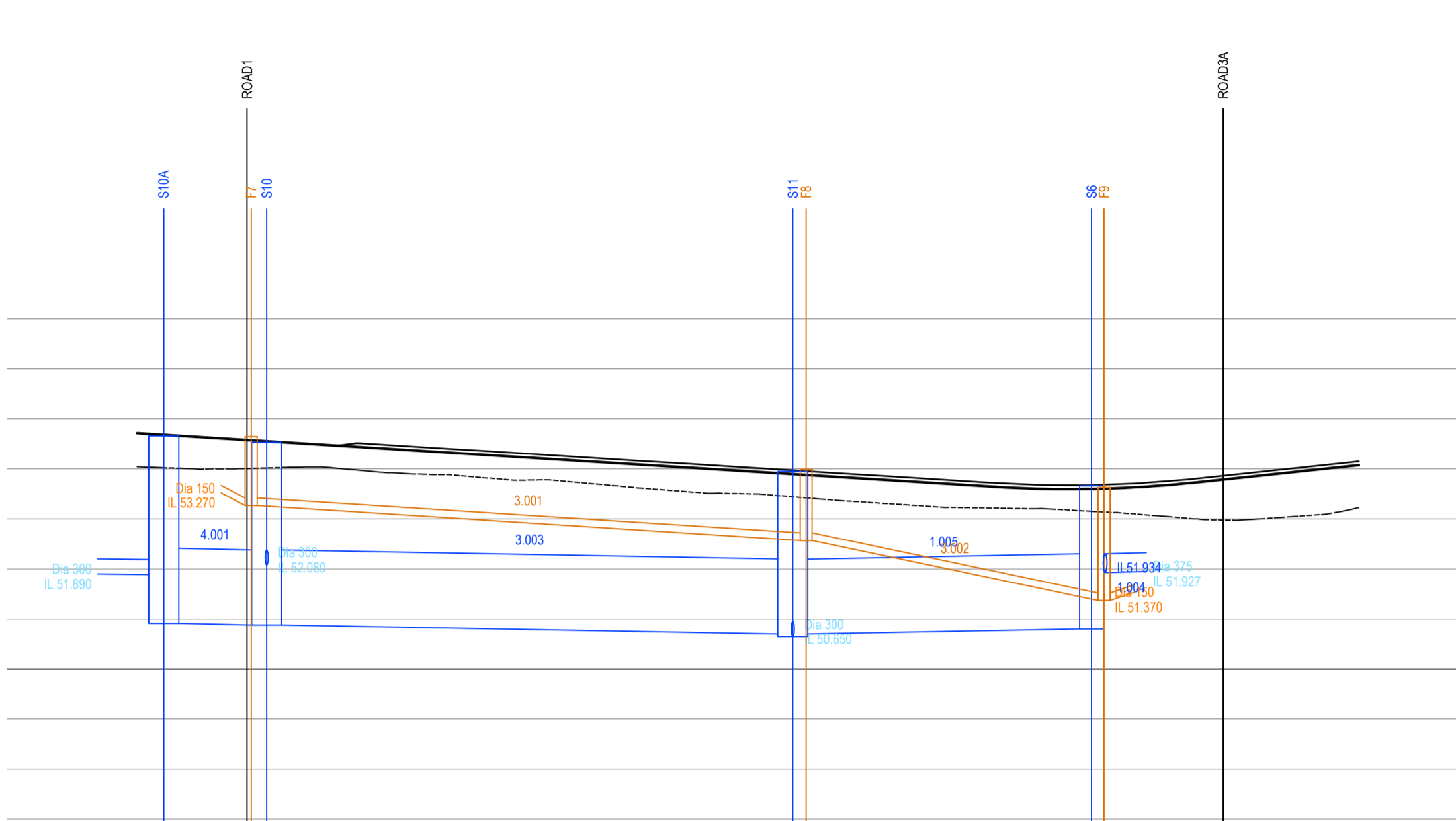


CHAINAGE	0.000	0.100	6.008	6.043	10.000	16.227	20.000	22.188	30.000	31.885	40.000	44.887	46.707	48.551	50.000	60.000	61.897	68.207	70.342	
EXISTING GROUND LEVEL	57.475																			
ALIGNMENT LEVEL	57.475		57.302	57.138	57.014	56.844	56.735	56.644	56.525	56.427	56.306	56.188	56.077	55.972	55.887	55.805	55.727	55.653	55.584	
VERTICAL ALIGNMENT	G = -4.192% 1: -23.9																			
HORIZONTAL ALIGNMENT	R = 45,000																			
LEFT HAND CHANNEL																				
RIGHT HAND CHANNEL			57.167	57.166	57.002	56.796	56.589	56.382	56.175	55.968	55.762	55.555	55.348	55.141	54.934	54.727	54.520	54.313	54.106	53.899
STORMWATER COVER LEVEL						56.842			56.201											54.534
STORMWATER INVERT						55.290			54.750	54.750	54.450	54.375								52.880
STORMWATER DETAILS						Pipe 3.000 Dia 225 Circular CLAY 1 in 29			Pipe 3.001 Dia 225 Circular CLAY 1 in 44							Pipe 3.002 Dia 300 Circular CLAY 1 in 12				
STORMWATER LENGTHS						15.896			13.182							26.415				
FOULWATER COVER LEVEL											55.303									54.650
FOULWATER INVERT											53.520									52.270
FOULWATER DETAILS											Pipe 3.000 Dia 150 Circular CLAY 1 in 79									
FOULWATER LENGTHS											19.737									



CHAINAGE	0.000	2.872	11.609	20.003	22.003	53.888	53.782	53.624	53.508	53.372	53.240	53.207	53.043	52.885	52.724	52.564	52.403	52.242		
EXISTING GROUND LEVEL	54.042																			
ALIGNMENT LEVEL	54.042		54.003	54.014	54.003	53.888	53.782	53.624	53.508	53.372	53.240	53.207	53.043	52.885	52.724	52.564	52.403	52.242		
VERTICAL ALIGNMENT																				
HORIZONTAL ALIGNMENT																				
LEFT HAND CHANNEL																				
RIGHT HAND CHANNEL			54.648	54.586	54.524	54.461	54.399	54.349	54.297	54.244	54.192	54.140	54.088	54.036	53.984	53.932	53.880	53.828	53.776	
STORMWATER COVER LEVEL			54.662		54.534															
STORMWATER INVERT			50.915	50.860	50.800				50.700	50.697										
STORMWATER DETAILS			Pipe 4.001 Dia 1500 Circular Unknown 1 in 294						Pipe 3.003 Dia 1500 Circular Unknown 1 in 293						Pipe 1.005 Dia 1500 Circular Unknown 1 in 285					
STORMWATER LENGTHS			10.288						52.602						29.987					
FOULWATER COVER LEVEL			54.650							53.991										
FOULWATER INVERT			53.270						52.570	52.570					51.370					
FOULWATER DETAILS									Pipe 3.001 Dia 150 Circular CLAY 1 in 79						Pipe 3.002 Dia 150 Circular CLAY 1 in 26					
FOULWATER LENGTHS									55.486						31.103					

- To be read in conjunction with Eastwood and Partners drawings prefixed 45864.
- All pipes shall be either:
A - Verified clay to BS EN 285 with a minimum crushing strength as follows:
150 dia - 45 N/m²
225 dia - 45 N/m²
300 dia - 72 N/m²
B - PVC (certified to WIS 4-35-01 & BS EN 13476)
C - Class 120 concrete to BS 5911-1:2002/EN 1916.
- All pipes should always connect soffit to soffit unless noted otherwise.
- All sewers to have BSI Kitemark status (certified to WIS 4-35-01 & BS EN 13476). Maximum pipe length to be 3m. Plastic channel sections in manholes are not acceptable. Clay channel sections shall be used.
- 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 500mm in non-vehicular access areas) then a concrete slab should be provided above granular bed and surround.
- Manhole covers shall have a clear opening of 600 and shall be class D400 to BS EN 124 with 150 deep frames in highways.
- Pipes entering manholes and road gullies shall have a flexible joint within 600 of the inside of the manhole or gully joining with a short Rucker pipe.
- The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
- Sewers must have 5m clearance from trees and hedges.
- All trenches in roads and paved areas shall be backfilled with Type 1 DOT granular sub-base material, or other granular material approved by the highway authority.
- Fill ground must be filled and consolidated under the supervision and to the satisfaction of Yorkshire Water before any sewer works are carried out.
- All in situ concrete to be designated mix FN02 to BS 8500-1 unless agreed otherwise.
- The invert levels at the proposed points of connection to existing public sewers shall be checked before any new drains are constructed. Any variation to the levels shown on the drawing shall be notified to Eastwood & Partners.
- 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.
- Cover levels are indicative only. Covers to be set to suit camber/gradient of existing and proposed roads.
- Cover slabs must carry the BSI Kitemark or will 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 600mm x 600mm for the Yorkshire Water specified cover size. Please refer to Concrete Pipe Systems Association (CPSA), 'Technical Bulletin' issued Autumn 2004 for Kitemarked cover slab opening sizes.
- All foul lateral sewers and drains to be 1500 unless noted otherwise.
- Yorkshire Water policy is that Type 'C' brick manholes and 1050mm dia manhole rings are not preferred. Instead it is preferred that you use a type 'B' manhole with 1200mm dia or 1500mm dia rings, with the opening sized over the channel where depth of cover to pipe soffit is 1 - 1.5m.
- Manhole covers shall have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.
- Where a B125 cover and frame has been approved, this must not be coated in plastic and must have fitting eyes suitably sized to accommodate standard lifting keys. Screw down covers are not acceptable.
- All adoptable sewer works and material to be in accordance with 'Code for Adoption'. The Relevant British/European and Yorkshire Water's Standards/Requirements/Appendix to the Mechanical and Electrical Specification and Kitemarked.
- Yorkshire Water is not obliged to accept filter drain/land drainage run-off into the public sewer network or adoptable drainage system (directly or indirectly). An alternative method of disposal of the land drainage run-off will therefore be required and you will have to liaise with the Local Authority, Land Drainage Section with regard to the disposal of the filter drain/land drainage run-off.
- Sulphate resistant cement (C20-D02) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
- 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 Kitemarked (certified to WIS 4-35-01 and BS EN 13476). Adoptable plastic sewer pipes to be laid in maximum 3 metre lengths unless there is a specific operational need to lay longer lengths. Plastic channel sections in manholes are not acceptable and Yorkshire Water would prefer clayware channel in manholes. We have found that plastic channels are difficult to set in concrete because they float and a satisfactory finish cannot be obtained on the bedding.
- The clearance of the crossover points (min 300mm) between the surface water, foul sewers, rising main and other services should be sufficient clearance to provide 150mm surround of a certain mm that exceeds this (200mm).
- All adoptable laterals to be 1500 and VC unless stated otherwise.

P01	First issue.	AT	CH	30.08.24
REV	DESCRIPTION	SIG	CHK	DATE

HOOPER HOMES

**WEST STREET, WORSBROUGH,
BARNSLAY**

**LONGITUDINAL SECTIONS
SHEET 1 OF 3**

