

Eastleigh Works Drainage Operation and Maintenance Manual

Rev A – 24th April 2023

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A
Revision

Issued for Planning Condition Sign Off
Purpose

24.04.23
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PW
Checked

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1 Adoptability of SuDS Components.

Whilst the site will be privately owned it will be possible to offer some of the drainage system for adoption. At the time of writing, no features had been considered for adoption. The following information is included should adoption be considered in the future.

On the 25th October 2019, the documentation submitted by Water UK concerning sewerage was approved by Ofwat. It is designed to guide water companies and developers when planning, designing and constructing foul and surface water drainage systems which are intended for adoption, as per the Section 104 agreement under the Water Industry Act 1991. The documents provide updated guidance for all standards and specifications required when designing new water or drainage infrastructure and aim to accelerate the uptake of sustainable drainage (SuDS), by smoothing out the transfer of ownership, responsibility and ensure the assets are effectively managed and maintained. They will also allow English water and sewerage companies to adopt a wider range of drainage types, including those with sustainable elements.

Practically and in terms of SuDS, the basic criteria that need to be achieved for a surface water drainage system to be “adoptable” or “not adoptable”, will mainly require the following.

Adoptable	Non-Adoptable
It is constructed for the drainage of buildings and yards appurtenant to buildings	Watercourses as defined in law (these included rivers, streams and can include some ditches)
It has a channel (a depression between banks or ridges with a definite boundary)	Components built primarily for the drainage of surface water from streets or the drainage of land
It conveys and returns flows to a sewer or to a surface water body or to groundwater	Components built to manage groundwater
It has an effective point of discharge, which must have lawful authority to discharge into a watercourse or other water body or into land. As with conventional piped systems, this right to discharge must be secured by the developer and transferred to the sewerage company on adoption	Components which are part of the structure of a building or yard (e.g., green roof, pervious driveway or guttering and rainwater pipes attached to the building)
	Components which are an integral part of the structure of a street (e.g., a pervious street or channel formed by kerb of a conventional road or channel formed by a depression in the centre of a street)

Using the above criteria, it will not be possible to offer any of the drainage elements up for adoption.

2 Maintenance for non-adoptable drainage elements

All drainage elements on site are privately owned and will be maintained by a private maintenance company employed by the building owners. The contact details for this company are not currently known but this document will be included in the operations and maintenance manual for the site and form instructions to the maintenance company on how and when to properly maintain and service the drainage.

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2.1 Below Ground Drainage

The entire drainage system should be monitored monthly by lifting the covers to the manholes and chambers to monitor debris build-up. If required, these are to be cleaned at the earliest opportunity to prevent blockages.

Every six months, the drainage system should be inspected to identify areas that are not operating as required and any remedial works identified should be carried out at the earliest opportunity.

The system should be cleaned out at 12 monthly intervals and includes the removal of sediment from all structures that have capacity to accommodate sediment storage.

Debris removed from the catch pits should be removed by a suitably qualified and accredited contractor and an appropriate waste transfer or waste disposal certificate should be kept as record.

A full CCTV survey of the surface water drainage system should also be carried out at 10 yearly intervals to assess the condition of the drainage system.

Appendix A Drainage General Arrangement

SOAKAWAY SETTING OUT

SOP N°	SETTING OUT COORDS		LEVEL (mAOD)	
	Eastings	Northing	SOFFIT	INVERT
SOP01	445795.017	118204.657	TBC	TBC
SOP02	445804.826	118193.309	TBC	TBC
SOP03	445798.772	118198.078	TBC	TBC
SOP04	445788.964	118199.427	TBC	TBC
SOP05	445827.692	118166.528	TBC	TBC
SOP06	445838.157	118154.423	TBC	TBC
SOP07	445832.104	118149.193	TBC	TBC
SOP08	445821.641	118161.298	TBC	TBC
SOP09	445780.040	118171.334	TBC	TBC
SOP10	445782.657	118168.308	TBC	TBC
SOP11	445781.079	118167.075	TBC	TBC
SOP12	445778.527	118170.025	TBC	TBC

PROPOSED PRIVATE FOUL WATER MANHOLE SCHEDULE

MANHOLE REF	MANHOLE TYPE	APPROX. COVER LVL	INVERT LVL OF INCOMING PIPE	DIAMETER OF LARGEST PIPE	APPROX. DEPTH	INTERNAL SIZE	COVER TYPE CLEAR OPENING	LOAD CLASS	SETTING OUT COORDS		REMARKS
									Eastings	Northing	
PIC F1	MDPE INSPECTION	14.080	13.150	1500	0.930	4500	600x600	C250	445815.606	118185.910	
PIC F2	MDPE INSPECTION	14.080	13.150	1500	0.930	4500	600x600	C250	445827.674	118171.958	
PIC F3	MDPE INSPECTION	14.080	12.950	1500	1.130	4500	600x600	C250	445826.699	118173.088	
MH F1	PCC RING	14.450	TBC	1500	TBC	12000	600x600	D400	445813.653	118157.694	NEW MANHOLE OVER EXISTING RUN. BD IL: 12.600

WAVIN AQUACELL STORMWATER SOAKAWAY TANK OR SIMILAR APPROVED WRAPPED IN PERMEABLE MEMBRANE. 15.0m x 8.0m x 0.8m DEEP GIVING 91.2m³ OF STORAGE WITH 95% VOIDS.
IL OF SOAKAWAY: 11.500

CONNECT FRENCH DRAIN TO SURFACE WATER CHAMBER AT HIGH LEVEL

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CONNECT FRENCH DRAIN TO SURFACE WATER CHAMBER AT HIGH LEVEL

WAVIN AQUACELL STORMWATER SOAKAWAY TANK OR SIMILAR APPROVED WRAPPED IN PERMEABLE MEMBRANE. 16.0m x 8.0m x 0.8m DEEP GIVING 97.3m³ OF STORAGE WITH 95% VOIDS.
IL OF SOAKAWAY: 11.500.

CONTRACTOR TO CLEAN OUT MANHOLE AND PROVE CONDITION OF DOWNSTREAM DRAINAGE

3750 PUBLIC FOUL SEWER

EXISTING DRAINAGE BLOCKED. UNABLE TO CONFIRM IF PIPEWORK SERVES OTHER BUILDINGS.

DRAINAGE KEY

	EXISTING PRIVATE SURFACE WATER SEWER
	PROPOSED PRIVATE SURFACE WATER SEWER
	EXISTING PRIVATE FOUL WATER SEWER
	PROPOSED PRIVATE FOUL WATER SEWER
	EXISTING PUBLIC FOUL WATER SEWER
	FRENCH DRAIN
	ABANDONED DRAINAGE (NOT SHOWN AT CONTRACTORS REQUEST)
	PROPOSED PRIVATE SURFACE WATER PRECAST CONCRETE RING MANHOLE
	PROPOSED PRIVATE SURFACE WATER MDPE INSPECTION CHAMBER
	EXISTING PRIVATE SURFACE WATER MANHOLE
	PROPOSED PRIVATE FOUL WATER PRECAST CONCRETE RING MANHOLE
	PROPOSED PRIVATE FOUL WATER MDPE INSPECTION CHAMBER
	EXISTING PRIVATE FOUL WATER MANHOLE
	EXISTING PUBLIC FOUL WATER MANHOLE
	PROPOSED CHANNEL DRAIN
	PERMATREAT HD. OUTLET FROM CHANNEL EVERY METER TO ADJACENT BIOMAT UNITS FOR HYDROCARBON INTERCEPTION. POSITIVE CONNECTION TO BELOW GROUND DRAINAGE FROM END OF UNITS.
	CHANNEL OUTLET
	RODDABLE TRAPPED CHANNEL OUTLET
	STUB STACK / STUB STACK + AIR ADMITTANCE VALVE
	SOIL VENT PIPE
	POLYPROPYLENE INSPECTION CHAMBER
	MANHOLE
	BACKDROP

EXISTING PUBLIC FOUL WATER MANHOLE SCHEDULE

MANHOLE REF	MANHOLE TYPE	APPROX. COVER LVL	INVERT LVL OF INCOMING PIPE	DIAMETER OF LARGEST PIPE	APPROX. DEPTH	INTERNAL SIZE	COVER TYPE CLEAR OPENING	LOAD CLASS	SETTING OUT COORDS		REMARKS
									Eastings	Northing	
EXMH F1	EXISTING	13.930	10.830	3000	3.100	EXISTING	600x600	D400	-	-	DROP SHAFT MANHOLE
EXMH F2	EXISTING	13.930	7.780	3750	6.150	EXISTING	600x600	D400	-	-	
EXMH F3	EXISTING	14.045	11.350	1500	2.695	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	COVER LEVEL TO BE ADJUSTED

PROPOSED PRIVATE SURFACE WATER MANHOLE SCHEDULE

MANHOLE REF	MANHOLE TYPE	APPROX. COVER LVL	INVERT LVL OF INCOMING PIPE	DIAMETER OF LARGEST PIPE	APPROX. DEPTH	INTERNAL SIZE	COVER TYPE CLEAR OPENING	LOAD CLASS	SETTING OUT COORDS		REMARKS
									Eastings	Northing	
PIC S1	MDPE INSPECTION	14.050	13.300	1500	0.750	4500	600x600	D400	445813.304	118229.889	
PIC S2	MDPE INSPECTION	14.050	13.300	1500	0.750	4500	600x600	D400	445836.031	118203.587	
PIC S2a	MDPE INSPECTION	14.050	13.095	1500	0.955	4500	600x600	D400	445822.873	118218.815	
PIC S3	MDPE INSPECTION	14.155	12.550	1500	1.605	4500	350x350	D400	445788.486	118211.904	REDUCED ACCESS COVER.
PIC S4	MDPE INSPECTION	14.080	12.370	2250	1.710	6000	600x600	D400	445794.052	118210.856	
PIC S5	MDPE INSPECTION	14.055	12.550	1500	1.505	4500	600x600	D400	445813.484	118185.851	REDUCED ACCESS COVER.
PIC S6	MDPE INSPECTION	14.080	12.400	2250	1.680	6000	600x600	D400	445813.440	118188.417	
MH S2	PCC RING	14.080	12.280	2250	1.800	12000	600x600	D400	445802.435	118201.155	500mm SUMP IN BASE OF MANHOLE
PIC S7	MDPE INSPECTION	14.000	13.300	1500	0.700	4500	600x600	D400	445848.022	118188.969	
PIC S8	MDPE INSPECTION	13.950	13.300	1500	0.650	4500	600x600	D400	445868.593	118165.274	
PIC S9	MDPE INSPECTION	13.800	13.115	1500	0.685	4500	600x600	D400	445860.160	118175.034	
PIC S10	MDPE INSPECTION	14.055	12.550	1500	1.505	4500	350x350	D400	445826.593	118170.695	REDUCED ACCESS COVER.
PIC S11	MDPE INSPECTION	14.075	12.400	2250	1.675	6000	600x600	D400	445828.002	118171.179	
MH S3	PCC RING	14.040	12.550	1500	1.490	10500	600x600	D400	445853.726	118142.101	
PIC S12	MDPE INSPECTION	14.055	12.550	1500	1.505	4500	350x350	D400	445847.873	118145.095	REDUCED ACCESS COVER.
PIC S13	MDPE INSPECTION	14.075	12.385	2250	1.680	6000	600x600	D400	445848.918	118145.999	
MH S4	PCC RING	14.075	12.280	2250	1.795	12000	600x600	D400	445839.849	118157.483	500mm SUMP IN BASE OF MANHOLE
PIC S14	MDPE INSPECTION	14.275	12.650	1500	1.625	4500	350x350	D400	445775.113	118198.416	REDUCED ACCESS COVER.
MH S5	PCC RING	14.300	12.380	1500	1.940	12000	600x600	D400	445794.584	118175.906	
PIC S15	MDPE INSPECTION	14.380	12.950	1500	1.430	4500	350x350	D400	445807.551	118160.061	REDUCED ACCESS COVER.
MH S6	PCC RING	14.425	12.950	1500	1.475	10500	600x600	D400	445824.615	118141.155	
MH S7	PCC RING	14.455	12.950	1500	1.505	10500	600x600	D400	445836.720	118127.159	
MH S8	PCC RING	14.480	13.050	1500	1.430	10500	600x600	D400	445782.838	118166.627	

EXISTING PRIVATE SURFACE WATER MANHOLE SCHEDULE

MANHOLE REF	MANHOLE TYPE	APPROX. COVER LVL	INVERT LVL OF INCOMING PIPE	DIAMETER OF LARGEST PIPE	APPROX. DEPTH	INTERNAL SIZE	COVER TYPE CLEAR OPENING	LOAD CLASS	SETTING OUT COORDS		REMARKS
									Eastings	Northing	
EXMH S1	EXISTING	14.030	11.685	TBC	2.345	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	COVER LEVEL TO BE ADJUSTED
EXMH S2	EXISTING	14.020	11.520	TBC	2.500	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	COVER LEVEL TO BE ADJUSTED
EXMH S4	EXISTING	14.045	TBC	1500	TBC	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	MANHOLE TO BE CLEANED COVER LEVEL TO BE ADJUSTED

- ALL EXISTING SERVICES TO BE LOCATED PRIOR TO COMMENCEMENT OF ANY DRAINAGE WORKS, AND WHERE NECESSARY PROTECTION OR DIVERSIONS TO BE UNDERTAKEN TO AVOID CONFLICT WITH THE PROPOSED WORK.
- ALL PROPOSED SERVICES TO BE COORDINATED WITH PROPOSED UNDERGROUND DRAINAGE.
- THIS DESIGN IS DEPENDANT ON LLFA APPROVAL OF DRAINAGE PROPOSAL AND SUITABILITY OF CONNECTION TO THE PUBLIC SEWER. NO WORKS ARE TO COMMENCE UNTIL CONSENT TO CONNECT IS RECEIVED FROM HAMPSHIRE COUNTY COUNCIL.
- ALL EXISTING DRAINS TO BE ABANDONED SHALL BE EITHER REMOVED OR GROUTED UP IF NOT POSSIBLE. GROUTING TO BE PERFORMED BY CAPPING ALL ENDS / CONNECTIONS AND FILLING THE RETAINING VOID WITH GROUT, IN ACCORDANCE WITH CIVIL ENGINEERING SPECIFICATION FOR THE WATER INDUSTRY 7th EDITION (CESWI) 7TH EDITION.
- ALL SOFT SPOTS TO BE REMOVED FROM BOTTOM OF EXCAVATIONS AND TO BE REFILLED TO FORMATION LEVEL IN ACCORDANCE WITH GROUNDWORKS SPECIFICATIONS.
- FOUNDATIONS ADJACENT TO DRAIN RUNS ARE TO BE CONSTRUCTED SO THAT THE DIFFERENCE BETWEEN THE FORMATION LEVEL OF THE FOUNDATION AND INVERT LEVEL OF ANY DRAIN MUST NOT EXCEED THE HORIZONTAL DISTANCE MINUS 50MM.
- WHERE DRAIN RUNS ARE TO BE CAST INTO FOUNDATIONS, A MINIMUM OF 75MM OF CONCRETE IS TO BE MAINTAINED BETWEEN THE OUTSIDE OF THE PIPE AND THE TOP OR BOTTOM REINFORCEMENT OF THE FOUNDATION.
- UNLESS SPECIFIED OTHERWISE PIPE INVERT LEVELS AT MANHOLES AND CHAMBERS TO BE AT SAME LEVEL AS INVERT LEVEL OF CHAMBER
- ALL EXTERNAL DRAINAGE SHOWN ON THIS DRAWING HAS BEEN BASED UPON CLAY/CONCRETE (VITRIFIED CLAYWARE TO BS 65 AND BS EN 295 OR CONCRETE TO BS 5911-1 & BS EN 1916 AND FLEXIBLY JOINTED)
- ALL DRAIN RUNS BELOW STRUCTURAL SLAB ARE TO BE CAST IRON TAVERBY ST-COBAIN OR SIMILAR APPROVED. ROCKER PIPES TO BE FITTED TO ALL CAST IRON DRAINAGE AT THE POINT WHERE THE PIPE EMERGES FROM BENEATH THE SLAB
- ALL PRIVATE DRAINAGE WORKS TO BE IN ACCORDANCE WITH 'CIVIL ENGINEERING SPECIFICATION FOR THE WATER INDUSTRY 7th EDITION', BS EN 752 2017 'DRAIN AND SEWER SYSTEMS OUTSIDE BUILDINGS' AND THE BUILDING REGULATIONS APPROVED 'DOCUMENT H'.
- ALL PRIVATE DRAINAGE PIPES WITH A COVER OF LESS THAN 900mm IN NON-TRAFFICKED AREAS AND LESS THAN 1200mm IN TRAFFICKED AREAS TO BE BEDDED AND SURROUNDED IN CONCRETE (CLASS 2). COMPRESSIBLE MATERIAL SHALL BE PROVIDED AT EVERY PIPE JOINT. WHERE COVER EXCEEDS THIS DEPTH, PIPES ARE TYPICALLY BEDDED AND SURROUNDED IN CLASS 3. REFER TO DRAINAGE DETAILS DRAWING FOR SPECIFIC TYPES.
- BACKFILL TO DRAINAGE TRENCHES UNDER HARDSTANDING AREAS TO BE TYPE 1 SUB BASE MATERIAL. ELSEWHERE BACKFILL TO BE FREE DRAINING READILY COMPATIBLE MATERIAL FREE FROM DETRITUS, ORGANIC MATTER, FROZEN SOIL CLAY LUMPS AND LARGE STONES. TO BE COMPACTED IN LAYERS NOT EXCEEDING 150mm THICK.
- WHERE FOUL SEWERS RUN ABOVE SURFACE SEWERS, CONCRETE PROTECTION MAY BE REQUIRED AT CROSSEOVERS TO PREVENT ANY POTENTIAL CONTAMINATION. WHERE FOUL AND SURFACE WATER SEWERS CROSS AND THERE IS LESS THAN 100MM CLEARANCE SHORT LENGTHS OF BOTH RUNS ARE TO BE ENCASED IN CONCRETE.
- THE FIRST PIPE OUT OF MANHOLES TO BE AS SHORT AS PRACTICABLE SO AS TO PROVIDE A FLEXIBLE JOINT AS CLOSE AS POSSIBLE TO THE OUTSIDE FACE OF THE CONCRETE SURROUND AND CONNECTED TO A LENGTH OF ROCKER PIPE.
- ALL CONNECTIONS PASSING THROUGH BASES OR EDGE BEAMS TO BE IN SEALED SLEEVES. ALTERNATIVELY CONNECTIONS MAY BE CAST-IN WITH FLEXIBLE JOINTS NOT GREATER THAN 150MM FROM FACE OF CONCRETE.
- WHERE DRAINAGE PIPES ARE LESS THAN 300mm BELOW THE UNDERSIDE OF THE GROUND FLOOR SLAB, CONCRETE ENCASUREMENT IS REQUIRED (CLASS 2). COMPRESSIBLE JOINTS ARE TO BE PROVIDED AT EVERY PIPE JOINT WITHIN THE CONCRETE. WHERE PIPES ARE MORE THAN 300mm BELOW THE UNDERSIDE OF THE SLAB, CLASS 3 BEDDING IS ACCEPTABLE.
- SEWERS MUST HAVE 5m CLEARANCE FROM TREES AND HEDGES OR TO HAVE SUITABLE ROOT PROTECTION IN ACCORDANCE WITH SFA REQUIREMENTS.
- ALL INTERNAL DRAINAGE POSITIONS ARE TAKEN FROM ARCHITECT'S/M&E CONSULTANTS DRAWINGS. REFER TO AFOREMENTIONED FOR SETTING-OUT.
- REFER TO ARCHITECT'S M&E CONSULTANTS INFORMATION FOR SETTING-OUT OF DRAINAGE ABOVE GROUND FLOOR SLAB. RAINWATER AND FOUL WATER POP UP LOCATIONS AND SIZES TO BE CONFIRMED BY ARCHITECT AND M&E ENGINEER.
- ALL UNDERGROUND FOUL DRAINAGE SHOULD BE SUITABLY VENTED AT OR NEAR TO THE HEAD OF RUNS.
- ALL ACCESS FITTINGS, STACKS, R/WPS AND GULLIES TO BE RODDABLE. ALL TO HAVE LOW LEVEL RODDING ACCESS PLATES UNLESS AN ALTERNATIVE MEANS OF ACCESS IS AGREED. ACCESS POINT TO BE ABOVE ANY GROUND FLOOR CONNECTED APPLIANCE SPILL LEVEL.
- ALL GULLY AND CHANNEL DRAIN OUTLETS AND TERMINATION POINTS TO BE TRAPPED AND RODDABLE.
- ALL BRANCH CONNECTIONS TO BE MADE WITH SWEEP BENDS IN THE DIRECTION OF FLOW IN THE MAIN SEWER.
- WHERE NO WC'S ARE CONNECTED UPSTREAM, UNDERSLAB FW DRAINAGE TO BE LAID AT 1:40 MIN. AFTER THE CONNECTION OF AT LEAST TWO WC, A FALL OF 1:80 APPLIES.
- ALL FOUL MANHOLES, INSPECTION CHAMBERS, RODDING EYES & PUMP CHAMBER TO HAVE DOUBLE SEALED COVERS.
- SOAKAWAY UNITS TO BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS DETAILS.
- COVER LEVELS, GULLY POSITIONS, AND BUILDING LOCATION ARE APPROXIMATE AND SHALL BE CONFIRMED BY ARCHITECT/LANDSCAPE ARCHITECT. CONTRACTOR TO ALLOW FOR ADJUSTMENT TO SUIT AGREED POSITIONS AND FINISHED LEVELS, AND CONFIRM ALL COVER LEVELS ON SITE.
- BR385 SOAKAWAY TESTS CARRIED OUT ON SITE JUNE 2019 HAS SHOWN THE INFILTRATION RATE TO BE 0.9611m/hr, 0.6909m/hr & 0.4306m/hr. THE SOAKAWAYS HAVE BEEN DESIGNED TO SUIT THE 0.6909m/hr INFILTRATION RATE FOR BOTH AREAS.
- ALL SOAKAWAYS TO BE SITED 5m MINIMUM FROM ANY BUILDING OR WALL, EXISTING OR PROPOSED, & 10m FROM ANY OTHER SOAKAWAY.
- NO SOAKAWAY BASES TO PENETRATE WATER TABLE LEVEL. NO SOAKAWAY TO BE CONSTRUCTED IN CONTAMINATED GROUND.
- ALL PIPEWORK TO BE 1000 UNLESS OTHERWISE NOTED ON THE DRAWING

CHANNEL SETTING OUT

SOP N°	SETTING OUT COORDS	
	Eastings	Northing
SOP13	445794.617	118212.449
SOP14	445795.273	118211.691
SOP15	445813.645	118190.449
SOP16	445814.872	118189.032
SOP17	445824.413	118177.996
SOP18	445825.641	118176.578
SOP19	445829.960	118171.698
SOP20	445831.087	118170.281
SOP21	445849.470	118149.023
SOP22	445850.127	118148.265
SOP23	445789.301	118211.081
SOP24	445846.157	118145.240
SOP25	445873.970	118158.429
SOP26	445851.669	118138.857
SOP27	445847.324	118143.888
SOP28	445772.282	118198.550
SOP29	445838.589	118121.759
SOP30	445770.126	118175.220
SOP31	445781.886	118164.599

EXMH14 IS SHOWN AS BEING FULL OF RUBBLE ON THE SUMO SURVEY. THE CONDITION AND SUITABILITY OF USING THE EXISTING SURFACE WATER SEWER IS UNKNOWN.
UNTIL THE FULL CONDITION OF THIS MANHOLE AND DOWNSTREAM PIPEWORK IS KNOWN ALL CONNECTIONS FROM THE PROPOSED DRAINAGE TO THE EXISTING SEWER BETWEEN EXMH1 AND THE DOWNSTREAM PIPEWORK FROM EXMH14 ARE TO BE TREATED AS IN ABEYANCE.

- GENERAL NOTES
1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE EVOLVE DESIGN STATEMENT.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, SERVICES & SPECIALIST MANUFACTURERS DETAILS, DRAWINGS AND SPECIFICATIONS.
3. DO NOT SCALE THIS DRAWING. IF IN DOUBT ASK. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. ALL DIMENSIONS TO EXISTING ELEMENTS ARE TO BE CHECKED AND CONFIRMED ON SITE BY CONTRACTOR.

NOTES

- THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING:-
- (i). ALL OPERATIONS SHOULD BE CARRIED OUT IN ACCORDANCE WITH THE GENERAL HEALTH AND SAFETY POLICY OF THE DEVELOPER AS REQUIRED BY SECTIONS 2 OF THE HEALTH AND SAFETY AT WORK ACT 1974 AND IN PARTICULAR THE CONSTRUCTION (GENERAL PROVISIONS) REGULATIONS.
- (ii). THE LOCAL AUTHORITY AND UTILITIES COMPANIES ARE TO BE NOTIFIED PRIOR TO COMMENCEMENT OF WORK ON SITE.
- (iii). PRIOR TO CONSTRUCTION THE ACTUAL POSITIONS AND DEPTHS OF SERVICES LIKELY TO BE AFFECTED BY THE WORKS SHOULD BE ESTABLISHED BY MEANS OF HAND DIG IN CLOSE LIAISON WITH THE UTILITY COMPANIES. THE CONTRACTOR SHALL IMMEDIATELY ADVISE THE ENGINEER OF ANY SERVICES EXPOSED WHICH MAY AFFECT THE DESIGN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT PIPES ARE ADEQUATELY PROTECTED FROM CONCENTRATED LOADING BY CONSTRUCTION TRAFFIC DURING THE CONSTRUCTION PERIOD. EVOLVE ARE RESPONSIBLE FOR PERMANENT WORKS ONLY. ANY TEMPORARY BUILD UPS ARE TO BE PROPOSED AND APPROVED BY THE CONTRACTOR PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL ALLOW FOR THE PROTECTION, TEMPORARY AND PERMANENT SUPPORT, AND TEMPORARY AND PERMANENT DIVERSION WORKS, AS NECESSARY TO ALL EXISTING SERVICES.
- THE CONTRACTOR SHALL ALLOW FOR KEEPING TRENCHES AND EXCAVATIONS AS DRY AS PRACTICABLE BY PUMPING FROM TEMPORARY SUMPS AND DE-WATERING AS APPROPRIATE. THE POINT AND METHOD OF DISCHARGE TO BE AGREED WITH THE DRAINAGE AUTHORITY, LLFA AND ENVIRONMENT AGENCY.
- ALL DRAINS TO BE CCTV SURVEYED ON COMPLETION OF THE WORKS.

P	06.02.23	REVISED AS CLOUDED	PW	PW
O	09.01.23	ACO ROADRAIN SPEC. ADDED	LG	PW
N	22.12.22	DRAINAGE UPDATED TO SUIT 1:40 MAX GRADIENT IN SERVICE YARD	PW	PW
M	12.12.22	REVISED AS CLOUDED	PW	PW
L	01.12.22	REVISED AS CLOUDED	PW	PW
K	07.11.22	DRAINAGE UPDATED AFTER RECEIPT OF SUMO SERVICES SURVEY AND LEVELS DRAWING	PW	PW
J	17.10.22	REVISED AS CLOUDED	PW	PW
H	12.09.22	ISSUED FOR CONSTRUCTION	PW	SG
G	15.03.21	DRAINAGE MOVED TO SUIT REVISED BUILDING POSITION. GRIDS ADDED FOR COORDINATION.	PW	SG
F	01.03.21	REVISED TO SUIT LATEST LAYOUT. REISSUED FOR TENDER	PW	SG
E	04.09.20	REVISED AS CLOUDED	PW	SG
D	20.07.20	STACK ADDED IN UNIT 220. DRAINAGE COORDINATED WITH BUILDING PHASING	PW	SG
C	06.07.20	STACK REMOVED IN UNIT 220. DRAINAGE UPDATED TO SUIT. RE-ASSUED FOR TENDER	PW	SG
B	03.07.20	TENDER ISSUE	PW	SG
A	26.06.20	WORK IN PROGRESS ISSUE	PW	SG
Rev.	Revision		By	Ch