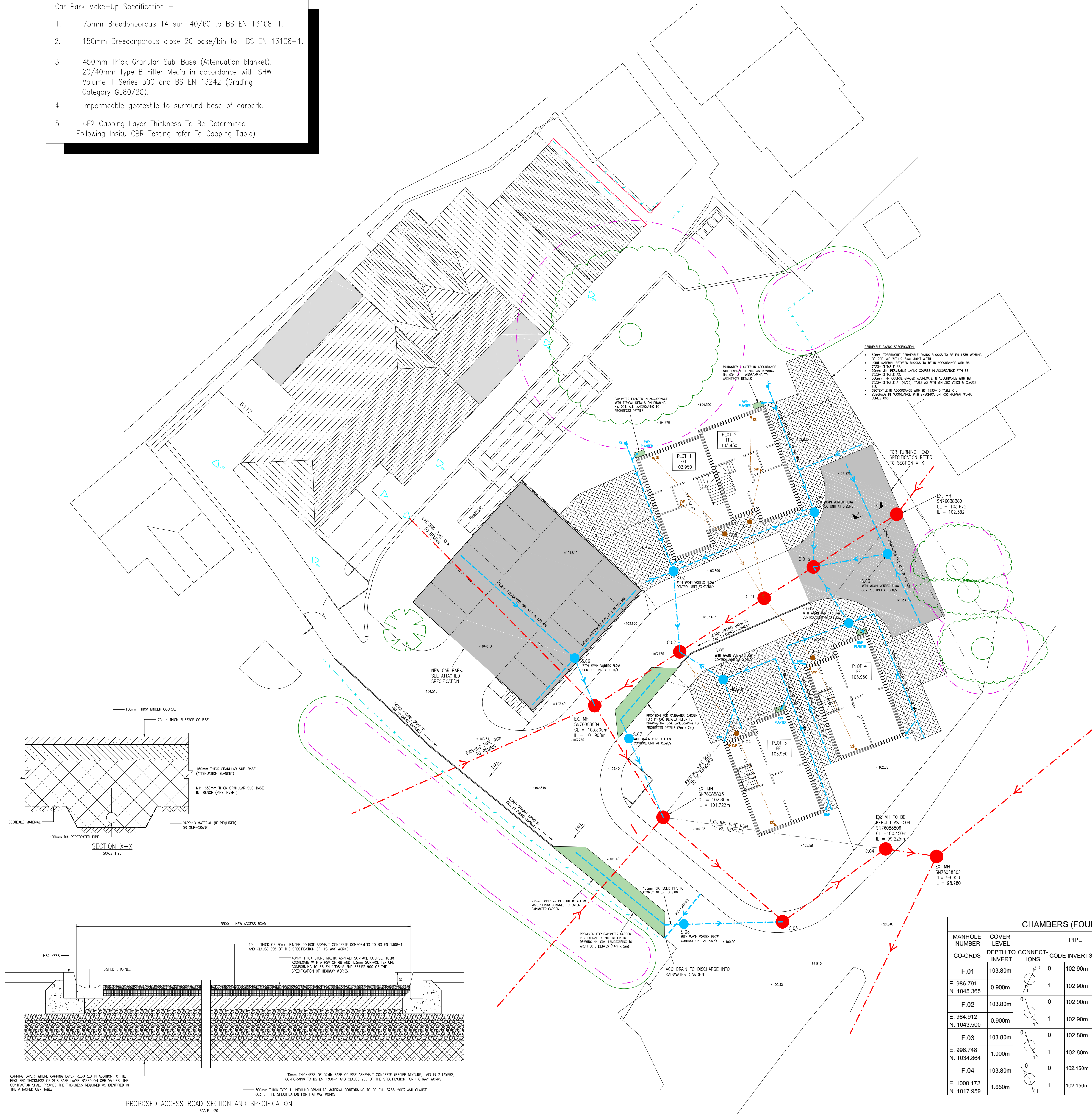


1. 75mm Breedonporous 14 surf 40/60 to BS EN 13108-1.
2. 150mm Breedonporous close 20 base/bin to BS EN 13108-1
3. 450mm Thick Granular Sub-Base (Attenuation blanket).
20/40mm Type B Filter media in accordance with SHW
Volume 1 Series 500 and BS EN 13242 (Grading
Category Gc80/20).
4. Impermeable geotextile to surround base of carpark.
5. 6F2 Capping Layer Thickness To be Determined
Following Insitu CBR Testing refer To Capping Table)



ALL DIMENSIONS & LEVELS ARE BASED ON SITE SURVEY. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE BEFORE PROCEEDING.

ARCHITECT TO CONFIRM ALL PROPOSED
LEVELS PRIOR TO COMMENCEMENT OF
WORKS ON SITE.

BELOW GROUND DRAINAGE TO BE UPVC UNLESS NOTED
OTHERWISE IN ACCORDANCE WITH BS EN1401 AND/OR BS EN
4501 AND ARE KITEMARKED.
450mm Dia. INSPECTION CHAMBERS UNLESS NOTED OTHERWISE
MAX. 3000mm DEPTH.

WHERE PIPES PASS THROUGH WALLS PROVIDE STRESSLINE
CONCRETE LINTEL OVER WITH MIN. 50mm SPACE ALL ROUND
PIPE MASKED WITH IMPREGNATED FIBREBOARD AND THE VOID
FILLED WITH COMPRESSIBLE SEALANT OR PROVIDE MAX. 600mm
LONG ROCKER PIPES EITHER SIDE OF WALL (WITHIN 150mm)

FOUL DRAINAGE:
100mm Dia. PIPEWORK GENERALLY AT A MIN. 1 in 80 GRAD.
WITH PIPES BEDDED AS MANUFACTURERS RECOMMENDATIONS
FOR GROUND CONDITIONS ON SITE.

STORM DRAINAGE:
100mm Dia. PIPEWORK GENERALLY AT A MIN. 1 in 100 GRAD.
WITH PIPES BEDDED AS MANUFACTURERS RECOMMENDATIONS
FOR GROUND CONDITIONS ON SITE.

CHAMBERS (STORM)						
MANHOLE NUMBER	COVER LEVEL	PIPE	M/H SIZE	TYPES		
CO-ORDS	DEPTH TO INVERT	CONNECT- IONS	CODE INVERTS	DIA. INV./SOFF	M/H	COVER
S.01	103.800m		1 102.325m	100		
E. 992.431 N. 1045.225	1.475m	2	102.325m	100	1200	B125
S.02	103.800m		1 102.120m 2 102.120m 3 102.120m	100 100 100		
E. 981.346 N. 1038.510	1.680m	3	102.120m	100	1200	B125
S.03	103.800m		0 102.325m	100		
E. 1009.344 N.1030.425	1.475m	1	102.325m	100	1200	B125
S.04	103.800m		0 102.340m 1 102.340m 2 102.340m	100 100 100		
E. 1002.430 N. 1024.782	1.460m	2	102.340m	100	1200	B125
S.05	103.800m		0 102.120m 1 102.120m	100		
E. 1003.404 N. 1021.197	1.680m	1	102.120m	100	1200	B125
S.06	104.810m		0 101.965m 1 101.965m 2 101.965m 3 101.965m	100 100 100 100		
E. 974.987 N. 1027.529	2.845m	3	101.965m	100	1200	D400
S.07	103.400m		0 101.850m	100		
E. 982.422 N. 1021.852	1.550m	1	101.850m	100	1200	B125
S.08	100.800m		0 99.565m	100		
E. 992.891 N. 1006.045	1.235m	1	99.565m	100	900	D400

CHAMBERS (COMBINED)									
MANHOLE NUMBER	COVER LEVEL	DEPTH TO CONNECT-		PIPE		M/H SIZE		TYPES	
CO-ORDS		INVERT	IONS	CODE	INVERTS	DIA INV/SOFF	M/H	COVER	
C.01a (Adoptable)	103.675m	1	0	1	102.258m	100			
				2	102.258m	100			
E. 984.398 N. 1031.336	1.417m	2	3	2	102.258m	100	900	3	D400
				3	102.258m	100			
C.01 (Adoptable)	103.675m	1	0	1	102.190m	100			
				2	102.190m	100			
E. 990.464 N. 1038.817	1.500m	2	3	3	102.190m	100	900	3	D400
				4	102.190m	100			
C.02 (Adoptable)	103.500m	1	0	1	102.020m	100			
				2	102.020m	100			
E. 984.398 N. 1031.336	1.480m	2	2	2	102.020m	100	900	3	D400
C.03 (Adoptable)	100.925m	1	0	1	99.375m	100			
E. 1000.109 N. 1007.103	1.500m	2	1	2	99.375m	100	900	3	D400
C.04 (Adoptable)	100.450m	1	0	1	99.225m	100			
E. 1000.109 N. 1007.103	1.225m	2	1	2	99.225m	100	900	3	D400

MANHOLE NUMBER	COVER LEVEL	PIPE		M/H SIZE	TYPES	
CO-ORDS	DEPTH TO CONNECT- INVERT	CODE	INVERTS NO./DIA	M/H	COVER	
F. 01	103.80m		0	102.90m	100	
E. 986.791 N. 1045.365	0.900m		1	102.90m	100	450 4 B125
F. 02	103.80m		0	102.90m	100	
E. 984.912 N. 1043.500	0.900m		1	102.90m	100	450 4 B125
F. 03	103.80m		0	102.80m	100	
E. 996.748 N. 1034.864	1.000m		1	102.80m	100	450 4 B125
F. 04	103.80m		0	102.150m	100	
E. 1000.172 N. 1017.959	1.650m		1	102.150m	100	450 4 B125

1. DRAINAGE DESIGN AND CONSTRUCTION TO BE IN ACCORDANCE WITH SEWERS FOR ADOPTION 7TH EDITION AND THE REQUIREMENTS OF THE STATUTORY UNDERTAKER
2. REFER TO DRAWING NO. HCE-1333-001 FOR GENERAL CONSTRUCTION NOTES.
3. 100mm DIAMETER PLASTIC PIPE SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 1401-1, BS EN 1852 AND BS EN 12666-1. THERMOPLASTIC CHAMBERS AND RINGS SHALL COMPLY WITH BS EN 13598-1 AND BS EN 13598-2 AND BE KITE MARKED.
4. FOR DRAINAGE DETAILS & SECTIONS REFER TO DRAWING NO. HCE-1333-003, 004 & 005.

- — FOUL MANHOLE
- — FOUL DRAINAGE RUN
- — SOIL & VENT PIPE
- — AIR ADMITTANCE VALVE
- — SUB STACK
- — STORM MANHOLE
- — STORM DRAINAGE RUN
- — RAIN WATER PIPE
- — RODDING EYE
- — ACO CHANNEL (ALL TO HAVE HEEL GUARD GRATINGS)
- — ACO SILT TRAP

REV	DATE	BY	DESCRIPTION	CHK	APP'D
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The image shows a large, bold, black 'HCE' logo on the left. To its right, the company name 'HCE Limited' is written in a smaller, black, sans-serif font. Below the company name, the address 'Canolfan Gorseionn Centre', 'Millers Drive', 'Gorseionn', and 'SA4 4QN' are listed in the same font. Further down, the contact details 'Tel: 01792 805010', 'Email: info@hcelimited.com', and 'Web: www.hcelimited.com' are provided, with the email and website addresses in a slightly larger font than the phone number.

URBAN PROPERTY GROUP			
ARCHITECT: HURLEY & DAVIES			
PROJECT: RESIDENTIAL DEVELOPMENT COMMERCIAL STREET, YSTALFYFERA SWANSEA			
TITLE: BELOW GROUND DRAINAGE LAYOUT			
SCALE: AT: 1:200	CHECKED: IH	APPROVED: IH	
CAD FILE: HCE-1333-002	DESIGN-DRAWN: WJ	DATE: JAN 2020	
PROJECT No: 1333	DRAWING No: 002		REV: R01