

**ANY ADDRESS
ANY TOWN/CITY
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**REPORT ON THE CCTV SURVEY
OF THE DRAINAGE**

BY

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LIMITED

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FOR

**ANY CONSULTING ENGINEERS/OTHER
ANY ADDRESS
ANY COUNTRY
ANY POST CODE**

JANUARY 2016

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1.0 DESCRIPTION OF THE PREMISES

The premises comprise a commercial office building on a corner plot at the junction of,
..... &

The area of interest for this survey is the buried drainage below basement floor level and drainage suspended at high level in the basement.

At the time of survey the premises were un-occupied.

2.0 EXTENT AND METHOD OF THE SURVEY

The extent and method of the survey was as requested by of, by an email dated 18/03/2014 and as shown in the Spaflow Limited., proposal dated 00/01/2016 and confirmed by an email from on 00/01/2016.

The purpose of the survey is to record the installation in its current form, to provide information to the Consulting Engineers, to assist them with their proposals for the redevelopment of the existing property.

The survey comprised the following:-

To locate, trace, map and CCTV survey – The buried drainage below basement floor level and any drainage suspended at high level in the basement.

The survey was carried out on the 00/01/2016.

3.0 LIMITATIONS OF THE SURVEY

The scope of the survey was limited to that shown in section 2.0 or otherwise referred to in the text.

No drain cleaning was done, no level checks, flow checks, [apart from route checking tests], leakage tests or other tests were carried out.

There were some areas not accessible for the survey, including 4 No. light-wells. There was no access to service ducts containing pipes. The false ceilings in the basement were of a steel strip form and access was limited.

The work was carried out on a day of dry weather.

No responsibility can be accepted for any deficiencies, events or circumstances which may occur and which due to the foregoing circumstances were not identified during the survey.

4.0 HEALTH AND SAFETY

The work was carried out in accordance with the requirements of the Spaflow Method Statement and Health and Safety Procedures Document, and in accordance with the requirements of the client. No events or incidents occurred during the survey.

No particular findings, which could have an immediate or reasonably foreseeable effect on health and safety were noted.

5.0 INFORMATION UTILISED

The following drawing by, was provided in digital form.

DRAWING NO:	000/000 REV1	EXISTING LOWER GROUND PLAN
	000/000 REV1	BASEMENT FLOOR PLAN

The following drawing by Price & Myers was also provided:-

DRAWING NO:	0000/0 REV 0	PILING LAYOUT This drawing showed below slab drainage
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6.0 RECORD DRAWING PRODUCED

The following survey record drawing was produced on CAD based on the Basement drawing referred to above.

DRAWING NO:	PH01	Record of CCTV Survey of Drainage - Basement Level
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7.0 DESCRIPTION OF THE SYSTEM

The system is combined as it receives connections from foul drainage and from surface water drainage.

The system commences towards the rear of the property at a manhole, MH5 which is located in a lobby area at a toilet.

MH5 receives, at its head a 100 Ø cast iron [CI] connection [D] from an assumed sealed top back inlet gully [STBIG] in a void to which there was no access. A 100 Ø CI rainwater pipe [RWP] from above, offsets at low level and connects into this gully.

MH5 also receives 4 No. branch connections, including:-

100 Ø CI [A] from a 100 Ø drain point [DP] at a shower.

100 Ø CI [B] from a 100 Ø soil vent pipe [SVP] from above which serves a toilet core above.

100 Ø CI [C] from a 110 Ø UPVC bend connection from a WC, a 42 Ø UPVC waste [WP] from a WB connects to the top of the bend connection to the WC.

The final connection is 100 Ø CI [E] from a 110 Ø UPVC bend connection from a WC, a 42 Ø UPVC WP from a WB connects to the top of the bend.

The 150 Ø CI outlet from MH5 runs, via a change of direction to the head of MH3.

MH3 located in an office/server room receives one branch connection, 100 Ø CI [A] from MH4.

MH4 located in an office receives, at its head a 100 Ø CI connection [A] from an assumed open top gully [OTG] located in a light-well [no access to light-well]

MH4 receives one branch connection, 100 Ø CI [B] from an assumed OTG in a light-well, [no access to the light-well].

The 100 Ø CI outlet from MH4 runs to MH3 as previously described.

The 150 Ø CI outlet from MH3 runs to the head of MH2.

MH2 located in an office/server room and receives 4 No. branch connections, including:-

100 Ø CI [A] from a 100 Ø CI DP which receives a 75 Ø CI waste vent pipe [WVP] from above, which connects to 100 Ø CI at low level . A 42 Ø copper [Cu] WP connects to the 100 Ø CI at low level.

The 42 Ø WP is from a sink at a kitchen in a long offset run at low level below a raised floor.

100 Ø CI [B] from a 100 Ø stack from above assumed to be a RWP.

100 Ø CI [C] from an assumed OTG in a light-well [no access to the light-well].

The final connection is 100 Ø CI [D] from an assumed 100 Ø OTG in a light-well, [no access to the light-well].

The 150 Ø CI outlet from MH2 runs to the head of MH1, via a double offset.

MH1 located in a pump room, receives one branch, 100 Ø CI [A] from an open top back inlet gully [OTBIG] also in the pump room. An OTG in the Boiler Room connects to a back inlet on the gully.

A UPVC condensate waste pipe discharges over the plant room gully.

There is also a 100 Ø CI connection from an interceptor trap, in MH1, to a 110 Ø UPVC pipe to above, assumed to have formerly been a vent pipe [VP], but now used as a RWP, which drops from above and offsets at high level across the Pump Room.

The 150 Ø CI outlet from MH1 runs via a 150 Ø CI interceptor trap and 150 Ø CI outfall to the brick built public sewer below Lombard Lane.

8.0 FINDINGS OF THE SURVEY

The drawing provided to us did not show rooms or partition layouts, therefore we added them in approximate locations for clarity.

The system is combined as previously described.

We were not appointed to survey upper floors, therefore some pipes from above were not identified for purpose with certainty.

Some areas could not be accessed, such as a void behind the toilets and also the light-wells, so drainage in these locations was assumed.

The false ceiling was of metal strip panel formation, so access was limited.

All pipe-work beneath the floor is all of cast iron.

Manholes were constructed of in-situ cast concrete, with internal cast iron bolted top access chambers.

Manhole covers were of galvanised mild steel, floor finish infill type, with double seals. All manhole covers except MH1 were located below raised floors.

The structural condition of the manholes was visually good.

There were minor defects at manholes including:-

MH1 - 1 No. nut is missing from the interceptor trap plate

MH3 - 1 No. cover bolt is missing

Gullies, where visible were of cast iron with gratings of metal.

Stacks above floor level were of CI or UPVC. Some cast iron stacks were grubby and a little rusty.

Waste pipes above slab level were of copper or of UPVC.

There is a Thames Water manhole in the pavement on adjacent to a light-well. This cover could not be opened without risk of damage. It is not believed to receive connection from this building.

8.2 The findings of the CCTV Survey

The findings of the CCTV survey are shown in detail for each surveyed pipe run in the CCTV report sheets in Appendix 10.2.

Only general comments or comments on specific defects are repeated in the following text:-

Where pipe runs have several defects of a similar nature in general only the most significant will be repeated here.

There is scale in several runs, mostly light scale, which is normally ignored as not significant.

MH3	-	MH2	-	Medium scale 5% cross sectional area loss
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There is debris:-

MH2	-	MH1	-	Debris in MH1 interceptor
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There is standing water:-

MH5	-	BRANCH D	-	5% Height/Diameter
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9.0 RECOMMENDATIONS

These recommendations are given as though the system is to be retained as now existing, without taking into account any possible renovation or redevelopment, of which we are not aware. Therefore some recommendations may be superfluous.

All parts of the system which could not be entered for survey should be made accessible, including all four light-wells and the void below the WC. The gullies in these areas should be serviced and will, it is assumed require cleaning.

The minor scale and debris deposits should be cleared by jetting.

All retained manhole covers and frames should be cleaned, any rust removed, repainted if necessary and re-fitted with all seals checked.

The internal bolted inspection chambers should be cleaned, any rust removed, repainted and re-fitted with new gaskets and greased nuts and bolts.

The missing nut to the interceptor trap plate at MH1 should be replaced.

The missing cover bolt at MH3 should be replaced.

All gully gratings and covers should be cleaned, inspected, any rust removed, repainted and re-fitted including new seals or screws to sealed tops [if necessary].

All retained pipe-work should be tested for leaks.

The soil, waste and rainwater pipe system at upper floors should be surveyed in order to confirm with certainty whether stacks receive rainwater, soil and waste or both.

END OF TEXT

SCHEDULE OF PHOTOGRAPHS

Any address

	LOCATION	Comments
1.	PLANT ROOM	View of MH1
2.	PLANT ROOM	Internal view of MH1
3.	PLANT ROOM	Internal view of MH1 showing internal access chamber
4.	OFFICE/SERVER ROOM	View of MH2 cover below raised floor
5.	OFFICE/SERVER ROOM	Internal view of MH2
6.	OFFICE/SERVER ROOM	Internal view of MH2
7.	OFFICE/SERVER ROOM	View of MH3, below raised floor
8.	OFFICE/SERVER ROOM	Internal view of MH3
9.	OFFICE/SERVER ROOM	Internal view of MH3
10.	OFFICE	View of MH4 cover, below raised floor
11.	OFFICE	View of MH4 cover, below raised floor
12.	OFFICE	Internal view of MH4
13.	TOILET CORRIDOR	View of location of MH5
14.	TOILET CORRIDOR	View of MH5
15.	TOILET CORRIDOR	Internal view of MH5
16.	PUMP ROOM	View of open top gully
17.	BOILER ROOM	View of open top back inlet gully [OTG1] with UPVC condensate waste pipe discharging over gully
18.	BASEMENT LIGHT-WELL	View of typical light-well through window. All locked and not accessible