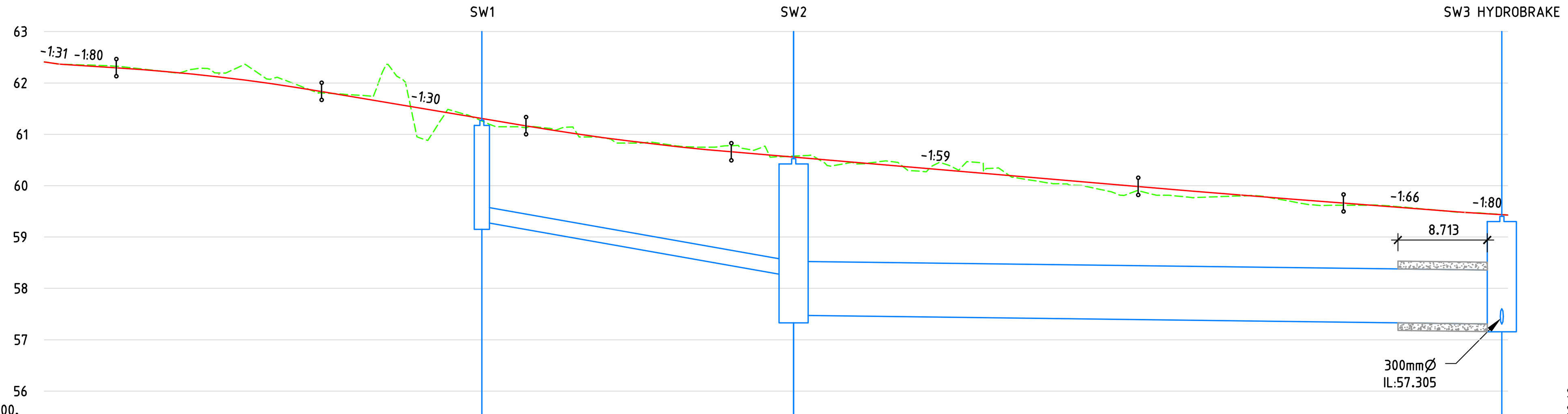
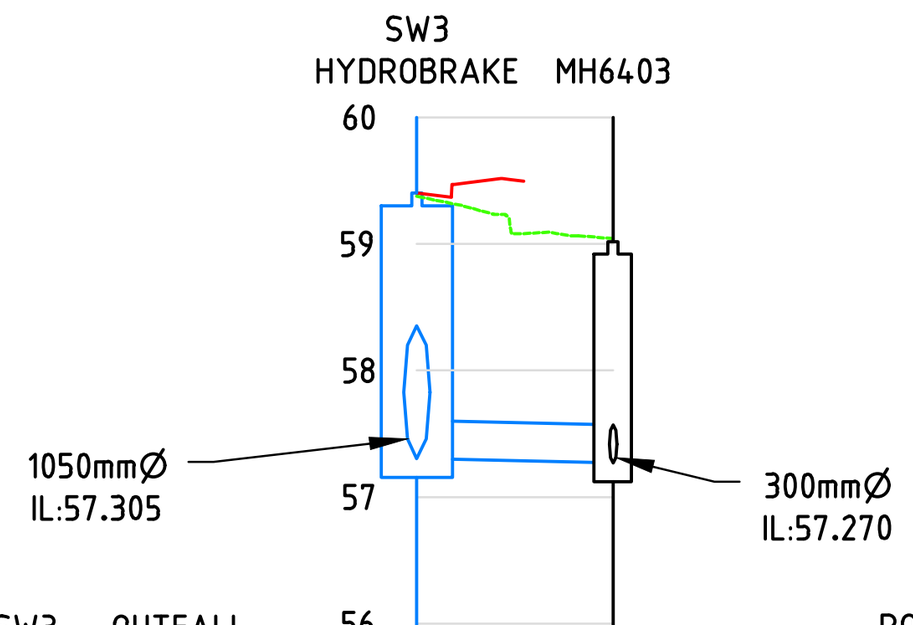


ROAD 01
SCALE: H 1:500,V 1:100.
DATUM: 55.000

CHAINAGE	EXISTING LEVELS	PROPOSED LEVELS
0.000	62.411	62.411
2.000	62.361	62.358
4.000	62.350	62.333
6.000	62.339	62.308
8.000	62.304	62.282
10.000	62.259	62.253
12.000	62.213	62.219
14.000	62.246	62.182
16.000	62.274	62.140
18.000	62.222	62.094
20.000	62.303	62.044
22.000	62.072	61.989
24.000	62.010	61.930
26.000	61.857	61.867
28.000	61.795	61.801
30.000	61.769	61.734
32.000	61.735	61.666
34.000	62.222	61.599
36.000	61.236	61.532
38.000	61.083	61.465
40.000	61.447	61.398
42.000	61.312	61.331
44.000	61.148	61.264
46.000	61.148	61.197
48.000	61.141	61.130
50.000	61.094	61.066
52.000	60.978	61.006
54.000	60.946	60.949
56.000	60.830	60.895
58.000	60.830	60.844
60.000	60.822	60.797
62.000	60.764	60.753
64.000	60.748	60.713
66.000	60.768	60.676
68.000	60.728	60.641
70.000	60.755	60.607
72.000	60.567	60.573
74.000	60.584	60.539
76.000	60.445	60.505
78.000	60.430	60.471
80.000	60.432	60.437
82.000	60.483	60.403
84.000	60.316	60.368
86.000	60.287	60.334
88.000	60.405	60.300
90.000	60.467	60.266
92.000	60.336	60.232
94.000	60.200	60.198
96.000	60.112	60.164
98.000	60.048	60.130
100.000	60.011	60.096
102.000	59.964	60.062
104.000	59.877	60.028
106.000	59.870	59.994
108.000	59.830	59.960
110.000	59.804	59.926
112.000	59.766	59.893
114.000	59.784	59.860
116.000	59.797	59.827
118.000	59.805	59.795
120.000	59.747	59.763
122.000	59.674	59.732
124.000	59.620	59.701
126.000	59.618	59.670
128.000	59.620	59.639
130.000	59.619	59.609
132.000	59.589	59.579
134.000	59.552	59.548
136.000	59.516	59.518
138.000	59.487	59.487
140.000	59.465	59.461
142.000	59.437	59.436
142.574	59.429	59.429

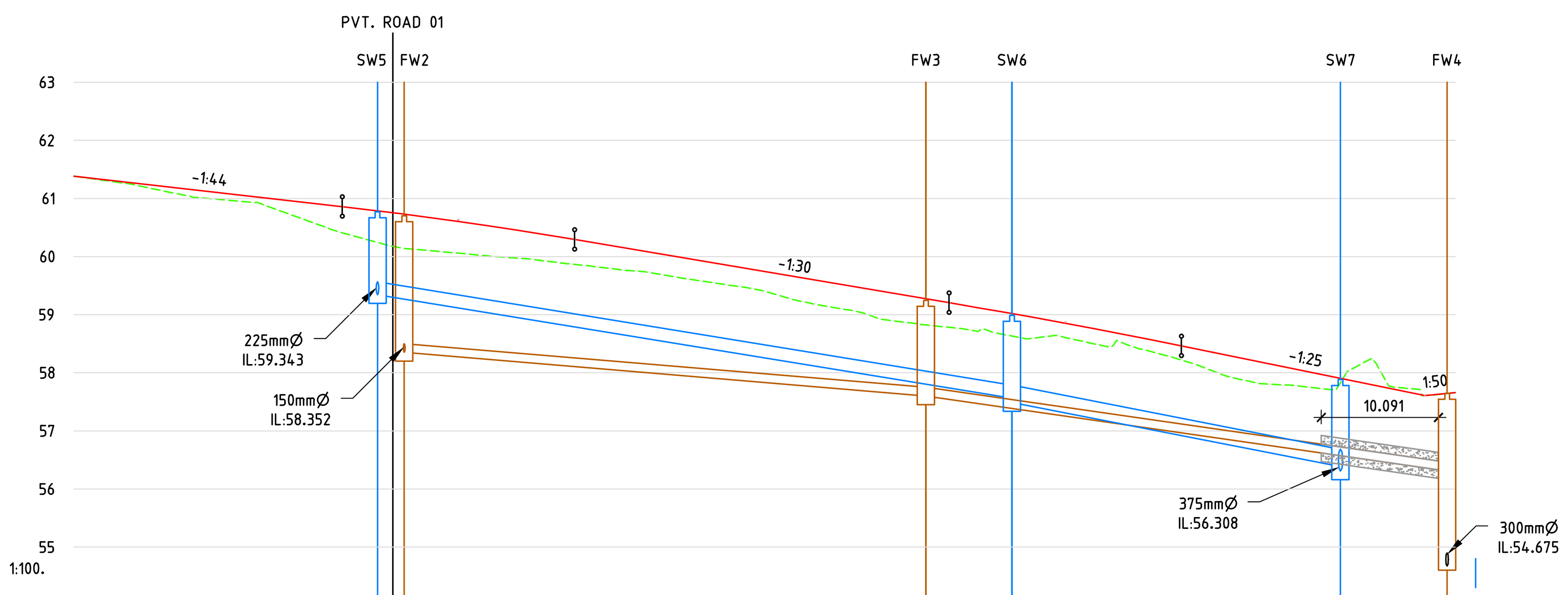
HORIZONTAL GEOMETRY	G =-1.250% L =5.552; L =81.996; L =60.579; G =-1.244% L =4.179
VERTICAL GEOMETRY	G =-3.183% L =1.447; R =949.228 K =9.492 L =20.000; G =-3.357% L =19.917; R =1210.054 K =12.101 L =20.000; G =-1.704% L =39.651; R =11011.913 K =110.119 L =20.000; G =-1.523% L =11.828
SURFACE WATER COVER LEVELS	61.273; 60.524; 59.402
SURFACE WATER INVERT LEVELS	59.300; 58.227 57.477; 57.305
SURFACE WATER PIPE DETAILS	Size:300mm Type:Clay Len:30.397m Grad:1:28.31 PN:1.000; Size:1050mm Type:Concrete Len:68.984m Grad:1:401.07 PN:1.001
SURFACE WATER BED AND SURROUND	Granular class S; Granular class S; Concrete GEN 3



SW3 - OUTFALL
SCALE: H 1:500,V 1:100.
DATUM: 55.000

CHAINAGE	EXISTING LEVELS	PROPOSED LEVELS
0.000	59.378	59.402
2.000	59.292	59.482
4.000	59.082	59.502
6.000	59.068	
7.767	57.495	

HORIZONTAL GEOMETRY	L =7.767
SURFACE WATER COVER LEVELS	59.402; 59.020
SURFACE WATER INVERT LEVELS	57.300; 57.270
SURFACE WATER PIPE DETAILS	Size:300mm Type:Clay Len:7.767m Grad:1:221.91 PN:1.002
SURFACE WATER BED AND SURROUND	Granular class S



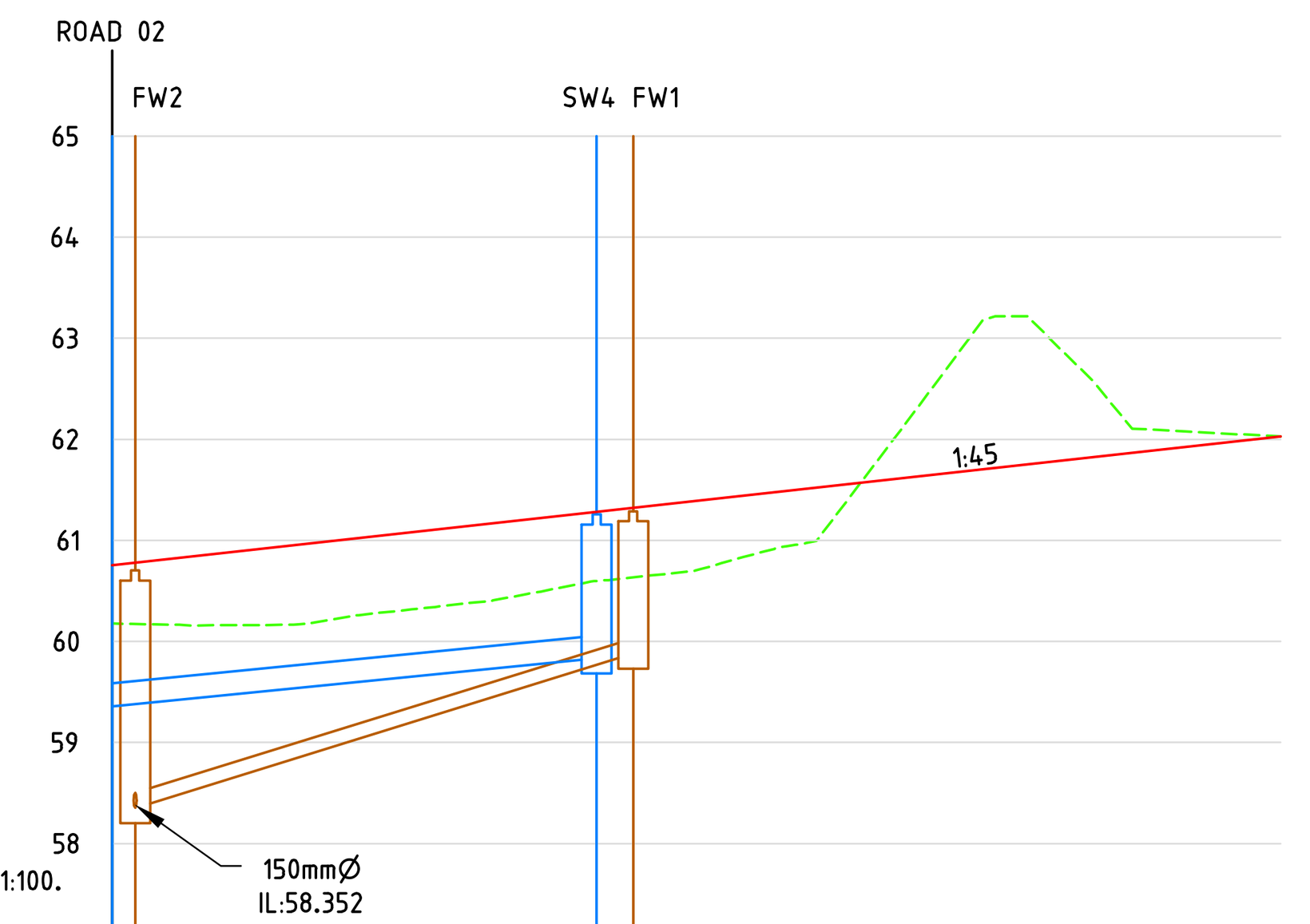
ROAD 02
SCALE: H 1:500,V 1:100.
DATUM: 54.000

CHAINAGE	EXISTING LEVELS	PROPOSED LEVELS
0.000	61.385	61.385
2.000	61.329	61.340
4.000	61.272	61.294
6.000	61.200	61.249
8.000	61.117	61.203
10.000	61.038	61.157
12.000	60.993	61.112
14.000	60.957	61.066
16.000	60.916	61.021
18.000	60.770	60.975
20.000	60.625	60.930
22.000	60.479	60.884
24.000	60.360	60.838
26.000	60.250	60.791
28.000	60.156	60.741
30.000	60.114	60.689
32.000	60.078	60.635
34.000	60.042	60.578
36.000	60.004	60.520
38.000	59.976	60.459
40.000	59.938	60.396
42.000	59.889	60.331
44.000	59.848	60.264
46.000	59.799	60.196
48.000	59.757	60.129
50.000	59.709	60.061
52.000	59.642	59.994
54.000	59.579	59.926
56.000	59.521	59.859
58.000	59.461	59.791
60.000	59.373	59.724
62.000	59.255	59.656
64.000	59.173	59.589
66.000	59.101	59.521
68.000	59.025	59.454
70.000	58.907	59.386
72.000	58.859	59.319
74.000	58.810	59.251
76.000	58.769	59.184
78.000	58.732	59.115
80.000	58.662	59.045
82.000	58.583	58.974
84.000	58.630	58.901
86.000	58.579	58.827
88.000	58.491	58.751
90.000	58.537	58.674
92.000	58.401	58.596
94.000	58.297	58.516
96.000	58.178	58.435
98.000	58.035	58.353
100.000	57.906	58.272
102.000	57.817	58.190
104.000	57.792	58.109
106.000	57.758	58.028
108.000	57.713	57.946
110.000	58.063	57.865
112.000	58.185	57.783
114.000	57.746	57.702
116.000	57.639	57.620
118.000	57.640	57.642
118.909	57.660	57.660

HORIZONTAL GEOMETRY	L =53.677; L =65.232; G =1.983% L =2.609
VERTICAL GEOMETRY	G =-2.277% L =23.091; R =1823.714 K =18.237 L =20.000; G =-3.374% L =32.247; R =2866.090 K =28.661 L =20.000; G =-4.072% L =20.963
SURFACE WATER COVER LEVELS	60.768; 58.987; 57.883
SURFACE WATER INVERT LEVELS	59.343; 57.562 57.487; 56.383
SURFACE WATER PIPE DETAILS	Size:225mm Type:Clay Len:54.656m Grad:1:30.67 PN:1.001; Size:300mm Type:Clay Len:28.302m Grad:1:25.62 PN:1.002
SURFACE WATER BED AND SURROUND	Granular class S; Granular class S
FOUL WATER COVER LEVELS	60.702; 59.246
FOUL WATER INVERT LEVELS	58.352; 57.600 57.600; 56.310
FOUL WATER PIPE DETAILS	Size:150mm Type:Clay Len:44.915m Grad:1:59.72 PN:1.001; Size:150mm Type:Clay Len:44.892m Grad:1:34.79 PN:1.002
FOUL WATER BED AND SURROUND	Granular class S; Granular class S; Concrete GEN 3

NOTES:

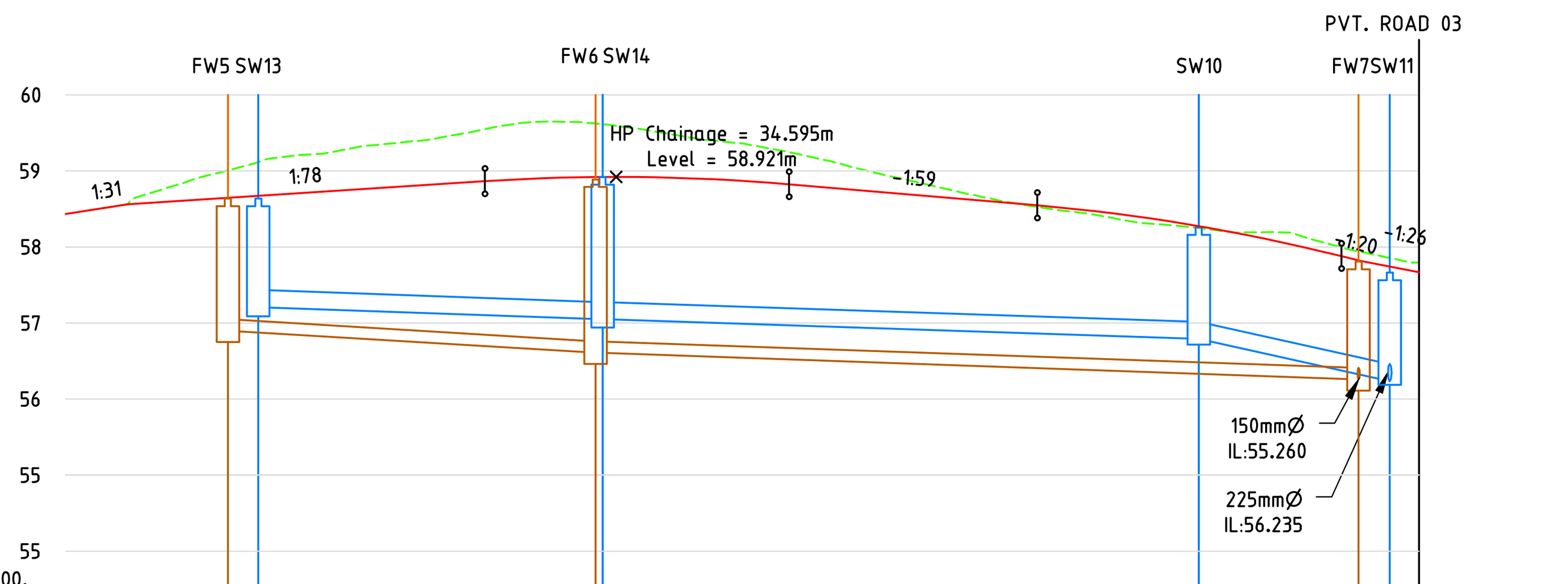
1. ALL SEWERS ARE DESIGNED IN ACCORDANCE WITH SEWER SECTOR GUIDANCE V.0.2 AND UNITED UTILITIES GUIDELINES AND STANDARD DETAILS.
2. ALL CO-ORDINATES AND LEVELS SHOWN ARE RELATIVE TO THE TOPOGRAPHIC SURVEY.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE LINE AND LOCATION OF ANY EXISTING SEWERS, AS WELL AS ANY EXISTING GROUND AND INVERT LEVELS SHOWN ON THE DRAWING ARE CORRECT PRIOR TO THE COMMENCEMENT OF ANY WORKS. ANY DISCREPANCIES MUST BE MUST BE REPORTED IMMEDIATELY.
4. PRIOR TO THE COMMENCEMENT OF ANY ON SITE WORKS THE CONTRACTOR MUST CONTACT THE STATUTORY UNDERTAKER AND BE IN POSSESSION OF THE LATEST DRAWINGS SHOWING THEIR APPARATUS.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ALLOW FOR THE SUPERVISION OF THE CONSTRUCTION WORKS BY UNITED UTILITIES AND/ OR THE HIGHWAYS AUTHORITY. THE CONTRACTOR WILL NOTIFY THE SUPERVISING OFFICER GIVING NOTICE WHICH WILL BE IN ACCORDANCE WITH THE AUTHORITIES REQUIREMENTS.
6. THE PROPOSED SEWERS WILL BE CLAY PIPE WORK AND SHALL BE EXTRA STRENGTH TO BS EN 295:1991 PART 1.
7. ANY PRE CAST CONCRETE PIPE WORK WILL BE IN ACCORDANCE WITH BS EN 1916:2002.
8. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THE CORRECT BEDDING, SURROUND AND BACKFILLING PROCEDURES ARE FOLLOWED FOR PVC PIPES. FOR DETAILS OF EMBEDMENT AND SURROUND FOR FLEXIBLE PIPES REFER TO UNITED UTILITIES STANDARD DETAIL STND/05/001
9. ALL MANHOLES AND CHAMBERS SHALL BE IN ACCORDANCE WITH BS EN 1917:2002
10. SEWERS WITH COVER TO SOFFIT GREATER THAN 1.2m IN ROADS AND 0.9m IN FIELDS SHALL HAVE BED AND SURROUND AS FOLLOWS: RIGID PIPE EMBEDMENT SHALL BE CLASS S. SEMI RIGID PIPE EMBEDMENT SHALL BE CLASS S ALL IN ACCORDANCE WITH UNITED UTILITIES STANDARD DETAIL STND/05/001.
15. ANY SEWER FOR ADOPTION WITH A COVER OF LESS THAN 1.2M TO PIPE SOFFIT IN ROADS OR 0.9m TO PIPE SOFFIT IN FIELDS WILL HAVE A MINIMUM 150mm GEN 3 CONCRETE BED AND SURROUND WITH FLEXIBILITY MAINTAINED WITH FLEXCELL EXPANSION JOINT FILLER OR SIMILAR APPROVED AT EACH PIPE JOINT.
16. PRIVATE DRAINAGE CONNECTIONS TO THE SEWER WILL BE 150MM DIAMETER AND LAID TO THE SPECIFIED INVERT.
17. THE INVERT LEVELS SPECIFIED AT THE DRAG OUT CHAMBER ARE INCOMING LEVELS.
18. WHEREVER POSSIBLE PRIVATE DRAINAGE RUNS WILL REMAIN WITHIN THE CURTILAGE OF THE DWELLING FOR WHICH THEY SERVE.
19. THE CONNECTION TO THE ADOPTABLE SEWER SHALL BE MANUFACTURED JUNCTION PIPES A SADDLE CONNECTION IS NOT PERMITTED UNLESS IT IS CLEARLY SPECIFIED.
20. CONNECTIONS TO THE EXISTING SEWER WILL BE IN ACCORDANCE WITH SECTION 104 APPROVAL GRANTED BY UNITED UTILITIES.
24. CONNECTIONS TO THE EXISTING WATERCOURSE WILL BE IN ACCORDANCE WITH APPROVAL GRANTED BY THE EA.



PRIVATE ROAD 01
SCALE: H 1:500,V 1:100.
DATUM: 57.000

CHAINAGE	EXISTING LEVELS	PROPOSED LEVELS
0.000	60.177	
2.000	60.169	60.799
4.000	60.158	60.843
6.000	60.161	60.887
8.000	60.164	60.931
10.000	60.188	60.975
12.000	60.254	61.019
14.000	60.299	61.063
16.000	60.342	61.107
18.000	60.387	61.151
20.000	60.450	61.195
22.000	60.526	61.239
24.000	60.600	61.284
26.000	60.639	61.328
28.000	60.682	61.372
30.000	60.765	61.416
32.000	60.878	61.460
34.000	60.962	61.504
36.000	61.303	61.548
38.000	61.829	61.592
40.000	62.359	61.636
42.000	62.895	61.680
44.000	63.217	61.724
46.000	63.072	61.769
48.000	62.676	61.813
50.000	62.215	61.857
52.000	62.089	61.901
54.000	62.068	61.945
56.000	62.047	61.989
57.800	62.029	62.029

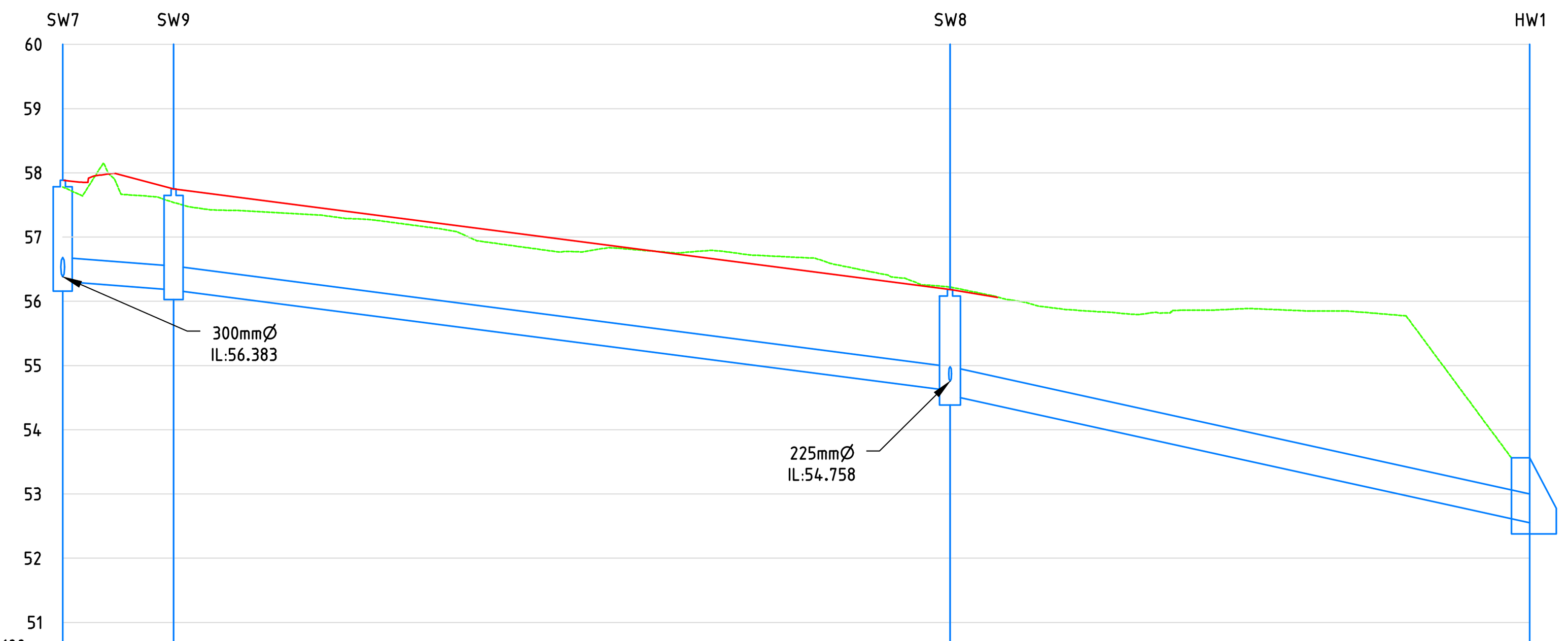
HORIZONTAL GEOMETRY	L =14.809; R: 2.000 L: 0.843; R: 2.000 L: 0.843; L =4.046; R: 5.000 L: 1.885; R: 5.000 L: 1.885; R: 4.000 L: 6.282; L =4.260; L =22.947
VERTICAL GEOMETRY	G =2.191% L =40.323; G =2.237% L =17.476
SURFACE WATER COVER LEVELS	61.261
SURFACE WATER INVERT LEVELS	59.343; 59.833
SURFACE WATER PIPE DETAILS	Size:225mm Type:Clay Len:24.563m Grad:1:50.12 PN:1.000
SURFACE WATER BED AND SURROUND	Granular class S
FOUL WATER COVER LEVELS	60.702; 61.292
FOUL WATER INVERT LEVELS	58.352; 59.880
FOUL WATER PIPE DETAILS	Size:150mm Type:Clay Len:24.545m Grad:1:16.03 PN:1.000
FOUL WATER BED AND SURROUND	Granular class S



PRIVATE ROAD 02
SCALE: H 1:500,V 1:100.
DATUM: 53.000

CHAINAGE	EXISTING LEVELS	PROPOSED LEVELS
0.000	58.434	58.484
2.000	58.497	58.548
4.000	58.561	58.582
6.000	58.736	58.606
8.000	58.860	58.631
10.000	58.975	58.655
12.000	59.078	58.680
14.000	59.177	58.705
16.000	59.215	58.729
18.000	59.267	58.754
20.000	59.335	58.778
22.000	59.375	58.803
24.000	59.417	58.828
26.000	59.490	58.852
28.000	59.568	58.877
30.000	59.633	58.897
32.000	59.650	58.912
34.000	59.639	58.920
36.000	59.600	58.923
38.000	59.543	58.920
40.000	59.476	58.911
42.000	59.412	58.896
44.000	59.371	58.876
46.000	59.305	58.849
48.000	59.228	58.817
50.000	59.141	58.783
52.000	59.037	58.749
54.000	58.942	58.715
56.000	58.851	58.681
58.000	58.759	58.647
60.000	58.670	58.613
62.000	58.587	58.579
64.000	58.524	58.545
66.000	58.467	58.508
68.000	58.411	58.464
70.000	58.339	58.413
72.000	58.297	58.355
74.000	58.260	58.292
76.000	58.213	58.221
78.000	58.193	58.144
80.000	58.193	58.061
82.000	58.096	57.971
84.000	57.988	57.874
86.000	57.900	57.783
88.973	57.795	57.668

HORIZONTAL GEOMETRY	L =27.956; R: 6.000 L: 9.428; L =49.993; G =-4.973% L =1.378
VERTICAL GEOMETRY	G =3.181% L =2.458; G =1.230% L =25.106; R =683.071 K =6.831 L =20.000; G =-1.698% L =16.305; R =610.676 K =6.107 L =20.000; G =-3.857% L =3.728
SURFACE WATER COVER LEVELS	58.638; 58.920; 58.262; 57.664
SURFACE WATER INVERT LEVELS	57.210; 57.050 57.050; 56.790 56.790; 56.235
SURFACE WATER PIPE DETAILS	Size:225mm Type:Clay Len:21.831m Grad:1:136.44 PN:2.000; Size:225mm Type:Clay Len:38.977m Grad:1:149.91 PN:2.001; Size:225mm Type:Clay Len:12.943m Grad:1:23.30 PN:2.002
SURFACE WATER BED AND SURROUND	Granular class S; Granular class S; Granular class S
FOUL WATER COVER LEVELS	58.629; 58.839; 57.832
FOUL WATER INVERT LEVELS	55.900; 55.610 55.610; 55.260
FOUL WATER PIPE DETAILS	Size:150mm Type:Clay Len:26.026m Grad:1:90.0 PN:1.000; Size:150mm Type:Clay Len:51.888m Grad:1:148.25 PN:1.001
FOUL WATER BED AND SURROUND	Granular class S; Granular class S



SW7 - HW1
SCALE: H 1:500,V 1:100.
DATUM: 50.000

CHAINAGE	EXISTING LEVELS
0.000	57.780
2.000	57.787
4.000	57.910
6.000	57.646
8.000	57.580
10.000	57.467
12.000	57.421
14.000	57.409
16.000	57.387
18.000	57.365
20.000	57.343
22.000	57.291
24.000	57.272
26.000	57.219
28.000	57.167
30.000	57.109
32.000	56.966
34.000	56.895
36.000	56.840
38.000	56.785
40.000	56.771
42.000	56.819
44.000	56.814
46.000	56.781
48.000	56.754
50.000	56.786
52.000	56.763
54.000	56.716
56.000	56.697
58.000	56.677
60.000	56.581
62.000	56.499
64.000	56.418
66.000	56.328
68.000	56.242
70.000	56.186
72.000	56.104
74.000	56.015
76.000	55.925
78.000	55.876
80.000	55.847
82.000	55.823
84.000	55.798
86.000	55.819
88.000	55.861
90.000	55.867
92.000	55.885
94.000	55.875
96.000	55.858
98.000	55.849
100.000	55.848
102.000	55.817
104.000	55.784
106.000	55.755
108.000	55.730
110.000	55.720
112.000	55.709
114.298	55.697

HORIZONTAL GEOMETRY	L =8.631; L =60.487; L =45.180
SURFACE WATER COVER LEVELS	57.883; 57.750 57.750; 56.184 56.184
SURFACE WATER INVERT LEVELS	56.308; 56.175 56.175; 54.608 54.533; 52.551
SURFACE WATER PIPE DETAILS	Size:375mm Type:Concrete Len:8.632m Grad:1:64.89 PN:1.003; Size:375mm Type:Concrete Len:60.507m Grad:1:38.60 PN:1.004; Size:450mm Type:Concrete Len:45.197m Grad:1:22.78 PN:1.005
SURFACE WATER BED AND SURROUND	Granular class S; Granular class S; Granular class S

0 mm 10 20 30 40 50

FILENAME:
PLOT DATE:

Rev	Date	Description	By	Chk
P05	05.09.23	Private Road 4 foul updated	H.S.	R.A.
P04	09.06.23	Updated as per UU comments	H.S.	R.A.
P03	09.05.23	Added SW7 - HW1	H.S.	R.A.
P02	03.04.23	Updated in line with latest drainage layout	A.R.	M.A.
P01	30.11.22	PRELIMINARY - Issued for Information	A.R.	M.A.

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Project Name
COLLYHURST VILLAGE

Client
DEX CONSTRUCTION

Designed	Drawn	Checked	Scale @ A1
A.R.	A.R.	M.A.	1:500

Drawing Title
LONGITUDINAL SECTIONS SHEET 1

Project No.
221625

PRELIMINARY
NOT FOR CONSTRUCTION

Drawing No.
221625-EDGE-XX-XX-DR-C-2111

Revision
P05