



30 October 2014

Your ref:
Planning ref:
Our ref: J11145/DB/c05

Ms Lauren Wiltshire
Barratt David Wilson Southampton
Tollbar House
Tollbar Way
Hedge End
Southampton
Hampshire
SO30 2UH

Dear Ms Wiltshire,

RE: PORTSDOWN HILL SITE, BEDHAMPTON
UPDATE ON SOIL GAS MONITORING WINTER 2013/2014

Following on from the recommendations included within our pre-purchase desk study and ground investigation letter report and further to your instruction we carried out a limited programme of soil gas and groundwater monitoring during the winter of 2013 / 2014.

The results of this monitoring are enclosed and comprise two monitoring visits including one during a period of low atmospheric pressure, deemed to be the most onerous ground conditions for measurement of soil gas.

Groundwater has not been detected during the monitoring and elevated concentrations of soil gas have not been measured.

On the basis of these results it is not anticipated that there would be a requirement for soil gas protection, especially as the proposed new houses are understood to be constructed using a suspended ground floor slab over a naturally ventilated underfloor void which would be expected to provide an effective permeability contrast barrier to any low levels of soil gas.

Winter groundwater levels are also not anticipated to present an issue of concern with regards to surface water management and excavations. As discussed in our letter report however, the design of soakaways or other SUDs systems on chalk strata should be carried out in accordance with the guidance provided by CIRIA.

We trust that this letter provides sufficient information although please do not hesitate to contact me should you have any queries or questions.

Yours sincerely
Wilson Bailey Partnership

Dominic Brightman
BSc MSc DIC FGS CGeol ARSM
Principal Engineer

Site		Portsmouth Hill Site			Job Number	J11144
Client		BDW Southampton			Sheet	1/2
Engineer						
Date		29/11/2013				
Air Temperature		9 °C				
Barometric Pressure		1026 mB				
Visit No		1 of 2				
Borehole No	BH1	BH5	BH6			
Condition of Standpipe	good	good	good			
Combustible gas (CH4) % LEL	<0.1	<0.1	<0.1			
Combustible gas (CH4) % vol	<0.1	<0.1	<0.1			
Combustible gas (CH4) ppmv by PID	<0.1	<0.1	<0.1			
Carbon Dioxide % vol	4.2	3.4	2.3			
Oxygen % vol	17.6	16.2	18.1			
Flow Rate (max) l/hr	<0.01	<0.01	0.03			
Relative Downhole Pressure mb	-0.32	-0.54	-0.12			
Water Level m	dry	dry	dry			
Remarks						

Site Portsdown Hill Site				Job Number J11144
Client BDW Southampton				Sheet 1/2
Engineer				
Date 14/02/2014				
Air Temperature 9 °C				
Barometric Pressure 990 mB				
Visit No 2 of 2				
Borehole No	BH1	BH5	BH6	
Condition of Standpipe	good	good	good	
Combustible gas (CH4) % LEL	<0.1	<0.1	<0.1	
Combustible gas (CH4) % vol	<0.1	<0.1	<0.1	
Combustible gas (CH4) ppmv by PID	<0.1	<0.1	<0.1	
Carbon Dioxide % vol	4.8	4.2	2.8	
Oxygen % vol	17.5	17.3	17.9	
Flow Rate (max) l/hr	<0.01	<0.01	0.03	
Relative Downhole Pressure mb	0.44	0.75	0.04	
Water Level m	dry	dry	dry	
Remarks				