

Manhole S30  
MD-SHE-0243-3270-1220-3270  
Head 1.22m Flow 32.7 l/s

Manhole S63  
MD-SHE-0182-1700-1200-1700  
Head 1.20m Flow 17 l/s

Manhole S5  
SWH172  
Head 2.20m Flow 25.0 l/s

FL 79.10\*\*  
Floor levels taken from 'Mill Hill  
3rd phase site plan.DXF

FL 79.10  
Floor levels based on new design  
subject to part M check and  
private drainage design.

LEVEL- Related to  
Ordnance Survey by  
connection to the OS  
Active Network by G.P.S

GRID- Related to  
Ordnance Survey using  
One Point Localisation on  
Station S1. Orientation at  
OS Grid North.

FLOOR LEVELS ARE PRELIMINARY

Section 104 surface water sewer  
Section 104 foul water sewer  
Section 104 sewer easment  
Section 104 right of access 24/7

A. Storage revised to D1800mm, highway vertical alignment revised. 22-5-17  
B. Main sewer network revised, Tubisider storage added, FW pump station relocated, FW sewers revised, Floor levels amended, Skeletal private drainage added, rising main route and outfall location revised. 7-8-17  
C. S85 hydrobrake revised. 8-8-17  
D. Foul water pump station revised position. 4-9-17  
E. Revised for section 104/38 submission. 15-12-17  
F. Plots 15-64 & 80-82 revised and updated for section 104 & 38 submission. 18-4-19  
G. Indicative layout added for northern part of the development, existing and proposed sewer routes added following meeting with UU. 22-6-19  
H. Full redesign in line with Alpha Design layout. 17-10-19  
J. Private drainage added, storage tank No1 volume and tank size revised. 19-11-19  
K. Details/revisions for section 104 submission. 28-11-19  
L. Revised following UU comment 29-11-19. 2-12-19  
M. Phasing clarified. 16-7-20  
N. UU reference number added. 2-8-20  
P. Full redesign following layout changes and implementation of surface water storage basin. 14-8-21  
Q. Plots 13-15 & 18 revised. 26-8-21

**R.A.B. ENGINEERING DESIGN LTD**

12 BERRY HOLME CLOSE  
SHEFFIELD S35 1AB

High Grange Developments Ltd

Mill Hill, Cleator Moor  
Engineering Layout 15-64 & 80-133

DRAWN BY rab  
SCALE 1:500 DATE April 17  
DRAWING No 1083-1-2 REV Q

Surface water discharge to watercourse  
Approved discharge from S5 49.3 l/s  
Obar from new development 44.7 l/s  
Total 100year discharge 94.0 l/s

CLIMATE CHANGE  
Approved development upstream of S5  
30% climate change, development  
downstream of S5 is 40%

WM-A  
Top concrete 81.82  
u/s concrete 81.52  
top of pipe 81.32  
Invert of pipe 80.42

WM-B  
Top concrete 79.13  
u/s concrete 78.83  
top of pipe 78.63  
Invert of pipe 77.73

Water main to be located at crossing point, prior to any further drainage works

Top concrete 75.73  
u/s concrete 75.43  
top of pipe 75.23  
Invert of pipe 74.33

Maximum discharge to watercourse 49.3 l/s/sec for the 100year event inc 30% climate change.

PRELIMINARY ONLY