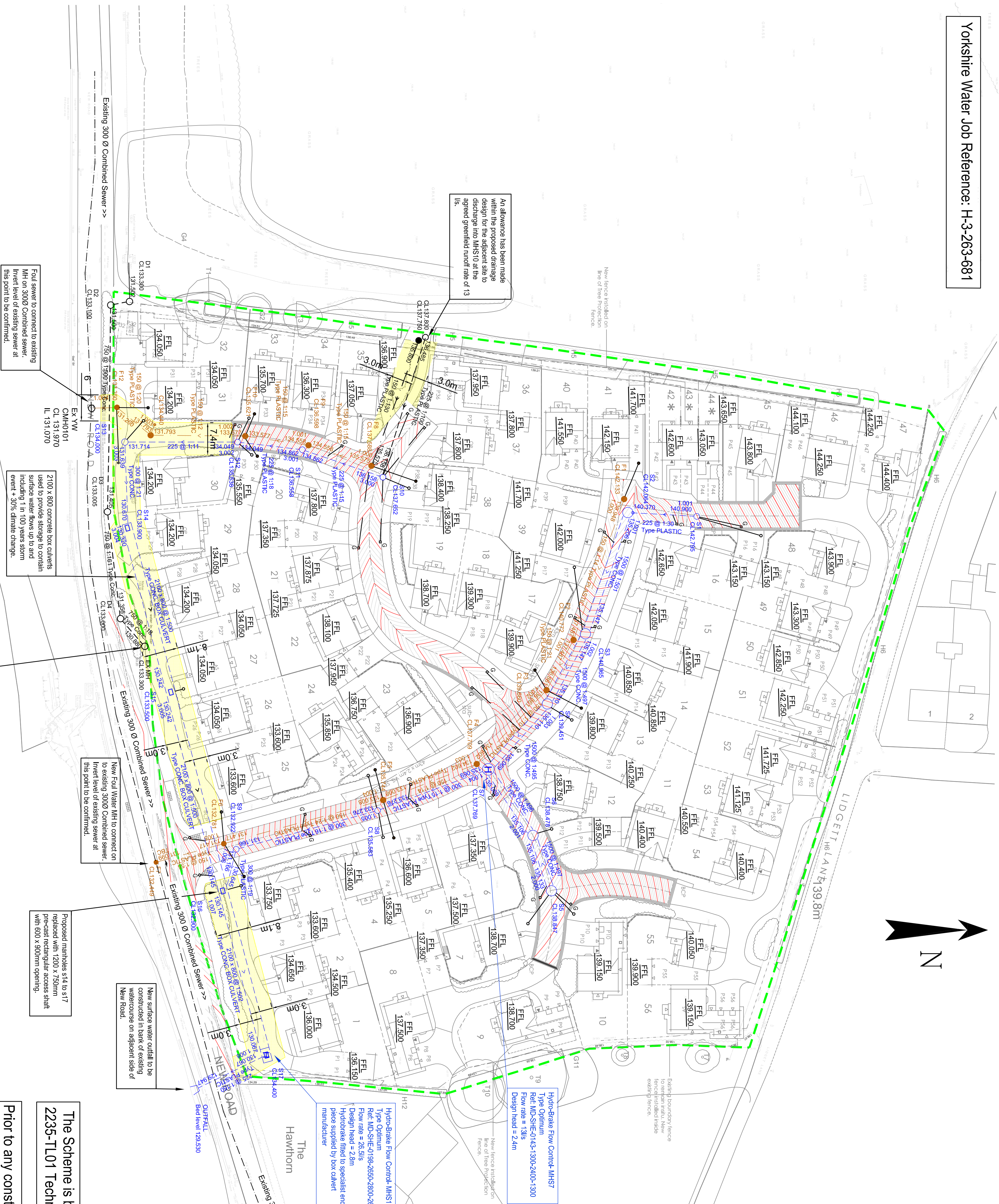


Yorkshire Water Job Reference: H-3-263-681



All levels of existing sewers to be confirmed prior to works commencing on site.

Note -
Design based on the following :
1:30 year storm event is contained the adoptable sewer system.
1:100 + 30% climate change event - No flooding

Existing manholes to be inspected by a Yorkshire Water Developer Services Inspector to ascertain whether a new connection can be accommodated within the existing manhole the existing manhole may have to be re-built at the developers expense.

The Scheme is based on Chris Gollhard Architecture Ltd.
2235-TL01 Technical Layout.

Prior to any construction, the contractor must confirm the precise invert level and pipe diameter of the receiving drainage system and must immediately advise RSK of any variation to that upon which the design has been based.

The details provided on this drawing are subject to comments by all the relevant approving authorities. Until such time as all comments have been received and incorporated onto the drawings, all the information provided and costings, are used at Barratt Homes risk and no liability will be accepted by RSK.

CIVIL / STRUCTURAL DESIGN RISK MANAGEMENT

Abnormal or unusual residual risks associated with the design outcomes shown on this drawing are:-

- Adaptor sewer works and material to be in accordance with *Sewers for Adoption* 3rd Edition, the Relevant British/European and Yorkshire Water's Standards/Requirements/Addendum to the Mechanical and Electrical specification and Renatemed.
- Manhole covers shall/must have a minimum clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in manholes.
- Filled ground must be filled and consolidated under the supervision and to the satisfaction of Yorkshire Water's before any sewer works are carried out.
- Yorkshire Water's is not obliged to accept their 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 need to liaise with the Local Authority, Local Drainage Section with regard to the disposal of their drain/land drainage run-off.
- Cover slabs must carry the BS1681 mark or will be rejected by Yorkshire Water's Inspector. Where the clear opening of the Renatemed product is different to that of the cover and frame, a bedding bearing slab should be fitted above the cover slab to bring the size down to 600mm x 600mm for the Yorkshire Water's opening size class. Please refer to Concrete Pipe Systems Association (CPSA), Technical Bulletin issued Autumn 2004 for Renatemed cover slab opening sizes.
- Suitable reinforced cement (C20/C25) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
- The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb/lane and services manholes.

Drainage Legend:

- | | |
|---|--|
|  | Proposed adoptable foul water sewer and manhole |
|  | Foul water lateral connection, and demarcation manhole |
|  | Proposed adoptable surface water sewer and manhole |
|  | Surface water lateral connection and demarcation manhole |
|  | Proposed road gully with 150mm dia. connecting pipe |
|  | Drainage easement |
|  | Existing combined water sewer |
|  | Development Boundary |

Rev.	Date	Amendment	Drawn	Chkd.	Appd.
P4	23.03.17	Revised in accordance with latest layout	MF	MR	
P3	30.01.17	Repayment schedule in accommodation flows from future phase	NS	MR	
P2	27.01.17	Revised in accordance with latest layout and high-capacity core (e.g. 3 g. access)	MR		
P1	26.11.16	First Issues	MF	MR	

PS&K

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DETAILED DESIGN

Adoptable Drainage layout

Drawn	Date	Checked	Date	Approved	Date
M.F.	Nov 16	MAR	Nov 16		
Scale		Orig. Size		Dimensions	
1:500		A1			
Project No.		Drawing File			
8809991					
Drawing No.		Rev.			
40-01		P4			