Phone: 08456 880 880 Fax: 08458 724 594



Drainage Survey Report

Client

Norwich Union

Central Scanning Team

P O Box 121 **Surrey Street**

NR1 3ZH

Customer Name

Mr E Appleton

7 Church Lane

Eccleston St Helens

WA10 5AB

01744454044

Date & Time Job Received 29/12/2008 11:47

Appointment Date 30/12/2008

Survey No. NUA0192835-S0

Property Details:

Property Type : **Bungalow** Age of Property: < 10 YEARS

Time Resident: < 10 YEARS

Assumed Cause: Tree Roots Age of Damage: 6 months 3rd Party Recovery: N

Covered by N.H.B.C: N Section 24:

Damage Under Drive : Y

No. Meterage Code

Client Ref.

Video Overview:

Surface Category:

Policy Holder Contact on Arrival:

Manholes Clear:

Diameter of Pipe: 150mm / 6i

Pipe Material:

Clay

Surveyed By:

PAUL SKIDMORE

Contact Number Survey Type:

07825 057916 **Unblock and CCTV**

Site Plan Attached: \\ANSACLUSTER\MII Camera Stills:

NUA0192835-S0-A.jp

Manholes

Inv Lev. Blocked Int'cpt BackDrop No.

1 2.4 Y Y N

Faults Found

4

ST Start Survey, MH1 downstream 1 0 Water Level .00..... % Height/diameter 2 WL 0

Description

Hole in Drain at (or from6 to9....) o'clock 3 0.2 Н

4 RF 1.4

Debris (non-silt/grease) ..10....% cross-sectional area loss 5 2.2 DE

Roots Mass ..70..... % cross-sectional area loss 6 RM 3.5 Roots Mass .90..... % cross-sectional area loss 7 RM

Roots Fine RF 8 6

Roots Mass ..40..... % cross-sectional area loss 9 7 RM

Roots Mass ...80.... % cross-sectional area loss 10 7.6 RM

MC Material of drain changes from clay to plastic 8.7 11 Material of drain changes from plastic to clay 12 9.2 MC

RF Roots Fine 13 9.6 10.4 RF Roots Fine 14

Line of Drain deviates down from 30 degrees to 60 degrees of deviation LDM 15 10.6



16	11.1	GO	line of drain levels	
17	13.6	GO	pulled joint down	
18	14.2	FH	Finish Survey, Main sewer	
19	0			
20	0	ST	Start Survey,MH1 upstream	
21	0	WL	Water Level00 % Height/diameter	
22	0.2	BDS	Back drop shaft	
23	0.2	GO	survey continued over dropshaft	
24	0.5	RM	Roots Mass80 % cross-sectional area loss	
25	0.6	MH	Buried Manhole	
26	0.7	FH	Finish Survey,Buried manhole	
27	0			
28	0	ST	Start Survey,Buried manhole upstream	
29	0	WL	Water Level00 % Height/diameter	
30	0	DC	Dimension of drain changes, new dimension .100 mm	
31	0.6	RF	Roots Fine	
32	4	FH	Finish Survey	

Notes:

On arrival to site the Policyholder (Ph) explained the manhole on his driveway is partially charged manhole 1 (mh), he also explained a previous repair was carried out approx 5 years ago where the footpath was excavated to replace some pipework that was damaged by roots. Due to this previous repair the Ph infomed me that mh1 is shared with the neighbours at number 5 and 9.

Mh1 was inspected, this was partially blocked, root ingress was also visible in the brickwork. Mh1 also had a dropshaft upstream of the chamber, this was also blocked as the rodding access was overflowing. High Power Water Jetting (hpwj) and rodding was required to restore flow both upstream (u/s) and downstream (d/s) of Mh1. A cctv survey was firstly carried out downstream of mh1 which showed mass root ingress in the first 11 metres. The survey was finished at 14.2 metres at the main sewer, this section was found to be ok.

Another cctv survey was carried out upstream of mh1 from the rodding access at the top of the dropshaft. This revealed a buried manhole at 0.6metres which had mass root ingress. This manhole is where numbers 5, 7 & 9 all become shared. The survey was continued upstream of the buried manhole on the section private to the ph. The only fault found was fine roots at 0.6metres.

I would recomend the following works:-

REPAIR 1 - The pipework downstream of mh1 will require root cutting and a 150mm liner installed upto 10.5metres, this is just before the pipework drops but there are fine roots just before this point which the liner should be able to seal. Mh1 will require repointing as the root ingress has damaged some of this. Confined space equipment required as Mh1 is 2.4metres deep, Mh1 has steps built into the brickwork.

REPAIR 2 - An excavation is required upstream of mh1 under the block paving driveway to expose the buried manhole. Contractor can then assess what further works are required. Root ingress has already been established but the chamber may require re channeling and re benching.

REPAIR 3 - (repair private to PH), from the buried manhole a 100mm patch liner is required 0.6metres upstream to cover the fine roots.



(EP	REP 3:- Buried manhole upstream	0.00	0.00
PLIN21.2	5 Single patch liner 100mm x 1 metre "	0.50	1.50
GO	See Notes	0.00	0.00

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REPAIR 1 - The pipework downstream of mh1 will require root cutting and a 150mm liner installed upto 10.5 metres, this is just before the pipework drops but there are fine roots just before this point which the liner should be able to seal. Mh1 will require repointing as the root ingress has damaged some of this. Confined space equipment required as Mh1 is 2.4 metres deep, Mh1 has steps built into the brickwork.

REPAIR 2 - An excavation is required unstream of mild under the black paving driveway to expose the buried manhole. Contractor can then assess what further works are required. Root ingress has already been established but the chamber may require re channeling and rebenching.

REPAR 3 - (repair private to PH), from the buried manhole a 100mm patch liner is required 0.6 metres upstream to cover the fine roots.

