

# DRAINROD

## Environmental Services Ltd

PLUMBING  
CENTRAL HEATING  
GULLY GULPING SERVICE  
DRAIN TRACING  
GUTTER CLEARANCE

24 HOUR EMERGENCY SERVICE

Telephone: 0800 1951956

Email: [drainrod@hotmail.com](mailto:drainrod@hotmail.com)

DRAINAGE  
COLOUR C.C.TV SURVEYS  
EXCAVATION  
LINING SPECIALIST  
CENTRAL HEATING POWER FLUSHING

[www.drainrod.co.uk](http://www.drainrod.co.uk)

TKG/C/01091/sb

28<sup>th</sup> January 2015

Ben Frazier  
17 Waddon Gardens  
Primrose Hill  
NW3 3DN

Dear Mr Frazier,

*RE: 17 Waddon Gardens, Primrose Hill, NW3*

With reference to the C.C.TV Camera Survey carried out at the above property, we have pleasure in submitting the following report, video and diagram.

CAMERA SURVEYED FROM MANHOLE 1 UPSTREAM (100MM)

METRES	FINDINGS
000.5	Radial Cracking
000.9	Offset Joint
	Radial Cracking
001.0	Line deviates sharp right
001.2	Offset Joint-Severe
	Ingress via joint/scale
	Unable to pass bend

CAMERA SURVEYED FROM MANHOLE 1 SLIPPER 1 UPSTREAM (100MM)

METRES	FINDINGS
000.4	Offset Joint
000.8	Offset Joint
001.4	Offset Joint-Severe
001.4	Unable to pass offset



Head Office: Old Stone House, 29 Stanley Grove, Croydon, Surrey CR0 3QW  
Telephone: 0800 1951956 Fax: 020 8665 1024  
VAT No. 611 8765 37

#### CAMERA SURVEYED FROM MANHOLE 1 SLIPPER 2 UPSTREAM (100MM)

METRES	FINDINGS
000.3	Inset Branch 12 o/c
001.3	Ingress via joint
001.8	Debris in run Silt
002.2	Ingress via joint/unable to pass
002.5	Trap to Gully

#### CAMERA SURVEYED FROM MANHOLE 1 DOWNSTREAM (100MM)

METRES	FINDINGS
001.3	Radial Crack
002.0	Radial Crack
002.4	Offset Joint-Slight
003.4	Offset Joint Radial Crack
006.3	Offset Joint Radial Crack
006.6	Long Crack
008.4	Ingress via joint Scale
009.2	Enters Manhole 2

#### CAMERA SURVEYED FROM MANHOLE 2 SLIPPER 1 UPSTREAM (100MM)

METRES	FINDINGS
000.4	Offset Joint
003.1	Offset Joint
003.5	Enters bend-Unable to pass

#### CAMERA SURVEYED FROM MANHOLE 2 SLIPPER 2 UPSTREAM (100MM)

METRES	FINDINGS
002.8	Enters bend to SVP

#### CAMERA SURVEYED FROM MANHOLE 2 SLIPPER 3 UPSTREAM (100MM)

METRES	FINDINGS
000.8	Unable to pass bend Scale

#### CAMERA SURVEYED FROM MANHOLE 2 SLIPPER 4 UPSTREAM (100MM)

METRES	FINDINGS
000.5	Scale-Heavy
000.6	Partial blockage Unable to pass

#### CAMERA SURVEYED FROM MANHOLE 2 DOWNSTREAM (150MM)

METRES	FINDINGS
000.5	Scale
002.0	Holding Water-Slight Debris in run
002.9	Ingress via joint
004.9	Offset Joint
005.4	Offset Joint
006.4	Holding Water Ingress via joint
008.6	Holding Water Scale
009.5	Holding Water
010.6	Enters Manhole 3 Roots

#### CAMERA SURVEYED FROM MANHOLE 3 SLIPPER 1 UPSTREAM (100MM)

METRES	FINDINGS
000.8	Unable to pass reel

#### CAMERA SURVEYED FROM MANHOLE 3 SLIPPER 2 UPSTREAM (100MM)

METRES	FINDINGS
005.5	Radial Crack-Slight
006.4	Radial Crack-Slight
007.6	Radial Crack
008.2	Radial Crack Roots
008.8	Roots
010.0	Ingress via joint-Unable to pass

**END OF SURVEY**

## FINDINGS

The system surveyed is predominantly of clayware construction and has evidence of numerous structural defects throughout.

These defects consist of radial cracking, root ingress, joint movement and solidified scale build up exists.

The system is functioning, however some of the defects are becoming pronounced and we believe that problems may start to be experienced.

The system is deep and access to the manholes is limited due to their depths, they will require confined space operatives to allow entry.

If major works are being undertaken we would recommend that as much of the drainage as possible is renewed at the same time and if possible re-designed.

Clearly remedial works are required.



## RECOMMENDATIONS

1. Manhole 1 upstream  
Manhole 1 slipper 1  
Manhole 1 slipper 2  
Manhole 2 slipper 1  
Manhole 3 slipper 1

These runs all have joint movement and may result in water loss from the system. Each run should be individually water tested to confirm its integrity, failure of a water test would necessitate excavation and renewal of the run.

2. Manhole 2 to slipper 4  
Manhole 3 to slipper 2  
Manhole 1 to Manhole 2

These manholes are deep and will require confined space entry equipment and personnel to carry out these works.

Each of these runs have blockages or build up within the runs, they should be cleansed and cleared of debris with specialist cable cutters and high pressure descaling equipment.

Once cleansed they should be re-surveyed in full to assess their full structural condition.

These runs are likely to require structural repairs, it maybe possible to do this without excavation dependant upon the findings.

### ESTIMATED COST

1. Manhole 1 upstream  
Manhole 1 slipper 1  
Manhole 1 slipper 2  
Manhole 2 slipper 1  
Manhole 3 slipper 1

Individually water test and report.

Cost = £ 95 + VAT per test

2. Manhole 2 to slipper 4  
Manhole 3 to slipper 2  
Manhole 1 to Manhole 2


Cable cut, descale and re-survey.

(Requires confined space entry equipment and operatives.)

Cost = £ 1680 + VAT

I hope the above is to your satisfaction. Should you wish to discuss further, please do not hesitate in contacting me.

Yours sincerely,

  
T.K. Gunstone  
**GENERAL MANAGER**

Encl.

CLIENT: ...Ben Frazier.....

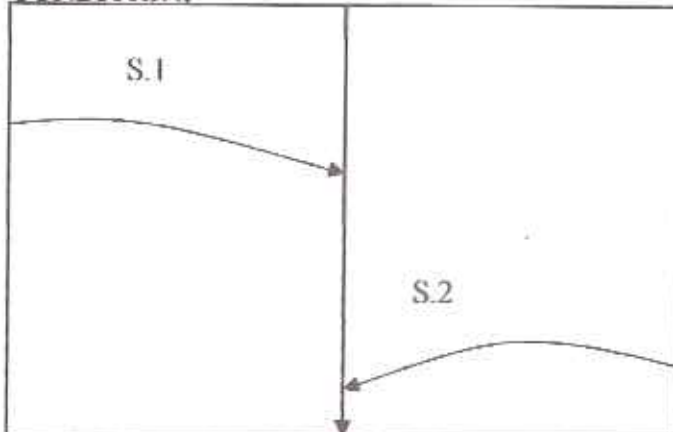
DATE: 28<sup>th</sup> January 2015 .....

LOCATION: ...17 Waddon Gardens, Primrose Hill, NW3...

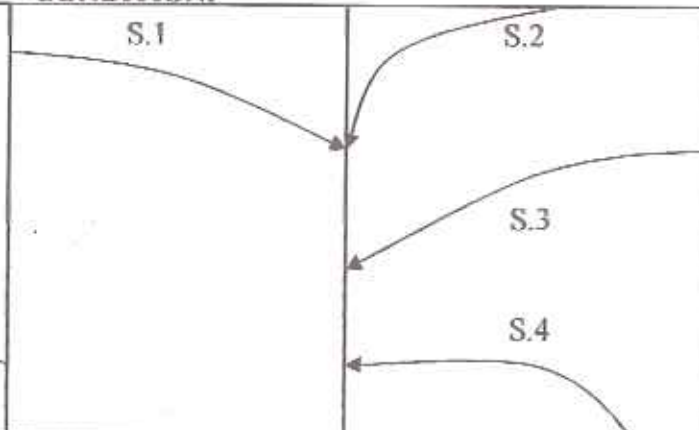
REF: TkG/C/01091/sb.....

	MANHOLE:	1		MANHOLE:	2
	INVERT LEVEL:	1400mm		INVERT LEVEL:	2560mm
<u>SYSTEM:</u>	FOUL	.....	<u>SYSTEM:</u>	FOUL	.....
	STORM	.....		STORM	.....
	COMBINED	x		COMBINED	x
	COVER SIZE:	450X600		COVER SIZE:	450X600
<u>CONSTRUCT:</u>	BRICK	.....	<u>CONSTRUCT:</u>	BRICK	.....
	CEMENT	x		CEMENT	x
	SECTIONS	.....		SECTIONS	.....
<u>TYPE:</u>	LIGHTWEIGHT	.....	<u>TYPE:</u>	LIGHTWEIGHT	.....
	MEDIUM DUTY	x		MEDIUM DUTY	x
	HEAVY DUTY	.....		HEAVY DUTY	.....
<u>MATERIALS:</u>	SALT GLAZED	x	<u>MATERIAL:</u>	SALT GLAZED	x
	CAST IRON	.....		CAST IRON	.....
	PORCELAIN	.....		PORCELAIN	.....
	PITCH FIBRE	.....		PITCH FIBRE	.....
	OTHER	.....		OTHER	.....
<u>PIPE DIAMETER:</u>	100 MM	x	<u>PIPE DIAMETER:</u>	100 MM	.....
	150 MM	.....		150 MM	x
	OTHER	.....		OTHER	.....

CONDITION:



CONDITION:



CLIENT: ...Ben Frazier.....

DATE: 28<sup>th</sup> January 2015 .....

LOCATION: ...17 Waddon Gardens, Primrose Hill, NW3...

REF: TkG/C/01091/sb.....

MANHOLE: 3  
INVERT LEVEL: 2640mm  
SYSTEM: FOUL .....  
STORM .....  
COMBINED x  
COVER SIZE: 450X600  
CONSTRUCT: BRICK .....  
CEMENT x  
SECTIONS .....  
TYPE: LIGHTWEIGHT .....  
MEDIUM DUTY x  
HEAVY DUTY .....  
MATERIALS: SALT GLAZED .....  
CAST IRON .....  
PORCELAIN x  
PITCH FIBRE .....  
OTHER .....  
PIPE DIAMETER: 100 MM .....  
150 MM x  
OTHER .....

MANHOLE:  
INVERT LEVEL:  
SYSTEM: FOUL  
STORM  
COMBINED  
COVER SIZE:  
CONSTRUCT: BRICK  
CEMENT  
SECTIONS  
TYPE: LIGHTWEIGHT  
MEDIUM DUTY  
HEAVY DUTY  
MATERIAL: SALT GLAZED  
CAST IRON  
PORCELAIN  
PITCH FIBRE  
OTHER  
PIPE DIAMETER: 100 MM  
150 MM  
OTHER

CONDITION:

CONDITION:

