Envirocheck® Flood

RMS 100 year Return Flood Map (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point

RMS 100 year Return Flood Data

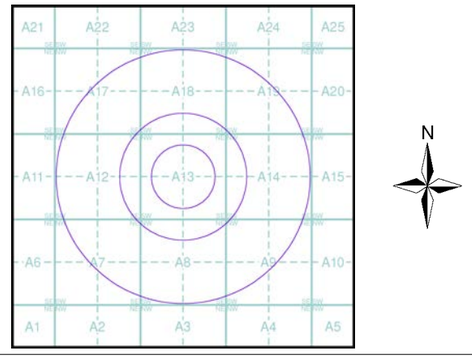
Flood Depth (mm)	Flood Type: Defended Flood	Undefended Flood	Pluvial & Minor River Flood (flood depth n/a)
0 - 200			
201 - 500			
501 - 2000			
2001 +			

Contours (height in metres)

Standard Contour 105 100 95 — 167.3 Spot Height

Index Contour — 45.8 Air Height

RMS 100 year Return Flood Map - Slice A



Order Details

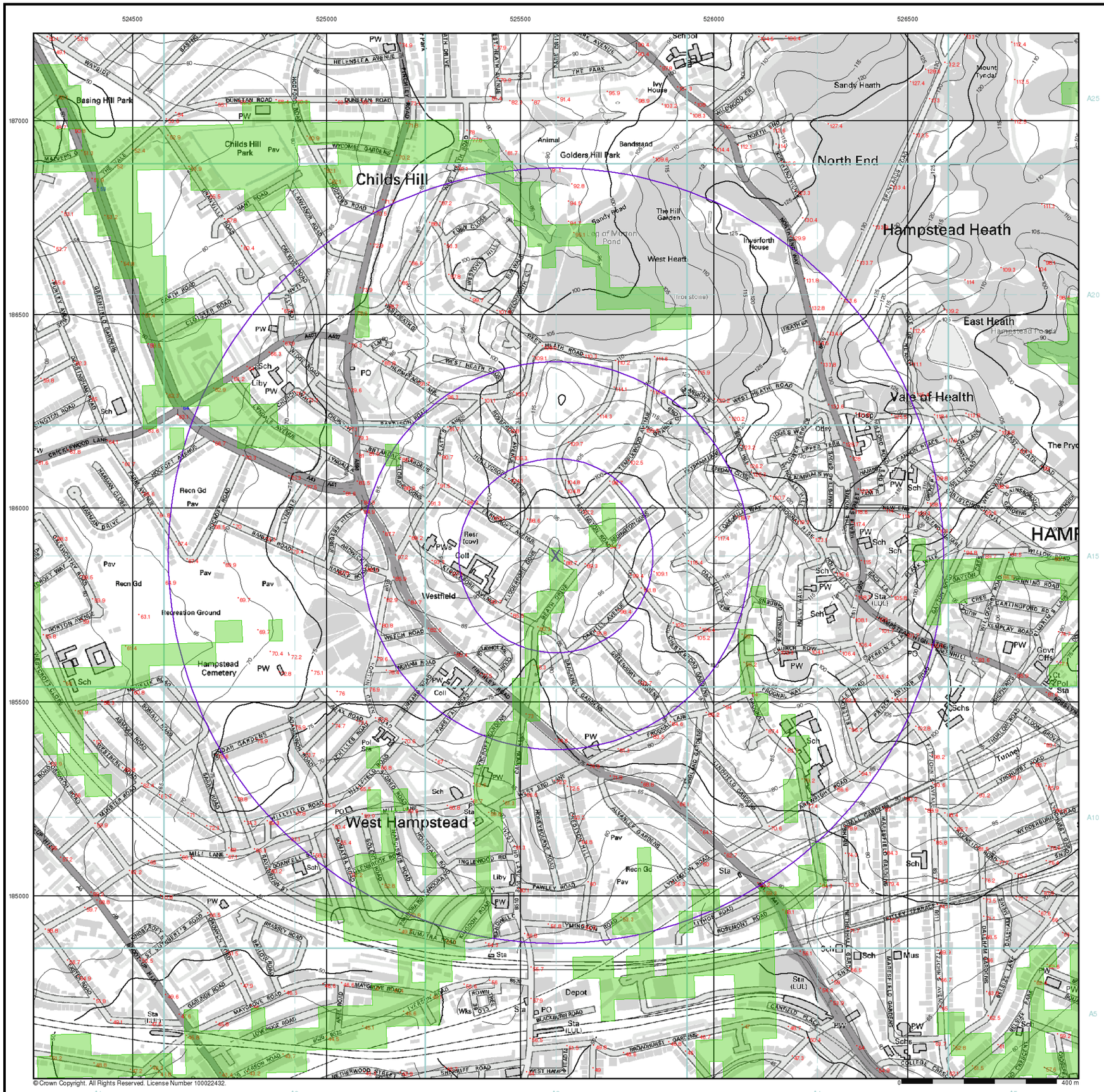
Order Number:	43193165_1_1
Customer Ref:	110601
National Grid Reference:	525590, 185880
Slice:	A
Site Area (Ha):	0.01
Search Buffer (m):	1000

Site Details

36, Ferncroft Avenue, London, NW3 7PE

Landmark® Information Group

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



A1 A2 A3 A4 A5

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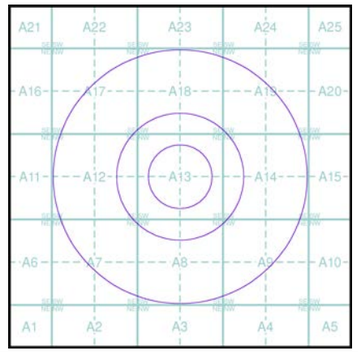
RMS 1000 year Return Flood Map - Slice A



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524500
525000
525500
526000
526500
187000
186500
186000
185500
185000
A25
A20
A15
A10
A5
Childs Hill
Golders Hill Park
North End
Hampstead Heath
West Heath
Vale of Health
East Heath
West Hampstead
Hampstead Cemetery
Recreation Ground
Basing Hill Park
Childs Hill Park
Leg of Mutton Pond
Sandy Heath
Bandstand
Animal
The Hill Garden
Inverforth House
Ivy House
Mount Tyndal
Sandy Road
Willoughby Cr
North End Way
Spaniards Road
Heath Drive
Heath Street
Hampstead High Street
Fitzjohn's Avenue
Finchley Road
West End Lane
Frognal
Frognal Lane
Church Row
Pond Street
Rosslyn Hill
Tunnel
Heath Road
West Heath Road
Lyndhurst Road
Lyndhurst Gardens
Mansfield Gardens
Willoughby Road
Keats Grove
Keats House
Hampstead Heath Overground
Hampstead Heath (London)
Hampstead Heath (LUL)
Finchley Road & Frognal (LUL)
Swiss Cottage (LUL)
Golders Green (LUL)
Brent Cross (LUL)
Hendon Central (LUL)
Colindale (LUL)
Edgware (LUL)
Mill Hill East (LUL)
Finchley Central (LUL)
Mill Hill Broadway (Thameslink)
Cricklewood (Thameslink)
Hampstead Heath Depot
Hampstead Heath Pumping Station
Hampstead Heath Tunnel
Hampstead Heath Wks
Hampstead Heath Rsvr (cov)
Hampstead Heath Rsvr (Uncov)
Hampstead Heath Coll
Hampstead Heath Pond
Hampstead Heath Recn Gd
Hampstead Heath Pav
Hampstead Heath Sch
Hampstead Heath Govt Offs
Hampstead Heath Ct
Hampstead Heath Pol Sta
Hampstead Heath Mus
Hampstead Heath Hosp
Hampstead Heath Obsy
Hampstead Heath Liby
Hampstead Heath PO
Hampstead Heath Sta
Hampstead Heath Schs
Hampstead Heath Tunnel
Hampstead Heath Depot
Hampstead Heath Wks
Hampstead Heath Rsvr (c

Envirocheck® Flood

EA Historic Flood Map (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID

EA Historic Flood Events Data

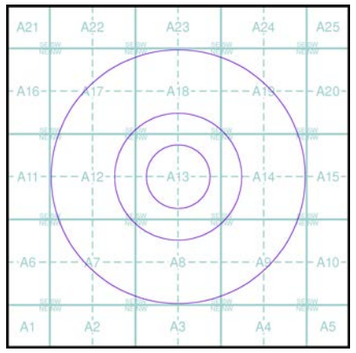
- Channel Capacity Exceeded (no raised defences)
- Groundwater/High Water Table
- Local Drainage/Surface Water
- Mechanical Failure
- Obstruction/Blockage - Bridge
- Obstruction/Blockage - Channel
- Obstruction/Blockage - Culvert
- Obstruction/Blockage - Debris Screen
- Operational Failure/ Breach of Defence
- Other
- Overtopping of Defences
- Unknown
- Historical Flood Liabilities

Contours (height in metres)

Standard Contour 105 100 95 — Spot Height 167.3

Index Contour — Air Height 45.8

EA Historic Flood Map - Slice A



Order Details

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National Grid Reference:	525590, 185880
Slice:	A
Site Area (Ha):	0.01
Search Buffer (m):	1000

Site Details

36, Ferncroft Avenue, London, NW3 7PE

Landmark® Information Group

Tel: 0844 844 9952
Fax: 0844 844 9951
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Envirocheck® Report:

Flood Screening Report Datasheet

Order Details:

Order Number:
43193165_1_1

Customer Reference:
110601

National Grid Reference:
525590, 185880

Slice:
A

Site Area (Ha):
0.01

Search Buffer (m):
1000

Site Details:

36, Ferncroft Avenue
London
NW3 7PE

Client Details:

Mr T Attwood
Alan Conisbee & Associates
1-5 Offord Street
London
N1 1DH

Contents

Contents

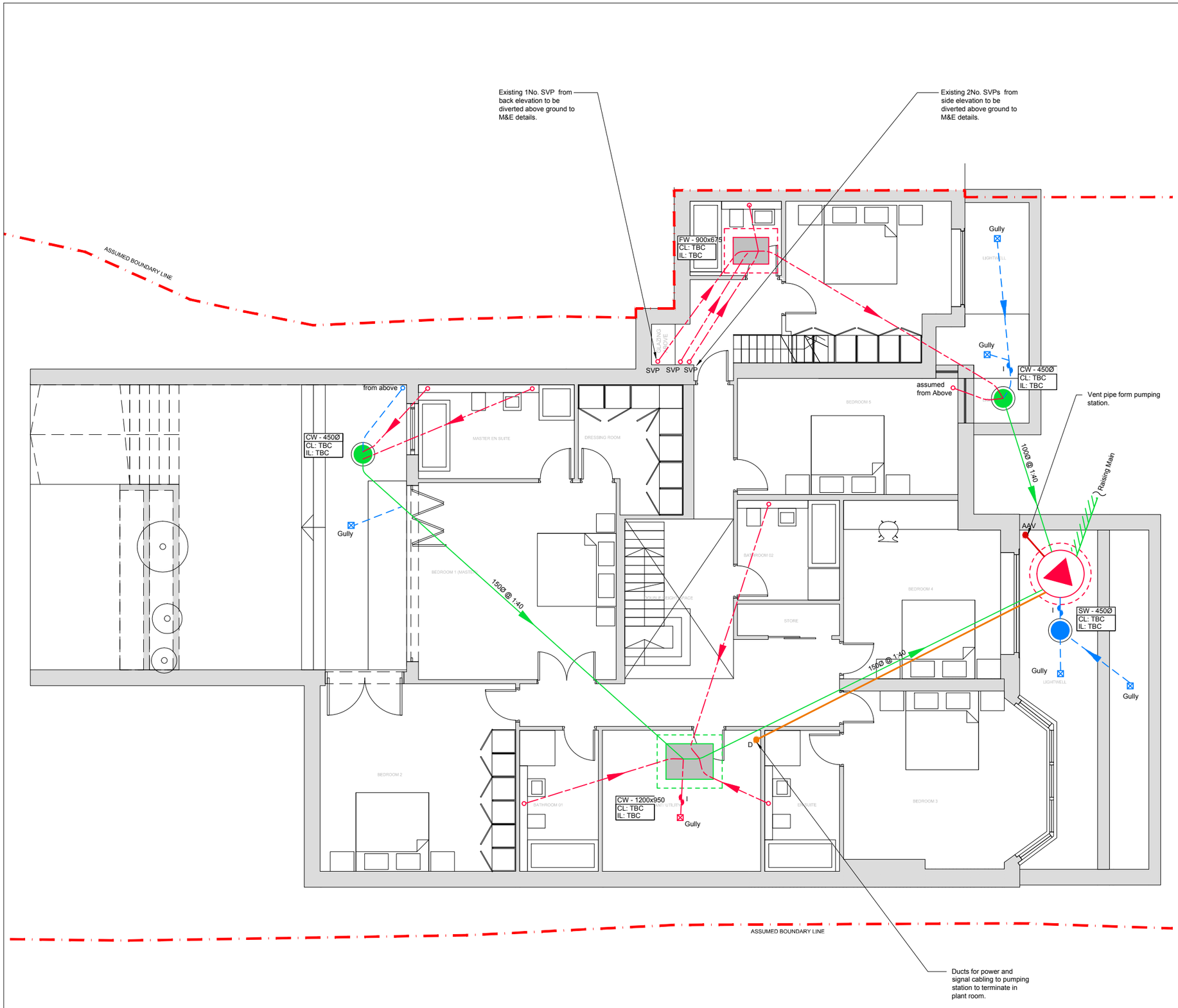
Report Version v47.0

Flood Insurance Risk Data

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Postcode Sector Flood Insurance Claim Ratings Insurance Rating: Medium Flood Insurance Claim Rating Postcode Sector: NW3 7	A13NE (N)	0	4	525592 185877

APPENDIX E

Preliminary Drainage Layout & Site Proposals



NOTES

23. CDM note: All pipework, silt traps, catchpits, trapped gullies, attenuation tanks and pump chambers to be regularly inspected every three months and cleared out on a regular frequency for the first nine months. After this period the frequency can be reduced to every six months. Pump sets to be inspected and maintained in accordance with the recommendations of the manufacturer/pump provider. Porous surface to be regularly swept three times a year to remove the silt. Grease traps/interceptors are to be instected/emptied at least once a moth and, preferably, every two weeks.
24. This drawing is to be read in conjunction with all relevant Conisbee drawings.
25. HEALTH AND SAFETY: The works shall be carried out by specialist competent and experienced contractors who are members of a recognised national organisation.Operatives shall have received full and appropriate training for the operations they are to undertake. All work shall be carried out in accordance with all pertinent Health and Safety Regulations.
26. Private Pipe Concrete Encasement: All drain runs constructed with less than 900mm cover between finished ground level and crown of the pipe are to be encased with a minimum of 150mm grade ST4 concrete. The casing concrete is to be jointed at every pipe joint position with 20mm flexcell board to form joint and provide joint flexibility.
27. Adoptable Pipe Concrete Encasement: All drain runs constructed with less than 1200mm cover between finished ground level and crown of the pipe are to be encased with a minimum of 150mm grade ST4 concrete. The casing concrete is to be jointed at every pipe joint position with 20mm flexcell board to form joint and provide joint flexibility.
28. Before commencing any Sewer or drainage works, the Groundworker must satisfy themselves, The Client and the Local Authority of actual levels and conditions of existing sewers.
29. Where groundwater ingress is encountered, consider the use of a sump / pump arrangement. Where excavations are >1m deep, consider the use of full perimeter trench support.
30. The existing sewer connections are be successfully confirmed prior to commencing any upstream drainage works.

LEGEND

- Existing private sewer
- GRP package pumping station. Details to be confirmed.
- D — uPVC duct for electrical cables and termination point. Details to be confirmed.
- 100Ø @ 1:40 — Private surface water pipe and chamber. Pipe diameter, gradient and chamber diameter and levels indicated.
- 100Ø @ 1:40 — Private foul water pipe and chamber. Pipe diameter, gradient and chamber diameter and levels indicated.
- 100Ø @ 1:40 — Private combined water pipe and chamber. Pipe diameter, gradient and chamber diameter and levels indicated.
- Polypropylene universal inspection chambers, 450 dia, 100 inlet / outlet connections (6 no. max) or 150 inlet/outlet connections (4 no max).
- Internal RC manhole with sealed prefabricated inspection chambers.
- Gully — Proposed trapped gully to Architect's Specification.
- I — Proposed intercepting trap.

Design Notes:

Total existing building area (including terraces at back):	370 m²
Existing peak rate run off:	5.14 l/s
Existing foul water discharge (1 no. domestic property):	<1.00 l/s
Total proposed building area (including terrace & lightwells):	390 m²
Proposed surface water discharge rate:	5.42 l/s
Proposed peak foul water discharge	<1.00 l/s

All RWPs, SVPs & stub stacks are assumed and to be confirmed.

NOTES

1. Invert levels and positions of existing drains / chambers / sewers where new connections are to be made must be checked and confirmed to the engineer prior to the commencement of any works.
2. All drainage works shall be carried out in accordance with the requirements of the Local Authority, the Environment Agency and in conjunction with all relevant British Standards, Codes of Practice.
3. All drainage shall comply with the typical details and the requirements of BS EN 752 and Part H of the Building Regulations.
4. Any part of the existing drainage system to be retained as part of the new scheme shall be cleaned and inspected. Any structural defects shall be repaired using appropriate and approved means.
5. For setting-out dimensions of SVP's, RWP's etc, refer to Architect's or Mechanical Engineer's drawings. Positions shown are indicative and subject to final design.
6. All foul and RWP connections shall be 100mm diameter unless otherwise specified.
7. All precast concrete units used in the drainage works shall be manufactured using sulphate resisting cement.
8. Manhole covers and frames shall be BS EN 124 and shall be Kitemarked. Covers and frames shall be heavy duty D400 in carriageways and vehicular areas and medium duty B125 in footways and soft landscaping. In blocked/concrete paved areas covers shall be recessed fabricated steel. All recessed covers shall in accordance with the FACTA association gradings.
9. All internal inspection chambers to be recessed, double sealed with screw down covers.
10. Cover levels are to be adjusted locally to suit finished ground levels.
11. At least one soil pipe at the head of each foul run shall vent to the atmosphere.
12. Existing drainage to be removed is to be broken out to bed level and void backfilled with granular material, compacted in layers not exceeding 250mm.
13. All drain runs from SVP's, stub stacks or FW gullies to be 100mm dia laid at 1:40 gradient unless otherwise stated. All RWP's to be 100mm dia laid 1:80 min unless otherwise stated.
14. Access panels are to be provided to all rainwater pipes, max 600 above finished ground level.
15. All manholes / inspection chambers in block paved areas, to have recessed covers. MH covers in paved areas to have cover & frame orientated 'square' with paving to minimise cut slabs or blocks.
16. All Gradients at drainage runs are indicative. runs to be laid invert to invert.
17. Generally pipes to have granular Bed & Surround in accordance with manufacturers recommendations, ensuring adequate protection with respect to depth and location.
18. All private drainage to be laid to levels shown using flexibly jointed pipes, either uPVC to BS 4660 and BS 5481 or vitrified clayware to BS EN 295.
19. Rodding eyes, etc are to be laid to manufacturers minimum cover and depth to allow adequate fall from adjoining unit.
20. Where new sewers are constructed within 5m of a new or existing tree the sewer shall be concrete encased against root intrusion. Refer to drainage details.
21. All new drainage to be jetted and CCTV surveyed on completion. Contractor to make sure that the drainage is fully operational. Refer to Drainage maintenance manual for maintenance details.
22. All runs connecting into the public drainage network to be vitrified clay, extra length to BS EN 295 or BS65 with plain sleeved or socketed flexible joints.

Rev	Date	Description	Drawn	Check
P1	11.03.13	Issued for inclusion in FRA.	DN	TG

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Consulting Civil Engineers
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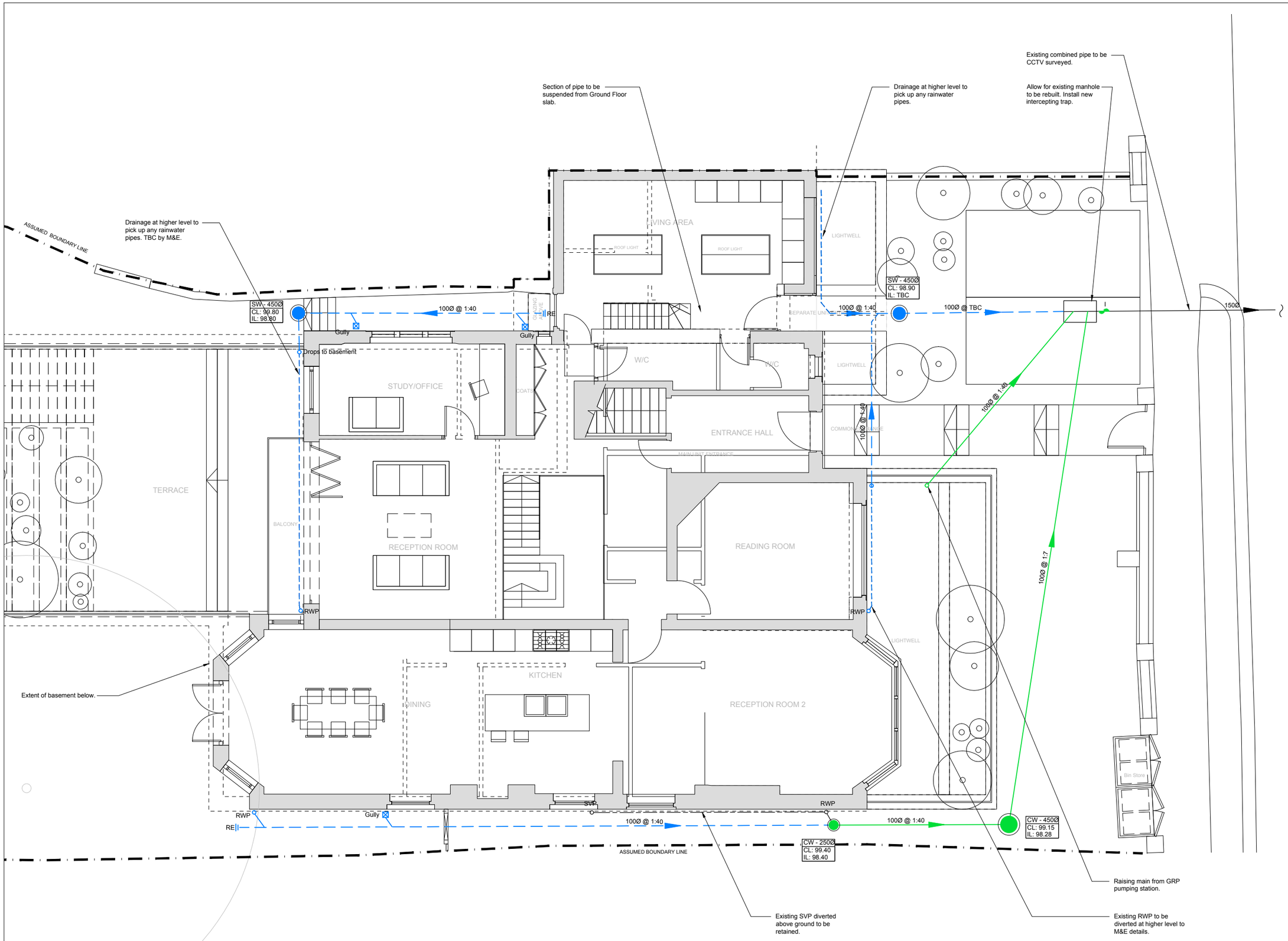
www.conisbee.co.uk

Drawing Status: PRELIMINARY
Project: 44 FERNCROFT AVENUE
Title: DRAINAGE LAYOUT BASEMENT

Date: FEB '13
Scale: 1:50 @ A1
Drawn: DN
Engineer: TG
Project No: **110601**
Drawing No: **C100**
Revision: **P1**



NOTES

1. For general notes refer to drawing no. C100 - Basement Drainage Layout

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THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE SPECIFICATION AND ALL OTHER RELEVANT DRAWINGS. DO NOT SCALE FROM THIS DRAWING.

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Drawing Status: PRELIMINARY

Project: 44 FERNCROFT AVENUE

Title: DRAINAGE LAYOUT GROUND FLOOR

Date: FEB '13
Scale: 1:50 @ A1
Drawn: DN
Engineer: TG
Project No: **110601**
Drawing No: **C101**
Revision: **P1**