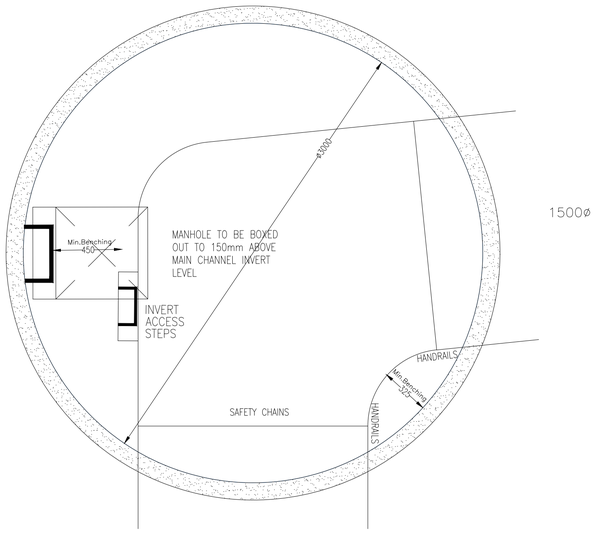
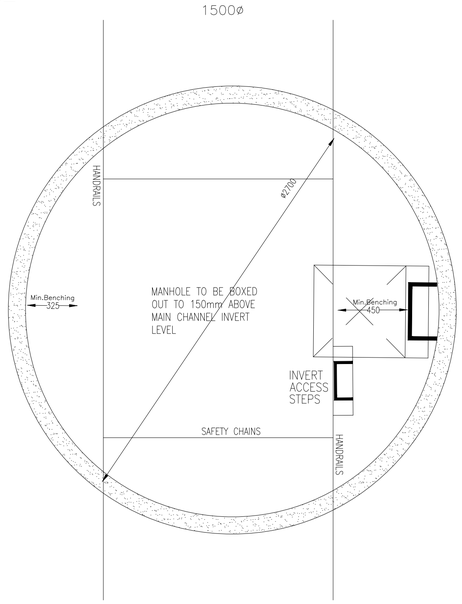
PLEASE NOTE THAT THIS DRAWING IS ISSUED FOR INFORMATION/TENDER PURPOSES ONLY UNTIL TECHNICAL APPROVAL HAS BEEN GRANTED.
ANY WORK UNDERTAKEN PRIOR TO TECHNICAL APPROVAL BEING GRANTED IS AT THE CLIENTS RISK.

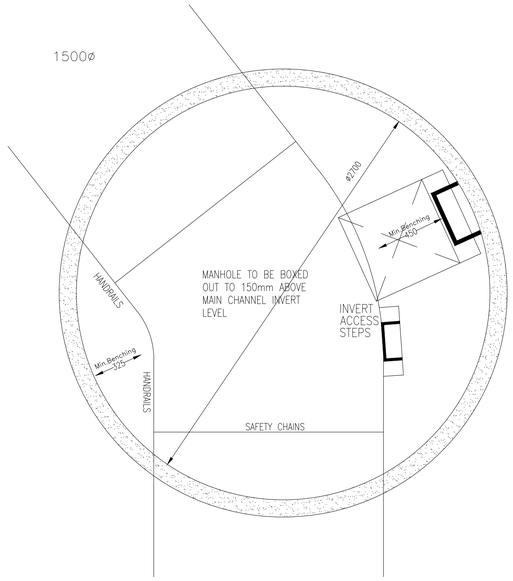
## S101




## S102




## S103




| Manhole Number / Coordinates | Cover Level / Depth To Soffit | Connections | Pipe: Code | Pipe: Inverts | Pipe: Diams | Manhole Size | Types: Manhole | Types: Cover | Other Detail: Depth & Size (mm) | Means of Access | Safety Chains | Handrails | Invert Access Steps |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S101**<br>**E= 386197.453**<br>**N= 397132.775** | **46.167**<br>**2.199** | 1 → 0 | 1<br>0 | 1.000<br>1.001 | 42.468<br>42.468 | 1500<br>1500 | **3000** | SHALLOW ACCESS MH | **D400** | **150**<br>**600 x 600**<br>**750 x 600 COVER SLAB OPENING** | Ladder | **Yes** | Yes | Yes |
| **S102**<br>**E= 386199.688**<br>**N= 397115.599** | **45.827**<br>**1.959** | 1 → 0 | 1<br>0 | 1.001<br>1.002 | 42.368<br>42.368 | 1500<br>1500 | **2700** | SHALLOW ACCESS MH | **D400** | **150**<br>**600 x 600**<br>**750 x 600 COVER SLAB OPENING** | Ladder | Yes | Yes | Yes |
| **S103**<br>**E= 386205.772**<br>**N= 397068.842** | **45.929**<br>**2.334** | 1 → 0 | 1<br>0 | 1.002<br>1.003 | 42.095<br>42.095 | 1500<br>1500 | **2700** | SHALLOW ACCESS MH | **D400** | **150**<br>**600 x 600**<br>**750 x 600 COVER SLAB OPENING** | Ladder | Yes | Yes | Yes |

MANHOLES TO BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN AND CONSTRUCTION GUIDANCE - MAY 2021

MANHOLE LADDER TO BE CONSTRUCTED IN LINE WITH DESIGN AND CONSTRUCTION GUIDE CLAUSE DCG CLAUSE E2.37

ROCKER PIPES WILL BE USED IN LINE WITH DESIGN AND CONSTRUCTION GUIDANCE
FOR PIPES 225-600 DIA - ROCKER PIPE EFFECTIVE LENGTH:600
FOR PIPES 825 DIA AND ABOVE - ROCKER PIPE EFFECTIVE LENGTH SHALL BE 1250, ROCKER PIPES TO BE USED UNTIL THE PIPE OUTSIDE DIAMETER EXCEEDS THE EFFECTIVE LENGTH OF THE ROCKER PIPE

NOTE ALL CONNECTIONS TO BE MADE SOFFIT LEVEL UNLESS INDICATED OTHERWISE

GENERAL

1. All adoptable sewers and associated works are to comply fully with "Design and Construction Guidance" & Local Practices
2. All highway works to be to adoptable standards and to to comply fully with the Local Authority specification.
3. All private drainage works are to comply fully with part H of the Building Regulations
4. All existing invert levels to be checked by the Contractor at the start of works and any discrepancies notified to REFA. All levels are based on topographical survey information provided by others.
5. All materials to bear the relevant B.S.Kitemark and comply fully with the specifications. All concrete & concrete products must use Sulphate resistant cement (unless the site investigation report proves that sulphate attack from soils and groundwater will not occur)
6. All opening notices etc. as required under highways acts etc. are to be obtained prior to commencement of works. All works are to be inspected by L.A., NHBC or Relevant Water Authority as applicable.

C.D.M. REGULATIONS 2015

In line with the above regulations we are obliged to inform the Client of their responsibilities under section CDM 15/1, and residual risks that may be encountered in the construction of these works. All design work has been carried out with Health and Safety aspects given full consideration. Wherever possible risks have been eliminated from the design, however due to the very nature of this type of work it is not possible to remove all the risks from the design.
We would also respectfully remind the Client of his obligations to take all reasonable steps in ensuring that only competent Contractors who have a valid safety policy are employed.
They should also provide satisfactory responses at tender stage as to the manner in which they will deal with the elements of risk involved in this type of work and in particular those highlighted by REFA below:-

1. Support / treatment for ALL excavation work.
2. Guarding to edges of excavations to prevent people,materials and vehicles falling into excavation.
3. Guarding of excavations outside working hours to prevent unauthorised access.
4. Undermining to adjacent roads or structures.
5. Confined space operations.
6. Dealing with existing services.
7. Traffic management on existing highways.
8. Procedure to be followed in event of accident or emergency.
9. Method of working where contaminated ground is present on site.
10. Confirmation will be required that all operatives are adequately trained, copies of relevant training certificates to be supplied.

The above list is by no means exhaustive but it does highlight operations that present a risk to contractors and the general public.
For clarification on any item please contact REFA.

| rev | Revision details | RevBy | Date |
|---|---|---|---|
| G | TO LATEST DESIGN | AS | 06.02.24 |
| F | S103 REVISED | AS | 03.04.23 |
| E | MH CO ORDS REVISED | AS | 30.03.23 |
| D | REVISED TO LATEST DESIGN | AS | 27.03.23 |
| C | MH CO ORDS ADDED | AS | 23.01.23 |
| B | REVISED TO LATEST DESIGN | AS | 18.01.23 |
| A | REVISED TO LATEST DESIGN | AS | 21.12.22 |

smas worksafe designer www.smasltd.com as recognised by SSIP SAFETY SCHEMES IN PROCUREMENT

| Drawing Stage | | Drawing Status | | |
|---|---|---|---|---|
| | Draft | | Comments | ● Tender |
| ● | Issued | | Information | Construction |
| | | ● | Approval | As Built |

Client
**KELLEN HOMES**

Job title
**BENNETT STREET MANCHESTER**

Drawing title
**SW MANHOLE SCHEMATICS DRG 1**

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GEOTECHNICAL • ENVIRONMENTAL

| Date | Scale | Drawn |
|---|---|---|
| 18.11.22 | 1:20 | AS |

DRAWING No 22122/104/3 Rev G

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A1 SHEET