

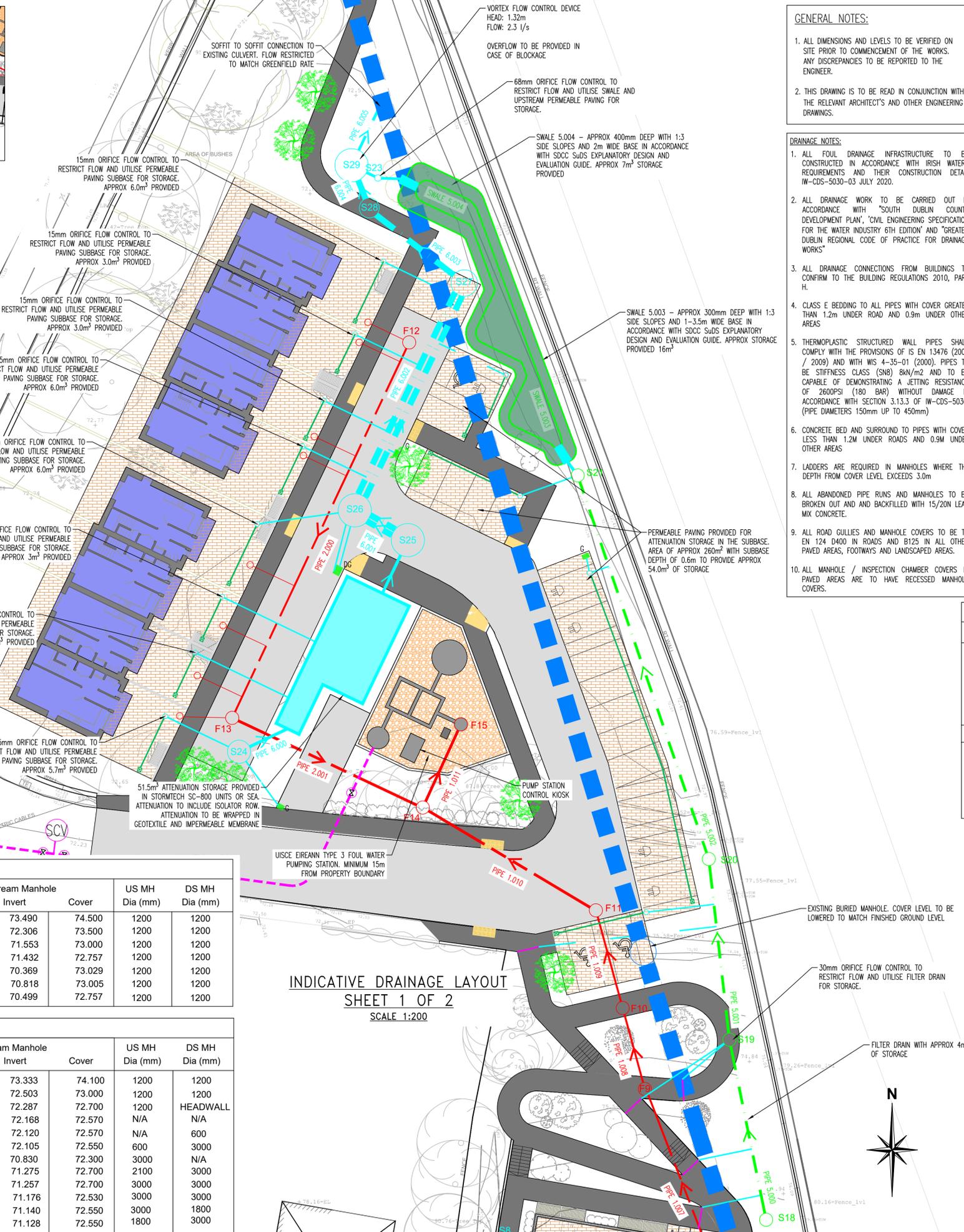
- SuDS NOTES:**
- CONTRACTOR TO PROVIDE METHOD STATEMENT DEMONSTRATING HOW THE ATTENUATION SYSTEM WILL BE REPLACED AT THE END OF THEIR DESIGN LIFE.
 - CONTRACTOR TO TAKE INTO ACCOUNT LATERAL LOADS FROM THE ADJACENT BUILDINGS IN THE DESIGN OF THE ATTENUATION SYSTEM.
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 - ALL SuDS ELEMENTS TO BE DESIGNED IN ACCORDANCE WITH THE SDCG SuDS SUSTAINABLE DRAINAGE EXPLANATORY DESIGN & EVALUATION GUIDE 2022 THE ACCOMPANYING INDICATIVE DETAILS FOR TAKING IN CHARGE AND THE CIRIA SuDS MANUAL.
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 - THE DRAINAGE STRATEGY DRAWINGS SHOULD BE REVIEWED IN CONJUNCTION WITH THE APPENDIX TO EMPLOYERS REQUIREMENTS.

FOUL NETWORK

Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole			Downstream Manhole			US MH Dia (mm)	DS MH Dia (mm)
					Number	Invert	Cover	Number	Invert	Cover		
1.007	225	23	uPVC	18.292	F8	74.285	76.360	F9	73.490	74.500	1200	1200
1.008	225	25	uPVC	7.612	F9	72.610	74.500	F10	72.306	73.500	1200	1200
1.009	225	150	uPVC	9.184	F10	71.614	73.500	F11	71.553	73.000	1200	1200
1.010	225	150	uPVC	18.178	F11	71.553	73.000	F14	71.432	72.757	1200	1200
1.011	225	150	uPVC	8.289	F14	70.424	72.757	F15	70.369	73.029	1200	1200
2.000	150	60	uPVC	37.641	F12	71.445	72.820	F13	70.818	73.005	1200	1200
2.001	150	60	uPVC	19.115	F13	70.818	73.014	F14	70.499	72.757	1200	1200

STORM - SITE A (NORTH)

Pipe Code	Dimensions (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole			Downstream Manhole			US MH Dia (mm)	DS MH Dia (mm)
					Number	Invert	Cover	Number	Invert	Cover		
5.000	225	100	uPVC	16.657	S18	73.500	76.250	S19	73.333	74.100	1200	1200
5.001	225	170	uPVC	16.490	S19	72.600	74.100	S20	72.503	73.000	1200	1200
5.002	225	170	uPVC	36.759	S20	72.503	73.000	S21	72.287	72.700	1200	HEADWALL
5.003	N/A	200	SWALE	23.815	S21	72.287	72.700	S22	72.168	72.570	N/A	N/A
5.004	N/A	202	SWALE	9.698	S22	72.168	72.570	S23	72.120	72.570	N/A	600
5.005	225	175	uPVC	2.622	S23	72.120	72.570	S29	72.105	72.550	600	3000
5.006	225	20	uPVC	6.057	S29	71.128	72.550	S30	70.830	72.300	3000	N/A
6.000	225	170	uPVC	24.555	S24	71.419	73.000	S25	71.275	72.700	2100	3000
6.001	2x525	307	CONC	5.523	S25	71.275	72.700	S26	71.257	72.700	3000	3000
6.002	2x525	265	CONC	21.455	S26	71.257	72.700	S27	71.176	72.530	3000	3000
6.003	525	316	CONC	11.360	S27	71.176	72.530	S28	71.140	72.550	3000	1800
6.004	525	288	CONC	3.460	S28	71.140	72.550	S29	71.128	72.550	1800	3000



INDICATIVE DRAINAGE LAYOUT
SHEET 1 OF 2
SCALE 1:200

- GENERAL NOTES:**
- ALL DIMENSIONS AND LEVELS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF THE WORKS. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECT'S AND OTHER ENGINEERING DRAWINGS.
- DRAINAGE NOTES:**
- ALL FOUL DRAINAGE INFRASTRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IRISH WATERS REQUIREMENTS AND THEIR CONSTRUCTION DETAIL IW-CDS-5030-03 JULY 2020.
 - ALL DRAINAGE WORK TO BE CARRIED OUT IN ACCORDANCE WITH "SOUTH DUBLIN COUNTY DEVELOPMENT PLAN", "CIVIL ENGINEERING SPECIFICATION FOR THE WATER INDUSTRY 6TH EDITION" AND "GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS".
 - ALL DRAINAGE CONNECTIONS FROM BUILDINGS TO CONFIRM TO THE BUILDING REGULATIONS 2010, PART H.
 - CLASS E BEDDING TO ALL PIPES WITH COVER GREATER THAN 1.2m UNDER ROAD AND 0.9m UNDER OTHER AREAS.
 - THERMOPLASTIC STRUCTURED WALL PIPES SHALL COMPLY WITH THE PROVISIONS OF IS EN 13476 (2007 / 2009) AND WITH WIS 4-35-01 (2000). PIPES TO BE STIFFNESS CLASS (SN8) 8kN/m² AND TO BE CAPABLE OF DEMONSTRATING A JETTING RESISTANCE OF 2600PSI (180 BAR) WITHOUT DAMAGE IN ACCORDANCE WITH SECTION 3.13.3 OF IW-CDS-5030. (PIPE DIAMETERS 150mm UP TO 450mm).
 - CONCRETE BED AND SURROUND TO PIPES WITH COVER LESS THAN 1.2M UNDER ROADS AND 0.9M UNDER OTHER AREAS.
 - LADDERS ARE REQUIRED IN MANHOLES WHERE THE DEPTH FROM COVER LEVEL EXCEEDS 3.0m.
 - ALL ABANDONED PIPE RUNS AND MANHOLES TO BE BROKEN OUT AND BACKFILLED WITH 15/20N LEAN MIX CONCRETE.
 - ALL ROAD GULLIES AND MANHOLE COVERS TO BE TO EN 124 D400 IN ROADS AND B125 IN ALL OTHER PAVED AREAS, FOOTWAYS AND LANDSCAPED AREAS.
 - ALL MANHOLE / INSPECTION CHAMBER COVERS IN PAVED AREAS ARE TO HAVE RECESSED MANHOLE COVERS.

LEGEND

- EXISTING FOUL SEWER
- PROPOSED 150mm Ø FOUL SEWER AND MANHOLE
- PROPOSED 100mm Ø FOUL CONNECTION & 450mm Ø IC
- EXISTING STORM SEWER
- EXISTING STORM CULVERT (1500mmØ)
- PROPOSED STORM SEWER AND MANHOLE
- PROPOSED STORM CONNECTION
- PROPOSED FILTER DRAIN (1m WIDE) & MANHOLE
- PROPOSED 150mm Ø PERFORATED LAND DRAIN WITH ASSOCIATED 450mm Ø INSPECTION CHAMBER AND ROODING EYE
- PROPOSED SWALE EXTENTS
- PROPOSED PERMEABLE PAVING TO BE UNDERDRAINED
- PROPOSED INLET/OUTLET TO BE AS PER SDCG SuDS GUIDE 2022 SECTION 8.4.11.1
- PROPOSED RAINGARDEN TO BE UNDERDRAINED
- PROPOSED RAINWATER BUTT
- PROPOSED TREE PIT (TO COMPLY WITH THE REQUIREMENTS OF SDCG PARKS DEPARTMENT)
- PROPOSED LINEAR DRAINAGE
- PROPOSED GULLY
- PROPOSED STORM TECH SC-800 OR SEA INSTALLED AS PER SDCG SuDS EXPLANATORY DESIGN AND EVALUATION GUIDE 2022
- PROPOSED RISING MAIN
- PROPOSED RISING MAIN AIR VALVE
- PROPOSED RISING MAIN SCOUR VALVE
- PROPOSED RISING MAIN SLUICE VALVE

NOTE: FOUL uPVC PIPES SHALL BE IN ACCORDANCE WITH IRISH WATER CoP SECTION 3.13.3; SN8 STIFFNESS CLASS. PIPE FITTINGS MAY BE SN4 IF SN8 IS UNAVAILABLE.

STORAGE PROVISION

Item	Volume (m³)
SITE A (NORTH)	
FILTER DRAIN	4m³
PERMEABLE PAVING (PUBLIC)	54m³
SWALE	23m³
STORM TECH	51.5m³
PERMEABLE PAVING (PRIVATE)	35.7m³
OVERSIZED MH & PIPES	51.5m³
TOTAL	219m³
SITE B (SOUTH)	
PERMEABLE PAVING (PUBLIC)	25m³
INFILTRATION TRENCHES	24.5m³
STORMTECH	114m³
TOTAL	164m³
SITE WIDE TOTAL	383m³

DRAWING STATUS:
ISSUE_FOR_PLANNING

CLIENT: SOUTH DUBLIN COUNTY COUNCIL

ARCHITECT: SOUTH DUBLIN COUNTY COUNCIL

JOB DESCRIPTION: 29NO. UNIT HOUSING DEVELOPMENT, CASTLEFIELD AVENUE, OLD KNOCKLYON ROAD, DUBLIN 16

DRAWING TITLE: INDICATIVE DRAINAGE LAYOUT - SHEET 1 OF 2

PROJECT No.: P-3811

DRAWING No.: C-03

REV. No.: D

SCALE: AS SHOWN

SHEET: A1

DATE: 06.12.24

DRAWN BY: SMCG

CHECKED BY: MK

APPROVED BY: MK

McMahon Associates

Consulting Civil & Structural Engineers, Project Managers
Environmental Engineers, PSDP & Traffic Engineers

The Mill Building, Newtown Link Road, Greenhills, Drogheda, Co. Louth

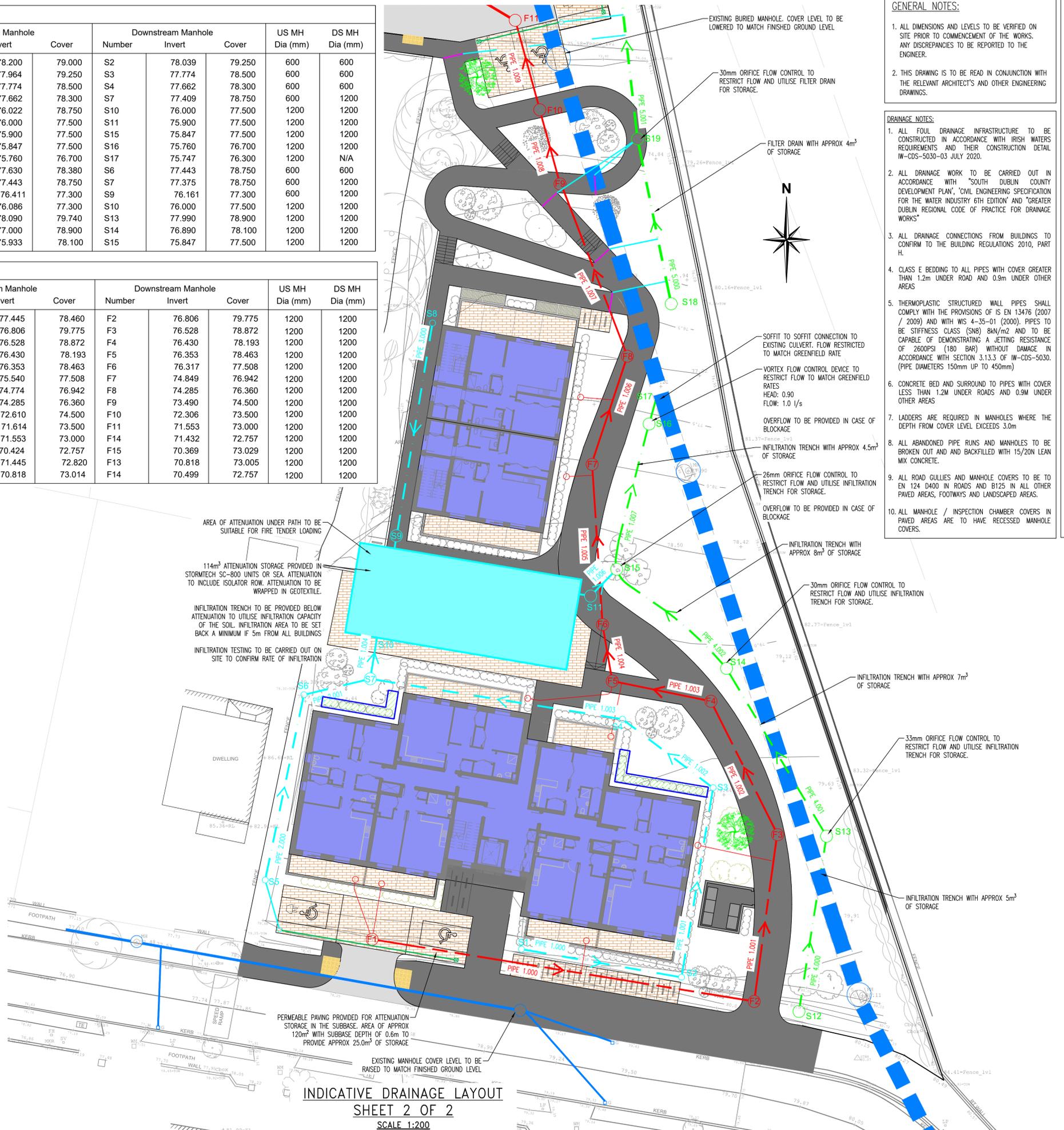
t: 041 2137 050 e: info@mcMahonengineers.com

STORM - SITE B (SOUTH)												
Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole			Downstream Manhole			US MH Dia (mm)	DS MH Dia (mm)
					Number	Invert	Cover	Number	Invert	Cover		
1.000	150	100	uPVC	16.109	S1	78.200	79.000	S2	78.039	79.250	600	600
1.001	225	100	uPVC	19.016	S2	77.964	79.250	S3	77.774	78.500	600	600
1.002	225	100	uPVC	11.241	S3	77.774	78.500	S4	77.662	78.300	600	600
1.003	225	100	uPVC	25.328	S4	77.662	78.300	S7	77.409	78.750	600	1200
1.004	225	98	uPVC	2.163	S7	76.022	78.750	S10	76.000	77.500	1200	1200
1.005	225	223	ATTEN	22.370	S10	76.000	77.500	S11	75.900	77.500	1200	1200
1.006	225	70	uPVC	3.700	S11	75.900	77.500	S15	75.847	77.500	1200	1200
1.007	225	169	uPVC	14.731	S15	75.847	77.500	S16	75.760	76.700	1200	1200
1.008	225	170	uPVC	2.173	S16	75.760	76.700	S17	75.747	76.300	1200	N/A
2.000	150	100	uPVC	18.724	S5	77.630	78.380	S6	77.443	78.750	600	600
2.001	150	100	uPVC	6.768	S6	77.443	78.750	S7	77.375	78.750	600	1200
3.000	225	85	uPVC	21.354	S8	76.411	77.300	S9	76.161	77.300	600	1200
3.001	225	142	uPVC	1.000	S9	76.086	77.300	S10	76.000	77.500	1200	1200
4.000	225	176	uPVC	17.558	S12	78.090	79.740	S13	77.990	78.900	1200	1200
4.001	225	176	uPVC	19.334	S13	77.000	78.900	S14	76.890	78.100	1200	1200
4.002	225	170	uPVC	14.650	S14	75.933	78.100	S15	75.847	77.500	1200	1200

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Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole			Downstream Manhole			US MH Dia (mm)	DS MH Dia (mm)
					Number	Invert	Cover	Number	Invert	Cover		
1.000	150	60	uPVC	38.366	F1	77.445	78.460	F2	76.806	79.775	1200	1200
1.001	150	60	uPVC	16.655	F2	76.806	79.775	F3	76.528	78.872	1200	1200
1.002	150	150	uPVC	14.760	F3	76.528	78.872	F4	76.430	78.193	1200	1200
1.003	150	150	uPVC	11.557	F4	76.430	78.193	F5	76.353	78.463	1200	1200
1.004	150	150	uPVC	5.304	F5	76.353	78.463	F6	76.317	77.508	1200	1200
1.005	150	23	uPVC	15.886	F6	75.540	77.508	F7	74.849	76.942	1200	1200
1.006	225	23	uPVC	11.254	F7	74.774	76.942	F8	74.285	76.360	1200	1200
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STORAGE PROVISION	
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LEGEND

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- EXISTING STORM CULVERT (1500mmØ)
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REV	DATE	DESCRIPTION	BY	APPV
D	19.02.26	STATUS CHANGED	SM-G	MK
C	17.04.25	STATUS UPDATED	SM-G	MK
B	28.03.25	MINOR CHANGES & SUDS NOTES ADDED	SM-G	MK
A	11.12.24	STATUS UPDATED	SM	MK

DRAWING STATUS:
ISSUE_FOR_PLANNING

CLIENT:
SOUTH DUBLIN COUNTY COUNCIL

ARCHITECT:
SOUTH DUBLIN COUNTY COUNCIL

JOB DESCRIPTION:
29NO. UNIT HOUSING DEVELOPMENT, CASTLEFIELD AVENUE, OLD KNOCKLYON ROAD, DUBLIN 16

DRAWING TITLE:
INDICATIVE DRAINAGE LAYOUT - SHEET 2 OF 2

PROJECT No.: P-3811 **DRAWING No.:** C-04

SCALE: AS SHOWN **SHEET:** A1 **DATE:** 06.12.24

DRAWN BY: SMCB **CHECKED BY:** MK **APPROVED BY:** MK

McMahon Associates
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