

The contents of this drawing including design details remains the property of Halsion Ltd and shall not be used for any other purpose without the prior written permission of Halsion Ltd. Do not reproduce or copy this drawing in whole or in part without the prior written permission of Halsion Ltd. All measurements are to be taken on site unless otherwise indicated. Halsion Ltd will not be held responsible for any errors or omissions in this drawing.

- GENERAL NOTES**
1. ALL DIMENSIONS TO BE READ IN CONJUNCTION WITH ALL RELEVANT SPECIFICATIONS, SCHEDULES & SCHEMATICS.
  2. FOR SCHEDULE OF MECHANICAL SYMBOLS REFER TO DRAWING No. 30407-62-11-01.
  3. FOR SECTIONS REFER TO DRAWING No. 70457/51/06.
  4. FLUSHING BYPASSES ON ALL SYSTEMS TO BE FINALISED PRIOR TO CONSTRUCTION. TO BE INSTALLED TO ALL SERVICES REQUIRING PROTECTIVE PROTECTION.

| PIPE MATERIAL   |        | PIPE SIZE      |     | PIPE WALL THICKNESS |     |
|-----------------|--------|----------------|-----|---------------------|-----|
|                 |        | HORIZONTAL (M) |     | VERTICAL (M)        |     |
| MILD STEEL      | 20-32  | 2.4            | 3.0 | 2.4                 | 3.0 |
|                 | 36-48  | 2.4            | 3.0 | 2.4                 | 3.0 |
|                 | 60-100 | 3.0            | 4.0 | 3.0                 | 4.0 |
| COPPER          | 150    | 2.4            | 3.0 | 2.4                 | 3.0 |
|                 | 150    | 2.4            | 3.0 | 2.4                 | 3.0 |
|                 | 150    | 2.4            | 3.0 | 2.4                 | 3.0 |
| STAINLESS STEEL | 20     | 2.4            | 3.0 | 2.4                 | 3.0 |
|                 | 20     | 2.4            | 3.0 | 2.4                 | 3.0 |
|                 | 20     | 2.4            | 3.0 | 2.4                 | 3.0 |
| ABS             | 60     | 2.4            | 3.0 | 2.4                 | 3.0 |
|                 | 60     | 2.4            | 3.0 | 2.4                 | 3.0 |
|                 | 60     | 2.4            | 3.0 | 2.4                 | 3.0 |
| PVC             | 150    | 2.4            | 3.0 | 2.4                 | 3.0 |
|                 | 150    | 2.4            | 3.0 | 2.4                 | 3.0 |
|                 | 150    | 2.4            | 3.0 | 2.4                 | 3.0 |
| PVC             | 150    | 2.4            | 3.0 | 2.4                 | 3.0 |
|                 | 150    | 2.4            | 3.0 | 2.4                 | 3.0 |
|                 | 150    | 2.4            | 3.0 | 2.4                 | 3.0 |
| PVC             | 150    | 2.4            | 3.0 | 2.4                 | 3.0 |
|                 | 150    | 2.4            | 3.0 | 2.4                 | 3.0 |
|                 | 150    | 2.4            | 3.0 | 2.4                 | 3.0 |

| PIPE SIZE (DN & MM) |  | PIPE DIAMETER (IN MM) |  |
|---------------------|--|-----------------------|--|
| 12 TO 150           |  | 12 TO 150             |  |
| 150 TO 200          |  | 150 TO 200            |  |
| 200 TO 250          |  | 200 TO 250            |  |

| DUCTWORK ROP SIZE & SUPPORTS |  |
|------------------------------|--|
| DUCT TYPE                    |  |
| DUCT TYPE                    |  |
| DUCT TYPE                    |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

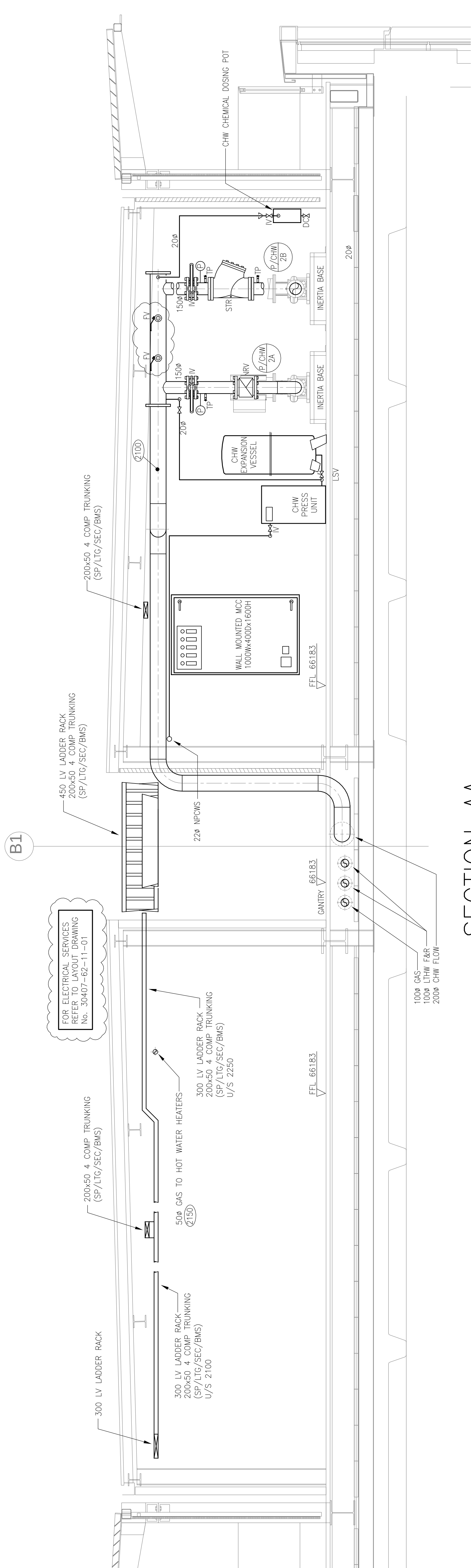
| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

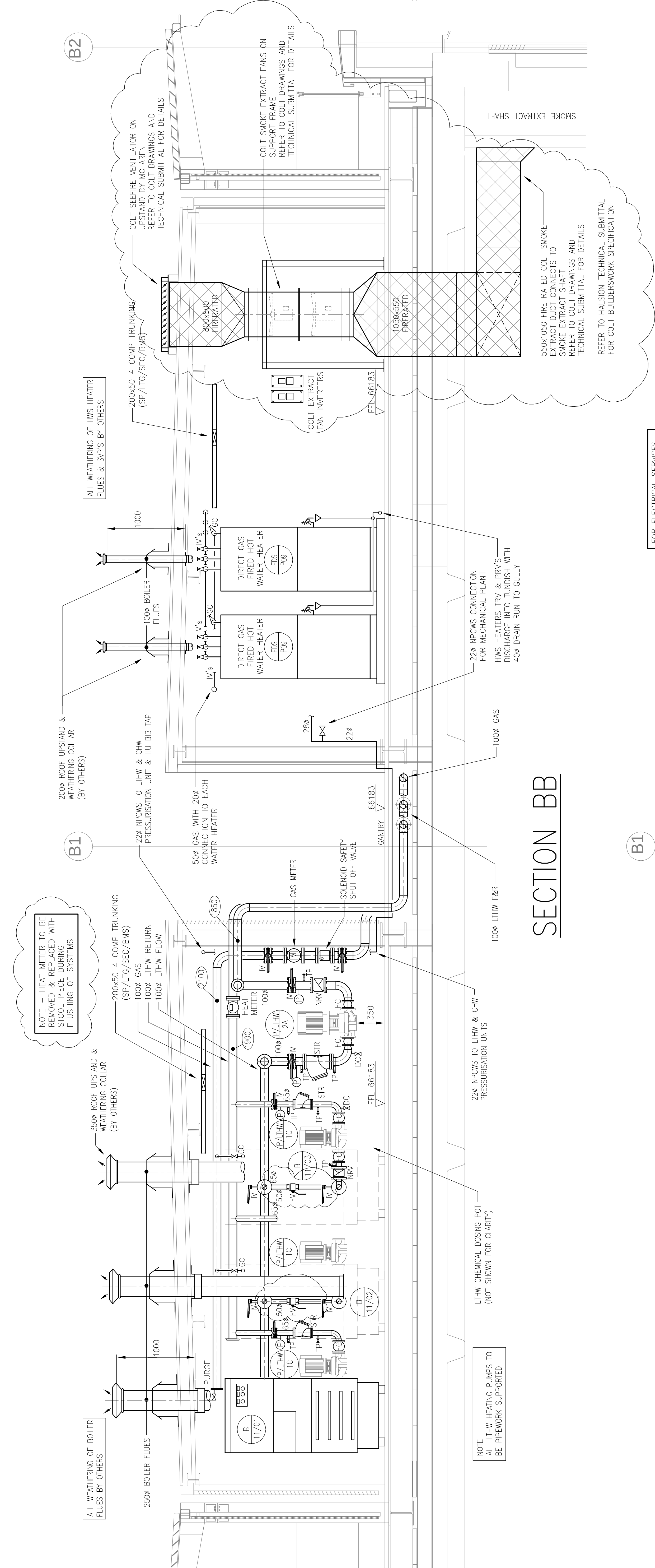
| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |

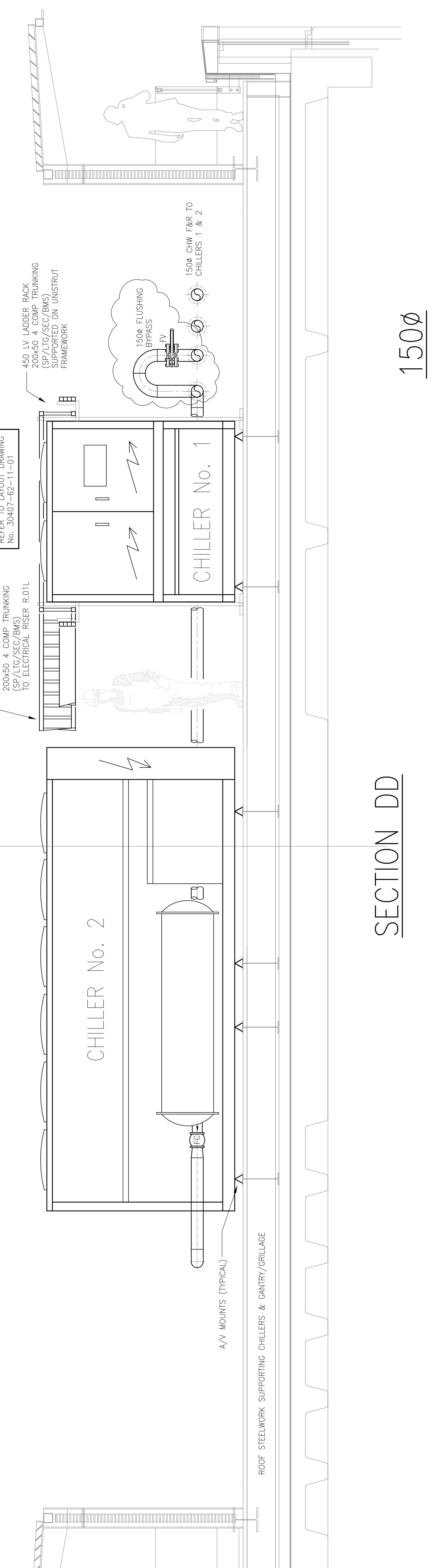
| DUCT TYPE |  |
|-----------|--|
| DUCT TYPE |  |
| DUCT TYPE |  |
| DUCT TYPE |  |



SECTION AA



SECTION BB



SECTION DD

SECTION CC

**HALSION**  
**LD.**

BUILDING SERVICES ENGINEERS

HOMESTEAD FARM, STONE STREET  
PETHAM, CANTERBURY, KENT, CT14 5PP  
TELEPHONE: 01227 709969  
FAX: 01227 709970  
EMAIL: [info@halsion.co.uk](mailto:info@halsion.co.uk)

With Confidence:

Architect:

BENNETTS ASSOCIATES

Project:

ONE MABLEDON PLACE

Rev:

1

Issue:

LEVEL 11  
PLANTROOM & CHILLER  
MECHANICAL SERVICES SECTIONS

Scale:

1:250A0

Date:

09/10/13

Drawn:

AR

Checked:

AR

Rev:

0185

Drawing No.:

70457-51-06

Rev:

C4