FLOW CONTROL DATA S17

MANUFACTURER	HYDRO INTERNATIONAL
TELEPHONE	01275 878371
TYPE	HYDRO BRAKE OPTIMUM
FLOW/HEAD	16.50l/s @ 1.100m
HYDRO REF	SHE-0181-1650-1100-1650
To be installed in accordance with manufacturers specifications and recommendations before the manhole cover slab is installed	

FLOW CONTROL DATA S50

MANUFACTURER	HYDRO INTERNATIONAL
TELEPHONE	01275 878371
TYPE	HYDRO BRAKE OPTIMUM
FLOW/HEAD	6.90l/s @ 1.500m
HYDRO REF	SHE-0115-6900-1500-6900
To be installed in accordance with manufacturers specifications and recommendations before the manhole cover slab is installed	

Impermeable Area	1.486ha	Based on Layout Ref: M
Climate Change	30%	
Urban Creep	Nil	Barnsley MBC LLFA Requirements
CV Values	0.75/0.84	Default values (Barnsley LLFA)
Plan area at 52.538m	2067m2	
Plan Area at 53.538m	2658m²	Maximum water depth 1.0m
Design parameters are based on the latest information available from Barnsley MBC and will be subject to their requirements at detailed design / planning approval stage		

New connection into existing FW sewer. Size of sewer to be confirmed.
Cl.52.724
Il.: 51.715
Il. to be confirmed prior to works commencing and reported to the engineers. Connection subject to YW approval via a S106 connection application. 21 days notice will be required.

New connection into existing SW sewer. Size of sewer to be confirmed.
Cl.52.825
Il.: 51.471
Il. to be confirmed prior to works commencing and reported to the engineers. Connection subject to YW approval via a S106 connection application. 21 days notice will be required.

Existing manholes will need to be inspected with a Yorkshire Water Inspector to check that it can accommodate the new connection and to check if any remedial works are required. It may be necessary to reconstruct the manhole at the developers expense.

Easements will be required to all sewers outside of the public highway. Easements to be a minimum off-set 3m either side of proposed sewer. Larger pipes, attenuation tank and deeper sewers will require larger off-set distances as specified in Code for Adoption.

The attenuation has been designed based on the 1 in 100 year + 30% climate change storm event due to the topography of the site.

Yorkshire Water will require future access to the attenuation tank and flow control manhole.

Flow Control Manhole S50
Cl.53.150
Il.: 51.707 300Ø
Il.51.657 150Ø
Design Head: 1.50m
Discharge Rate: 6.9l/s

Attenuation Crates – TBC
22m x 7.5m x 0.8m
Volume required 125.4m3

Pond Volume
2233.2m³

The attenuation has been designed based on the 1 in 100 year + 30% climate change storm event due to the topography of the site.

Yorkshire Water will require future access to the attenuation tank and flow control manhole.

Flow Control Manhole S17
Cl.54.300
Il.: 52.491 900Ø
Il.52.441 225Ø
Design Head: 1.10m
Discharge Rate: 16.5l/s

New headwall connection into Dobs Syke. Exact location to be confirmed.
Il.: 52.364
Il. to be confirmed prior to works commencing and reported to the engineers. Connection subject to YW approval via a S106 connection application. 21 days notice will be required.

Retained Canal Basin

Attenuation Basin to Engineer's Details

LEAP
AREA=400M²

Pocket Park

NOTE
Lateral sewers to be Plastidrain (110 & 160 O.D.) in UPVC and manufactured by Hepworth or similar approved by Yorkshire Water. Demarcation chamber to be polypropylene Non-Entry Inspection Chamber up to 2.0m depth manufactured by Wavin or similar approved by Yorkshire Water to BS EN 13598-1:2003.

SUBJECT TO THE APPROVAL OF ALL RELEVANT AUTHORITIES

K E Y

- Storm water manhole
- Foul water manhole
- Storm water sewer
- Foul water sewer
- Combined sewer
- Gully
- Yard gully
- Channel Drain (min B125 grade cover)
- YW 104 Sewer Easement

N O T E S

1. For longitudinal sections refer to drawing 0873/82/06.
2. No services are to be sited directly over, or within 1m of, an adoptable sewer or manhole.
3. Private drainage connections to adoptable sewers to be via 45° junction.
4. Off site manholes already built must have invert levels checked prior to connection to the off site drainage.
5. Any connections to existing sewers/manholes are to be supervised by Yorkshire Water.
6. All connections to proposed public sewers to be minimum 150mmØ.
7. Any land drain or water course on site to be diverted as not to pass under proposed buildings. Diversion to be approved and inspected on site by the Local Authority.

Yorkshire Water General Notes

1. All adoptable sewer works and material to be in accordance with 'Code for Adoption', the Relevant British/European and Yorkshire Water's Standards/Requirements/Addendum to the Mechanical and Electrical Specification and Kitemarked.
2. Manhole covers shall/must have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.
3. Filled ground must be filled and consolidated under the supervision, and to the satisfaction, of Yorkshire Water before any sewer works are carried out.
4. Yorkshire water is not obliged to accept filter drain/land drainage run-off into the public sewer network or adoptable drainage system (directly or indirectly). An alternative method of disposal of the land drainage run-off will therefore be required and you will have to liaise with the Local Authority, Land Drainage section with regard to the disposal of filter drain/land drainage run-off
5. Cover slabs must carry the BSI Kitemark or will be rejected by the Yorkshire Water inspector. Where the clear opening of the Kitemarked product is different to that of the cover and frame, a loading bearing slab should be fitted above the cover slab to bring the size down to 600x600mm for the Yorkshire Water specified cover size. Please refer to the Concrete Pipe Systems Association (CPSA), 'Technical Bulletin' issued autumn 2004 for kitemarked cover slab opening sizes.
6. Sulphate resistant cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
7. The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
8. Sewers must have 5 metres clearance from trees and hedges, (please also refer to S.1.10 in Code for Adoption 2020 for restrictions on tree planting adjacent to Sewers).
9. Sewers to be laid in Class "S" bedding (150mm granular bed and surround). Where depth of cover to top of the sewer is less than 1.2m in highways and verges (or less than 900mm in none vehicular access areas) then a concrete slab should be provided above the granular bed and surround.
10. Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table 2)
11. The chamber size of manholes with more than one connection in them may need to be increased an increment to accommodate the connections and bends.
12. Yorkshire Water policy is not to accept Type "C" brick manhole and 1050mm dia manhole rings. Instead it is preferred that you use a type "B" manhole with 1200mm dia or 1500mm dia. rings, with the opening sited over the channel where depth of cover to pipe sofit is 1-1.5m
13. Adoptable plastic sewer pipes to be BSI Kitemarked (Certified to WIS 4-35-01 and BS/EN13476). Adoptable sewer pipes to be laid in maximum 3 metre lengths unless there is a specific operational need to lay longer lengths. Plastic channel sections in manholes are not acceptable and Yorkshire Water would prefer clayware channel in manholes due to plastic channels being difficult to set in concrete and float, therefore a satisfactory finish cannot be obtained on the benching.
14. The minimum crushing strength for clay pipes should be as follows : 100mm dia. 40KN/m, 150mm dia. 40KN/m, 225mm dia. 45KN/m and 300mm dia. 72KN/m. The minimum crushing strength for concrete pipes should be – (Class 120 to EN 1916/BS5911-1 2002). Plastic pipes should conform to WIS 4-35-01 and BS EN13476.
15. Where a B125 cover and frame has been approved, this must not be coated in plastic and must have lifting eyes suitably sizes to accommodate standard lifting keys. Screw down covers are not acceptable.

Rev	By	Date	Revision	Chk	Apvd
A	DJG	25.01.23	Revised to suit new layout Rev V		
/	JMG	16.08.22	Issued for approval	RJ	MI

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TITLE
SECTION 104 LAYOUT
SHEET 1 OF 2

PROJECT
BLEACHCROFT WAY

CLIENT
HARRON HOMES

DRAWING STATUS
PRELIMINARY

Scale	Date	Drawn	Chk.
1:500 @ A1	AUG 22	JMG	MI

Drg. No. 0873/82/03.01 Rev A