

PROPOSED SURFACE MANHOLE SCHEDULE													
MH NAME	MH CL (m)	MH IL (m)	MH DEPTH (m)	DEPTH TO SOFFIT (m)	MH CHAMBER DIAM. (mm)	MH TYPE	MH COVER GRADE	MH COVER SIZE (LxW or DIAM.)	INLET PIPE INVERTS (m)	INLET PIPE DIAM. (mm)	OUTLET PIPE INVERTS (m)	OUTLET PIPE DIAM. (mm)	COMMENTS
SW01	131.500	130.900	0.600	0.450	450	PPIC	B125	450	130.900	-	130.900	150	LOCATED WITHIN FILTER TRENCH.
SW02	131.500	130.830	0.670	0.520	450	PPIC	B125	450	130.830	150	130.830	150	LOCATED WITHIN FILTER TRENCH.
SW03	131.500	130.810	0.690	0.540	450	PPIC	B125	450	130.810	150	130.810	150	LOCATED WITHIN FILTER TRENCH.
SW04	131.500	130.760	0.740	0.590	450	PPIC	B125	450	130.760	150	130.760	150	LOCATED WITHIN FILTER TRENCH.
SW05	131.500	130.670	0.830	0.680	450	PPIC	B125	450	130.670	150	130.670	150	LOCATED WITHIN FILTER TRENCH.
SW06	131.500	130.580	0.920	0.770	450	PPIC	B125	450	130.580	150	130.580	150	LOCATED WITHIN FILTER TRENCH.
SW07	131.600	130.570	1.030	0.805	600	PPIC	B125	600	130.570	150	130.570	225	FITTED WITH 350Ø REDUCER CAP.
SW08	131.450	130.435	1.015	0.790	600	PPIC	B125	600	130.435	225	130.435	225	FITTED WITH 350Ø REDUCER CAP.
SW09	131.450	130.405	1.045	0.820	600	PPIC	B125	600	130.405	225	130.405	225	FITTED WITH 350Ø REDUCER CAP.
SW10	131.325	130.275	1.050	0.825	600	PPIC	B125	600	130.275	225	130.275	225	FITTED WITH 350Ø REDUCER CAP.
SW11	131.200	130.210	0.990	0.765	600	PPIC	B125	600	130.210	225	130.210	225	FITTED WITH 350Ø REDUCER CAP.
SW12	131.225	130.075	1.150	0.925	600	PPIC	B125	600	130.075	225	130.075	225	FITTED WITH 350Ø REDUCER CAP.
SW13	131.150	130.550	0.600	0.450	450	PPIC	B125	450	130.550	150	130.550	150	LOCATED WITHIN FILTER TRENCH.
SW14	131.150	130.550	0.600	0.450	450	PPIC	B125	450	130.550	150	130.550	150	LOCATED WITHIN FILTER TRENCH.
SW15	131.500	129.975	1.525	1.300	600	PPIC	B125	600	129.975	225	129.975	225	FITTED WITH 350Ø REDUCER CAP.
SW16	131.500	129.930	1.570	1.345	600	PPIC	B125	600	129.930	225	129.930	225	FITTED WITH 350Ø REDUCER CAP.
SW17	131.380	130.130	1.250	1.100	450	PPIC	B125	450	130.130	150	130.130	150	FITTED WITH 350Ø REDUCER CAP.
SW18	130.700	129.995	0.705	0.555	450	PPIC	B125	450	129.995	-	129.995	150	LOCATED WITHIN FILTER TRENCH.
SW19	131.125	129.995	1.130	0.980	450	PPIC	B125	450	129.995	150	129.995	150	LOCATED WITHIN FILTER TRENCH.
SW20	131.150	129.975	1.175	1.025	450	PPIC	B125	450	129.975	150	129.975	150	FITTED WITH 350Ø REDUCER CAP.
SW21	131.500	129.830	1.670	1.370	600	PPIC	B125	600	129.830	225	129.830	300	FITTED WITH 350Ø REDUCER CAP.
SW22	131.000	129.775	1.225	0.925	600	PPIC	B125	600	129.775	300	129.775	300	FITTED WITH 350Ø REDUCER CAP.
SWL5	131.000	129.000	2.000	-	600	PPIC	B125	600	129.000	300	-	-	LINED SOAKAWAY.

PROPOSED FOUL MANHOLE SCHEDULE													
MH NAME	MH CL (m)	MH IL (m)	MH DEPTH (m)	DEPTH TO SOFFIT (m)	MH CHAMBER DIAM. (mm)	MH TYPE	MH COVER GRADE	MH COVER SIZE (LxW or DIAM.)	INLET PIPE INVERTS (m)	INLET PIPE DIAM. (mm)	OUTLET PIPE INVERTS (m)	OUTLET PIPE DIAM. (mm)	COMMENTS
FW01	131.750	130.180	1.570	1.470	600	PPIC	B125	600	130.180	100	130.180	100	FITTED WITH 350Ø REDUCER CAP.
FW02	131.725	130.085	1.640	1.490	600	PPIC	B125	600	130.085	150	130.085	150	FITTED WITH 350Ø REDUCER CAP.
FW03	131.700	130.060	1.640	1.490	600	PPIC	B125	600	130.060	150	130.060	150	FITTED WITH 350Ø REDUCER CAP.
FW04	131.650	130.020	1.630	1.480	600	PPIC	B125	600	130.020	150	130.020	150	FITTED WITH 350Ø REDUCER CAP.
FW05	131.625	130.000	1.625	1.475	600	PPIC	B125	600	130.000	150	130.000	150	FITTED WITH 350Ø REDUCER CAP.
FW06	131.600	129.965	1.635	1.485	600	PPIC	B125	600	129.965	150	129.965	150	FITTED WITH 350Ø REDUCER CAP.
FW07	131.575	129.935	1.640	1.490	600	PPIC	B125	600	129.935	150	129.935	150	FITTED WITH 350Ø REDUCER CAP.
FW08	131.550	129.905	1.645	1.495	600	PPIC	B125	600	129.905	150	129.905	150	FITTED WITH 350Ø REDUCER CAP.
FW09	131.525	129.875	1.650	1.500	600	PPIC	B125	600	129.875	150	129.875	150	FITTED WITH 350Ø REDUCER CAP.
FW10	131.500	129.840	1.660	1.510	600	PPIC	B125	600	129.840	150	129.840	150	FITTED WITH 350Ø REDUCER CAP.
FW11	131.375	129.670	1.705	1.555	600	PPIC	B125	600	129.670	150	129.670	150	FITTED WITH 350Ø REDUCER CAP.
FW12	131.475	129.545	1.930	1.780	600	PPIC	B125	600	129.545	150	129.545	150	FITTED WITH 350Ø REDUCER CAP.
FW13	131.450	129.515	1.935	1.785	600	PPIC	B125	600	129.515	150	129.515	150	FITTED WITH 350Ø REDUCER CAP.
FW14	131.430	129.505	1.925	1.775	600	PPIC	B125	600	129.505	150	129.505	150	FITTED WITH 350Ø REDUCER CAP.
FW15	131.400	129.495	1.905	1.755	600	PPIC	B125	600	129.495	150	129.495	150	FITTED WITH 350Ø REDUCER CAP.
FW16	131.385	129.485	1.900	1.750	600	PPIC	B125	600	129.485	150	129.485	150	FITTED WITH 350Ø REDUCER CAP.
FW17	131.370	129.470	1.900	1.750	600	PPIC	B125	600	129.470	150	129.470	150	FITTED WITH 350Ø REDUCER CAP.
FW18	131.250	129.490	1.760	1.610	600	PPIC	B125	600	129.490	150	129.490	150	FITTED WITH 350Ø REDUCER CAP.
FW19	131.320	129.450	1.870	1.720	600	PPIC	B125	600	129.450	150	129.450	150	FITTED WITH 350Ø REDUCER CAP.
FW20	130.740	129.385	1.355	1.205	600	PPIC	B125	600	129.385	150	129.385	150	CONSTRUCTED OVER EXISTING CHAMBER.

DRAINAGE NOTES:

- DRAINAGE SYSTEMS TO COMPLY WITH THE FOLLOWING STANDARDS:
 - BS EN 752:2008
 - BUILDING REGULATIONS APPROVED DOCUMENT PART H, 2015 EDITION
 - NHBC STANDARDS CHAPTER 5.3, 2017 EDITION
 - NHBC STANDARDS PLUS, 2017
- ALL COMPONENTS USED IN DRAINAGE SYSTEMS TO COMPLY WITH THE FOLLOWING: BS EN 476:2011
- ALL DRAINAGE SYSTEMS AND COMPONENTS TO BE CONSTRUCTED AND TESTED TO THE FULL SATISFACTION OF BOTH BUILDING REGULATIONS AND WARRANTY PROVIDER INSPECTORS
- ALL DRAINAGE TO BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH BS EN 1610:2015.
- V.C. DENOTES VITRIFIED CLAY, VITRIFIED CLAY PIPES AND FITTINGS TO COMPLY WITH THE RELEVANT PROVISIONS OF BS EN295-1:2013, 2:2013, 3:2012 AND BS 65 RESPECTIVELY AND BE KITEMARKED. ALL PIPES SHALL BE EXTRA STRENGTH TO BS 65 OR EQUIVALENT BS EN295 PIPE CRUSHING STRENGTH.
- LATERAL DRAIN CONNECTIONS (PIPES CONNECTING INTO ADAPTABLE SEWERS) TO BE VITRIFIED CLAY. WHERE COVER IS LESS THAN 1.2m TO GROUND LEVEL PIPE PROTECTION IS REQUIRED IN THE FORM OF A CONCRETE COVER SLAB.
- PVC-U DENOTES UNPLASTISED POLYVINYL CHLORIDE. PVC-U PIPES AND FITTINGS TO COMPLY WITH THE RELEVANT PROVISIONS OF BS EN1401, BS EN13476-2 AND BS4660:1989/2000 RESPECTIVELY AND BE KITEMARKED.
- PRECAST CONCRETE MANHOLES TO BE IN ACCORDANCE WITH BS EN 1917:2002 AND BS 5911-3:2010, 4:2002 AND TO BE KITEMARKED. PRECAST CONCRETE RINGS AND COVER SLABS TO CONCRETE PIPES TO BE JOINTED WITH CEMENT MORTAR UNLESS NOTED OTHERWISE.
- INSITU AND PRECAST CONCRETE UNITS SHALL HAVE SULPHATE RESISTING PORTLAND CEMENT TO BS EN 197-1:2011.
- POLYPROPYLENE INSPECTION CHAMBERS TO COMPLY WITH BS EN 13598-1:2010, 2:2016 AND BS 7158:2001 AND TO BE KITEMARKED.
- MANHOLE COVERS AND FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 124-1 TO 6:2015. MANHOLE COVERS AND FRAMES TO BE OF A NON-ROCKING DESIGN WITH CUSHION INSERTS AND KITEMARKED. LOAD CLASS A15 COVERS TO BE USED IN AREAS INACCESSIBLE TO VEHICLES; LOAD CLASS B125 COVERS TO BE USED IN FOOTWAYS; LOAD CLASS D400 COVERS TO BE USED IN PRIVATE ROADS. ALL COVERS TO BE BADGED 'FW' OR 'SW' AS APPROPRIATE. MANHOLE COVER SLABS AND ACCESS TO BE IN ACCORDANCE WITH CONCRETE PIPE ASSOCIATION TECHNICAL BULLETIN ISSUED SEPTEMBER 2001.
- POLYPROPYLENE INSPECTION CHAMBER COVERS AND FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 124-1 TO 6:2015. COVERS AND FRAMES TO BE OF A NON-ROCKING DESIGN WITH CUSHION INSERTS AND KITEMARKED. LOAD CLASS A15 COVERS TO BE USED IN AREAS INACCESSIBLE TO VEHICLES; LOAD CLASS B125 COVERS TO BE USED IN FOOTWAYS; LOAD CLASS D400 COVERS TO BE USED IN PRIVATE ROADS.
- ROAD GULLY GRATES AND FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 124-1 TO 6:2015 AND BE OF A NON-ROCKING DESIGN WITH LEFT HANDED CAPTIVE HINGE ACCESS AND BE KITEMARKED. LOAD CLASS D400 GRATES TO BE USED IN PRIVATE ROADS. TYPE D400-450 GRATE AND FRAME. MINIMUM AREA OF WATERWAY TO BE 1010cm².
- DRAINAGE CHANNELS TO BE ACO M1000 0.0 MULTIDRAIN CHANNEL (O.S.A) FITTED WITH SLOTTED DUCTILE IRON GRATING. GRATES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 124-1 TO 6:2015 AND BE KITEMARKED. LOAD CLASS A15 GRATES TO BE USED IN AREAS INACCESSIBLE TO VEHICLES; LOAD CLASS B125 GRATES TO BE USED IN FOOTWAYS; LOAD CLASS D400 GRATES TO BE USED IN PRIVATE ROADS. SUMP UNIT AND SILT BUCKET UNITS TO BE USED ON ALL GULLIES.
- CLASS Z BEDDING DETAIL SHALL BE PROVIDED:
 - WHERE COVER TO PIPE BARREL IS:
 - i) <1.2m IN VEHICULAR TRAFFICED AREAS
 - ii) <0.9m IN AREAS INACCESSIBLE TO VEHICLES.
 - AT ALL ROAD GULLY, RWP, SVP AND DRAINAGE CHANNEL BRANCHES.
 - AREAS OF DEEP ROOTING VEGETATION.
 - WHERE TWO PIPES CROSS WITH A CLEAR GAP OF <300mm.
 - CLASS Z SURROUND TO EXTEND A MINIMUM OF 1.0m FROM THE CENTRE OF THE CROSSING POINT & EXTENDED TO WITHIN 150mm OF THE NEAREST FLEXIBLE JOINT, WHERE REQUIRED.
- CLASS 'Y' BEDDING DETAIL TO BE PROVIDED TO ALL PIPEWORK BENEATH BUILDING FOOTPRINT WITH ROCKER PIPES PROVIDED AS CLOSE AS POSSIBLE TO BUILDING STRUCTURE WHERE PIPE EXITS
- NO MECHANICAL COMPACTION OF FILL MATERIAL WITHIN 300mm OF THE CROWN OF ANY PIPE.

THE VERSIONS OF BRITISH STANDARDS AND OTHER PUBLICATIONS LISTED ABOVE ARE CURRENT AT THE TIME OF THE DRAWING ISSUE. HOWEVER IF THESE HAVE BEEN REVISED OR UPDATED THEN THE NEWER VERSIONS SHOULD BE USED. ANY DISCREPANCIES SHOULD BE NOTIFIED TO AWP IMMEDIATELY.

100% STAGE 4 SUBMISSION

NOTES:

- THESE NOTES ARE INTENDED TO AUGMENT DRAWINGS AND SPECIFICATIONS. WHERE CONFLICT OF REQUIREMENTS EXIST THE ORDER OF PRECEDENCE SHALL BE AS SHOWN IN THE SPECIFICATION. OTHERWISE THE STRICTEST PROVISION SHALL GOVERN.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ENGINEERS AND ARCHITECTS DRAWINGS.
- DRAWINGS NOT TO BE SCALED. ALL DIMENSIONS TO BE CHECKED ON SITE BY THE CONTRACTOR. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER AND FURTHER INSTRUCTIONS OBTAINED BEFORE WORK IS COMMENCED.
- THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURE AND SEQUENCE AND ENSURE THAT THE BUILDING AND ITS COMPONENTS ARE SAFE DURING ERECTION. THIS INCLUDES THE ADDITION OF WHATEVER TEMPORARY BRACINGS, GUTS OR TIE-DOWNS WHICH MAY BE NECESSARY. SUCH MATERIAL REMAINING THE PROPERTY OF THE CONTRACTOR ON COMPLETION, AND FOR ENSURING THAT THE WORKS AND ANY ADJACENT PROPERTIES ARE SAFE IN THE TEMPORARY CONDITION.

JOB NO: 49043 DRAWING REFERENCE TABLE	
THIS DRAWING TO BE READ IN CONJUNCTION WITH THE DRAWINGS LISTED BELOW	
ALAN WOOD & PARTNERS	DRAWING REFERENCE
- DRAINAGE LAYOUT	- KDW-AWP-ZZ-XX-DR-C-3300
- DRAINAGE SECTIONS SHEET 1	- KDW-AWP-ZZ-XX-DR-C-3600
- DRAINAGE SECTIONS SHEET 2	- KDW-AWP-ZZ-XX-DR-C-3601
- DRAINAGE DETAILS	- KDW-AWP-ZZ-XX-DR-C-3602
- SITE HAZARD DRAWING	- KDW-AWP-ZZ-XX-DR-C-4001
- TOPOGRAPHICAL SURVEY AND SERVICES	- KDW-AWP-ZZ-XX-DR-C-4300
- ENABLING WORKS & DIVERSIONS	- KDW-AWP-ZZ-XX-DR-C-4301
- CUT & FILL	- KDW-AWP-ZZ-XX-DR-C-4302
- CONSTRUCTION SPECIFICATIONS & KERBING	- KDW-AWP-ZZ-XX-DR-C-4303
DRAWINGS BY OTHERS	DRAWING REFERENCE
- FLOOD RISK ASSESSMENT BY CUNDALL	- Z9A8416Y20-CDL-XX-XX-RP-C-010201
- TOPOGRAPHICAL/UTILITY/DRAINAGE SURVEY BY MIDLAND SURVEY LTD	- 39373
- PROPOSED SITE 1 LANDSCAPE PLAN BY HLM ARCHITECTS	- Z9A8416Y20-HLM-10-00-DR-L-000103

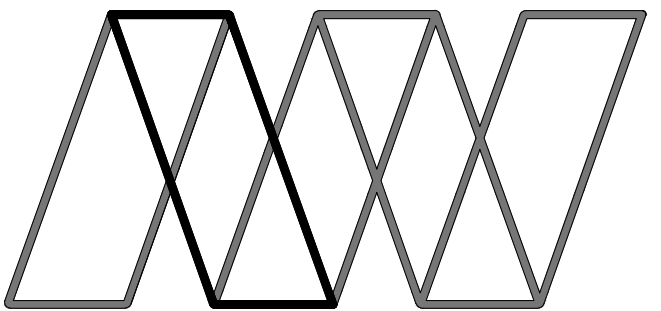
RWP & SVP LOCATIONS AND SIZES TO BE READ IN CONJUNCTION WITH ARCHITECT'S DRAWINGS. WHERE PIPE SIZE DIFFER FROM ASSUMPTION, DRAINAGE ENGINEER TO BE CONSULTED.

ALL PIPES COLLECTING RWPS ASSUMED TO BE 1000

ABOVE-GROUND SVPS TO BE 1000, AS SPECIFIED ON ARCHITECT DRAWING. TO CONNECT INTO 1500 ADAPTOR BEFORE GOING BELOW-GROUND.

RWPS AND SVPS TO BACKDROP INTO CHAMBERS WHERE REQUIRED.

P5	UPDATED TO SUIT LAYOUT	20.11.23	DC	DC	JAG
P4	UPDATED TO SUIT LAYOUT	15.09.23	DC	DC	JAG
P3	100% STAGE 4 ISSUE	14.08.23	DC	DC	JAG
P2	MANHOLE SCHEDULE UPDATED	05.07.23	HD	DC	JAG
P1	FIRST ISSUE	19.06.23	HD	DC	JAG
Rev	Description	Date	By	Chk	App



Alan Wood & Partners

Hull Office 341 Beverley Road Hull HU5 1LD	Consulting Civil & Structural Engineers Project Managers Building Surveyors
T. 01482 442138 www.alanwood.co.uk	Leeds T. 01135 311098 Lincoln T. 01522 300210 Scarborough T. 01723 865484 Sheffield T. 01142 440077 York T. 01904 611594

Project:	PROPOSED BARRACKS AT KENDREW, OAKHAM, LE15 7AG				
Client:	ESS MODULAR				
Drawing:	MANHOLE SCHEDULE				
Role:	CIVIL ENGINEER				
Drawing Status:	FOR APPROVAL	Suitability Code:	S4		
Job. no.	49043	Scale@ A1:	NA	Rev.	P5
Project Originator Volume Level Type Role Number					
Z9A8416Y20 - AWP - ZZ - XX - DR - C - 00003301					