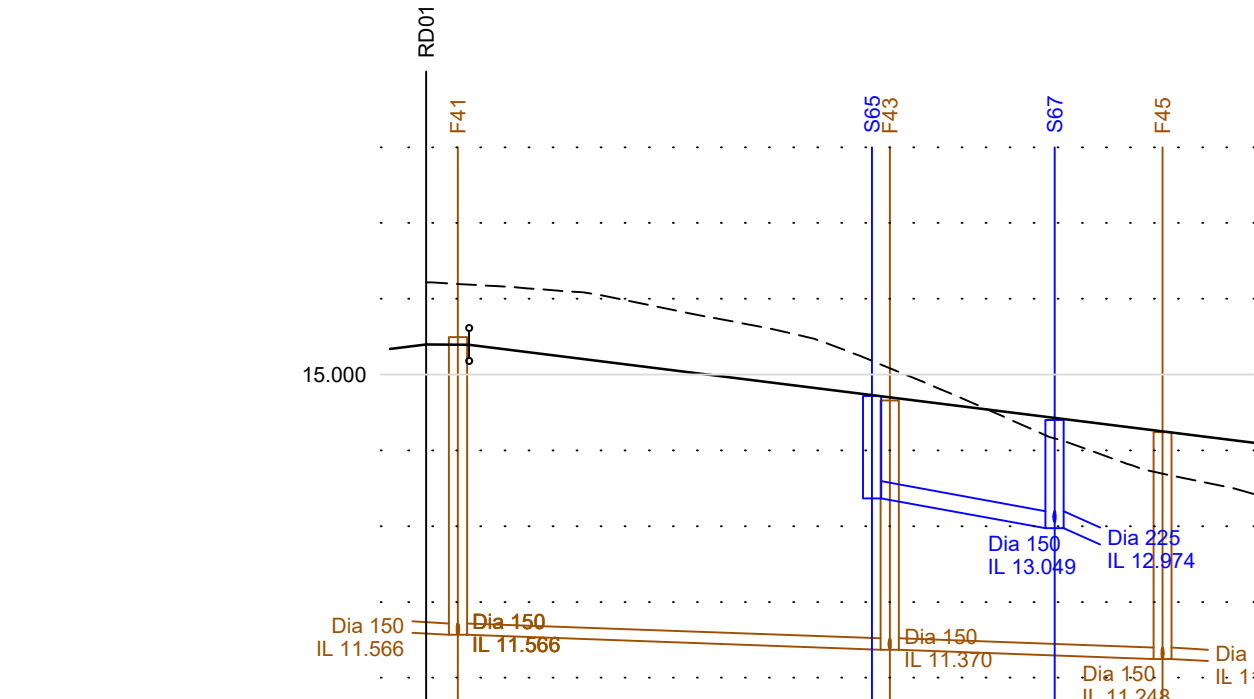
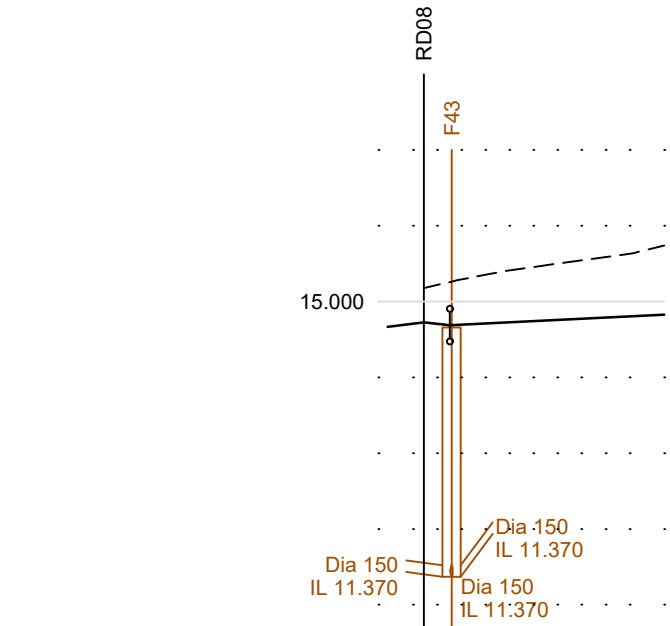
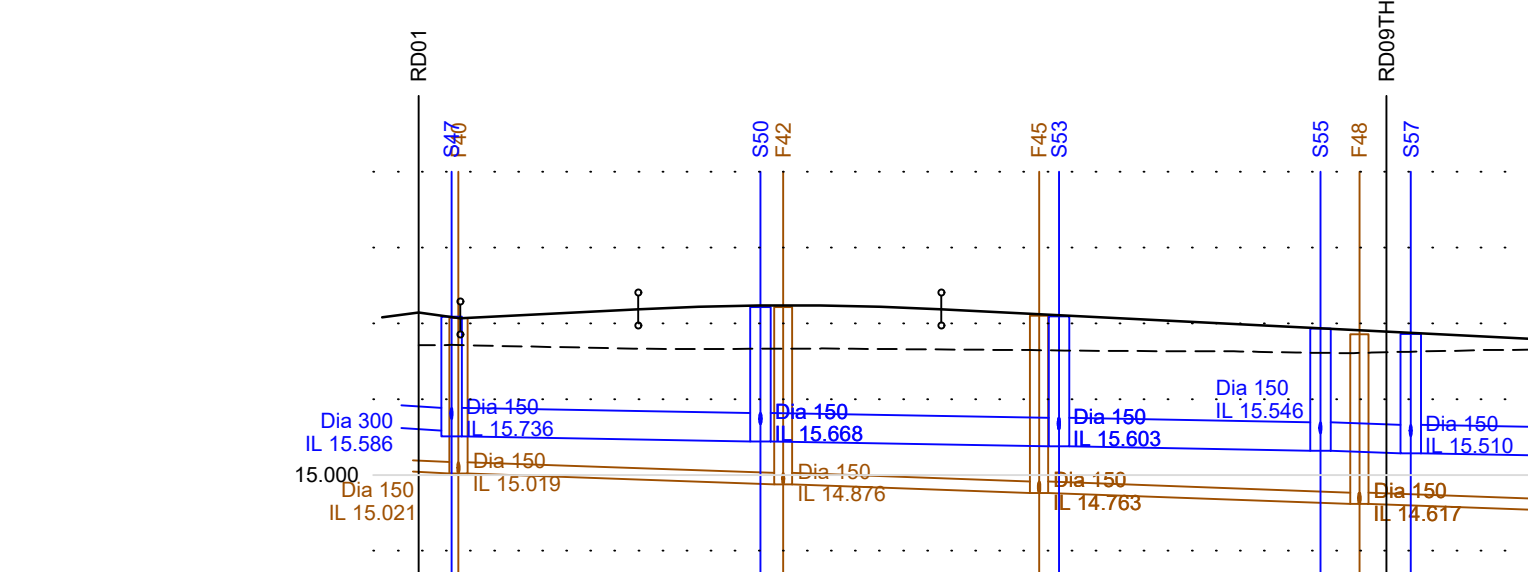




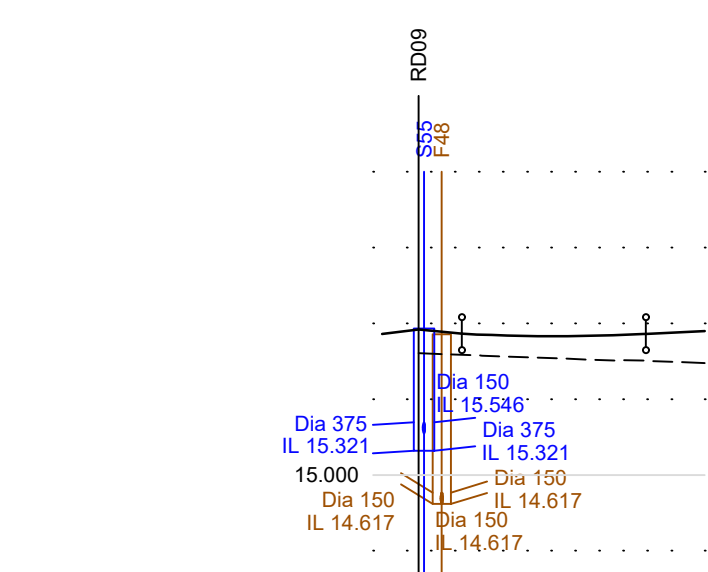
RD08	DATUM 10.000
CHAINAGE	0.000 2.093 2.850 10.000 14.985 15.137 29.415 30.942 40.000 41.463 45.676 47.714 48.959 50.000 54.592
EXISTING GROUND LEVEL	16.218 15.395 15.215 14.985 14.715 15.137 14.278 14.485 14.215 14.101
ALIGNMENT LEVEL	
VERTICAL ALIGNMENT	G= -2.500% 1: -40.0
HORIZONTAL ALIGNMENT	R= 34.059
STORMWATER COVER LEVEL	14.718 14.389
STORMWATER DETAILS	13.398 Dia 225 CLAY 1 in 30 11.710 12.974
FOULWATER COVER LEVEL	15.694 14.860 14.239
FOULWATER DETAILS	11.596 Dia 150 CLAY 1 in 150 29.334 11.370 Dia 150 CLAY 1 in 150 18.337 11.248



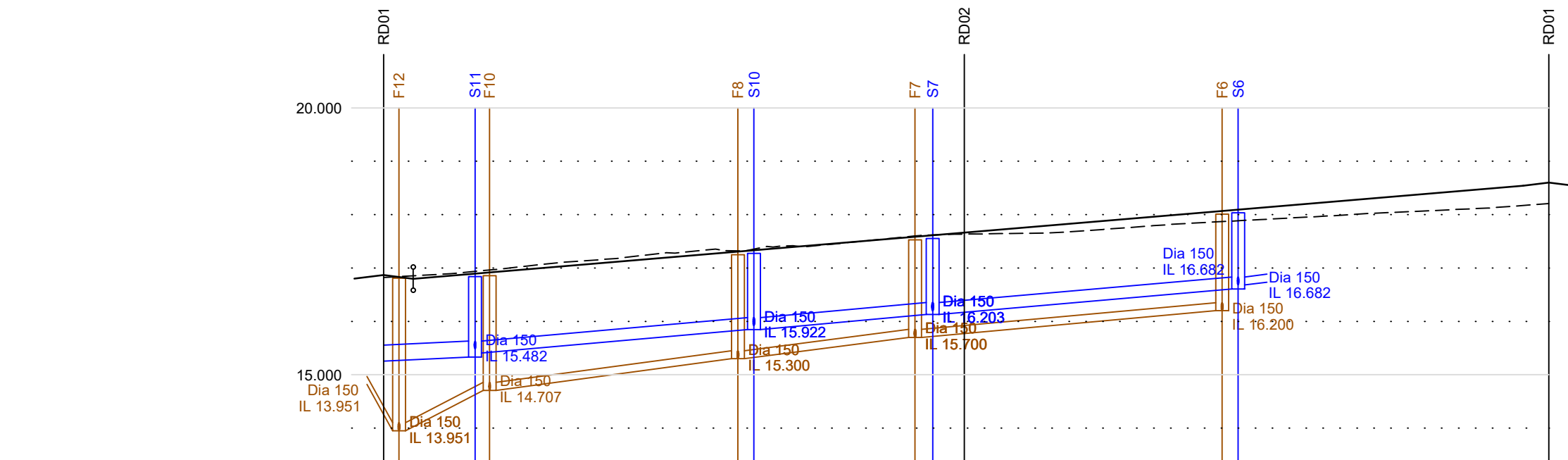
RD08TH	DATUM 10.000
CHAINAGE	0.000 1.923 10.000 15.852
EXISTING GROUND LEVEL	15.177 14.688 14.771 14.829
ALIGNMENT LEVEL	
VERTICAL ALIGNMENT	G= 1.000% 1: 100.0
HORIZONTAL ALIGNMENT	
STORMWATER COVER LEVEL	
STORMWATER DETAILS	
FOULWATER COVER LEVEL	14.660
FOULWATER DETAILS	



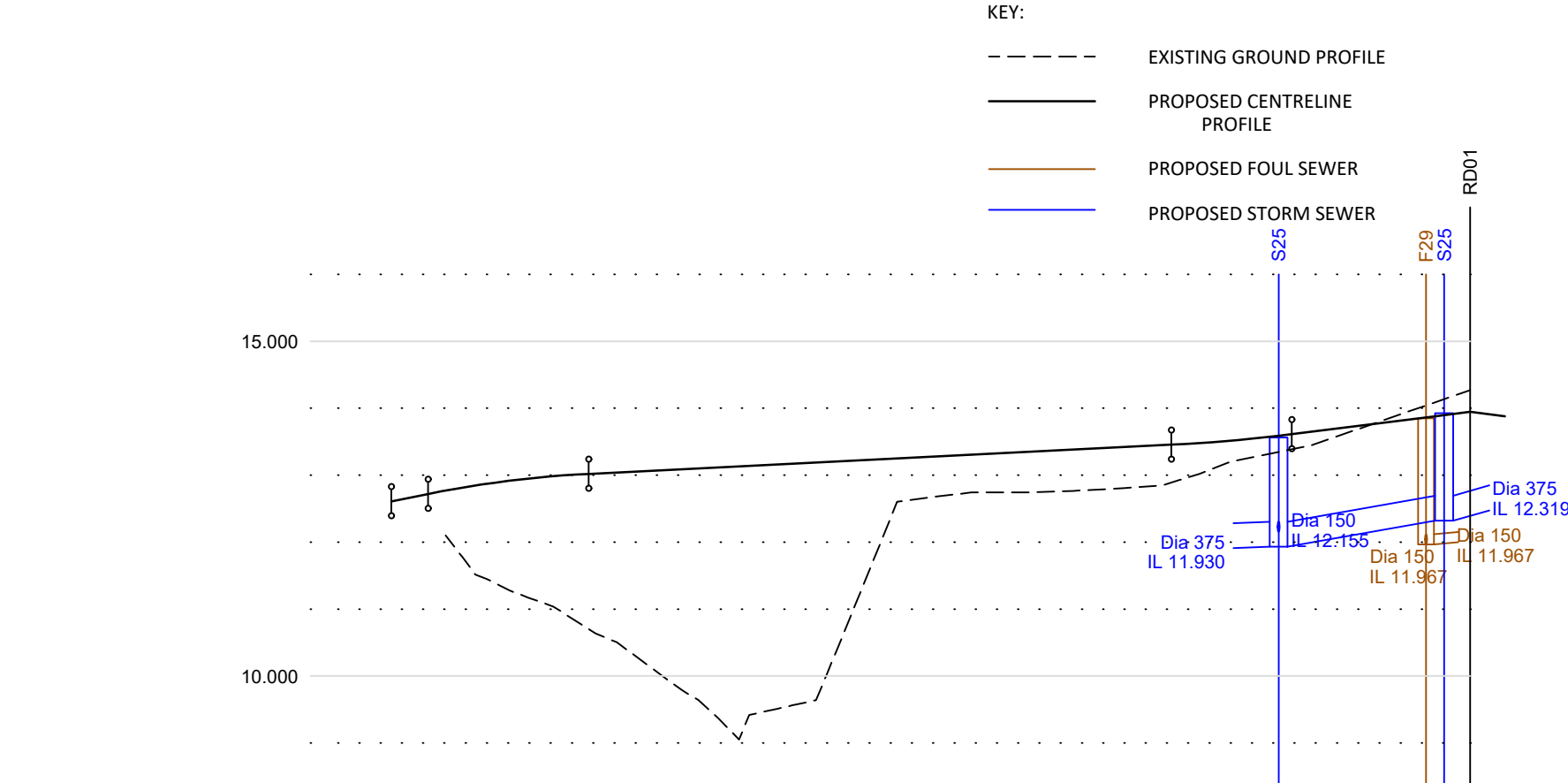
RD09	DATUM 13.000
CHAINAGE	0.000 2.749 10.000 14.482 15.000 16.882 24.462 34.482 40.944 42.242 50.000 53.390 55.428 59.506 62.081 63.866 65.771 67.819 70.000 73.284
EXISTING GROUND LEVEL	16.712 17.089 17.141 17.186 17.191 17.226 17.236 17.221 17.186 17.131 16.650 16.633 16.633 16.609 16.831 16.847 16.798
ALIGNMENT LEVEL	
VERTICAL ALIGNMENT	G= 1.000% 1: 100.0 L= 20.000 KF= -10.0 G= -1.000% 1: -100.0
HORIZONTAL ALIGNMENT	R= 177.950 R= 34.050 R= 40.050 R= 14.050
STORMWATER COVER LEVEL	17.086 15.511 15.443 15.443 15.376 15.376 17.092 16.932 16.860
STORMWATER DETAILS	15.019 Dia 150 CLAY 1 in 150 21.432 14.876 Dia 150 CLAY 1 in 150 16.957 14.763 Dia 150 CLAY 1 in 150 21.918 14.617 Dia 150 CLAY 1 in 150 25.864
FOULWATER COVER LEVEL	17.070 17.070 17.215 17.100 16.855
FOULWATER DETAILS	15.019 Dia 150 CLAY 1 in 150 21.432 14.876 Dia 150 CLAY 1 in 150 16.957 14.763 Dia 150 CLAY 1 in 150 21.918 14.617 Dia 150 CLAY 1 in 150 25.864



RD09TH	DATUM 13.000
CHAINAGE	0.000 1.923 5.000 9.002 10.000 15.002 16.477
EXISTING GROUND LEVEL	16.608 16.863 16.845 16.831 16.832 16.861 16.887
ALIGNMENT LEVEL	
VERTICAL ALIGNMENT	G= 1.000% KF= 6.0 L= 12.156 1: 100.0
HORIZONTAL ALIGNMENT	
STORMWATER COVER LEVEL	16.932
STORMWATER DETAILS	
FOULWATER COVER LEVEL	16.855
FOULWATER DETAILS	



RD10	DATUM 13.000
CHAINAGE	0.000 1.433 2.792 8.561 9.927 20.000 30.000 33.195 34.895 37.590 40.000 49.709 51.448 54.410 57.770 60.000 70.000 78.579 80.079 90.000 100.000 109.186
EXISTING GROUND LEVEL	16.823 16.798 16.919 17.087 17.254 17.421 17.589 17.756 17.923 18.091 18.258 18.425 18.539 18.208
ALIGNMENT LEVEL	
VERTICAL ALIGNMENT	G= 1.673% 1: 59.8
HORIZONTAL ALIGNMENT	R= 62.400
STORMWATER COVER LEVEL	16.839 16.839 17.272 17.553 18.032
STORMWATER DETAILS	Dia 300 CLAY 1 in 100 9.924 15.407 Dia 225 CLAY 1 in 59 26.134 15.647 15.647 Dia 225 CLAY 1 in 59 16.608 16.128 16.128 Dia 225 CLAY 1 in 60 28.602 16.607
FOULWATER COVER LEVEL	16.808 16.599 17.247 17.525 18.008
FOULWATER DETAILS	13.951 Dia 150 CLAY 1 in 11 8.498 14.706 Dia 150 CLAY 1 in 39 23.298 16.300 16.300 Dia 150 CLAY 1 in 42 16.834 16.700 16.700 Dia 150 CLAY 1 in 58 28.960



BRDG	DATUM 8.000
CHAINAGE	0.000 3.022 5.775 10.000 15.000 17.775 20.000 30.000 40.000 50.000 61.304 63.001 65.001 68.922 70.304 80.000 83.616
EXISTING GROUND LEVEL	12.609 12.719 12.866 12.982 13.019 13.041 13.141 13.241 13.341 13.441 13.454 13.503 13.604 13.612 13.654 13.880
ALIGNMENT LEVEL	
VERTICAL ALIGNMENT	G= 4.000% 1: 25.0 L= 12.000 KF= -4.0 G= 1.000% 1: 100.0 G= 2.500% 1: 40.0
HORIZONTAL ALIGNMENT	R= 17.000
STORMWATER COVER LEVEL	13.561 13.590 12.319
STORMWATER DETAILS	11.930 Dia 375 CONC 1 in 34 13.409
FOULWATER COVER LEVEL	13.590
FOULWATER DETAILS	

ALL PIPE BEDDING TO BE
CLASS 'S' GRANULAR
SURROUND UNLESS NOTED
OTHERWISE ON THE
DRAWING

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consent.

1. Do not scale.
2. Refer to all other Project Drawings and supporting notes.
3. All adoptable drainage works to be constructed as detailed in Sewers for Adoption, 7th edition or as stipulated in the Water Authorities Addendum.
4. All public sewers are to be the subject of a Section 104 agreement of the Water Industry Act 1991.
5. Invert levels of existing manholes and sewers are to be checked on site before construction commences and results reported to engineers.
6. The Contractor is responsible for maintaining continuity of flow for all existing sewers within the site boundary and limit of works for the duration of the project.
7. All manhole ironworks to comply with BS EN124, and be stamped with BSI Kitemark. Covers to suit loading as below;
- Carriageways and Roads - D400
- Driveways and Verges - C250
- Footways and Pedestrian Areas - B125
- Gardens/Landscaping - A15
8. All sewer pipes, up to, and including 225mm are to be vitrified clay to BS EN295. All sewer pipes 300mm diameter and above to concrete pipes to BS EN316.
9. All drainage shall be installed and tested strictly in accordance with the Manufacturers' printed instructions, BS EN 752, BS EN 1601, Local Water Authority requirements and the Building Regulations.
10. All bedding shall be Class S unless noted otherwise.
11. All trenches under existing and proposed public highways are to be backfilled with thoroughly compacted Type 1 granular sub-base material.
12. Drainage laid beneath roads and areas of vehicular access (car parking etc) with less than 1200mm of cover shall be encased in concrete bed and surround with associated movement joints. Drainage laid beneath paths, footways and pedestrian areas with less than 900mm of cover shall be similarly treated.
13. Chambers with outgoing pipes greater than 600mm diameter shall be fitted with guard bars, safety chains or other approved safety devices.
14. The use of precast concrete products made with sulphate resisting cement is mandatory, unless a laboratory report proves such precautions are not necessary.
15. All gully connections to use a minimum diameter pipe of 150mm and to be surrounded by a minimum of 150mm of grade C8/C10 concrete over its full length (which should not exceed 15m) and its connection to the carrier system.
16. All sewers to be abandoned must be surveyed to identify any lateral connections that are still live with any found to be reported to the Engineer.
17. All laterals to be 150mm laid at 1:80 (surface) or 1:60 (foul) unless otherwise stated.
18. All private drains to be 100mm diameter unless otherwise stated.
19. All foul and storm water drains which are not to be adopted as public sewers shall be in accordance with Document H of the Building Regulations, together with NHBC Standards Chapter 5.3 and 5.8.301.
20. Where pipes pass through footings, retaining or screen walls, lintels to be provided over drains.
21. Where inverts are less than 0.6m deep inspection chambers (min dia 190mm) or access fittings (225 x 100mm) to be used, elsewhere proprietary plastic brick or pc is to be used and sized in accordance with Table 11 of Document H of the Building Regulations (<0.6m to invert min DN300, >0.6m to invert min DN475).
22. All gullies connected direct to drains to be roddable.
23. Rainwater downpipes to be easily removable for rodding or to be provided with rodding access at ground level.
24. Unless noted otherwise FW IC's and RE's to be 0.6m below DPC level, SW IC's and RE's to be 0.45m.
25. Adequate precautions in accordance with Approved Document H and manufacturers' recommendations to be taken to protect drains (particularly plastic) at shallow depths.
26. Catchpits to be as IC's but with 300mm sump below outgoing pipe invert level except where detailed elsewhere.
27. Trees and shrubs of a large size or heavy canopy with a moderate or high water demand must not be planted within any sewer easement.
28. Gullies within and adjacent to area of site works to be suction cleaned at commencement and completion of works.
29. 1m deep root barrier of an approved type to be installed vertically along the back edging kerb of all areas of footway/ demarcation to protect from both proposed and future plantation.

PERMITTED PIPE MATERIALS

CLAYWARE (FOR SEWERS 150mm & 225mm)

All clayware pipes to be vitrified clay to BS EN 295-1:1993 and of minimum crushing strength of 45KN Class 200 for diameters of 225mm. For 150mm diameter pipes a minimum crushing strength of 28KN shall be used.

CONCRETE (FOR SEWERS 300mm AND ABOVE)
All concrete pipes are to be pipe strength Class 120 to BS 5911-1:2004 unless indicated otherwise on the drawings.

P5	12.20	RD10 drainage amended.	JS	SL
P4	11.20	RD08, RD08TH and BRDG vertical alignment updated with drainage amended to suit	SM	SL
P3	10.20	Horizontal alignments updated with vertical alignment amended to suit, RD10 added and drainage updated	SM	SL
P2	06.20	RD09 and RD09TH horizontal alignment updated with vertical alignment and drainage layout amended to suit	SM	SL
P1	05.20	First issue	SM	SL
Rev	Date	Description	Drawn	Checked

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Client:
**BARRATT DAVID
WILSON HOMES**

Project
WATER LANE, ANGMERING

Title
**LONG SECTIONS
SHEET 4**

Status
FOR APPROVAL

Scale 1:500 H @ A1 1:100 V	Date MAY 2020	Drawn SM	Checked SL
Drawing No A290-RM-114	PLN-1-4014 E	Revision	P5