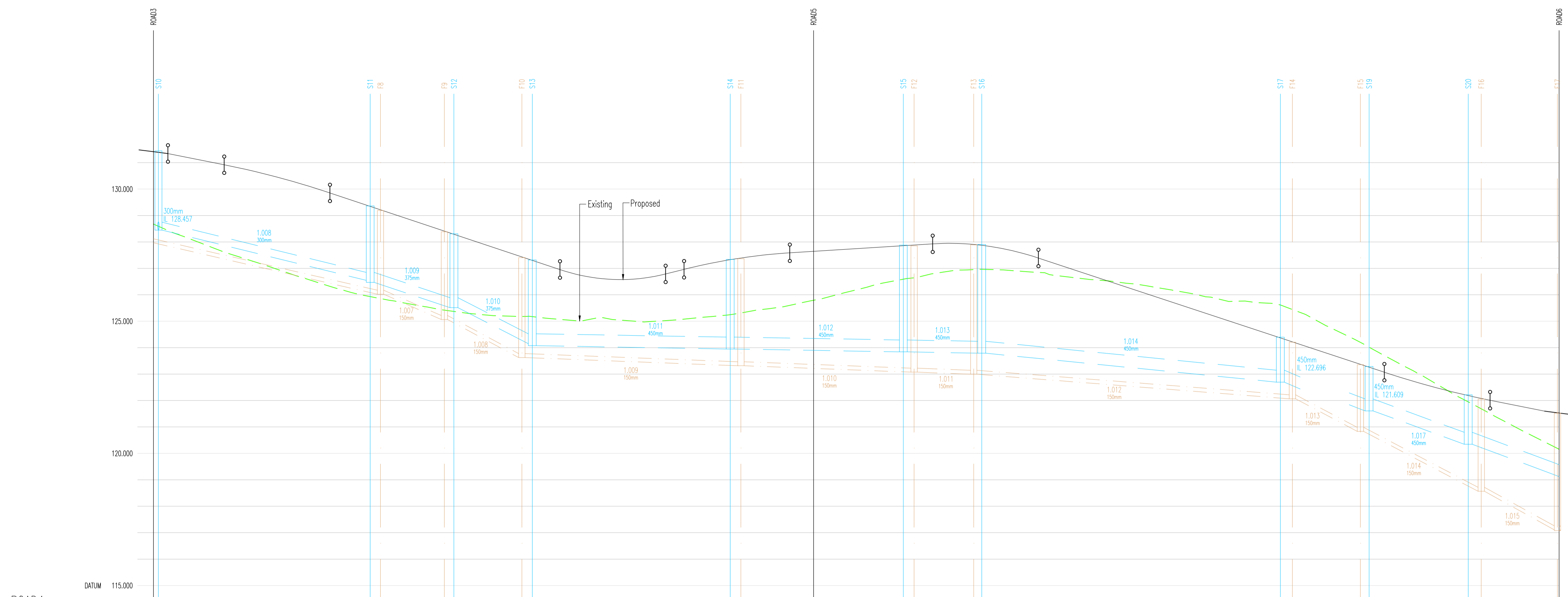


ATTENTION IS DRAWN TO THE REQUIREMENTS OF THE CONSTRUCTION DESIGN AND MANAGEMENT REGULATIONS 2015 AND THE DUTIES AND RESPONSIBILITIES CONTAINED THEREIN

Adoption General Notes

- All adoptable sewer works and materials to be in accordance with Sewerage Sector Guidance (SSG), the relevant British/European and the adopting Water Authority 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.
- Filled ground must be filled and consolidated under the supervision, and to the satisfaction, of Yorkshire Water before any sewer works are carried out.
- Cover slabs must carry the BS Kitemark or may 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 600x600mm for 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.
- The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces 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 the granular bed and surround.
- Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2)
- Adoptable plastic sewer pipes to be BSI Kitemark (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.
- Plastic channel sections in manholes are not acceptable and layware is preferable. Plastic channels are difficult to set in concrete and a satisfactory finish cannot be obtained on the bedding.
- 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's policy is not generally 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 soffit is 1-1.5m.
 - All adoptable sewers to be BSI Kitemark (certified to WIS 4-35-01).
 - Bedding and backfill material to conform to the requirements of Water Industry Specification 4-08-02 (Table A2)
- Where plastic pipes are proposed for adoptable sewers, structural calculations for the plastic pipes and a site investigation report to prove that the ground condition is suitable for the plastic pipes are to be produced.
- Where plastic pipes are installed into the ground prior to getting full technical approval, the developer must provide a CCTV survey of the prospectively adoptable sewers and a deformation test (Light-Line test) of the plastic pipes.
- Demarcation chambers to be a min. 450mm chamber for 100mm dia foul & 150mm dia surface water pipes up to 1.2m deep. For depths greater than 1.2m, restricted access opening to 350mm is required for safety reasons.
- Maximum depth of demarcation chamber to be 3m, where depth exceeds 3m, manhole to be constructed as type B manhole.
- Where a 5125 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.
- 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 the land drainage runoff will therefore be required and you will have to liaise with the Land Drainage Authority/Land Drainage Section with regard to the disposal of the filter drain/land drainage runoff is required.
- Sulphate resisting cement (C20-D02) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
- Strength of vitrified clay pipes (if used) to be 40KN/m for 1000, 40KN/m for 1500, 45KN/m for 2250 and 72KN/m for 3000. All concrete pipes to be Class 120 concrete to EN 1916/BS 5911-1:2002.
- All levels of existing drainage to be confirmed prior to work commencing on site.
- The contractor must allow for any fees required for road and sewer opening permits, sewer connections and make the appropriate applications.
- There should be enough clearance to accommodate the bedding for both pipes, approx 300mm; if crossover is near rocker then the clearance needed may be increased.



CHAINAGE	EXISTING GROUND LEVEL	ALIGNMENT LEVEL	VERTICAL ALIGNMENT	HORIZONTAL ALIGNMENT	LEFT HAND CHANNEL	RIGHT HAND CHANNEL	STORMWATER COVER LEVEL	STORMWATER INVERT	STORMWATER DETAILS	STORMWATER LENGTHS	FOULWATER COVER LEVEL	FOULWATER INVERT	FOULWATER DETAILS	FOULWATER LENGTHS
0+00	128.675	131.346	C = -4.000%				131.446	128.447	Pipe 1.008	39.872			Dia 150	44.010
0+25	127.876	131.056	1: -25.0		131.174	131.037	128.447	128.447	Dia 300					
0+50	127.077	130.766	KF = -7.51880		131.174	130.987	128.447	128.447	Class S Bed and Surround					
0+75	126.278	130.476			131.174	130.785	128.447	128.447						
1+00	125.479	130.186			130.920	130.558	128.447	128.447						
1+25	124.680	129.896			130.655	130.297	128.447	128.447						
1+50	123.881	129.606			130.435	130.033	128.447	128.447						
1+75	123.082	129.316			129.815	129.678	128.447	128.447						
2+00	122.283	129.026			129.482	129.345	128.447	128.447						
2+25	121.484	128.736			129.149	129.012	128.447	128.447						
2+50	120.685	128.446			128.816	128.679	128.447	128.447						
2+75	119.886	128.156			128.483	128.346	128.447	128.447						
3+00	119.087	127.866			128.150	128.013	128.447	128.447						
3+25	118.288	127.576			127.817	127.680	128.447	128.447						
3+50	117.489	127.286			127.484	127.347	128.447	128.447						
3+75	116.690	127.000			127.151	127.014	128.447	128.447						
4+00	115.891	126.710			126.816	126.679	128.447	128.447						
4+25	115.092	126.420			126.483	126.346	128.447	128.447						
4+50	114.293	126.130			126.150	126.013	128.447	128.447						
4+75	113.494	125.840			125.817	125.680	128.447	128.447						
5+00	112.695	125.550			125.484	125.347	128.447	128.447						
5+25	111.896	125.260			125.151	125.014	128.447	128.447						
5+50	111.097	124.970			124.816	124.679	128.447	128.447						
5+75	110.298	124.680			124.483	124.346	128.447	128.447						
6+00	109.499	124.390			124.150	124.013	128.447	128.447						
6+25	108.700	124.100			123.817	123.680	128.447	128.447						
6+50	107.901	123.810			123.484	123.347	128.447	128.447						
6+75	107.102	123.520			123.151	123.014	128.447	128.447						
7+00	106.303	123.230			122.817	122.680	128.447	128.447						
7+25	105.504	122.940			122.484	122.347	128.447	128.447						
7+50	104.705	122.650			122.151	122.014	128.447	128.447						
7+75	103.906	122.360			121.817	121.680	128.447	128.447						
8+00	103.107	122.070			121.484	121.347	128.447	128.447						
8+25	102.308	121.780			121.151	121.014	128.447	128.447						
8+50	101.509	121.490			120.817	120.680	128.447	128.447						
8+75	100.710	121.200			120.484	120.347	128.447	128.447						
9+00	99.911	120.910			120.151	120.014	128.447	128.447						
9+25	99.112	120.620			119.817	119.680	128.447	128.447						
9+50	98.313	120.330			119.484	119.347	128.447	128.447						
9+75	97.514	120.040			119.151	119.014	128.447	128.447						
10+00	96.715	119.750			118.817	118.680	128.447	128.447						
10+25	95.916	119.460			118.484	118.347	128.447	128.447						
10+50	95.117	119.170			118.151	118.014	128.447	128.447						
10+75	94.318	118.880			117.817	117.680	128.447	128.447						
11+00	93.519	118.590			117.484	117.347	128.447	128.447						
11+25	92.720	118.300			117.151	117.014	128.447	128.447						
11+50	91.921	118.010			116.817	116.680	128.447	128.447						
11+75	91.122	117.720			116.484	116.347	128.447	128.447						
12+00	90.323	117.430			116.151	116.014	128.447	128.447						
12+25	89.524	117.140			115.817	115.680	128.447	128.447						
12+50	88.725	116.850			115.484	115.347	128.447	128.447						
12+75	87.926	116.560			115.151	115.014	128.447	128.447						
13+00	87.127	116.270			114.817	114.680	128.447	128.447						
13+25	86.328	115.980			114.484	114.347	128.447	128.447						
13+50	85.529	115.690			114.151	114.014	128.447	128.447						
13+75	84.730	115.400			113.817	113.680	128.447	128.447						
14+00	83.931	115.110			113.484	113.347	128.447	128.447						
14+25	83.132	114.820			113.151	113.014	128.447	128.447						
14+50	82.333	114.530			112.817	112.680	128.447	128.447						
14+75	81.534	114.240			112.484	112.347	128.447	128.447						
15+00	80.735	113.950			112.151	112.014	128.447	128.447						
15+25	79.936	113.660			111.817	111.680	128.447	128.447						
15+50	79.137	113.370			111.484	111.347	128.447	128.447						
15+75	78.338	113.080			111.151	111.014	128.447	128.447						
16+00	77.539	112.790			110.817	110.680	128.447	128.447						
16+25	76.740	112.500			110.484	110.347	128.447	128.447						
16+50	75.941	112.210			110.151	110.014	128.447	128.447						
16+75	75.142	111.920			109.817	109.680	128.447	128.447						
17+00	74.343	111.630			109.484	109.347	128.447	128.447						
17+25	73.544	111.340			109.151	109.014	128.447	128.447						
17+50	72.745	111.050			108.817	108.680	128.447	128.447						
17+75	71.946	110.760			108.484	108.347	128.447	128.447						
18+00	71.147	110.470			108.151	108.014	128.447	128.447						
18+25	70.348	110.180			107.817	107.680	128.447	128.447						
18+50	69.549	109.890			107.484	107.347	128.447	128.447						
18+75	68.750	109.600			107.151	107.014	128.447	128.447						
19+00	67.951	109.310			106.817	106.680	128.447	128.447						
19+25	67.152	109.020												