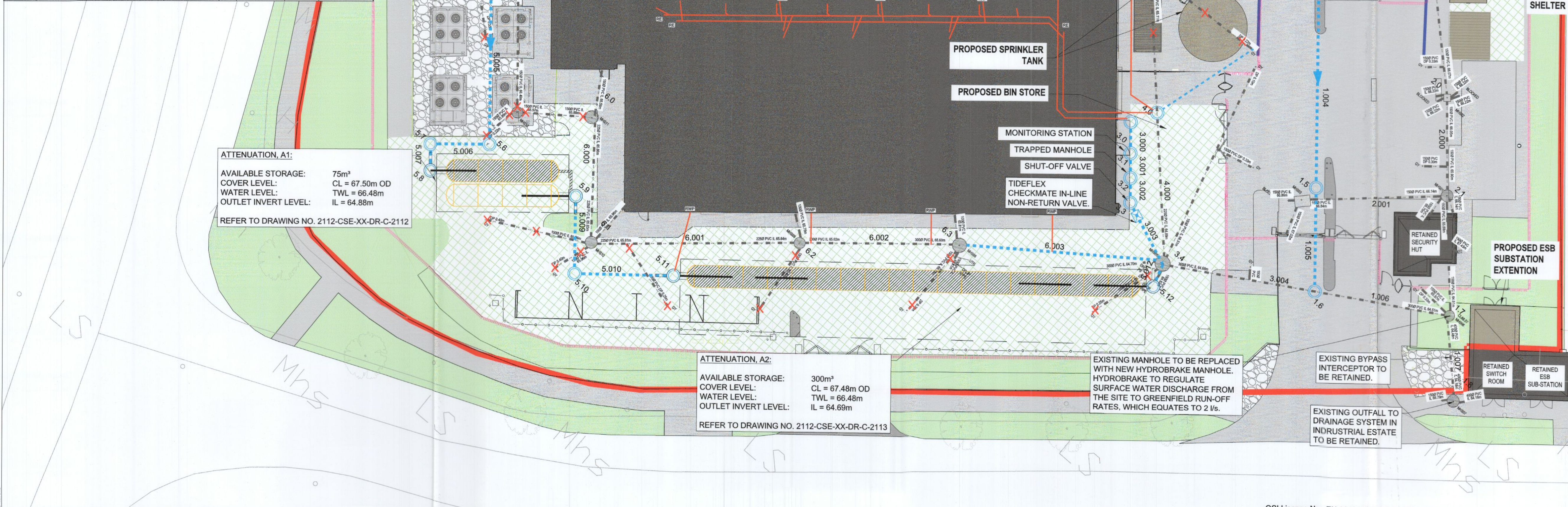


Manhole Name	Cover Level	Upstream Invert Level	Downstream Invert Level	Manhole Type	Manhole Diameter (mm)	Manhole Depth	Comments
1.0	CL = 67.737	1.000 = 65.150	1.001 = 65.034	B	1,200	2,553	
1.1	CL = 66.639	1.000 = 65.100	1.001 = 65.034	B	1,200	1,505	Attenuation A3, Inlet/Outlet
1.2	CL = 66.669	1.001 = 65.007	1.002 = 65.007	B	1,200	1,562	
1.3	CL = 66.710	1.002 = 64.880	1.003 = 64.880	B	1,200	1,886	Manometer Full Retention Separator NSFA015
1.4	CL = 66.733	1.003 = 64.833	1.004 = 64.833	B	1,200	1,900	
2.0	CL = 67.451	2.000 = 65.950	2.001 = 65.950			1,436	Retained existing manhole.
2.1	CL = 67.654	2.000 = 65.900	2.001 = 65.800			1,854	Retained existing manhole.
1.5	CL = 67.672	1.004 = 64.895	1.005 = 64.696	B	1,200	2,970	
3.0	CL = 67.658	3.000 = 65.656	3.001 = 65.656	B	1,200	1,952	
3.1	CL = 67.605	3.000 = 65.946	3.001 = 65.646			1,959	Nivus Flowmeter and Aquacell sampler
3.2	CL = 67.612	3.001 = 65.635	3.002 = 65.635			1,977	Interceptor manhole fitted with Naylor Dublin Interceptor or equivalent device
3.3	CL = 67.622	3.002 = 65.624	3.003 = 65.624			1,998	Manual Check Valve-Tek ANSI Class 150 Stainless Steel Gate Valve. Note of valve to be adapted to have handle finish just beneath chamber cover for accessibility purposes. Microswitch to M&E specification to be fixed to manhole outlet above banding
4.0	CL = 67.652	4.000 = 65.050	4.001 = 65.050	B	1,200	2,596	
5.0	CL = 67.593	5.000 = 66.573	5.001 = 66.573	B	1,200	1,059	
5.1	CL = 67.716	5.000 = 66.442	5.001 = 66.442	B	1,200	1,348	
5.2	CL = 67.685	5.001 = 66.388	5.002 = 66.388	B	1,200	1,322	
5.3	CL = 67.671	5.002 = 66.370	5.003 = 66.370	B	1,200	1,336	
5.4	CL = 67.623	5.003 = 66.294	5.004 = 66.294	B	1,200	1,449	
5.5	CL = 67.626	5.004 = 66.198	5.005 = 66.198	B	1,200	1,493	
5.6	CL = 67.445	5.005 = 66.902	5.006 = 64.862	G	1,200	2,532	Backup manhole.
5.7	CL = 67.708	5.006 = 64.925	5.007 = 64.925	B	1,200	2,780	
5.8	CL = 67.674	5.007 = 64.913	5.008 = 64.874	B	1,200	2,761	Attenuation A1, Inlet
5.9	CL = 67.634	5.008 = 64.855	5.009 = 64.855	B	1,200	2,764	Attenuation A1, Outlet
6.0	CL = 67.507	5.009 = 64.855	5.010 = 64.855	B	1,200	2,652	
5.11	CL = 67.592	5.010 = 64.831	5.011 = 64.887	C	1,200	2,761	Attenuation A2, Inlet
5.12	CL = 67.686	5.011 = 64.887	5.012 = 64.887	C	1,200	2,995	Attenuation A3, Outlet
6.1	CL = 67.553	6.000 = 65.830	6.001 = 65.810			1,633	Retained existing manhole.
6.2	CL = 67.574	6.001 = 65.640	6.002 = 65.620			1,743	Retained existing manhole.
6.3	CL = 67.593	6.002 = 65.600	6.003 = 64.772			2,089	To be replaced.
3.4	CL = 67.712	3.003 = 65.950 4.000 = 64.890 5.011 = 64.890 6.003 = 64.772	6.003 = 64.680			3,032	Retained existing manhole.
1.6	CL = 67.927	1.006 = 64.674 1.008 = 64.649	1.009 = 64.674			3,353	Retained existing manhole.
1.7	CL = 68.014	1.006 = 64.680 1.007 = 64.680	1.007 = 64.680			3,588	Retained existing manhole.
1.8	CL = 68.320	1.007 = 64.180 1.008 = 64.180	1.008 = 64.180			3,878	Retained existing manhole.

Pipe Number	Pipe Diameter (mm)	Length (m)	Upstream Invert Level	Downstream Invert Level	Slope	Pipe Backfill / Surround Information	Pipe Materials	Comments
1.000	225	9.400	65.150	65.109	1:200	DG2	HDPE Telemast	
1.001	300	5.408	65.034	65.007	1:200	DG2	HDPE Telemast	
1.002	300	11.414	65.007	64.850	1:200	DG2	HDPE Telemast	
1.003	300	3.377	64.850	64.833	1:200	DG2	HDPE Telemast	
1.004	300	27.435	64.833	64.696	1:200	DG2	HDPE Telemast	
2.000	150	6.703	66.050	65.900	1:58		uPVC	Retained existing pipe.
2.001	225	11.865	65.800	65.622	1:67		uPVC	Retained existing pipe.
1.005	300	9.214	64.696	64.640	1:200	DG2	HDPE Telemast	
3.000	225	2.054	65.656	65.646	1:200	DG2	HDPE Telemast	
3.001	225	2.200	65.646	65.635	1:200	DG2	HDPE Telemast	
3.002	225	2.200	65.635	65.624	1:200	DG2	HDPE Telemast	
3.003	225	6.160	65.624	65.593	1:200	DG2	HDPE Telemast	Hydrflex Checkmate in-line Non-Return Valve retained existing pipe
4.000	225	12.718	65.006	64.890	1:110		uPVC	Retained existing pipe
5.000	150	28.182	66.573	66.442	1:200	DG3	HDPE Telemast	
5.001	150	10.748	66.442	66.388	1:200	DG2	HDPE Telemast	
5.002	150	3.636	66.388	66.370	1:200	DG2	HDPE Telemast	
5.003	150	17.215	66.370	66.294	1:200	DG2	HDPE Telemast	
5.004	225	2.200	66.209	66.198	1:200	DG2	HDPE Telemast	
5.005	225	21.183	66.198	66.092	1:200	DG2	HDPE Telemast	
5.006	300	5.379	64.692	64.625	1:200	DG2	HDPE Telemast	
5.007	300	2.268	64.625	64.613	1:200	DG2	HDPE Telemast	
5.009	300	6.887	64.613	64.655	1:384	DG2	HDPE Telemast	
5.010	300	8.849	64.655	64.631	1:384	DG2	HDPE Telemast	
5.012	300	2.203	64.687	64.680	1:300	DG2	HDPE Telemast	
6.000	225	11.266	65.860	65.830	1:376		uPVC	Retained existing pipe
6.001	225	16.665	65.810	65.640	1:110		uPVC	Retained existing pipe
6.002	300	14.387	65.620	65.600	1:716		uPVC	Retained existing pipe
6.003	300	18.303	65.580	64.740	1:200		uPVC	Retained existing pipe
3.004	300	13.816	64.680	64.574	1:131		uPVC	Retained existing pipe
1.006	300	12.356	64.574	64.480	1:131		uPVC	Retained existing pipe
1.007	400	7.552	64.480	64.180	1:25		uPVC	Retained existing pipe



CALMOUNT ROAD

- NOTES**
- STORM SEWER PIPES TO BE ADS HDPE TWINWALL IN ACCORDANCE WITH EN13476. FOR ALL STORMWATER DRAINAGE FOR PIPES <450mm IN DIAMETER.
 - ALL RWMP CONNECTIONS ARE 150mm WELDED HDPE WITH 90° SLOW RADI BENDS SADDLED INTO MAIN SURFACE WATER DRAINAGE.
 - FOR ALL MANHOLE DETAILS, PIPE BEDDING, SURROUND AND HAUNCHING DETAILS AS PER DWG 22_112-CSE-00-XX-DR-C-2910. MANHOLE COVERS & FRAMES, ROAD GULLIES, TESTING & CLEANING OF DRAINS AND SEWER DIVERSIONS. REFER TO THE CIVIL WORKS SPECIFICATION AND GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS VERSION 6.0 WHICH IS PROVIDED IN THE INFORMATION PACK.
 - GULLY CONNECTIONS SHALL COMPLY WITH THE DWG No. 22_112-CSE-00-XX-DR-C-2911 & SECTION 11 AND SECTION 14.7 OF GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS VERSION 6.0.
 - ALL MANHOLES SHALL BE IN ACCORDANCE WITH THE FOLLOWING DETAILS OUTLINED IN APPENDIX 1 GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS VERSION 6.0 OF THE FOLLOWING:
 - MANHOLES WITH BETWEEN 1m AND 3m COVER TO TOP OF PIPE, &
 - PIPE DIAMETER IS LESS THAN 525mm SHALL BE TYPE B.
 - MANHOLES WITH BETWEEN 3m AND 6m COVER TO TOP OF PIPE, &
 - PIPE DIAMETER IS LESS THAN 525mm SHALL BE TYPE C.
 - ALL MANHOLES ON DRAINS OF 450mm DIAMETER AND OVER SHALL BE PROVIDED WITH SAFETY CHAINS FOR PLACING ACROSS THE MOUTH OF THE DRAIN ON THE DOWNSTREAM SIDE OF THE MANHOLE. MILD STEEL SAFETY CHAIN SHALL BE 12MM NOMINAL SIZE GRADE M (6) NON-CALIBRATED CHAIN, TYPE 1, COMPLYING WITH BS EN 818: PART 3. CHAINS SHALL BE HOT DIP GALVANISED TO BS EN ISO 1461. CHAINS SHALL BE SECURED ONLY BY A SAFETY EYEBOLT TO BS 7883: 2005 WITH A STANDARD SCREW GATE KARBINER TO BS EN 362.
 - VERTICAL BACKDROP IN MANHOLES SHALL BE IN ACCORDANCE WITH TYPE G MANHOLE DETAIL IN APPENDIX 1 TO THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS VERSION 6.0.
 - ALL COVERS AND GRATINGS SHALL COMPLY TO BE CLASS D400 TO EN 124.
 - REFER TO DRAWING NUMBER 22_112-CSE-00-XX-DR-C-2912 FOR DETAILS OF PROPOSED PETROL INTERCEPTORS.

- LEGEND**
- OUTLINE OF THE SITE SUBJECT TO THIS APPLICATION
 - RETAINING WALLS
 - EXISTING BUILDINGS
 - PROPOSED BUILDINGS
 - GRASSCRETE
 - CONCRETE PAVING
 - LANDSCAPING AREA (REFER TO LANDSCAPE ARCHITECT DRAWING)
 - GRAVEL
 - EXISTING FENCE
 - PROPOSED FENCE
 - PROPOSED PLANT SCREEN
 - LOW LEVEL BARRIER
 - EXISTING SURFACE WATER PIPE TO BE RETAINED
 - EXISTING SURFACE WATER PIPE TO BE REMOVED
 - PROPOSED SURFACE WATER PIPE
 - PROPOSED SURFACE WATER MANHOLE
 - EXISTING SURFACE WATER MANHOLE
 - PROPOSED SURFACE WATER ATTENUATION
 - BASE OF ATTENUATION AREA
 - INTERNAL DRAINAGE PIPE

REV.	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P03	09/12/22	PLANNING ISSUE		LT	CD	CD
P02	14/10/22	PLANNING ISSUE		LT	CD	CD
P01	02/09/22	DRAFT PLANNING ISSUE		LT	CD	CD

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MECHANICAL & ELECTRICAL ENGINEER CIVIL & STRUCTURAL ENGINEER

Clifton Scannell Emerson Associates

ARCHITECT FIRE ENGINEER

KAVANAGH TUIE ARCHITECTS

BB7

SECURITY ENGINEER OTHER ENGINEER

CUNDALL

PROJECT: Unit 1, M50 Business Park

TITLE: PROPOSED SURFACE WATER DRAINAGE LAYOUT PLAN

DRAWING NO.: 22_112-CSE-00-XX-DR-C-2110

SCALE: A1 1:200 AGILE No.: REV: P03