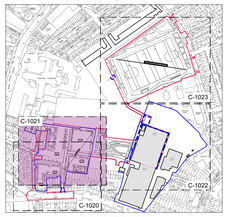
NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEERS & ARCHITECT'S DRAWINGS.FIGURED DIMENSIONS ONLY (NOT SCALING) TO BE USED. WHERE A CONFLICT OF INFORMATION EXISTS OR IF IN ANY DOUBT - ASK'.
2. CONSULTANTS TO BE INFORMED IMMEDIATELY OF ANY DISCREPANCIES BEFORE WORK PROCEEDS.



KEY PLAN

SCALE @ A0: 1:5000
SCALE @ A2: 1:10000

CIVIL LEGEND

- NEW FOUL MANHOLE — F
- NEW FOUL PIPE — PIPE DESCRIPTION
- EX. SURFACE WATER MANHOLE — Ex.S
- EX. SURFACE WATER PIPE — PIPE DESCRIPTION
- NEW SURFACE WATER MANHOLE — S
- NEW SURFACE WATER PIPE — PIPE DESCRIPTION
- EX. COMBINED MANHOLE — Ex.C
- EX. COMBINED PIPE — PIPE DESCRIPTION
- NEW RISING MAIN — PIPE DESCRIPTION
- DECOMMISSIONED LINE — PIPE DESCRIPTION
- FOUL INSPECTION CHAMBER — IC
- SURFACE ACCESS JUNCTION — AJ
- RAINWATER PIPE — RWP
- SOIL VENT PIPE — SVP
- ROAD GULLEY — RG
- SURFACE RODDING EYE — RE
- GULLEY TRAP — GT
- NEW SIDE INLET KERB GULLY — KG
- PAVEMENT GULLY — PG
- DRAINAGE CHANNEL
- PROPOSED INSPECTION OPENING — IO
- 150mmØ PERFORATED uPVC CONVEYANCE PIPE BENEATH BASE OF TREE PIT — TP
- NEW TREE PIT
- SILT TRAP MANHOLE — ST MH
- EXISTING BUILDING
- BAILEY GIBSON SITE BOUNDARY
- OWNERSHIP LINE
- BASEMENT OUTLINE

DRAINAGE NOTES

1. SURFACE WATER DRAINS TO BE AS SPECIFIED ON DRAWING BGL-BMD-ZZ-ZZ-DR-C-1220 & 1222.
2. FOUL DRAINS TO BE UNPLASTICISED PVC PIPES TO IS EN 1401 2009/2012 CLASS SN8 IN LINE WITH THE REQUIREMENTS OF IRISH WATER CODE OF PRACTICE FOR WASTEWATER.
3. PIPE DIAMETERS SHOWN ON DRAINAGE LAYOUTS ARE REQUIRED MINIMUM INTERNAL DIAMETERS (MM).
4. ALL DRAINS WITH COVER LESS THAN 0.5M IN GARDENS/ PATHWAYS AND 1.2M UNDER ROADS TO BE BEDDED & SURROUNDED IN C16/20 CONCRETE AS PER BMCE DRAWING BGL-BMD-ZZ-ZZ-DR-C-1220 & 1222 AND SPECIFICATIONS.
5. DUBLIN CITY COUNCIL SURFACE WATER MANHOLES (LOCATED UNDER ALL ROADS) TO BE HIGH DENSITY BLOCKWORK TO IS 20 PART1:1987 OR CAST IN SITU CLASS 30N / 20MM IN LINE WITH THE GREATER DUBLIN REGION (GDR) CODE OF PRACTICE FOR DRAINAGE. REFER TO SUPPORTING DOCUMENTATION AND BMCE DRAWING BGL-BMD-ZZ-ZZ-DR-C-1220 & 1222. ALL MANHOLES TO BE WATERTIGHT STRUCTURES.
6. ALL FOUL DRAINAGE & WATERMAINS OUTSIDE THE BUILDING FOOTPRINT TO BE CONSTRUCTED IN ACCORDANCE WITH IRISH WATER DETAILS & CODES OF PRACTICE.
7. INSPECTION CHAMBERS (IC / AJ) TO BE POLYPROPYLENE 0.5M INTERNAL DIAMETER, MAXIMUM OF 1.0M DEEP. 150MM THICK C16 / 20 CONCRETE BED AND SURROUND.
8. SILT TRAP MANHOLES (ST MH) TO BE CAST IN SITU CONCRETE CL 30N / 20MM IN LINE WITH THE GREATER DUBLIN REGION (GDR) CODE OF PRACTICE FOR DRAINAGE. PIT TO BE 0.5M DEEP (BELOW OUTLET INVERT LEVEL).
9. TREE PITS (TP) TO BE PROPRIETARY UNITS, REFER TO BMCE DRAWING BGL-BMD-ZZ-ZZ-DR-C-1221. INSPECTION OPENINGS (IO) ADJACENT TO TREE PITS TO BE DUCTILE IRON COVERS/FRAMES, MIN CLASS D400 TO IS EN 124:2 2015.
10. MANHOLE COVERS IN TRAFFICKED AREAS TO BE MIN CLASS D400 TO IS EN 124:2 2015 DUCTILE IRON COVERS/ FRAMES. ALL OTHER AREAS TO BE MIN CLASS C250. MANHOLE COVERS IN CARRIAGEWAYS TO HAVE POLYESTER RESIN BEDDING MATERIAL FOR FIXING MANHOLE FRAMES AS PER BMCE CIVIL SPECIFICATION.
11. ROAD GULLIES TO BE CONSTRUCTED OF 215MM ENGINEERING BLOCKS OR 225MM MASS CONCRETE TO GDR CODE OF PRACTICE FOR DRINAAGE, COVER/FRAME TO BE DUCTILE IRON WITH MIN CLASS D400 TO IS EN 124:2 2015. REFER TO SUPPORTING DOCUMENTATION AND BMCE DRAWING BGL-BMD-ZZ-ZZ-DR-C-1210.
12. DRAINS FROM AJ's / IC's TO MAIN LINES TO BE 100mm DIAMETER UPVC (UNLESS OTHERWISE SHOWN ON LAYOUT), BED AND SURROUNDED IN 150mm CONCRETE.
13. LAND DRAIN TO BE 100 DIA. UPVC PERFORATED PIPES, BED & SURROUND IN 150MM THICK PEA GRAVEL & WRAPPED IN TERRAM 1000 OR SIMILAR APPROVED GEOTEXTILE.
14. INFILTRATION TRENCH TO BE GRANULAR FILL MATERIAL TO TII SPECIFICATION TO CLAUSE 505 TYPE B. TRENCH TO BE 400MM DEEP BY 700MM WIDE, UNLESS OTHERWISE SHOWN ON THIS DRAWING.
15. ALL TRENCHES IN ROADS TO BE BACKFILLED TO FORMATION LEVEL WITH CLAUSE 808 MATERIAL TO TII SPECIFICATION.
16. DIMENSIONED POSITION OF BUILDER'S UPSTAND (PU / SVP/ RWP) & STACKS TO BE PROVIDED BY THE ARCHITECT.
17. CONNECTIONS FROM PU'S / RWP'S TO BE 100 DIA. UPVC PIPES UNLESS OTHERWISE SHOWN. FOUL DRAIN CONNECTIONS FROM PU'S (WASTE AND OR SOIL) TO EXTERNAL MANHOLES OR INSPECTION CHAMBERS TO BE LAID TO A MINIMUM FALL OF 1 IN 40. RWP'S CONNECTIONS TO EXTERNAL SYSTEM TO BE LAID TO A MINIMUM FALL OF 1 IN 100.
18. MANHOLE COVERS / INSPECTION CHAMBERS TO MATCH FINISHED LEVELS OF EXTERNAL PAVING, ROAD, HARDSTANDING OR LANDSCAPED AREAS COVER LEVELS ARE INDICATIVE ONLY.
19. PRIOR TO COMPLETION OF DRAINAGE CONSTRUCTION ON SITE THE CONTRACTOR SHALL COMPLETE THE NEXT LIST OF WORKS IN ACCORDANCE WITH THE SPECIFICATION:
    - CLEANSE THE SYSTEM
    - TEST ALL PIPE WORK
    - CARRY OUT A CCTV INSPECTION
    - COMPLETE A SET OF AS CONSTRUCTED DRAWINGS
20. THE CONTRACTOR SHALL BE ENTIRELY RESPONSIBLE FOR LOCATING THE POSITIONS OF ALL EXISTING SERVICES AND SHALL, IF REQUIRED BY THE ENGINEER/CLIENT, REPRESENTATIVE CARRY OUT A SURVEY OF THE SITE TO LOCATE THESE SERVICES INCLUDING WHERE REQUIRED RATES FOR CARRYING OUT EXCAVATION IN ROADS, AND ELSEWHERE WHERE SERVICES ARE ENCOUNTERED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DIVERSION OF EXISTING SERVICES ENCOUNTERED DURING THE COURSE OF THE WORK.
21. ALL EXISTING SERVICES SHOWN ON THE GPR SURVEY PROVIDED IN THE SUPPORTING DOCUMENTATION AND NOT SHOWN ON THIS DRAWING, TO BE BROKEN AND REMOVED.
22. ALL EXISTING DCC AND IRISH WATER SEWERS TO BE MAINTAINED AND KEPT ALIVE DURING WORKS.
23. ALL STACKS TO BE RODDABLE ABOVE SLAB LEVEL.
24. MINIMUM DISTANCE BETWEEN BRANCH CONNECTIONS TO THE MAIN LINES TO BE 300mm.
25. ALL BRANCH CONNECTIONS TO MAIN LINE FOUL SEWER TO BE BY MEANS OF 45 DEGREE "Y" BRANCH CONNECTIONS ONLY.
26. ALL FINAL FOUL INSPECTION CHAMBERS WITHIN THE CURTILAGE OF EACH PROPERTY TO BE IN ACCORDANCE WITH IRISH WATER'S STANDARD DETAILS FOR INSPECTION CHAMBERS.
27. THE CONTRACTOR SHALL NOTE THE TESTING REQUIREMENTS, WHICH SHALL APPLY TO BOTH FOUL AND SURFACE WATER NETWORKS, AS OUTLINED IN THE IRISH WATER QUALITY ASSURANCE FIELD INSPECTION REQUIREMENTS MANUAL AND ALLOW FOR ALL COSTS ASSOCIATED WITH TESTING AND COMMISSIONING. THE CONTRACTOR SHALL NOTE THAT IRISH WATER NOW REQUIRE A CHARTERED ENGINEER TO CERTIFY INSTALLATION / TESTING, MATERIALS COMPLIANCE AND WORKMANSHIP.
28. THE CONTRACTOR SHALL PREPARE ALL FINAL DOCUMENTS PRIOR TO HANDOVER FOR SUBMISSION TO IRISH WATER AS OUTLINED IN APPENDIX 4 OF THE IRISH WATER QUALITY ASSURANCE FIELD INSPECTION REQUIREMENTS MANUAL. IN PARTICULAR, THE CONTRACTOR SHALL NOTE THE REQUIREMENTS FOR MANHOLE INTEGRITY TESTS, PIPELINE AIR TESTS, MANHOLE INSPECTION CARDS, CCTV SURVEYS OF COMPLETED PIPE WORK, AND AS CONSTRUCTED DRAWINGS.

PROPOSED DRAINAGE LAYOUT

SCALE @ A0: 1:200
SCALE @ A2: 1:400

PLOT NUMBERS		
BLOCK NUMBER	RESIDENTIAL PLOT NUMBERS	NON-RESIDENTIAL
BLOCK BG1	BG1-1 to BG1-152	CRECHE - 248m²
		RETAIL UNIT - 238m²
BLOCK BG2	BG2-1 to BG2-89	RESTAURANT - 159m²
BLOCK BG3	BG3-1 to BG3-52	
BLOCK BG4	BG4-1 to BG4-49	
BLOCK BG5	BG5-1 to BG5-4	

NEW SURFACE WATER MANHOLE

MANHOLE	COVER LEVEL	INVERT LEVEL
1-IC3.0	+21.82	OUT: +20.66
1-IC6.0	+20.80	OUT: +19.79
1-IC6.1	+20.80	IN FROM 1-IC6.0: +19.64 OUT: +19.64
1-SI1.0	+21.70	OUT: +20.32
1-SI1.1	+20.93	IN FROM 1-SI1.0: +19.14 OUT: +19.14
1-SI1.2	+20.77	IN FROM 1-SI1.1: +19.02 OUT: +19.02
1-SI1.3	+20.80	IN FROM 1-SI1.2: +18.70 OUT: +18.71
1-SI1.4	+20.64	IN FROM 1-SI1.3: +18.56 OUT: +18.56
1-SI1.5	+20.60	IN FROM 1-SI4.0: +18.56 IN FROM 1-SI1.4: +18.51 OUT: +18.51
1-SI1.6	+20.02	IN FROM 1-SI1.5: +18.32 OUT: +18.32
1-SI1.7	+19.92	IN FROM 1-SI1.6: +18.26 IN FROM 1-SI5.3: +18.88 IN FROM 1-SCV1.0: +18.41 OUT: +18.26
1-SI1.8	+19.99	IN FROM 1-SI1.7: +18.13 OUT: +18.13
1-SI1.9	+20.47	IN FROM 1-SI1.8: +18.09 OUT: +18.09
1-SI1.10	+19.91	IN FROM 1-SI1.9: +17.96 OUT: +17.96
1-SI1.11	+19.91	IN FROM 1-SI1.10: +17.84 OUT: +17.84
1-SI1.12	+20.05	IN FROM 1-SI1.11: +17.66 OUT: +17.70
1-SI1.13	+19.42	IN FROM 1-SI1.12: +17.55 OUT: +17.55
1-SI1.14	+19.30	IN FROM 1-SI1.13: +17.43 IN FROM 1-SI7.0: +17.43 OUT: +17.43 OUT: +18.32
1-SI1.15	+19.20	IN FROM 1-SI1.14: +17.37 OUT: +17.37
1-SI1.16	+19.13	IN FROM 1-SI1.15: +17.18 OUT: +17.18
1-SI1.17	+18.65	IN FROM 1-SI1.16: +17.02 IN FROM 1-SI8.1: +17.37 OUT: +17.02
1-SI1.18	+18.59	IN FROM 1-SI1.17: +16.82 OUT: +16.82
1-SI1.19	+18.23	IN FROM 1-SI10.5: +16.57 IN FROM 1-SI1.18: +16.57 OUT: +16.57
1-SI1.20	+18.23	IN FROM 1-SI9.3: +16.56 IN FROM 1-SI1.19: +16.56 OUT: +16.56
1-SI1.21	+17.85	IN FROM 1-SI1.20: +16.48 OUT: +16.48
1-SI1.22	+17.93	IN FROM 1-SI1.21: +16.46
1-SI2.0	+21.34	OUT: +19.56
1-SI2.1	+20.82	IN FROM 1-SI2.0: +19.29 IN FROM 1-SI3.1: +19.45 OUT: +18.91
1-SI3.0	+21.71	IN FROM 1-IC3.0: +20.43 OUT: +20.43
1-SI3.1	+20.94	IN FROM 1-SI3.0: +20.04 OUT: +19.57
1-SI4.0	+20.60	OUT: +18.63
1-SI5.0	+20.51	OUT: +19.54
1-SI5.1	+20.09	IN FROM 1-SI5.0: +19.26 OUT: +19.22
1-SI5.2	+19.94	IN FROM 1-SI5.1: +19.08 IN FROM 1-SI6.0: +19.16 OUT: +19.08
1-SI5.3	+19.96	IN FROM 1-SI5.2: +19.05 OUT: +19.05
1-SI6.0	+20.80	IN FROM 1-IC6.1: +19.28 OUT: +19.28
1-SI7.0	+19.19	OUT: +17.91
1-SI8.0	+19.17	IN FROM 1-SI1.14: +18.26 OUT: +18.27
1-SI8.1	+18.65	IN FROM 1-SI8.0: +17.45 OUT: +17.45
1-SI9.0	+19.00	OUT: +17.07
1-SI9.1	+18.65	IN FROM 1-SI9.0: +16.98 OUT: +16.98
1-SI9.2	+18.25	IN FROM 1-SI9.1: +16.82 OUT: +16.82
1-SI9.3	+18.48	IN FROM 1-SI9.2: +16.63 OUT: +16.63
1-SI10.0	+19.55	OUT: +17.89
1-SI10.1	+19.80	IN FROM 1-SI10.0: +17.68 OUT: +17.68
1-SI10.2	+19.60	IN FROM 1-SI10.1: +17.48 OUT: +17.48
1-SI10.3	+19.50	IN FROM 1-SI10.2: +17.30 OUT: +17.20
1-SI10.4	+18.60	IN FROM 1-SI10.3: +17.09 OUT: +17.09
1-SI10.5	+18.42	IN FROM 1-SI10.4: +16.82 OUT: +16.82
1-SI11.0	+20.54	OUT: +19.06
1-SI11.1	+20.32	IN FROM 1-SI11.0: +18.83 OUT: +18.83
1-SI11.2	+20.38	IN FROM 1-SI11.1: +18.75 OUT: +18.75
1-SI11.3	+20.37	IN FROM 1-SI11.2: +18.71 OUT: +18.78
1-SCV1.0	+19.95	OUT: +18.46

NEW FOUL DRAINAGE MANHOLE

MANHOLE	COVER LEVEL	INVERT LEVEL
1-F1.0	+20.66	OUT: +19.31
1-F1.1	+20.79	IN FROM 1-F2.2: +19.16 IN FROM 1-F1.0: +18.99 OUT: +18.99
1-F1.2	+20.66	IN FROM 1-F1.1: +18.84 OUT: +18.84
1-F1.3	+20.62	IN FROM 1-F1.2: +18.88 IN FROM 1-F4.0: +19.10 OUT: +18.83
1-F1.4	+20.08	IN FROM 1-F1.3: +18.63 IN FROM 1-F5.0: +19.09 OUT: +18.63
1-F1.5	+19.97	IN FROM 1-F1.4: +18.55 IN FROM 1-F6.3: +18.55 OUT: +18.55
1-F1.6	+19.90	IN FROM 1-F1.5: +18.53 OUT: +18.53
1-F1.7	+19.97	IN FROM 1-F1.6: +18.20 OUT: +18.20
1-F1.8	+20.41	IN FROM 1-F1.7: +18.10 OUT: +18.10
1-F1.9	+20.30	IN FROM 1-F1.8: +17.85 OUT: +17.85
1-F1.10	+20.10	IN FROM 1-F1.9: +17.60 OUT: +17.60
1-F1.11	+19.85	IN FROM 1-F1.10: +17.22 OUT: +17.22
1-F1.12	+19.43	OUT: +17.00
1-F1.13	+17.76	IN FROM 1-F1.12: +16.93
1-F1.14	+17.68	IN FROM: +16.85 OUT: +16.85
1-F1.15	+17.43	OUT: +16.52
1-F1.16	+17.32	IN FROM 1-F1.15: +16.41 OUT: +16.41
1-F1.17	+18.24	IN FROM 1-F1.16: +16.10 OUT: +16.10
1-F1.18	+18.34	IN FROM 1-F1.17: +15.79 OUT: +15.79
1-F2.0	+21.66	IN FROM 1-IC2.0: +20.89 OUT: +19.82
1-F2.1	+20.91	IN FROM 1-F2.0: +19.56 OUT: +19.56
1-F2.2	+20.78	IN FROM 1-F2.1: +19.43 OUT: +19.43
1-F3.0	+20.80	IN FROM 1-IC3.1: +18.99 OUT: +19.00
1-F4.0	+20.59	OUT: +19.16
1-F5.0	+20.17	OUT: +19.19
1-F6.0	+20.45	OUT: +19.02
1-F6.1	+20.08	IN FROM 1-F6.0: +18.92 OUT: +18.92
1-F6.2	+19.98	IN FROM 1-F6.1: +18.73 IN FROM 1-F3.0: +18.83 OUT: +18.73
1-F6.3	+19.93	IN FROM 1-F6.2: +18.70 OUT: +18.70
1-IC2.0	+22.06	OUT: +21.18
1-IC3.0	+20.80	OUT: +20.11
1-IC3.1	+20.80	IN FROM 1-IC3.0: +19.69 OUT: +19.45
EX F5	+18.03	IN FROM 1-F1.18: +15.68

NEW SURFACE WATER MANHOLE

MANHOLE	COVER LEVEL	INVERT LEVEL
1-S12.1	+20.20	+19.15
1-S12.2	+19.90	+18.78
1-S12.3	+19.90	+18.40
1-S12.4	+19.90	+17.80
1-S13.1	+19.90	+19.15
1-S13.2	+20.00	+18.93
1-S13.3	+19.95	+18.71

ISSUE	DATE	DESCRIPTION	BY
PL6	31.05.22	PLANNING ISSUE	KS
PL5	16.03.22	UPDATED AS PER IW COMMENTS	TN
PL4	24.02.22	IW DIVERSIONS TEAM COMMENTS	TN
PL3	20.01.22	ISSUED FOR IW DESIGN VETTING	TN
PL2	10.12.21	ISSUED FOR IW DESIGN VETTING	TN
PL1	09.11.21	ISSUED FOR PRE-APPLICATION SUBMISSION	TN

Project Engineer: CIARAN O'RAFFERTY | Project Director: CIARAN KENNEDY

BM STAGE

PLANNING

BM BARRETT MAHONY
Dublin Office:
Sandwith House, 53-54 Lower Sandwith Street, Dublin 2, Ireland.
Tel: (01) 677 3200 Fax: (01) 677 3164
London Office:
12 Mill Street, London SE1 2AY, United Kingdom
Tel: (0044) 864 5413 2722
Consulting Engineers, Civil . Structural . Project Management.E-mail: bmce@bmce.ie Web: www.bmce.ie

CLIENT
CWTC MULTI FAMILY ICAV ACTING SOLELY IN RESPECT OF ITS SUB FUND DBTR SCR1 FUND

PROJECT TITLE
BAILEY GIBSON SHD 2

BM PROJECT No.
19117

MODEL | REFERENCE: **BGL-BMD-ZZ-00-DR-C-1020-1022 & 1120-1122** | SUITABILITY: **S1** | REVISION: **P01**

DRAWING TITLE
PROPOSED DRAINAGE LAYOUT (SHEET 2 OF 4)

DRG | DRAWING REFERENCE: **BGL-BMD-ZZ-00-DR-C-1021** | STATUS: **D2** | REVISION: **PL6**