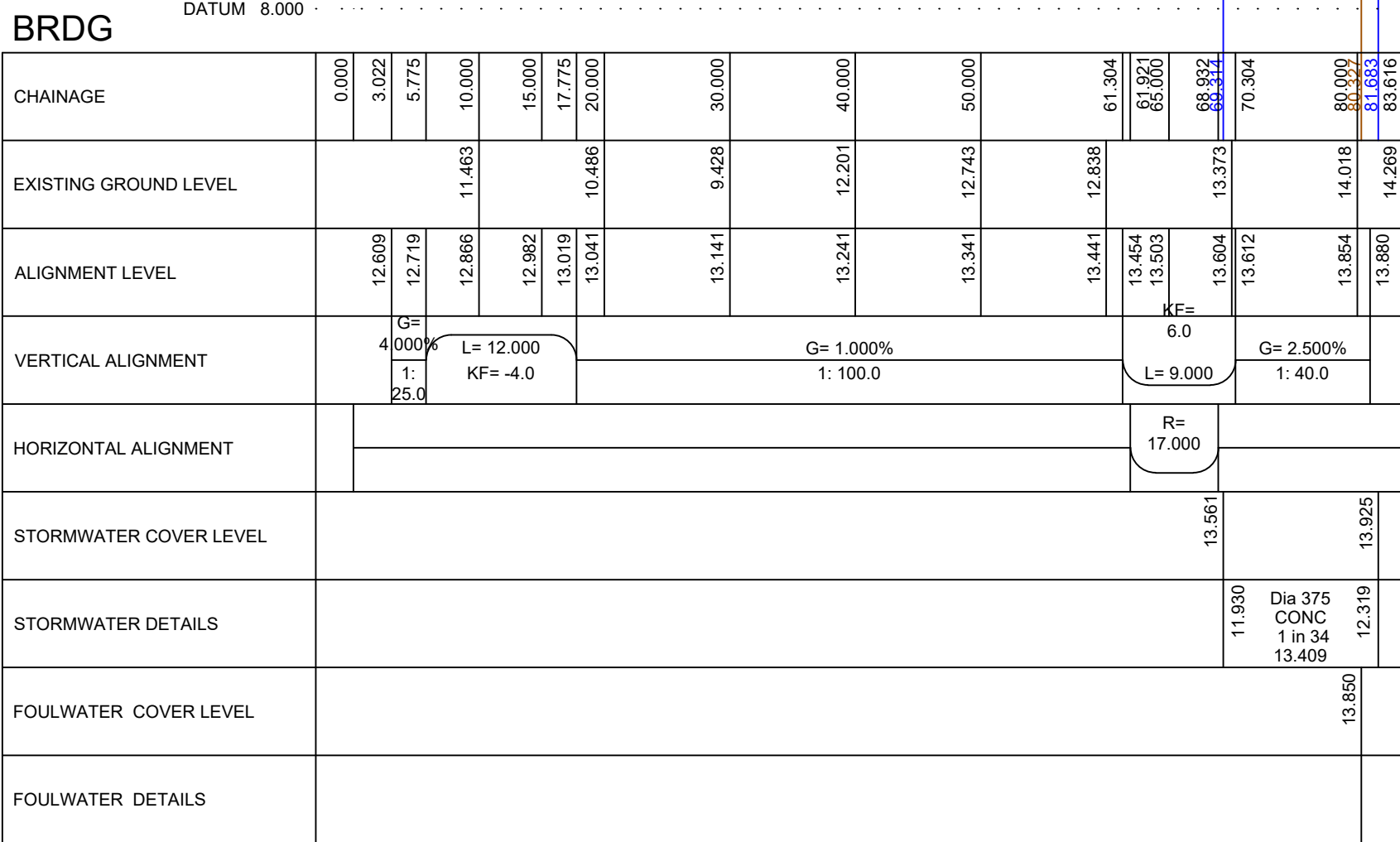
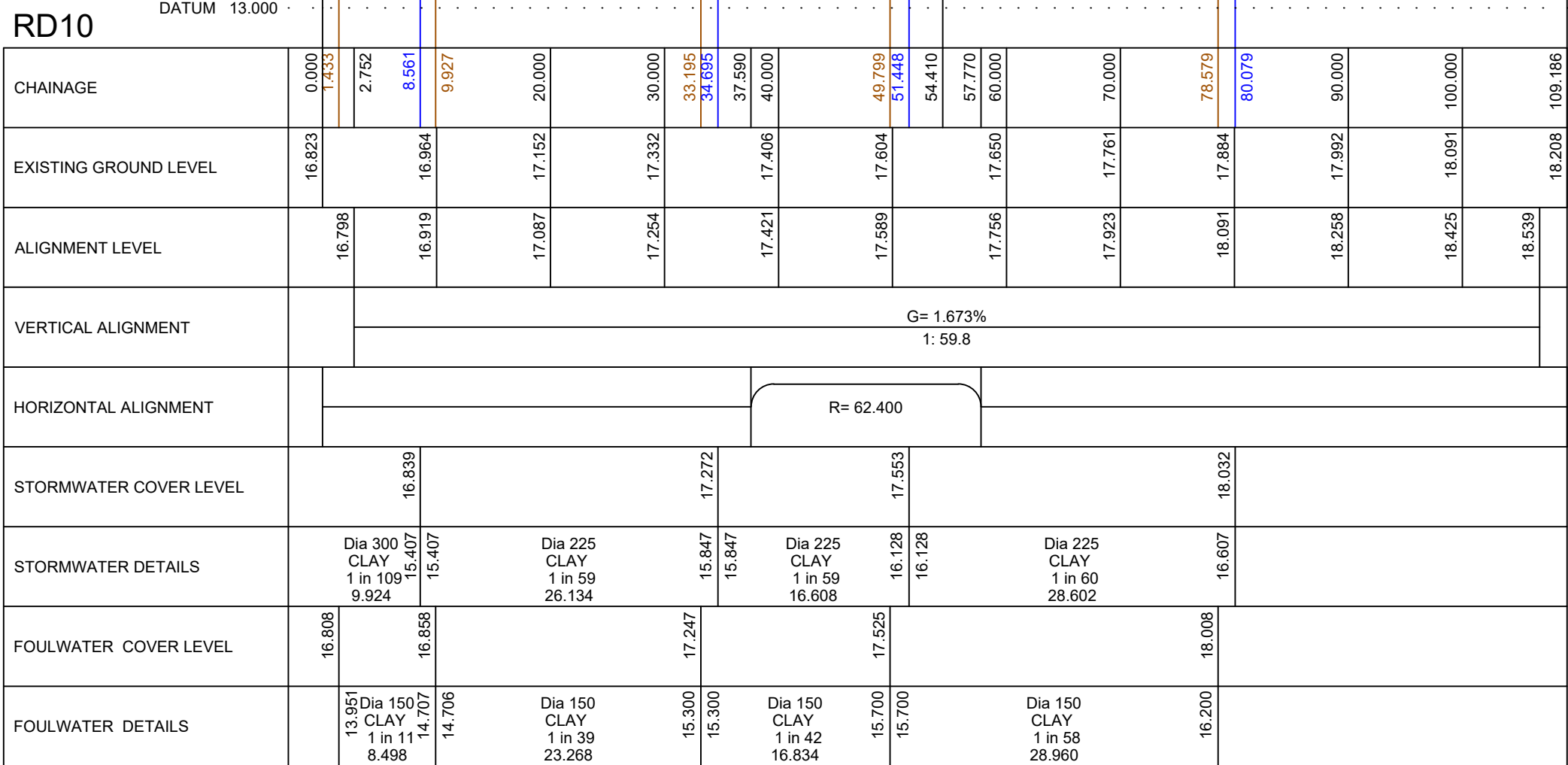
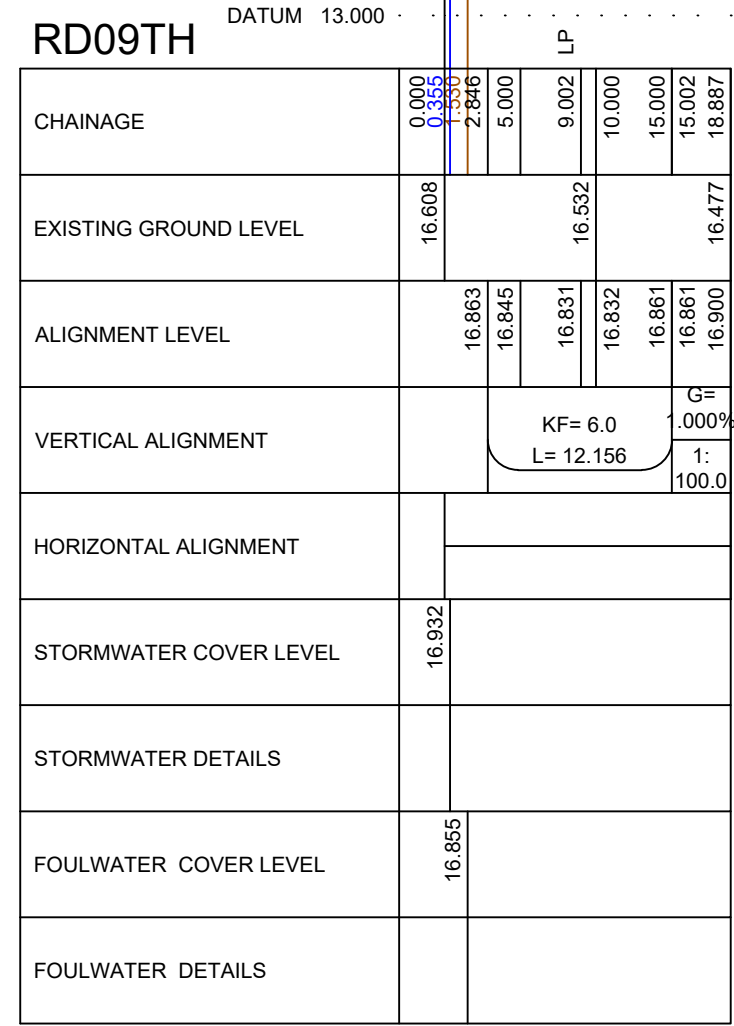
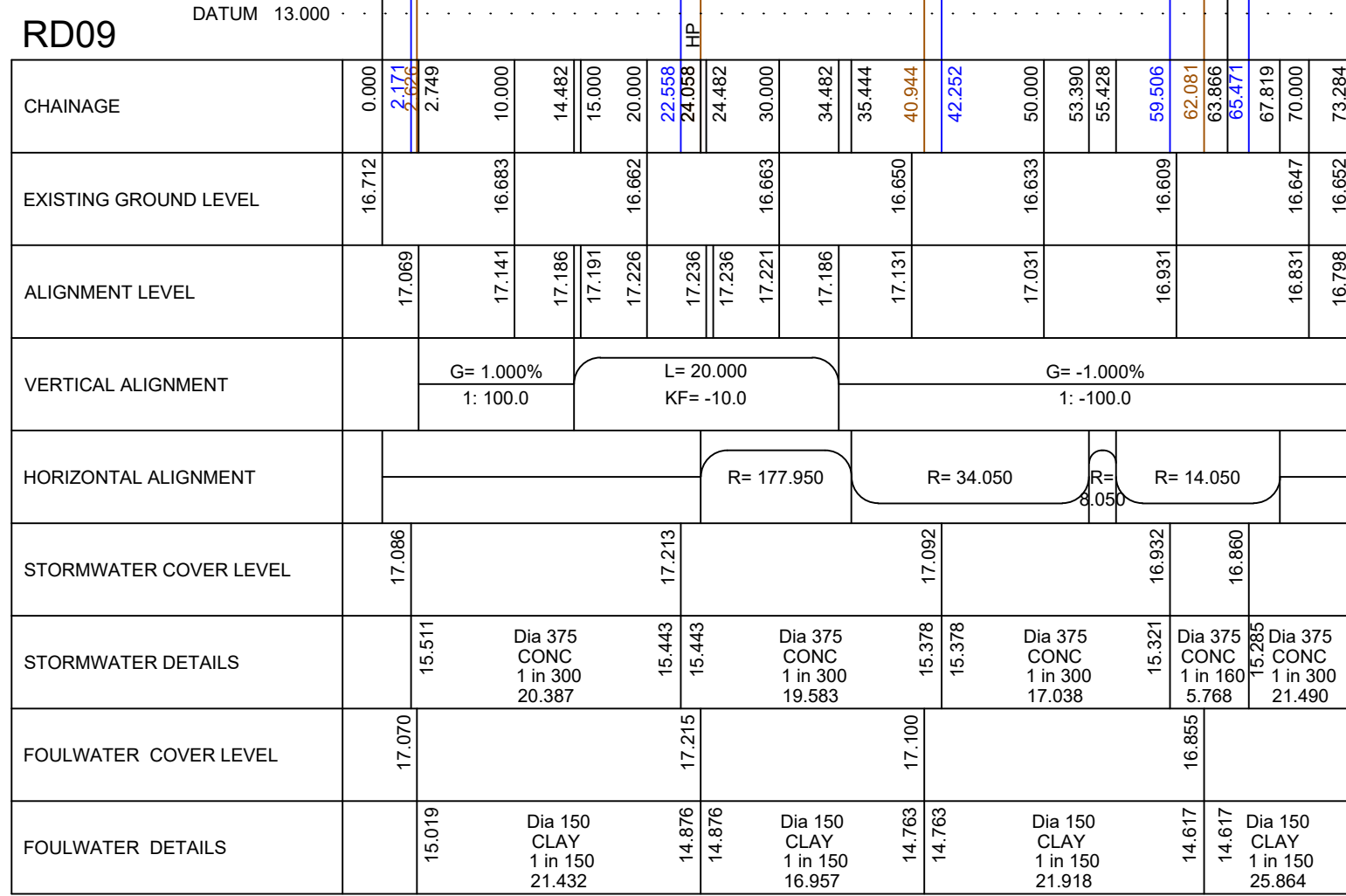
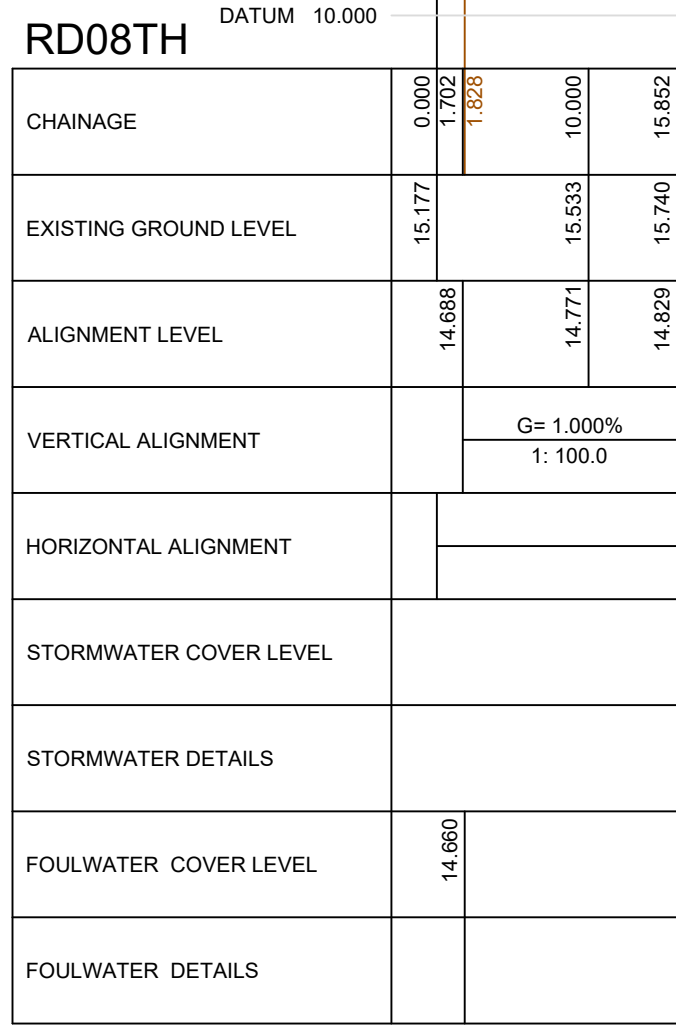
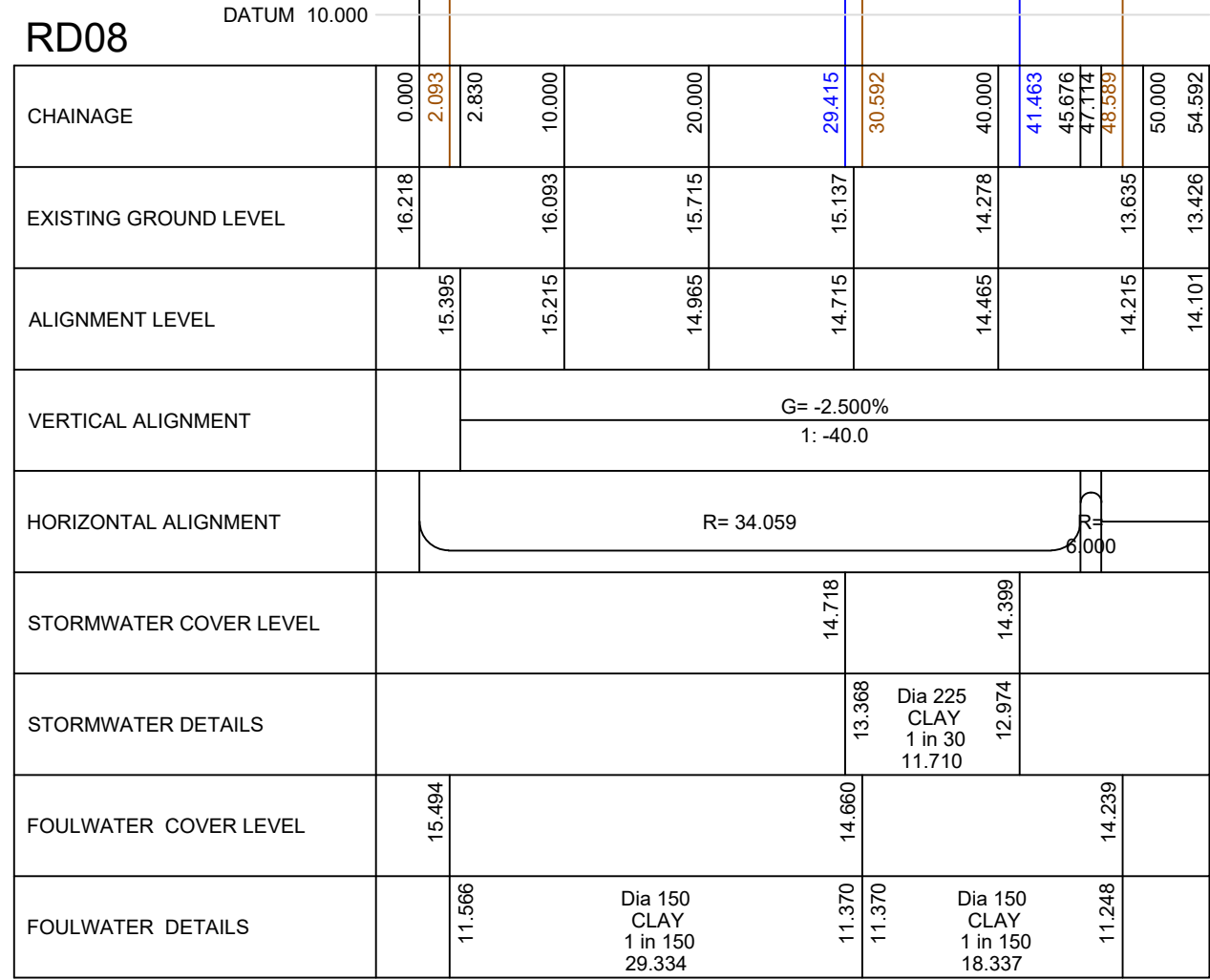




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DRAINAGE NOTES: consent.

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 Section 104 of the Adoption, 2nd 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 new drains to be constructed in compliance with BS EN124, and stamped, with BSI Kitemark. Covers to suit loading as below:
 - Carriageways and Roads - D400
 - Driveways and Verges - C250
 - Footways and Pedestrian Areas - B125
8. All manholes/landscaped access points to be constructed to BS EN124.
9. All sewer pipes, up to, and including 225mm are to be vitrified clay to BS EN256. All sewer pipes 300mm diameter and above to concrete pipes to BS EN1916.
10. All drainage shafts to 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.
11. All bedding shall be Class 5 unless noted otherwise.
12. All trenches under existing and proposed public highways are to be backfilled with thoroughly compacted Type 1 granular sub-base material.
13. 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 surrounded with associated movement joints. Drainage laid beneath paths, footways and pedestrian areas with less than 100mm of cover to be encased in a specially treated concrete bed.
14. Chambers with outgoing pipes greater than 600mm diameter shall be fitted with guard bars, safety chains or other approved safety devices.
15. The use of precast concrete products made with sulphate resisting cement is mandatory, unless a laboratory report proves such precautions are not necessary.
16. All gully connections to use a minimum diameter pipe of 150mm and to be surrounded by a minimum of 150mm of grade C8/10 concrete to its full length. Pipes shall not exceed 15m and its connection to the carter system.
17. All sewers to be abandoned should be surveyed and identify any lateral connections that are still live with any found to be reported to the Engineer.
18. All lateral sewers to be 150mm laid at 1:80 (surface) or 1:60 (foul) unless otherwise stated.
19. All private drains to be a large diameter pipe unless otherwise stated.
20. 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 BS8301.
21. Where pipes pass through footings, retaining or screen walls, lintels to be provided over drains.
22. Where inverts are less than 0.6m deep inspection chambers (min dia. 190mm or access opening of c. 100mm) to be used. Where proprietary plastic brick or pcc 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>.
23. All connections connected direct to drains to be roddable.
24. Rainwater downpipes to be easily removable for rodding or to be provided with rodding access at ground level.
25. Unless noted otherwise FW IC's and R's to be Approved Document H level, SW IC's and R's to be 45mm.
26. All drains to be constructed in accordance with the Approved Document H and manufacturers' recommendations to be installed to protect drains (particularly plastic) at shallow depths.
27. Catchpits to be as IC's but with 300mm spig below outgoing pipe invert level except where detailed elsewhere.
28. Treat all drains with a large size or heavy capacity with a moderate or high water demand must not be planted within any sewer easement.
29. Gullies within and adjacent to area of site works to be suction cleaned at commencement and completion of works.
30. 1m deep buttress or apron type to be installed vertically along the back edging kerb of all areas of footway/ demarcation to protect from both proposed and future plantway.

PERMITTED PIPE MATERIALS

CLAYWARE (FOR SEWERS 150mm & 225mm)

All clayware pipes to be vitrified clay to BS EN 295-1:1991 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	R008, RD08TH and BR0G vertical alignment updated with drainage amended 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	R009 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			Revision P5