PRELIMINARY SUBJECT TO CONFIRMATION OF UNITED UTILITIES AND MANCHESTER CITY COUNCIL ACCEPTANCE OF DISCHARGE CONNECTION LOCATIONS AND FLOW RATES

ALL PROPOSED DRAINAGE IS CURRENTLY PRELIMINARY SUBJECT TO EXISTING DRAINAGE SURVEYS AND DETAILED DRAINAGE DESIGN BEING COMPLETED

PROPOSED FOUL WATER POP UPS INFORMATION TAKEN FROM CIVIC DRAWING 18703-CIV-XX-00-D-P-11001_P03. FOUL POP UP INFORMATION TO BE CONFIRMED BY OTHERS

PRELIMINARY SUBJECT TO CONFIRMATION OF LANDSCAPE ARCHITECTS PROPOSED SITE LEVELS AND ALL FOUL WATER POP UP AND RAINWATER DOWNPIPE LOCATIONS AND FLOW RATES

PROPOSED DRAINAGE CONNECTION TO EXISTING PUBLIC COMBINED WATER SEWER VIA NEW MANHOLE. GRAVITY CONNECTION SUBJECT TO CONFIRMATION OF LEVELS OF EXISTING PUBLIC SEWER. PROPOSED CONNECTION IS ALSO SUBJECT TO DETAILED DRAINAGE DESIGN AND UNITED UTILITIES AND LLFA APPROVALS. **A SECTION 106 AGREEMENT WITH UNITED UTILITIES WILL BE REQUIRED TO CONFIRM UNITED UTILITIES ACCEPTANCE OF PROPOSED CONNECTION.**

EXISTING PUBLIC COMBINED WATER SEWER. SONDE TRACING HAS BEEN PROBED ON SITE AND CONFIRMS THE SEWER ALIGNMENT FALLS ON THE SAME LINE AS THE TFR SURVEY DATA. DIAMETER RECORDED AS 525 MM ON THE RECORD PLAN AND 600 MM IN THE CCTV REPORT; FOR DESIGN PURPOSES THE PIPE IS ASSUMED TO BE 600 MM PENDING CONFIRMATION. INVERT LEVEL HAS BEEN ESTIMATED USING A 1:350 FALL EXTRAPOLATED BETWEEN KNOWN CHAMBERS UU7001 AND UU8001, AS CCTV INDICATES CHAMBERS UU8004 AND UU8004A ARE BURIED AND DIRECT LEVEL DATA IS UNAVAILABLE. OVERALL SEWER LEVELS ARE THEREFORE ASSUMMED AND SUBJECT TO VERIFICATION.

PROPOSED NEW COMBINED WATER MANHOLE TO BE CONSTRUCTED ON THE LINE OF THE EXISTING PUBLIC UNITED UTILITIES COMBINED WATER SEWER TO ALLOW FOR COMBINED CONNECTION FROM SITE. **DISCUSSIONS WITH UNITED UTILITIES ARE CURRENTLY ONGOING TO DETERMINE IF THEY WOULD ACCEPT A SADDLE CONNECTION TO AVOID THE NEED TO CONSTRUCT A NEW MANHOLE.**

NON-RETURN VALVE IN SW10 OUTFALL PIPELINE TO PREVENT FOUL WATER SURCHARGING INTO SURFACE WATER NETWORK. ALTHON CHECK-FLEX INLINE NON-RETURN VALVE OR SIMILAR APPROVED.

15000Ø HYDROBRAKE CHAMBER
DESIGN HEAD: 1.4m
DESIGN FLOW: 5.0 L/s
UNIT REF: MD-SHE-0100-5000-1400-5000

LOCATION AND DEPTHS OF ALL EXISTING SERVICES ALONG PROPOSED OUTFALL PIPELINE TO BE IDENTIFIED AND CONFIRMED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORKS. ANY POTENTIAL CLASHES BETWEEN EXISTING SERVICES AND PROPOSED OUTFALL PIPELINE TO BE HIGHLIGHTED TO ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORKS.

PROPOSED VENT PIPE TO BE LOCATED ON SITE. ARCHITECT TO CONFIRM LOCATION. VENT TO BE INSTALLED ABOVE PODIUM LEVEL.

ALL EXTERNAL HARDSTANDING AREAS TO BE DRAIN INTO ADJACENT SOFT LANDSCAPING AND/OR FALL TOWARDS SURROUNDING HIGHWAY DRAINAGE AS PER THE CURRENT SCENARIO.

PROPOSED 150mmØ SURFACE WATER PIPE STUB TO BE CONSTRUCTED TO ALLOW FOR FUTURE CONNECTION TO NEW PUBLIC SURFACE WATER SEWER IN ROWLANDSWAY TO THE WEST OF THE SITE.

PROPOSED TEMPORARY HOIST FOOTING

PROPOSED CELLULAR ATTENUATION TANK
(19m x 3m x 0.8m DEEP x 0.95 VOID RATIO)
TOTAL VOLUME = 43.3m³
TANK INVERT LEVEL: 58.800
TOP OF TANK LEVEL: 59.600
TO PROVIDE ATTENUATION STORAGE UP TO AND INCLUDING 1 IN 100 YEAR +45% CLIMATE CHANGE RAINFALL EVENT.

PROPOSED OFFSET EASEMENT FOR EXISTING UNITED UTILITIES COMBINED WATER SEWER. UNITED UTILITIES HAVE INDICATED THAT AN OFFSET EASEMENT IS NOT ACCEPTABLE AND THAT A BUILD-OVER AGREEMENT WILL BE REQUIRED. THE BUILD-OVER AGREEMENT IS TO BE SUBMITTED ONCE THE CCTV SURVEY OF THE EXISTING UU SEWER IS COMPLETED. SHOULD UNITED UTILITIES NOT ACCEPT THE BUILD OVER AGREEMENT A PROPOSED SEWER DIVERSION WOULD BE REQUIRED VIA A SECTION 185 AGREEMENT WITH UNITED UTILITIES.

SITE BOUNDARY.

PROPOSED DRAINAGE CONNECTION TO EXISTING PUBLIC COMBINED WATER SEWER VIA EXISTING UU MANHOLE 7901. GRAVITY CONNECTION SUBJECT TO CONFIRMATION OF LEVELS OF EXISTING PUBLIC SEWER. PROPOSED CONNECTION IS ALSO SUBJECT TO DETAILED DRAINAGE DESIGN AND UNITED UTILITIES AND LLFA APPROVALS. **A SECTION 106 AGREEMENT WITH UNITED UTILITIES WILL BE REQUIRED TO CONFIRM UNITED UTILITIES ACCEPTANCE OF PROPOSED CONNECTION.**

ALL PROPOSED FOUL POP-UPS AND RAINWATER DOWNPIPES ARE TAKEN FROM CIVIC DRAWING 18703-CIV-XX-00-D-P-11001_P03. EXACT LOCATIONS AND FLOW RATES TO BE CONFIRMED BY OTHERS. ONCE ALL CONFIRMED PROPOSED BELOW GROUND DRAINAGE TO BE RE-DESIGNED TO SUIT.

ASSUMED THAT ALL EXISTING PRIVATE DRAINAGE CURRENTLY SERVING THE SITE WILL BE ABANDONED AND 'GRUBBED UP' AS PART OF THE DEMOLITION WORKS.

ALL EXTERNAL HARDSTANDING AREAS TO BE DRAIN INTO ADJACENT SOFT LANDSCAPING AND/OR FALL TOWARDS SURROUNDING HIGHWAY DRAINAGE AS PER THE CURRENT SCENARIO.

PROPOSED CRANE FOOTING LOCATION

LINE OF PROPOSED PODIUM DECK/GREEN ROOF AREA AT FIRST FLOOR LEVEL.

N

LEGEND

- PROPOSED FOUL WATER MANHOLE
- PROPOSED SURFACE WATER MANHOLE
- PROPOSED COMBINED WATER MANHOLE
- PROPOSED FOUL WATER PPIC
- PROPOSED SURFACE WATER PPIC
- PROPOSED FOUL WATER DRAINAGE
- PROPOSED SURFACE WATER DRAINAGE
- PROPOSED COMBINED WATER DRAINAGE
- PROPOSED HYDROBRAKE CHAMBER
- PROPOSED CELLULAR ATTENUATION TANK
- PROPOSED FLOOR GULLY
- EXISTING PUBLIC COMBINED WATER DRAINAGE
- PROPOSED LINEAR DRAINAGE CHANNEL (ACO)
- PROPOSED ROAD GULLY
- PROPOSED RAINWATER DOWNPIPE
- PROPOSED FOUL POP-UP (SOIL VENT PIPE/STUB STACK)
- PROPOSED VENT PIPE FROM ATTENUATION TANK
- SITE BOUNDARY

GENERAL NOTES

1. SETTING OUT SHALL BE UNDERTAKEN USING ONLY THE INFORMATION GIVEN. DISTANCES SHOULD NOT BE SCALED FROM THIS DRAWING.
2. ALL SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DESIGN & CONSTRUCTION GUIDANCE & UNITED UTILITIES CONSTRUCTION GUIDANCE.
3. THE MINIMUM GRAVITY PIPE DIAMETER UNDER ADOPTABLE HIGHWAYS SHALL BE 150mm
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL INFORMATION GIVEN WITH REGARDS TO EXISTING SERVICES AND DRAINAGE CONNECTIONS ETC. PRIOR TO COMMENCING THE WORKS. THE RATES SHALL INCLUDE FOR HAND DIG AROUND SERVICES WHERE NECESSARY. THE CONTRACTOR SHALL ADHERE TO THE CDM REGULATIONS AT ALL TIMES
5. THE OUTSIDES OF ALL SEWERS SHALL BE A MINIMUM OF 1.0m FROM KERB LINES AND THE OUTSIDE OF MANHOLES SHALL BE A MINIMUM OF 0.5m FROM KERB LINES
6. EXISTING FLOWS IN WATERCOURSES, SEWERS AND LAND DRAINS SHALL BE MAINTAINED AT ALL TIMES
7. ONLY TRAINED PERSONNEL SHALL BE PERMITTED TO ENTER CONFINED SPACES
8. ALL METERIALS TO BEAR THE RELEVANT B.S. KITEMARK AND COMPLY FULLY WITH THE SPECIFICATIONS. ALL CONCRETE & CONCRETE PRODUCTS MUST USE SULPHATE RESISTANT CEMENT (UNLESS THE SITE INVESTIGATION REPORT PROVES THAT SULPHATE ATTACK FROM SOILS AND GROUNDWATER WILL NOT OCCUR TO WITHSTAND A CLASS
9. ALL OPENING NOTICES ETC. AS REQUIRED UNDER HIGHWAYS ACTS ETC. ARE TO BE OBTAINED PRIOR TO COMMENCEMENT OF WORKS. ALL WORKS ARE TO BE INSPECTED BY L.A., NHBC OR THE NETWORK OPERATOR AS APPLICABLE.
10. WHERE "ULTRA RIB" UPVC PIPES (OR SIMILAR APPROVED) ARE USED IN ADOPTABLE DRAINAGE THEY SHALL STILL BE HANDLED AND LAID IN ACCORDANCE WITH THE SPECIFICATION AND GUIDANCE ISSUED BY THE HIGH PERFORMANCE PIPE ASSOCIATION.
11. A CLASS S BED AND SURROUND MUST BE USED FOR SUCH PIPES. TRENCH BACKFILL IN HIGHWAYS TO WITHIN 1M OF HIGHWAY SHALL, AS DIRECTED BY THE HIGHWAY AUTHORITY BE A SUITABLE GRANULAR MATERIAL ALL IN ACCORDANCE WITH SEWERS FOR ADOPTION CL. 4.3.4.
12. SLAB LEVELS SHALL NOT BE VARIED WITHOUT REFERENCE TO THE ENGINEER FOR GUIDANCE
13. DOMESTIC DRAINAGE SHALL BE TO BUILDING REGULATIONS APPROVED DOCUMENT H. 110mm U.P.V.C. PIPES LAID TO THE FOLLOWING MINIMUM FALLS UNLESS OTHERWISE SHOWN.

	FOUL	S.W.
HEAD RUN	1 IN 40	1 IN 60
ELSEWHERE	1 IN 80	1 IN 100

14. ALL HIGHWAY GULLY CONNECTIONS TO BE 150mm VITRIFIED CLAY UNLESS NOTED OTHERWISE
15. ALL PRIVATE GULLY CONNECTIONS TO BE 100mm VITRIFIED CLAY UNLESS NOTED OTHERWISE
16. MINIMUM COVER TO DRAINAGE SOFFIT LEVEL & ACCESS CHAMBERS ;

LANDSCAPING	TRAFFICKED AREAS	HIGHWAYS
0.600m	0.900m	1.200m

17. CLASS 'S' BEDDING AND SURROUND TO BE USED WHERE MINIMUM COVER IS ACHIEVED.
18. WHERE MINIMUM COVER IS NOT ACHIEVED CLASS 'Z' BEDDING AND SURROUND (CONCRETE ENCASEMENT) IS TO BE USED.
19. FOUNDATIONS WITHIN CLOSE PROXIMITY TO PROPOSED DRAINAGE WILL NEED TO BE AT THE SAME DEPTH AS DRAINAGE TO AVOID THE POTENTIAL FOR UNDERMINING.
20. TOP OF FOUNDATIONS ARE TO BE A MIN 750mm FROM FINISHED EXTERNAL LEVELS.
21. ALL SURFACE / FOUL WATER CONNECTIONS ARE TO HAVE RODDABLE ACCESS FROM ABOVE GROUND
22. ALL POP-UP AND RWP SETTING OUT IS TO BE PROVIDED BY THE ARCHITECT
23. FINAL POP UP LOCATIONS SUBJECT TO ARCHITECT / M&E CO-ORDINATION

REV	DATE	DESCRIPTION	BY	CHK	APP
P07	10.08.2026	RIBA STAGE 4 - UPDATED TO SUIT LATEST LAYOUT	JLJ	JRS	KOB
P06	15.07.2026	RIBA STAGE 4	JC	JRS	KOB
P05	28.04.2026	DRAWING AMENDED FOLLOWING LATEST CCTV SURVEY	JC	JRS	KOB
P04	09.02.2026	DRAWING AMENDED FOLLOWING RIBA STAGE 3 ISSUE & REVIEW	JLJ	JRS	KOB
P03	30.01.2026	RIBA STAGE 3 ISSUE	JLJ	JRS	KOB
P02	25.11.2025	PRELIMINARY ISSUE - UPDATED TO SUIT DESIGN TEAM COMMENTS	JC	JRS	KOB
P01	07.11.2025	PRELIMINARY ISSUE	JC	JRS	KOB

DRAWING STATUS: **STAGE 4**

CLIENT: WYTHENSHAWE COMMUNITY HOUSING GROUP AND MUSE PLACES

ARCHITECT: BOWKER SADLER

PROJECT: ALPHA HOUSE, WYTHENSHAWE

TITLE: BELOW GROUND DRAINAGE OUTLINE DRAINAGE STRATEGY

STATUS:	PROJECT No.	PROJECT	ORIGIN	FUNCT.	SPACIAL	FORM	DISC.	DRAWING No.	REV:
04	224-126	18703	AJP	XX	ZZ	D	C	000900	P07

SCALE @ A1:	DESIGNED:	DRAWN:	CHECKED:	APPROVED:	DATE:
1:200	JC	JC	JRS	KOB	NOV 2025

AJP consulting engineers
est. 1978
0151 227 1462 info@ajpltd.co.uk 91 Dale Street, Liverpool, L2 2ET