to the building is close to Manchester Road which at 200.30 is safe from flood risk.

The sports Centre threshold level is 199.72 and also safe from flood.

6) Conclusion. There is no risk from flooding of the proposed building and safe exit from the site is immediately available.

MAC 2/11

403800N

424000E

424100E

R I V E R D O N

flow

194.67

195.10 water level 17/02/2011

195.00

196.28

196.46

196.59

g r a s s

196.77

196.71

196.77

198.48

196.87

197.09

197.39

g r a s s

198.11

brick sports centre

flat roof 202.96

flat roof 203.63

TH 199.72

199.12

403700N

199.55

200.12

ST01 200.246

199.41

199.99

200.51

200.48

200.37

M A N C H E S T E R R O A D

200.30

200.15

200.18

200.15

ST02 201.285

eaves level 206.33

s t o n e

ridge level 209.48

h o u s e

424000E

424100E

403800N

403700N

Station	Easting	Northing	Level
ST01	424037.947	403692.541	200.246
ST02	424018.825	403678.756	201.285

All Services to be Field Verified
All Drawings remain the property of CT Surveys until all payments have been made

Copyright CT Surveys Limited 2011

CT SURVEYS
Topographic & Building Surveys

THE OLD MILL
HIGHFIELD, TINGLEY
WAKEFIELD
WF3 1LA

Tel : 0113 259 7023
Fax : 07949 195764
email : mail@ct-surveys.com
Web Site : www.ct-surveys.com

A member of THE SURVEY ASSOCIATION

CLIENT
Mike Clynch

LOCATION
Manchester Road
Penistone

SHEET	1 OF 1
SCALE	1 : 500 @ A3
DATE	February 2011
LEVEL DATUM	OSGB by GPS
GRID DATUM	OSGB fixed at ST01
B.M. USED	Nail at ST01 surveyed by GPS Value 200.246m

DRAWING NO.
2086IS/1