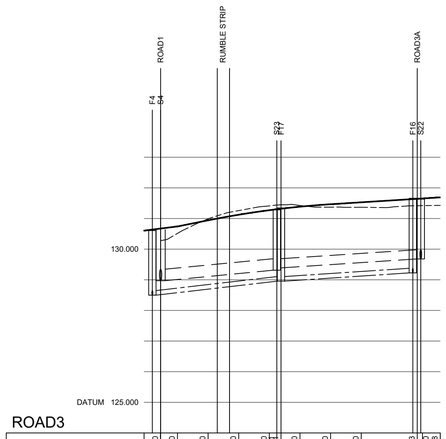
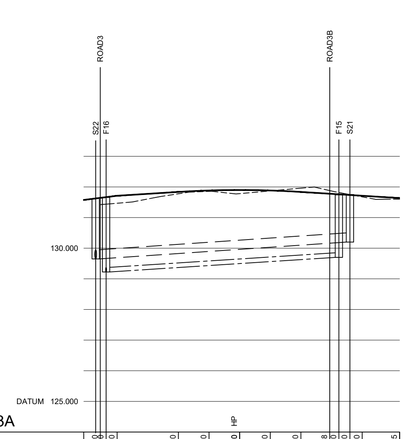


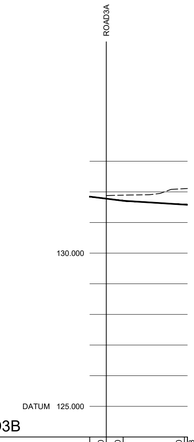
ROAD3

CHAINAGE	-2.750	0.000	5.000	10.000	15.000	15.551	20.000	25.000	30.000	39.143	40.000	42.898		
EXISTING GROUND LEVEL	130.277	130.514		131.299			131.426		131.367	131.421	131.429			
ALIGNMENT LEVEL		130.741	130.941	131.124	131.273	131.387	131.466	131.529		131.654	131.690			
VERTICAL ALIGNMENT			G= 4.000% 1: 25.0	L= 20.000 KF= -7.27273				G= 1.250% 1: 80.0						
HORIZONTAL ALIGNMENT														
STORMWATER COVER LEVEL	130.638			131.285						131.632				
STORMWATER INVERT	128.971	128.972			129.313	129.388					129.681			
STORMWATER DETAILS			Pipe 2.002 Dia 375 Circular CONC 1 in 55				Pipe 2.001 Dia 300 Circular CLAY 1 in 80							
STORMWATER LENGTHS			18.917				23.500							
FOULWATER COVER LEVEL	130.808			131.344						131.658				
FOULWATER INVERT	128.608	128.498			128.956	128.956					129.225			
FOULWATER DETAILS			Pipe 2.002 Dia 150 Circular CLAY 1 in 46				Pipe 2.001 Dia 150 Circular CLAY 1 in 80							
FOULWATER LENGTHS			21.206				21.520							



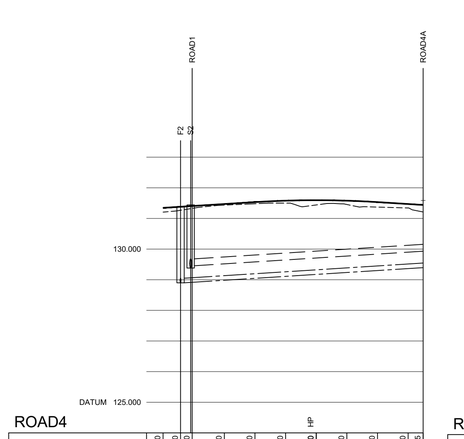
ROAD3A

CHAINAGE	-2.750	-1.000	0.000	10.000	15.000	20.000	HP	25.000	30.000	34.708	38.200	40.000	46.115	
EXISTING GROUND LEVEL	131.418	131.497		131.776		131.782			131.980			131.676	131.601	
ALIGNMENT LEVEL		131.712		131.837	131.894	131.899		131.894	131.837			131.712	131.635	
VERTICAL ALIGNMENT				G= 1.250% 1: 80.0		L= 20.000 KF= -8.0						G= -1.250% 1: -80.0		
HORIZONTAL ALIGNMENT														
STORMWATER COVER LEVEL	131.632						131.751							
STORMWATER INVERT	129.681						130.200							
STORMWATER DETAILS				Pipe 2.000 Dia 300 Circular CLAY 1 in 80										
STORMWATER LENGTHS				41.500										
FOULWATER COVER LEVEL	131.658						131.741							
FOULWATER INVERT		129.225					129.700							
FOULWATER DETAILS				Pipe 2.000 Dia 150 Circular CLAY 1 in 80										
FOULWATER LENGTHS				38.000										



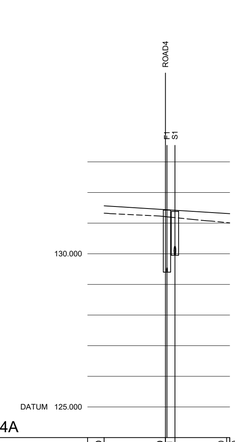
ROAD3B

CHAINAGE	-2.750	0.000	10.000	10.493
EXISTING GROUND LEVEL	131.679	131.693		132.104	132.109
ALIGNMENT LEVEL		131.709		131.584	131.578
VERTICAL ALIGNMENT				G= -1.250% 1: -80.0	
HORIZONTAL ALIGNMENT					



ROAD4

CHAINAGE	0.000	2.850	4.750	10.000	15.000	20.000	HP	25.000	30.000	35.000	40.000	42.455		
EXISTING GROUND LEVEL	131.206			131.436		131.500			131.455		131.342	131.212		
ALIGNMENT LEVEL	131.346			131.471	131.533	131.580		131.596	131.580	131.533	131.471	131.440		
VERTICAL ALIGNMENT			G= 1.250% 1: 80.0			L= 20.000 KF= -8.0					G= -1.250% 1: -80.0			
HORIZONTAL ALIGNMENT														
STORMWATER COVER LEVEL			131.441											
STORMWATER INVERT				129.456										
STORMWATER DETAILS				Pipe 1.000 Dia 225 Circular CLAY 1 in 80										
STORMWATER LENGTHS				39.500										
FOULWATER COVER LEVEL	131.388													
FOULWATER INVERT				128.899										
FOULWATER DETAILS				Pipe 1.000 Dia 150 Circular CLAY 1 in 80										
FOULWATER LENGTHS				40.040										



ROAD4A

CHAINAGE	0.000	10.000	11.561	20.000	20.510
EXISTING GROUND LEVEL	131.324	131.212		131.018	131.008
ALIGNMENT LEVEL	131.565	131.440		131.315	131.309
VERTICAL ALIGNMENT		G= -1.250% 1: -80.0			
HORIZONTAL ALIGNMENT					
STORMWATER COVER LEVEL		131.382			
STORMWATER INVERT		129.950			
STORMWATER DETAILS					
STORMWATER LENGTHS					
FOULWATER COVER LEVEL		131.426			
FOULWATER INVERT		129.400			
FOULWATER DETAILS					
FOULWATER LENGTHS					

1. ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH CODES FOR ADOPTION,THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATER STANDARDS/REQUIREMENTS/ADDENDUM TO THE MECHANICAL AND ELECTRICAL SPECIFICATION AND KITEMARKED.
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 YORKSHIRE WATER BEFORE ANY SEWER WORKS ARE CARRIED OUT.
4. YORKSHIRE WATER IS **NOT** OBLIGED TO ACCEPT FILTER DRAIN/LAND DRAINAGE RUNOFF INTO THE PUBLIC SEWER NETWORK OR ADOPTABLE DRAINAGE SYSTEM (DIRECTLY OR INDIRECTLY). AN ALTERNATIVE METHOD OF DISPOSAL OF THE LAND DRAINAGE RUNOFF 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 RUNOFF.
5. 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 600x600mm 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.
6. SULPHATE RESISTANT CEMENT (C20-DC2) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED PROVING THAT SUCH PRECAUTIONS ARE NOT NECESSARY.
7. THE ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1m AND MANHOLES 0.5m FROM KERB FACES AND MARGINS.
8. SEWERS MUST HAVE 5m CLEARANCE FROM TREES AND HEDGES (PLEASE ALSO REFER TO CODES FOR ADOPTION FOR RESTRICTION ON TREE PLANTING ADJACENT TO SEWERS).
9. 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 OVER SEWER SHALL BE PROVIDED ABOVE GRANULAR BED AND SURROUND.
10. BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENT OF WATER INDUSTRY SPECIFICATION 4-08-02 (TABLE A2).
11. THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION IN THEM MAY NEED OT BE INCREASED AN INCREMENT TO ACCOMMODATE THE CONNECTIONS AND BENDS.
13. 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 YORKSHIRE WATER WOULD PREFER CLAYWARE CHANNELS IN MANHOLES. WE HAVE FOUND THAT PLASTIC CHANNELS ARE DIFFICULT TO SET IN CONCRETE BECAUSE THEY FLOAT AND A SATISFACTORY FINISHED CANNOT BE OBTAINED ON THE BENCHING.
14. THE MINIMUM CRUSHING STRENGTH FOR CLAY PIPES SHOULD BE AS FOLLOWS: 100mm DIA. 40kN/m, 150mm DIA. 40KN/m, 225mm DIA. 45KN/m AND 300mm DIA. 72kN/m.THE MINIMUM CRUSHING STRENGTH FOR CONCRETE PIPES SHOULD BE - CLASS 120 TO EN 1916/BS5911-1 2002. PLASTIC PIPES SHOULD CONFORM TO WIS 4-35-01 AND BS EN13476.
15. 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.
16. ALL HIGHWAY WORKS AND MATERIAL TO CONFORM WITH BMBC HIGHWAY DESIGN GUIDE SPECIFICATION.
17. GULLY COVER AND FRAMES SHALL BE D400 DUCTILE IRON AND COMPLY WITH EUROPEAN STANDARD BS EN 124. THOSE SIGHTED IN ACCESSWAYS AND MEWS COURTS MUST BE SUITABLE FOR USE IN PEDESTRIAN AREAS.

Rev A Road & sewer design amended to suit BMBC & Avant comments 09.03.23 HH

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Client
AVANT HOMES

Project
HAY GREEN LANE, BIRDWELL

Detail
PROPOSED LONG SECTIONS - Rds 3-4

Dwn	Chkd	Date	Scale	Dwg No.
HH		Jan-23	1:500hor 1:100ver@A1	E23/8034/005-02A