

- Notes:**
- This drawing is to be read in conjunction with all relevant architect's and engineer's drawings.
 - It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

- All adoptable sewer works and material to be in accordance with Sewers for Adoption 6th Edition. The Relevant British/European and Yorkshire Water's Standards/Requirements/Addendum to the Mechanical and Electrical Specification and Kitemarked.
- Manhole covers shall have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.
- Where a B125 cover and frame has been approved, this must not be coated in plastic and must have lifting eyes suitably sized to accommodate standard lifting keys. Screw down covers are not accepted.
- Filled ground must be filled and consolidated under the supervision and to the satisfaction of Yorkshire Water before any sewer works are carried out.
- 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 the filter drain/land drainage run-off.
- Cover slabs must carry the BS1 Kitemark or will be rejected by 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 600mm x 600mm for the Yorkshire Water specified cover size. Please refer to Concrete Pipe Systems Association (CPSA), 'Technical Bulletin' issued Autumn 2004 for Kitemarked cover slab opening sizes.
- Sulphate resistant cement (C20-DC2) 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 kerbs and service margins.
- Sewers must have 5 metres clearance from trees and hedges (please also refer to Figure 2.3 on page 33 in 'Sewers for Adoption' 6th Edition for restrictions on tree planting adjacent to sewers).
- 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 non-vehicular access areas) then a concrete slab should be provided above granular bed and surround.
- Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2).
- 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.
- Yorkshire Water policy is not to accept Type 'C' brick manholes and 100mm 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 soffit is 1 - 1.5m.



EXISTING PERFORATED LAND DRAIN RUNNING THE PERIMETER FROM EAST TO SOUTH TO THE EXISTING OUTFALL

OVERLAND FLOOD ROUTE

ALL LEVELS OF THE EXISTING SEWERS HAVE BEEN CHECKED ON SITE AND ARE CORRECT AS SHOWN

EXISTING TREES WITHIN 5m FROM THE PROPOSED SEWER MUST BE REMOVED

No.	Revision	Date	Drawn
P10	Site plan updated	31.3.21	TM
P9	Tank updated to Carlows design	11.12.20	TM
P8	Layout updated to Architects amended plan	19.11.20	TM
P7	Layout updated to Architects amended plan	27.8.20	TM
P6	Layout updated to Architects amended plan	14.2.20	TM
P5	Revised in accordance with Yorkshire Waters comments	24.10.19	TM
P4	Drainage layout revised to accommodate Yorkshire Waters comments	10.10.19	TM
P3	Revised in accordance with Yorkshire Waters comments	17.9.19	TM
P2	Revised in accordance with Yorkshire Waters comments	17.9.19	TM
P1	First Issue		

TOPPING ENGINEERS
CONSULTING CIVIL & STRUCTURAL ENGINEERS

Alre House 12 Victoria Avenue
Harrogate HG1 1ED
t: 01433 522 293
www.topping-engineers.com
e: info@topping-engineers.com

Client	GP Atkin		
Project	Residential Development Westend Falls, Nafferton		
Drawing title	Section 104 Layout		
Drawn	TM	Chkd	
Date	July 2019	Scale	As Shown @ A1
Contract No.	18152	Drg No.	DR-C-0100
		Revision	P10

Site plan (1:250)