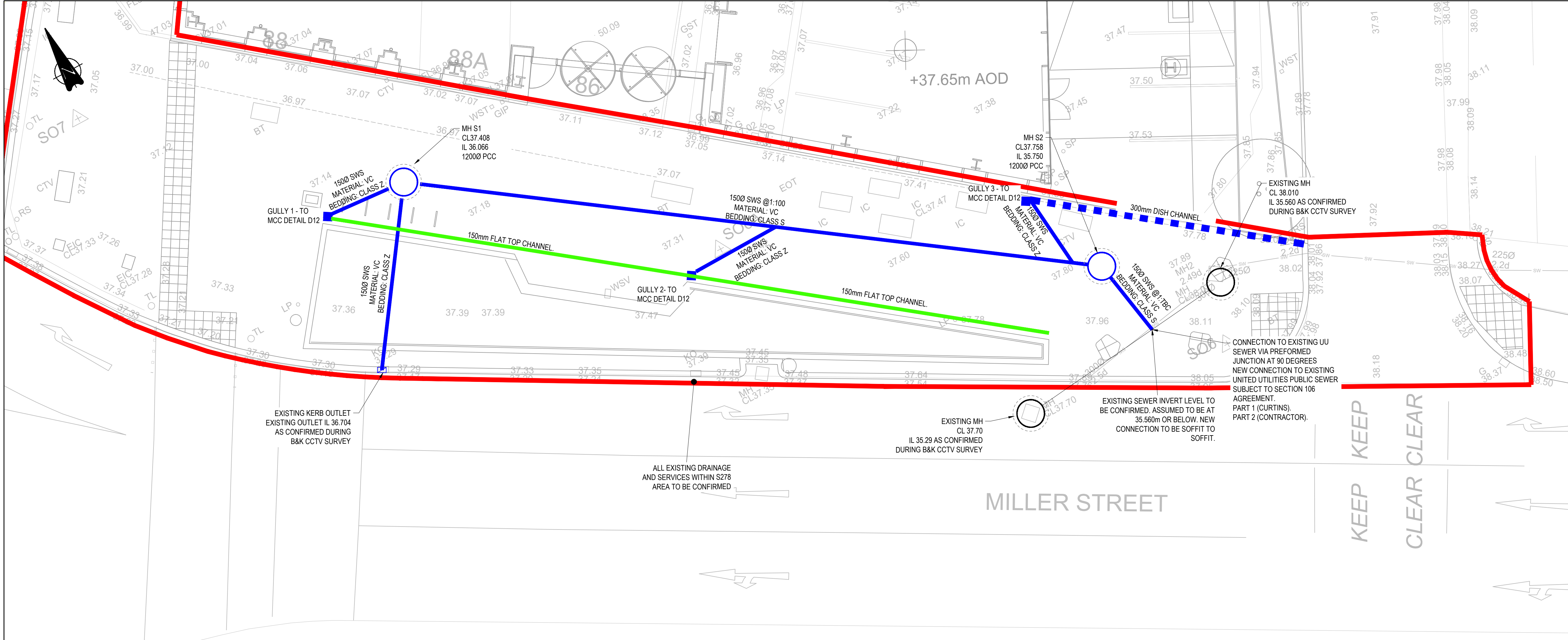
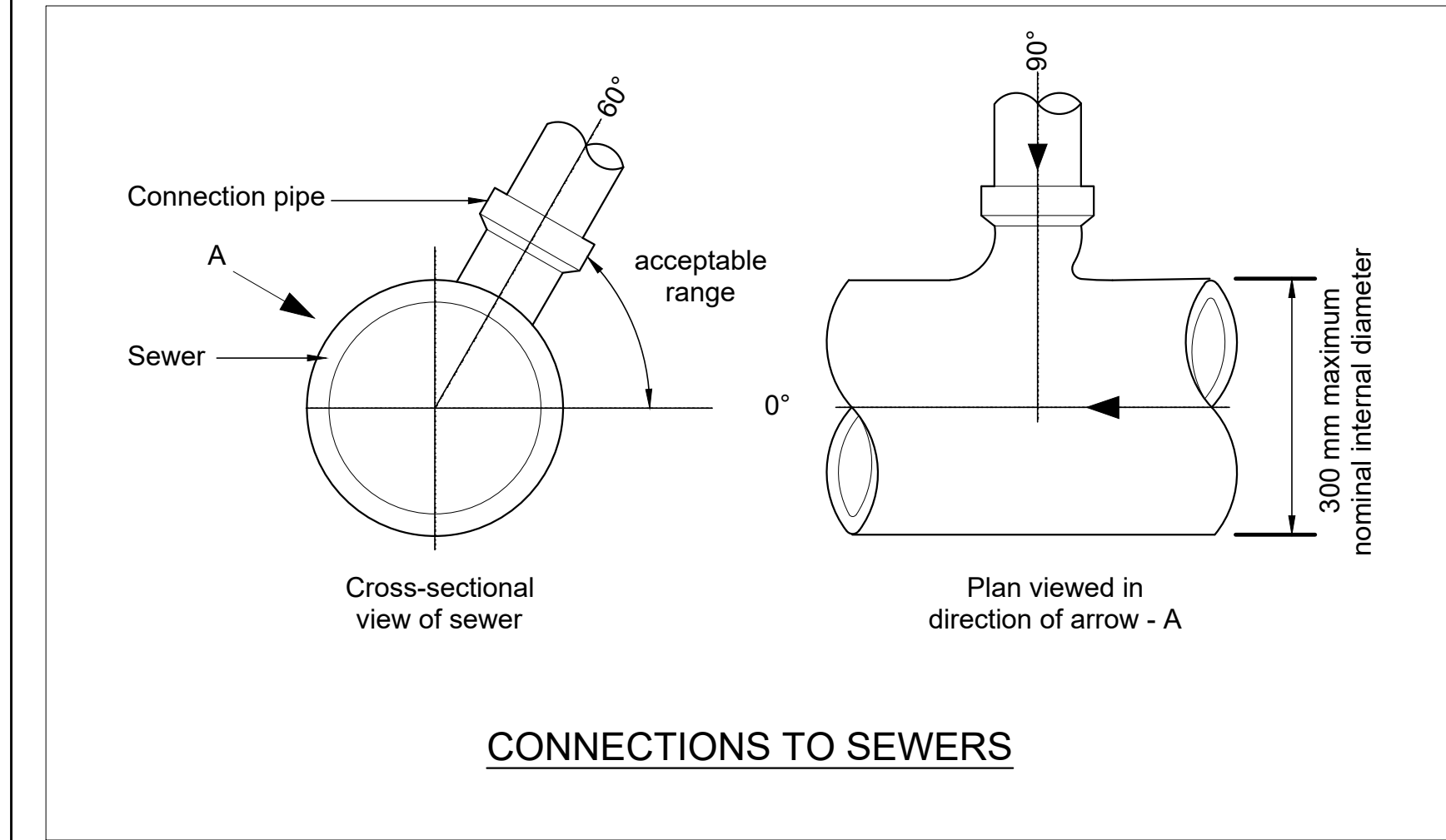




- GENERAL NOTES:**
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
 - ALL DRAINAGE WORKS SHOWN ON THIS DRAWING ARE TO BE ADOPTED UNDER THE S278 AGREEMENT AS HIGHWAY DRAINAGE. ALL DRAINAGE SHOULD BE IN ACCORDANCE WITH MANCHESTER CITY COUNCIL STANDARD DETAILS.
 - ALL WORKS TO EXISTING PUBLIC SEWERS TO BE UNDERTAKEN IN ACCORDANCE WITH "DESIGN AND CONSTRUCTION GUIDANCE FOR FOUL AND SURFACE WATER SEWERS LATEST EDITION" AND "CIVIL ENGINEERING SPECIFICATION FOR THE WATER INDUSTRY 7th EDITION" AND CONSTRUCTED TO THE RELEVANT STATUTORY UNDERTAKERS DETAILS.
 - DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
 - DESIGN BASED ON TOPOGRAPHICAL SURVEY AND CCTV SURVEY INFORMATION AVAILABLE AT THE TIME OF THE DESIGN.
 - OUTFALL CONNECTION(S) SUBJECT TO AGREEMENT WITH THE UNITED UTILITIES.
 - ALL DIMENSIONS ARE IN METRES AND LEVELS IN METRES ABOVE ORDNANCE DATUM UNLESS OTHERWISE NOTED.
 - COVER LEVELS, GULLY POSITIONS, AND BUILDINGS LOCATION ARE APPROXIMATE AND SHALL BE CONFIRMED BY ARCHITECT/LANDSCAPE ARCHITECT. CONTRACTOR TO ALLOW FOR ADJUSTMENT TO SUIT AGREED POSITIONS AND FINISHED LEVELS, AND CONFIRM ALL COVER LEVELS ON SITE.
 - ALL GULLY AND CHANNEL DRAIN OUTLETS AND TERMINATION POINTS TO BE TRAPPED AND RODDABLE.
 - INVERT LEVELS AT MANHOLES/ INSPECTION CHAMBERS TO BE USED TO SET OUT PIPEWORK. PIPE GRADIENTS ARE SHOWN INDICATIVELY ONLY.
 - ALL PIPE DIAMETERS GIVEN ARE NOMINAL INTERNAL PIPE DIAMETERS.
 - ALL SEWERS, UNLESS AGREED OTHERWISE STATED, SHALL BE:
 - 100mm to 300mm DIA TO BE VITRIFIED CLAY.
 - 375mm DIA AND GREATER TO BE CLASS 120 CONCRETE PIPES.
 - AS AN ALTERNATIVE THE CONTRACTOR MAY USE AN APPROVED UNPLASTICISED POLYVINYL CHLORIDE (PVCU) WITH APPROVAL FROM THE ENGINEER/MANCHESTER CITY COUNCIL.
 - SEWER PIPES TO BE LAID IN MAXIMUM 3 METRE LENGTHS UNLESS THERE IS A SPECIFIC OPERATIONAL NEED TO LAY LONGER LENGTHS.
 - THE FIRST PIPE OUT OF MANHOLES TO BE AS SHORT AS PRACTICABLE SO AS TO PROVIDE A FLEXIBLE JOINT AS CLOSE AS POSSIBLE TO THE OUTSIDE FACE OF THE CONCRETE SURROUND AND CONNECTED TO A LENGTH OF ROCKER PIPE.
 - ALL NEW CONNECTIONS INTO EXISTING MANHOLES (OR INTO EXISTING SEWERS) TO BE 'SOFFITS LEVEL' UNLESS OTHERWISE NOTED.
 - ALL ADOPTABLE DRAINAGE PIPES WILL REQUIRE A MINIMUM OF 1200mm COVER, IN ACCORDANCE WITH SEWERAGE UNDERTAKERS REQUIREMENTS. WHERE THIS IS NOT ACHIEVED, IT WILL BE NECESSARY TO AGREE THE BED AND SURROUND DETAIL.
 - REFER TO PIPE EMBEDMENT DETAILS DRAWING FOR SPECIFIC TYPES AS PER MCC DETAIL D6 TO D10.
 - SULPHATE RESISTANT CEMENT (C20-DC2) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED TO PROVE THAT SUCH PRECAUTIONS ARE NOT REQUIRED.
 - WHERE FOUL SEWERS RUN ABOVE SURFACE SEWERS, CONCRETE PROTECTION MAY BE REQUIRED AT CROSSOVERS TO PREVENT ANY POTENTIAL CONTAMINATION.
 - THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION MAY NEED TO BE INCREASED TO ACCOMMODATE THE CONNECTIONS AND BENDS.
 - ALL MANHOLE, GULLY AND CHANNEL COVERS (IRONWORK) SHOULD BE D400 LOAD CLASS.
 - ALL PROPRIETARY PRODUCTS TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS, INSTRUCTIONS AND RECOMMENDATIONS.

SW Manhole schedule																		
MH REF	CL (mAOD)	IL (mAOD)	DEPTH TO SOFFIT (mAOD)	DS PIPE DIA (mm)	MH DIA (mm)	MH TYPE	CATCHPIT	CATCHPIT DEPTH (mm)	COVER SIZE (mm)	COVER CLASS	COVER TYPE	RECESSED	BACK DROP	Back drop IL (m)	RESTRICTED ACCESS	COMMENTS	EASTING	NORTHING
S1	37.41	36.07	1.34	150	1200	SEE MCC STANDARD DETAIL D1	N	N/A	600X900	D400	SINGLE SEALED	N	N	N/A	N	FOR CONSTRUCTION DETAILS SEE MCC DETAIL D1-D5	384195.927	399021.291
S2	37.76	35.75	2.01	150	1200	SEE MCC STANDARD DETAIL D1	N	N/A	600X600	D400	SINGLE SEALED	N	N	N/A	N	FOR CONSTRUCTION DETAILS SEE MCC DETAIL D1-D5	384221.764	399003.154



CONNECTIONS TO SEWERS

DRAWING BASED ON:

- TOPOGRAPHICAL SURVEY BY: SEP, SEP011122, RECEIVED 02.11.22.
- CCTV SURVEY BY: BOWMER AND KIRKLAND, RECEIVED 20.01.23.
- UU RECORDS UU REF: UUPS-ORD-122012, DATED 06.09.19.
- SITE LEVELS: TAKEN FROM CURTINS DRAWING 073521-CUR-00-XX-DR-95006
- ARCHITECT SITE LAYOUT: TFGM DRAWING DEVPUFF378 210420 SR RECEIVED 19.01.23.

DESIGN PHILOSOPHY

[SURFACE WATER DESIGN](#)
THE DESIGN PROVIDES CAPACITY UP TO THE 100 YEAR 40% CLIMATE CHANGE EVENT.
SW FLOW RATE: 23.0L/S
OUTFALL TO THE UU SEWER CROSSING THE SITE. SADDLE CONNECTION UPSTREAM OF MANHOLE UUMH2907
INFILTRATION IS NOT CONSIDERED APPROPRIATE FOR THIS SCHEME.
A DESIGN CHECK WITH A 1m SURCHARGED WATER LEVEL HAS BEEN MODELLED (36.99)

KEY:

- PROPOSED S278 DRAINAGE BOUNDARY
- EXISTING COMBINED PUBLIC SEWER
- PROPOSED SURFACE WATER DRAIN
- TRAPPED ROAD GULLY TO MCC GULLY DETAIL D12
- 150mm ID GULLY OUTLET
- RE-LAY EXISTING KERB DRAIN INSPECTION UNIT
- DISHED CHANNEL REFER TO CURTINS DRAWING 073521-CUR-00-XX-DR-C-95007
- FLAT TOP CHANNEL REFER TO CURTINS DRAWING 073521-CUR-00-XX-DR-C-95007

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Rev:	Description:	Date:	By:	Chkd:
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Status:	FOR APPROVAL S4			
Project:	NOMA PLOT P			
Orig Title:	DRAINAGE LAYOUT			
Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	23.01.23	CS	CS	CG
Scale: 1:100				
Project No:	Originator:	Zone:	Level:	Type: Discipline: Category / Number: Rev:
073521 - CUR - 00 - XX - DR - C - 95008	-P01			

