

- DO NOT SCALE FROM THIS DRAWING
- ALL DIMENSIONS ARE MILLIMETERS U.N.O
- ALL LEVELS ARE IN METERS ABOVE ORDANCE DATUM U.N.O
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT AND ENGINEERS DRAWINGS AND SPECIFICATIONS

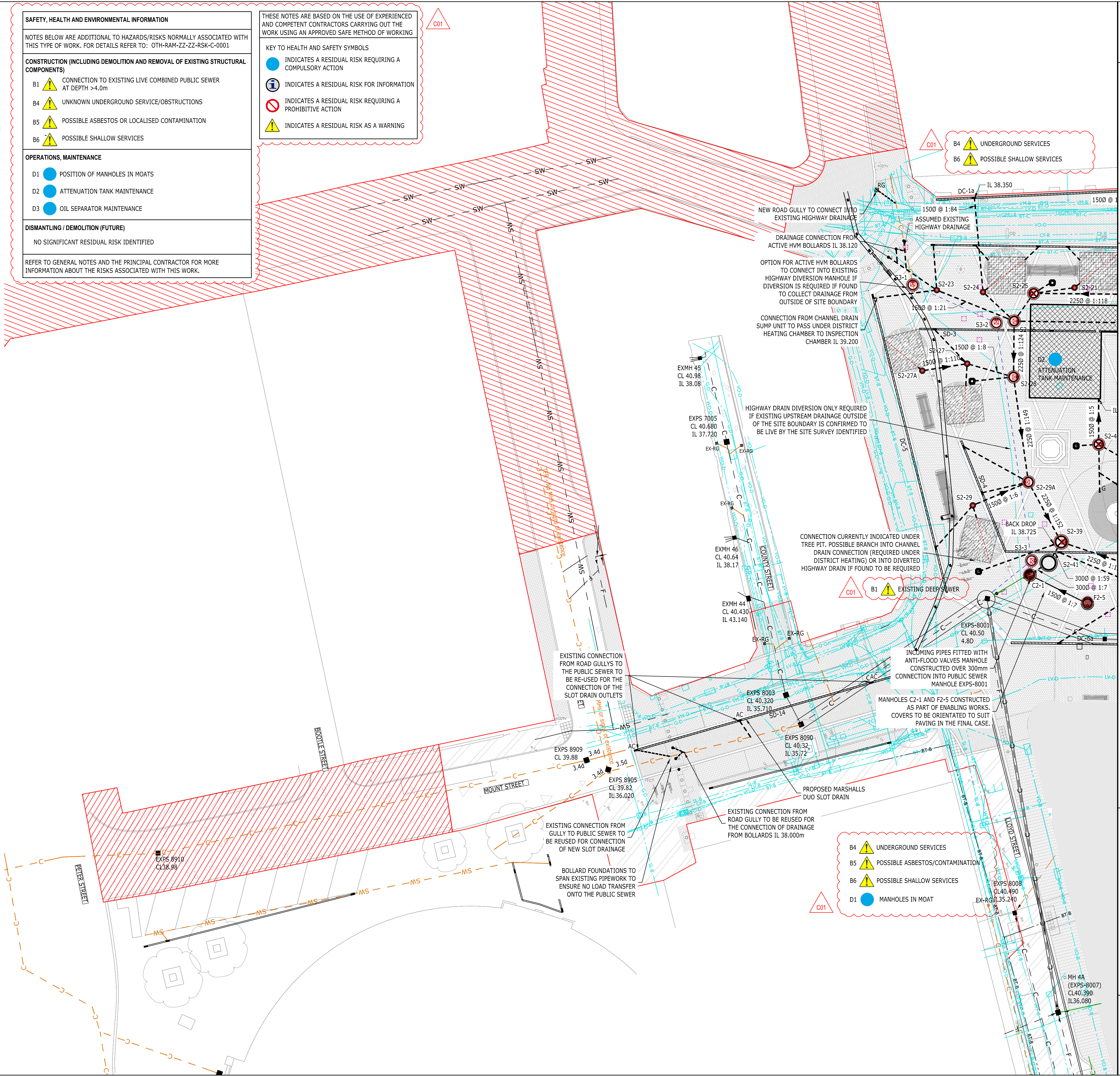
IF ANY INFORMATION WITHIN THESE DRAWINGS CHANGES THE BELOW GROUND DRAINAGE IS ALSO SUBJECT TO CHANGE
- THIS DRAWING HAS BEEN CREATED USING THE FOLLOWING INFORMATION:
 - UTILITIES SURVEY BY POWERS AND TILTMAN DATED FEBRUARY/MARCH 2018
 - CCTV DRAINAGE SURVEY BY POWERS AND TILTMAN DATED 14/11/18
 - PROPOSED LANDSCAPE PLAN BY PLANIT, DRAWING NUMBER OTH-PLA-EE-XX-CAD-L-1000
 - PROPOSED LANDSCAPE PLAN BY PLANIT, DRAWING NUMBER OTH-PLA-EE-ES-DWG-L-1000
 - PROPOSED UTILITIES DIVERSION PLAN BY ARUP, OTH-ARU-EE-ES-DWG-U-20404/20405
 - PROPOSED PUBLIC REALM SERVICING STRATEGY BY ARUP OTH-ARU-EE-ES-DWG-B-10401
 - DISTRICT HEATING AS BUILT DRAWING 50467-VE-SW-BG-DR-M-5601
- ANY DISCREPANCIES IN DIMENSIONS OR DETAILS ON OR BETWEEN DRAWINGS SHOULD BE DRAWN TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.
- THIS DRAWING HAS BEEN DEVELOPED USING INFORMATION PROVIDED TO RAMBOLL BY A NUMBER OF THIRD PARTIES. RAMBOLL CAN ACCEPT NO RESPONSIBILITY FOR THE ACCURACY OF THE THIRD PARTY INFORMATION SHOWN.
- FOR DRAINAGE SCHEDULE REFER TO DRAWING OTH-RAM-EE-XX-DWG-C-1200 AND C-1201
- FOR DRAINAGE DETAILS REFER TO DRAWING SERIES OTH-RAM-EE-XX-DWG-C-1400 TO 1402
- ALL DRAINAGE WORKS CARRIED OUT IN ACCORDANCE WITH SEWERS FOR ADOPTION 7TH EDITION, DESIGN MANUAL FOR ROADS AND BRIDGES, RELEVANT WATER AUTHORITY STANDARDS, LOCAL COUNCIL STANDARDS AND HEALTH AND SAFETY POLICIES.
- PIPES ARE NOT DESIGNED FOR CONSTRUCTION TRAFFIC, CONTRACTOR WILL TAKE NECESSARY PRECAUTIONS TO PROTECT PIPES DURING CONSTRUCTION. EXISTING DRAINAGE WHICH IS TO REMAIN IN THE PROPOSED WORKS TO BE PROTECTED AT ALL TIMES.
- ALL SURFACE WATER PIPES (UP TO 600mm DIA) TO BE STRUCTURED WALL HDPE TO BS EN 13476-1 AND -3, KITEMARKED, AGREMENT CERTIFIED OR CE MARKED U.N.O.
- ALL FOUL WATER PIPES TO BE VITRIFIED CLAY TO BS EN 295-1:1991/BS 65 AS APPROPRIATE, KITEMARKED, AGREMENT CERTIFIED OR CE MARKED U.N.O.
- PRECAST CONCRETE MANHOLES IN ACCORDANCE WITH BS 5911 - 3:2002, BS EN 1917:2002 AND TO BE KITEMARKED OR CE MARKED.
- POLYPROPYLENE INSPECTION CHAMBER TO BE IN ACCORDANCE WITH B57158 OR BSEN13598-1 OR AGREEMENT CERTIFIED MINIMUM INTERNAL DIAMETER 450mm UNO.
- ALL FOUL BRANCH CONNECTIONS TO BE DN100 AT 1:40 MINIMUM GRADIENT U.N.O.
- ALL SURFACE WATER BRANCHES FROM RAIN WATER DOWN PIPES, GULLIES AND CHANNELS TO BE DN150 AT 1:80 MINIMUM GRADIENT U.N.O.
- FOR PIPES WITH LESS THAN 1200mm COVER TO CROWN PIPE BEDDING TO BE CLASS Z SURROUND OR PROTECTIVE COVER SLAB U.N.O IN ACCORDANCE WITH BUILDING REGULATIONS DOCUMENT H.
- ROOT PROTECTION BARRIERS REQUIRED TO ALL DRAINAGE TRENCHES WITHIN 5m OF EXISTING OR PROPOSED TREES SUBJECT TO CONFIRMATION BY LANDSCAPE ARCHITECT
- CONNECTION TO EXISTING PUBLIC SEWER NETWORK IS SUBJECT TO AGREEMENT IN PRINCIPLE. A SECTION 106 AGREEMENT IS REQUIRED TO BE SUBMITTED BY THE CONTRACTOR FOR FORMAL CONNECTION.
- SURFACE WATER DISCHARGE FROM ALBERT SQUARE WORKS HAS BEEN RESTRICTED TO 110 L/S BY PIPE SIZE AND GRADIENT. FOUL WATER DISCHARGE IS UNRESTRICTED
- THIS DRAWING IS THE COPYRIGHT OF RAMBOLL UK.

REFER TO DRAWING
OTH-RAM-EE-XX-DWG-C-1022 FOR
REMEDIAL WORKS OR ADDITIONAL
SURVEY WORKS TO BE UNDERTAKEN
PRIOR TO CONSTRUCTION.

REFER TO DRAWING
OTH-RAM-EE-XX-DWG-C-1003 FOR
EXISTING DRAINAGE WORKS.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION	
NOTES BELOW ARE ADDITIONAL TO HAZARDS/RISKS NORMALLY ASSOCIATED WITH THIS TYPE OF WORK. FOR DETAILS REFER TO: OTH-RAM-ZZ-ZZ-RSK-C-0001	
CONSTRUCTION (INCLUDING DEMOLITION AND REMOVAL OF EXISTING STRUCTURAL COMPONENTS)	
B1	CONNECTION TO EXISTING LIVE COMBINED PUBLIC SEWER AT DEPTH >4.0m
B4	UNKNOWN UNDERGROUND SERVICE/OBSTRUCTIONS
B5	POSSIBLE ASBESTOS OR LOCALISED CONTAMINATION
B6	POSSIBLE SHALLOW SERVICES
OPERATIONS, MAINTENANCE	
D1	POSITION OF MANHOLES IN MOATS
D2	ATTENUATION TANK MAINTENANCE
D3	OIL SEPARATOR MAINTENANCE
DISMANTLING / DEMOLITION (FUTURE)	
NO SIGNIFICANT RESIDUAL RISK IDENTIFIED	
REFER TO GENERAL NOTES AND THE PRINCIPAL CONTRACTOR FOR MORE INFORMATION ABOUT THE RISKS ASSOCIATED WITH THIS WORK.	

THESE NOTES ARE BASED ON THE USE OF EXPERIENCED AND COMPETENT CONTRACTORS CARRYING OUT THE WORK USING AN APPROVED SAFE METHOD OF WORKING	
KEY TO HEALTH AND SAFETY SYMBOLS	
	INDICATES A RESIDUAL RISK REQUIRING A COMPULSORY ACTION
	INDICATES A RESIDUAL RISK FOR INFORMATION
	INDICATES A RESIDUAL RISK REQUIRING A PROHIBITIVE ACTION
	INDICATES A RESIDUAL RISK AS A WARNING



Scale Bars to be used as guidance only - refer to sheet size below

1:100	1:200	1:500	1:1000	1:2500	1:5000	1:10000
1:100	1:200	1:500	1:1000	1:2500	1:5000	1:10000
1:100	1:200	1:500	1:1000	1:2500	1:5000	1:10000
1:100	1:200	1:500	1:1000	1:2500	1:5000	1:10000

KEY

EXISTING PUBLIC COMBINED DRAIN/ MANHOLE		C
EXISTING PUBLIC FOUL DRAIN/ MANHOLE		F
EXISTING PUBLIC SURFACE WATER DRAIN/MANHOLE		SW
EXISTING PRIVATE FOUL DRAIN/ MANHOLE		F
EXISTING ASSUMED DRAIN/SEWER		EX-RG
EXISTING ROAD GULLY		DP
PROPOSED FOWL WATER DRAIN/CONCRETE MANHOLE		
PROPOSED SURFACE WATER DRAIN/CONCRETE MANHOLE		
PROPOSED SURFACE WATER POLY PROPYLENE INSPECTION CHAMBER		
PERFORATED PIPES TO BASE OF TREE PITS		
PROPOSED ROAD GULLY		RG
PROPOSED DRAINAGE CHANNEL / SLOT DRAIN WITH SUMP AND ACCESS UNIT		DC/SD AC
PROPOSED ATTENUATION		
PROPOSED TREE PIT		
PROPOSED TREE PIT BOTTOM OF TREE PIT TO BE 38.420 AS PART OF THE ATTENUATION STRATEGY		

C01	30/04/2021	LS	SG	CONSTRUCTION ISSUE
T01	26/02/2021	LS	SG	LANDSCAPE PLAN UPDATED
				SHE BOX INFORMATION ADDED
				TENDER ISSUE
				TREE PIT LOCATIONS UPDATED, MANHOLES MOVED TO SUIT. ATTENUATION TANK LAYOUT AMENDED.
ISSUE	DATE	APPROVED	DRAWN	DESCRIPTION

OUR TOWN HALL PROJECT

Arkwright House, Parsonage, Manchester, M3 2LF
+44 (0) 161 827 1800
www.Ramboll.com

PROJECT STATUS	STAGE 5
CLIENT	MANCHESTER CITY COUNCIL
PROJECT	OUR TOWN HALL PROJECT
DRAWING TITLE	TOWN HALL EXTERNALS PROPOSED DRAINAGE SHEET 3 OF 3
SIZE & SCALE	A1: 1:250
DRAWING STATUS	S4 - CONSTRUCTION
JOB NUMBER	1620003165
DRAWING NO.	OTH-RAM-EE-XX-DWG-C-1102
REV	C01