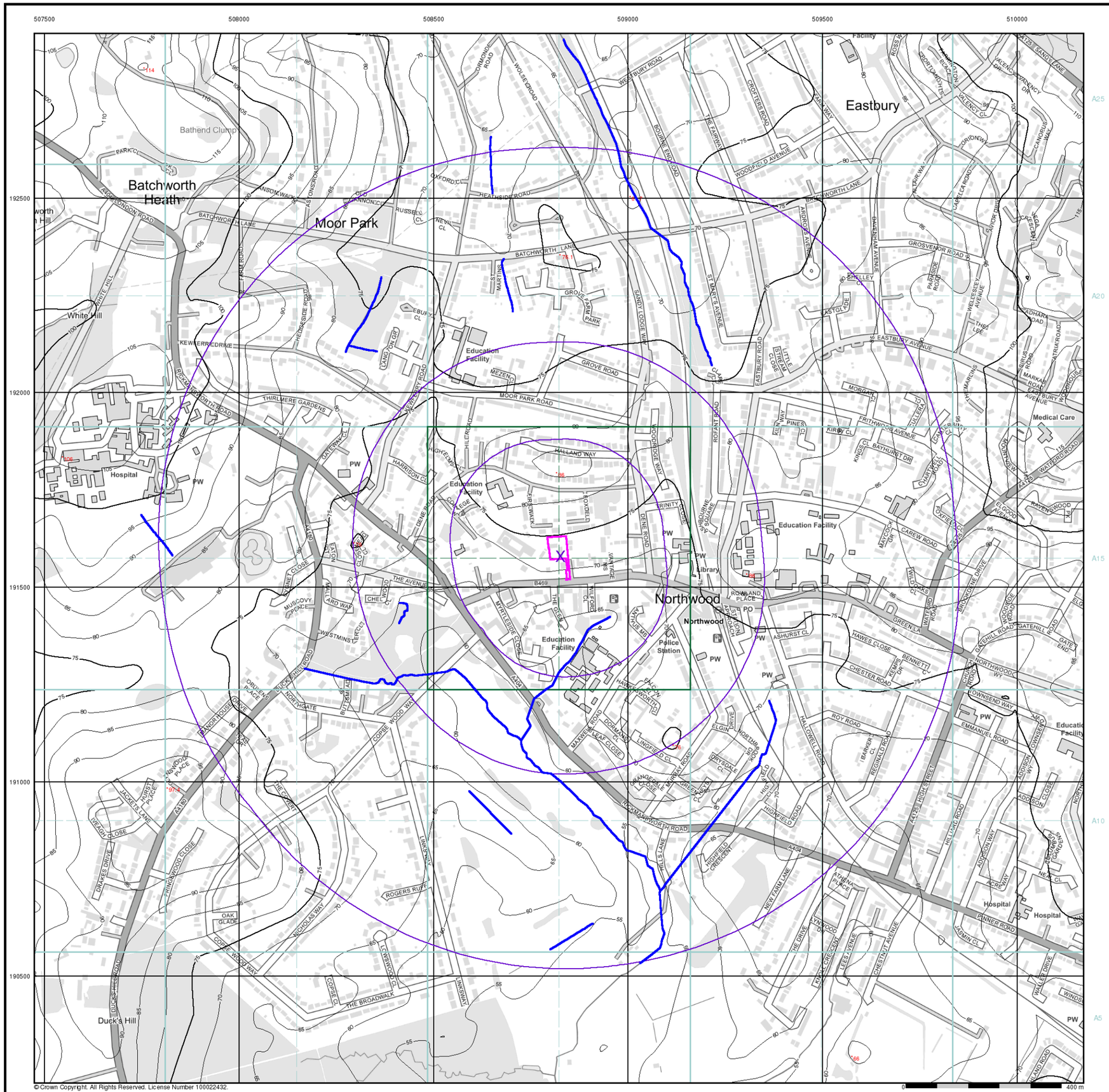



Envirocheck®

LANDMARK INFORMATION GROUP®

## General

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

## OS Water Network Data

- Canal
- Reservoir
- Foreshore
- Marsh
- Tidal River
- Inland River
- Drain
- Other
- Lake
- Transfer
- Lock Or Flight Of Locks
- Sea

## Contours (height in meters)

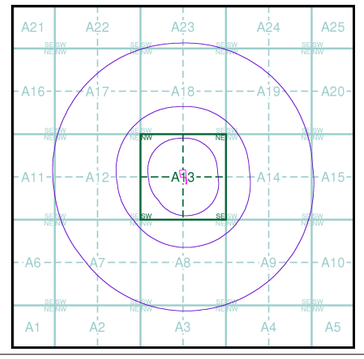
Standard Contour 105 100 95

Master Contour

Spot Height 167.3

- MLW Mean Low Water
- MHW Mean High Water

## OS Water Network Map - Slice A




## Order Details

| | |
|---|---|
| Order Number: | 204084438_1_1 |
| Customer Ref: | RML 6980 |
| National Grid Reference: | 508830, 191580 |
| Slice: | A |
| Site Area (Ha): | 0.31 |
| Search Buffer (m): | 1000 |

## Site Details

London School of Theology, Green Lane, NORTHWOOD, HA6 2UW


Landmark INFORMATION GROUP

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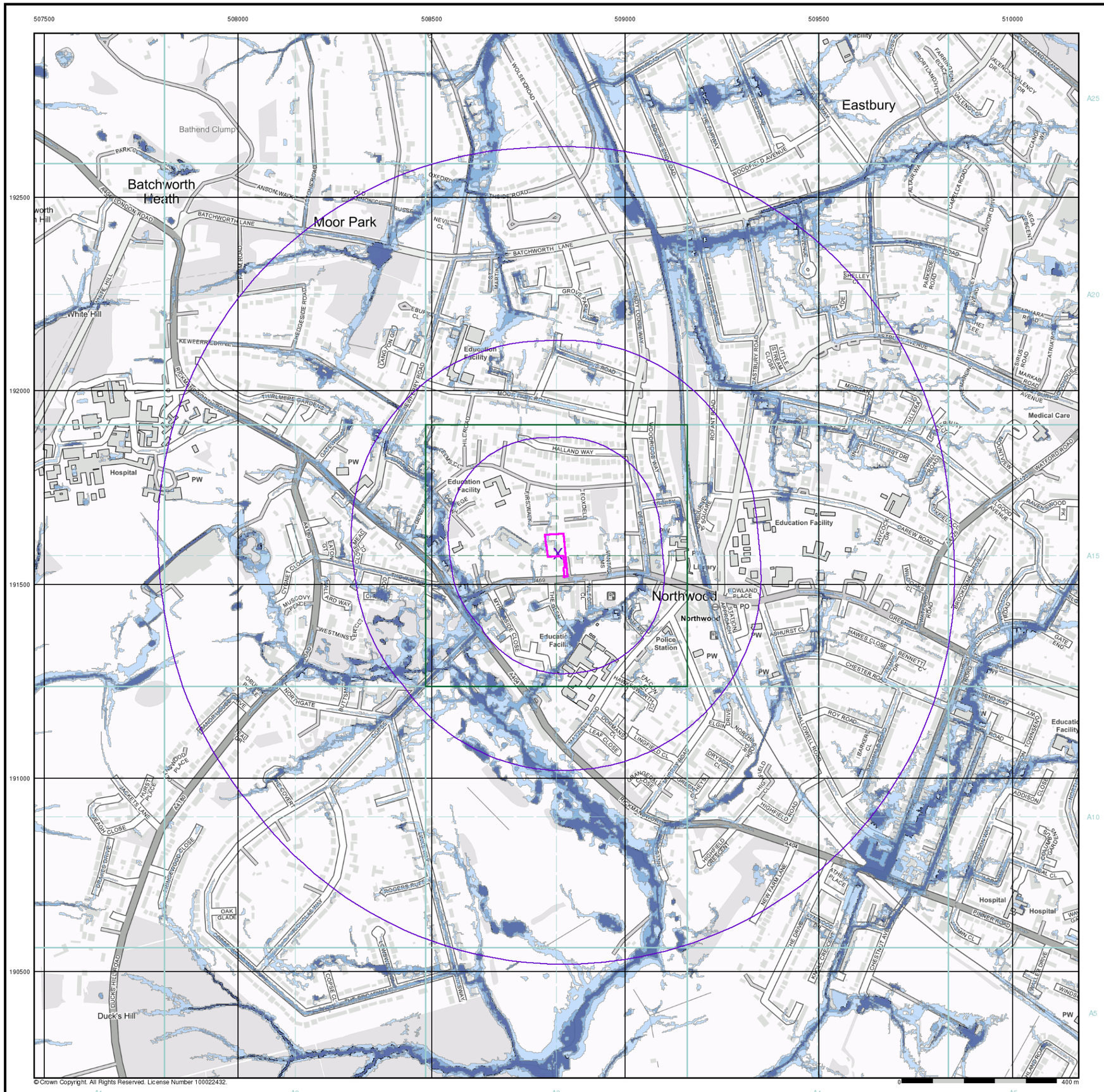
Web: www.envirocheck.co.uk




# Envirocheck®

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## General

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

## Risk of Flooding from Surface Water

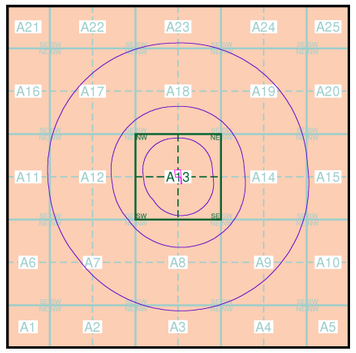
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

## Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

## EA/NRW Suitability Map - Slice A




## Order Details

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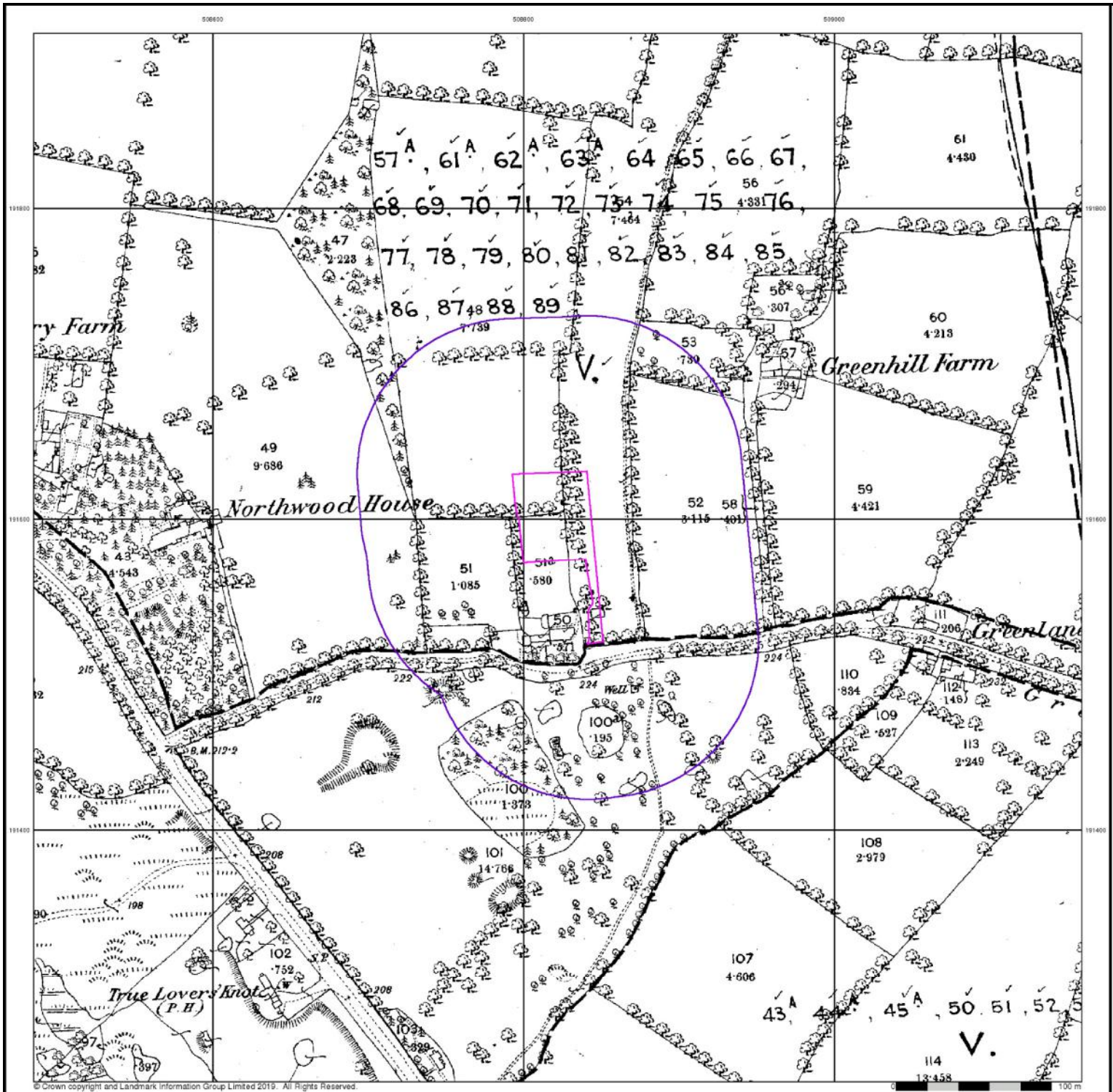




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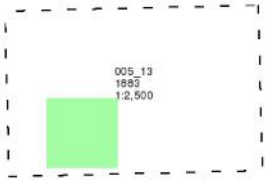
## Middlesex

**Published 1883**

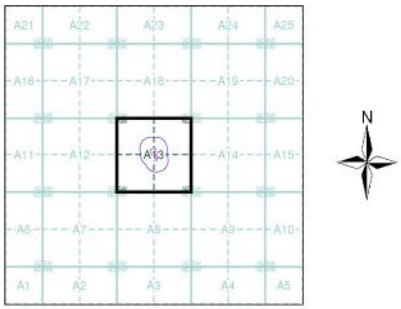
**Source map scale - 1:2,500**

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

## Map Name(s) and Date(s)




## Historical Map - Segment A13




## Order Details

| | |
|---|---|
| Order Number: | 204084438_1_1 |
| Customer Ref: | RML 6980 |
| National Grid Reference: | 508830, 191580 |
| Slice: | A |
| Site Area (Ha): | 0.31 |
| Search Buffer (m): | 100 |

## Site Details

London School of Theology, Green Lane, NORTHWOOD, HA6 2UW

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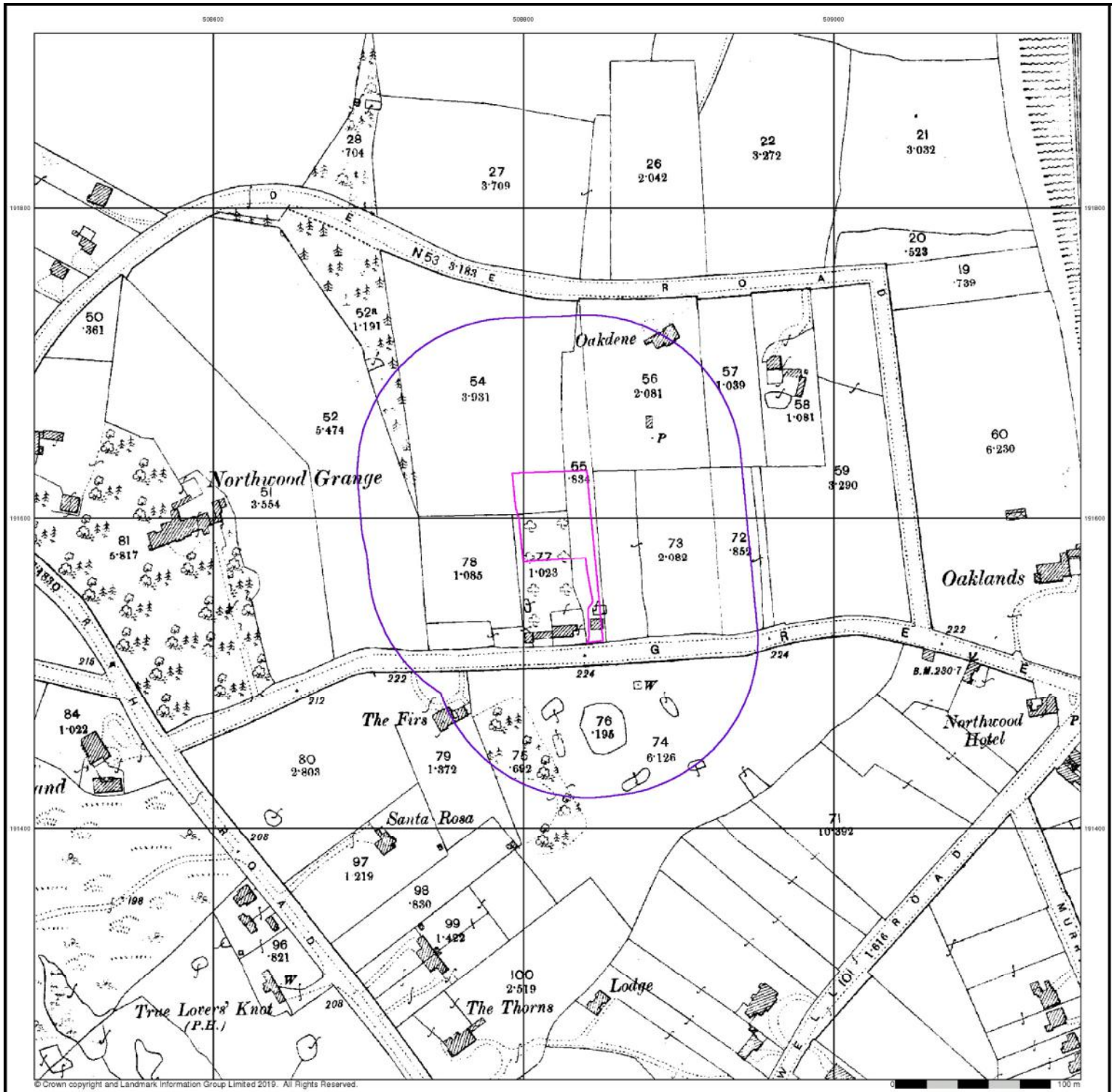


# Envirocheck®

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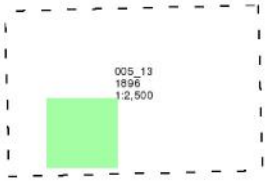
## Middlesex

**Published 1896**

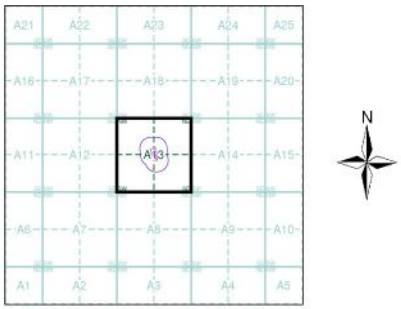
**Source map scale - 1:2,500**

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

## Map Name(s) and Date(s)




## Historical Map - Segment A13




## Order Details

| | |
|---|---|
| Order Number: | 204084438_1_1 |
| Customer Ref: | RML 6980 |
| National Grid Reference: | 508830, 191580 |
| Slice: | A |
| Site Area (Ha): | 0.31 |
| Search Buffer (m): | 100 |

## Site Details

London School of Theology, Green Lane, NORTHWOOD, HA6 2UW

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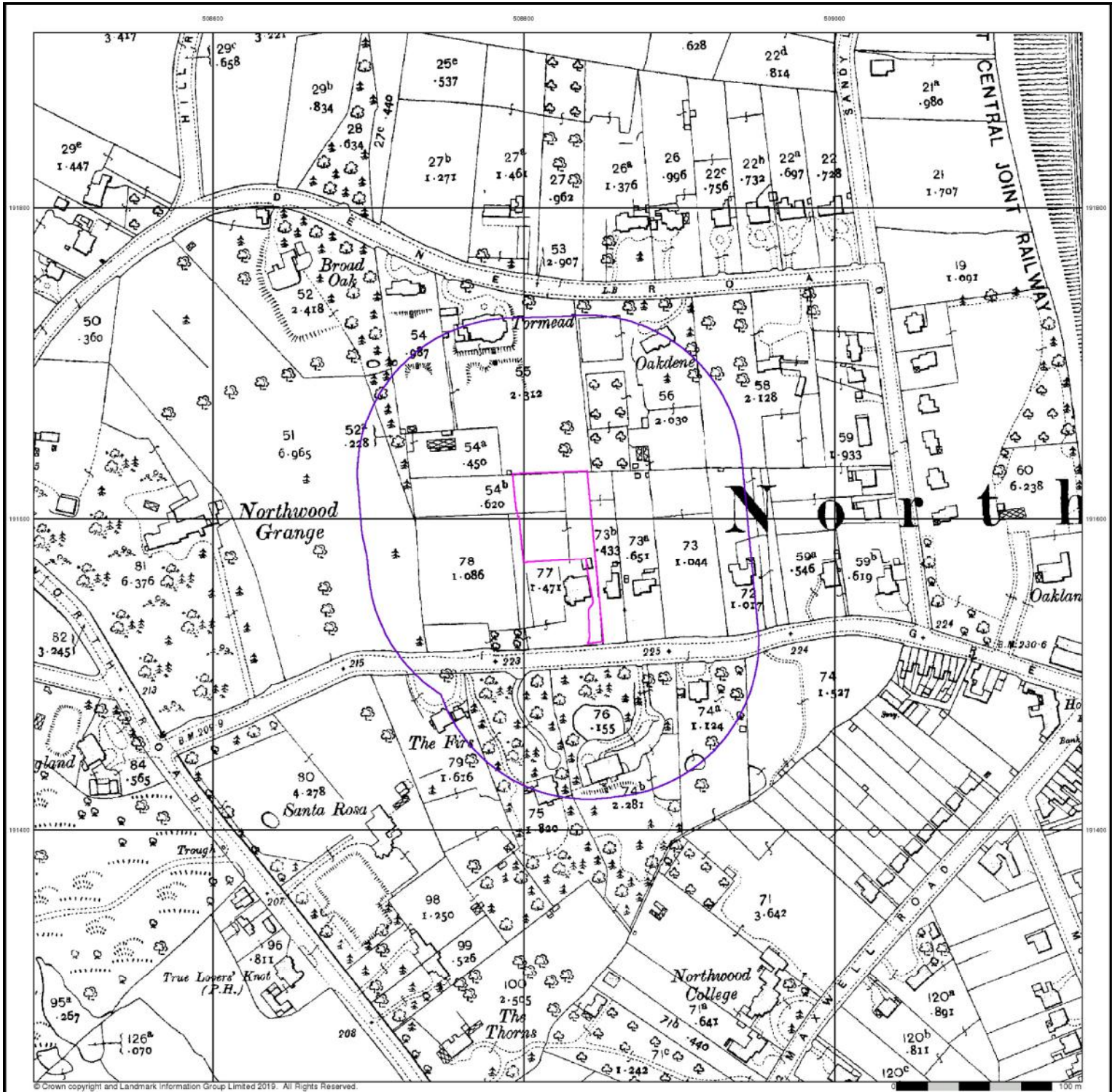


# Envirocheck®

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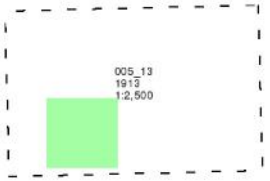
## Middlesex

**Published 1913**

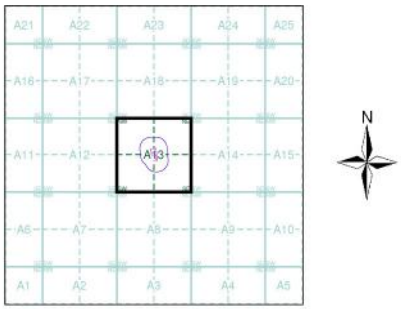
**Source map scale - 1:2,500**

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

## Map Name(s) and Date(s)




## Historical Map - Segment A13

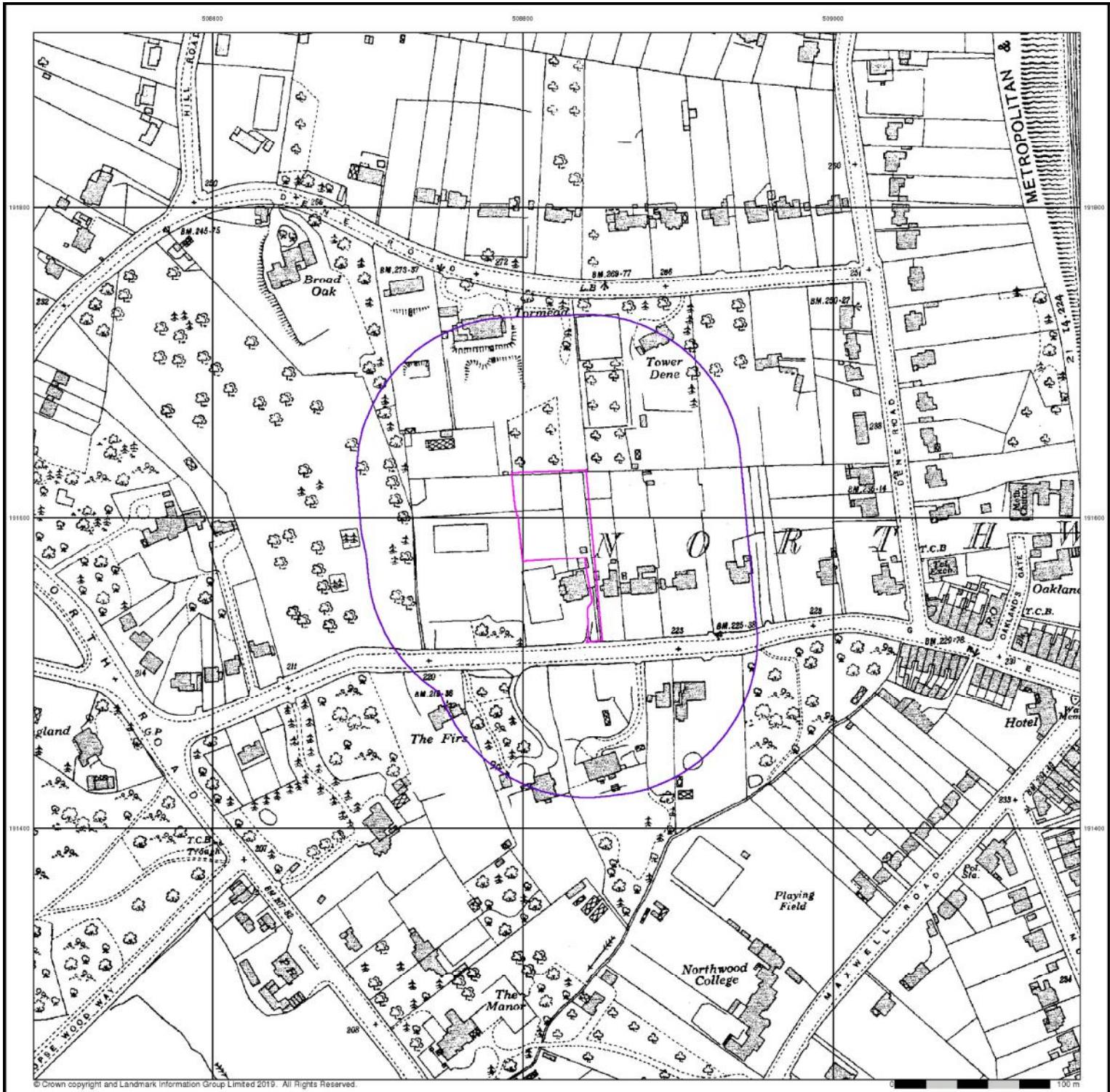



## Order Details

| | |
|---|---|
| Order Number: | 204084438_1_1 |
| Customer Ref: | RML 6980 |
| National Grid Reference: | 508830, 191580 |
| Slice: | A |
| Site Area (Ha): | 0.31 |
| Search Buffer (m): | 100 |

## Site Details

London School of Theology, Green Lane, NORTHWOOD, HA6 2UW






# Envirocheck®

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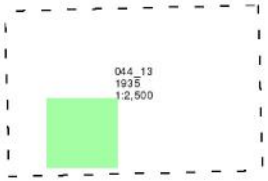
## Hertfordshire

**Published 1935**

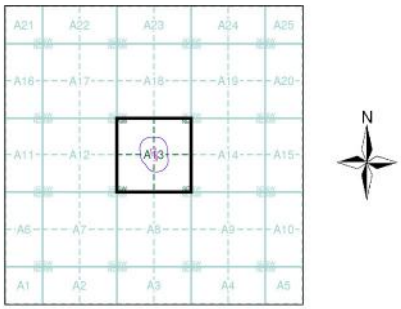
**Source map scale - 1:2,500**

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

## Map Name(s) and Date(s)




## Historical Map - Segment A13




## Order Details

| | |
|---|---|
| Order Number: | 204084438_1_1 |
| Customer Ref: | RML 6980 |
| National Grid Reference: | 508830, 191580 |
| Slice: | A |
| Site Area (Ha): | 0.31 |
| Search Buffer (m): | 100 |

## Site Details

London School of Theology, Green Lane, NORTHWOOD, HA6 2UW

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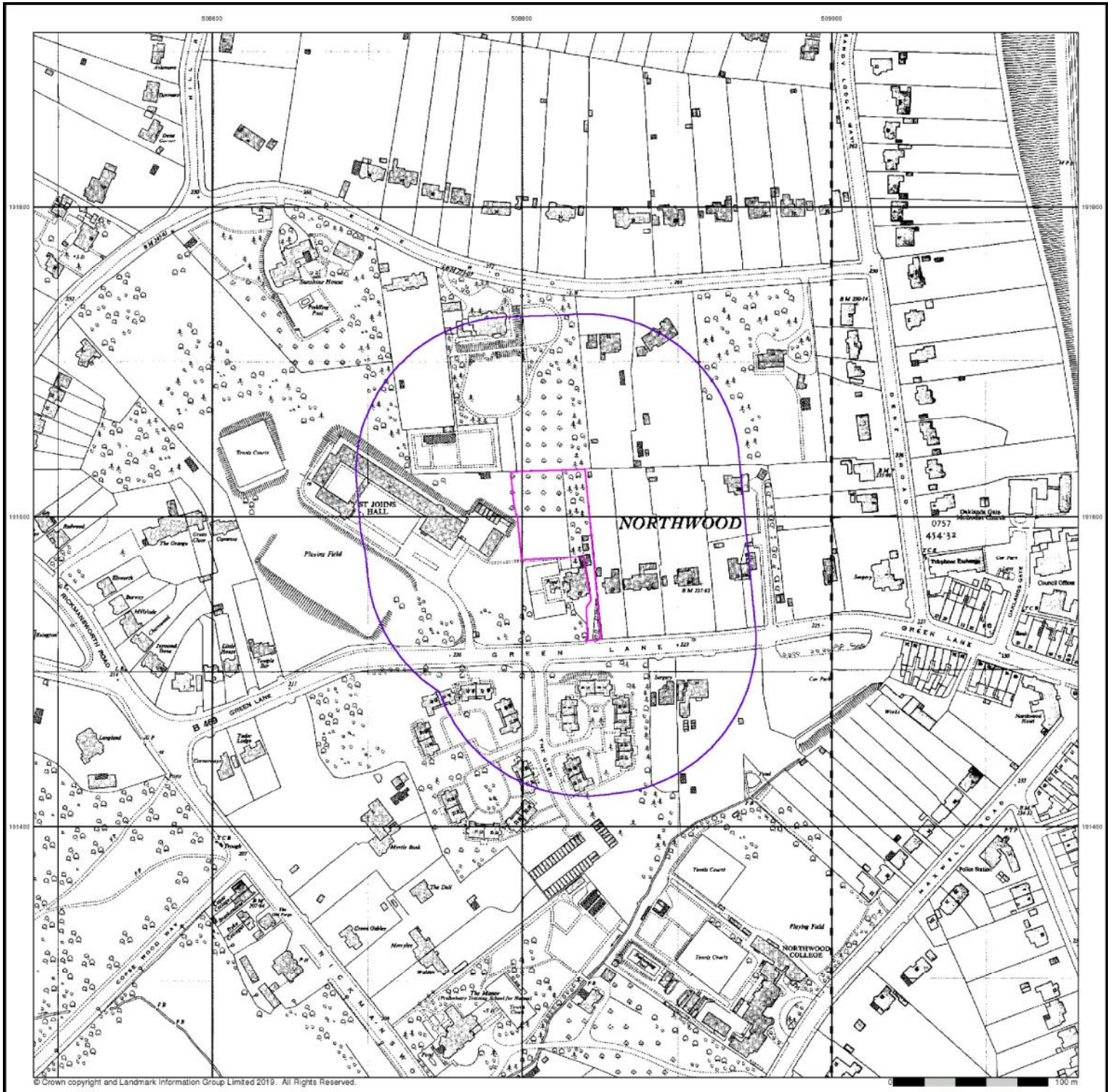
Web: www.envirocheck.co.uk



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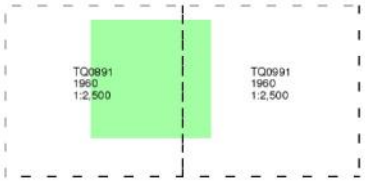
## Ordnance Survey Plan

**Published 1960**

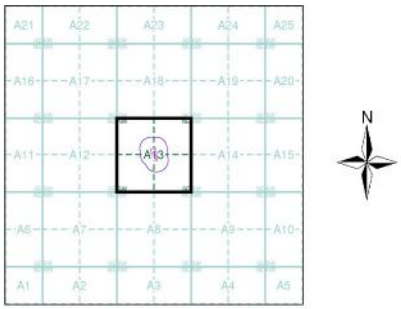
**Source map scale - 1:2,500**

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

## Map Name(s) and Date(s)




## Historical Map - Segment A13




## Order Details

| | |
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| Order Number: | 204084438_1_1 |
| Customer Ref: | RML 6980 |
| National Grid Reference: | 508830, 191580 |
| Slice: | A |
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## Site Details

London School of Theology, Green Lane, NORTHWOOD, HA6 2UW

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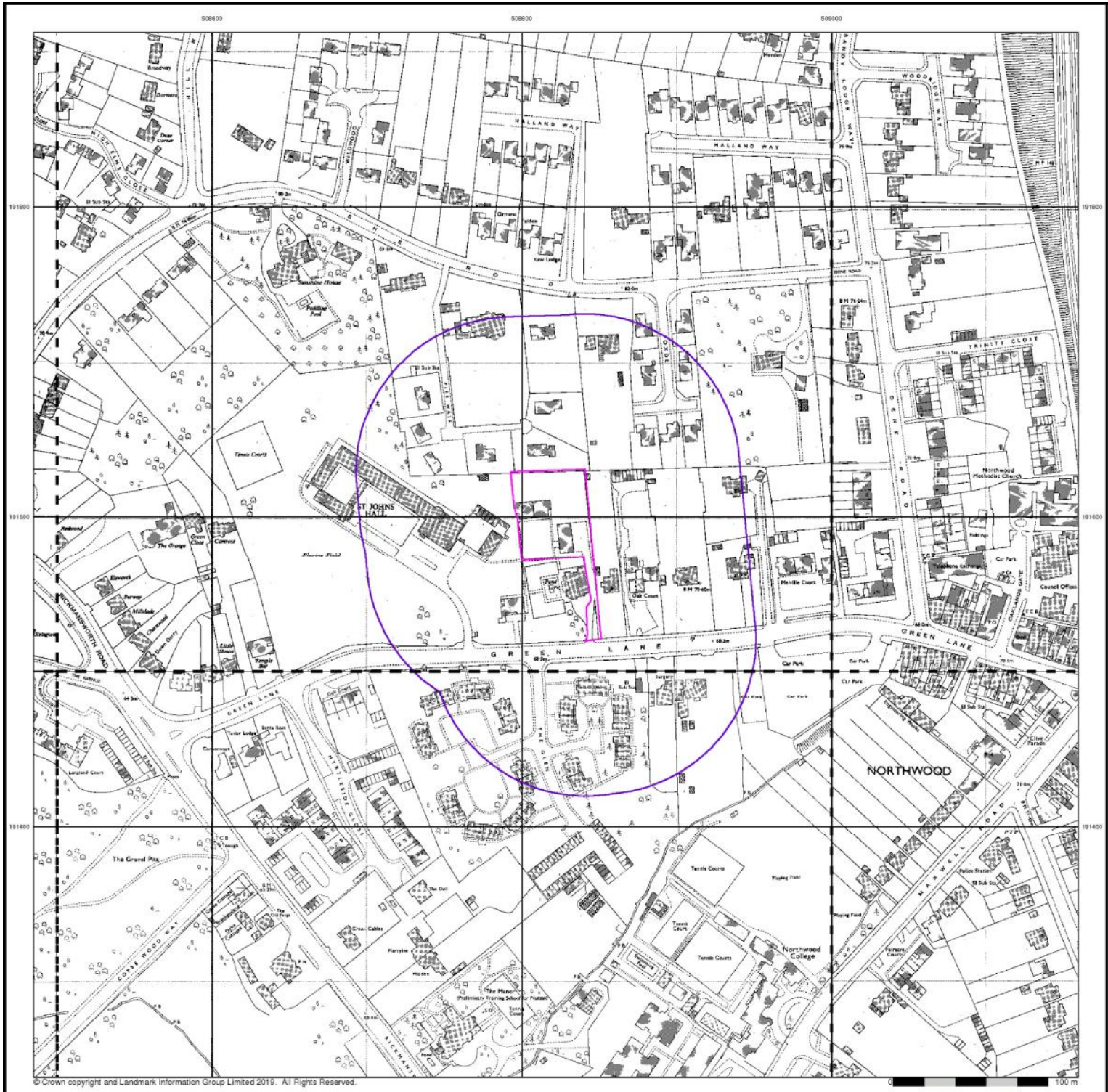
Fax: 0844 844 9951
Web: www.envirocheck.co.uk






# Envirocheck®

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## Ordnance Survey Plan

**Published 1970 - 1976**

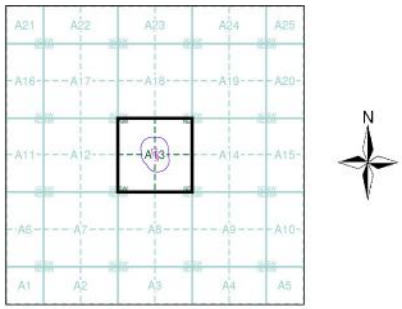
**Source map scale - 1:1,250**

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

## Map Name(s) and Date(s)

| | | |
|---|---|---|
| TQ0891NW 1976 1:1,250 | TQ0891NE 1970 1:1,250 | TQ0991NW 1973 1:1,250 |
| TQ0891SW 1974 1:1,250 | TQ0891SE 1973 1:1,250 | TQ0991SW 1970 1:1,250 |

## Historical Map - Segment A13




## Order Details

| | |
|---|---|
| Order Number: | 204084438_1_1 |
| Customer Ref: | RML 6980 |
| National Grid Reference: | 508830, 191580 |
| Slice: | A |
| Site Area (Ha): | 0.31 |
| Search Buffer (m): | 100 |

## Site Details

London School of Theology, Green Lane, NORTHWOOD, HA6 2UW

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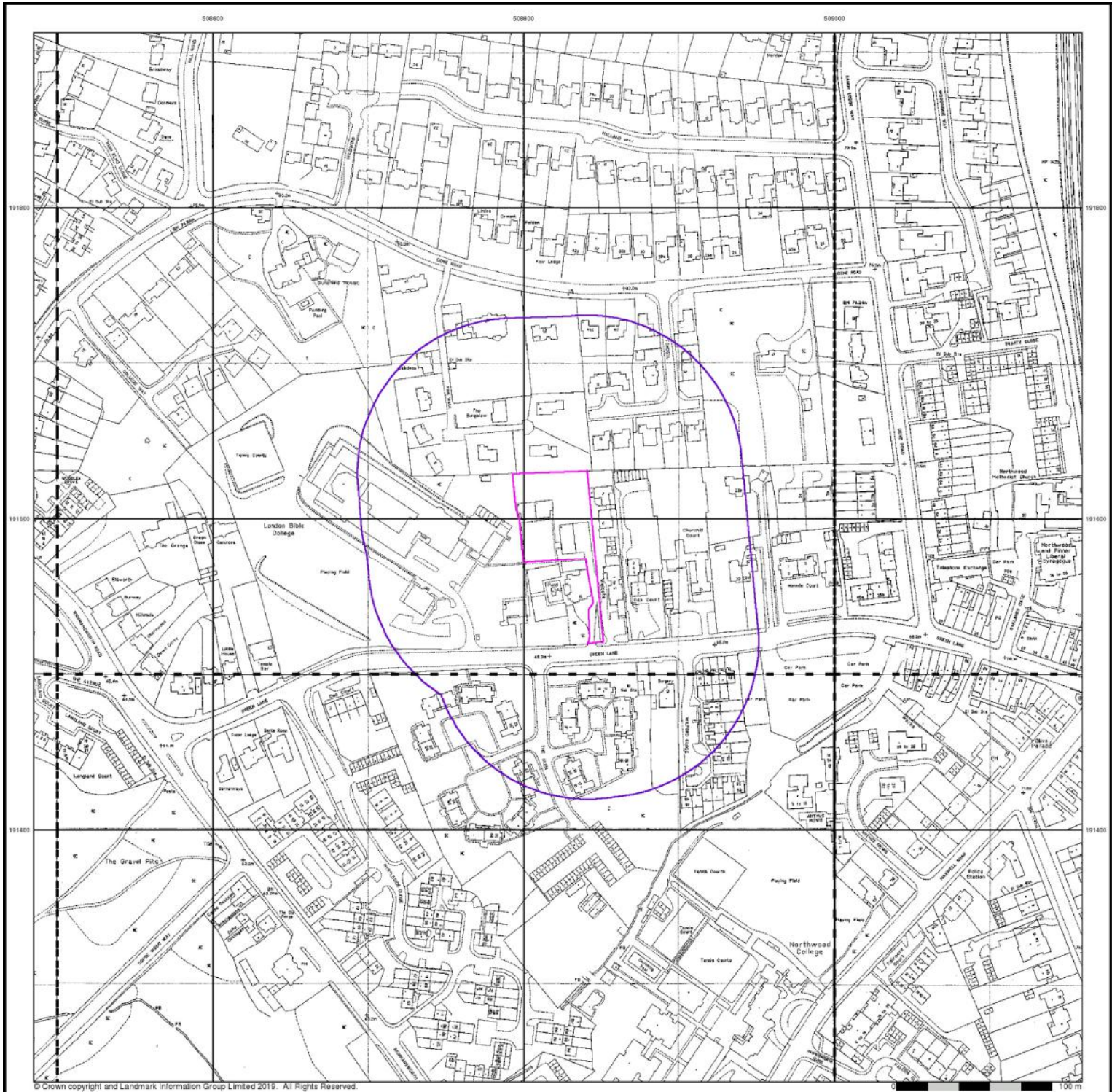





# Envirocheck®

LANDMARK INFORMATION GROUP®

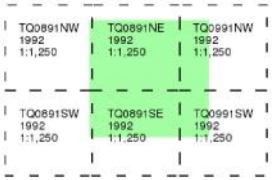
## Large-Scale National Grid Data

**Published 1992**

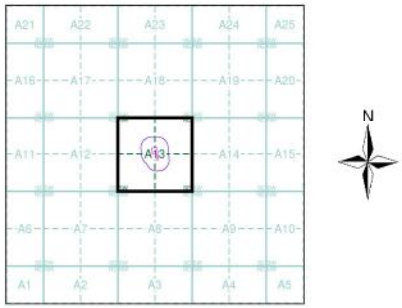
**Source map scale - 1:1,250**

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

## Map Name(s) and Date(s)




## Historical Map - Segment A13




## Order Details

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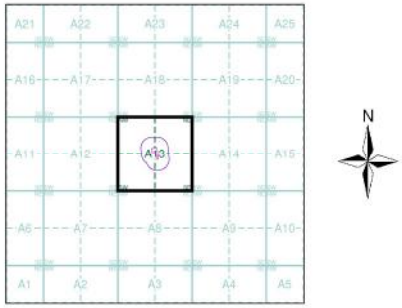
## Historical Aerial Photography

### Published 1999

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

## Historical Aerial Photography - Segment A13

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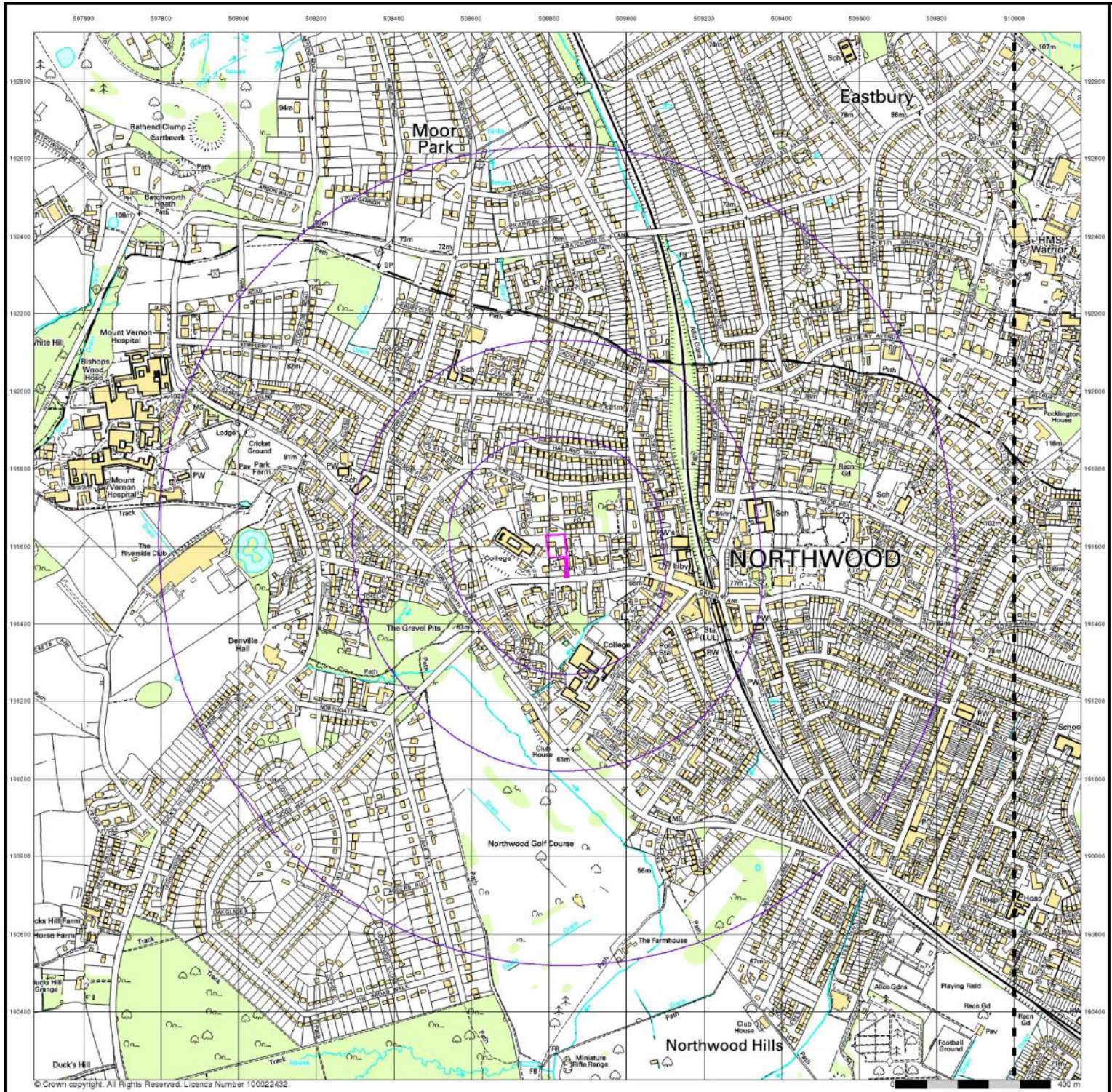



# Envirocheck®

LANDMARK INFORMATION GROUP®

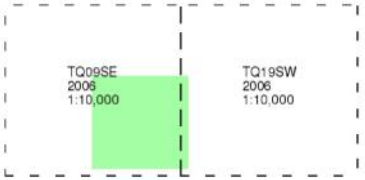
## 10k Raster Mapping

**Published 2006**

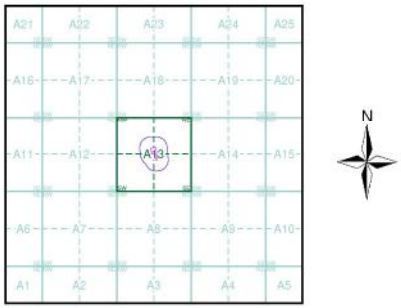
**Source map scale - 1:10,000**

The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

## Map Name(s) and Date(s)




## Historical Map - Slice A




## Order Details

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## Site Details

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# Envirocheck®

LANDMARK INFORMATION GROUP®

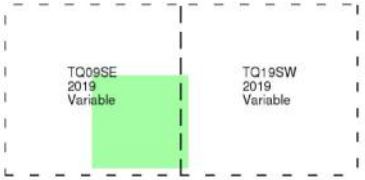
## VectorMap Local

**Published 2019**

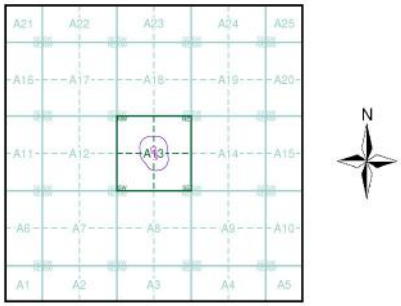
**Source map scale - 1:10,000**

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities),1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

## Map Name(s) and Date(s)




## Historical Map - Slice A




## Order Details

| | |
|---|---|
| Order Number: | 204084438_1_1 |
| Customer Ref: | RML 6980 |
| National Grid Reference: | 508830, 191580 |
| Slice: | A |
| Site Area (Ha): | 0.31 |
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| | | |
|---|---|---|
| Risk Management | Title:<br>**GENERAL SITE PHOTOGRAPHS 2019** | Scale : NTS<br>Report<br>Date : June 2019 |
| **RISK MANAGEMENT LIMITED**<br>Tel : 01883 343572<br>Fax : 01883 344060 | Project Name :<br>London School of Theology<br>Green Lane, Northwood | Plate **1**<br>Job No : RML 6980 |

| | | |
|---|---|---|
| Risk Management | Title :<br>**GENERAL SITE PHOTOGRAPHS 2019** | Scale : NTS<br>Report<br>Date : June 2019 |
| **RISK MANAGEMENT LIMITED**<br>Tel : 01883 343572<br>Fax : 01883 344060 | Project Name :<br>London School of Theology<br>Green Lane, Northwood | Plate **2**<br>Job No : RML 6980 |

| | | |
|---|---|---|
| Risk Management | Title :<br>**GENERAL SITE PHOTOGRAPHS 2019** | Scale : NTS<br>Report<br>Date : June 2019 |
| **RISK MANAGEMENT LIMITED**<br>Tel : 01883 343572<br>Fax : 01883 344060 | Project Name :<br>London School of Theology<br>Green Lane, Northwood | Plate **3**<br>Job No : RML 6980 |

Risk Management

Risk Management Limited
Unit 10 Coopers Place
Combe Lane
Godalming
Surrey GU8 5SZ

# Borehole Log

Borehole No.
**BH1**
Sheet 1 of 2

| | | | | | |
|---|---|---|---|---|---|
| **Project No.** | RML 6980 | **Coordinates:** | | **Drilling Technique:** Cable Percussion Rig | **Level (m):** |
| **Site Address:** | London School of Theology, Green Lane, Northwood, HA6 2UW | **Date:** | 20/05/2019 | **Diameter (mm):** 200 | **Scale:** 1:50 |

| Stratum Description | Legend | Depth (m) | Level (m) | Samples and In Situ Testing | | | | Water Strikes | Well |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Depth (m) | Sample Type | Test Type | Results | | |
| **Grass over Topsoil** | | 0.20 | | 0.10 | D1 | | | | |
| **MADE GROUND** (brown silty clay with brick fragments, gravel and roots). | | | | 1.00 | D2 | | | | |
| | | | | 1.10 | B1 | | | | |
| | | 1.40 | | 1.50 | | SPT | N=13 (1,1/2,3,4,4) | | |
| Stiff to very stiff grey mottled orange-brown and red-brown silty CLAY. | | | | 2.00 | D3 | | | | |
| *with occasional fragments of siltstone between 1.50m and 1.90m depth* | | | | 2.50 | U1 | | (35 blows) | | |
| | | | | 3.00 | D4 | | | | |
| | | | | 3.50 | | SPT | N=43 (5,7/9,10,12,12) | | |
| | | | | 4.00 | D5 | | | | |
| | | | | 4.50 | U2 | | (100 blows) | | |
| | | | | 5.00 | D6 | | | | |
| | | | | 6.00 | D7 | | | | |
| | | | | 6.50 | | SPT | N=52 (5,7/10,12,14,16) | | |
| | | | | 7.00 | D8 | | | | |
| | | | | 8.00 | D9 | | | | |
| | | | | 8.50 | U3 | | (100 blows) | | |
| | | 8.80 | | | | | | | |
| Stiff to very stiff orange-brown mottled grey silty CLAY with pockets of orange-brown sand. | | | | 9.00 | D10 | | | | |
| Continued on next sheet | | | | 10.00 | D11 | | | | |

**KEY**

D = Disturbed Sample
U = Undisturbed Sample
B = Bulk Sample
W = Water Sample

CPT = Cone Penetration Test
SPT = Standard Penetration Test
V = Vane Test
PP = Pocket Penetrometer
MEXE = Insitu CBR test

Remarks: Service Pit excavated to 1.20m depth. Groundwater not noted during boring. Roots in evidence until at least 1.40m depth.

AGS

Risk Management Limited
Unit 10 Coopers Place
Combe Lane
Godalming
Surrey GU8 5SZ

# Borehole Log

Borehole No. **BH1**



| | | | |
|---|---|---|---|
| **Project No.** RML 6980 | **Coordinates:** | **Drilling Technique:** Cable Percussion Rig | **Level (m):** |
| **Site Address:** London School of Theology, Green Lane, Northwood, HA6 2UW | **Date:** 20/05/2019 | **Diameter (mm):** 200 | **Scale:** 1:50 |

| Stratum Description | Legend | Depth (m) | Level (m) | Samples and In Situ Testing | | | | Water Strikes | Well |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Depth (m) | Sample Type | Test Type | Results | | |
| Stiff to very stiff orange-brown mottled grey silty CLAY with pockets of orange-brown sand. | | | | 10.50 | | SPT | N=36 (5,9/7,8,10,11) | | |
| | | | | 11.00 | D12 | | | | |
| | | 11.60 | | | | | | | |
| Very dense, fine to coarse black rounded to sub-rounded GRAVEL. | | | | 12.00 | D13 | | | | |
| | | | | 12.50 | B2 | CPT | 50 (7,16/50 for 155mm) | | |
| | | 13.60 | | | | | | | |
| Off-white rubbly to blocky CHALK with flint gravel. | | | | 14.00 | D14 | | | | |
| | | | | 14.50 | | SPT | N=36 (4,7/8,9,9,10) | | |
| | | | | 15.00 | D15 | | | | |
| | | | | 16.00 | D16 | | | | |
| | | | | 16.50 | | SPT | N=35 (4,7/7,9,9,10) | | |
| | | | | 17.00 | D17 | | | | |
| | | | | 18.00 | D18 | | | | |
| | | | | 18.50 | | SPT | N=39 (5,8/9,9,10,11) | | |
| | | | | 19.00 | D19 | | | | |
| Borehole terminated at 20.00m depth | | 20.00 | | 20.00 | D20 | SPT | N=38 (5,5/8,9,10,11) | | |

Remarks: Service Pit excavated to 1.20m depth. Groundwater not noted during boring. Roots in evidence until at least 1.40m depth.

**KEY**

D = Disturbed Sample
U = Undisturbed Sample
B = Bulk Sample
W = Water Sample

CPT = Cone Penetration Test
SPT = Standard Penetration Test
V = Vane Test
PP = Pocket Penetrometer
MEXE = Insitu CBR test

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Risk Management Limited
Unit 10 Coopers Place
Combe Lane
Godalming
Surrey GU8 5SZ

# Borehole Log

Borehole No. **DIS1**

Sheet 1 of 1

| | | | | | |
|---|---|---|---|---|---|
| **Project No.** | RML 6980 | **Coordinates:** | | **Drilling Technique:** Drive-in-Sampler | **Level (m):** |
| **Site Address:** | London School of Theology, Green Lane, Northwood, HA6 2UW | **Date:** | 24/05/2019 | **Diameter (mm):** 50 | **Scale:** 1:25 |

| Stratum Description | Legend | Depth (m) | Level (m) | Samples and In Situ Testing: Depth (m) | Sample Type | Test Type | Results | Water Strikes | Well |
|---|---|---|---|---|---|---|---|---|---|
| **Grass over Topsoil** | | 0.08 | | 0.15 | D1 | | | | |
| **MADE GROUND** (brown desiccated silty clay with brick fragments and roots). | | 0.30 | | 0.50 | D2 | | | | |
| Soft brown silty CLAY with fragments of siltstone and roots. *roots in evidence until at least 1.40m depth* | | | | 1.00 | D3 | | | | |
| | | | | 1.50 | D4 | | | ▼ | |
| | | | | 2.00 | D5 | | | | |
| | | | | 2.50 | D6 | | | | |
| | | 2.70 | | | | | | | |
| Firm to stiff brown mottled grey silty CLAY. Borehole terminated at 3.00m depth | | 3.00 | | 3.00 | D7 | | | | |

Remarks: Service pit excavated to 1.20m depth. Groundwater encountered at 1.80m depth. Roots in evidence until at least 1.40m depth.

**KEY**

D = Disturbed Sample
U = Undisturbed Sample
B = Bulk Sample
W = Water Sample

CPT = Cone Penetration Test
SPT = Standard Penetration Test
V = Vane Test
PP = Pocket Penetrometer
MEXE = Insitu CBR test

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Risk Management

Risk Management Limited
Unit 10 Coopers Place
Combe Lane
Godalming
Surrey GU8 5SZ

# Borehole Log

Borehole No.
**DIS2**
Sheet 1 of 1

| | | | | | |
|---|---|---|---|---|---|
| **Project No.** | RML 6980 | **Coordinates:** | | **Drilling Technique:** Drive-in-Sampler | **Level (m):** |
| **Site Address:** | London School of Theology, Green Lane, Northwood, HA6 2UW | **Date:** | 24/05/2019 | **Diameter (mm):** 50 | **Scale:** 1:25 |

| Stratum Description | Legend | Depth (m) | Level (m) | Samples and In Situ Testing: Depth (m) | Sample Type | Test Type | Results | Water Strikes | Well |
|---|---|---|---|---|---|---|---|---|---|
| Asphalt. | | 0.10 | | 0.15 | D1 | | | | |
| **MADE GROUND** (crushed brick and stone). | | 0.30 | | | | | | | |
| **MADE GROUND** (brown-grey silty clay with brick fragments and roots). | | 0.40 | | 0.50 | D2 | | | | |
| Firm brown silty CLAY with roots. *roots in evidence until at least 1.40m depth* | | | | 1.00 | D3 | | | | |
| | | | | 1.50 | D4 | | | | |
| | | | | 2.00 | D5 | | | ▼ | |
| | | | | 2.50 | D6 | | | | |
| Firm to stiff, orange-brown mottled grey silty CLAY. | | 2.90 | | 3.00 | D7 | | | | |
| | | | | 3.50 | D8 | | | | |
| | | | | 4.00 | D9 | | | | |
| | | | | 4.50 | D10 | | | | |
| Borehole terminated at 5.00m depth | | 5.00 | | 5.00 | D11 | | | | |

Remarks: Service pit excavated to 1.20m depth. Groundwater encountered at 2.00m depth. Standpipe installed to 5.00m depth. Roots in evidence until at least 1.40m depth.

**KEY**

D = Disturbed Sample
U = Undisturbed Sample
B = Bulk Sample
W = Water Sample

CPT = Cone Penetration Test
SPT = Standard Penetration Test
V = Vane Test
PP = Pocket Penetrometer
MEXE = Insitu CBR test

AGS

Risk Management Limited
Unit 10 Coopers Place
Combe Lane
Godalming
Surrey GU8 5SZ

# Borehole Log

Borehole No.
**DIS3**
Sheet 1 of 1

| | | | | | |
|---|---|---|---|---|---|
| **Project No.** | RML 6980 | **Coordinates:** | | **Drilling Technique:** Drive-in-Sampler | **Level (m):** |
| **Site Address:** | London School of Theology, Green Lane, Northwood, HA6 2UW | **Date:** | 24/05/2019 | **Diameter (mm):** 50 | **Scale:** 1:25 |

| Stratum Description | Legend | Depth (m) | Level (m) | Samples and In Situ Testing: Depth (m) | Sample Type | Test Type | Results | Water Strikes | Well |
|---|---|---|---|---|---|---|---|---|---|
| **Grass over Topsoil** | | 0.05 | | | | | | | |
| **MADE GROUND** (brown clay with brick fragments, gravel and roots). | | 0.20 | | 0.15 | D1 | | | | |
| **MADE GROUND** (brown silty clay with brick fragments and roots). | | 0.60 | | 0.50 | D2 | | | | |
| Firm orange-brown silty CLAY. *with a little grey mottling from 1.20m depth* | | | | 1.00 | D3 | | | | |
| | | | | 1.50 | D4 | | | | |
| Firm to stiff grey mottled red-orange silty CLAY. | | 1.80 | | 2.00 | D5 | | | | |
| | | | | 2.50 | D6 | | | | |
| Borehole terminated at 3.00m depth | | 3.00 | | 3.00 | D7 | | | | |

Remarks: Service pit excavated to 1.20m depth. Groundwater not noted during boring. Roots in evidence until at least 0.60m depth.

**KEY**

D = Disturbed Sample
U = Undisturbed Sample
B = Bulk Sample
W = Water Sample

CPT = Cone Penetration Test
SPT = Standard Penetration Test
V = Vane Test
PP = Pocket Penetrometer
MEXE = Insitu CBR test

AGS

Risk Management Limited
Unit 10 Coopers Place
Combe Lane
Godalming
Surrey GU8 5SZ

# Borehole Log

Borehole No.
**DIS4**
Sheet 1 of 1

| | | | | | |
|---|---|---|---|---|---|
| **Project No.** | RML 6980 | **Coordinates:** | | **Drilling Technique:** Drive-in-Sampler | **Level (m):** |
| **Site Address:** | London School of Theology, Green Lane, Northwood, HA6 2UW | **Date:** | 24/05/2019 | **Diameter (mm):** 50 | **Scale:** 1:25 |

| Stratum Description | Legend | Depth (m) | Level (m) | Samples and In Situ Testing: Depth (m) | Sample Type | Test Type | Results | Water Strikes | Well |
|---|---|---|---|---|---|---|---|---|---|
| **Grass over Topsoil** | | 0.05 | | | | | | | |
| **MADE GROUND** (brown clay with brick fragments, concrete and roots). | | 0.20 | | 0.15 | D1 | | | | |
| **MADE GROUND** (crushed stone and concrete fll). *roots in evidence until at least 0.50m depth* | | 0.70 | | 0.50 | D2 | | | | |
| Firm orange-brown silty CLAY. | | | | 1.00 | D3 | | | | |
| | | | | 1.50 | D4 | | | | |
| | | | | 2.00 | D5 | | | | |
| Firm to stiff orange-brown mottled grey silty CLAY. | | 2.20 | | 2.50 | D6 | | | | |
| Borehole terminated at 3.00m depth | | 3.00 | | 3.00 | D7 | | | | |

Remarks: Service pit excavated to 1.20m depth. Groundwater not noted during boring. Roots in evidence until at least 0.50m depth.

**KEY**

D = Disturbed Sample
U = Undisturbed Sample
B = Bulk Sample
W = Water Sample

CPT = Cone Penetration Test
SPT = Standard Penetration Test
V = Vane Test
PP = Pocket Penetrometer
MEXE = Insitu CBR test

AGS

Risk Management Limited
Unit 10 Coopers Place
Combe Lane
Godalming
Surrey GU8 5SZ

# Borehole Log

Borehole No.
**DIS5**
Sheet 1 of 1

| | | | | | |
|---|---|---|---|---|---|
| **Project No.** | RML 6980 | **Coordinates:** | | **Drilling Technique:** Drive-in-Sampler | **Level (m):** |
| **Site Address:** | London School of Theology, Green Lane, Northwood, HA6 2UW | **Date:** | 24/05/2019 | **Diameter (mm):** 50 | **Scale:** 1:25 |

| Stratum Description | Legend | Depth (m) | Level (m) | Samples and In Situ Testing: Depth (m) | Sample Type | Test Type | Results | Water Strikes | Well |
|---|---|---|---|---|---|---|---|---|---|
| **Grass over Topsoil** | | 0.05 | | 0.15 | D1 | | | | |
| **MADE GROUND** (brown silty clay with brick fragments, gravel and roots). | | 0.40 | | 0.50 | D2 | | | | |
| Firm orange-brown silty CLAY with occasional grey mottling. *roots in evidence until at least 0.80m depth* | | | | 1.00 | D3 | | | | |
| | | | | 1.50 | D4 | | | | |
| | | | | 2.00 | D5 | | | | |
| | | | | 2.50 | D6 | | | | |
| Borehole terminated at 3.00m depth | | 3.00 | | 3.00 | D7 | | | | |

Remarks: Service pit excavated to 1.20m depth. Groundwater not noted during boring. Roots in evidence until at least 0.80m depth.

**KEY**

D = Disturbed Sample
U = Undisturbed Sample
B = Bulk Sample
W = Water Sample

CPT = Cone Penetration Test
SPT = Standard Penetration Test
V = Vane Test
PP = Pocket Penetrometer
MEXE = Insitu CBR test

AGS

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Unit 10 Coopers Place
Combe Lane
Godalming
Surrey GU8 5SZ

# Borehole Log

Borehole No.
**DIS6**
Sheet 1 of 1

| | | | | | |
|---|---|---|---|---|---|
| **Project No.** | RML 6980 | **Coordinates:** | | **Drilling Technique:** Drive-in-Sampler | **Level (m):** |
| **Site Address:** | London School of Theology, Green Lane, Northwood, HA6 2UW | **Date:** | 24/05/2019 | **Diameter (mm):** 50 | **Scale:** 1:25 |

| Stratum Description | Legend | Depth (m) | Level (m) | Samples and In Situ Testing: Depth (m) | Sample Type | Test Type | Results | Water Strikes | Well |
|---|---|---|---|---|---|---|---|---|---|
| **Grass over Topsoil** | | 0.04 | | | | | | | |
| **MADE GROUND** (brown clay with brick fragments, clinker and gravel). | | 0.20 | | 0.15 | D1 | | | | |
| Soft orange-brown silty CLAY with pockets of grey silt. | | | | 0.50 | D2 | | | | |
| | | | | 1.00 | D3 | | | | |
| Firm orange-brown mottled grey silty CLAY. | | 1.40 | | 1.50 | D4 | | | | |
| | | | | 2.00 | D5 | | | | |
| Firm to stiff grey silty CLAY with occasional orange-red mottling. | | 2.20 | | 2.50 | D6 | | | | |
| Borehole terminated at 3.00m depth | | 3.00 | | 3.00 | D7 | | | | |

Remarks: Service pit excavated to 1.20m depth. Groundwater not noted during boring.

**KEY**

D = Disturbed Sample
U = Undisturbed Sample
B = Bulk Sample
W = Water Sample

CPT = Cone Penetration Test
SPT = Standard Penetration Test
V = Vane Test
PP = Pocket Penetrometer
MEXE = Insitu CBR test

AGS

# FALLING HEAD PERMEABILITY TEST

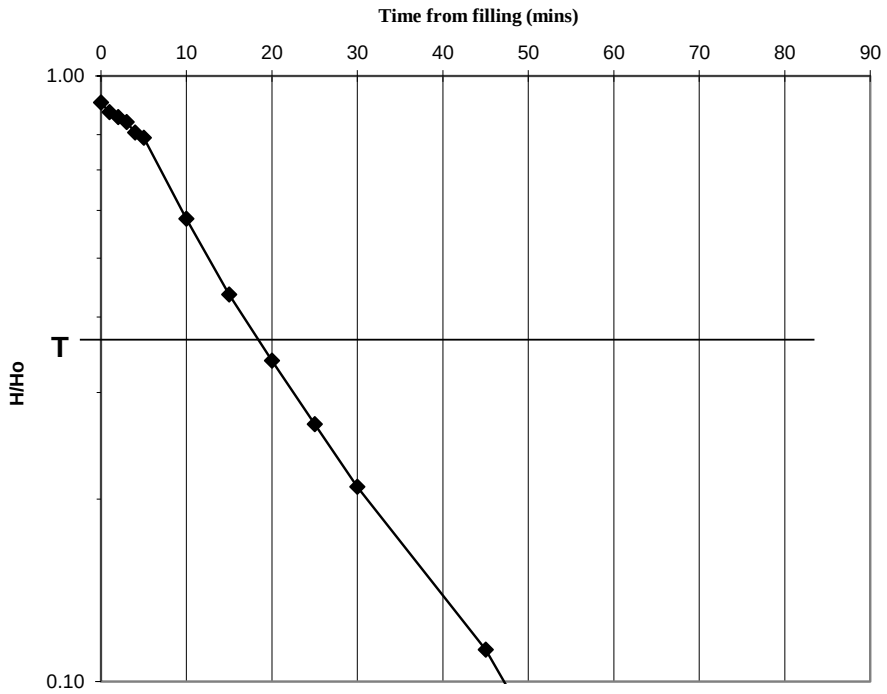
Risk Management Limited
Tel : 01883 343572

**Project Name :** London School of Theology, Green Lane, Northwood, London HA6 2UW

## SOAKAWAY TEST SA1 (DIS2)

**Job No.** RML 6980
**Date :** June 2019

| Test Depth | $H_0$ = | | | | |
|---|---|---|---|---|---|
| 1.24 | 1.24 | | | | |
| **Depth (m)** | **Time (mins)** | **H** | **$H/H_0$** | | |
| 0.120 | 0 | 1.12 | 0.90 | | |
| 0.160 | 1 | 1.08 | 0.87 | | |
| 0.180 | 2 | 1.06 | 0.85 | | |
| 0.200 | 3 | 1.04 | 0.84 | | |
| 0.240 | 4 | 1.00 | 0.81 | | |
| 0.260 | 5 | 0.98 | 0.79 | | |
| 0.520 | 10 | 0.72 | 0.58 | | |
| 0.700 | 15 | 0.54 | 0.44 | | |
| 0.820 | 20 | 0.42 | 0.34 | | |
| 0.910 | 25 | 0.33 | 0.27 | | |
| 0.980 | 30 | 0.26 | 0.21 | | |
| 1.100 | 45 | 0.14 | 0.11 | | |
| 1.180 | 60 | 0.06 | 0.05 | | |
| 1.210 | 75 | 0.03 | 0.02 | | |
| 1.230 | 90 | 0.01 | 0.01 | | |




| | | |
|---|---|---|
| Diameter of pipe = | 0.019 | (m) |
| Area (A) = | 0.0003 | ($m^2$) |
| Intake factor (F) = | 0.05 | |
| Basic Time Factor (T) = | 18.5 | (min) |
| Permeability (k) = | **4.89E-06** | m/sec |

Risk Management

# Standard Penetration Test (SPT) versus Depth Profile

Risk Management Limited
Tel : 01883 343572

**Project Name :** London School of Theology, Green Lane, Northwood, London HA6 2UW

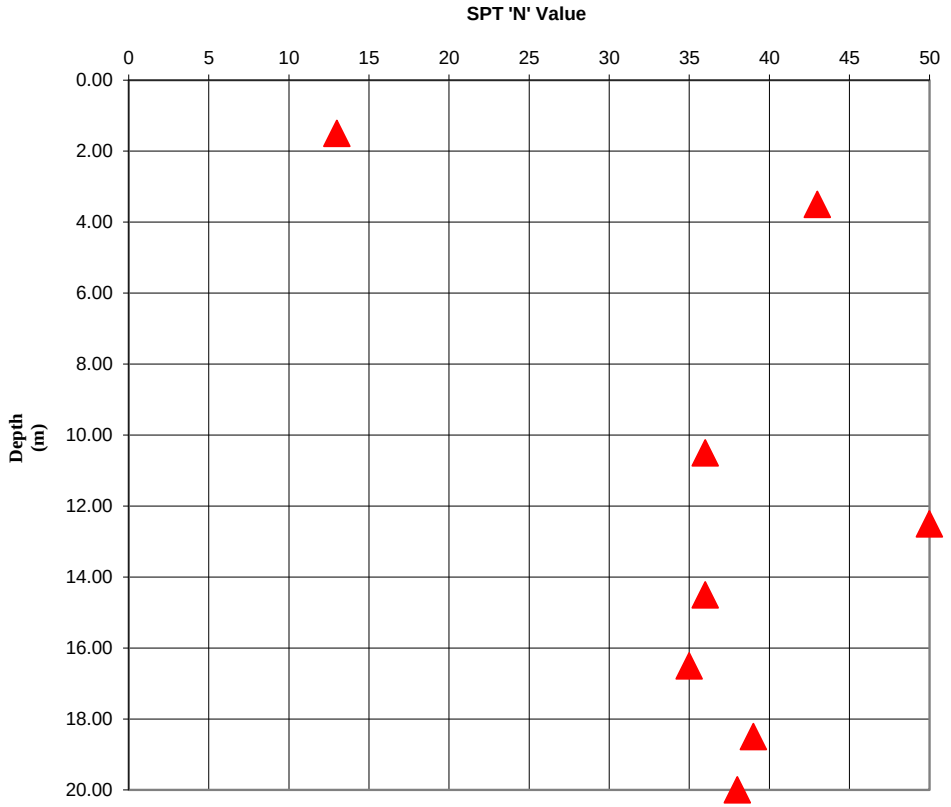
**Job No. :** RML 6980

**Date :** June 2019

**BH1**

| Depth (m) | SPT 'N' value |
|---|---|
| 1.50 | 13 |
| 3.50 | 43 |
| 6.50 | 52 |
| 10.50 | 36 |
| 12.50 | 50 |
| 14.50 | 36 |
| 16.50 | 35 |
| 18.50 | 39 |
| 20.00 | 38 |

NB : SPT 'N' values greater than 50 reported as 50 above



Risk Management

PROJECT NAME : London School of Theology, Green Lane, Northwood, London HA6 2UW

PROJECT NO: RML 6980

| Date | June 2019 |
|---|---|
| | |
| Page | 1 of 1 |

| Sample Details | | | | Classification Tests | | | | | Density Tests | | Undrained Triaxial Compression Tests | | | Chemical Results | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BH No. | Depth (m) | Sample No. | Description | MC (%) | LL (%) | PL (%) | PI | <425 mic (%) | Bulk ($Mg/m^3$) | Dry ($Mg/m^3$) | Cell Pressure kPa | Deviator Stress kPa | Mean Shear Stress kPa | pH | W/S $SO_4$ (g/l) | Total $SO_4$ (%) | Water $SO_4$ (g/l) | Other tests and comments |
| | | | | | | | | | | | | | | | | | | |
| BH1 | 1.00 | D2 | | | | | | | | | | | | 7.2 | < 0.02 | | | |
| BH1 | 1.50 | S1 | Stiff grey mottled orange-brown and red-brown silty CLAY with occasional fragments of siltstone. | 19 | 77 | 24 | 53 | 100 | 1.95 | 1.63 | 30 | 197 | 98 | | | | | Class CV |
| BH1 | 2.00 | D3 | | | | | | | | | | | | 8.8 | 0.05 | | | |
| BH1 | 2.50 | U1 | Very stiff grey mottled orange-brown and red-brown silty CLAY. | 18 | 63 | 18 | 45 | 100 | 2.11 | 1.79 | 50 | 318 | 159 | | | | | Class CH |
| BH1 | 4.50 | U2 | Very stiff grey mottled orange-brown and red-brown silty CLAY. | 23 | | | | | 2.08 | 1.69 | 90 | 376 | 188 | | | | | |
| BH1 | 6.00 | D7 | Stiff grey mottled orange-brown and red-brown silty CLAY. | 13 | | | | | 2.08 | 1.85 | 120 | 263 | 131 | | | | | |
| BH1 | 8.50 | U3 | Very stiff grey mottled orange-brown and red-brown silty CLAY. | 19 | | | | | 2.10 | 1.77 | 170 | 335 | 167 | | | | | |
| | | | | | | | | | | | | | | | | | | |
| DIS1 | 0.15 | D1 | | | | | | | | | | | | 7.1 | | | | |
| DIS2 | 0.15 | D1 | | | | | | | | | | | | 8.2 | | | | |
| DIS3 | 0.50 | D2 | | | | | | | | | | | | 7.4 | | | | |
| DIS4 | 0.50 | D2 | | | | | | | | | | | | 9.1 | | | | |
| DIS5 | 0.50 | D2 | | | | | | | | | | | | 7.4 | | | | |
| DIS6 | 1.00 | D3 | | | | | | | | | | | | 7.7 | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |

## SUMMARY OF GEOTECHNICAL TESTING

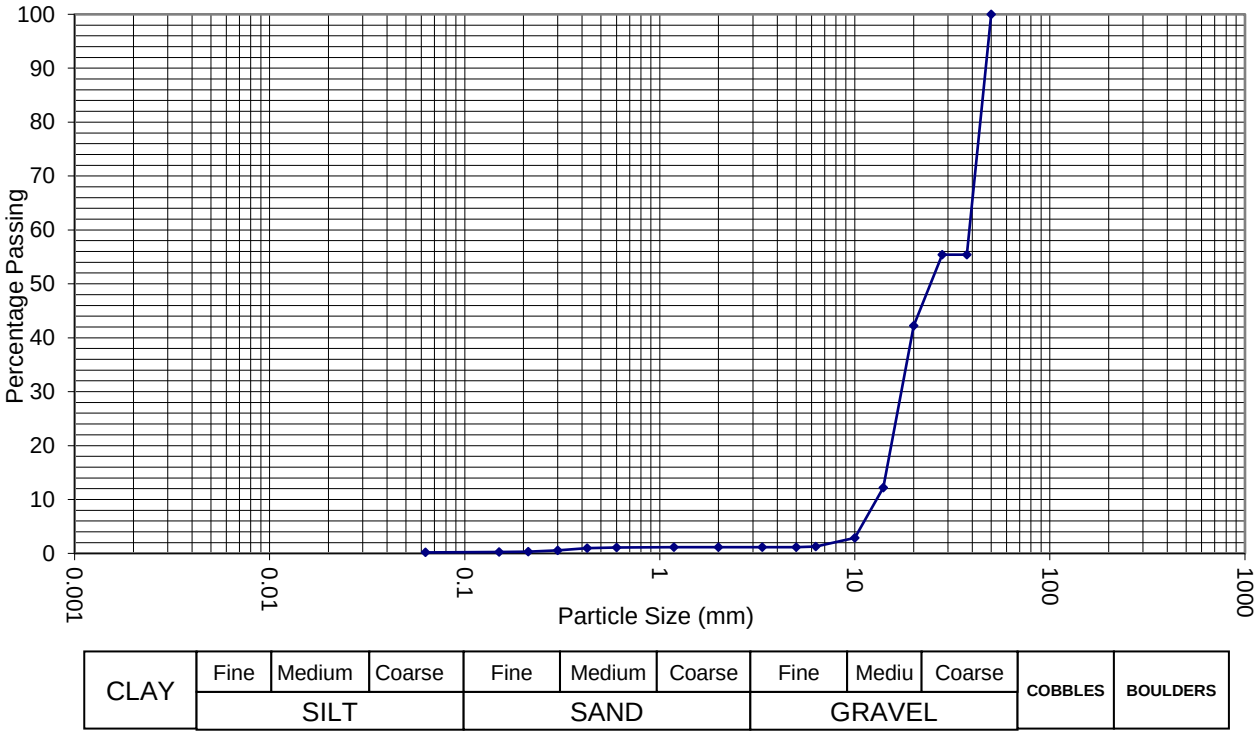
Risk Management

# Results of Particle Size Distribution Tests

| | | | |
|---|---|---|---|
| **Project Name :** | **London School of Theology, Green Lane, Northwood** | **Project No.** | **RML 6980** |
| **Borehole No.** | **BH1** | **Sample No.** | **B2** |
| **Depth (m)** | **12.50** | | |

**Test Method : BS 1377 : Part 2 : 1990 : Clause 9**

| Sieve (mm) | Passing (%) | Sieve (mm) | Passing (%) |
|---|---|---|---|
| 200 | 100 | 2 | 1 |
| 125 | 100 | 1.18 | 1 |
| 90 | 100 | 0.6 | 1 |
| 75 | 100 | 0.425 | 1 |
| 63 | 100 | 0.3 | 1 |
| 50 | 100 | 0.212 | 0 |
| 37.5 | 55 | 0.15 | 0 |
| 28 | 55 | 0.063 | 0 |
| 20 | 42 | Pipette | |
| 14 | 12 | Particle Size | % Passing |
| 10 | 3 | | |
| 6.3 | 1 | | |
| 5 | 1 | | |
| 3.35 | 1 | | |




Description :

**Fine to coarse, black rounded to sub-rounded GRAVEL.**

# Undrained Shear Strength versus Depth Profile

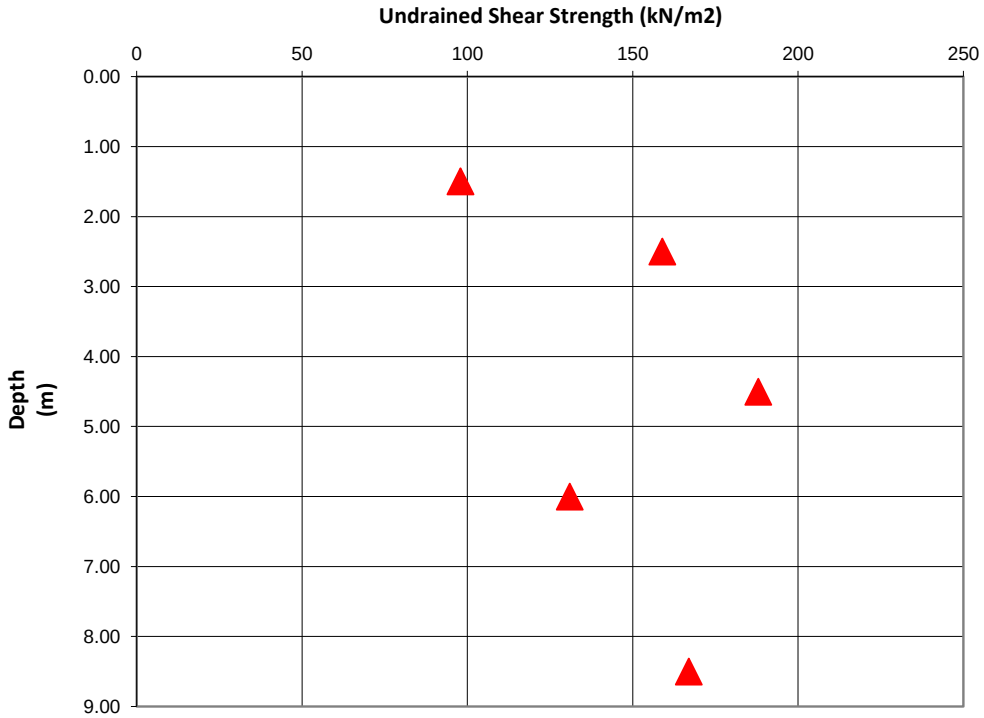
Risk Management Limited
Tel : 01883 343572

**Project Name : London School of Theology, Green Lane, Northwood, London HA6 2UW**

| Job No. : | RML 6980 |
|---|---|
| Date : | June 2019 |

**BH1**

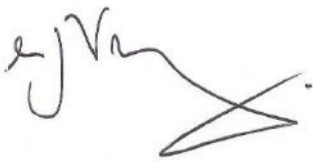
| Depth (m) | Shear Strength ($kN/m^2$) |
|---|---|
| 1.50 | 98 |
| 2.50 | 159 |
| 4.50 | 188 |
| 6.00 | 131 |
| 8.50 | 167 |



**Unit A2**
**Windmill Road**
**Ponswood Industrial Estate**
**St Leonards on Sea**
**East Sussex**
**TN38 9BY**
Telephone: (01424) 718618

cs@elab-uk.co.uk
info@elab-uk.co.uk

**THE ENVIRONMENTAL LABORATORY LTD**

| | |
|---|---|
| **Analytical Report Number:** | 19-23403 |
| **Issue:** | 1 |
| **Date of Issue:** | 18/06/2019 |
| **Contact:** | Malcolm Price |
| **Customer Details:** | Risk Management Ltd<br>10 Coopers Place<br>Combe Lane<br>Godalming<br>SurreyGU8 5SZ |
| **Quotation No:** | Q19-01475 |
| **Order No:** | RML 6980 |
| **Customer Reference:** | RML 6980 |
| **Date Received:** | 06/06/2019 |
| **Date Approved:** | 18/06/2019 |
| **Details:** | London School of Theology Green Lane, Northwood, London |
| **Approved by:** |  |

Mike Varley, Technical Manager

Any comments, opinions or interpretations expressed herein are outside the scope of UKAS accreditation (Accreditation Number 2683

# Sample Summary

**Report No.: 19-23403, issue number 1**

| Elab No. | Client's Ref. | Date Sampled | Date Scheduled | Description | Deviations |
|---|---|---|---|---|---|
| 175187 | DIS1 D1 0.15 | 24/05/2019 | 06/06/2019 | Silty loam | |
| 175188 | DIS2 D1 0.15 | 24/05/2019 | 06/06/2019 | Sandy silty loam | |
| 175189 | DIS3 D2 0.50 | 24/05/2019 | 06/06/2019 | Silty loam | |
| 175190 | DIS4 D2 0.50 | 24/05/2019 | 06/06/2019 | Silty loam | |
| 175191 | DIS5 D2 0.50 | 24/05/2019 | 06/06/2019 | Silty loam | |
| 175192 | DIS6 D3 1.00 | 24/05/2019 | 06/06/2019 | Silty clayey loam | |
| 175193 | BH1 D2 1.00 | 20/05/2019 | 06/06/2019 | Sandy clayey loam | |
| 175194 | BH1 D3 2.00 | 20/05/2019 | 06/06/2019 | Silty clayey loam | |

## Results Summary

**Report No.: 19-23403, issue number 1**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ELAB Reference | | | | 175187 | 175188 | 175189 | 175190 | 175191 | 175192 | 175193 | 175194 |
| Customer Reference | | | | D1 | D1 | D2 | D2 | D2 | D3 | D2 | D3 |
| Sample ID | | | | | | | | | | | |
| Sample Type | | | | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL |
| Sample Location | | | | DIS1 | DIS2 | DIS3 | DIS4 | DIS5 | DIS6 | BH1 | BH1 |
| Sample Depth (m) | | | | 0.15 | 0.15 | 0.50 | 0.50 | 0.50 | 1.00 | 1.00 | 2.00 |
| Sampling Date | | | | 24/05/2019 | 24/05/2019 | 24/05/2019 | 24/05/2019 | 24/05/2019 | 24/05/2019 | 20/05/2019 | 20/05/2019 |
| **Determinand** | **Codes** | **Units** | **LOD** | | | | | | | | |
| **Soil sample preparation parameters** | | | | | | | | | | | |
| Moisture Content | N | % | 0.1 | 16.2 | 14.9 | 19.4 | 8.0 | n/t | n/t | n/t | n/t |
| Stones Content | N | % | 0.1 | 11.1 | 40.9 | < 0.1 | 19.3 | n/t | n/t | n/t | n/t |
| Material removed | N | % | 0.1 | 11.1 | 40.9 | < 0.1 | 19.3 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Description of Inert material removed | N | | 0 | Stones,clinker | Stones,brick,clinker | None | Stones,brick.clinker | None | None | None | None |
| **Metals** | | | | | | | | | | | |
| Arsenic | M | mg/kg | 1 | 18.1 | 35.0 | 13.7 | 17.7 | n/t | n/t | n/t | n/t |
| Cadmium | M | mg/kg | 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | n/t | n/t | n/t | n/t |
| Chromium | M | mg/kg | 5 | 29.3 | 37.7 | 31.2 | 25.6 | n/t | n/t | n/t | n/t |
| Copper | M | mg/kg | 5 | 33.9 | 87.6 | 28.7 | 40.1 | n/t | n/t | n/t | n/t |
| Lead | M | mg/kg | 5 | 115 | **584** | 34.8 | **468** | n/t | n/t | n/t | n/t |
| Mercury | M | mg/kg | 0.5 | < 0.5 | 12.8 | < 0.5 | < 0.5 | n/t | n/t | n/t | n/t |
| Nickel | M | mg/kg | 5 | 18.4 | 27.0 | 16.1 | 23.2 | n/t | n/t | n/t | n/t |
| Selenium | M | mg/kg | 1 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | n/t | n/t | n/t | n/t |
| Zinc | M | mg/kg | 5 | 145 | 199 | 56.3 | 130 | n/t | n/t | n/t | n/t |
| **Anions** | | | | | | | | | | | |
| Water Soluble Sulphate | M | g/l | 0.02 | n/t | n/t | n/t | n/t | n/t | n/t | < 0.02 | 0.05 |
| **Inorganics** | | | | | | | | | | | |
| Free Cyanide | N | mg/kg | 1 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | n/t | n/t | n/t | n/t |
| Hexavalent Chromium | N | mg/kg | 0.8 | < 0.8 | < 0.8 | < 0.8 | < 0.8 | n/t | n/t | n/t | n/t |
| Total Cyanide | M | mg/kg | 1 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | n/t | n/t | n/t | n/t |
| **Miscellaneous** | | | | | | | | | | | |
| Acid Neutralisation Capacity | N | mol/kg | 0.1 | n/t | n/t | n/t | n/t | < 0.1 | < 0.1 | n/t | n/t |
| Loss On Ignition (450°C) | M | % | 0.01 | n/t | n/t | n/t | n/t | 6.94 | 2.82 | n/t | n/t |
| pH | M | pH units | 0.1 | 7.1 | 8.2 | 7.4 | 9.1 | 7.4 | 7.7 | 7.2 | 8.8 |
| Total Organic Carbon | N | % | 0.01 | n/t | n/t | n/t | n/t | 3.0 | 0.19 | n/t | n/t |
| **Phenols** | | | | | | | | | | | |
| Phenol | M | mg/kg | 1 | < 1 | < 1 | < 1 | 1 | n/t | n/t | n/t | n/t |
| M,P-Cresol | N | mg/kg | 1 | < 1 | < 1 | < 1 | < 1 | n/t | n/t | n/t | n/t |
| O-Cresol | N | mg/kg | 1 | < 1 | 1 | < 1 | < 1 | n/t | n/t | n/t | n/t |
| 3,4-Dimethylphenol | N | mg/kg | 1 | < 1 | < 1 | < 1 | < 1 | n/t | n/t | n/t | n/t |
| 2,3-Dimethylphenol | M | mg/kg | 1 | < 1 | < 1 | < 1 | < 1 | n/t | n/t | n/t | n/t |
| 2,3,5-trimethylphenol | M | mg/kg | 1 | < 1 | < 1 | < 1 | < 1 | n/t | n/t | n/t | n/t |
| Total Monohydric Phenols | N | mg/kg | 5 | < 5 | < 5 | < 5 | < 5 | n/t | n/t | n/t | n/t |

## Results Summary

**Report No.: 19-23403, issue number 1**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ELAB Reference | | | | 175187 | 175188 | 175189 | 175190 | 175191 | 175192 | 175193 | 175194 |
| Customer Reference | | | | D1 | D1 | D2 | D2 | D2 | D3 | D2 | D3 |
| Sample ID | | | | | | | | | | | |
| Sample Type | | | | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL |
| Sample Location | | | | DIS1 | DIS2 | DIS3 | DIS4 | DIS5 | DIS6 | BH1 | BH1 |
| Sample Depth (m) | | | | 0.15 | 0.15 | 0.50 | 0.50 | 0.50 | 1.00 | 1.00 | 2.00 |
| Sampling Date | | | | 24/05/2019 | 24/05/2019 | 24/05/2019 | 24/05/2019 | 24/05/2019 | 24/05/2019 | 20/05/2019 | 20/05/2019 |
| **Determinand** | **Codes** | **Units** | **LOD** | | | | | | | | |
| **Polyaromatic hydrocarbons** | | | | | | | | | | | |
| Naphthalene | M | mg/kg | 0.1 | < 0.1 | 0.2 | < 0.1 | < 0.1 | n/t | n/t | n/t | n/t |
| Acenaphthylene | M | mg/kg | 0.1 | < 0.1 | 0.1 | < 0.1 | 0.1 | n/t | n/t | n/t | n/t |
| Acenaphthene | M | mg/kg | 0.1 | < 0.1 | 0.5 | < 0.1 | < 0.1 | n/t | n/t | n/t | n/t |
| Fluorene | M | mg/kg | 0.1 | < 0.1 | 0.3 | < 0.1 | < 0.1 | n/t | n/t | n/t | n/t |
| Phenanthrene | M | mg/kg | 0.1 | < 0.1 | 0.7 | < 0.1 | 0.9 | n/t | n/t | n/t | n/t |
| Anthracene | M | mg/kg | 0.1 | < 0.1 | 0.5 | < 0.1 | 0.4 | n/t | n/t | n/t | n/t |
| Fluoranthene | M | mg/kg | 0.1 | 0.1 | 2.0 | < 0.1 | 4.8 | n/t | n/t | n/t | n/t |
| Pyrene | M | mg/kg | 0.1 | 0.2 | 2.8 | < 0.1 | 4.9 | n/t | n/t | n/t | n/t |
| Benzo(a)anthracene | M | mg/kg | 0.1 | < 0.1 | 1.3 | < 0.1 | 3.1 | n/t | n/t | n/t | n/t |
| Chrysene | M | mg/kg | 0.1 | < 0.1 | 2.3 | < 0.1 | **4.0** | n/t | n/t | n/t | n/t |
| Benzo(b)fluoranthene | M | mg/kg | 0.1 | 0.1 | 2.4 | < 0.1 | 4.4 | n/t | n/t | n/t | n/t |
| Benzo(k)fluoranthene | M | mg/kg | 0.1 | 0.1 | 2.9 | < 0.1 | 3.9 | n/t | n/t | n/t | n/t |
| Benzo(a)pyrene | M | mg/kg | 0.1 | < 0.1 | 1.2 | < 0.1 | 4.2 | n/t | n/t | n/t | n/t |
| Indeno(1,2,3-cd)pyrene | M | mg/kg | 0.1 | < 0.1 | 0.9 | < 0.1 | 3.7 | n/t | n/t | n/t | n/t |
| Dibenzo(a,h)anthracene | M | mg/kg | 0.1 | < 0.1 | 0.5 | < 0.1 | 0.9 | n/t | n/t | n/t | n/t |
| Benzo[g,h,i]perylene | M | mg/kg | 0.1 | < 0.1 | 1.7 | < 0.1 | 3.0 | n/t | n/t | n/t | n/t |
| Total PAH(16) | M | mg/kg | 0.4 | 0.9 | 20.3 | < 0.4 | 38.3 | n/t | n/t | n/t | n/t |
| Total PAH (Including Coronene) | N | mg/kg | 2 | n/t | n/t | n/t | n/t | 3 | < 2 | n/t | n/t |
| **BTEX** | | | | | | | | | | | |
| Benzene | M | ug/kg | 10 | < 10.0 | < 10.0 | < 10.0 | < 10.0 | n/t | n/t | n/t | n/t |
| Toluene | M | ug/kg | 10 | < 10.0 | < 10.0 | < 10.0 | < 10.0 | n/t | n/t | n/t | n/t |
| Ethylbenzene | M | ug/kg | 10 | < 10.0 | < 10.0 | < 10.0 | < 10.0 | n/t | n/t | n/t | n/t |
| Xylenes | M | ug/kg | 10 | < 10.0 | < 10.0 | < 10.0 | < 10.0 | n/t | n/t | n/t | n/t |
| MTBE | N | ug/kg | 10 | < 10.0 | < 10.0 | < 10.0 | < 10.0 | n/t | n/t | n/t | n/t |
| Total BTEX | M | mg/kg | 0.01 | n/t | n/t | n/t | n/t | < 0.01 | < 0.01 | n/t | n/t |
| **TPH CWG** | | | | | | | | | | | |
| >C5-C6 Aliphatic | N | mg/kg | 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | n/t | n/t | n/t | n/t |
| >C6-C8 Aliphatic | N | mg/kg | 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | n/t | n/t | n/t | n/t |
| >C8-C10 Aliphatic | N | mg/kg | 1 | < 1.0 | 114 | < 1.0 | < 1.0 | n/t | n/t | n/t | n/t |
| >C10-C12 Aliphatic | M | mg/kg | 1 | < 1.0 | 561 | < 1.0 | < 1.0 | n/t | n/t | n/t | n/t |
| >C12-C16 Aliphatic | M | mg/kg | 1 | < 1.0 | 271 | < 1.0 | < 1.0 | n/t | n/t | n/t | n/t |
| >C16-C21 Aliphatic | M | mg/kg | 1 | < 1.0 | 32.9 | < 1.0 | < 1.0 | n/t | n/t | n/t | n/t |
| >C21-C35 Aliphatic | M | mg/kg | 1 | < 1.0 | 1110 | 4.5 | 8.7 | n/t | n/t | n/t | n/t |
| >C35-C40 Aliphatic | M | mg/kg | 1 | < 1.0 | 162 | 2.4 | 1.1 | n/t | n/t | n/t | n/t |
| Total aliphatic hydrocarbons (>C5 - C40) | N | mg/kg | 1 | < 1.0 | 2250 | 6.8 | 10 | n/t | n/t | n/t | n/t |
| >C5-C7 Aromatic | N | mg/kg | 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | n/t | n/t | n/t | n/t |
| >C7-C8 Aromatic | N | mg/kg | 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | n/t | n/t | n/t | n/t |
| >C8-C10 Aromatic | N | mg/kg | 1 | < 1.0 | 138 | < 1.0 | < 1.0 | n/t | n/t | n/t | n/t |
| >C10-C12 Aromatic | M | mg/kg | 1 | < 1.0 | 443 | < 1.0 | < 1.0 | n/t | n/t | n/t | n/t |
| >C12-C16 Aromatic | M | mg/kg | 1 | < 1.0 | 257 | < 1.0 | < 1.0 | n/t | n/t | n/t | n/t |
| >C16-C21 Aromatic | M | mg/kg | 1 | < 1.0 | 89 | 1.4 | 7.9 | n/t | n/t | n/t | n/t |
| >C21-C35 Aromatic | M | mg/kg | 1 | < 1.0 | 4350 | 35.4 | 103 | n/t | n/t | n/t | n/t |
| >C35-C40 Aromatic | M | mg/kg | 1 | < 1.0 | 1210 | 8.4 | 9.1 | n/t | n/t | n/t | n/t |
| Total aromatic hydrocarbons (>C5 - C40) | N | mg/kg | 1 | 1.5 | 6490 | 45.2 | 121 | n/t | n/t | n/t | n/t |
| Total petroleum hydrocarbons (>C5 - C40) | N | mg/kg | 1 | 1.5 | 8740 | 52 | 131 | n/t | n/t | n/t | n/t |
| **Total Petroleum Hydrocarbons** | | | | | | | | | | | |
| Mineral Oil | M | mg/kg | 5 | n/t | n/t | n/t | n/t | < 5 | < 5 | n/t | n/t |
| **PCB (ICES 7 congeners)** | | | | | | | | | | | |
| PCB (Total of 7 Congeners) | M | mg/kg | 0.03 | n/t | n/t | n/t | n/t | < 0.03 | < 0.03 | n/t | n/t |

Tests marked N are not UKAS accredited.
The Environmental Laboratory Ltd. Reg. No. 3882193

# Results Summary

**Report No.: 19-23403, issue number 1**

| WAC Analysis | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Elab Ref:** | 175192 | | | | | **Landfill Waste Acceptance Criteria Limits*** | | |
| **Sample Date:** | 24/05/2019 | | | | | **Inert Waste Landfill** | **Stable Non-reactive Hazardous waste in non-hazardous Landfill** | **Hazardous Waste Landfill** |
| **Sample ID:** | DIS6 D3 | | | | | | | |
| **Depth (m)** | 1 | | | | | | | |
| **Site:** | London School of Theology Green Lane, Northwood, London | | | | | | | |
| | | | | | | | | |
| **Determinand** | | **Code** | **Units** | | | | | |
| Total Organic Carbon | | N | % | | 0.19 | 3 | 5 | 6 |
| Loss on Ignition | | M | % | | 2.8 | -- | -- | 10 |
| Total BTEX | | M | mg/kg | | < 0.01 | 6 | -- | -- |
| Total PCBs (7 congeners) | | M | mg/kg | | < 0.03 | 1 | -- | -- |
| TPH Total WAC | | M | mg/kg | | < 5 | 500 | -- | -- |
| Total (of 17) PAHs | | N | mg/kg | | < 2 | 100 | -- | -- |
| pH | | M | | | 7.7 | -- | >6 | -- |
| Acid Neutralisation Capacity | | N | mol/kg | | < 0.1 | -- | To evaluate | To evaluate |
| **Eluate Analysis** | | | **10:1** | | **10:1** | **Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg** | | |
| | | | **mg/l** | | **mg/kg** | | | |
| Arsenic | | N | < 0.005 | | < 0.05 | 0.5 | 2 | 25 |
| Barium | | N | < 0.005 | | < 0.05 | 20 | 100 | 300 |
| Cadmium | | N | < 0.001 | | < 0.01 | 0.04 | 1 | 5 |
| Chromium | | N | < 0.005 | | < 0.05 | 0.5 | 10 | 70 |
| Copper | | N | < 0.005 | | < 0.05 | 2 | 50 | 100 |
| Mercury | | N | < 0.005 | | < 0.01 | 0.01 | 0.2 | 2 |
| Molybdenum | | N | < 0.005 | | < 0.05 | 0.5 | 10 | 30 |
| Nickel | | N | < 0.001 | | < 0.05 | 0.4 | 10 | 40 |
| Lead | | N | < 0.001 | | < 0.05 | 0.5 | 10 | 50 |
| Antimony | | N | < 0.005 | | < 0.05 | 0.06 | 0.7 | 5 |
| Selenium | | N | < 0.005 | | < 0.05 | 0.1 | 0.5 | 7 |
| Zinc | | N | < 0.005 | | < 0.05 | 4 | 50 | 200 |
| Chloride | | N | < 5 | | < 50 | 800 | 15000 | 25000 |
| Fluoride | | N | < 5 | | 11.00 | **10** | 150 | 500 |
| Sulphate | | N | 3 | | 34.50 | 1000 | 20000 | 50000 |
| Total Dissolved Solids | | N | 22 | | 216.00 | 4000 | 60000 | 100000 |
| Phenol Index | | N | < 0.01 | | < 0.10 | 1 | - | - |
| Dissolved Organic Carbon | | N | 6.750 | | 67.00 | 500 | 800 | 1000 |
| **Leach Test Information** | | | | | | | | |
| pH | | N | 7.0 | | | | | |
| Conductivity (uS/cm) | | N | 32 | | | | | |
| Dry mass of test portion (g) | | | 101.000 | | | | | |
| Dry Matter (%) | | | 79 | | | | | |
| Moisture (%) | | | 27 | | | | | |
| Eluent Volume (ml) | | | 930 | | | | | |

Results are expressed on a dry weight basis, after correction for moisture content where applicable

* Stated limits are for guidance only, and not for conformity assessment.

# Results Summary

**Report No.: 19-23403, issue number 1**

| WAC Analysis | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Elab Ref:** | 175191 | | | | | **Landfill Waste Acceptance Criteria Limits*** | | |
| **Sample Date:** | 24/05/2019 | | | | | **Inert Waste Landfill** | **Stable Non-reactive Hazardous waste in non-hazardous Landfill** | **Hazardous Waste Landfill** |
| **Sample ID:** | DIS5 D2 | | | | | | | |
| **Depth (m)** | 0.5 | | | | | | | |
| **Site:** | London School of Theology Green Lane, Northwood, London | | | | | | | |
| | | | | | | | | |
| **Determinand** | | **Code** | **Units** | | | | | |
| Total Organic Carbon | | N | % | | 3.00 | 3 | 5 | 6 |
| Loss on Ignition | | M | % | | 6.9 | -- | -- | 10 |
| Total BTEX | | M | mg/kg | | < 0.01 | 6 | -- | -- |
| Total PCBs (7 congeners) | | M | mg/kg | | < 0.03 | 1 | -- | -- |
| TPH Total WAC | | M | mg/kg | | < 5 | 500 | -- | -- |
| Total (of 17) PAHs | | N | mg/kg | | 3.0 | 100 | -- | -- |
| pH | | M | | | 7.4 | -- | >6 | -- |
| Acid Neutralisation Capacity | | N | mol/kg | | < 0.1 | -- | To evaluate | To evaluate |
| **Eluate Analysis** | | | **10:1** | | **10:1** | **Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg** | | |
| | | | **mg/l** | | **mg/kg** | | | |
| Arsenic | | N | < 0.005 | | < 0.05 | 0.5 | 2 | 25 |
| Barium | | N | 0.016 | | 0.16 | 20 | 100 | 300 |
| Cadmium | | N | < 0.001 | | < 0.01 | 0.04 | 1 | 5 |
| Chromium | | N | < 0.005 | | < 0.05 | 0.5 | 10 | 70 |
| Copper | | N | 0.007 | | 0.07 | 2 | 50 | 100 |
| Mercury | | N | < 0.005 | | < 0.01 | 0.01 | 0.2 | 2 |
| Molybdenum | | N | < 0.005 | | < 0.05 | 0.5 | 10 | 30 |
| Nickel | | N | 0.001 | | < 0.05 | 0.4 | 10 | 40 |
| Lead | | N | 0.003 | | < 0.05 | 0.5 | 10 | 50 |
| Antimony | | N | < 0.005 | | < 0.05 | 0.06 | 0.7 | 5 |
| Selenium | | N | < 0.005 | | < 0.05 | 0.1 | 0.5 | 7 |
| Zinc | | N | 0.009 | | 0.09 | 4 | 50 | 200 |
| Chloride | | N | < 5 | | < 50 | 800 | 15000 | 25000 |
| Fluoride | | N | < 5 | | < 10 | 10 | 150 | 500 |
| Sulphate | | N | 6 | | 60.60 | 1000 | 20000 | 50000 |
| Total Dissolved Solids | | N | 131 | | 1310.00 | 4000 | 60000 | 100000 |
| Phenol Index | | N | < 0.01 | | < 0.10 | 1 | - | - |
| Dissolved Organic Carbon | | N | 12.000 | | 120.00 | 500 | 800 | 1000 |
| **Leach Test Information** | | | | | | | | |
| pH | | N | 8.2 | | | | | |
| Conductivity (uS/cm) | | N | 195 | | | | | |
| Dry mass of test portion (g) | | | 101.000 | | | | | |
| Dry Matter (%) | | | 86 | | | | | |
| Moisture (%) | | | 16 | | | | | |
| Eluent Volume (ml) | | | 971 | | | | | |

Results are expressed on a dry weight basis, after correction for moisture content where applicable

* Stated limits are for guidance only, and not for conformity assessment.

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## Results Summary

**Report No.: 19-23403, issue number 1**

### Asbestos Results

Analytical result only applies to the sample as submitted by the client. Any comments, opinions or interpretations (marked #)
in this report are outside UKAS accreditation (Accreditation No2683). They are subjective comments only which must be verified by the client.

| Elab No | Depth (m) | Clients Reference | Description of Sample Matrix # | Asbestos Identification | Gravimetric Analysis Total (%) | Gravimetric Analysis by ACM Type (%) | Free Fibre Analysis (%) | Total Asbestos (%) |
|---|---|---|---|---|---|---|---|---|
| 175187 | 0.15 | DIS1 D1 | Brown soil, clinker, plant-material | No asbestos detected | n/t | n/t | n/t | n/t |
| 175188 | 0.15 | DIS2 D1 | Brown sandy soil, road-stone, stones, brick, plant-material | No asbestos detected | n/t | n/t | n/t | n/t |
| 175189 | 0.50 | DIS3 D2 | Brown soil, stones | No asbestos detected | n/t | n/t | n/t | n/t |
| 175190 | 0.50 | DIS4 D2 | Brown soil, stones, sandstone | No asbestos detected | n/t | n/t | n/t | n/t |

# Method Summary

**Report No.: 19-23403, issue number 1**

| Parameter | Codes | Analysis Undertaken On | Date Tested | Method Number | Technique |
|---|---|---|---|---|---|
| **Soil** | | | | | |
| Free cyanide | N | As submitted sample | 10/06/2019 | 107 | Colorimetry |
| Hexavalent chromium | N | As submitted sample | 10/06/2019 | 110 | Colorimetry |
| Aqua regia extractable metals | M | Air dried sample | 10/06/2019 | 118 | ICPMS |
| Phenols in solids | M | As submitted sample | 07/06/2019 | 121 | HPLC |
| PAH (GC-FID) | M | As submitted sample | 11/06/2019 | 133 | GC-FID |
| Water soluble anions | M | Air dried sample | 10/06/2019 | 172 | Ion Chromatography |
| Low range Aliphatic hydrocarbons soil | N | As submitted sample | 11/06/2019 | 181 | GC-MS |
| Low range Aromatic hydrocarbons soil | N | As submitted sample | 11/06/2019 | 181 | GC-MS |
| Total cyanide | M | As submitted sample | 10/06/2019 | 204 | Colorimetry |
| TPH CWG soil by gc-gc | M | As submitted sample | 10/06/2019 | 214 | |
| Asbestos identification | U | Air dried sample | 14/06/2019 | PMAN | Microscopy |
| **Leachate** | | | | | |
| Arsenic | N | | 12/06/2019 | 101 | ICPMS |
| Cadmium | N | | 12/06/2019 | 101 | ICPMS |
| Chromium | N | | 12/06/2019 | 101 | ICPMS |
| Lead | N | | 12/06/2019 | 101 | ICPMS |
| Nickel | N | | 12/06/2019 | 101 | ICPMS |
| Copper | N | | 12/06/2019 | 101 | ICPMS |
| Zinc | N | | 12/06/2019 | 101 | ICPMS |
| Mercury | N | | 12/06/2019 | 101 | ICPMS |
| Selenium | N | | 12/06/2019 | 101 | ICPMS |
| Antimony | N | | 12/06/2019 | 101 | ICPMS |
| Barium | N | | 12/06/2019 | 101 | ICPMS |
| Molybdenum | N | | 12/06/2019 | 101 | ICPMS |
| pH Value | N | | 12/06/2019 | 113 | Electrometric |
| Electrical Conductivity | N | | 12/06/2019 | 136 | Probe |
| Dissolved Organic Carbon | N | | 12/06/2019 | 102 | TOC analyser |
| Chloride | N | | 12/06/2019 | 131 | Ion Chromatography |
| Fluoride | N | | 12/06/2019 | 131 | Ion Chromatography |
| Sulphate | N | | 12/06/2019 | 131 | Ion Chromatography |
| Total Dissolved Solids | N | | 12/06/2019 | 144 | Gravimetric |
| Phenol index | N | | 12/06/2019 | 121 | HPLC |
| **WAC Solids analysis** | N | | | | |
| pH Value | M | Air dried sample | 11/06/2019 | 113 | Electrometric |
| Total Organic Carbon | N | Air dried sample | 11/06/2019 | 210 | IR |
| Loss on Ignition | M | Air dried sample | 12/06/2019 | 129 | Gravimetric |
| Acid Neutralization Capacity to pH 7 | N | Air dried sample | 11/06/2019 | NEN 737 | Electrometric |
| Total BTEX | M | As submitted sample | 11/06/2019 | 181 | GCMS |
| Mineral Oil | M | As submitted sample | 10/06/2019 | 117 | GCFID |
| Total PCBs (7 congeners) | M | Air dried sample | 11/06/2019 | 120 | GCMS |
| Total PAH (17) | N | As submitted sample | 12/06/2019 | 133 | GCFID |

Tests marked N are not UKAS accredited

# Report Information

**Report No.: 19-23403, issue number 1**

**Key**

| | |
|---|---|
| U | hold UKAS accreditation |
| M | hold MCERTS and UKAS accreditation |
| N | do not currently hold UKAS accreditation |
| ^ | MCERTS accreditation not applicable for sample matrix |
| * | UKAS accreditation not applicable for sample matrix |
| S | Subcontracted to approved laboratory UKAS Accredited for the test |
| SM | Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test |
| NS | Subcontracted to approved laboratory. UKAS accreditation is not applicable. |
| I/S | Insufficient Sample |
| U/S | Unsuitable sample |
| n/t | Not tested |
| < | means "less than" |
| > | means "greater than" |

Soil sample results are expressed on an air dried basis (dried at < 30°C), and are uncorrected for inert material removed.

ELAB are unable to provide an interpretation or opinion on the content of this report.

The results relate only to the sample received.

PCB congener results may include any coeluting PCBs

Uncertainty of measurement for the determinands tested are available upon request

Unless otherwise stated, sample information has been provided by the client

**Deviation Codes**

| | |
|---|---|
| a | No date of sampling supplied |
| b | No time of sampling supplied (Waters Only) |
| c | Sample not received in appropriate containers |
| d | Sample not received in cooled condition |
| e | The container has been incorrectly filled |
| f | Sample age exceeds stability time (sampling to receipt) |
| g | Sample age exceeds stability time (sampling to analysis) |

Where a sample has a deviation code, the applicable test result may be invalid.

**Sample Retention and Disposal**

All soil samples will be retained for a period of one month

All water samples will be retained for 7 days following the date of the test report

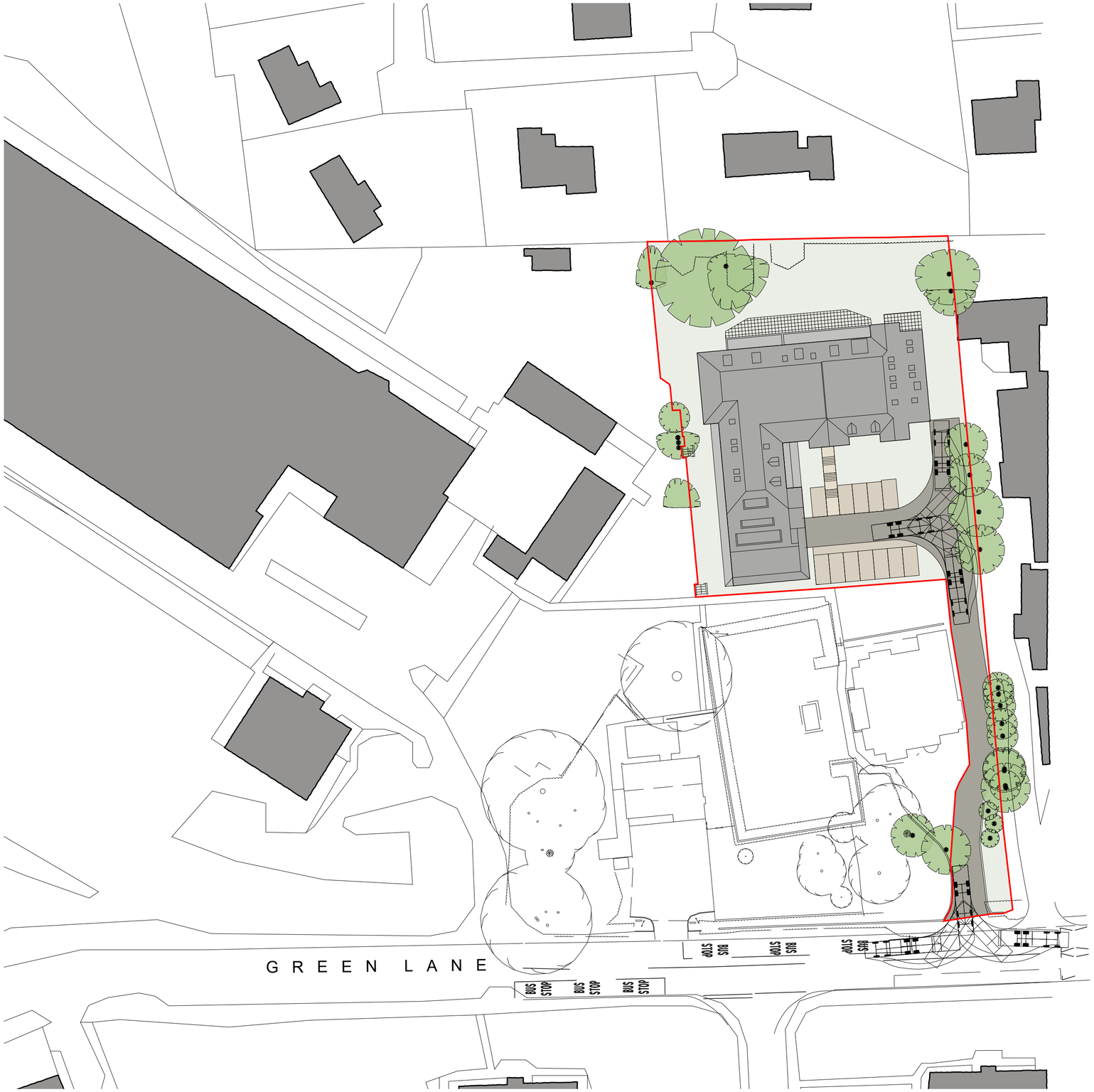
Charges may apply to extended sample storage

Risk Management Limited
Tel : 01883 343572

# GROUNDWATER & GAS MONITORING RESULTS

| Project Name: | London School of Theology, Green Lane, Northwood, London HA6 2UW | Project No. : | RML 6980 |
|---|---|---|---|
| | | Date : | June 2019 |

| BH No. | Date | Pressure (mb) | Oxygen (%) | Carbon Dioxide (%) | Methane (%) | Methane LEL (%) | Flow Rate (l/hr) | Groundwater Level (m) |
|---|---|---|---|---|---|---|---|---|
| DIS2 | 3rd June 2019 | 1013 | 18.0 | 3.8 | 0.0 | 0.0 | 0.0 | 1.47 |
| DIS2 | 11th June 2019 | 1012 | 18.2 | 3.0 | 0.0 | 0.0 | 0.0 | 1.57 |
| DIS2 | 20th June 2019 | 1012 | 17.1 | 1.5 | 0.0 | 0.0 | 0.0 | 1.24 |




| Rev | Date | Description |
|---|---|---|
| | | |
| | | |
| | | |

Fluent
ARCHITECTURAL DESIGN SERVICES

FLUENT
ARCHITECTURAL DESIGN SERVICES
221 Clare Road, Staines,
Middlesex, Tw19 7EF
Tel: 01784 391674 Mob: 07841 848473
E-mail: tommillin@fluent-ads.co.uk
Web: fluent-ads.co.uk

Client :

Westcombe Homes Ltd

LST Site C, Green Lane, Northwood

Proposed Site Layout

1 : 500 @ A2

0 10

| | |
|---|---|
| Scale | 1:500 @ A2 |
| Dwg No. | FLU.249.3A.02 |
| Date | 11.10.16 |
| Rev | |
| Drawn | N.Millin |

**Key**

Borehole Location


Risk Management

Title : **SKETCH FIELDWORK LOCATION PLAN**

**RISK MANAGEMENT LIMITED**
**Unit 10 Coopers Place, Combe Lane,**
**Godalming, Surrey GU8 5SZ**
**Tel : 01883 343572**

Project Location : London School of Theology, Green Lane, Northwood, London HA6 2UW

Report Date : June 2019

Scale : NTS

Drawn By : MSP

Drg. No. RML 6980 /1