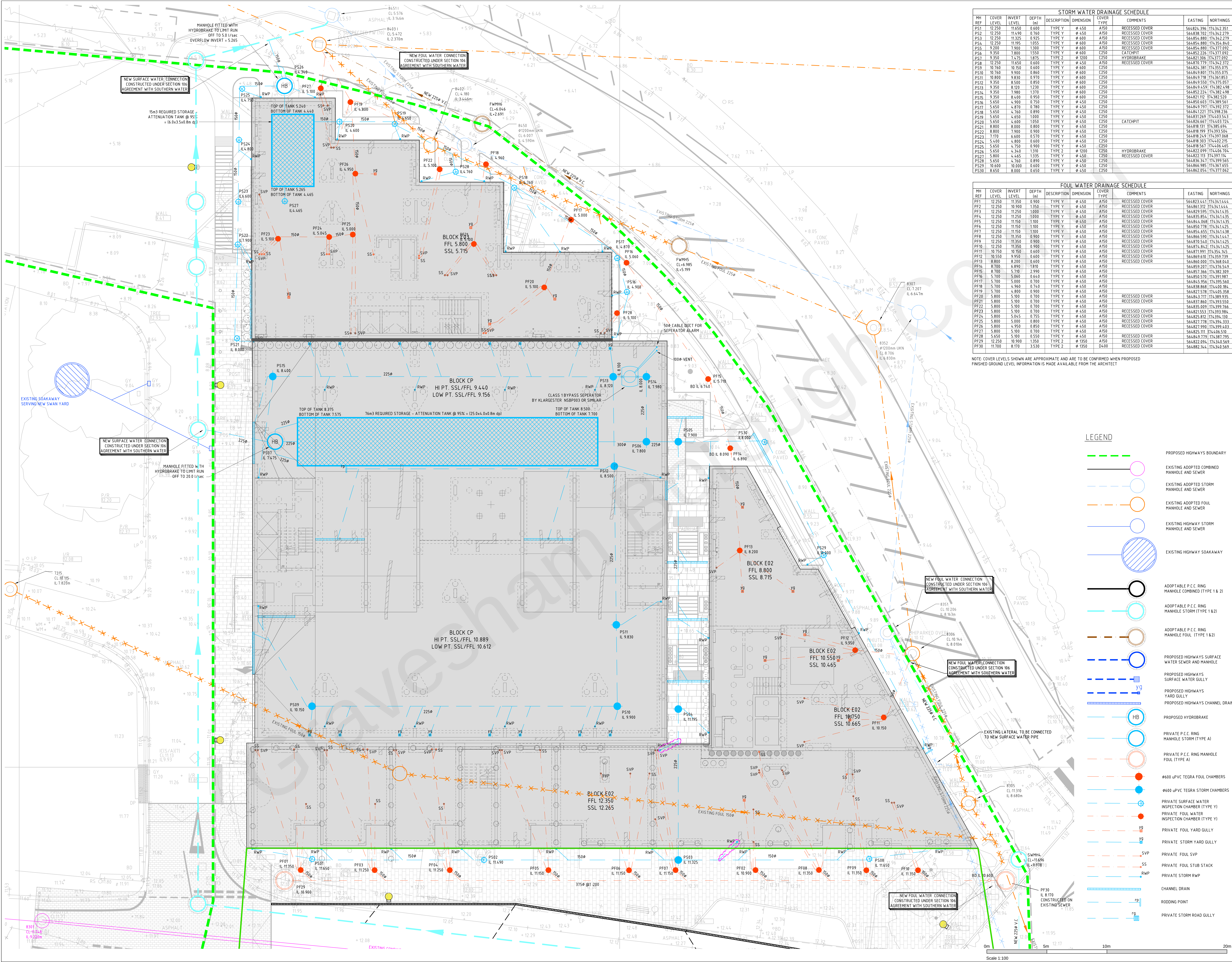




STORM WATER DRAINAGE SCHEDULE											
MH REF	COVER LEVEL	INVERT LEVEL	DEPTH (m)	DESCRIPTION	DIMENSION	COVER TYPE	COMMENTS	EASTING	NORTHINGS		
PS1	12.250	11.650	0.600	TYPE Y	Ø 450	A150	RECESSED COVER	564824.396	174342.351		
PS2	12.250	11.490	0.760	TYPE Y	Ø 450	A150	RECESSED COVER	564838.702	174342.279		
PS3	12.250	11.270	0.975	TYPE Y	Ø 600	A150	RECESSED COVER	564854.880	174342.279		
PS4	12.250	11.195	1.055	TYPE Y	Ø 600	A150	RECESSED COVER	564854.880	174342.844		
PS5	9.200	7.900	1.300	TYPE Y	Ø 600	A150	RECESSED COVER	564854.880	174371.092		
PS6	9.350	7.800	1.550	TYPE Y	Ø 600	C250	CATCHPIT	564854.226	174371.092		
PS7	9.350	7.475	1.875	TYPE Y	Ø 700	C250	HYDROBRAKE	564824.396	174371.092		
PS8	12.250	11.650	0.600	TYPE Y	Ø 450	A150	RECESSED COVER	564870.779	174342.372		
PS9	10.760	8.500	2.260	TYPE Y	Ø 600	C250		564824.396	174355.075		
PS10	10.760	9.900	0.860	TYPE Y	Ø 600	C250		564849.801	174355.075		
PS11	10.800	9.830	0.970	TYPE Y	Ø 600	C250		564849.778	174361.853		
PS12	9.350	8.500	0.850	TYPE Y	Ø 600	C250		564849.550	174375.051		
PS13	9.350	8.120	1.230	TYPE Y	Ø 600	C250		564849.459	174382.498		
PS14	9.350	7.980	1.370	TYPE Y	Ø 600	C250		564852.224	174382.498		
PS15	9.350	8.400	0.950	TYPE Y	Ø 600	C250		564871.172	174382.520		
PS16	8.650	4.900	3.750	TYPE Y	Ø 450	C250		564850.603	174389.561		
PS17	8.650	4.870	3.780	TYPE Y	Ø 450	C250		564849.791	174392.372		
PS18	8.650	4.760	3.890	TYPE Y	Ø 450	C250		564849.121	174398.238		
PS19	8.650	4.450	4.200	TYPE Y	Ø 450	C250		564831.269	174403.543		
PS20	8.650	4.000	4.650	TYPE Y	Ø 450	C250		564824.671	174403.774		
PS21	8.800	8.000	0.800	TYPE Y	Ø 450	C250		564818.131	174385.594		
PS22	8.800	7.900	0.900	TYPE Y	Ø 450	C250		564818.131	174393.504		
PS23	11.700	6.600	5.100	TYPE Y	Ø 450	C250		564818.241	174391.688		
PS24	5.400	4.800	0.600	TYPE Y	Ø 450	C250		564818.303	174402.215		
PS25	5.650	4.750	0.900	TYPE Y	Ø 450	C250		564818.561	174406.465		
PS26	5.650	4.340	1.310	TYPE Y	Ø 450	C250	HYDROBRAKE	564821.091	174406.704		
PS27	8.800	4.465	4.335	TYPE Y	Ø 450	C250	RECESSED COVER	564822.113	174397.174		
PS28	8.650	4.760	3.890	TYPE Y	Ø 450	C250		564830.347	174399.565		
PS29	8.650	10.000	1.350	TYPE Y	Ø 450	C250		564846.985	174361.655		
PS30	8.650	8.000	0.650	TYPE Y	Ø 450	C250		564862.054	174371.062		

FOUL WATER DRAINAGE SCHEDULE											
MH REF	COVER LEVEL	INVERT LEVEL	DEPTH (m)	DESCRIPTION	DIMENSION	COVER TYPE	COMMENTS	EASTING	NORTHINGS		
PF1	12.250	11.350	0.900	TYPE Y	Ø 450	A150	RECESSED COVER	564823.441	174361.444		
PF2	12.250	10.900	1.350	TYPE Y	Ø 450	A150	RECESSED COVER	564831.372	174361.444		
PF3	12.250	11.250	1.000	TYPE Y	Ø 450	A150	RECESSED COVER	564829.599	174361.435		
PF4	12.250	11.250	1.000	TYPE Y	Ø 450	A150	RECESSED COVER	564835.854	174361.435		
PF5	12.250	11.150	1.100	TYPE Y	Ø 450	A150	RECESSED COVER	564844.048	174361.435		
PF6	12.250	11.150	1.100	TYPE Y	Ø 450	A150	RECESSED COVER	564849.778	174361.425		
PF7	12.250	11.150	1.100	TYPE Y	Ø 450	A150	RECESSED COVER	564854.655	174361.438		
PF8	12.250	11.350	0.900	TYPE Y	Ø 450	A150	RECESSED COVER	564849.590	174361.447		
PF9	12.250	11.350	0.900	TYPE Y	Ø 450	A150	RECESSED COVER	564870.540	174361.425		
PF10	12.250	11.350	0.900	TYPE Y	Ø 450	A150	RECESSED COVER	564874.842	174361.425		
PF11	10.760	10.150	0.600	TYPE Y	Ø 450	A150	RECESSED COVER	564871.991	174364.165		
PF12	10.550	9.950	0.600	TYPE Y	Ø 450	A150	RECESSED COVER	564869.610	174359.739		
PF13	8.800	8.200	0.600	TYPE Y	Ø 450	A150	RECESSED COVER	564860.000	174368.044		
PF14	8.700	8.490	0.190	TYPE Y	Ø 450	A150		564853.221	174376.545		
PF15	8.700	5.710	2.990	TYPE Y	Ø 450	A150		564851.366	174382.309		
PF16	5.700	5.680	0.020	TYPE Y	Ø 450	A150		564850.510	174391.987		
PF17	5.700	5.000	0.700	TYPE Y	Ø 450	A150		564846.594	174399.560		
PF18	5.700	4.960	0.740	TYPE Y	Ø 450	A150		564838.868	174400.184		
PF19	5.700	4.800	0.900	TYPE Y	Ø 450	A150		564827.578	174405.388		
PF20	5.800	5.100	0.700	TYPE Y	Ø 450	A150	RECESSED COVER	564843.717	174389.935		
PF21	5.800	5.100	0.700	TYPE Y	Ø 450	A150	RECESSED COVER	564837.860	174393.550		
PF22	5.800	5.100	0.700	TYPE Y	Ø 450	A150		564835.000	174393.766		
PF23	5.800	5.100	0.700	TYPE Y	Ø 450	A150		564821.551	174393.984		
PF24	5.800	5.045	0.755	TYPE Y	Ø 450	A150	RECESSED COVER	564825.812	174394.130		
PF25	5.800	5.000	0.800	TYPE Y	Ø 450	A150	RECESSED COVER	564827.778	174394.333		
PF26	5.800	4.950	0.850	TYPE Y	Ø 450	A150	RECESSED COVER	564827.990	174394.453		
PF27	5.800	5.100	0.700	TYPE Y	Ø 450	A150	RECESSED COVER	564825.111	174406.510		
PF28	5.650	5.100	0.550	TYPE Y	Ø 450	A150	RECESSED COVER	564849.778	174382.795		
PF29	12.250	10.900	1.350	TYPE Y	Ø 1350	A150	RECESSED COVER	564822.094	174361.360		
PF30	11.700	8.770	2.930	TYPE Y	Ø 1350	D400	RECESSED COVER	564882.164	174340.569		

NOTE: COVER LEVELS SHOWN ARE APPROXIMATE AND ARE TO BE CONFIRMED WHEN PROPOSED FINISHED GROUND LEVEL INFORMATION IS MADE AVAILABLE FROM THE ARCHITECT

LEGEND

- PROPOSED HIGHWAYS BOUNDARY
- EXISTING ADOPTED COMBINED MANHOLE AND SEWER
- EXISTING ADOPTED STORM MANHOLE AND SEWER
- EXISTING ADOPTED FOUL MANHOLE AND SEWER
- EXISTING HIGHWAY STORM MANHOLE AND SEWER
- EXISTING HIGHWAY SOAKAWAY
- ADOPTABLE P.C.C. RING MANHOLE COMBINED (TYPE 1 & 2)
- ADOPTABLE P.C.C. RING MANHOLE STORM (TYPE 1 & 2)
- ADOPTABLE P.C.C. RING MANHOLE FOUL (TYPE 1 & 2)
- PROPOSED HIGHWAYS SURFACE WATER SEWER AND MANHOLE
- PROPOSED HIGHWAYS SURFACE WATER GULLY
- PROPOSED HIGHWAYS YARD GULLY
- PROPOSED HIGHWAYS CHANNEL DRAIN
- PROPOSED HYDROBRAKE
- PRIVATE P.C.C. RING MANHOLE STORM (TYPE A)
- PRIVATE P.C.C. RING MANHOLE FOUL (TYPE A)
- Ø600 UPVC TEGRA FOUL CHAMBERS
- Ø600 UPVC TEGRA STORM CHAMBERS
- PRIVATE SURFACE WATER INSPECTION CHAMBER (TYPE Y)
- PRIVATE FOUL WATER INSPECTION CHAMBER (TYPE Y)
- PRIVATE FOUL YARD GULLY
- PRIVATE STORM YARD GULLY
- PRIVATE FOUL SVP
- PRIVATE FOUL SUB STACK
- PRIVATE STORM RWP
- CHANNEL DRAIN
- RODDING POINT
- PRIVATE STORM ROAD GULLY

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NOTES:

- DO NOT SCALE THIS DRAWING
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWING ISSUES AND THE SPECIFICATION
- ALL ADOPTABLE HIGHWAY CONSTRUCTION WORKS SHALL BE CARRIED OUT TO THE STANDARD Laid Down IN GRAVESHAM BOROUGH COUNCILS SPECIFICATIONS, WITH A VIEW TO ADOPTION UPON COMPLETION
- ALL ADOPTABLE SEWERS AND SOAKAWAYS SHALL BE CONSTRUCTED TO THE STANDARDS Laid Down IN 'SEWERS FOR ADOPTION' 6th EDITION, THAMES WATER'S AND GRAVESHAM BOROUGH COUNCILS SPECIFICATIONS, WITH A VIEW TO ADOPTION UPON COMPLETION
- ALL SEWERS WITH LESS THAN 12m OF COVER WHEN Laid BENEATH THE ROADS, OR 0.9m OF COVER IN OTHER AREAS, SHALL BE PROTECTED WITH CONCRETE IN ACCORDANCE WITH EITHER OF THE DETAILS SHOWN ON THE STANDARD DRAWING PROVIDED FOR BEING TYPICAL LOCATIONS, REFER TO SEWER SECTIONS
- IN ORDER TO MAINTAIN THE SATISFACTORY FUNCTIONING OF DRAINAGE SYSTEM, ALL ROAD AND YARD GULLIES ARE TO BE 'TRAPPED'
- ALL NON ADOPTABLE LATERALS BENEATH THE HIGHWAY SHALL BE BACKFILLED WITH LEAN MIX CONCRETE UNLESS OTHERWISE AGREED WITH THE HIGHWAYS ENGINEER
- ALL PRIVATE SEWERS ARE TO BE 100mm DIA. UNLESS OTHERWISE STATED. THE PRIVATE DRAINAGE DESIGN ON THE PLAN HAS BEEN BASED ON THE PRINCIPLES OF A JWC SYSTEM IT CAN BE ADAPTED TO SUIT A STORMWATER SYSTEM BUT REFERENCE SHOULD BE MADE TO THIS OFFICE BEFORE AMENDMENTS ARE MADE
- ALL PRIVATE DRAINAGE TO BE IN ACCORDANCE WITH THE BUILDING REGULATIONS APPROVED DOCUMENT 'H' BS EN 752, AND TO THE SATISFACTION OF MHCL/UNION OFFICE OF NEWHAM BOROUGH COUNCIL
- MANHOLES SITUATED WITHIN AREAS ACCESSIBLE TO MOTOR VEHICLES ARE TO BE FITTED WITH SATISFACTORY STRENGTH COVERS AND FRAMES
- WHERE DRAINS PASS THROUGH FOUNDATIONS, A FLEXIBLE JOINT SHOULD BE PROVIDED WITH 50mm OF THE FACE OF THE STRUCTURE, WHERE TYPE Z MANHOLES ARE EMPLOYED OR CONCRETE SURROUND IS ADDED TO OTHER MANHOLES A ROCKER PIPE OF MAX 60mm IN LENGTH SHALL BE PROVIDED EITHER SIDE OF THE MANHOLE, Laid AT A SLIGHTLY STEEPER GRADIENT TO ALLOW FOR SETTLEMENT
- STUB STACKS FITTED WITH AIR ADMITTANCE VALVES MAY BE USED INSTEAD OF SOIL AND VENT PIPES, SUBJECT TO THE ARCHITECTS APPROVAL EXCEPT WHERE THE DRAINAGE CONNECTION EXCEEDS 50m BEFORE CONNECTING WITH ANOTHER VENTILATED DRAIN OR INSPECTION CHAMBER OR MANHOLE. HEAD OF DRAIN VENT PIPES MUST NOT BE FITTED WITH AIR ADMITTANCE VALVES
- SHALLOW PRIVATE DRAINS MAY REQUIRE PROTECTION USING CONCRETE SURROUND OR PAVING SLABS BEHIND THE TRENCH SUBJECT TO THE BUILDING INSPECTOR'S REQUIREMENTS
- APPROPRIATE MEASURES TO BE AGREED WITH THE DISTRICT COUNCIL'S BUILDING CONTROL SECTION, ARE TO BE TAKEN TO DISCOURAGE RODENT ENTRY INTO THE PROPERTIES
- WHERE DRAIN RUNS PASS CLOSE TO BUILDINGS OR THEIR INVERT LEVELS ARE BELOW FOUNDATION LEVEL, THE TRENCHES ARE TO BE BACKFILLED IN ACCORDANCE WITH THE STANDARD DETAIL PROVIDED
- REFERENCE SHOULD BE MADE TO THE STRUCTURAL ENGINEERS DETAILS FOR ALL ASPECTS OF FOUNDATION DESIGN AND CONSTRUCTION
- BEFORE DETERMINING THE AMOUNT OF FACE BACKWORK TO EACH UNIT, CONSIDERATION MUST BE GIVEN TO THE PROPOSED FINISHED GROUND LEVELS IN THE VICINITY OF THE PROPERTY. THE LEVELS SHOWN ON THIS DRAWING HAVE BEEN DECIDED UPON THE PARAMETERS SET DOWN IN THE APPROVED DOCUMENT 'H' OF THE BUILDING REGULATIONS 1991/199 EDITION
- THE CONTRACTOR IS TO KEEP A RECORD OF ANY VARIATIONS MADE ON SITE, INCLUDING THE RELOCATION OF SEWERS OR DRAINS, SO THAT AN AS CONSTRUCTED DRAWING CAN BE PREPARED UPON COMPLETION OF THE PROJECT
- THE CONTRACTOR SHOULD CHECK ALL DIMENSIONS ON SITE
- IT IS THE SUBCONTRACTORS RESPONSIBILITY TO ENSURE COMPLIANCE WITH CURRENT BUILDING REGULATIONS AND CODES OF PRACTICE
- CONNECTIONS TO AND DIVERSIONS OF EXISTING DRAINAGE ARE TO BE CHECKED FOR LEVEL AND POSITION PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ON SITE. ANY SIGNIFICANT DIFFERENCES ARE TO BE REPORTED TO THIS OFFICE SO THAT DESIGNS MAY BE ADJUSTED ACCORDINGLY
- ADDITIONAL CONCRETE SURROUND TO MANHOLES REQUIRED IN ACCORDANCE WITH THE STANDARD DETAILS WHERE COVER ABOVE SEWER IS LESS THAN 900mm
- COVER LEVELS SHOWN ARE APPROXIMATE AND ARE TO BE CONFIRMED WHEN PROPOSED FINISHED GROUND LEVEL INFORMATION IS MADE AVAILABLE FROM THE ARCHITECT

P7	25/04/22	REVISED AS CLOUDED	GMC
P6	23/02/22	COORDINATION ISSUE	GMC
P5	05/01/21	COORDINATION ISSUE	GMC
P4	11/08/21	COORDINATION ISSUE	GMC
P3	04/06/21	COORDINATION ISSUE	GMC
P2	01/04/21	COORDINATION ISSUE	RH
P1	11/06/20	PRELIMINARY ISSUE	RH
REV	DATE	DESCRIPTION	BY
PRELIMINARY			
CLIENT: REEF GROUP			
PROJECT: THE CHARTER GRAVESEND			
DRG TITLE: TECHNICAL LAYOUT SHEET 2			
Manhire Associates Limited Consulting Engineers 70 Colchester Road, Northbrook Kingston Upon Thames, KT2 7AZ T: +44 20 8990 9097 F: +44 20 8990 7988 E: enquiries@manhireassociates.co.uk			
PROJECT NO	DRG NO	REV	SCALE
19042	C1061	P7	1:100
		DRG	RH
		JUNE 20	