PERMIT

Tree Report

5 Hampton Close

Waterlooville

For Daryn Brewer

Feb 2011

1.0 Introduction

1.1 Daryn Brewer is in process of extending his property with a single storey side extension.
1.2 A recent inspection of the site has identified a series of Oak trees to the East of the property in relation to its potential impact on the proposed foundations. The nearest of these is 4.25m off the boundary fence.
1.3 I have undertaken a tree survey of the nearest tree which is an English Oak tree *(Quercus robur)*. This report focuses upon the potential for
the tree root plate to interfere with the proposed foundations and the impact the proposed foundations will have on the tree root system.

2.0 Tree Survey

2.1 A survey was carried out in accordance with the requirements of the British Standard; *BS 5837; 2005;'Trees in Relation to Construction'.* See drawing no.01.

3.0 Building Proposals

3.1 It is proposed to construct a single storey extension to the east of the property. The proposed foundations are to be trench fill concrete and excavated to depths in accordance with NHBC C4.2 "Building Near Trees" See drawing no's 02 and 04.

The depth calculations are shown on sheet 05. The clay has been assumed to be High Shrinkability ie. a PI above 40%.

4.0 Impact on Tree Root System

The ground level around the existing Oak tree is approximately 1.5m higher than the ground level adjacent to the main building. A low level retaining wall runs along the Eastern boundary and supports the bank. The majority of any tree root system is located within the top 600mm of top soil where the nutrients and moisture vital to maintain the health of the tree are concentrated. The location of the Oak Tree in an elevated position on a the bank make it extremely unlikely that the tree root system would be affected by the proposed foundations.

Therefore in my considered opinion the proposed foundation system is acceptable.

Bruce Duff
BEng(Hons) MIStructE CEng

PROJECT: 5 HAMPTON CLOSE

NHBC CH 4.2

TREE INFLUENCE CIRCLES.

ASSUME HIGH SHRINKABILITY CLAY

OAK TREE MATURE HEIGHT 20m.

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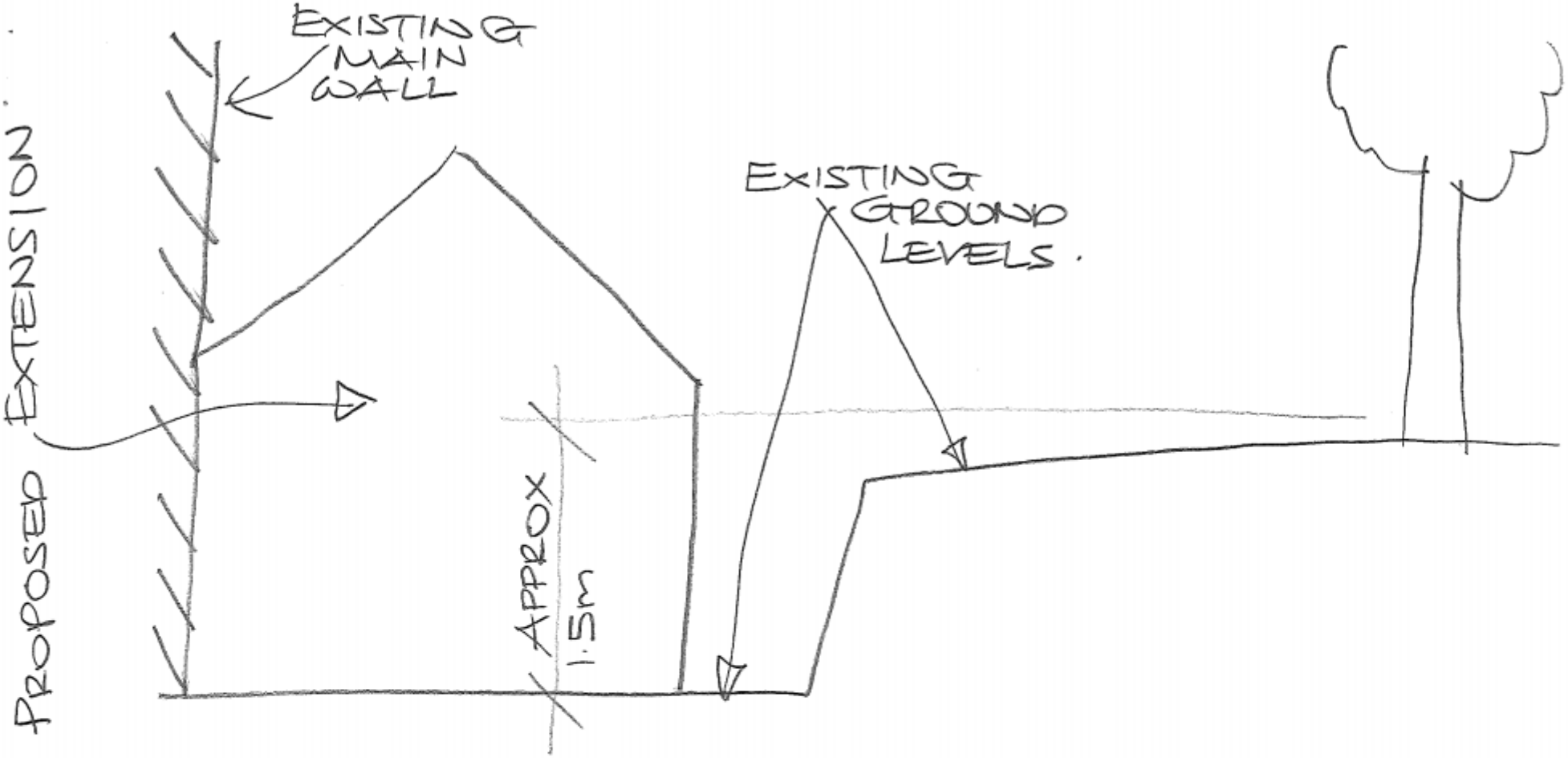
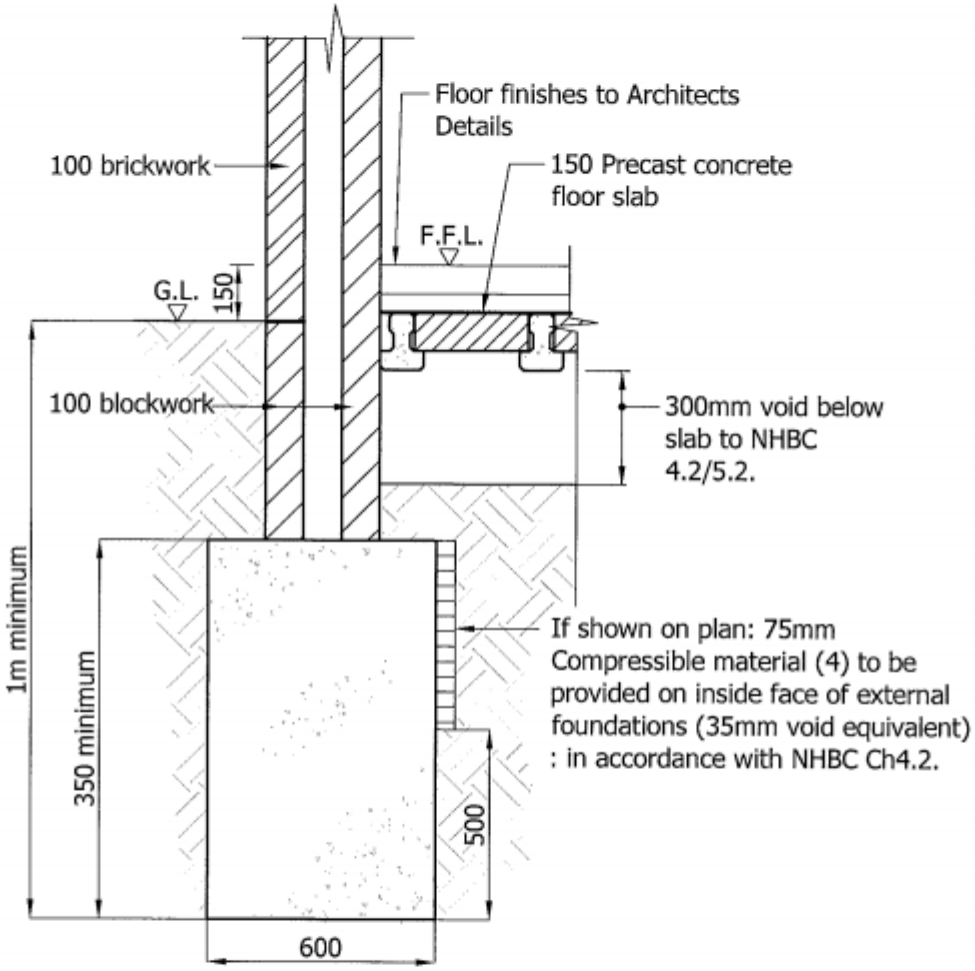
		D
2.5m DEEP FOUNDS	D/H = 0.5	10m
2.75m	= 0.25	5.0m



FOUNDATION SECTION

5 HAMPTON CLOSE

DRG 03



Typical Proposed External Foundation Detail

(Scale 1:20)

5 HAMPTON CL
WATERLOOVILLE

DRG 04

FEB 11