



FRONT ELEVATION  
SCALE 1:10

Material: Reinforced concrete  
Weight approximately 4970kg  
All dimensions in mm



|           |                          |                        |                        |
|-----------|--------------------------|------------------------|------------------------|
| Min Cover | Cover Black<br>Size (mm) | Min Cover<br>Size (mm) | Max Cover<br>Size (mm) |
| All Faces | 55                       | 50                     | 40                     |

  

|                            |                                    |                                  |                       |                    |
|----------------------------|------------------------------------|----------------------------------|-----------------------|--------------------|
| Exposure<br>Classification | Exposure induced<br>by Carbonation | Corrosion induced<br>by Chloride | Freeze/Thaw<br>effect | Chemical<br>effect |
| All Faces                  | XC3/4                              | XD3                              | XF4                   | XA3                |

#### HANDRAIL SPECIFICATION

- KEE KLAMP@ GALVANISED SIZE 8 FITTINGS
- SIZE 8 48.3MM OD 3.2MM WALL THICKNESS GALVANISED MEDIUM DUTY TUBE TO BS EN 10255
- 360N/M DESIGN LOAD AT STATED IN BS 8118, BS 6180, BS 6399 & BS 7818, CIVIL ENGINEERING SPECIFICATION FOR THE WATER INDUSTRY (CESWI) AND  
CLAS 1 HANDRAILS & BALUSTERS & THE ENGINEERING EQUIPMENT AND MATERIALS SURVEYS' ASSOCIATION (EJEMA) PUBLICATION 105 7TH EDITION FACTORY STAIRWAYS, LADDERS AND HANDRAILS
- OTHER DESIGN LOADS AVAILABLE ON REQUEST
- GRP/FRP HANDRAILS ALSO AVAILABLE



1. STUB AND ROCKER PIPES ARE REQUIRED WHERE CONNECTIONS ARE MADE INTO AND THROUGH MANHOLES, PIPES AND STRUCTURES.
2. ALL GULLY GRATINGS SHALL BE HUNG HINGED TOWARDS THE ONCOMING TRAFFIC.
3. ALL GULLY GRATINGS SHALL BE 750mm DEPTH OF FRAME OF 100mm AND A MINIMUM WATERWAY AREA OF 1000mm<sup>2</sup> (CONCRETE 3:1). AND SHALL COMPLY WITH (BS) EN 124 CLASS D400.
3. ONLY CONCRETE GULLY POTS SHOULD BE USED AND THESE SHOULD CONFORM TO BS 5911 PART 230. DIMENSIONS WILL BE 750mm x 750mm DEPTH (CONCRETE 3:1)
4. GULLY CONNECTIONS SHALL BE SURROUNDED WITH CONCRETE FOR FULL LENGTH OF THE CONNECTION.
5. PRE-CAST CONCRETE HIGHWAY MANHOLE CHAMBERS AND SHAFTS SHALL BE SURROUNDED WITH 150mm OF ST44 CONCRETE (GRADE 3:2) (6)
6. MANHOLE COVERS IN CARRIAGEWAYS SHALL HAVE A MINIMUM DEPTH OF FRAME OF 150mm.
7. SET AND PROVE ALL EXISTING GULLY CONNECTIONS THAT ARE TO BE RE-USED.

|     |          |  |      |      |
|-----|----------|--|------|------|
| P06 | 21.04.22 | Drainage updates                             | H.S. | M.A. |
| P05 | 15.02.22 | Updated to latest pond information           | D.A. | R.A. |
| P04 | 30.06.20 | PRELIMINARY - Updated to suit S.104 comments | D.A. | R.A. |
| P03 | 17.04.20 | PRELIMINARY - Updated to suit S.104 comments | D.A. | R.A. |
| P02 | 23.03.20 | PRELIMINARY - Updated to suit S.104 comments | D.A. | R.A. |
| P01 | 24.01.20 | PRELIMINARY - Issued for information         | D.A. | R.A. |
| Rev | Date     | Description                                  | By   | Ch   |

**EDGE**  
CONSULTING  
ENGINEERS  
[www.edgece.com](http://www.edgece.com)

**Manchester . UK**  
3rd Floor, Conavon Court,  
12 Blackfriars Street,  
Manchester, M3 5BQ,  
United Kingdom

**T:** +44 (0) 161 834 1938  
**E:** [manchester@edgece.com](mailto:manchester@edgece.com)

The concepts + information contained in this document are the copyright of EDGE Consulting Engineers.  
Use or copying of this document in whole or in part without the written permission of EDGE Consulting Engineers  
constitutes an infringement of copyright.

**DO NOT SCALE DRAWINGS. IF IN DOUBT, ASK!**

Project Name  
**HAWTHORNE FARM  
CLITHEROE**

|                        |            |            |                 |
|------------------------|------------|------------|-----------------|
| Client                 |            |            |                 |
| <b>PERSIMMON HOMES</b> |            |            |                 |
| Designed               | Drawn      | Checked    | Scale @ A1      |
| <b>D.A</b>             | <b>D.A</b> | <b>R.A</b> | <b>AS SHOWN</b> |

### HEADWALL SW9 DETAILS

Project No. **19310**

19310-EDGE-XX-XX-DR-C-C2204 P06

