

File name: I:\K:\WSP\GROUP\CONVENTUAL DATA\PROJECTS\70044X\70044S48 - PORT STREET MANCHESTER\WPCV - CIVIL ENGINEER\DRAWINGS\STAGE 04\DRAWINGS\Z3-WSP-G580-PL-BL-001 - PROPOSED DRAINAGE LAYOUT.DWG, printed on 15 December 2022, 17:46:19, by BenBourne, Jcd

SPECIALIST DESIGN ITEM –
BASEMENT PUMP SYSTEM TO DRAIN RUNOFF FROM UNCOVERED
CAR PARK RAMP – PERFORMANCE CRITERIA:

SURFACE WATER RUNOFF FROM UNCOVERED BASEMENT CAR PARK RAMP TO BE DRAINED TO PUMP CHAMBER IN BASEMENT BEFORE BEING PUMPED TO MHS1 IN THE PORT STREET.

TOTAL DRAINED IMPERMEABLE AREA – 95 m²
RUNOFF BASED ON RATIONAL METHOD (50mm/hr) – 1.32 L/S
PUMP CHAMBER BASED ON MERCURY PACKAGE PUMPING STATION AS PROVIDED BY TT PUMPS. BASED ON INCOMING FLOW RATE OF 1.32 L/S.
DESIGN CAPACITY OF PUMP CHAMBER CURRENTLY BASED ON 50MM/HR RAIN FALL INTENSITY. FINAL DESIGN CRITERIA TO BE DISCUSSED AND AGREED WITH CONTRACTOR AND END USER AT DETAILED DESIGN STAGE. NO EMERGENCY STORAGE HAS CURRENTLY BEEN ALLOWED FOR.
MAX PUMP DISCHARGE RATE – 3 L/S
PUMP SWITCH ON / OFF (DEPTH ABOVE INVERT) – 0.7m (ON), 0.3m (OFF)
PUMP ARRANGEMENT – DUTY / STAND BY
HIGH LEVEL ALARM TELEMETRY WARNING – REQUIRED
BACK UP POWER SUPPLY – TO BE AGREED

RIISING MAIN, POWER SUPPLY, TELEMETRY AND ALL OTHER MECHANICAL AND ELECTRICAL REQUIREMENTS TO BE SPECIFIED BY FUTURESERV.

i PROPOSED DEEP EXCAVATION CIRCA 4 METRES IN EXISTING PUBLIC HIGHWAY (PORT STREET). CONTRACTOR TO ORGANISE FOR NECESSARY ROAD WORKS PERMITS FROM MCC.

PROPOSED NEW COMBINED CONNECTION ONTO EXISTING 300mm DIAMETER CONCRETE COMBINED PUBLIC SEWER. SUBJECT TO SECTION 106 CONNECTION APPROVAL FROM UNITED UTILITIES.

INCOMING CONNECTIONS TO NEW COMBINED MANHOLE TO BE FITTED WITH FLAP VALVES TO PREVENT SEWAGE BACKWASH IN EVENT OF PUBLIC SEWER SURCHARGING

MH C1
CL: 49.580
IL: 46.000

MH S4
CL: 49.375
IL: 46.055

PPIC F1
CL: 49.500
IL: 47.440

210 300# PM PRE EXISTING BASEMENT THROUGH PILED WALL

ACO CONNECTION TO BE VERTICAL CONNECTION THROUGH BASEMENT CEILING SLAB

INDICATIVE ROUTE OF PROPOSED RISING MAIN TO RUN AT HIGH LEVEL WITHIN THE BASEMENT. ROUTE / DETAILING OF RISING MAIN TO BE BY FUTURESERV.

TT PUMPS 'MERCURY' PACKAGED PUMPING STATION AT BASEMENT LEVEL. MAX RATE OF 3l/s.
CL: 46.250
IL: 45.050

PPIC S11
CL: 46.250
IL: 45.750

ACO CONNECTION TO BE VERTICAL CONNECTION THROUGH BASEMENT CEILING SLAB

i CONSTRUCTION PROPOSED DRAINAGE PENETRATIONS / PIPEWORK THROUGH CONTIGUOUS PILED WALL / BASEMENT CAPPING SLAB AND ASSOCIATED WATERPROOFING DETAILS ETC BY FUTURESERV / SHP. WSP BELOW GROUND DRAINAGE RESPONSIBILITY TO BE FROM EXTERNAL ADAPTOR TO EXTERNAL BELOW GROUND DRAINAGE.

KEY TO HEALTH AND SAFETY SYMBOLS

- !** INDICATES A RESIDUAL RISK REQUIRING A COMPULSORY ACTION.
- i** INDICATES A RESIDUAL RISK FOR INFORMATION.
- ⊘** INDICATES A RESIDUAL RISK REQUIRING A PROHIBITIVE ACTION.
- ⚠** INDICATES A RESIDUAL RISK AS A WARNING.

UNTIL TECHNICAL APPROVAL HAS BEEN OBTAINED FROM THE RELEVANT LOCAL AUTHORITIES OR STATUTORY BODIES, IT SHOULD BE UNDERSTOOD THAT ALL DRAWINGS ARE ISSUED AS PRELIMINARY AND NOT FOR CONSTRUCTION. SHOULD THE CONTRACTOR AND / OR EMPLOYER COMMENCE WORK PRIOR TO APPROVAL BEING GIVEN, IT IS ENTIRELY AT THEIR OWN RISK

DO NOT SCALE

NOTES:

- ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT SCHEME DRAWINGS.
- FOR THE ASSOCIATED MANHOLE SCHEDULE REFER TO WSP DRAWING Z0-WSP-G580-SC-XX-001.
- REFER TO WSP DRAWING Z0-WSP-G580-PL-XX-001 FOR THE DRAINAGE LAYOUT AT GROUND FLOOR LEVEL.

KEY:

- SITE BOUNDARY
- ACO DRAIN
- PROPOSED SURFACE WATER PIPE + MH
- PROPOSED FOUL PIPE + MH
- PROPOSED COMBINED PIPE + MH
- EXISTING UU COMBINED SEWER + MH
- RISING MAIN
- ⊕** PUMP STATION
- ▨** PODIUM/AMENITY TERRACE PERMEABLE SUBBASE +CRATE SYSTEM
- ▨** LOWER EXTERNALS PERMEABLE SUBBASE SYSTEM
- ▨** AREA OF LANDSCAPING w/ DRAINAGE BOARD
- PERMEABLE GEOTEXTILE MEMBRANE
- IMPERMEABLE LINER
- FIN DRAIN/DOUBLE HEIGHT GEOCELLULAR CRATES
- ▨** ABOVE GROUND ATTENUATION TANK DESIGNED BY OTHERS
- ABOVE GROUND SURFACE/FOUL WATER PIPE & SLEEVING
- 450mm INSPECTION CHAMBER
- ▨** CLASS Z PROTECTION TO PIPE

P02	15/12/2022	JEB	UPDATED FOLLOWING INCLUSION OF TANK	50	50
P01	19/08/2022	JEB	STAGE 4 ISSUE	50	50
T02	13/04/2022	JEB	MINOR PRESENTATIONAL CHANGES	50	50
T01	07/04/2022	JEB	TENDER ISSUE	50	50
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS:	STAGE 4
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CLIENT:	VITA GROUP
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ARCHITECT:	SIMPSON HAUGH
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SITE/PROJECT:	PORT STREET, MANCHESTER
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TITLE:	PROPOSED DRAINAGE LAYOUT BASEMENT LEVEL
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SCALE @ A1:	1:200	CHECKED:	SM	APPROVED:	SM
PROJECT NO:	70084548	DESIGNED:	JEB	DRAWN:	JEB
				DATE:	December 22

DRAWING No:	Z3-WSP-G580-PL-B1-001	REV:	P02
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