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Notes

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- MANHOLES TO BE PRECAST CONCRETE RINGS IN ACCORDANCE WITH BS 5911-3 AND BS EN 1917, KITEMARKED, AGREEMENT CERTIFIED OR CE MARKED U.N.O.
- ALL COMBINED DRAINAGE TO BE PVCu SOLID WALL TYPE B TO BS EN 13476-1 AND -3, KITEMARKED, AGREEMENT CERTIFIED OR CE MARKED U.N.O.
- ALL SURFACE WATER PIPES TO BE STRUCTURED WALL HDPE TO BS EN 13476-1 AND -3, KITEMARKED, AGREEMENT CERTIFIED OR CE MARKED U.N.O.
- ALL DRAINAGE WORKS TO BE CARRIED OUT IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE AND RELEVANT UTILITY COMPANIES STANDARD AND HEALTH AND SAFETY POLICES
- ANY DISCREPANCIES IN DIMENSIONS OR DETAILS ON OR BETWEEN DRAWINGS SHOULD BE DRAWN TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION
- CONCRETE FOR GENERAL DRAINAGE WORKS TO BE GEN3 TO BS 8500-1, BS EN 206-1 AND ENGINEERS SPECIFICATION
- PIPES ARE NOT DESIGNED FOR CONSTRUCTION TRAFFIC, CONTRACTOR WILL TAKE NECESSARY PRECAUTIONS TO PROTECT PIPES DURING CONSTRUCTION
- REFER TO SEWER ABANDONMENT GENERAL ARRANGEMENT ON DRAWING RAM-XX-XX-DR-C-20010
- REFER TO SEWER DIVERSION GENERAL ARRANGEMENT ON DRAWING RAM-XX-XX-DR-C-20100
- REFER TO SEWER DIVERSION LONG SECTIONS ON DRAWING SERIES RAM-XX-XX-DR-C-20250
- REFER TO UNITED UTILITIES DEVELOPER SERVICES CONSTRUCTION DETAILS AND DRAWING SERIES RAM-XX-XX-DR-C-20400 FOR STANDARD DETAILS DRAWINGS

P01	ISSUED FOR APPROVAL	08/03 2023	CO SP	NM
Rev	Description	Date	By Chk	App

FOR APPROVAL

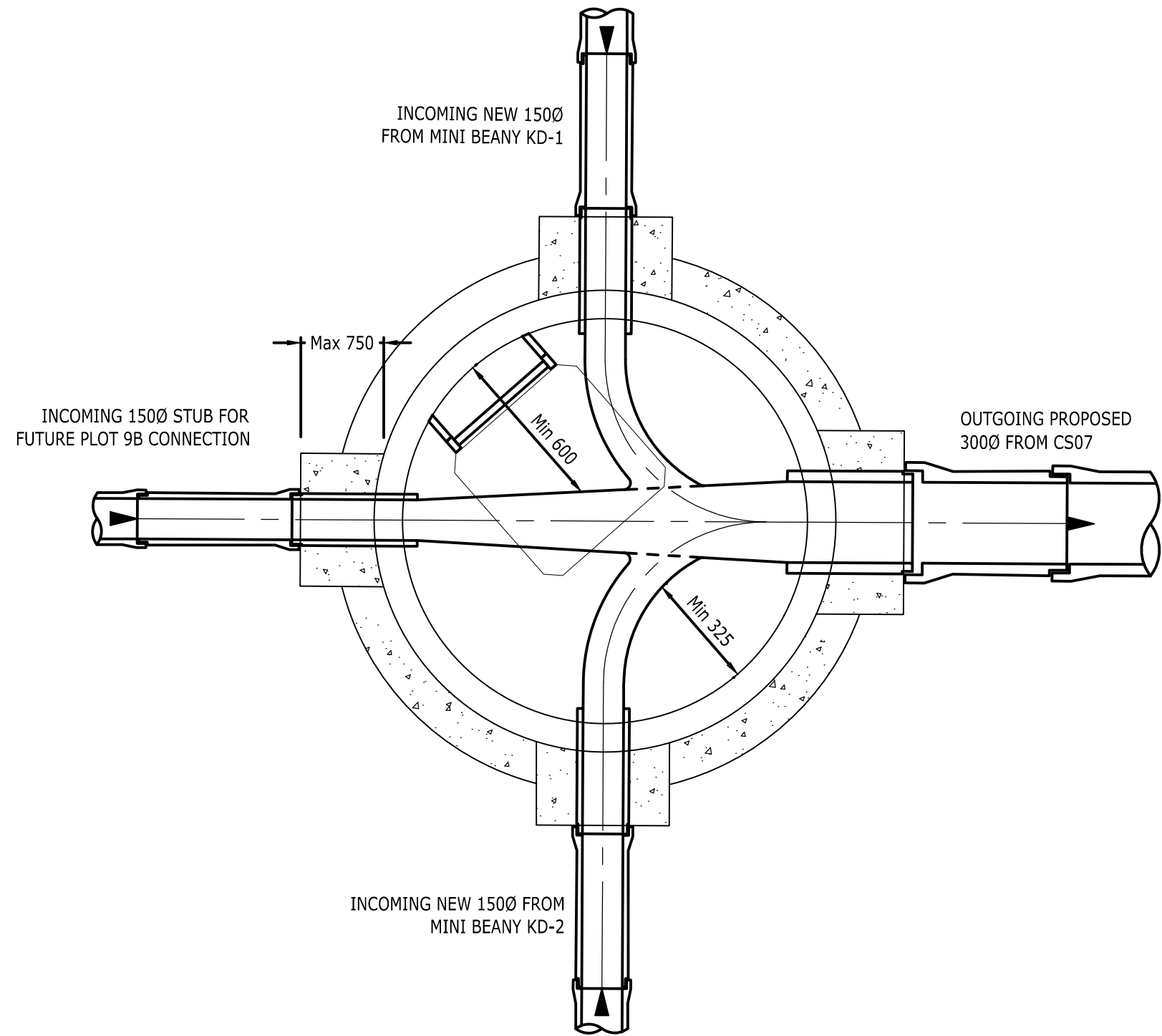
PLOT 10A
FIRST STREET
MANCHESTER

RAMBOLL

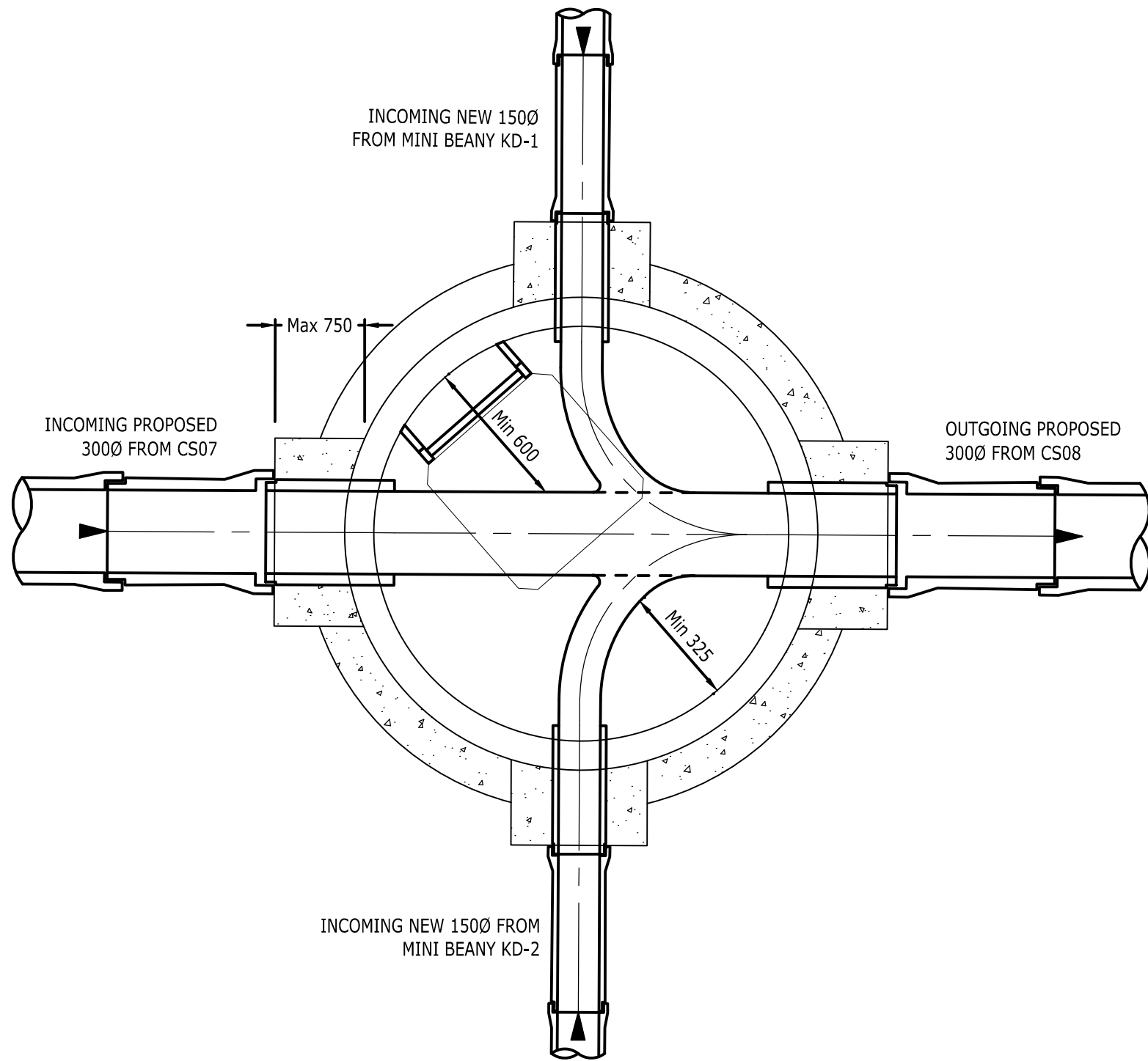
tel 01244 311855 chester@ramboll.co.uk
www.ramboll.co.uk

PROPOSED HULME STREET
SEWER DIVERSION
SCHEDULES & PLAN SECTIONS
SHEET 1

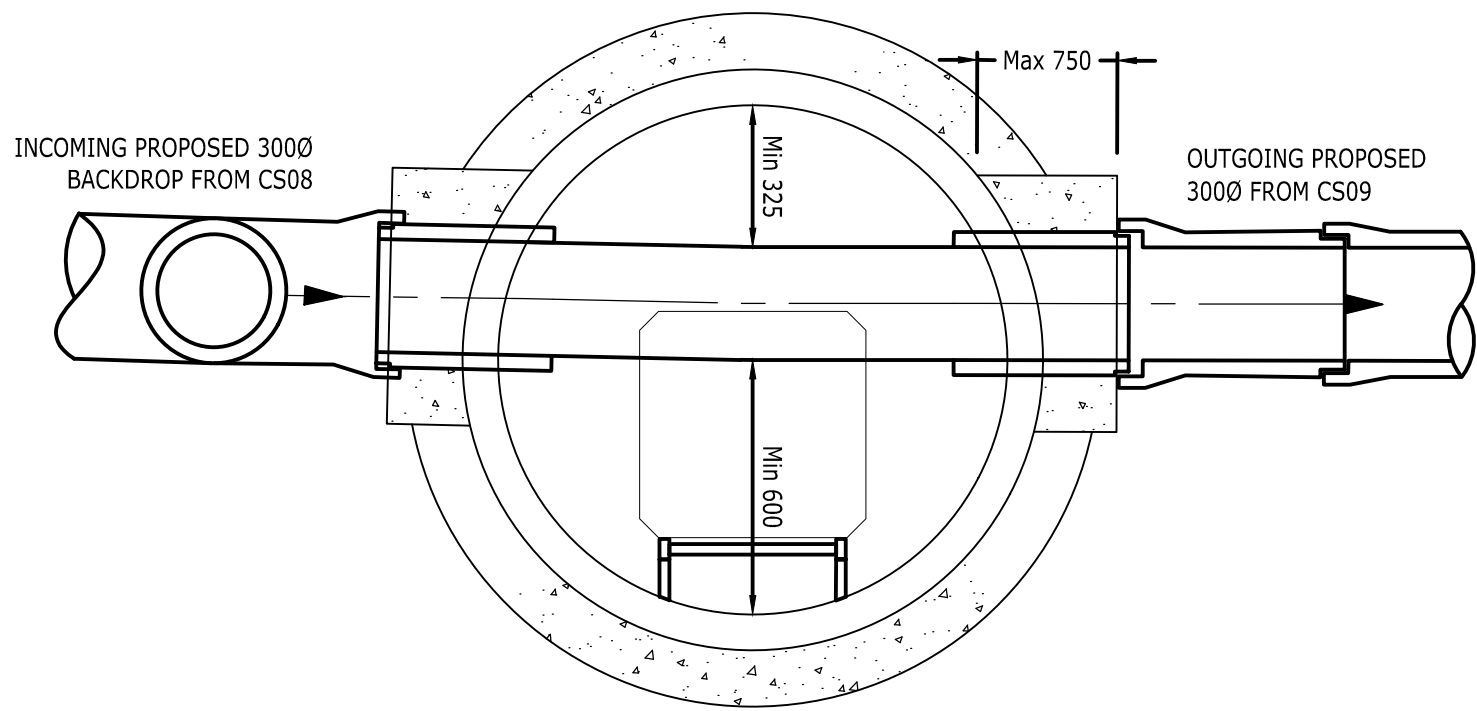
Project No:	Scale (@A1):	Drawn:	Date:
1620007819	AS SHOWN	CO	02/2023
Drawing No:	RAM-XX-XX-DR-C-20200		Rev:
			P01



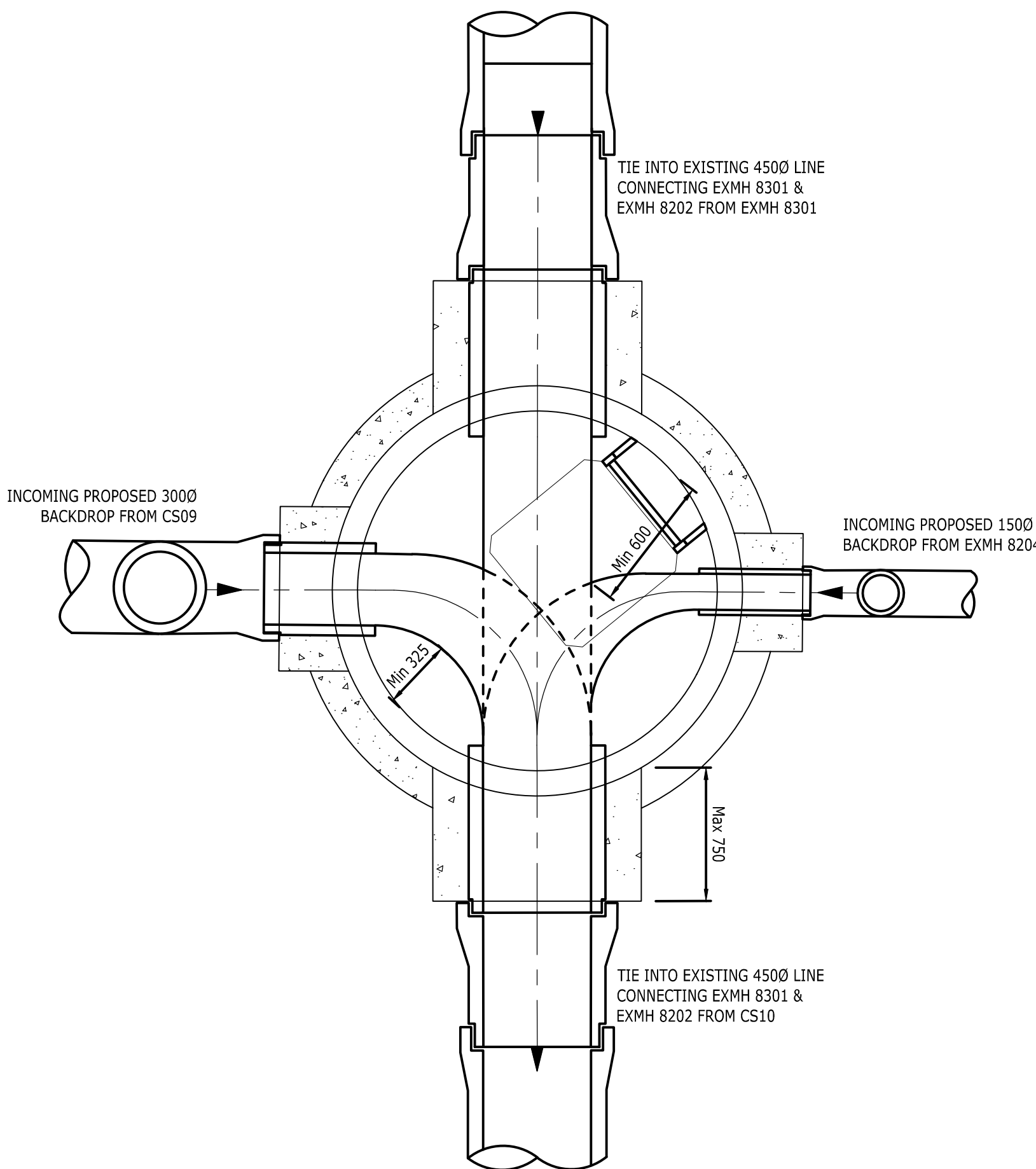
MANHOLE CS07
SCALE 1:20



MANHOLE CS08
SCALE 1:20



MANHOLE CS09
SCALE 1:20



MANHOLE CS10
SCALE 1:20

PUBLIC SEWER DIVERSION MANHOLE SCHEDULE

Manhole No.	Approx. Cover Level (m)	Invert Level (m)	Depth to Invert (m)	Main Channel (mm)	Branches	Manhole Type	Chamber Size (mm)	Cover Size (mm)	Cover Loading	Manhole Type	Comment	Co-ordinates (mm) EastingNorthing
CS07	33.100	-0.508	33.608	3000	1500 @ IL 31.750 In 1500 @ IL 31.750 In 1500 @ IL 31.600 In 3000 @ IL 31.600 Out	PCC	1500Ø	600x600	D400	Type 1	-	383806736,397236319
CS08	32.960	31.450	1.510	3000	3000 @ IL 31.450 In 1500 @ IL 31.600 In 1500 @ IL 31.600 In 3000 @ IL 31.450 Out	PCC	1350Ø	600x600	D400	Type 1	-	383833336,397250191
CS09	32.750	28.785	3.965	3000	3000 @ IL 30.585 In 3000 @ IL 28.785 Out	PCC	1350Ø	600x600	D400	Type 1	Backdrop into chamber	383842205,397254811
CS10	32.650	25.510	7.140	4500	3000 @ IL 27.310 In 1500 @ IL 27.160 In 4500 @ IL 25.510 In 4500 @ IL 25.510 Out	PCC	1500Ø	600x600	D400	Type 1	Backdrop into chamber. Manhole built on line of public sewer.	383851073,397259431

- PCC = PRECAST CONCRETE MANHOLE
- DN150 BRANCH CONNECTIONS TO DISCHARGE INTO MAIN CHANNEL AT HALF MAIN PIPE HEIGHT
- MANHOLE TYPE REFERS TO UNITED UTILITIES DEVELOPER SERVICES CONSTRUCTION DETAILS DRAWING STND/19/001 TO STND/19/012, REVISION A, DATED 15/04/2016
- FOR APPROPRIATE ROCKER PIPE LENGTHS REFER TO VARIABLE FEATURES TABLE ON STND/19/010
- CONFIRMATION OF CONSTRUCTION DETAIL REQUIRED FROM UNITED UTILITIES FOR CS10 AS MANHOLE IS IN EXCEEDANCE OF 6m.

CHANNEL DRAIN SCHEDULE

REF.	MANUFACTURER & TYPE	DESIGNATION	COVER LOADING AND MINIMUM TYPE	NUMBER OF OUTLETS	OUTLET DIA (mm)	LENGTH (m)	DRAINED AREA (m²)
KD-1	MARSHALLS MINI BEANY	360 BASE UNIT	E600 HALF BATTERED TOPS, DROPPERS & CENTRES	2	150	133	1040
KD-2	MARSHALLS MINI BEANY	360 BASE UNIT	E600 HALF BATTERED TOPS, DROPPERS & CENTRES	2	150	133	1040

ALL CHANNELS HAVE BEEN DESIGNED FOR A DESIGN RAINFALL INTENSITY OF 110mm/hr (1in5yr EVENT +40% CLIMATE CHANGE, WITH A RISK CATEGORY 3)
ALL OUTLETS TO BE INLINE SIDE OUTLET OUTFALLS WITH CONCRETE TRAPPED OUTFALL, SILT BOX & CAST IRON BEANY ACCESS COVER