H-3-264-431

Sewers For Adoption Under a Section 104 Agreement

1.All adoptable sewer works and material to be in accordance with "Sewers for Adoption" 6th Edition, The Relevant British/European and Yorkshire Water's Standard/Requirements/Addendum to the mechanical and electrical specification and Kitemarked.

2.Manhole covers 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 runoff into the public sewer network or adoptable drainage system (directly or indirectly.) An alternative method of disposal of land drainage runoff will therefore be required. Please consult with the Local Authority/Land drainage Section.

5. Cover slabs must carry the BSI kitemark or will be rejected by Yorkshire Water. Where the clear opening of the kite marked 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 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 Figure 2.3, page 33 in Sewers for Adoption 6th Edition for restrictions on tree planting adjacent to sewers)

9. Sewers to be laid in Class "S" bedding (150mm granular bed & surround.) Where depth of cover to the top of the sewer is less than 1.2m in Highway and verges (or less than 900mm in non vehicular areas) then a concrete slab should be provided above the granular bed and surround.

10. Bedding and backfill material to conform to the requirements of Water Industry Specification 4-08-02 (Table A2)

11. The chamber size of manholes with more than one connection may need to be increased an increment to accomodate the connections and bends.

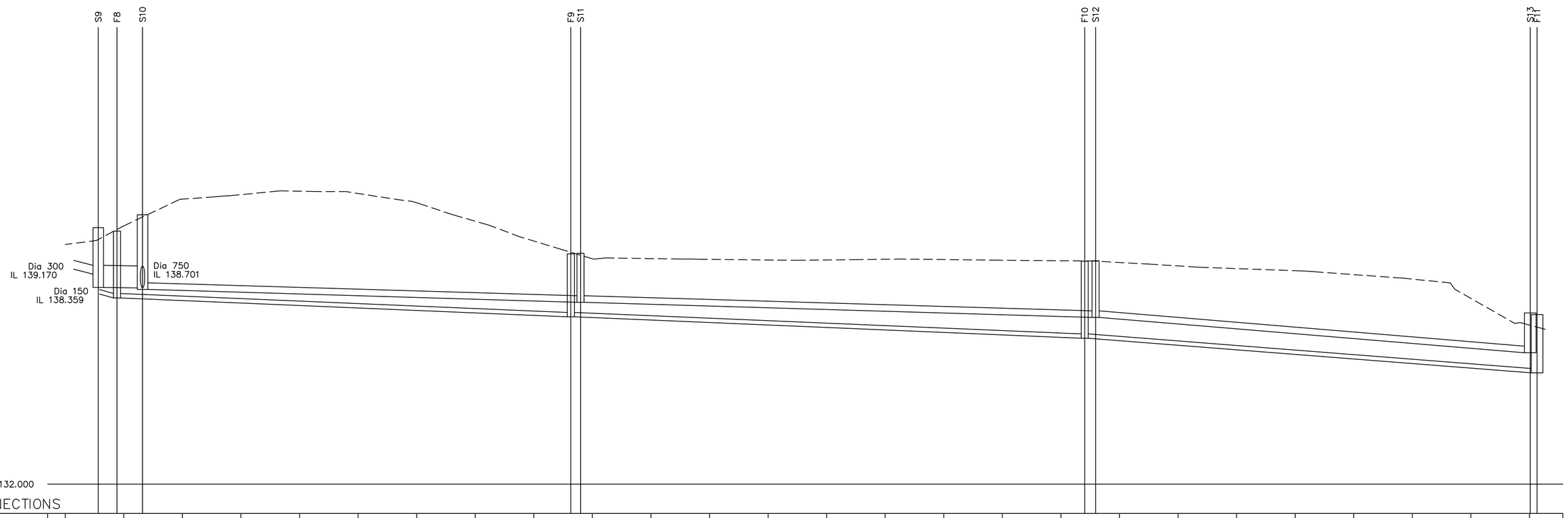
12. Yorkshire Water policy Is not to accept Type "C" brick manholes and 1050mm dia manhole rings. Instead it is preferred that you use a Type "B" manhole with 1200mm dia or 1500mm dia rings with the opening sited over the channel where depth of cover to pipe soffit is 1.0-1.5m

13. Stone backfill is required to all sewer trenches under vehicular areas. As dug material may be used on other areas subject to the written approval of the drainage authority.

14. All 150mm & 225mm dia pipes to be clay to comply with the relevant requirements of BS EN 295-1: 1991.
Minimum pipe crushing strength to be 150mm dia. 40KN/m, 225 dia. 45KN/m
All pipes 300mm dia and above to be concrete pipes to comply with the relevant provisions of BS 5911. Strength class 120 to EN 1916/BS 5911-1:2002.

15. 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 acceptable.

RISK ASSESSMENT: SIGNIFICANT RISKS THAT CANNOT BE DESIGNED OUT		SUGGESTED ACTION
RISK	LEVEL OF RISK (VHM)	
DEEP EXCAVATIONS ASSOCIATED WITH DEEP DRAINAGE WORKS	HIGH	ENSURE ALL EXCAVATIONS HAVE ADEQUATE TRENCH SUPPORTS AND ARE FENCED OFF TO PROTECT FROM FALLS.
HANDLING LARGE DIAMETER MANHOLE AND SOAKAWAY RINGS	HIGH	USE CORRECT LIFTING EQUIPMENT AND ENSURE OPERATIVES WEAR THE CORRECT PERSONAL PROTECTIVE EQUIPMENT.
CONTACT WITH SEWEAGE/WORKING IN CONFINED SPACES	MEDIUM	USE GAS DETECTORS/BREATHING EQUIPMENT AND ENSURE OPERATIVES WEAR THE CORRECT PERSONAL PROTECTIVE EQUIPMENT.
NOISE FROM MACHINERY	MEDIUM	OPERATIVES TO WEAR THE CORRECT EAR PROTECTION.
EXCAVATIONS NEAR TO UTILITIES	HIGH	UTILITY MAPS TO BE INSPECTED AND APPARATUS LOCATED USING APPROPRIATE EQUIPMENT PRIOR TO EXCAVATION.
EXCAVATIONS IN PUBLIC HIGHWAY	HIGH	ENSURE ALL EXCAVATIONS HAVE ADEQUATE TRENCH SUPPORTS AND ARE FENCED OFF TO PROTECT FROM FALLS. ENSURE THE CORRECT SIGNAGE/TRAFFIC CONTROL IS USED.
IT IS ASSUMED THAT WORKS ASSOCIATED WITH THIS DESIGN WILL BE UNDERTAKEN BY A PERSON(S) WHO ARE COMPETENT AND HAVE THE REQUIRED LEVEL OF EXPERIENCE AND EXPERTISE.		



OFFSITE CONNECTIONS

GROUND LEVEL	140.186	140.820	141.734	141.886	142.003	141.926	141.609	140.979	140.303	139.696	139.702	139.674	139.654	139.655	139.679	139.669	139.646	139.630	139.569	139.453	139.361	139.288	139.156	139.002	138.343	137.433	
STORMWATER COVER LEVEL		140.759	141.198							139.882								139.628								137.800	
STORMWATER INVERT		138.720	138.701	138.651						138.211	138.211							137.694	137.694							136.485	
STORMWATER DETAILS		Dia 750 Circular CONC 1 in 400 CLASS S B&S		Dia 225 Circular CLAY 1 in 170 CLASS S B&S								Dia 225 Circular CLAY 1 in 170 CLASS S B&S								Dia 225 Circular CLAY 1 in 61 CLASS S B&S							
STORMWATER LENGTHS		7.561		74.787								87.940								74.219							
FOULWATER COVER LEVEL		140.641								139.866								139.611								137.750	
FOULWATER INVERT		138.359								137.713	137.713							136.982	136.982							135.800	
FOULWATER DETAILS				Dia 150 Circular CLAY 1 in 120 CLASS S B&S								Dia 150 Circular CLAY 1 in 120 CLASS S B&S								Dia 150 Circular CLAY 1 in 65 CLASS S B&S							
FOULWATER LENGTHS				77.485								87.740								77.238							

Preliminary

Rev	Details	Date	Drwn	Chk.
A	YW reference added	26-2-20	AST	

Avant Homes

Lidgett Lane/Pilley Green
Pilley, Barnsley

Longitudinal sections
Sheet 4

Dwg No. : STE/19/28/09/04 A

Date : 18-12-19

Scale : H-1:500, V-1:100

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