

DO NOT SCALE (A0)

NOTES

GENERAL NOTES

1. ALL MATERIALS AND WORKMANSHIP IS TO COMPLY WITH JPG CONSULTANTS STANDARD SPECIFICATION & ALL RELEVANT BRITISH & EUROPEAN STANDARDS.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OUTSIDE BUILDINGS, THE CURRENT BUILDING REGULATIONS, RELEVANT ARCHITECTURAL & E.C. CONSULTANTS AND JPG CONSULTANTS DRAWINGS.
3. ANY DISCREPANCIES SHOULD BE REPORTED TO THE ENGINEER IMMEDIATELY SO THAT CLARIFICATION CAN BE SOUGHT PRIOR TO COMMENCEMENT OF WORKS.

DRAINAGE NOTES

1. ALL BUILDING DRAINAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH BS 752 DRAINAGE AND SEWER SYSTEMS OUTSIDE BUILDINGS, THE CURRENT BUILDING REGULATIONS, CODES FOR ADOPTION AND THE LOCAL AUTHORITY BUILDING CONTROL SPECIFIC REQUIREMENTS OF THE ADOPTING SEWERAGE/WATER AUTHORITY.
2. ANY DRAINAGE TO BE PUT FORWARD FOR ADOPTION EITHER WITHIN THE SITE OR OUTSIDE SHALL BE CONSTRUCTED TO THE DESIGN AND SEWER GUIDANCE CODES FOR ADOPTION LATEST EDITION AND ANY SPECIFIC REQUIREMENTS OF THE ADOPTING SEWERAGE/WATER AUTHORITY.
3. THE LOCATION, SIZE AND DEPTH OF ALL EXISTING DRAINS/SEWERS AND SERVICES SHALL BE ESTABLISHED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORKS ON SITE. ANY DISCREPANCIES FROM THE INFORMATION INDICATED ON THESE DRAWINGS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
4. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SHOULD ANY EXISTING LIVE DRAINAGE BE FOUND WITHIN THE SITE OF THE SERVICE ADJACENT TO THE PROPOSED WORKS.
5. ALL EXISTING DRAINAGE WITHIN THE SITE NOT REQUIRED FOR THE NEW DEVELOPMENT SHALL BE ABANDONED, DRAINS AND SEWERS LESS THAN 1.500m DEEP WHICH ARE IN OPEN GROUND SHOULD AS FAR AS IS PRACTICABLE BE FULLY REMOVED AT ANY POINT OF CONNECTION, AND BE GROUT FILLED TO PREVENT RATS CANNOT GAIN ACCESS, LARGER PIPES 2250 OR ABOVE SHOULD BE GROUT FILLED TO PREVENT SUBSIDENCE OR DAMAGE TO BUILDINGS OR SERVICES IN THE EVENT OF COLLAPSE.
6. THE CONTRACTOR SHALL ALLOW FOR THE PROTECTION, TEMPORARY AND PERMANENT SUPPORT AND DIVERSION WORKS AS NECESSARY, TO ALL EXISTING SERVICES TO THE SATISFACTION OF THE UTILITY COMPANIES.
7. THE CONTRACTOR SHALL ALLOW FOR DEALING WITH SURFACE WATER RUN OFF INTO EXCAVATIONS AND FROM SUBTERRANEAN SERVICES BY MEANS OF SHIMS, PUMPING AND DE WATERING AS APPROPRIATE, IN ORDER TO KEEP THE EXCAVATION AS REASONABLY DRY AS POSSIBLE DURING THE CONSTRUCTION OF THE WORKS.
8. THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS IN LINE WITH CURRENT LEGISLATION WHEN WORKING IN NEARLY COVERED SPACES, DEEP EXCAVATIONS AND MACHINERY.
9. THE CONTRACTOR SHALL ALLOW FOR OBTAINING ALL APPROVALS FROM THE RELEVANT AUTHORITIES WHEN WORKING IN THE PUBLIC HIGHWAY AND ON THE SEWERAGE SYSTEM.
10. THE CONTRACTOR SHALL SUITABLY PROTECT PEDESTRIANS AND VEHICLES FROM WORKING AREAS.
11. ALL MANHOLE CHAMBER COVER LEVELS ARE APPROXIMATE AND SHALL BE ADJUSTED ON SITE TO SUIT THE PROPOSED FINISHED LEVELS.
12. ALL PIPES SHALL BE Laid WITH LEVEL SOFFITS AND ALL MANHOLE/INJECTION CHAMBER INVERT LEVELS SHOWN ARE FOR THE OUT GOING PIPE UNDO, ON THE DRAWING (NOTE THAT ALL PIPE GRADIENTS INDICATED ON THE DRAWING ARE APPROXIMATE ONLY).
13. ALL PIPE CONNECTION FROM DRAINAGE CHANNELS AND GULLIES SHALL BE 1500 PIPES AT A MINIMUM GRADIENT OF 1:100 WITH CLASS 2 BEDDING UNDO, ON THE DRAWING.
14. ALL PIPE CONNECTIONS FROM RWPS TO FIRST CHAMBER SHALL BE 1000 AT 1:40 MIN, WITH CLASS 3 BEDDING BENEATH THE BUILDING AND CLASS 2 UNDER EXTERIORS WHERE COVER IS LESS THAN 1.200m UNDO, ON THE DRAWING. LOCATION OF RWPS AND RWPS TO BE CONFIRMED BY THE ARCHITECT AND ARE SHOWN INDICATIVELY ONLY.
15. ALL SYPHONIC RWP SYSTEMS TO BE DESIGNED BY OTHERS, PREWORK FROM DOWN PIPE TO FIRST MANHOLE TO BE SIZED/ DESIGNED BY SYPHONIC SYSTEM DESIGNER. THE FIRST MANHOLE TO HAVE AN OPEN GRATE COVER SAINT GOBAIN WATERWAY 2000 - CH40 OR SIMILAR APPROVED.
16. SUITABLY SIZED PERCOL INTERCEPTORS MUST COMPLY WITH THE REQUIREMENTS OUTLINE IN PIP03 THESE INCLUDE SILT STORAGE CAPACITY AND HIGH LEVEL HYDROCARBON ALARM, WRED BACK TO A MANNED OFFICE.
17. UPON COMPLETION OF THE DRAINAGE WORKS THE CONTRACTOR SHALL CLEAN ALL DRAIN RISERS BY JETTING AND REMOVE ALL DEBRIS FROM SITE. NO DEBRIS SHALL BE PERMITTED TO ENTER THE PUBLIC SEWER AND/OR WATERCOURSE SYSTEM. ONCE THE DRAINAGE SYSTEM HAS BEEN FULLY CLEANED OUT A CCTV CAMERA CONDITION SURVEY SHALL BE UNDERTAKEN TO ALL CONTRIBUTED DRAINAGE AND SEWER PIPES WITH THE FOOTAGE ISSUED TO THE ENGINEER FOR VIEW, THE AS BUILT INVERT AND COVER LEVELS SHALL BE RECORDED BY THE CONTRACTOR AND PASSED ON TO THE ENGINEER FOR REVIEW.

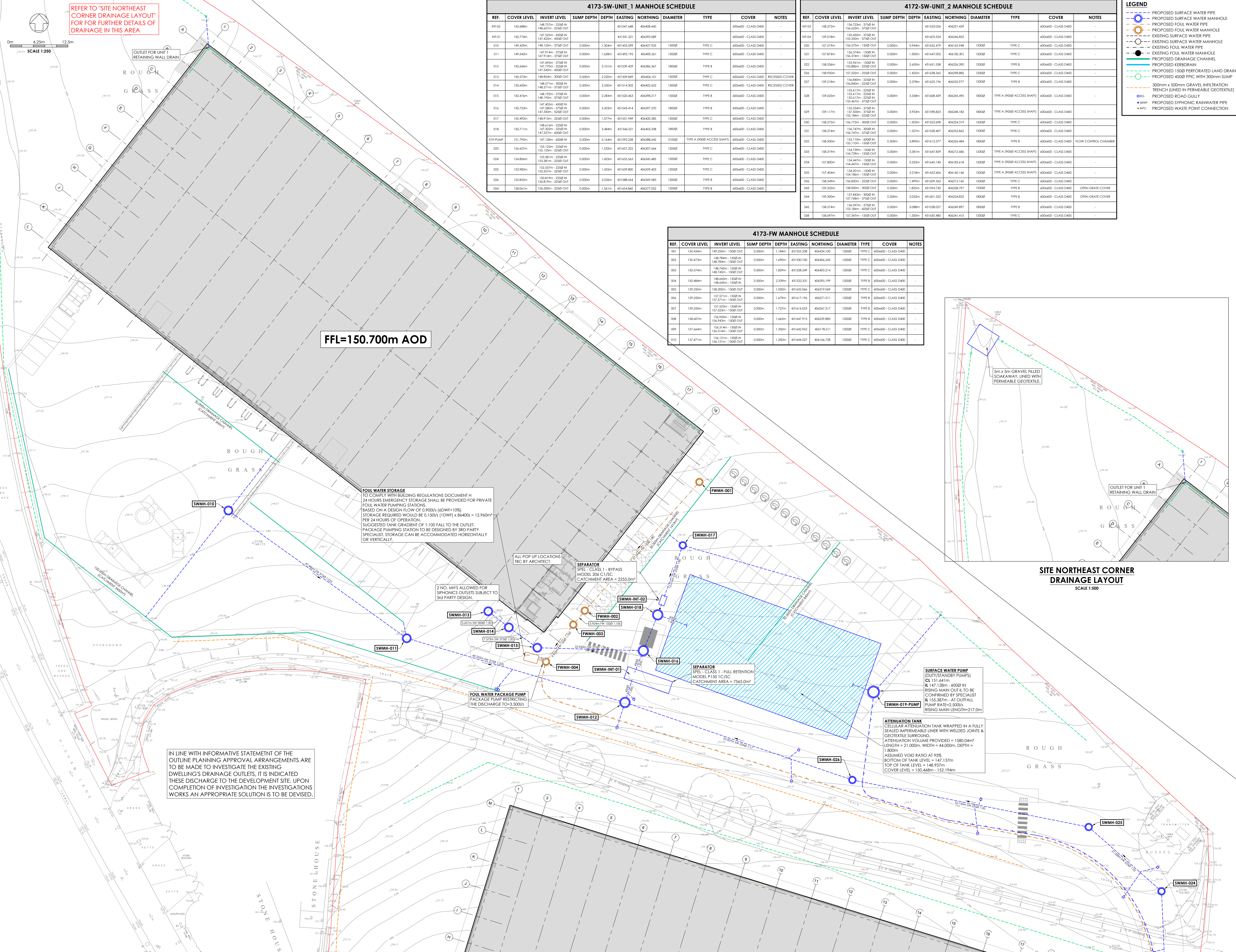
LEGEND

- PROPOSED SURFACE WATER PIPE
- PROPOSED SURFACE WATER MANHOLE
- PROPOSED FOUL WATER PIPE
- PROPOSED FOUL WATER MANHOLE
- EXISTING SURFACE WATER PIPE
- EXISTING SURFACE WATER MANHOLE
- EXISTING FOUL WATER PIPE
- EXISTING FOUL WATER MANHOLE
- PROPOSED DRAINAGE CHANNEL
- PROPOSED KERB DRAIN
- PROPOSED 1500 PERFORATED LAND DRAIN
- PROPOSED 4500 PPC WITH 300mm SUMP
- 300mm x 500mm GRAVEL INFILTRATION TRENCH (LINED IN PERMEABLE GEOTEXTILE)
- PROPOSED ROAD GULLY
- PROPOSED SYPHONIC RAINWATER PIPE
- PROPOSED WASTE POINT CONNECTION

4172-SW-UNIT_2 MANHOLE SCHEDULE										
REF.	COVER LEVEL	INVERT LEVEL	SUMP DEPTH	DEPTH	EASTING	NORTHING	DIAMETER	TYPE	COVER	NOTES
NH-03	128.272m	156.723m - 3750 IN 156.623m - 3750 OUT			431533.026	406251.439			600x600 - CLASS D400	-
NH-04	159.018m	156.623m - 3750 IN 155.350m - 3750 OUT			431603.324	406266.825			600x600 - CLASS D400	-
020	157.519m	156.575m - 1500 IN 156.374m - 1500 OUT	0.000m	0.844m	431652.479	406163.948	1200mm	TYPE C	600x600 - CLASS D400	-
021	157.874m	156.374m - 1500 IN 156.374m - 1500 OUT	0.000m	1.500m	431647.005	406185.301	1200mm	TYPE C	600x600 - CLASS D400	-
022	158.536m	155.961m - 1500 IN 155.866m - 2250 OUT	0.000m	2.650m	431651.538	406226.390	1200mm	TYPE B	600x600 - CLASS D400	-
026	158.550m	157.525m - 1500 IN 156.840m - 2250 OUT	0.000m	1.425m	431638.365	406298.885	1200mm	TYPE C	600x600 - CLASS D400	-
027	159.218m	156.840m - 2250 IN 156.840m - 2250 OUT	0.000m	2.378m	431625.194	406252.977	1200mm	TYPE B	600x600 - CLASS D400	-
028	159.025m	155.617m - 2250 IN 155.617m - 2250 IN 155.617m - 2250 IN	0.000m	3.558m	431608.439	406245.495	1800mm	TYPE A (R000 ACCESS SHAFT)	600x600 - CLASS D400	-
029	159.117m	155.334m - 3750 IN 157.300m - 3750 IN 155.100m - 1500 OUT	0.000m	3.933m	431598.823	406248.182	1800mm	TYPE A (R000 ACCESS SHAFT)	600x600 - CLASS D400	-
030	158.275m	156.723m - 3000 OUT	0.000m	1.503m	431553.698	406254.319	1500mm	TYPE C	600x600 - CLASS D400	-
031	158.274m	156.747m - 3000 IN 156.747m - 3750 OUT	0.000m	1.327m	431528.407	406252.862	1300mm	TYPE C	600x600 - CLASS D400	-
032	158.500m	155.100m - 6000 IN 155.100m - 1500 OUT	0.500m	3.890m	431613.377	406226.484	1800mm	TYPE B	600x600 - CLASS D400	FLOW CONTROL CHAMBER
033	158.319m	154.799m - 1500 IN 154.799m - 1500 OUT	0.000m	3.581m	431647.859	406212.866	1200mm	TYPE A (R000 ACCESS SHAFT)	600x600 - CLASS D400	-
034	157.800m	154.447m - 1500 IN 154.447m - 1500 OUT	0.000m	3.353m	431645.140	406183.618	1200mm	TYPE A (R000 ACCESS SHAFT)	600x600 - CLASS D400	-
035	157.404m	154.201m - 1500 IN 154.201m - 1500 OUT	0.000m	3.218m	431652.406	406160.146	1200mm	TYPE A (R000 ACCESS SHAFT)	600x600 - CLASS D400	-
036	158.349m	156.850m - 2250 OUT	0.000m	1.499m	431609.363	406215.160	1200mm	TYPE C	600x600 - CLASS D400	-
043	159.325m	158.000m - 3000 OUT	0.500m	1.825m	431594.742	406258.797	1300mm	TYPE B	600x600 - CLASS D400	OPEN GRATE COVER
044	159.300m	157.840m - 3000 IN 157.760m - 3750 OUT	0.500m	2.020m	431601.522	406254.832	1800mm	TYPE B	600x600 - CLASS D400	OPEN GRATE COVER
045	158.274m	155.977m - 3750 IN 155.180m - 6000 OUT	0.000m	3.088m	431538.057	406249.897	1800mm	TYPE B	600x600 - CLASS D400	-
058	158.697m	157.347m - 1500 OUT	0.000m	1.350m	431652.480	406241.415	1200mm	TYPE C	600x600 - CLASS D400	-

4173-SW-UNIT_1 MANHOLE SCHEDULE										
REF.	COVER LEVEL	INVERT LEVEL	SUMP DEPTH	DEPTH	EASTING	NORTHING	DIAMETER	TYPE	COVER	NOTES
INT-02	150.689m	148.757m - 2250 IN 148.657m - 2250 OUT			431547.448	406408.460			600x600 - CLASS D400	-
INT-01	150.774m	147.550m - 4000 IN 147.425m - 4000 OUT			431541.221	406392.089			600x600 - CLASS D400	-
010	149.429m	148.126m - 3750 OUT	0.000m	1.304m	431633.399	406427.925	1500mm	TYPE C	600x600 - CLASS D400	-
011	149.542m	147.914m - 3750 IN 147.770m - 2250 IN 147.240m - 4000 OUT	0.000m	1.628m	431492.195	406400.261	1500mm	TYPE C	600x600 - CLASS D400	-
012	150.646m	147.650m - 3750 IN 147.770m - 2250 IN 147.240m - 4000 OUT	0.000m	3.101m	431539.429	406386.367	1800mm	TYPE B	600x600 - CLASS D400	-
013	150.573m	148.854m - 3000 OUT	0.500m	2.220m	431509.849	406404.101	1500mm	TYPE C	600x600 - CLASS D400	RECESSED COVER
014	150.600m	148.917m - 3000 IN 147.300m - 5250 IN 147.300m - 5250 OUT	0.300m	2.530m	431514.302	406402.622	1500mm	TYPE C	600x600 - CLASS D400	RECESSED COVER
015	150.476m	148.107m - 3750 IN 148.192m - 3750 OUT	0.000m	2.284m	431520.463	406398.217	1500mm	TYPE B	600x600 - CLASS D400	-
016	150.733m	147.405m - 4000 IN 147.405m - 3750 IN 147.330m - 5250 OUT	0.000m	3.423m	431543.414	406397.570	1800mm	TYPE B	600x600 - CLASS D400	-
017	150.492m	148.913m - 2250 OUT	0.000m	1.577m	431551.949	406400.385	1200mm	TYPE C	600x600 - CLASS D400	-
018	150.711m	148.814m - 2250 IN 147.300m - 5250 IN 147.227m - 4000 OUT	0.000m	3.484m	431546.521	406405.338	1800mm	TYPE B	600x600 - CLASS D400	-
019-PUMP	151.792m	147.128m - 6000 IN	0.500m	1.544m	431593.228	406388.642	2100mm	TYPE A (R000 ACCESS SHAFT)	600x600 - CLASS D400	-
023	156.657m	155.125m - 2250 IN 155.125m - 2250 OUT	0.000m	1.532m	431657.222	406307.666	1200mm	TYPE C	600x600 - CLASS D400	-
024	154.806m	153.381m - 2250 IN 153.381m - 2250 OUT	0.000m	1.425m	431655.563	406345.485	1200mm	TYPE C	600x600 - CLASS D400	-
025	153.982m	152.557m - 2250 IN 152.557m - 2250 OUT	0.000m	1.425m	431639.600	406359.403	1200mm	TYPE C	600x600 - CLASS D400	-
026	152.855m	150.818m - 2250 IN 150.818m - 2250 OUT	0.000m	2.036m	431588.454	406349.583	1200mm	TYPE B	600x600 - CLASS D400	-
034	158.061m	156.500m - 2250 OUT	0.000m	1.561m	431654.860	406277.032	1200mm	TYPE B	600x600 - CLASS D400	-

4173-FW MANHOLE SCHEDULE										
REF.	COVER LEVEL	INVERT LEVEL	SUMP DEPTH	DEPTH	EASTING	NORTHING	DIAMETER	TYPE	COVER	NOTES
001	150.434m	149.250m - 1500 OUT	0.000m	1.184m	431555.538	406434.100	1200mm	TYPE C	600x600 - CLASS D400	-
002	150.473m	148.784m - 1500 IN 148.784m - 1500 OUT	0.000m	1.690m	431530.740	406406.245	1200mm	TYPE C	600x600 - CLASS D400	-
003	150.374m	148.745m - 1500 IN 148.745m - 1500 OUT	0.000m	1.809m	431538.249	406403.214	1200mm	TYPE C	600x600 - CLASS D400	-
004	150.484m	148.445m - 1500 IN 148.445m - 1500 IN	0.500m	2.339m	431522.331	406395.199	1200mm	TYPE B	600x600 - CLASS D400	-
005	159.220m	158.200m - 1500 OUT	0.000m	1.000m	431632.064	406319.069	1200mm	TYPE C	600x600 - CLASS D400	-
006	159.250m	157.571m - 1500 IN 157.571m - 1500 OUT	0.000m	1.479m	431617.196	406271.011	1200mm	TYPE B	600x600 - CLASS D400	-
007	159.250m	157.523m - 1500 IN 157.523m - 1500 OUT	0.000m	1.727m	431616.033	406267.317	1200mm	TYPE B	600x600 - CLASS D400	-
008	158.607m	156.943m - 1500 IN 156.943m - 1500 OUT	0.000m	1.665m	431647.915	406229.885	1200mm	TYPE B	600x600 - CLASS D400	-
009	157.644m	156.314m - 1500 IN 156.314m - 1500 OUT	0.000m	1.350m	431642.982	406178.211	1200mm	TYPE C	600x600 - CLASS D400	-
010	157.471m	156.121m - 1500 IN 156.121m - 1500 OUT	0.000m	1.350m	431644.227	406166.728	1200mm	TYPE C	600x600 - CLASS D400	-



IN LINE WITH INFORMATIVE STATEMENT OF THE OUTLINE PLANNING APPROVAL ARRANGEMENTS ARE TO BE MADE TO INVESTIGATE THE EXISTING DWELLING'S DRAINAGE OUTLETS, IT IS INDICATED THESE DISCHARGE TO THE DEVELOPMENT SITE. UPON COMPLETION OF INVESTIGATION THE INVESTIGATIONS WORKS AN APPROPRIATE SOLUTION IS TO BE DEVEID.

FOUL WATER STORAGE
TO COMPLY WITH BUILDING REGULATIONS DOCUMENT H 24 HOURS EMERGENCY STORAGE SHALL BE PROVIDED FOR PRIVATE FOUL WATER PUMPING STATIONS. BASED ON A DESIGN FLOW OF 0.900/s (6DWF+10%) STORAGE REQUIRED WOULD BE 0.150/s (1DWF) x 86400s = 12.960m³ PER 24 HOURS OF OPERATION. SUGGESTED TANK GRADIENT OF 1:100 FALL TO THE OUTLET. PACKAGE PUMPING STATION TO BE DESIGNED BY 3RD PARTY SPECIALIST. STORAGE CAN BE ACCOMMODATED HORIZONTALLY OR VERTICALLY.

2 NO. MHS ALLOWED FOR SYPHONICS OUTLETS SUBJECT TO 3RD PARTY DESIGN.

FOUL WATER PACKAGE PUMP
PACKAGE PUMP RESTRICTING THE DISCHARGE TO 3.500/s

ALL POP UP LOCATIONS TBC BY ARCHITECT

SEPARATOR
SPEL - CLASS 1 - BYPASS
MODEL 206 C1/SC
CATCHMENT AREA = 2255.0m²

SEPARATOR
SPEL - CLASS 1 - FULL RETENTION
MODEL P150 C1/SC
CATCHMENT AREA = 7565.0m²

SURFACE WATER PUMP
(DUTY/ST/ANDBY PUMPS)
CL 151.641m
IL 147.128m - 6000 IN
RISING MAIN OUT IL TO BE
CONFIRMED BY SPECIALIST
IL 155.387m - AT OUTFALL
PUMP RATE=2.500/s
RISING MAIN LENGTH=217.0m

ATTENUATION TANK
CELLULAR ATTENUATION TANK WRAPPED IN A FULLY SEALED IMPERMEABLE LINER WITH WELDED JOINTS & GEOTEXTILE SURROUND.
ATTENUATION VOLUME PROVIDED = 1580.04m³
LENGTH = 21.000m, WIDTH = 44.000m, DEPTH = 1.800m
ASSUMED VOID RATIO AT 95%
BOTTOM OF TANK LEVEL = 147.137m
TOP OF TANK LEVEL = 148.937m
COVER LEVEL = 150.468m - 152.194m

REV	DESCRIPTION	DATE	CHK	BY
P04	REVISED FOR COMPOUND LOCATION & POTENTIAL DRAINAGE	10.07.26	MDP	BT
P03	REVISED FOR LATEST SITE PLAN, LEVELS & POTENTIAL PHASING	07.05.26	MDP	BT
P02	TOPIC UPDATED FOR LATEST SURVEY	21.01.26	MDP	BT
P01	INITIAL ISSUE	30.09.25	BWR	BT

Project
HICHAM LANE NORTH,
JN 37, M1
DODWORTH

Drawing Title
DRAINAGE LAYOUT
SHEET 1 OF 2