

1. All adoptable sewer works and material to be in accordance with MWL requirements.
2. Manhole covers shall/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 MWL before any sewer works are carried out.
4. Cover slabs must carry the BS1 Kitemark or will be rejected by the MWL 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 the MWL specified cover size. Please refer to the Concrete Pipe Systems Association (CPSA), "Technical Bulletin" issued autumn 2004 for kitemarked cover slab opening sizes.
5. The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
6. 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).
7. 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 none vehicular access areas) then a concrete slab should be provided above the granular bed and surround.
8. Adoptable plastic sewer pipes to be BS1 Kitemarked (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.
9. Plastic channel sections in manholes are not acceptable and clayware is preferable. Plastic channels are difficult to set in concrete and a satisfactory finish cannot be obtained on the benching.
10. 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.
11. MWL policy is not to accept type "C" brick manhole and 1000mm dia manhole rings. Instead it is preferred that you use a type "B" manhole with 1200mm dia or 1500mm dia rings with the opening sized over the manhole where depth of cover to pipe soffit is 1-1.5m.
12. Surface water and foul rising mains to be provided with marker tape above the rising mains.
13. If plastic pipes are to be used then the following should apply:-
a. All adoptable sewers to be BS1 Kitemark (certified to WIS 4-35-01).
b. Bedding and backfill material to conform to the requirements of Water Industry Specification 4-08-02 (Table A2).
14. 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.
15. 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.
16. Demarcation chambers to be a min. 450mm chamber for 100mm foul & 150mm surface water pipes up to 1.2m deep. For depths greater than 1.2m, restricted access opening to 350mm is required for safety reasons.
17. Maximum depth of demarcation chamber to be 2m, where depth exceeds 2m, manhole to be constructed as type B manhole.
18. 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.
19. MWL is not obliged to accept filter drain/and drainage runoff into the public sewer network or adoptable drainage system (directly or in-directly). 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/and drainage runoff is required.
20. Sulphate resisting cement (C20-C22) and precast concrete products must be used in a laboratory report provided proving that such precautions are not necessary.
21. Strength of vitrified clay pipes (if used) to be 40kN/m for 100k, 40kN/m for 150k, 45kN/m for 225k and 72kN/m for 300k. All concrete pipes to be Class 120 concrete to EN 1916/BS 5911-1:2002.
22. All levels of existing drainage to be confirmed prior to work commencing on site.
23. The contractor must allow for any fee's required for road and sewer opening permits, sewer connections and make the appropriate applications.
24. 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.
25. All plastic drainage to be installed under the highway to be HAPAS approved.
26. Pipe with less than 1.20m cover require concrete protection. Please refer to drawing 0425/87/04.02.

REFER TO 0425/87/03.01 & 03.02
CROSSOVER LOCATIONS

SUBJECT TO THE
APPROVAL OF
ALL RELEVANT
AUTHORITIES

E	OR	10.07.23	Right & left channels added.		MI
D	RU	07.03.23	Updated MH positions on Road 3		MI
C	JMG	09.11.22	Drainage updated to avoid services & new outfall levels		MI
B	JMG	08.07.22	Updated for MWL submission		MI
A	JMG	27.06.22	Revised to Millers Layout & new road design		MI
/	DJC	27.05.22	Issued for approval	MI	MI
Rev	By	Date	Revision	Chk	Apvd.



Northwest House • 5 & 6 Northwest Business Park • Servia Hill, Leeds • L5E 2QH
0113 245 8498 • 0113 244 3864 • leeds@arpassociates.co.uk • www.arpassociates.co.uk
ARP Associates is a trading division of ARP Geotechnical Ltd, a company registered in England and Wales with company number 3773331, whose registered office is at 5/6 Northwest Business Park, Servia Hill, Leeds LS6 2QH

TITLE

LONGITUDINAL SECTIONS
SHEET 1 OF 5

PROJECT

GYPSY LANE,
WOMBWELL

CLIENT

MILLER HOMES
(YORKSHIRE) LTD

DRAWING STATUS

PRELIMINARY

Scale

1:500H 1:100V © A1

Date

MAY 22

Drawn

DJG

Chk.

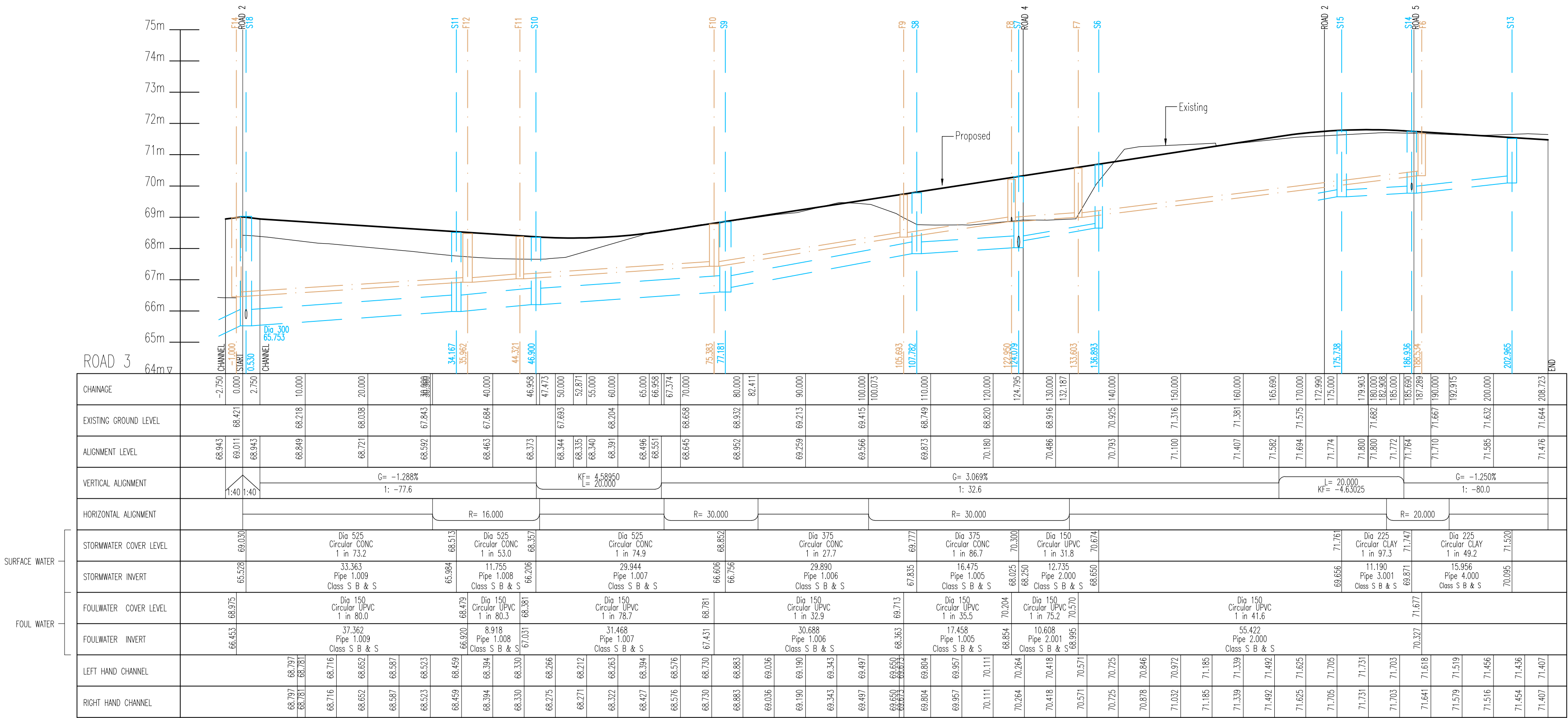
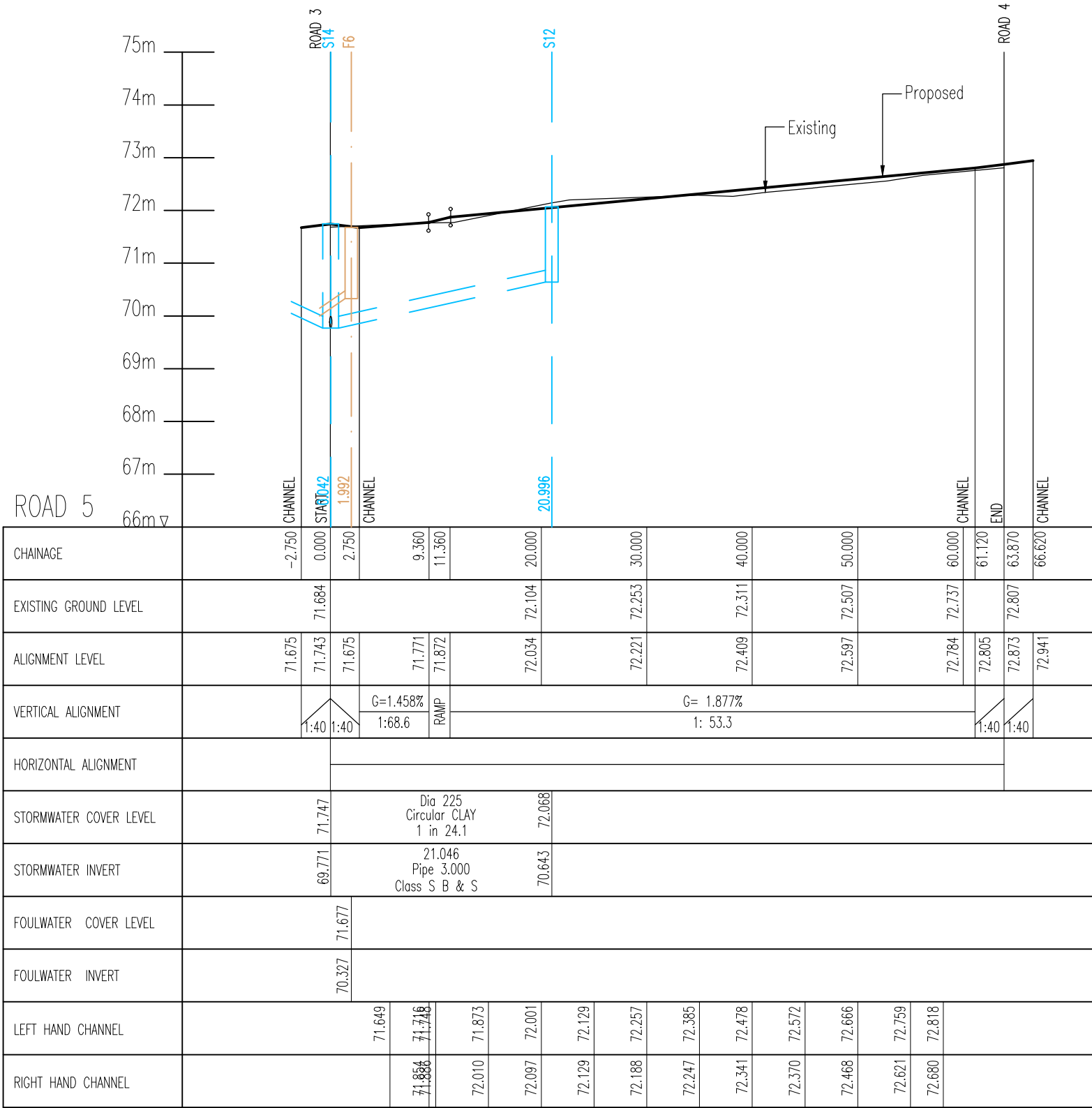
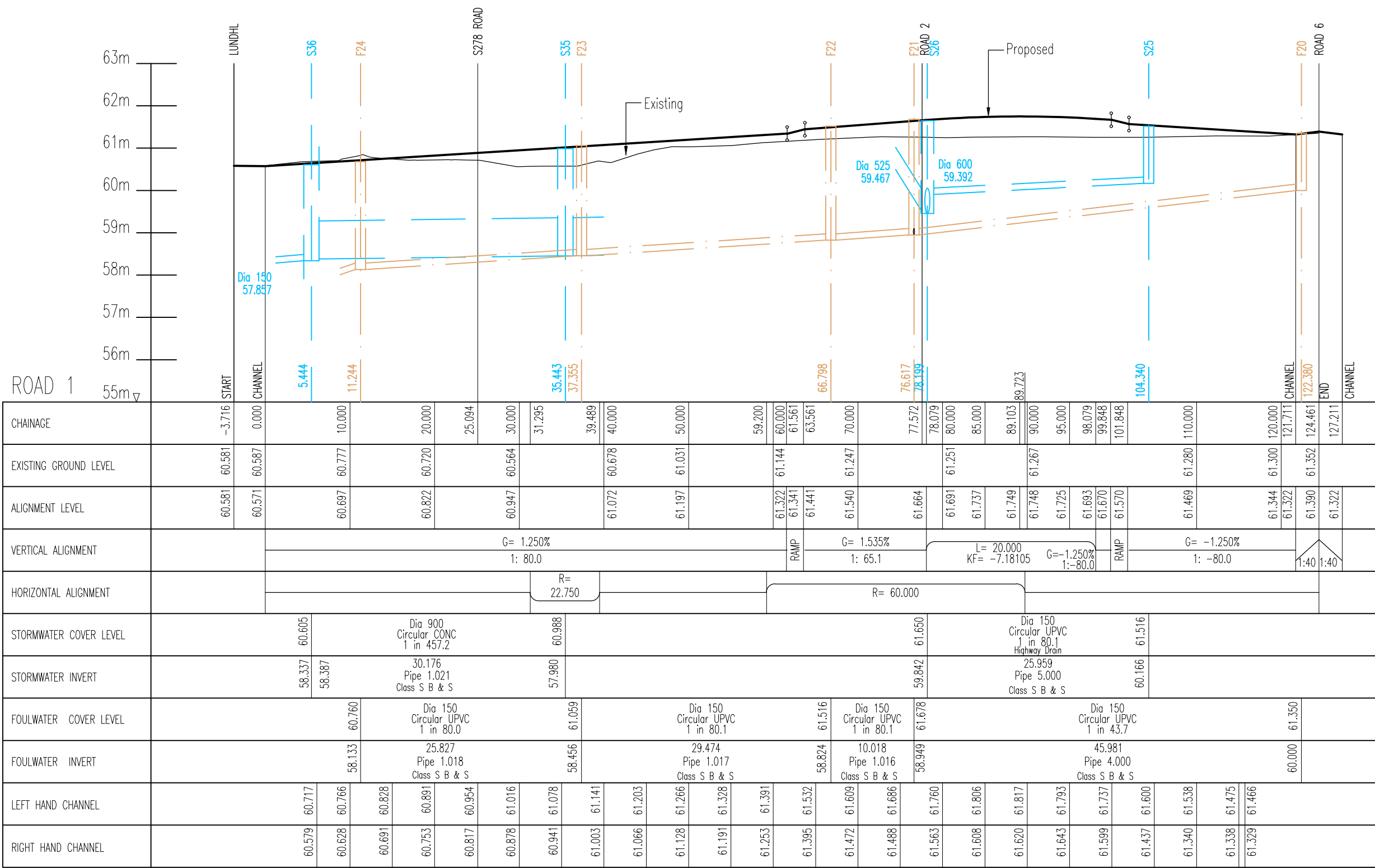
MI

Drg. No.

0425/87/06.01

Rev

E



NOTE

There should be enough clearance to accommodate the bedding for both pipes, approx. 300mm. If crossover is near the rocker then the clearance needed may be increased.