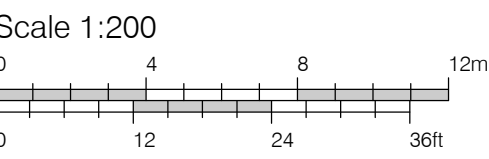


GENERAL NOTES  
1. DO NOT SCALE FROM THIS DRAWING  
2. ALL DIMENSIONS TO BE CHECKED ON SITE  
3. ANY DISCREPANCIES SHOULD BE REPORTED TO THE ARCHITECT - CONTRACT ADMINISTRATOR



Key

- Section 1 - Block F Show Flats
- Section 2 - Block F
- Section 3 - Block E
- Section 4 - Block C
- Section 5 - Block A Show Flats
- Section 6 - Block B
- Section 7 - Block A
- Section 8 - Block D & Energy Centre

P01 09.09.2022 Stage 3B Issue - Scheme adjusted to 2 stairs per core

| Rev | Date       | Description                                  |
|-----|------------|----------------------------------------------|
| 1   | 09.09.2022 | Issue - Scheme adjusted to 2 stairs per core |

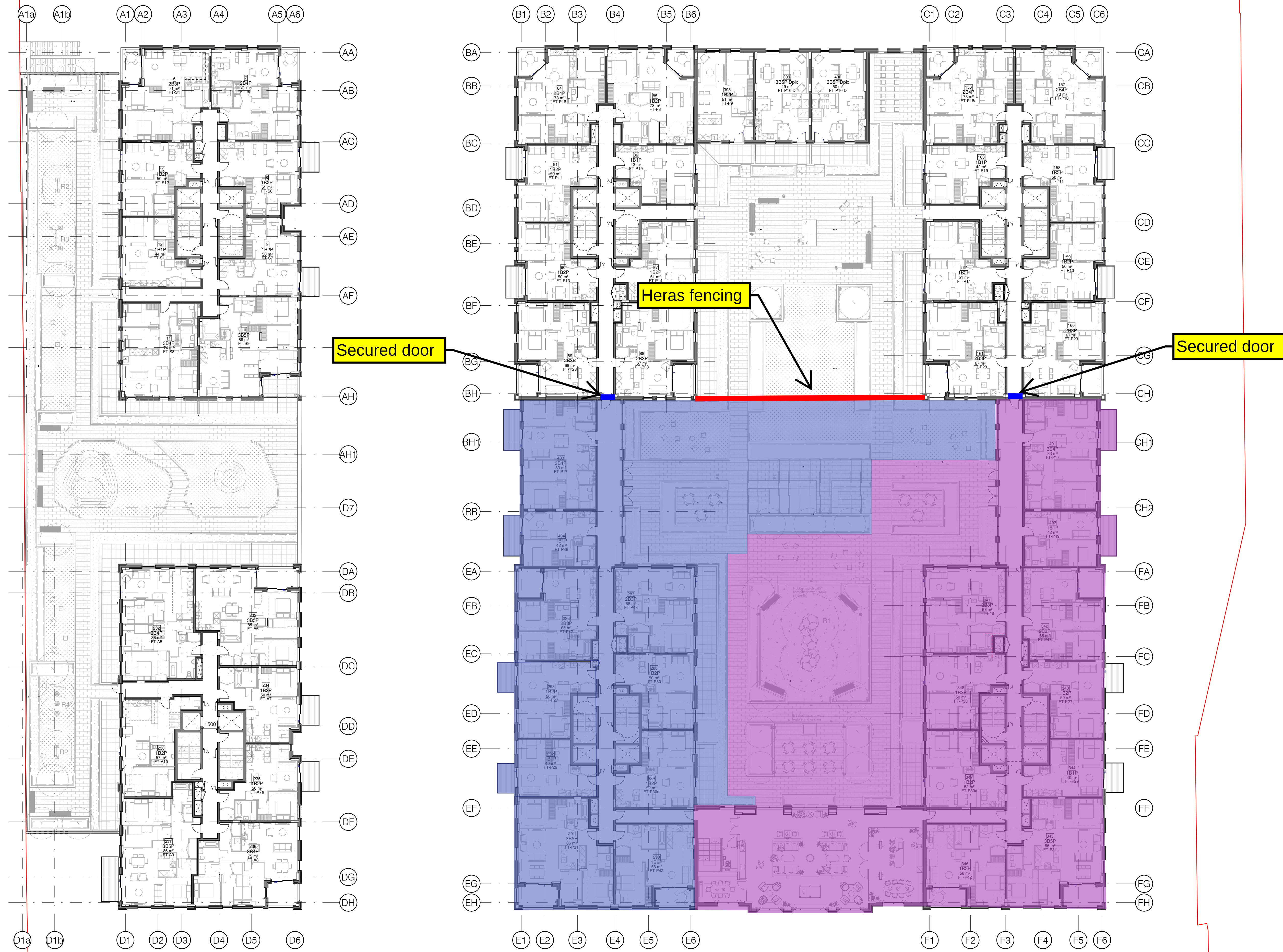
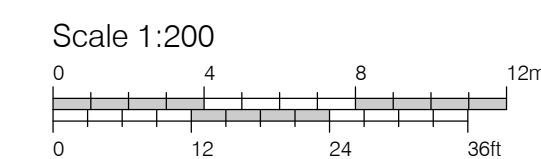


CLIENT  
Greystar  
PROJECT  
CTC - Stage 3B (2022)  
DRAWING NAME  
Stage 3B - Mezzanine Floor

| STATUS          |                       |                  | DATE       |
|-----------------|-----------------------|------------------|------------|
| TENDER          |                       |                  | MAY 2022   |
| DRAWN BY<br>JM  | CHECK BY<br>AD        | SCALE<br>1 : 200 | SIZE<br>A1 |
| JOB NO.<br>1140 | DRAWING NO.<br>010102 | REVISION<br>P01  |            |

1140CTC-FRA-ZZ-01-DR-A-010102

GENERAL NOTES  
1. DO NOT SCALE FROM THIS DRAWING  
2. ALL DIMENSIONS TO BE CHECKED ON SITE  
3. ANY DISCREPANCIES SHOULD BE REPORTED TO THE ARCHITECT - CONTRACT ADMINISTRATOR



- Key**
- Section 1 - Block F Show Flats
  - Section 2 - Block F
  - Section 3 - Block E
  - Section 4 - Block C
  - Section 5 - Block A Show Flats
  - Section 6 - Block B
  - Section 7 - Block A
  - Section 8 - Block D & Energy Centre

P01 09.09.2022 Stage 3B Issue - Scheme adjusted to 2 stairs per core

| Rev | Date       | Description                                  |
|-----|------------|----------------------------------------------|
| 1   | 09.09.2022 | Issue - Scheme adjusted to 2 stairs per core |

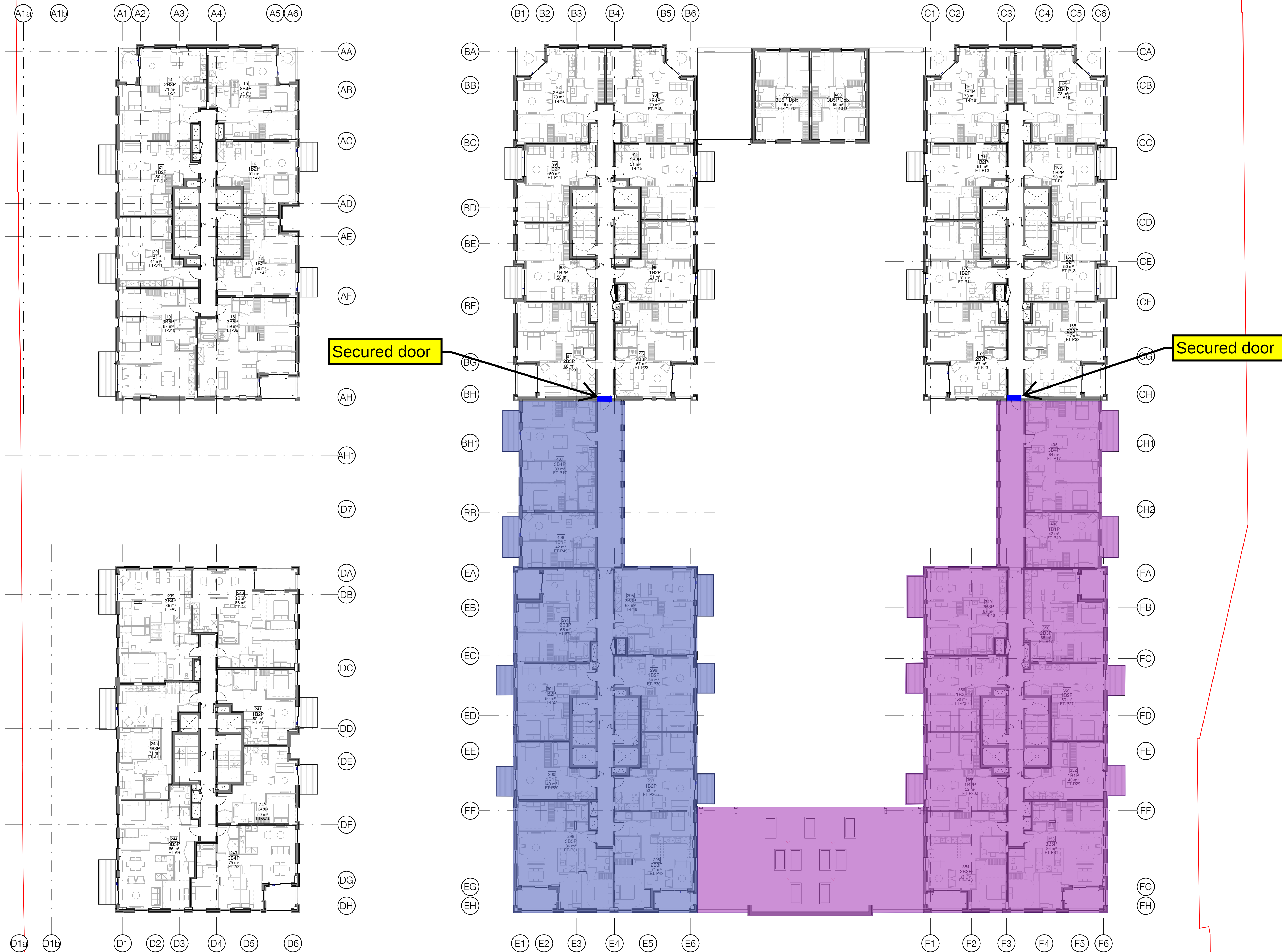
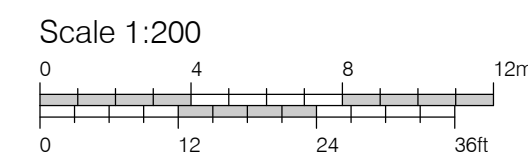


CLIENT  
Greystar  
PROJECT  
CTC - Stage 3B (2022)  
DRAWING NAME  
Stage 3B - First Floor

| STATUS   |             |          | DATE     |
|----------|-------------|----------|----------|
| TENDER   |             |          | MAY 2022 |
| DRAWN BY | CHECK BY    | SCALE    | SIZE     |
| JM       | AD          | 1 : 200  | A1       |
| JOB NO.  | DRAWING NO. | REVISION |          |
| 1140     | 010103      | P01      |          |

1140CTC-FRA-ZZ-01-DR-A-010103

GENERAL NOTES  
1. DO NOT SCALE FROM THIS DRAWING  
2. ALL DIMENSIONS TO BE CHECKED ON SITE  
3. ANY DISCREPANCIES SHOULD BE REPORTED TO THE ARCHITECT - CONTRACT ADMINISTRATOR



### Key

- Section 1 - Block F Show Flats
- Section 2 - Block F
- Section 3 - Block E
- Section 4 - Block C
- Section 5 - Block A Show Flats
- Section 6 - Block B
- Section 7 - Block A
- Section 8 - Block D & Energy Centre

P01 09.09.2022 Stage 3B Issue - Scheme adjusted to 2 stairs per core

| Rev | Date       | Description            |
|-----|------------|------------------------|
| 1   | 09.09.2022 | Issue for construction |



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Hoxton, London N1 7LB T: +44 (0)20 7612 8454

CLIENT  
Greystar

PROJECT  
CTC - Stage 3B (2022)

DRAWING NAME  
Stage 3B - Second Floor

DRAWING NO.  
1140

DRAWING NO.  
010104

REVISION  
P01

STATUS  
TENDER

DATE  
MAY 2022

DRAWN BY  
JM

CHECK BY  
AD

SCALE  
1 : 200

SIZE  
A1

JOB NO.  
1140

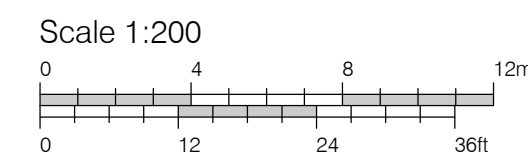
DRAWING NO.  
010104

REVISION  
P01

1140CTC-FRA-ZZ-02-DR-A-010104

GENERAL NOTES

1. DO NOT SCALE FROM THIS DRAWING
2. ALL DIMENSIONS TO BE CHECKED ON SITE
3. ANY DISCREPANCIES SHOULD BE REPORTED TO THE ARCHITECT - CONTRACT ADMINISTRATOR



## Key

- Section 1 - Block F Show Flats
- Section 2 - Block F
- Section 3 - Block E
- Section 4 - Block C
- Section 5 - Block A Show Flats
- Section 6 - Block B
- Section 7 - Block A
- Section 8 - Block D & Energy Centre

P01 09.09.2022 Stage 3B Issue - Scheme adjusted to 2 stairs per core

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



CLIENT  
Greystar

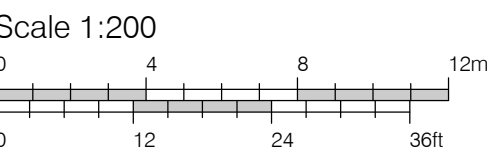
PROJECT  
CTC - Stage 3B (2022)

DRAWING NAME  
Stage 3B - Third Floor

| STATUS          |                       |                  | DATE       |
|-----------------|-----------------------|------------------|------------|
| TENDER          |                       |                  | MAY 2022   |
| DRAWN BY<br>JM  | CHECK BY<br>AD        | SCALE<br>1 : 200 | SIZE<br>A1 |
| JOB NO.<br>1140 | DRAWING NO.<br>010105 | REVISION<br>P01  |            |

1140CTC-FRA-ZZ-03-DR-A-010105

GENERAL NOTES  
1. DO NOT SCALE FROM THIS DRAWING  
2. ALL DIMENSIONS TO BE CHECKED ON SITE  
3. ANY DISCREPANCIES SHOULD BE REPORTED TO THE ARCHITECT - CONTRACT ADMINISTRATOR



Key

- Section 1 - Block F Show Flats
- Section 2 - Block F
- Section 3 - Block E
- Section 4 - Block C
- Section 5 - Block A Show Flats
- Section 6 - Block B
- Section 7 - Block A
- Section 8 - Block D & Energy Centre

P01 09.09.2022 Stage 3B Issue - Scheme adjusted to 2 stairs per core

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



CLIENT  
Greystar  
PROJECT  
CTC - Stage 3B (2022)  
DRAWING NAME  
Stage 3B - Roof Plan

| STATUS   |             |          | TENDER |  | DATE |
|----------|-------------|----------|--------|--|------|
| DRAWN BY | CHECK BY    | SCALE    |        |  | SIZE |
| JM       | AD          | 1 : 200  |        |  | A1   |
| JOB NO.  | DRAWING NO. | REVISION |        |  |      |
| 1140     | 010112      | P01      |        |  |      |

1140CTC-FRA-ZZ-RF-DR-A-010112



# Amended Report

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|                               |                                                                                 |                            |             |
|-------------------------------|---------------------------------------------------------------------------------|----------------------------|-------------|
| <b>Report No.:</b>            | 25-02435-2                                                                      |                            |             |
| <b>Initial Date of Issue:</b> | 10-Feb-2025                                                                     | <b>Date of Re-Issue:</b>   | 10-Feb-2025 |
| <b>Re-Issue Details:</b>      | This report has been revised and directly supersedes 25-02435-1 in its entirety |                            |             |
| <b>Client</b>                 | Springbridge Direct Ltd                                                         |                            |             |
| <b>Client Address:</b>        | Oxford Road<br>Denham<br>Middlesex<br>UB9 4DF                                   |                            |             |
| <b>Contact(s):</b>            | Tom Hawkins                                                                     |                            |             |
| <b>Project</b>                | Springbridge Yard                                                               |                            |             |
| <b>Quotation No.:</b>         | Q25-37158                                                                       | <b>Date Received:</b>      | 24-Jan-2025 |
| <b>Order No.:</b>             |                                                                                 | <b>Date Instructed:</b>    | 24-Jan-2025 |
| <b>No. of Samples:</b>        | 2                                                                               |                            |             |
| <b>Turnaround (Wkdays):</b>   | 10                                                                              | <b>Results Due:</b>        | 06-Feb-2025 |
| <b>Date Approved:</b>         | 07-Feb-2025                                                                     | <b>Subcon Results Due:</b> | 06-Feb-2025 |

**Approved By:**

**Details:** David Smith, Technical Director

**For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report**

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## Results - Soil

**Project: Springbridge Yard**

|                                        |                  |                             |            |              |            |                      |
|----------------------------------------|------------------|-----------------------------|------------|--------------|------------|----------------------|
| <b>Client: Springbridge Direct Ltd</b> |                  | <b>Chemtest Job No.:</b>    |            | 25-02435     |            |                      |
| Quotation No.: Q25-37158               |                  | <b>Chemtest Sample ID.:</b> |            | 1922378      |            |                      |
| Order No.:                             |                  | Client Sample Ref.:         |            | Topsoil      |            |                      |
|                                        |                  | Client Sample ID.:          |            | Top          |            |                      |
|                                        |                  | Sample Type:                |            | SOIL         |            |                      |
|                                        |                  | Date Sampled:               |            | 22-Jan-2025  |            |                      |
|                                        |                  | Time Sampled:               |            | 11:26        |            |                      |
|                                        |                  | Asbestos Lab:               |            | DURHAM       |            |                      |
| <b>Determinand</b>                     | <b>HWOL Code</b> | <b>Accred.</b>              | <b>SOP</b> | <b>Units</b> | <b>LOD</b> |                      |
| ACM Type                               |                  | U                           | 2192       |              | N/A        | -                    |
| Asbestos Identification                |                  | U                           | 2192       |              | N/A        | No Asbestos Detected |
| Moisture                               |                  | N                           | 2030       | %            | 0.020      | 17                   |
| Soil Colour                            |                  | N                           | 2040       |              | N/A        | Brown                |
| Other Material                         |                  | N                           | 2040       |              | N/A        | Stones               |
| Soil Texture                           |                  | N                           | 2040       |              | N/A        | Sand                 |
| Boron (Hot Water Soluble)              |                  | M                           | 2120       | mg/kg        | 0.40       | 1.1                  |
| Cyanide (Total)                        |                  | M                           | 2300       | mg/kg        | 0.50       | < 0.50               |
| Arsenic                                |                  | M                           | 2455       | mg/kg        | 0.5        | 1.4                  |
| Cadmium                                |                  | M                           | 2455       | mg/kg        | 0.10       | < 0.10               |
| Chromium                               |                  | M                           | 2455       | mg/kg        | 0.5        | 3.2                  |
| Copper                                 |                  | M                           | 2455       | mg/kg        | 0.50       | 3.2                  |
| Mercury                                |                  | M                           | 2455       | mg/kg        | 0.05       | < 0.05               |
| Nickel                                 |                  | M                           | 2455       | mg/kg        | 0.50       | 2.0                  |
| Lead                                   |                  | M                           | 2455       | mg/kg        | 0.50       | 6.0                  |
| Selenium                               |                  | M                           | 2455       | mg/kg        | 0.25       | < 0.25               |
| Zinc                                   |                  | M                           | 2455       | mg/kg        | 0.50       | 14                   |
| Chromium (Hexavalent)                  |                  | N                           | 2490       | mg/kg        | 0.50       | < 0.50               |

## Results - Soil

**Project: Springbridge Yard**

| <b>Client: Springbridge Direct Ltd</b> |             | <b>Chemtest Job No.:</b>    |      | 25-02435    |       |        |
|----------------------------------------|-------------|-----------------------------|------|-------------|-------|--------|
| Quotation No.: Q25-37158               |             | <b>Chemtest Sample ID.:</b> |      | 1922378     |       |        |
| Order No.:                             |             | Client Sample Ref.:         |      | Topsoil     |       |        |
|                                        |             | Client Sample ID.:          |      | Top         |       |        |
|                                        |             | Sample Type:                |      | SOIL        |       |        |
|                                        |             | Date Sampled:               |      | 22-Jan-2025 |       |        |
|                                        |             | Time Sampled:               |      | 11:26       |       |        |
|                                        |             | Asbestos Lab:               |      | DURHAM      |       |        |
| Determinand                            | HWOL Code   | Accred.                     | SOP  | Units       | LOD   |        |
| Aliphatic VPH >C5-C6                   | HS_2D_AL    | U                           | 2780 | mg/kg       | 0.05  | < 0.05 |
| Aliphatic VPH >C6-C7                   | HS_2D_AL    | U                           | 2780 | mg/kg       | 0.05  | < 0.05 |
| Aliphatic VPH >C7-C8                   | HS_2D_AL    | U                           | 2780 | mg/kg       | 0.05  | < 0.05 |
| Aliphatic VPH >C6-C8 (Sum)             | HS_2D_AL    | N                           | 2780 | mg/kg       | 0.10  | < 0.10 |
| Aliphatic VPH >C8-C10                  | HS_2D_AL    | U                           | 2780 | mg/kg       | 0.05  | < 0.05 |
| Total Aliphatic VPH >C5-C10            | HS_2D_AL    | U                           | 2780 | mg/kg       | 0.25  | < 0.25 |
| Aliphatic EPH >C10-C12 MC              | EH_2D_AL_#1 | M                           | 2690 | mg/kg       | 2.00  | < 2.0  |
| Aliphatic EPH >C12-C16 MC              | EH_2D_AL_#1 | M                           | 2690 | mg/kg       | 1.00  | < 1.0  |
| Aliphatic EPH >C16-C21 MC              | EH_2D_AL_#1 | M                           | 2690 | mg/kg       | 2.00  | 3.5    |
| Aliphatic EPH >C21-C35 MC              | EH_2D_AL_#1 | M                           | 2690 | mg/kg       | 3.00  | 25     |
| Aliphatic EPH >C35-C40 MC              | EH_2D_AL_#1 | N                           | 2690 | mg/kg       | 10.00 | 17     |
| Total Aliphatic EPH >C10-C35 MC        | EH_2D_AL_#1 | M                           | 2690 | mg/kg       | 5.00  | 30     |
| Total Aliphatic EPH >C10-C40 MC        | EH_2D_AL_#1 | N                           | 2690 | mg/kg       | 10.00 | 47     |
| Aromatic VPH >C5-C7                    | HS_2D_AR    | U                           | 2780 | mg/kg       | 0.05  | < 0.05 |
| Aromatic VPH >C7-C8                    | HS_2D_AR    | U                           | 2780 | mg/kg       | 0.05  | < 0.05 |
| Aromatic VPH >C8-C10                   | HS_2D_AR    | U                           | 2780 | mg/kg       | 0.05  | < 0.05 |
| Total Aromatic VPH >C5-C10             | HS_2D_AR    | U                           | 2780 | mg/kg       | 0.25  | < 0.25 |
| Aromatic EPH >C10-C12 MC               | EH_2D_AR_#1 | U                           | 2690 | mg/kg       | 1.00  | < 1.0  |

## Results - Soil

**Project: Springbridge Yard**

|                                        |                  |                             |            |              |            |        |
|----------------------------------------|------------------|-----------------------------|------------|--------------|------------|--------|
| <b>Client: Springbridge Direct Ltd</b> |                  | <b>Chemtest Job No.:</b>    |            | 25-02435     |            |        |
| Quotation No.: Q25-37158               |                  | <b>Chemtest Sample ID.:</b> |            | 1922378      |            |        |
| Order No.:                             |                  | Client Sample Ref.:         |            | Topsoil      |            |        |
|                                        |                  | Client Sample ID.:          |            | Top          |            |        |
|                                        |                  | Sample Type:                |            | SOIL         |            |        |
|                                        |                  | Date Sampled:               |            | 22-Jan-2025  |            |        |
|                                        |                  | Time Sampled:               |            | 11:26        |            |        |
|                                        |                  | Asbestos Lab:               |            | DURHAM       |            |        |
| <b>Determinand</b>                     | <b>HWOL Code</b> | <b>Accred.</b>              | <b>SOP</b> | <b>Units</b> | <b>LOD</b> |        |
| Aromatic EPH >C12-C16 MC               | EH_2D_AR_#1      | U                           | 2690       | mg/kg        | 1.00       | < 1.0  |
| Aromatic EPH >C16-C21 MC               | EH_2D_AR_#1      | U                           | 2690       | mg/kg        | 2.00       | 11     |
| Aromatic EPH >C21-C35 MC               | EH_2D_AR_#1      | U                           | 2690       | mg/kg        | 2.00       | 6.0    |
| Aromatic EPH >C35-C40 MC               | EH_2D_AR_#1      | N                           | 2690       | mg/kg        | 1.00       | 31     |
| Total Aromatic EPH >C10-C35 MC         | EH_2D_AR_#1      | U                           | 2690       | mg/kg        | 5.00       | 17     |
| Total Aromatic EPH >C10-C40 MC         | EH_2D_AR_#1      | N                           | 2690       | mg/kg        | 10.00      | 48     |
| Total VPH >C5-C10                      | HS_2D_Total      | U                           | 2780       | mg/kg        | 0.50       | < 0.50 |
| Total EPH >C10-C35 MC                  | EH_2D_Total_#1   | U                           | 2690       | mg/kg        | 10.00      | 47     |
| Total EPH >C10-C40 MC                  | EH_2D_Total_#1   | N                           | 2690       | mg/kg        | 10.00      | 95     |
| Benzene                                |                  | M                           | 2760       | µg/kg        | 1.0        | < 1.0  |
| Toluene                                |                  | M                           | 2760       | µg/kg        | 1.0        | < 1.0  |
| Ethylbenzene                           |                  | M                           | 2760       | µg/kg        | 1.0        | < 1.0  |
| m & p-Xylene                           |                  | M                           | 2760       | µg/kg        | 1.0        | < 1.0  |
| o-Xylene                               |                  | M                           | 2760       | µg/kg        | 1.0        | < 1.0  |
| Nitrogen (Total)                       |                  | SN                          | 2790       | %            | 0.10       | 0.23   |
| Naphthalene                            |                  | M                           | 2800       | mg/kg        | 0.10       | < 0.10 |
| Acenaphthylene                         |                  | N                           | 2800       | mg/kg        | 0.10       | < 0.10 |
| Acenaphthene                           |                  | M                           | 2800       | mg/kg        | 0.10       | < 0.10 |

## Results - Soil

**Project: Springbridge Yard**

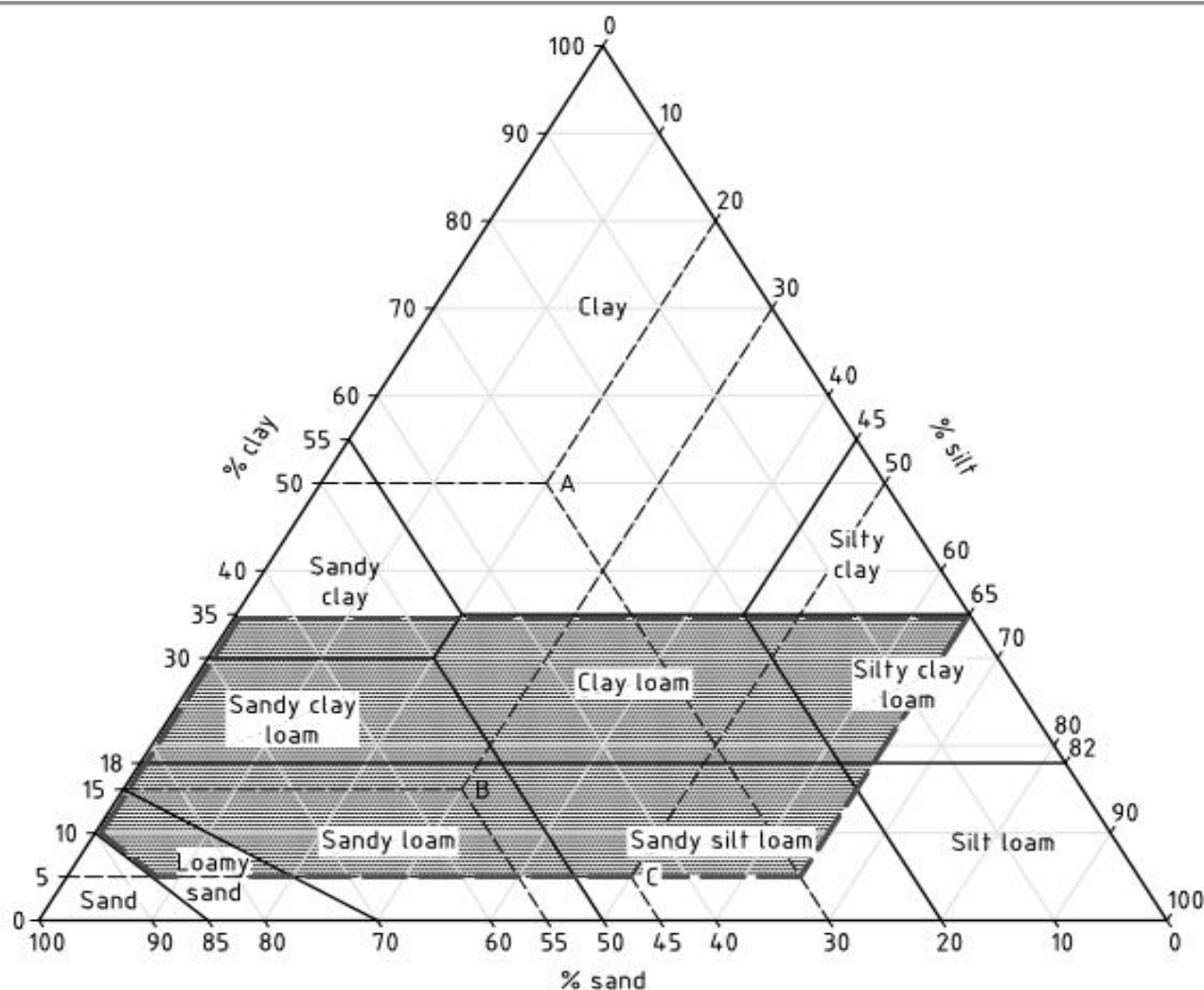
|                                        |                  |                             |            |              |            |        |
|----------------------------------------|------------------|-----------------------------|------------|--------------|------------|--------|
| <b>Client: Springbridge Direct Ltd</b> |                  | <b>Chemtest Job No.:</b>    |            | 25-02435     |            |        |
| Quotation No.: Q25-37158               |                  | <b>Chemtest Sample ID.:</b> |            | 1922378      |            |        |
| Order No.:                             |                  | Client Sample Ref.:         |            | Topsoil      |            |        |
|                                        |                  | Client Sample ID.:          |            | Top          |            |        |
|                                        |                  | Sample Type:                |            | SOIL         |            |        |
|                                        |                  | Date Sampled:               |            | 22-Jan-2025  |            |        |
|                                        |                  | Time Sampled:               |            | 11:26        |            |        |
|                                        |                  | Asbestos Lab:               |            | DURHAM       |            |        |
| <b>Determinand</b>                     | <b>HWOL Code</b> | <b>Accred.</b>              | <b>SOP</b> | <b>Units</b> | <b>LOD</b> |        |
| Fluorene                               |                  | M                           | 2800       | mg/kg        | 0.10       | < 0.10 |
| Phenanthrene                           |                  | M                           | 2800       | mg/kg        | 0.10       | < 0.10 |
| Anthracene                             |                  | M                           | 2800       | mg/kg        | 0.10       | < 0.10 |
| Fluoranthene                           |                  | M                           | 2800       | mg/kg        | 0.10       | < 0.10 |
| Pyrene                                 |                  | M                           | 2800       | mg/kg        | 0.10       | < 0.10 |
| Benzo[a]anthracene                     |                  | M                           | 2800       | mg/kg        | 0.10       | < 0.10 |
| Chrysene                               |                  | M                           | 2800       | mg/kg        | 0.10       | < 0.10 |
| Benzo[b]fluoranthene                   |                  | M                           | 2800       | mg/kg        | 0.10       | < 0.10 |
| Benzo[k]fluoranthene                   |                  | M                           | 2800       | mg/kg        | 0.10       | < 0.10 |
| Benzo[a]pyrene                         |                  | M                           | 2800       | mg/kg        | 0.10       | < 0.10 |
| Indeno(1,2,3-c,d)Pyrene                |                  | M                           | 2800       | mg/kg        | 0.10       | < 0.10 |
| Dibenz(a,h)Anthracene                  |                  | N                           | 2800       | mg/kg        | 0.10       | < 0.10 |
| Benzo[g,h,i]perylene                   |                  | M                           | 2800       | mg/kg        | 0.10       | < 0.10 |
| Total Of 16 PAH's                      |                  | N                           | 2800       | mg/kg        | 2.0        | < 2.0  |
| Total Phenols                          |                  | M                           | 2920       | mg/kg        | 0.10       | < 0.10 |

# Results - Topsoil Report

BS3882:2015

Chemtest Job No.: 25-02435  
 Chemtest Sample ID.: 1922378  
 Client Sample Ref.: Topsoil  
 Sample Location:  
 Client Sample ID.: Top  
 Top Depth (m):  
 Bottom Depth (m):  
 Date Sampled: 22-Jan-2025  
 Time Sampled:

| Parameter                                   | Units | Multipurpose Range | Result     | Compliant with Multipurpose Range? (Y/N) | Compliant with Specific Purpose Range? (Y/N) |       |       |
|---------------------------------------------|-------|--------------------|------------|------------------------------------------|----------------------------------------------|-------|-------|
| <b>Texture</b>                              |       |                    |            |                                          | Acid                                         | Low F | Calc. |
| Clay content (Sub Contracted)               | %     |                    | 6.0        |                                          |                                              |       |       |
| Silt content (Sub Contracted)               | %     |                    | 11.0       |                                          |                                              |       |       |
| Sand content (Sub Contracted)               | %     |                    | 84         |                                          |                                              |       |       |
| Soil texture class                          |       | See Attached Chart | Loamy Sand | YES                                      |                                              |       |       |
| <b>Mass Loss on Ignition</b>                |       |                    |            |                                          |                                              |       |       |
| Clay 5-20%                                  |       | 3.0-20             | 3.1        | YES                                      | YES                                          | YES   | YES   |
| Clay 20-35%                                 |       | 5.0-20             |            |                                          |                                              |       |       |
| <b>Stone Content</b>                        | % m/m |                    |            |                                          |                                              |       |       |
| >2mm (Sub Contracted)                       |       | 0-30               | 4.2        | YES                                      |                                              |       |       |
| >20mm (Sub Contracted)                      |       | 0-10               | 0.70       | YES                                      |                                              |       |       |
| >50mm (Sub Contracted)                      |       | 0                  | < 0.10     | YES                                      |                                              |       |       |
| Soil pH value                               |       | 5.5-8.5            | 8.2        | YES                                      | NO                                           | YES   | YES   |
| Carbonate (Calcareous only)                 | %     |                    | 1.2        |                                          |                                              |       | YES   |
| Electrical Conductivity                     | µS/cm | If >3300 do ESP    | 3200       | YES                                      |                                              |       |       |
| <b>Available Nutrient Content</b>           |       |                    |            |                                          |                                              |       |       |
| Nitrogen %                                  |       | >0.15              | 0.23       | YES                                      | YES                                          |       | YES   |
| Extractable phosphorus                      | mg/l  | 16-140             | 110        | YES                                      | YES                                          | NO    | YES   |
| Extractable potassium                       | mg/l  | 121-1500           | 1400       | YES                                      | YES                                          |       | YES   |
| Extractable magnesium                       | mg/l  | 51-600             | 220        | YES                                      | YES                                          |       | YES   |
| <b>Carbon : Nitrogen Ratio</b>              |       | <20:1              | 7.4/1      | YES                                      | YES                                          | YES   | YES   |
| <b>Exchangeable sodium</b>                  | %     | <15                | 4.2        |                                          |                                              |       |       |
| Available Calcium                           | mg/l  |                    | 1700       |                                          |                                              |       |       |
| Available Sodium                            | mg/l  |                    | 160        |                                          |                                              |       |       |
| <b>Phytotoxic Contaminants (by soil pH)</b> |       | < 6.0              | 6.0-7.0    | > 7.0                                    |                                              |       |       |
| Zinc (Nitric Acid extract)                  | mg/kg | <200               | <200       | <300                                     | 38                                           | YES   |       |
| Copper (Nitric Acid extract)                | mg/kg | <100               | <135       | <200                                     | 8.6                                          | YES   |       |
| Nickel (Nitric Acid extract)                | mg/kg | <60                | <75        | <110                                     | 5.4                                          | YES   |       |
| <b>Visible Contaminants</b>                 | % mm  |                    |            |                                          |                                              |       |       |
| >2mm                                        |       | <0.5               | 0.000      | YES                                      |                                              |       |       |
| ..... of which plastics                     |       | <0.25              | 0.000      | YES                                      |                                              |       |       |
| ..... man-made sharps                       |       | zero in 1kg        | 0.000      | YES                                      |                                              |       |       |

Texture Classification Chart**Key**

Area within which the texture of topsoil is required to fall

**NOTE** Examples of textural classification are as follows.

- Soil A with 30% sand, 20% silt and 50% clay is in the "clay" textural class.
- Soil B with 55% sand, 30% silt and 15% clay is in the "sandy loam" textural class.
- Soil C with 45% sand, 50% silt and 5% clay is in the "sandy silt loam" textural class.

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## Test Methods

| SOP  | Title                                                              | Parameters included                                                                                                                                                                                                                                                       | Method summary                                                                                                                                                                         | Water Accred. |
|------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 2010 | pH Value of Soils                                                  | pH at 20°C                                                                                                                                                                                                                                                                | pH Meter                                                                                                                                                                               |               |
| 2020 | Electrical Conductivity                                            | Electrical conductivity (EC) of aqueous extract or calcium sulphate solution for topsoil                                                                                                                                                                                  | Measurement of the electrical resistance of a 2:1 water/soil extract.                                                                                                                  |               |
| 2030 | Moisture and Stone Content of Soils(Requirement of MCERTS)         | Moisture content                                                                                                                                                                                                                                                          | Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.                                                                                   |               |
| 2040 | Soil Description(Requirement of MCERTS)                            | Soil description                                                                                                                                                                                                                                                          | As received soil is described based upon BS5930                                                                                                                                        |               |
| 2115 | Total Nitrogen in Soils                                            | Nitrogen                                                                                                                                                                                                                                                                  | Determination by elemental analyser                                                                                                                                                    |               |
| 2120 | Water Soluble Boron, Sulphate, Magnesium & Chromium                | Boron; Sulphate; Magnesium; Chromium                                                                                                                                                                                                                                      | Aqueous extraction / ICP-OES                                                                                                                                                           |               |
| 2192 | Asbestos                                                           | Asbestos                                                                                                                                                                                                                                                                  | Polarised light microscopy / Gravimetry                                                                                                                                                |               |
| 2260 | Carbonate                                                          | Carbonate                                                                                                                                                                                                                                                                 | Titration                                                                                                                                                                              |               |
| 2300 | Cyanides & Thiocyanate in Soils                                    | Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate                                                                                                                                                                                           | Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.                                                                                    |               |
| 2400 | Cations                                                            | Cations                                                                                                                                                                                                                                                                   | ICP-MS                                                                                                                                                                                 |               |
| 2420 | Phosphate                                                          | Phosphate                                                                                                                                                                                                                                                                 | Spectrophotometry - Discrete analyser                                                                                                                                                  |               |
| 2450 | Acid Soluble Metals in Soils                                       | Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc                                                                                                                  | Acid digestion followed by determination of metals in extract by ICP-MS.                                                                                                               |               |
| 2455 | Acid Soluble Metals in Soils                                       | Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc                                                                                                                  | Acid digestion followed by determination of metals in extract by ICP-MS.                                                                                                               |               |
| 2490 | Hexavalent Chromium in Soils                                       | Chromium [VI]                                                                                                                                                                                                                                                             | Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine. |               |
| 2620 | LOI 440                                                            | LOI 440 Trommel Fines                                                                                                                                                                                                                                                     | Determination of the proportion by mass that is lost from a soil by ignition at 440°C.                                                                                                 |               |
| 2690 | EPH A/A Split                                                      | Aliphatics: >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35–C40<br>Aromatics: >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35–C40                                                                                                                                               | Acetone/Heptane extraction / GCxGC FID detection                                                                                                                                       |               |
| 2760 | Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS      | Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule                                                                                                                                      | Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.                             |               |
| 2780 | VPH A/A Split                                                      | Aliphatics: >C5–C6, >C6–C7,>C7–C8,>C8–C10 Aromatics: >C5–C7,>C7–C8,>C8–C10                                                                                                                                                                                                | Water extraction / Headspace GCxGC FID detection                                                                                                                                       |               |
| 2790 | Semi-Volatile Organic Compounds (SVOCs) in Soils by GC-MS          | Semi-volatile organic compounds(cf. USEPA Method 8270)                                                                                                                                                                                                                    | Acetone/Hexane extraction / GC-MS                                                                                                                                                      |               |
| 2800 | Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS | Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene* | Dichloromethane extraction / GC-MS                                                                                                                                                     |               |
| 2920 | Phenols in Soils by HPLC                                           | Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.                                                                                                                         | 60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.                                                                               |               |

## **Report Information**

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### **Key**

|     |                                                                                                               |
|-----|---------------------------------------------------------------------------------------------------------------|
| U   | UKAS accredited                                                                                               |
| M   | MCERTS and UKAS accredited                                                                                    |
| N   | Unaccredited                                                                                                  |
| S   | This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis     |
| SN  | This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis |
| T   | This analysis has been subcontracted to an unaccredited laboratory                                            |
| I/S | Insufficient Sample                                                                                           |
| U/S | Unsuitable Sample                                                                                             |
| N/E | not evaluated                                                                                                 |
| <   | "less than"                                                                                                   |
| >   | "greater than"                                                                                                |
| SOP | Standard operating procedure                                                                                  |
| LOD | Limit of detection                                                                                            |

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.

Any comments or interpretations are outside the scope of UKAS accreditation.

The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.

Uncertainty of measurement for the determinands tested are available upon request .

None of the results in this report have been recovery corrected.

All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at  $\leq 30^{\circ}\text{C}$  prior to analysis.

All Asbestos testing is performed at the indicated laboratory .

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

NEW\_ASB Eurofins Chemtest Limited, 11 Depot Road, Newmarket, CB8 0AL

DURHAM Eurofins Chemtest Limited, Unit A North Wing, Prospect Business Park, Crookhall Lane, Consett, Co Durham, DH8 7PW

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### **Sample Deviation Codes**

A - Date of sampling not supplied

B - Sample age exceeds stability time (sampling to extraction)

C - Sample not received in appropriate containers

D - Broken Container

E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

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### **Sample Retention and Disposal**

All soil samples will be retained for a period of 30 days from the date of receipt.

All water samples will be retained for 14 days from the date of receipt.

Charges may apply to extended sample storage.

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### **Water Sample Category Key for Accreditation**

## **Report Information**

DW - Drinking Water  
GW - Ground Water  
LE - Land Leachate  
NA - Not Applicable  
PL - Prepared Leachate  
PW - Processed Water  
RE - Recreational Water  
SA - Saline Water  
SW - Surface Water  
TE - Treated Effluent  
TS - Treated Sewage  
UL - Unspecified Liquid

### **Clean Up Codes**

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NC - No Clean Up  
MC - Mathematical Clean Up  
FC - Florisil Clean Up

### **HWOL Acronym System**

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HS - Headspace analysis  
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent  
CU - Clean-up – e.g. by Florisil, silica gel  
1D - GC – Single coil gas chromatography  
Total - Aliphatics & Aromatics  
AL - Aliphatics only  
AR - Aromatic only  
2D - GC-GC – Double coil gas chromatography  
#1 - EH\_2D\_Total but with humics mathematically subtracted  
#2 - EH\_2D\_Total but with fatty acids mathematically subtracted  
+ - Operator to indicate cumulative e.g. EH+EH\_Total or EH\_CU+HS\_Total

If you require extended retention of samples, please email your requirements to:  
[customerservices@chemtest.com](mailto:customerservices@chemtest.com)



TIM O'HARE ASSOCIATES  
SOIL & LANDSCAPE CONSULTANCY

Mr Jason Lock  
Boughton Loam Ltd  
Telford Way Industrial Estate  
Telford Way  
Kettering  
Northamptonshire NN16 8UN

15<sup>th</sup> January 2025  
Our Ref: TOHA/25/1658/1/SS  
Your Ref: PO 9765

Dear Sirs

**Topsoil Analysis Report: Intensive Roof Garden Substrate**

We have completed the analysis of the soil sample recently submitted, referenced *IN1 Green Roof Substrate*, and have pleasure reporting our findings.

The purpose of the analysis was to determine the suitability of the material for use as an intensive lightweight substrate in a rooftop or podium garden environment.

This report presents the results of analysis for the sample submitted to our office, and it should be considered 'indicative' of the topsoil source. The report and results should therefore not be used by third parties as a means of verification or validation testing or waste designation purposes, especially after the topsoil has left the Boughton Loam Ltd site.

**SAMPLE EXAMINATION**

The sample was described as a dark brown (Munsell Colour 10YR 3/3), dry, friable to non-plastic, slightly calcareous SAND with a single grain structure. The sample was free of stone-sized material, with the exception of frequent lightweight expanded clay aggregates (leca) particles. The sample contained a moderate proportion of organic fines and occasional woody fragments. No unusual odours, deleterious materials, roots or rhizomes of pernicious weeds were observed.

---

Tim O'Hare Associates LLP  
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www.toha.co.uk



*Plate 1: IN1 Green Roof Substrate Sample*

#### **ANALYTICAL SCHEDULE**

The sample was submitted to a UKAS and MCERTS accredited laboratory for a range of physical and chemical tests to confirm the composition and fertility of the soil, and the concentration of selected potential contaminants. The following parameters were determined:

- detailed particle size analysis (5 sands, silt, clay);
- stone content (2-20mm, 20-50mm, >50mm);
- saturated hydraulic conductivity;
- bulk density (as received, saturated @ field capacity);
- pH and electrical conductivity values;
- exchangeable sodium percentage;
- major plant nutrients (N, P, K, Mg);
- organic matter content;
- C:N ratio;
- heavy metals (As, B, Cd, Cr, Cu, Pb, Hg, Ni, Se, Zn);
- total cyanide and total (mono) phenols;
- speciated PAHs (US EPA16 suite);
- aromatic and aliphatic TPH (C5-C35 banding);
- benzene, toluene, ethylbenzene, xylene (BTEX).

The results are presented on the attached Certificate of Analysis and an interpretation of the results is given below.

## RESULTS OF ANALYSIS

### Particle Size Analysis and Stone Content

The less than 2mm fraction fell into the *sand* texture class, with a predominance of medium sand (0.25-0.50mm). This indicates a narrow overall particle size distribution, which is beneficial for roof garden environments as good porosity levels are usually maintained in a consolidated state and the risk of particle interpacking is minimised.

The 'stone' sized fraction (>2mm) of the sample was very low (by mass), and comprised entirely of lightweight expanded clay aggregate (leca) up to 20mm in diameter. The proportion of stone sized particles recorded would be considered acceptable for an intensive roof garden substrate.

### Saturated Hydraulic Conductivity and Bulk Density

The saturated hydraulic conductivity of the sample was high (143 mm/hour) and the soil would be described as 'free-draining'. This indicates that the substrate is sufficiently permeable and should demonstrate adequate drainage performance for use in rooftop or podium garden environments. Soils used in these environments need to have satisfactory drainage performance to avoid stagnation (and therefore excess weight) and to enable efficient conveyance of water into the drainage system. The soil is free-draining and may therefore benefit from additional irrigation input in dry periods, depending on the nature of the recipient scheme.

The sample displayed a bulk density at Field Capacity of 1.55 Mg/m<sup>3</sup>, which is reasonably low compared to that of standard topsoil. The suitability of the bulk density result should be confirmed by the project engineer for the recipient site.

### pH and Electrical Conductivity Values

The sample was strongly alkaline in reaction (pH 8.3). This pH value would be considered suitable for general landscape purposes providing species with a wide pH tolerance or those known to prefer alkaline soils are selected for planting, turfing and seeding.

The electrical conductivity (salinity) value (water extract) was moderately high; however, the exchangeable sodium percentage was low, indicating low sodium risk. The source of the elevated soluble salts in this instance is likely to be from soluble potassium (see comments below).

The electrical conductivity value by CaSO<sub>4</sub> extract (3833 µS/cm) exceeded our maximum recommended value (3300 µS/cm).

### Organic Matter and Fertility Status

The sample was adequate to well supplied with organic matter and major plant nutrients. The sample contained a high level of extractable potassium (2158 mg/l) that exceed our recommended value (1500 mg/l).

High potassium levels such as that found in this sample can also have an antagonistic effect on other soil nutrients, particularly magnesium. This can reduce nutrient uptake, leading to plant stress, particularly for establishing specimens.

### Potential Contaminants

With reference to BS3882:2015 - Table 1: Notes 3 and 4, there is a requirement to confirm levels of potential contaminants in relation to the topsoil's proposed end use. This includes human health, environmental protection and metals considered toxic to plants. In the absence of site-specific assessment criteria, the concentrations that affect human health have been compared with the *residential with homegrown produce* land use in the Suitable For Use Levels (S4ULs) presented in *The LQM/CIEH S4ULs for Human Health Risk Assessment* (2015) and the DEFRA SP1010: *Development of Category 4 Screening Levels (C4SLs) for Assessment of Land Affected by Contamination – Policy Companion Document* (2014).

Of the potential contaminants determined, none was found at levels that exceeded their guideline values.

### Phytotoxic Contaminants

Of the phytotoxic (toxic to plants) contaminants determined (copper, nickel, zinc), none was found at levels that exceeded the maximum permissible levels specified in BS3882:2015 – Table 1.

## CONCLUSION

The purpose of the analysis was to determine the suitability of the material for use as an intensive lightweight substrate in a roof garden or podium landscape environment.

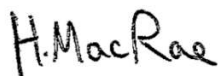
From the soil examination and subsequent laboratory analysis, the sample was described as a strongly alkaline, saline, slightly calcareous sand with a weakly developed structure and frequent 'leca' particles. The sample was found to be free draining. The sample was adequately to well supplied with organic matter and major plant nutrients, with a high level of extractable potassium. Of the potential contaminants determined, none exceeded their respective guideline values.

Based on our findings, the substrate represented by this sample appears to be a little rich on account of its high potassium content and slightly elevated electrical conductivity. The source of the elevated potassium content could be associated with the proportion and/or the type of compost in the blend. Potassium is highly soluble, and the level is likely to fall when the material is wetted by rain or irrigation water. However, in this instance we recommend reviewing the quality and quantity of compost that has been used.

---

We hope this report meets with your approval and provides the necessary information. Please do not hesitate to contact the undersigned if we can be of further assistance.

Yours faithfully



**Harriet MacRae**  
BSc MSc  
Soil Scientist



**Aaron Cross**  
BSc MSc MScSoilSci  
Senior Soil Scientist

For & on behalf of Tim O'Hare Associates LLP



**TIM O'HARE ASSOCIATES**  
SOIL & LANDSCAPE CONSULTANCY

|             |                                 |
|-------------|---------------------------------|
| Client:     | Boughton Loam Ltd               |
| Project:    | Intensive Roof Garden Substrate |
| Job:        | Topsoil Analysis                |
| Date:       | 15/01/2025                      |
| Job Ref No: | TOHA/25/1658/1/SS               |

| Sample Reference                  |      |               |
|-----------------------------------|------|---------------|
|                                   |      | Accreditation |
| Clay (<0.002mm)                   | %    | UKAS          |
| Silt (0.002-0.063mm)              | %    | UKAS          |
| Very Fine Sand (0.05-0.15mm)      | %    | UKAS          |
| Fine Sand (0.15-0.25mm)           | %    | UKAS          |
| Medium Sand (0.25-0.50mm)         | %    | UKAS          |
| Coarse Sand (0.50-1.0mm)          | %    | UKAS          |
| Very Coarse Sand (1.0-2.0mm)      | %    | UKAS          |
| Total Sand (0.05-2.0mm)           | %    | UKAS          |
| Texture Class (UK Classification) | --   | UKAS          |
| Stones (2-20mm)                   | % DW | GLP           |
| Stones (20-50mm)                  | % DW | GLP           |
| Stones (>50mm)                    | % DW | GLP           |

|                                           |                   |      |
|-------------------------------------------|-------------------|------|
| Saturated Hydraulic Conductivity (m)      | mm/hr             | A2LA |
| Bulk Density (as Received)                | Mg/m <sup>3</sup> | UKAS |
| Bulk Density (Saturated @ Field Capacity) | Mg/m <sup>3</sup> | UKAS |

|                                                         |       |      |
|---------------------------------------------------------|-------|------|
| pH Value (1:2.5 water extract)                          | units | UKAS |
| Electrical Conductivity (1:2.5 water extract)           | uS/cm | UKAS |
| Electrical Conductivity (1:2 CaSO <sub>4</sub> extract) | uS/cm | UKAS |
| Exchangeable Sodium Percentage                          | %     | UKAS |
| Organic Matter (LOI)                                    | %     | UKAS |
| Total Nitrogen (Dumas)                                  | %     | UKAS |
| C : N Ratio                                             | ratio | UKAS |
| Extractable Phosphorus                                  | mg/l  | UKAS |
| Extractable Potassium                                   | mg/l  | UKAS |
| Extractable Magnesium                                   | mg/l  | UKAS |

|                             |       |        |
|-----------------------------|-------|--------|
| Total Arsenic (As)          | mg/kg | MCERTS |
| Total Cadmium (Cd)          | mg/kg | MCERTS |
| Total Chromium (Cr)         | mg/kg | MCERTS |
| Hexavalent Chromium (Cr VI) | mg/kg | MCERTS |
| Total Copper (Cu)           | mg/kg | MCERTS |
| Total Lead (Pb)             | mg/kg | MCERTS |
| Total Mercury (Hg)          | mg/kg | MCERTS |
| Total Nickel (Ni)           | mg/kg | MCERTS |
| Total Selenium (Se)         | mg/kg | MCERTS |
| Total Zinc (Zn)             | mg/kg | MCERTS |
| Water Soluble Boron (B)     | mg/kg | MCERTS |
| Total Cyanide (CN)          | mg/kg | MCERTS |
| Total (mono) Phenols        | mg/kg | MCERTS |

|                          |       |        |
|--------------------------|-------|--------|
| Naphthalene              | mg/kg | MCERTS |
| Acenaphthylene           | mg/kg | MCERTS |
| Acenaphthene             | mg/kg | MCERTS |
| Fluorene                 | mg/kg | MCERTS |
| Phenanthrene             | mg/kg | MCERTS |
| Anthracene               | mg/kg | MCERTS |
| Fluoranthene             | mg/kg | MCERTS |
| Pyrene                   | mg/kg | MCERTS |
| Benz(a)anthracene        | mg/kg | MCERTS |
| Chrysene                 | mg/kg | MCERTS |
| Benzo(b)fluoranthene     | mg/kg | MCERTS |
| Benzo(k)fluoranthene     | mg/kg | MCERTS |
| Benzo(a)pyrene           | mg/kg | MCERTS |
| Indeno(1,2,3-cd)pyrene   | mg/kg | MCERTS |
| Dibenzo(a,h)anthracene   | mg/kg | MCERTS |
| Benzo(g,h,i)perylene     | mg/kg | MCERTS |
| Total PAHs (sum USEPA16) | mg/kg | MCERTS |

|                          |       |        |
|--------------------------|-------|--------|
| Aliphatic TPH >C5 - C6   | mg/kg | MCERTS |
| Aliphatic TPH >C6 - C8   | mg/kg | MCERTS |
| Aliphatic TPH >C8 - C10  | mg/kg | MCERTS |
| Aliphatic TPH >C10 - C12 | mg/kg | MCERTS |
| Aliphatic TPH >C12 - C16 | mg/kg | MCERTS |
| Aliphatic TPH >C16 - C21 | mg/kg | MCERTS |
| Aliphatic TPH >C21 - C35 | mg/kg | MCERTS |
| Aliphatic TPH (C5 - C35) | mg/kg | MCERTS |
| Aromatic TPH >C5 - C7    | mg/kg | MCERTS |
| Aromatic TPH >C7 - C8    | mg/kg | MCERTS |
| Aromatic TPH >C8 - C10   | mg/kg | MCERTS |
| Aromatic TPH >C10 - C12  | mg/kg | MCERTS |
| Aromatic TPH >C12 - C16  | mg/kg | MCERTS |
| Aromatic TPH >C16 - C21  | mg/kg | MCERTS |
| Aromatic TPH >C21 - C35  | mg/kg | MCERTS |
| Aromatic TPH (C5 - C35)  | mg/kg | MCERTS |

|                                    |       |        |
|------------------------------------|-------|--------|
| Benzene                            | mg/kg | MCERTS |
| Toluene                            | mg/kg | MCERTS |
| Ethylbenzene                       | mg/kg | MCERTS |
| p & m-xylene                       | mg/kg | MCERTS |
| o-xylene                           | mg/kg | MCERTS |
| MTBE (Methyl Tertiary Butyl Ether) | mg/kg | MCERTS |

S = SAND

**Visual Examination**

The sample was described as a dark brown (Munsell Colour 10YR 3/3), dry, friable to non-plastic, slightly calcareous SAND with a single grain structure. The sample was free of stone-sized material, with the exception of frequent lightweight expanded clay aggregates (leca) particles. The sample contained a moderate proportion of organic fines and occasional woody fragments. No unusual odours, deleterious materials, roots or rhizomes of pernicious weeds were observed.

Results of analysis should be read in conjunction with the report they were issued with

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**IN1 Green Roof Substrate**

|    |
|----|
| 4  |
| 7  |
| 7  |
| 20 |
| 45 |
| 15 |
| 2  |
| 89 |
| S  |
| 0  |
| 0  |
| 0  |

|      |
|------|
| 143  |
| 1.29 |
| 1.55 |

|      |
|------|
| 8.3  |
| 1576 |
| 3833 |
| 3.2  |
| 5.4  |
| 0.20 |
| 16   |
| 93   |
| 2158 |
| 143  |

|       |
|-------|
| 22    |
| < 0.2 |
| 33    |
| < 1.8 |
| 5     |
| 7     |
| < 0.3 |
| 12    |
| < 1.0 |
| 38    |
| 3.3   |
| < 1.0 |
| < 1.0 |

|        |
|--------|
| < 0.05 |
| < 0.05 |
| < 0.05 |
| < 0.05 |
| < 0.05 |
| < 0.05 |
| 0.06   |
| 0.05   |
| < 0.05 |
| < 0.05 |
| < 0.05 |
| < 0.05 |
| < 0.05 |
| < 0.05 |
| < 0.05 |
| < 0.05 |
| < 0.05 |
| < 0.05 |
| < 0.80 |

|         |
|---------|
| < 0.010 |
| < 0.010 |
| < 0.010 |
| < 1.0   |
| < 2.0   |
| < 8.0   |
| < 8.0   |
| < 10    |
| < 0.010 |
| < 0.010 |
| < 0.010 |
| < 0.020 |
| < 1.0   |
| 5       |
| 11      |
| < 10    |
| 16      |

|         |
|---------|
| < 0.005 |
| < 0.005 |
| < 0.005 |
| < 0.008 |
| < 0.005 |
| < 0.005 |

H. MacRae

Harriet MacRae  
BSc MSc  
Soil Scientist



**KEY**

- Site Boundary
- Adoptable Highway Boundary
- Proposed tree (with paving - filled tree grille)  
(Refer to Planting Plans for spec.)  
Extent of below-ground geogrid roof-crete system and vents indicated for hard landscaped areas
- Proposed tree in soft landscape  
(Refer to Planting Plans for spec.)
- Proposed hedge planting with mulch layer
- Proposed shrub planting with mulch layer
- Proposed turf to Courtyard / Open Space
- Proposed Wildflower Meadow

**Hard Landscape** (For paving details below refer to CTC-LDA-XX-XX-DR-L-09050 / 09051)

- P1 - Vehicular carriageway:  
Ref: Proposed Black DBM to Adoptable Standards.
- P2 - Pedestrian carriageway:  
Ref: Proposed Black DBM to Adoptable Standards.
- P3 - PCC aggregate block for vehicle & pedestrian areas (permeable) -  
Ref: Hydropave Fusion; Size: 200x100x40mm; 90° Herringbone  
Colour: Silver (50%), Mid Grey (50%)
- P4 - PCC aggregate block for vehicle thoroughfares & focal entrance areas (permeable) -  
Ref: Hydropave Fusion; Size: 200x100x40mm; 90° Herringbone; Colour: Graphite
- P5 - PCC Textured Self to Decorative Banding with mortar bed & joints -  
Ref: Hydropave Fusion; Size: 200x100x40mm; Staggered 50/50;  
Colour: Silver (border), Mid Grey (middle)
- P6 - PCC aggregate pavers to private frontages (non-permeable) -  
Ref: Fusion Size: 600x300x40mm; Staggered stretcher 50/50  
Colour: Silver (50%), Mid Grey (50%)
- P7 - Resin bound gravel to railway 'aggregate' element  
Ref: Adasset; Colour: 'Midnight Grey 6mm'
- P8 - Rubber mulch play surface to Central Play Courtyard  
Ref: Rhino Mulch; Colour: 'Earth Tone'
- P9 - Resin bound gravel to railway 'sleeper' element  
Ref: Adasset; Colour: 'XXX 6mm'

**Kerbs** (For all details below refer to CTC-LDA-XX-XX-DR-L-09052)

- K1 - PCC textured kerb - 75mm - (flush - transitions soft/hard, hard/hard)
- K2 - PCC textured kerb - 125mm - (flush - transitions soft/hard, hard/hard)
- K3 - PCC textured kerb - 255mm - (flush - transitions along vehicular routes)
- K4 - PCC textured kerb - 125mm - (125mm upstand for planters)
- K5 - PCC textured kerb - 255mm - (25mm upstand along car park access routes)
- K6 - Timber edge to soft planting and grassed area
- K7 - Bespoke Corten faux rail edge to railway feature
- PCC textured kerb colour to be silver, black speckled

**Boundary treatments** (For all details below refer to CTC-LDA-XX-XX-DR-L-09053)

- B1 - Metal railing to private frontages (1.2m high)
- B2 - Secure railing & gate to semi-private space north of block A (2.1m high)
- B3 - Metal gate to private frontages (1.2m high)
- B4 - Timber post and 3 rail fence to canal edge (1.2m high)
- B5 - Brick retaining wall (max. 450mm)

**Street Furniture** (For all details below refer to CTC-LDA-XX-XX-DR-L-09054)

- F1 - Litter Bin Powdercoated galvanised steel (80l) (Ref: S45 TA Litter Bin by OMOS)
- F2 - Timber bench to communal seating area (10m), 3m wide (Ref: QUAY by Factory Furniture)
- F3 - Timber seat to communal seating area (12m), 3m wide (Ref: QUAY by Factory Furniture)
- F4 - Timber cube bollard (informal seat) (Ref: Timber cube by Woodscape)
- F5 - Sheffield style cycle hoop (2m) (Ref: Sheffield stand by Broxap, PCC RAL 9004)
- F6 - Removable bollard (12m) (Ref: Autopa, Removable Bollard 101mm)
- F7 - Static bollard (15m) (Ref: Autopa, Fixed Bollard 114mm)
- F8 - Door guard (16m) (Ref: Roof fixed, PCC RAL 9004)

**Indicative Lighting** (To be designed by Specialist Lighting Consultant)

- Lighting columns (4m post)

**Play Items** (For all details below refer to CTC-LDA-XX-XX-DR-L-09057 / 09058)

- R1 - Obstacle Course Climbing Wall by HAGS
- R2 - Equilibria Natural by HAGS
- R3 - Somersault Volta by HAGS
- R4 - Inclusive Roundabout Spinnee by HAGS
- R5 - Swing Goro by HAGS
- R6 - Clamber Stick 3 by HAGS

**Ecological Enhancements at ground level**  
(Refer to Middlemarch Environmental Ltd Preliminary Ecological Appraisal - RT-MME-129768-01)

- Partially buried, upstanding logs in a cluster for deadwood habitat for the benefit of invertebrates (3nos)

**Note:**  
Site levels to Infrastructure Design Ltd design (Jan 2025)  
Ref: CTC-ISS-XX-XX-DR-C-923051-02

Levels shown alongside Clayton Road as per approved S278 drawing by LTP (July 2023)  
Ref: LTP 3770 C2 01 01 REV E 17 07 23 Setting Out

CDM Regulations 2015

ALL current drawings and specifications for the project must be read in conjunction with the Designer's Hazard and Environmental Assessment Record.

**notes**

- The contractor is responsible for checking dimensions, tolerances and references.
- Any discrepancy to be verified with the Architect before proceeding with the works.
- Where an item is covered by drawings to different scales the larger scale drawing is to be worked to.
- Do not scale drawing. Figured dimensions to be worked to in all cases.

4 3 2 1 0 2 4 6m

|       |                                                 |          |
|-------|-------------------------------------------------|----------|
| FINAL | FINAL CONSTRUCTION ISSUE                        | 16.05.25 |
| C02   | UPDATED ARCHITECT PLAN & HIGHWAYS PLAN RECEIVED | 21.02.25 |
| C01   | ISSUED FOR CONSTRUCTION                         | 14.02.25 |
| P01   | ISSUED FOR TEAM COORDINATION                    | 15.12.23 |
| REV   | AMENDMENT                                       | DATE     |

Client:

**GREYSTAR**  
The Global Leader in Rental Housing

Project:

CROWN TRADING CENTRE,  
HAYES, LONDON

Title:

GENERAL ARRANGEMENT 03

Scale:

1 : 100 | A1

Date: SEPT 2023

Drawn: DT

Checked: PW

**LDA**  
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Drawing no.

**CTC-LDA-XX-XX-DR-L-09013**

LDA Job no. L1115

Revision. FINAL