

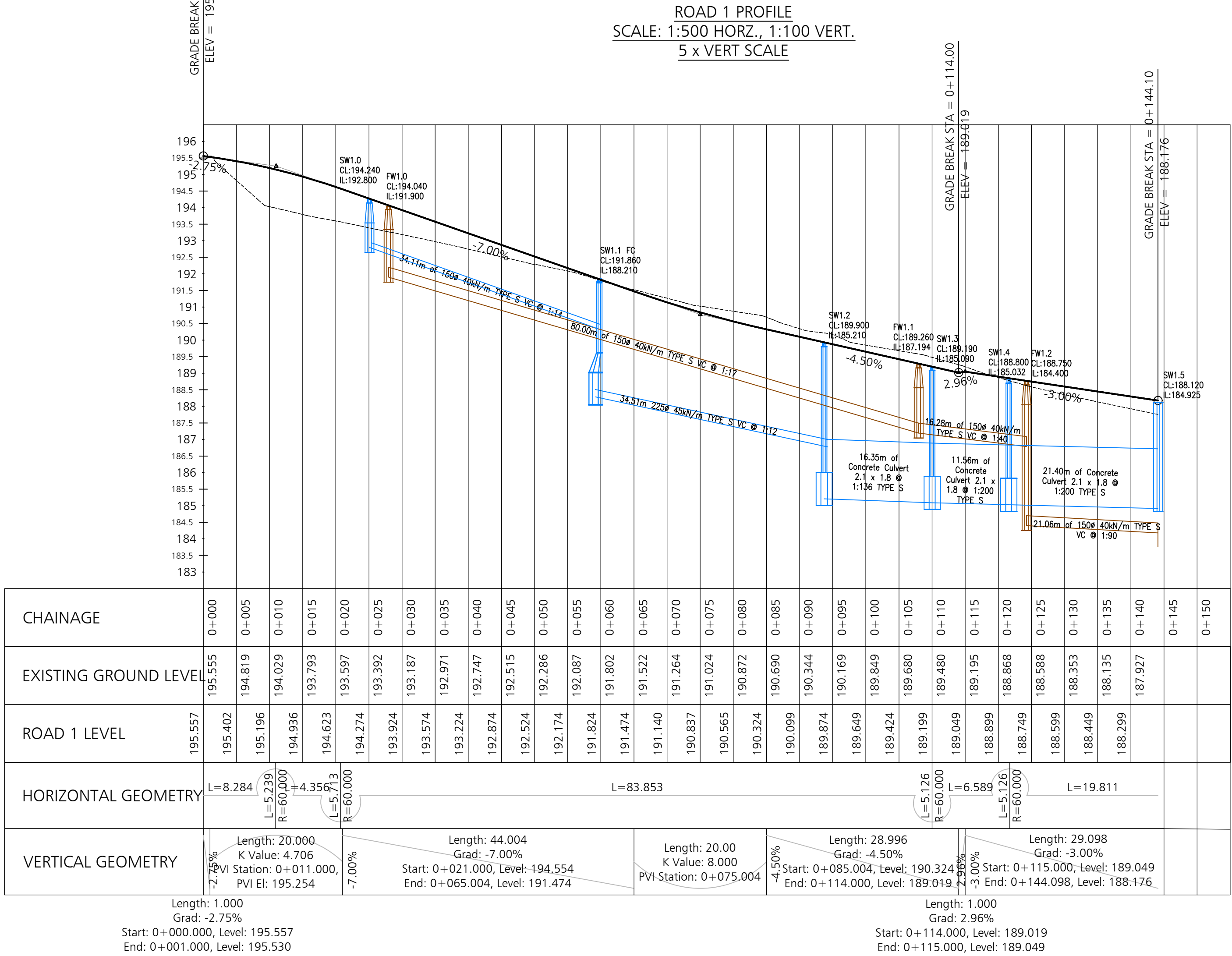
IT IS ASSUMED THAT ALL WORKS WILL BE UNDERTAKEN BY A COMPETENT CONTRACTOR WORKING, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT. IN ADDITION TO THE HAZARDS TYPICALLY ASSOCIATED WITH THE TYPES CONSTRUCTION DETAILED ON THIS DRAWING, ANY KNOWN ABNORMAL HAZARDS SPECIFIC TO THIS DRAWING HAVE BEEN IDENTIFIED.



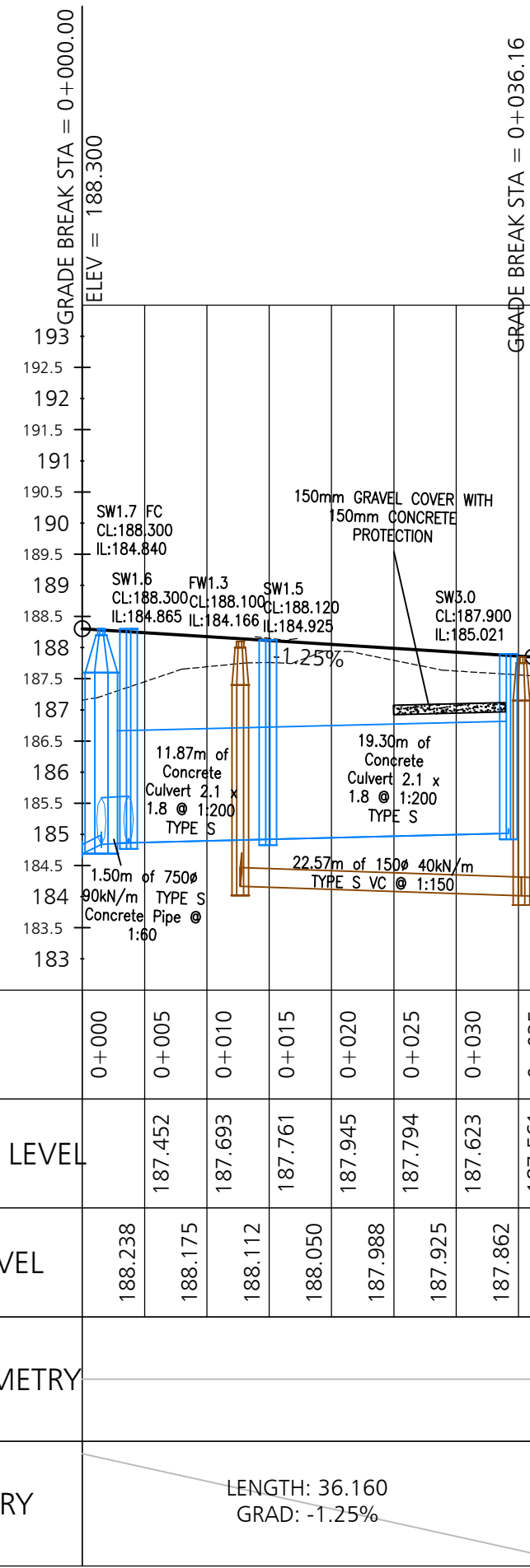
Notes

YORKSHIRE WATER NOTES

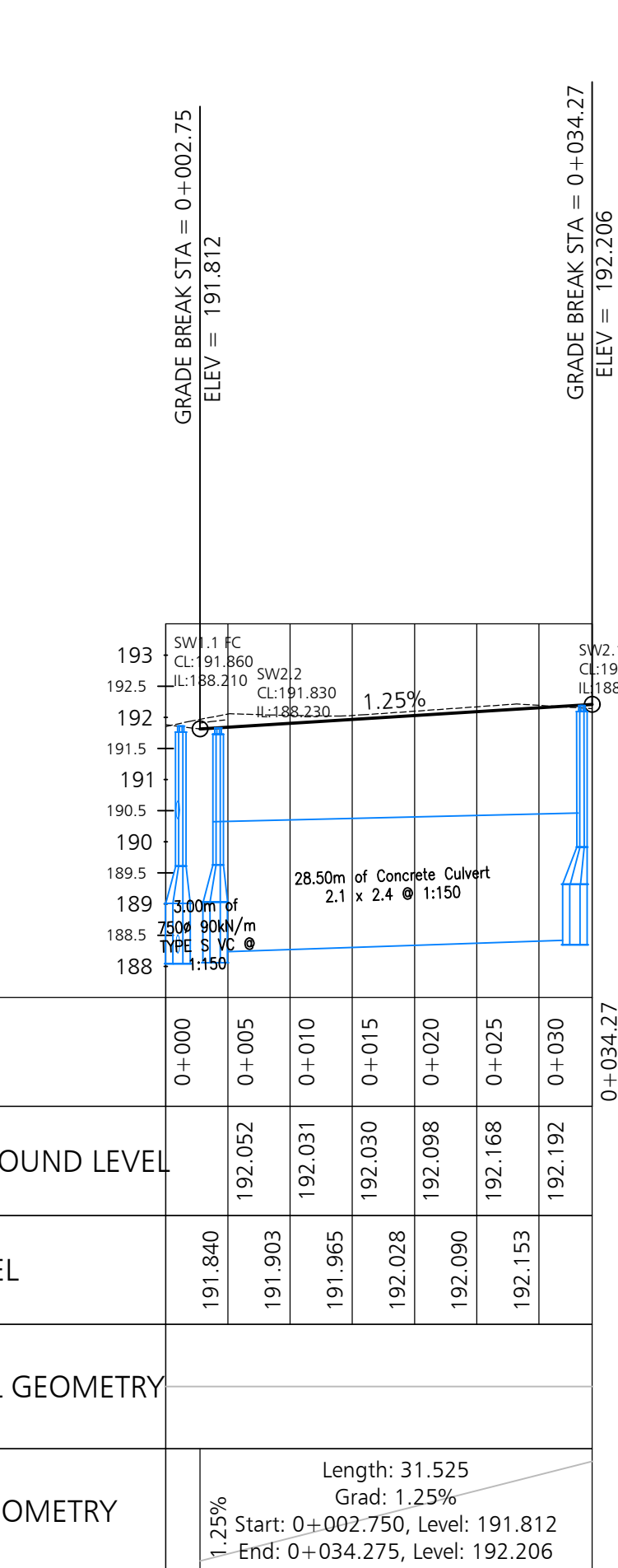
- ALL ADAPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH 'SEWERS FOR ADOPTION' 6TH EDITION, THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATER'S STANDARDS/REQUIREMENTS /ADDENDUM TO THE MECHANICAL AND ELECTRICAL SPECIFICATION AND KITEMARKED.
- MANHOLE COVERS SHALL/MUST HAVE A CLEAR OPENING OF 600# TYPE S AND SHALL BE CLASS D400 TO BS EN 124 WITH 150# TYPE S DEEP FRAMES IN HIGHWAYS.
- FILLED GROUND MUST BE FILLED AND CONSOLIDATED UNDER THE SUPERVISION AND TO THE SATISFACTION OF YORKSHIRE WATER BEFORE ANY SEWER WORKS ARE CARRIED OUT.
- YORKSHIRE WATER IS NOT OBLIGED TO ACCEPT FILTER DRAIN/LAND DRAINAGE RUN-OFF INTO THE PUBLIC SEWER NETWORK OR ADAPTABLE DRAINAGE SYSTEM (DIRECTLY OR IN-DIRECTLY). 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.
- COVER SLABS MUST CARRY THE BS1 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 600# TYPE S X 600# TYPE S 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.
- SULPHATE RESISTANT CEMENT (C20-DC2) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED PROVING THAT SUCH PRECAUTIONS ARE NOT NECESSARY.
- THE ADAPTABLE SEWERS SHOULD BE A MINIMUM OF 1M AND MANHOLES 0.5M FROM KERB FACES AND SERVICE MARGINS.
- '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)'
- SEWERS TO BE LAID IN CLASS 'S' BEDDING (150# TYPE S 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 900# TYPE S IN NON-VEHICULAR ACCESS AREAS) THEN A CONCRETE SLAB SHOULD BE PROVIDED ABOVE GRANULAR BED AND SURROUND.
- BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENT OF WATER INDUSTRY SPECIFICATION 4-08-02 (TABLE A2).
- THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION IN THEM MAY NEED TO BE INCREASED AN INCREMENT TO ACCORD TYPE SODATE THE CONNECTIONS AND BENDS.
- YORKSHIRE WATER POLICY IS NOT TO ACCEPT TYPE 'C' BRICK MANHOLES AND 1000# TYPE S DIA MANHOLE RINGS. INSTEAD IT IS PREFERRED THAT YOU USE A TYPE 'R' MANHOLE WITH 1000# TYPE S DIA OR 1500# TYPE S DIA RINGS. WITH THE OPENING SITED OVER THE CHANNEL WHERE DEPTH OF COVER TO PIPE SOFFIT IS 1 - 1.5M.
- THE LARGE MANHOLES WITH 1.2 X 0.6 OPENINGS WILL REQUIRE A FALL ARREST GRILL AS PER YORKSHIRE WATER SPECIFICATION.
- ADAPTABLE PLASTIC SEWER PIPES TO BE BS1 KITEMARKED (CERTIFIED TO WIS 4-35-01 AND BS/EN13476)ADAPTABLE PLASTIC SEWER PIPES TO BE LAID IN MAXIMUM 3 METER 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 BENCHING.



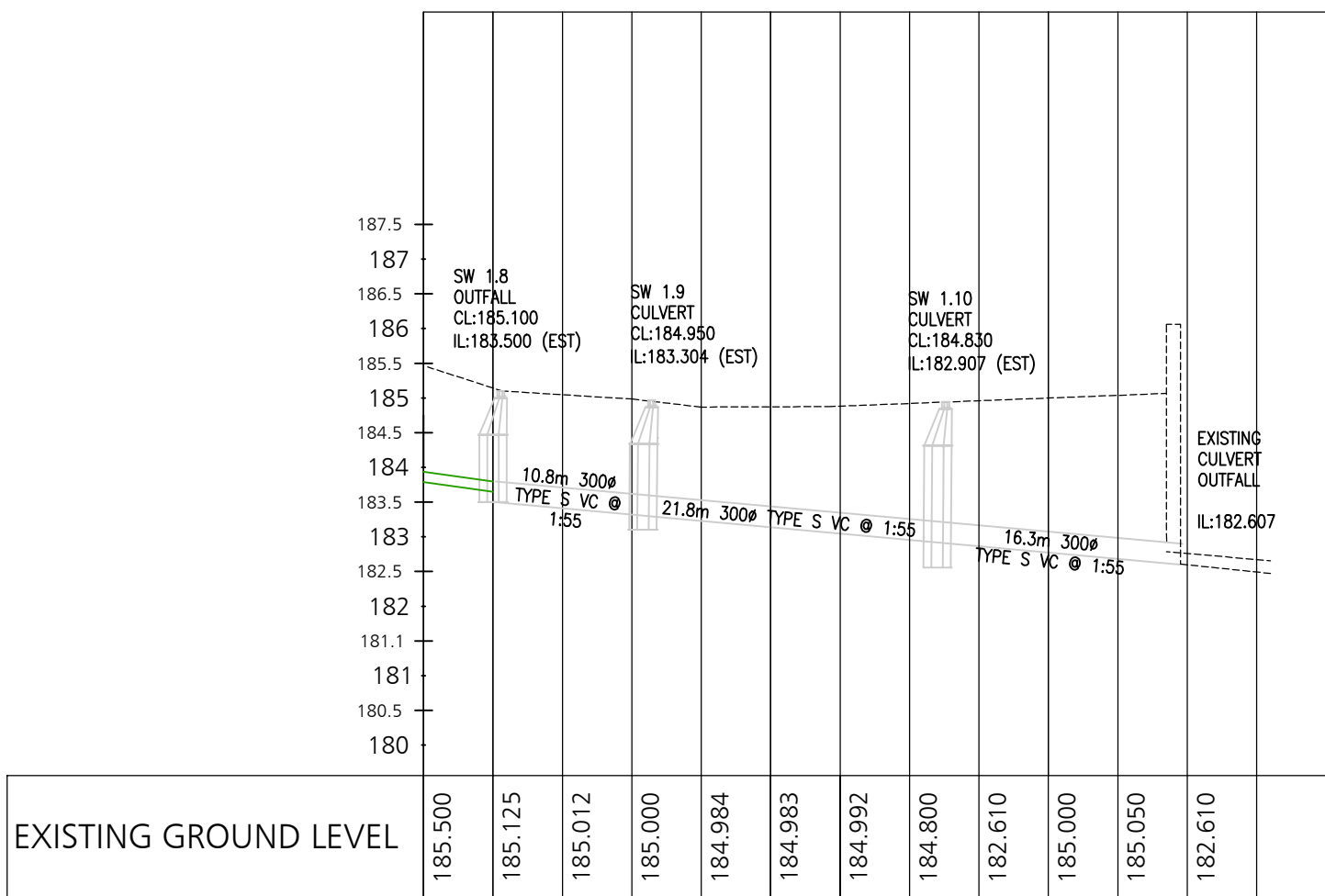
TURNING HEAD PROFILE
SCALE: 1:500 HORZ., 1:100 VERT.
5 x VERT SCALE



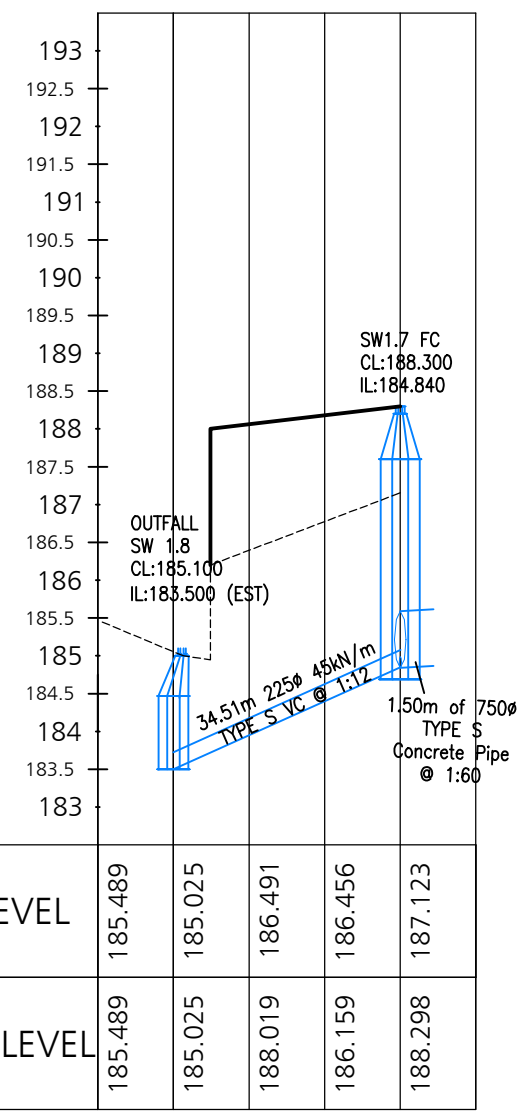
ROAD 2 PROFILE
SCALE: 1:500 HORZ., 1:100 VERT.
5 x VERT SCALE



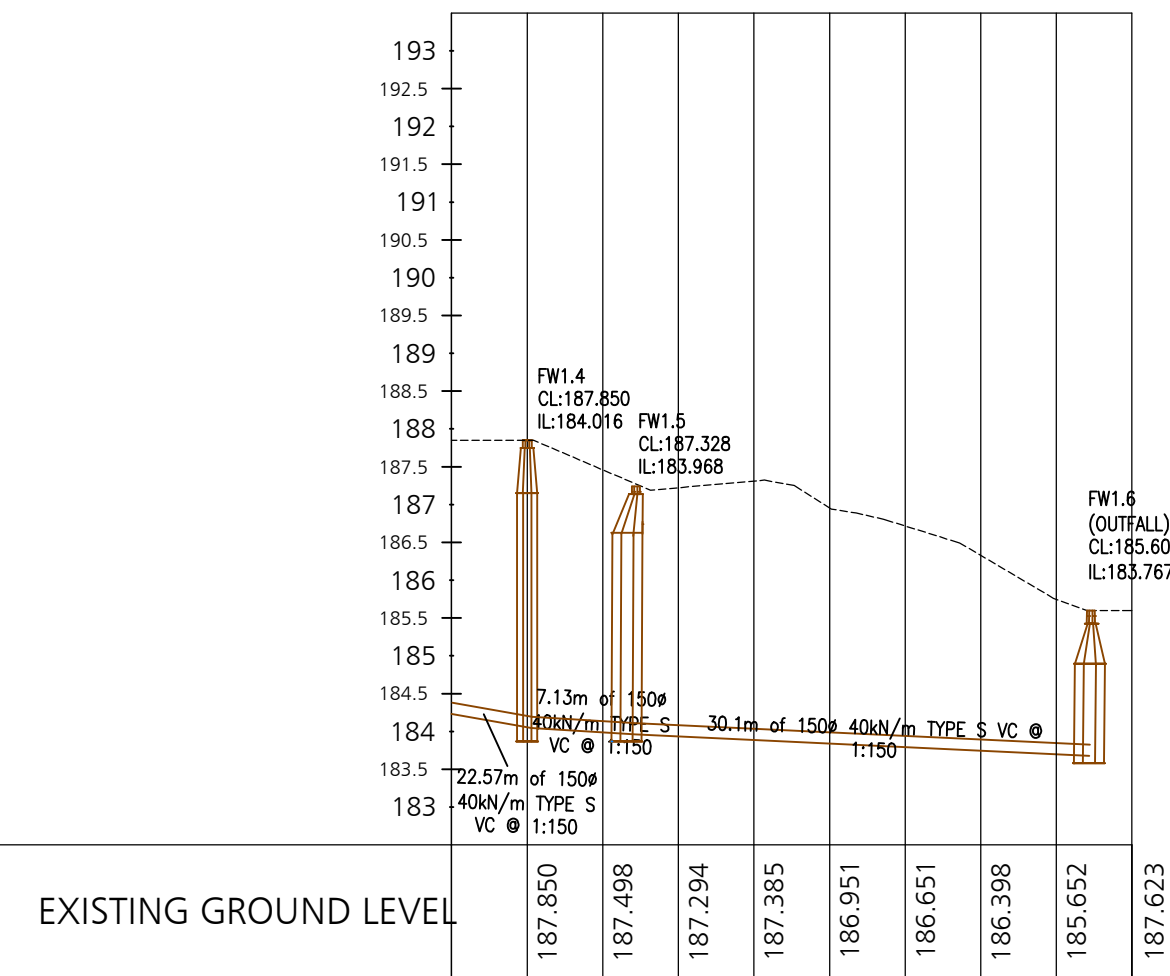
PROPOSED UNADOPTED
WATERCOURSE CULVERT DETAILS
SCALE: 1:500 HORZ., 1:100 VERT.
5 x VERT SCALE



SW OUTFALL DETAILS
SCALE: 1:500 HORZ., 1:100 VERT.
5 x VERT SCALE



FW OUTFALL DETAILS
SCALE: 1:500 HORZ., 1:100 VERT.
5 x VERT SCALE



27.09.17	PROPOSED LAND DRAINAGE CULVERT	KB	VB	P9
02.08.17	YV COMMENTS (26.07.17)	KB	VB	P8
14.07.17	ADDITIONAL OUTFALL LONG-SECTIONS	KB	VB	P7
05.07.17	DRAINAGE UPDATED NEW OUTFALL	KB	VB	P6
14.06.17	DRAINAGE UPDATED NEW OUTFALL	KB	VB	P5
03.05.17	ROAD 2 AND TURNING HEAD	KB	VB	P4
02.05.17	2.1 x 2.4 CULVERT UPDATED	KB	VB	P3
26.04.17	2.1 x 1.8 CULVERT UPDATED	KB	VB	P2
03.02.17	PRELIMINARY ISSUE	KB	VB	P1
Date	Revision	By	Chkd	Ref



5 Feast Field
Horsforth, Leeds
LS18 4TJ
Tel: 0113 258 3611
e-mail: info@dudleys.org.uk

Project
ST MARY'S AVE,
NETHERTHONG,
JONES HOMES
Title
LONG SECTIONS

Scale	A.S.	Drawn	KB	Checked	VB
Date	JAN'17	Status	PRELIMINARY		
Drg. No.	16293/015	Rev.	P9		