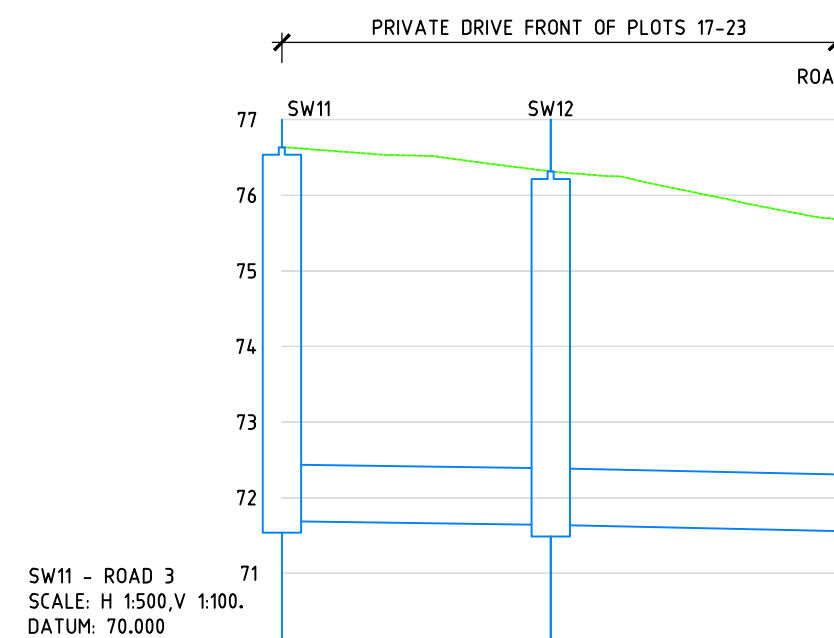
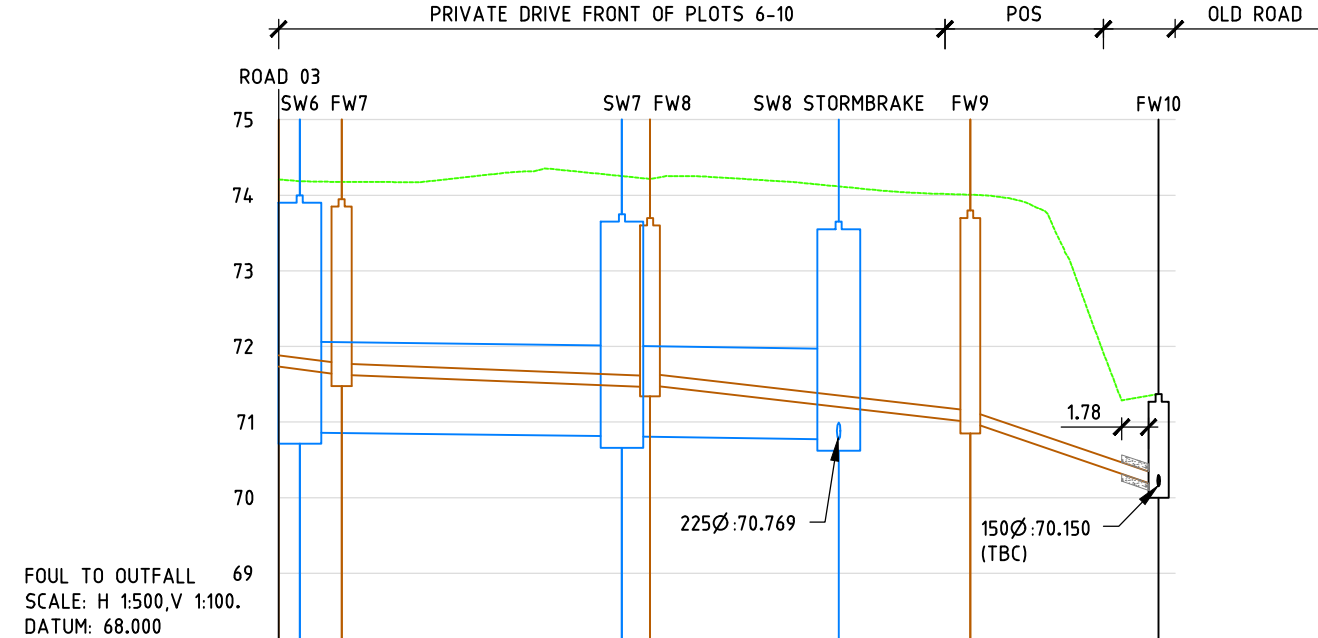
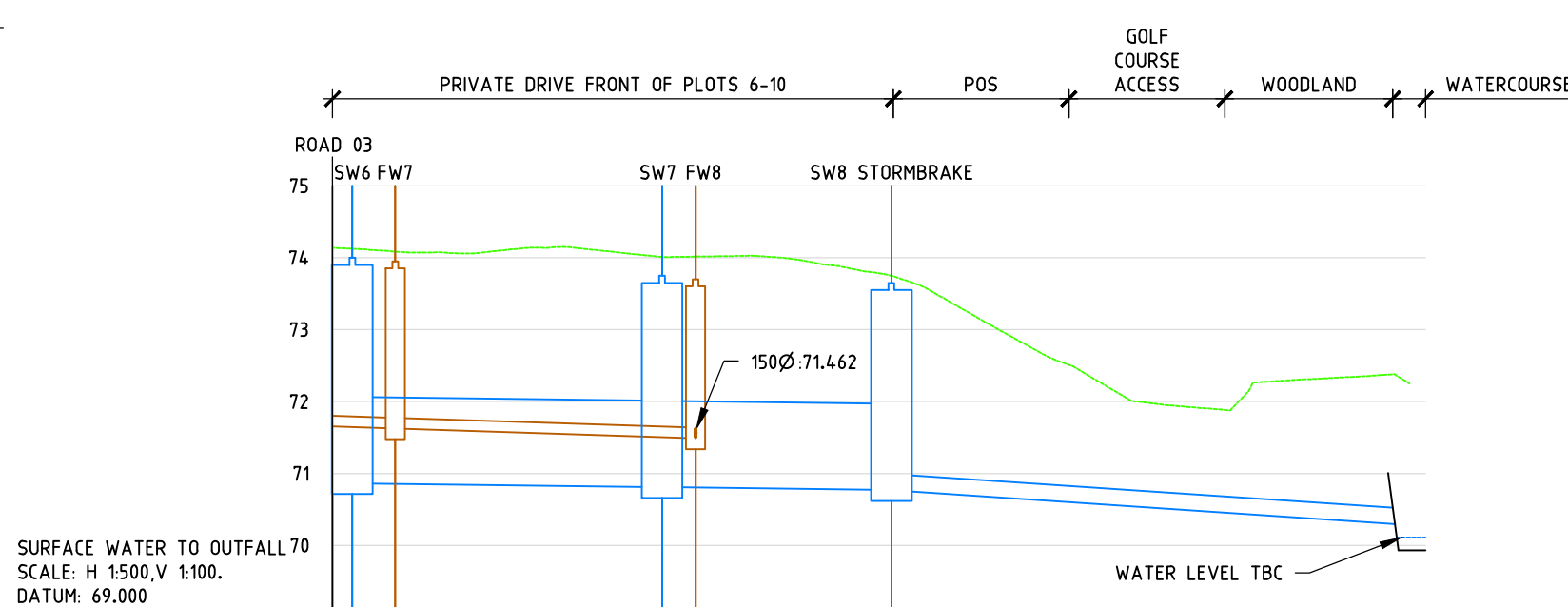
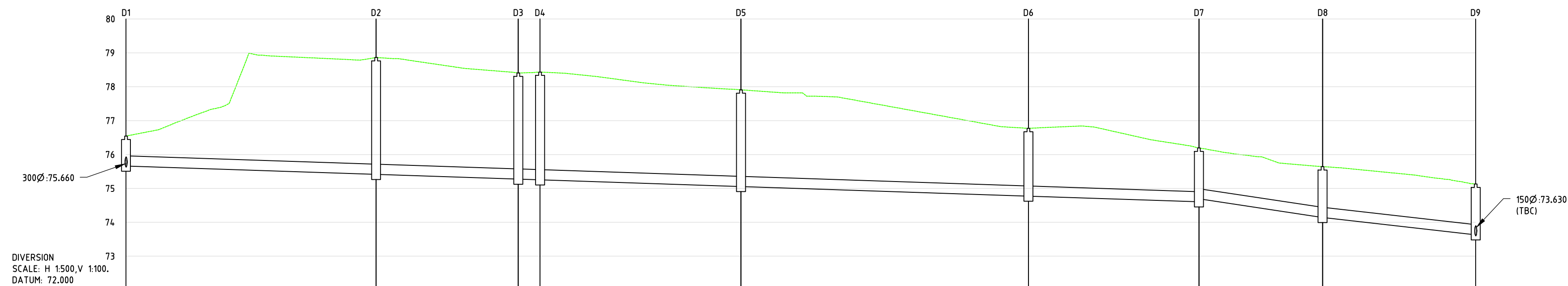


NOTES:

1. ALL SEWERS ARE DESIGNED IN ACCORDANCE WITH DESIGN AND CONSTRUCTION GUIDANCE FOR FOUL AND SURFACE WATER SEWERS OFFERING FOR ADICTION 2.1 VERSION AND UNITED UTILITIES GUIDANCE AND STANDARDS DETAIL CHANGES.
2. DRAWING IS SUBJECT TO APPROVAL BY UNITED UTILITIES UNDER A SECTION 104 AGREEMENT AND CONSTRUCTION WORKS UNDERTAKEN PRIOR TO TECHNICAL APPROVAL ARE AT THE DEVELOPERS RISK.
3. ALL UTILITIES AND SERVICES DETAIL SHOWN ARE RELATIVE TO THE TOPOGRAPHIC SURVEY DRAWING 92591/107 BY GEOMATIC SURVEYS LTD.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INVESTIGATING AND VERIFYING THE EXISTING DETAIL OF ALL UTILITIES AND THE PROPOSED SCHEME PRIOR TO COMMENCING ANY WORK AS FOLLOWS:
 - MANHOLE OUTLIFT LOCATIONS
 - OUTLIFT INVERT LEVELS
 - OUTLIFT PIPE DIAMETERS
 - INTER-CONNECTION OF SEWERS
5. ANY INACCURACIES OR INCONSISTENCIES ON THE DRAWING RESULTING FROM THE FINDINGS SHALL BE REPORTED TO THE SURVEYOR.
6. 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 APPROVAL.
7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ALLOW FOR THE SUPERVISION OF THE CONSTRUCTION WORKS BY UNITED UTILITIES. THE CONTRACTOR WILL NOTIFY THE SUPERVISING OFFICER OF ANY CHANGES WHICH WILL BE IN ACCORDANCE WITH THE AUTHORITIES REQUIREMENT.
8. THE PROPOSED SEWERS WILL BE CLAY PIPE WORK AND SHALL BE EXTRA STRENGTH TO BS EN 295-1991 PART 1.
9. ANY PIPE WORK WILL BE IN ACCORDANCE WITH BS EN 1916-2001.
10. THE CONTRACTOR MAY ELECT TO USE REINFORCED PVC PIPES COVERED BY BS EN 13476-7, 8, 9, 6.5 4660/200 & 8.5 EN 14001-1. STRUCTURAL CLASS UPVC PIPES TO COMPLY WITH W8-35-01 UP TO AND INCLUDING 300MM, MAX PIPE LENGTH TO BE 3.0M.
11. ALL MANHOLES AND CHAMBERS SHALL BE IN ACCORDANCE WITH BS EN 1917-2002.
12. ADAPTABLE SEWERS WITH COVER TO SOFIT GREATER THAN 1.2m IN ROAD AND 0.9m IN FIELDS SHALL HAVE CLASS 5 MANHOLE BED AND SURROUND
13. ANY SEWER FOR ADICTION WITH A COVER OF LESS THAN 1.2m TO SOFIT IN ROAD OR 0.9m IN FIELDS SHALL BE CLASS 5 MANHOLE BED AND SURROUND WITH FLEXCELL EXPANSION JOINT FLEXIBLELY MANIPULATED AT EACH JOINT PIPE.
14. ALL INTERFACES INTO THE EXISTING PUBLIC SEWER SHALL BE INSTALLED WITH SOFFITS LEVEL UNLESS SHOWN OTHERWISE.
15. THE CONNECTION TO THE ADAPTABLE SEWER SHALL BE MANUFACTURED JUNCTION PIPES, A SADDLE CONNECTION IS NOT PERMITTED UNLESS IT IS SPECIFICALLY APPROVED.
16. CONNECTIONS TO THE EXISTING PUBLIC SEWER WILL BE IN ACCORDANCE WITH APPROVED GRANTED BY THE STATUTORY UNDERTAKER.
17. THE DRAG CHAMBER CONNECTIONS TO THE SEWER WILL BE 150MM DIAMETER AND LAID TO THE SPECIFIED INVERT.
18. THE INVERT LEVELS SPECIFIED AT THE DRAG OUT CHAMBER ARE INCOMING LEVELS.
19. A PROTECTIVE GEOTEXTILE/PLASTIC MEMBRANE IS TO BE APPLIED TO ALL FOUR SEWERS LAID ABOVE STORM SEWERS WITH LESS THAN 500MM OF COVER.
20. CENTRE OF MANHOLES MAY NOT BE AT THE SAME LOCATION AS THE INTERFACES INTO THE EXISTING PUBLIC SEWER. THE MANHOLE RING SHALL BE ADJUSTED OVER THE MANHOLE BASE TO SATISFY THE FOLLOWING REQUIREMENTS:
 - CLEARANCE FROM THE ADJACENT PIPE WORK
 - CLEARANCE FROM THE KERB LINE AND THE REGULAR OF THE MANHOLE SHALL NOT PROJECT UNDER THE ROAD CHANNEL LINE).
 - TO PROVIDE THE MINIMUM STANDING SPACE IN THE MANHOLE AND THEREBY LAID TO THE MANHOLE COVER AND ENTRY ACCESS.
 - TO PROVIDE THE MINIMUM 250MM OF BEARING FOR THE MANHOLE RING OVER A STAIN IN STUB PIPES.
21. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CO-ORDINATE WITH THE HIGHWAY AND SEWERAGE AUTHORITIES FOR APPROVALS, INTERIM INSPECTION, SMAGGING AND FINAL INSPECTIONS OF THE SEWER TO ADAPTABLE STANDARDS.
22. THE DESIGNER HAS PROVIDED THE CONTRACTOR SHALL SURVEY A MARKED UP DRAWING TO RECORD ANY AS BUILT VARIATIONS NOT SHOWN ON THE DRAWINGS.



CHAINAGE	0.000	2.000	4.000	6.000	8.000	10.000	12.000	14.000	16.000	18.000	20.000	22.000	24.000	26.000	28.000	30.000	32.000	34.000		
EXISTING LEVELS	76.636	76.608	76.577	76.546	76.514	76.482	76.450	76.419	76.387	76.355	76.323	76.291	76.259	76.227	76.195	76.163	76.131	76.099		
HORIZONTAL GEOMETRY	L =17.776									L =18.913										
SURFACE WATER COVER LEVELS	76.636																			
SURFACE WATER INVERT LEVELS	71.689	71.638									71.638									71.643
SURFACE WATER PIPE DETAILS	Size:750mm Type:Concrete Len:17.776m Grad:1355:52 PN3.000									Size:750mm Type:Concrete Len:41.065m Grad:1234:66 PN3.001										
SURFACE WATER BED AND SURROUND	Granular class 5				Granular class 5															

[illegible][illegible][illegible]

P04	20.03.25	Amended SW8 flow control details.	H.S.	R.A.
P03	24.02.25	Amended to site layout 49, and client comments.	H.S.	R.A.
P02	12.12.24	Updated in line with site layout rev 47	H.S.	R.A.
P01	02.02.22	PRELIMINARY - Issued for Information	J.C	R.A.
Rev	Date	Description	By	Chk

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DO NOT SCALE DRAWINGS. IF IN DOUBT, ASK!

Project Name _____

**NORTH MANCHESTER
GOLF CLUB**

Client _____

DUCHY HOMES			
Designed	Drawn	Checked	Scale @ A1
R.A	J.C	R.A	N/A

Drawing Title
LONGITUDINAL SECTIONS
SHEET 2

Project No. **210701** **PRELIMINARY**

210701 NOT FOR CONSTRUCTION
Drawing No. Revision
210508-EDGE-XX-XX-DB-C-2202 P04