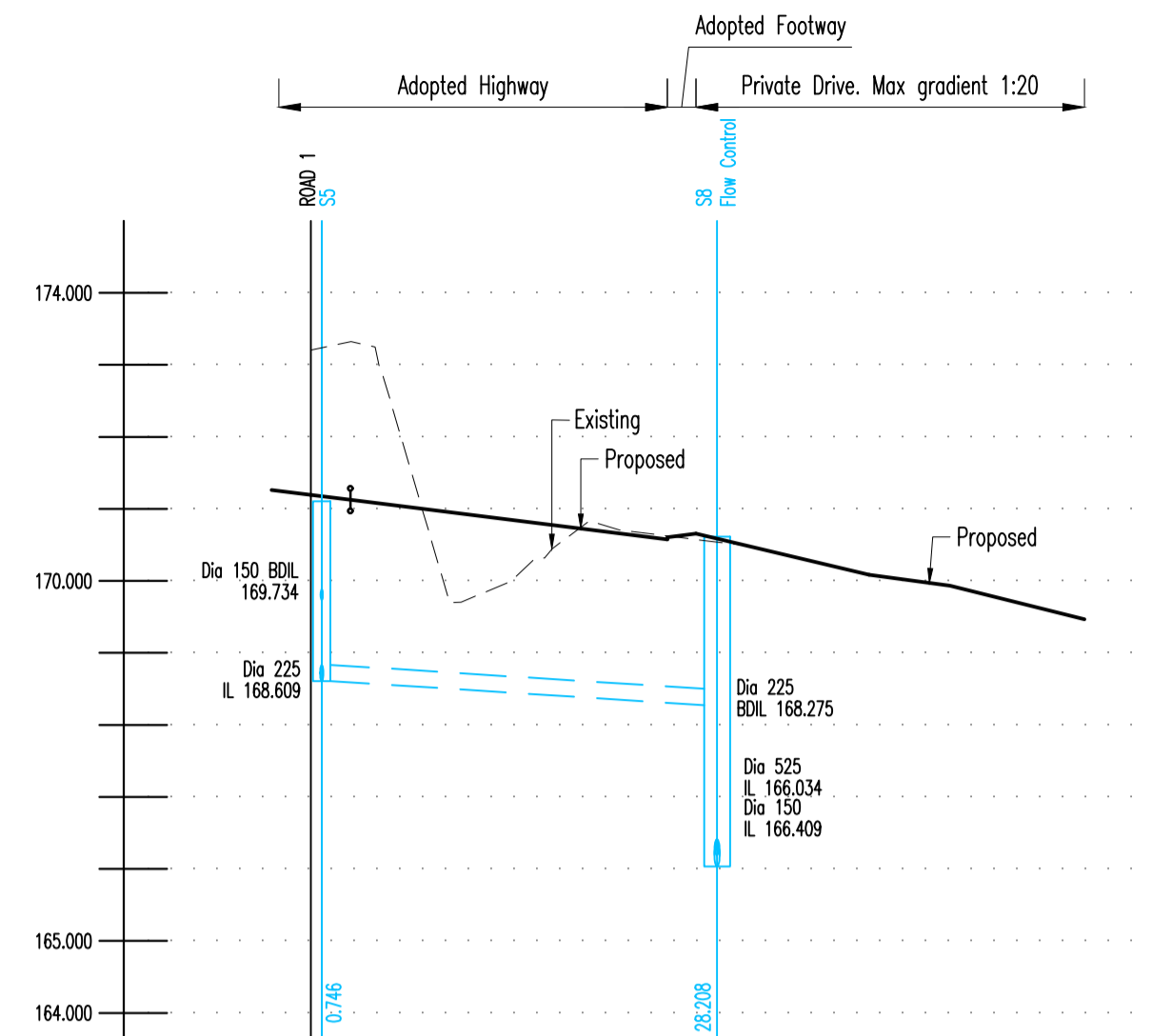


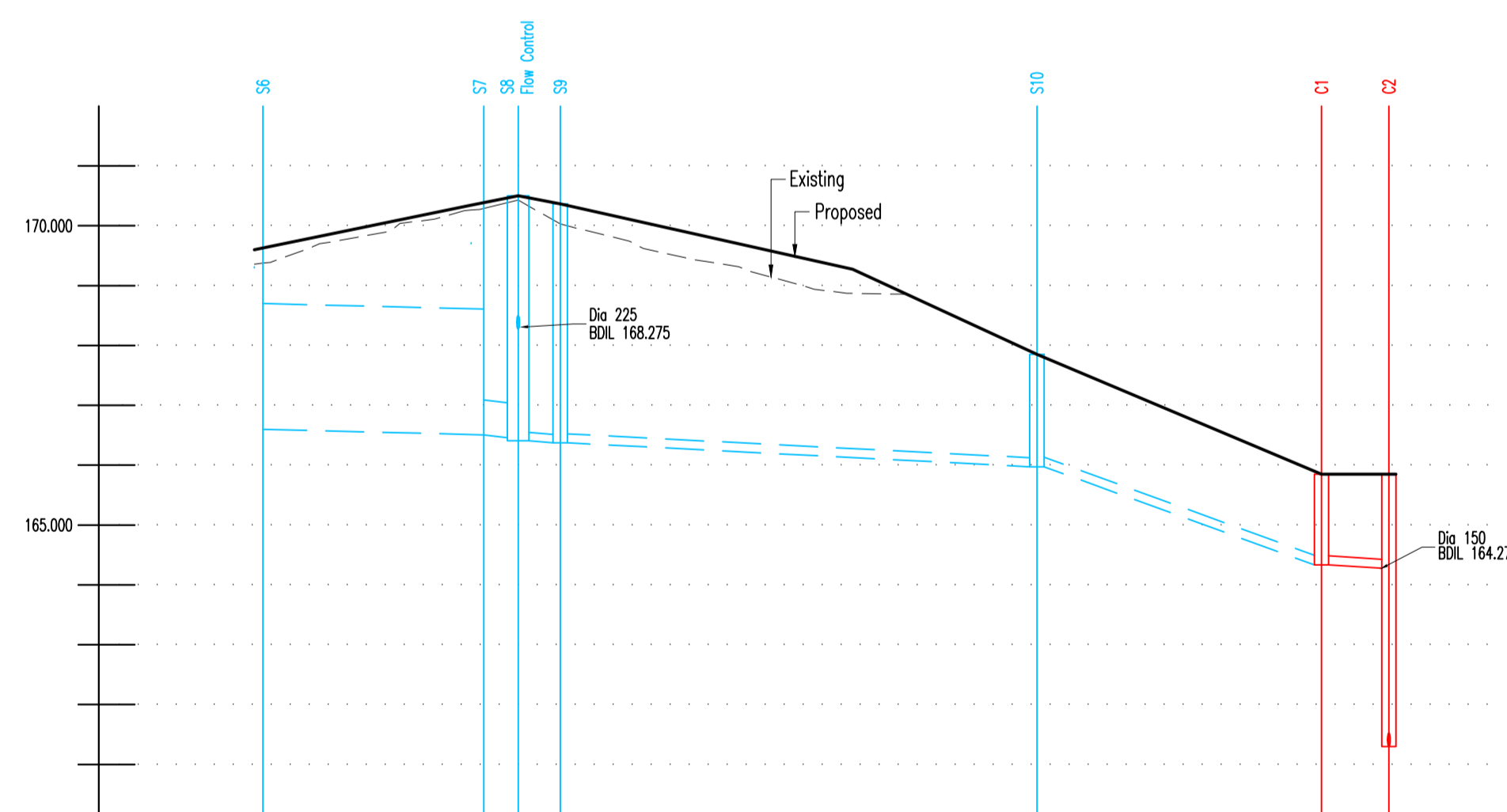
ROAD 1

CHAINAGE	0.000	5.542	6.380	10.000	14.246	16.246	17.000	27.798	30.000	40.000	40.985	50.000	57.071	60.000	70.000	75.062
EXISTING GROUND LEVEL	173.974	173.974	173.974	173.986	173.974	173.974	173.974	173.989	173.989	172.884	172.884	172.797	172.797	173.356	173.146	169.144
ALIGNMENT LEVEL	173.974	173.974	173.974	173.986	173.974	173.974	173.974	173.989	173.989	172.884	172.884	172.797	172.797	173.356	173.146	169.144
VERTICAL ALIGNMENT	G ₁ = -5.000%			RAMP			G ₂ = -5.000%			G ₃ = -5.000%			G ₄ = -5.000%			
HORIZONTAL ALIGNMENT	1: -20.0			RAMP			1: -20.0			1: -20.0			1: -20.0			
LEFT HAND CHANNEL		173.659	173.620	173.610	173.481	173.457	173.319	173.182	173.113	172.975	172.817	172.725				
RIGHT HAND CHANNEL																
SW CL / DETAIL																
SW IL / LENGTH																



ROAD 2

CHAINAGE	0.000	2.251	4.206	5.790	10.000	20.000	24.747
EXISTING GROUND LEVEL	173.206	173.206	173.206	173.206	173.206	173.206	173.206
ALIGNMENT LEVEL	173.206	173.206	173.206	173.206	173.206	173.206	173.206
VERTICAL ALIGNMENT	G ₁ = -2.500%		G ₂ = -4.762%		G ₃ = -2.70%		G ₄ = -5.000%
HORIZONTAL ALIGNMENT	1: -40.0		1: -21.0		1: -37.0		1: -20.0
LEFT HAND CHANNEL		170.984	171.041	170.977	171.015	170.752	170.880
RIGHT HAND CHANNEL							
SW CL / DETAIL							
SW IL / LENGTH							



S6 - C2

GROUND LEVEL	166.600	166.600	169.359	169.850	170.331	169.812	169.331	168.850	168.362	168.870	168.370	167.850	167.350	166.800
SW CL / DETAIL														
SW IL / LENGTH														

Yorkshire Water General Notes

- This drawing is to be read in conjunction with all relevant OEC Consulting Engineers and Architects drawings and project specifications.
- All adoptable sewer works and material to be in accordance with "The Code" Version 2.1 2021, the relevant British/European and Yorkshire Water's Standards/Requirements/ Local Practice for the Adoption of Small Submersible Foul and Surface Water Pumping Stations and Kitemarked.
- The location, size and depth of all existing drains/sewers and services shall be established by the contractor prior to commencement of works on site. Any discrepancies from the information indicated on these drawings shall immediately be brought to the attention of the engineers.
- All levels and dimensions shall be verified on site prior to commencement of any works. Any discrepancies shall immediately be brought to the attention of the engineers.
- Sewers must have 5 metres clearance from trees and hedges.
- The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
- All connections to public sewers to be a minimum of 150mm ϕ via a 45° junction.
- 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.
- Yorkshire Water policy is not to accept Type "C" brick manhole and 1050mm dia manhole rings. Instead it is preferred that you use a type "B" manhole with 1200mm dia or 1500mm dia. rings, with the opening sited over the channel where depth of cover to pipe soffit is 1-1.5m.
- 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.
- 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.
- 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.
- Cover slabs must carry the BSI Kitemark or will be rejected by the 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 600x600mm for the Yorkshire Water specified cover size. Please refer to the Concrete Pipe Systems Association (CPSA), "Technical Bulletin" issued autumn 2004 for kitemarked cover slab opening sizes.
- Maximum depth of demarcation chamber to be 3m, where depth exceeds 3m, manhole to be constructed as type B manhole.
- Demarcation chambers to be a min. 450mm ϕ chambers for 100mm ϕ foul & 150mm ϕ surface water pipes up to 1.2m deep. For depths greater than 1.2m, restricted access opening to 350mm is required for safety reasons.
- 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.
- 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.
- If plastic pipes are to be used then the following should apply:-
 - All adoptable sewers to be BSI Kitemark (certified to WIS 4-35-01).
 - Bedding and backfill material to conform to the requirements of the Water Industry Specification 4-08-02 (Table A2)
- Adoptable plastic sewer pipes to be BSI Kitemarked (Certified to WIS 4-35-01 and BS/EN13476). 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 clayware is preferable. Plastic channels are difficult to set in concrete because they float and a satisfactory finish cannot be obtained on the benching.
- Filled ground or soft spots must be excavated, backfilled and consolidated under the supervision, and to the satisfaction of Yorkshire Water before any sewer works are carried out.
- Sulphate resisting cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
- The minimum crushing strength of vitrified clay pipes (if used) should be as follows: 100 ϕ 40KN/m, 150 ϕ 40KN/m, 225 ϕ 45KN/m and 300 ϕ 75KN/m. The minimum crushing strength for concrete pipes should be - Class 120 to EN 1916/BSS911-1:2002. Plastic pipes should conform to WIS 4-35-01 and BS EN13476.
- Surface water and foul rising mains to be provided with marker tape above the rising mains.
- Yorkshire Water is not obliged to accept filter drain/land 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/land drainage runoff.
- All excavations in areas of high water tables and granular materials with high sand/silt contents shall be wrapped with a suitable geotextile filter membrane to prevent migration of sands/silts. Full height clay slanks across trenches and/or at manhole locations at 25m intervals to restrict water movement along the excavation shall be provided.
- All works within the public highway to be reinstated to the highway authority requirements. All drainage connections onto adoptable drainage systems shall be carried out to the water authority's approval.
- The contractor must allow for any fee's required for road and sewer opening permits, sewer connections and make the appropriate applications.
- Where there are double road gullies, the gully leads shall be connected onto separate pipe lengths.
- There must be enough clearance at crossovers to accommodate bedding to both pipes, approx. 300mm; if crossover is near the rocker then the clearance needed may be increased.

N O T E S
SUBJECT TO THE APPROVAL OF ALL RELEVANT AUTHORITIES
DO NOT SCALE ORIGINAL DRAWING SIZE A1

F	AB	13.07.23	Private drive details added	AB
E	LS	05.07.23	S6-S10 invert levels updated	AB
D	LS	24.05.23	Updated to suit new layout	AB
C	ZA	04.05.23	Updated to suit Yorkshire Water comments	AB
B	AB	06.04.23	Updated to suit external works designs	AB
A	AB	10.03.23	S9-C2 updated	AB
/	AB	03.03.23	Issued for approval	WW
Rev	By	Date	Description	Chk



Client YORKSHIRE CHOICE HOMES

Project WESTFIELD LANE, WYKE

Title LONGITUDINAL SECTIONS

Scale	H1:500V1:100	Drawn	AB	Checked	WW	Date	MARCH.23
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Drawing Status APPROVAL

Job No.	124.008	Drawing No.	06	Revision	F
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