LEGEND

EXISTING SURFACE WATER SEWER	SW-EX
EXISTING COMBINED SEWER	CS-EX
PROPOSED SURFACE WATER SEWER	S1.001 150 →
PROPOSED SURFACE WATER MANHOLE	○ S1-0
PROPOSED SURFACE WATER RODDING EYE (SLUNG DRAINAGE)	○ S8-0 RE
PROPOSED PETROL INTERCEPTOR	
PROPOSED ACO DRAINAGE CHANNEL	ACO
PROPOSED ATTENUATION TANK	▨
PROPOSED BIO RETENTION AREAS	▨
PROPOSED BLUE GREEN ROOF	▨
PROPOSED GREEN ROOF	▨
PROPOSED PERMEABLE PAVING	▨
PROPOSED FOUL SEWER	225 →
PROPOSED FOUL MANHOLE	○ F1-0
PROPOSED FOUL RODDING EYE (SLUNG DRAINAGE)	• F1-1 RE
EXISTING FOUL MANHOLE	● ExFMH I.L.4.30
EXISTING COMBINED SEWER MANHOLE	● Ex CSMH I.L.5.87
SITE BOUNDARY	

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COLOUR DRAWING

SYSTEM CERTIFICATION bmtrada ISO 9001 CERTIFICATION
SYSTEM CERTIFICATION bmtrada ISO 14001 CERTIFICATION
SYSTEM CERTIFICATION bmtrada ISO 45001 CERTIFICATION

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Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING	LL	23.10.2024
C03	ISSUED FOR PLANNING	LL	04.03.2025
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
C06	ISSUED FOR PLANNING REVIEW	LL	14.04.2025
C07	ISSUED FOR PLANNING	LL	09.06.2025

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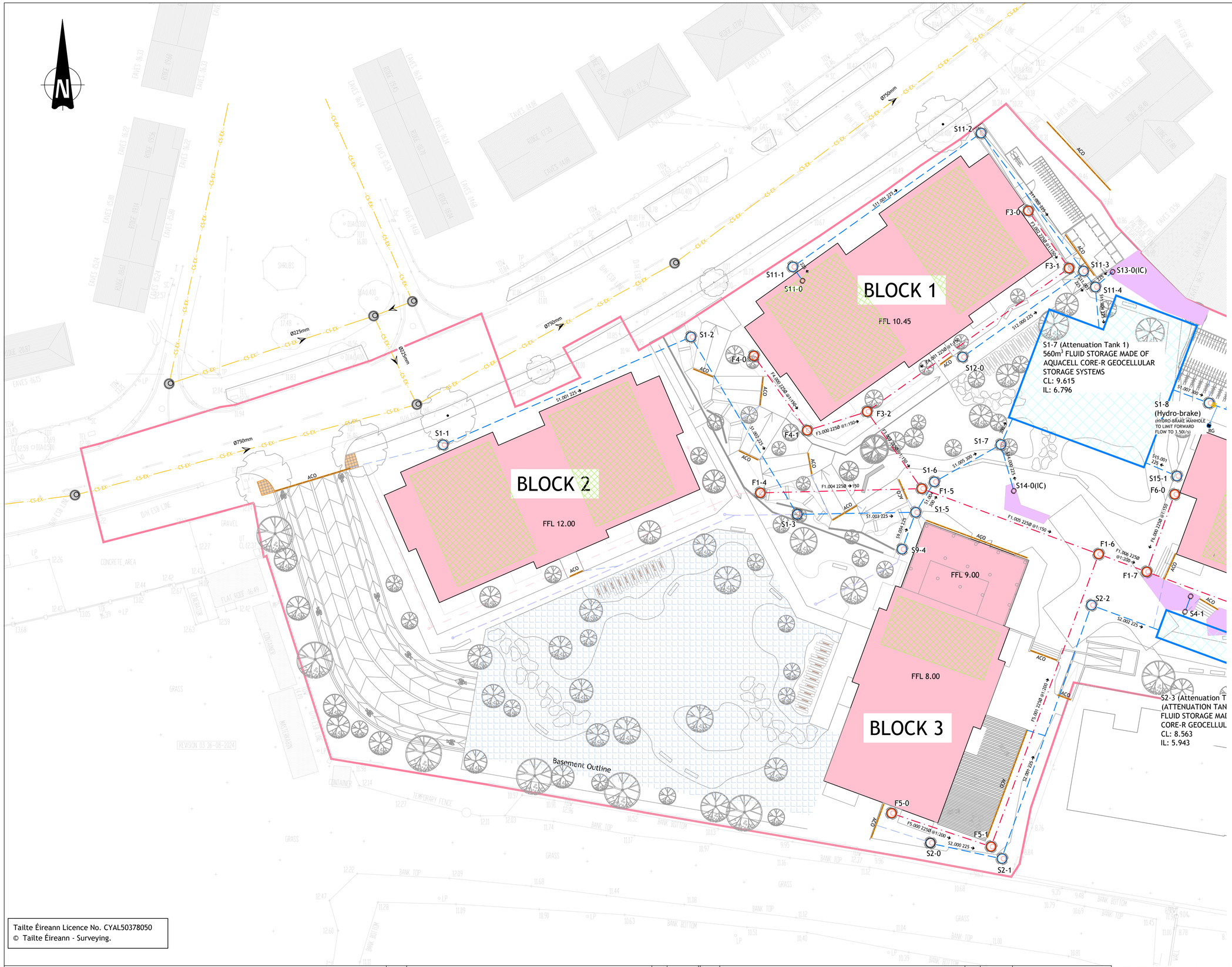
FRONVILLE LTD

PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK
Title: PROPOSED DRAINAGE LAYOUT - GENERAL ARRANGMENT

Drawn:	Date drawn:	Technician Check:	Engineer Check:	Approved:
Liam Lonergan	10.09.2024	Liam Lonergan	Simeon Solomons	Niamh Cronin

Project No: 214130
Model Ref: 214130-PUNCH-XX-XX-M2-C-0100-0102
Drawing Status: A0 (Planning)
Scale @ A1: 1:500
Document No: 214130-PUNCH-XX-XX-DR-C-0100
Revision No: C07



LEGEND

EXISTING SURFACE WATER SEWER	SW-EX
EXISTING COMBINED SEWER	CS-EX
PROPOSED SURFACE WATER SEWER	S1.001 150 →
PROPOSED SURFACE WATER MANHOLE	S1-0
PROPOSED SURFACE WATER RODDING EYE (SLUNG DRAINAGE)	S8-0 RE
PROPOSED PETROL INTERCEPTOR	
PROPOSED ACO DRAINAGE CHANNEL	ACO
PROPOSED ATTENUATION TANK	
PROPOSED BIO RETENTION AREAS	
PROPOSED BLUE GREEN ROOF	
PROPOSED GREEN ROOF	
PROPOSED PERMEABLE PAVING	
PROPOSED FOUL SEWER	225 →
PROPOSED FOUL MANHOLE	F1-0
PROPOSED FOUL RODDING EYE (SLUNG DRAINAGE)	F1-1 RE
EXISTING FOUL MANHOLE	ExFMH I.L.4.30
EXISTING COMBINED SEWER MANHOLE	Ex CSMH I.L.5.87
SITE BOUNDARY	

NOTES:
1. FOR BASEMENT DRAINAGE REFER TO DRAWING 214130-PUNCH-XX-XX-DR-C-0104
2. FOR DRAINAGE SCHEDULES REFER TO DRAWING 214130-PUNCH-XX-XX-DR-C-0105
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Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024	C07	ISSUED FOR PLANNING	LL	09.06.2025
C02	ISSUED FOR PLANNING	LL	23.10.2024				
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C06	ISSUED FOR PLANNING REVIEW	LL	14.04.2025				

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Elm Court, Boreenmanna Road, Cork, T12 HHW2
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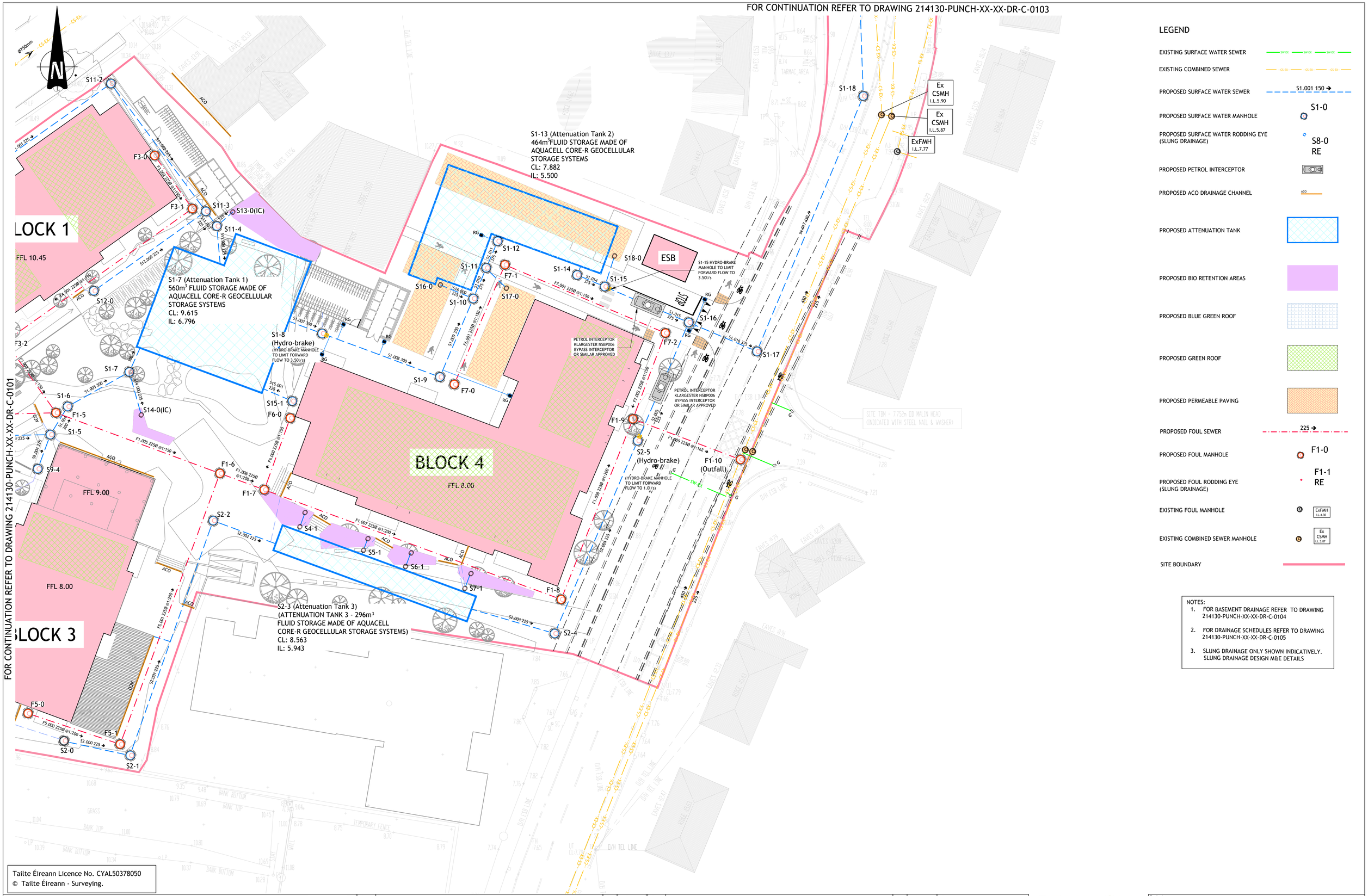
Project: KINSALE ROAD LRD, KINSALE ROAD, CORK			
Title: PROPOSED DRAINAGE LAYOUT - SHEET 1 OF 3			
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0100-0102	Drawing Status: A0 (Planning)	
Scale @ A1: AS SHOWN	Document No: 214130-PUNCH-XX-XX-DR-C-0101	Revision No: C07	

FOR CONTINUATION REFER TO DRAWING 214130-PUNCH-XX-XX-DR-C-0103

FOR CONTINUATION REFER TO DRAWING 214130-PUNCH-XX-XX-DR-C-0101



LEGEND

EXISTING SURFACE WATER SEWER	SW.EX
EXISTING COMBINED SEWER	CS.EX
PROPOSED SURFACE WATER SEWER	S1.001 150 →
PROPOSED SURFACE WATER MANHOLE	S1-0
PROPOSED SURFACE WATER RODDING EYE (SLUNG DRAINAGE)	S8-0 RE
PROPOSED PETROL INTERCEPTOR	
PROPOSED ACO DRAINAGE CHANNEL	ACO
PROPOSED ATTENUATION TANK	
PROPOSED BIO RETENTION AREAS	
PROPOSED BLUE GREEN ROOF	
PROPOSED GREEN ROOF	
PROPOSED PERMEABLE PAVING	
PROPOSED FOUL SEWER	225 →
PROPOSED FOUL MANHOLE	F1-0
PROPOSED FOUL RODDING EYE (SLUNG DRAINAGE)	F1-1 RE
EXISTING FOUL MANHOLE	ExFMH I.L.4.30
EXISTING COMBINED SEWER MANHOLE	Ex CSMH I.L.5.87
SITE BOUNDARY	

NOTES:
1. FOR BASEMENT DRAINAGE REFER TO DRAWING 214130-PUNCH-XX-XX-DR-C-0104
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C01	ISSUED FOR PLANNING	LL	03.10.2024	C07	ISSUED FOR PLANNING	LL	09.06.2025
C02	ISSUED FOR PLANNING	LL	23.10.2024				
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C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025				
C06	ISSUED FOR PLANNING REVIEW	LL	14.04.2025				

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Elm Court, Boreenmanna Road, Cork, T12 HHW2
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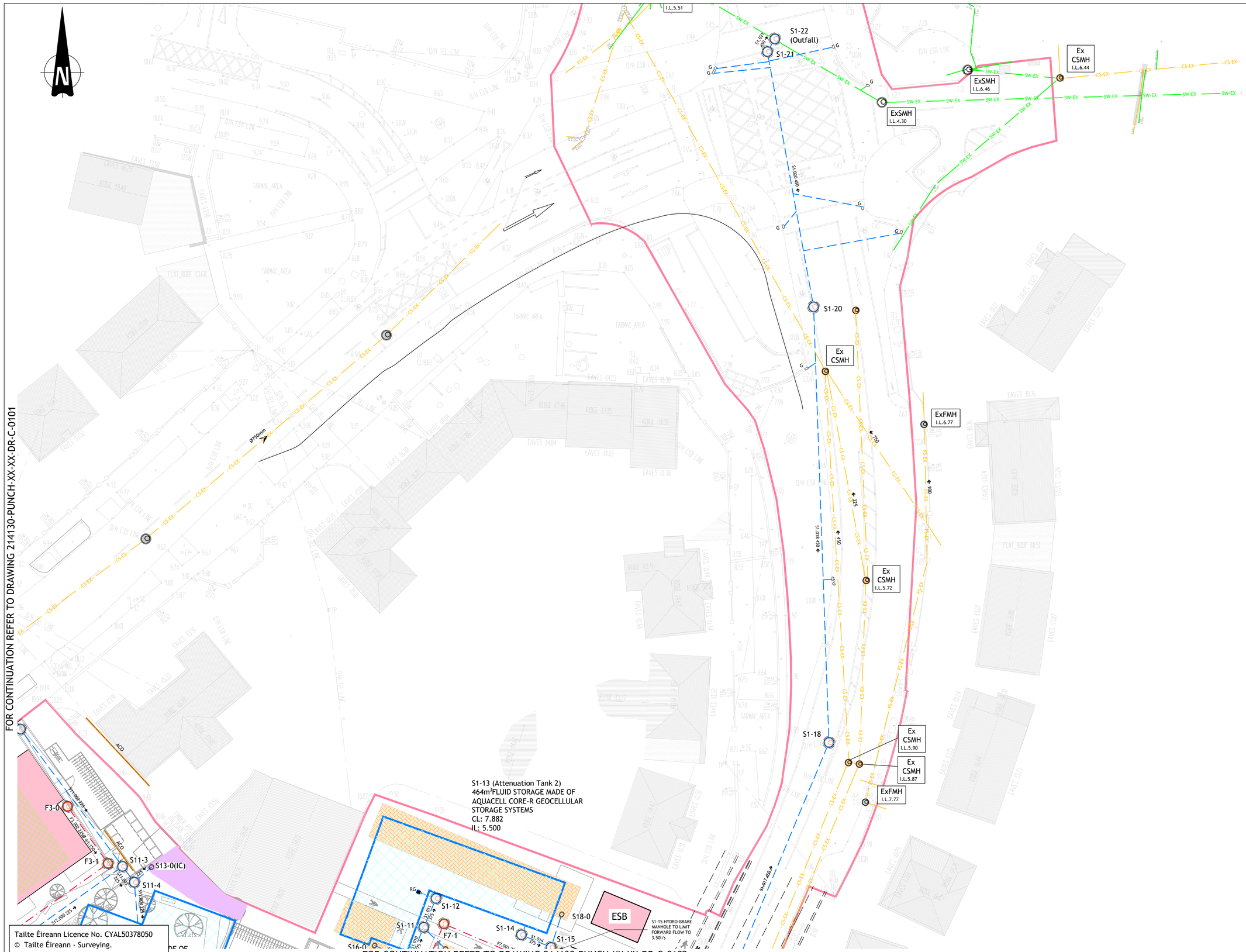
Project: KINSALE ROAD LRD, KINSALE ROAD, CORK
Title: PROPOSED DRAINAGE LAYOUT - SHEET 2 OF 3

Drawn:	Date drawn:	Technician Check:	Engineer Check:	Approved:
Liam Lonergan	10.09.2024	Liam Lonergan	Simeon Solomons	Niamh Cronin

Project No:	Model Ref:	Drawing Status:
214130	214130-PUNCH-XX-XX-M2-C-0100-0102	A0 (Planning)

Scale @ A1:	Document No:	Revision No:
AS SHOWN	214130-PUNCH-XX-XX-DR-C-0102	C07



LEGEND

EXISTING SURFACE WATER SEWER	SW-EX
EXISTING COMBINED SEWER	CS-EX
PROPOSED SURFACE WATER SEWER	S1.001 150 →
PROPOSED SURFACE WATER MANHOLE	S1-0
PROPOSED SURFACE WATER RODDING EYE (SLUNG DRAINAGE)	S8-0 RE
PROPOSED PETROL INTERCEPTOR	
PROPOSED ACO DRAINAGE CHANNEL	ACO
PROPOSED ATTENUATION TANK	
PROPOSED BIO RETENTION AREAS	
PROPOSED BLUE GREEN ROOF	
PROPOSED GREEN ROOF	
PROPOSED PERMEABLE PAVING	
PROPOSED FOUL SEWER	225 →
PROPOSED FOUL MANHOLE	F1-0
PROPOSED FOUL RODDING EYE (SLUNG DRAINAGE)	F1-1 RE
EXISTING FOUL MANHOLE	ExFMH I.L.4.30
EXISTING COMBINED SEWER MANHOLE	Ex CSMH I.L.5.87
SITE BOUNDARY	

NOTES:
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2. FOR DRAINAGE SCHEDULES REFER TO DRAWING 214130-PUNCH-XX-XX-DR-C-0105
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Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING	LL	23.10.2024
C03	ISSUED FOR PLANNING	LL	04.03.2025
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
C06	ISSUED FOR PLANNING REVIEW	LL	14.04.2025
C07	ISSUED FOR PLANNING	LL	09.06.2025

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Elm Court, Boreenmanna Road, Cork, T12 HHW2
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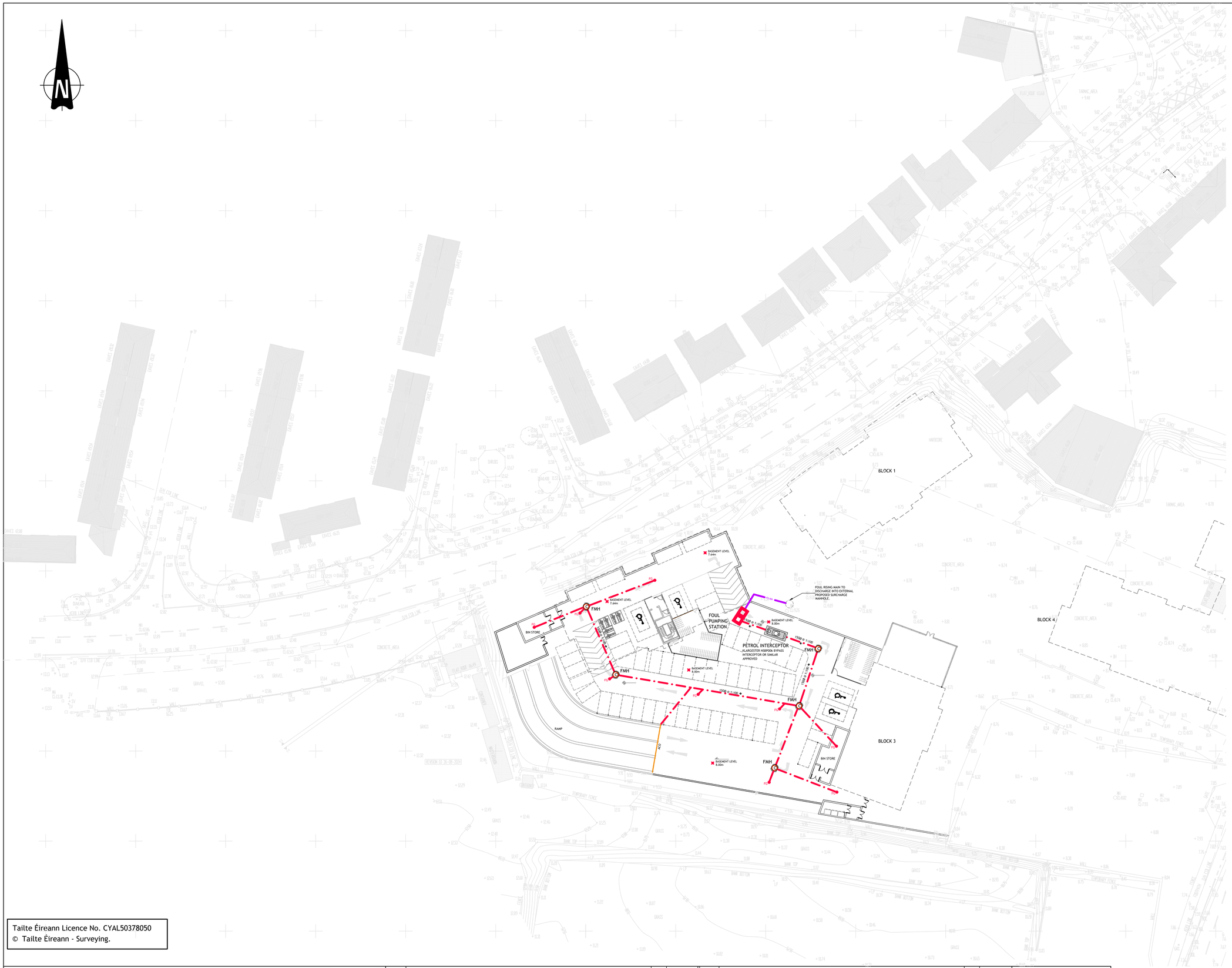
Project: KINSALE ROAD LRD, KINSALE ROAD, CORK
Title: PROPOSED DRAINAGE LAYOUT - SHEET 3 OF 3

Drawn:	Date drawn:	Technician Check:	Engineer Check:	Approved:
Liam Lonergan	10.09.2024	Liam Lonergan	Simeon Solomons	Niamh Cronin

Project No:	Model File:	Drawing Status:
214130	214130-PUNCH-XX-XX-M2-C-0100-0102	A0 (Planning)

Scale @ A1:	Document No:	Revision No:
AS SHOWN	214130-PUNCH-XX-XX-DR-C-0103	C07



LEGEND

PROPOSED FOUL SEWER	150Ø @ 1:100
PROPOSED FOUL MANHOLE	FMH
PROPOSED FLOOR GULLY	FG
PROPOSED ACO DRAINAGE CHANNEL	ACO
PROPOSED PETROL INTERCEPTOR	
PROPOSED FOUL RISING MAIN	FS.RM

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C01	ISSUED FOR PLANNING	LL	03.10.2024				
C02	ISSUED FOR PLANNING	LL	23.10.2024				
C03	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C04	ISSUED FOR PLANNING REVIEW	LL	08.04.2025				
C05	ISSUED FOR PLANNING	LL	09.06.2025				

Client: FRONVILLE LTD

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t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK
Title: PROPOSED BASEMENT DRAINAGE LAYOUT

Drawn:	Date drawn:	Technician Check:	Engineer Check:	Approved:
Liam Lonergan	10.09.2024	Liam Lonergan	Simeon Solomons	Niamh Cronin

Project No:	Model Ref:	Drawing Status:
214130	214130-PUNCH-XX-XX-M2-C-0104	A0 (Planning)

Scale @ A1:	Document No:	Revision No:
AS SHOWN	214130-PUNCH-XX-XX-DR-C-0104	C05

PROPOSED FOUL MANHOLE					
Name	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
F1-0	11.869	1200	567603.395	570100.374	1.019
F1-1	12.133	1200	567611.206	570082.574	1.413
F2-0	12.000	1200	567646.429	570108.337	1.150
F1-2	11.527	1200	567650.244	570099.531	1.091
F1-3	11.846	1200	567653.936	570101.134	3.396
F1-4	9.950	1200	567656.808	570101.210	1.519
F3-0	10.537	1200	567694.028	570140.385	1.537
F3-1	10.323	1200	567699.684	570132.421	1.388
F4-0	10.525	1200	567655.903	570120.243	1.747
F4-1	10.278	1200	567663.320	570109.883	1.585
F3-2	10.232	1200	567671.633	570112.497	2.482
F1-5	9.116	1200	567679.229	570101.802	1.453
F5-0	8.000	1200	567673.850	570057.112	1.000
F5-1	7.942	1200	567688.861	570052.075	1.021
F1-6	8.914	1200	567703.816	570092.708	2.209
F6-0	8.761	1200	567714.372	570101.009	1.511
F1-7	8.787	1200	567710.479	570090.247	2.118
F1-8	8.134	1200	567755.002	570073.804	1.702
F7-0	8.529	1200	567738.968	570106.060	1.479
F7-1	7.986	1200	567746.567	570123.996	1.066
F7-2	7.891	1200	567770.627	570113.762	1.145
F1-9	7.944	1200	567765.762	570100.868	1.658
F1-10 (Outfall)	7.656	1200	567781.906	570094.778	1.476

PROPOSED FOUL PIPES								
Name	US Node	US Node CL (m)	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)
F1.000	F1-0	11.869	F1-1	19.438	1.500	10.850	10.720	0.130
F1.001	F1-1	12.133	F1-2	42.562	1.500	10.720	10.436	0.284
F2.000	F2-0	12.000	F1-2	9.597	1.500	10.850	10.786	0.064
F1.002	F1-2	11.527	F1-3	4.025	1.500	10.436	10.409	0.027
F1.003	F1-3	11.846	F1-4	2.873	1.500	8.450	8.431	0.019
F1.004	F1-4	9.950	F1-5	22.429	1.500	8.431	8.281	0.150
F3.000	F3-0	10.537	F3-1	9.768	1.500	9.000	8.935	0.065
F3.002	F3-1	10.323	F3-2	34.407	1.500	8.935	8.706	0.229
F4.000	F4-0	10.525	F4-1	12.741	1.500	8.778	8.693	0.085
F4.001	F4-1	10.278	F3-2	8.714	1.500	8.693	8.635	0.058
F3.003	F3-2	10.232	F1-5	13.118	1.500	7.750	7.663	0.087
F1.005	F1-5	9.116	F1-6	26.215	1.500	7.663	7.488	0.175
F5.000	F5-0	8.000	F5-1	15.834	1.500	7.000	6.921	0.079
F5.001	F5-1	7.942	F1-6	43.298	1.500	6.921	6.705	0.216
F1.006	F1-6	8.914	F1-7	7.103	1.500	6.705	6.669	0.036
F6.000	F6-0	8.761	F1-7	11.444	1.500	7.250	7.174	0.076
F1.007	F1-7	8.787	F1-8	47.462	1.500	6.669	6.432	0.237
F1.008	F1-8	8.134	F1-9	29.125	1.500	6.432	6.286	0.146
F7.000	F7-0	8.529	F7-1	19.479	1.500	7.050	6.920	0.130
F7.001	F7-1	7.986	F7-2	26.146	1.500	6.920	6.746	0.174
F7.002	F7-2	7.891	F1-9	13.781	1.500	6.746	6.654	0.092
F1.009	F1-9	7.944	F1-10 (Outfall)	17.254	1.500	6.286	6.180	0.106

PROPOSED STORM MANHOLES				
Name	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)
S1-0 (Green Roof - Block 2)	24.675	1200	567613.534	570106.054
S1-1	11.857	1200	567612.735	570107.887
S1-2	10.980	1200	567647.163	570122.874
S8-0	12.127	1200	567614.099	570081.078
S8-1	11.821	1200	567653.255	570098.084
S1-3	9.680	1200	567661.935	570098.232
S9-0 (Blue Roof - Podium)	11.947	1200	567663.302	570082.862
S9-1	11.888	1200	567664.330	570085.661
S10-0 (Green Roof - Block 3)	37.125	1200	567676.257	570087.187
S10-1	11.670	1200	567675.009	570089.583
S9-3	11.584	1200	567675.807	570091.513
S9-4	9.000	1200	567676.500	570093.389
S1-4	9.006	1200	567678.392	570098.513
S1-5	9.151	1200	567680.984	570102.739
S14-0 (Bioretention Area)	8.995	1200	567692.016	570101.481
S1-6	9.107	1200	567690.224	570107.921
S11-0 (Green Roof - Block 1)	23.475	1200	567662.477	570130.971
S11-1	10.607	1200	567661.318	570132.602
S11-2	10.258	1200	567687.471	570151.182
S12-0	9.939	1200	567684.902	570120.082
S11-3	10.268	1200	567701.707	570132.019
S13-0 (Bioretention Area)	10.241	1200	567705.749	570131.911
S11-4	10.145	1200	567703.352	570129.806
S15-0 (Green Roof - Block 4)	27.525	1200	567720.650	570101.347
S15-1	8.778	1200	567715.313	570103.324
S1-7 (Attenuation Tank 1)	9.615	1200	567704.281	570119.181
S1-8 (Hydro-Brake)	8.837	1200	567719.143	570113.688
S1-9	8.588	1200	567736.806	570107.160
S16-0 (Permeable Paving)	8.422	1200	567738.054	570120.519
S1-10	8.204	1350	567741.809	570118.922
S17-0 (Permeable Paving)	8.012	1200	567747.373	570121.988
S1-11	8.054	1350	567743.766	570123.523
S1-12	8.004	1350	567745.474	570127.539
S1-13 (Attenuation Tank 2)	7.882	1350	567755.322	570126.487
S18-0 (Permeable Paving)	7.927	1200	567762.590	570124.482
S1-14	7.912	1350	567757.389	570122.471
S2-0	7.938	1200	567680.432	570052.587
S2-1	7.821	1200	567691.116	570051.002
S2-2	8.911	1200	567702.805	570085.619
S4-0 (Bioretention Area)	8.708	1200	567716.622	570086.898
S4-1 (Orifice)	8.728	1200	567715.587	570084.096
S7-0 (Bioretention Area)	8.367	1200	567741.407	570077.759
S7-1 (Orifice)	8.299	1350	567740.368	570074.945
S5-0 (Bioretention Area)	8.590	1200	567726.165	570083.388
S5-1 (Orifice)	8.663	1200	567725.126	570080.574
S6-0 (Bioretention Area)	8.590	1200	567732.553	570081.029
S6-1 (Orifice)	8.559	1350	567731.473	570078.230
S2-3 (Attenuation Tank 3)	8.563	1200	567727.952	570076.328
S2-4	7.864	1350	567754.020	570068.681
S2-5 (Hydro-Brake)	7.886	1350	567766.481	570097.599
S1-16	7.821	1350	567774.131	570115.352
S1-17	7.766	1350	567784.367	570110.996
S1-18	7.803	1350	567800.321	570149.307
S1-19	7.613	1350	567797.546	570197.985
S1-20	7.528	1350	567798.177	570210.092
S1-21	7.254	1350	567791.724	570245.717
S1-22 (Outfall)	7.238	1350	567792.767	570247.493
S1-15 (Hydro-Brake)	7.890	1350	567761.532	570120.721

PROPOSED STORM PIPES								
Name	US Node	US Node CL (m)	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)
S1.000	S1-0 (Green Roof - Block 2)	24.675	S1-1	2.000	0.600	24.000	10.600	13.400
S1.001	S1-1	11.857	S1-2	37.549	0.600	10.600	10.350	0.250
S1.002	S1-2	10.980	S1-3	28.730	0.600	9.350	9.158	0.192
S9.000	S8-0	12.127	S8-1	42.690	0.600	10.850	10.565	0.285
S8.001	S8-1	11.821	S1-3	8.681	0.600	10.565	8.381	2.184
S1.003	S1-3	9.680	S1-4	16.459	0.600	7.750	7.640	0.110
S9.000.	S9-0 (Blue Roof - Podium)	11.947	S9-1	2.982	0.600	11.447	11.427	0.020
S9.001	S9-1	11.888	S9-3	12.883	0.600	11.427	11.341	0.086
S10.000	S10-0 (Green Roof - Block 3)	37.125	S10-1	2.702	0.600	36.250	11.100	25.150
S10.001	S10-1	11.670	S9-3	2.088	0.600	11.100	11.086	0.014
S9.003	S9-3	11.584	S9-4	2.000	0.600	11.000	7.500	3.500
S9.004	S9-4	9.000	S1-4	5.462	0.600	7.500	7.464	0.036
S1.004	S1-4	9.006	S1-5	4.958	0.600	7.100	7.067	0.033
S1.005	S1-5	9.151	S1-6	10.594	0.600	7.067	6.996	0.071
S14.000	S14-0 (Bioretention Area)	8.995	S1-6	6.685	0.600	7.795	7.750	0.045
S1.006	S1-6	9.107	S1-7 (Attenuation Tank 1)	18.011	0.600	6.996	6.876	0.120
S11.000	S11-0 (Green Roof - Block 1)	23.475	S11-1	2.001	0.600	23.000	9.500	13.500
S11.001	S11-1	10.607	S11-2	32.081	0.600	9.500	9.286	0.214
S11.002	S11-2	10.258	S11-3	23.872	0.600	9.286	9.127	0.159
S12.000	S12-0	9.939	S11-3	20.613	0.600	8.514	8.308	0.206
S11.003	S11-3	10.268	S11-4	2.757	0.600	8.308	8.290	0.018
S13.000	S13-0 (Bioretention Area)	10.241	S11-4	3.190	0.600	8.816	8.784	0.032
S11.004	S11-4	10.145	S1-7 (Attenuation Tank 1)	10.666	0.600	7.650	7.579	0.071
S15.000	S15-0 (Green Roof - Block 4)	27.525	S15-1	5.691	0.600	27.000	7.000	20.000
S15.001	S15-1	8.778	S1-7 (Attenuation Tank 1)	19.317	0.600	7.000	6.871	0.129
S1.007	S1-7 (Attenuation Tank 1)	9.615	S1-8 (Hydro-Brake)	15.845	0.600	6.796	6.690	0.106
S1.008	S1-8 (Hydro-Brake)	8.837	S1-9	18.831	0.600	6.690	6.564	0.126
S1.009	S1-9	8.588	S1-10	12.782	0.600	6.564	6.479	0.085
S16.000	S16-0 (Permeable Paving)	8.422	S1-10	4.080	0.600	6.997	6.956	0.041
S1.010	S1-10	8.204	S1-11	5.000	0.600	6.404	6.371	0.033
S17.000	S17-0 (Permeable Paving)	8.012	S1-11	3.920	0.600	6.587	6.548	0.039
S1.011	S1-11	8.054	S1-12	4.364	0.600	6.371	6.342	0.029
S1.012	S1-12	8.004	S1-13 (Attenuation Tank 2)	9.904	0.600	5.566	5.500	0.066
S1.013	S1-13 (Attenuation Tank 2)	7.882	S1-14	4.517	0.600	5.500	5.470	0.030
S18.000	S18-0 (Permeable Paving)	7.927	S1-15 (Hydro-Brake)	3.907	0.600	6.500	6.474	0.026
S1.014	S1-14	7.912	S1-15 (Hydro-Brake)	4.497	0.600	5.470	5.440	0.030
S2.000	S2-0	7.938	S2-1	10.801	0.600	6.438	6.366	0.072
S2.001	S2-1	7.821	S2-2	36.537	0.600	6.366	6.122	0.244
S2.002	S2-2	8.911	S2-3 (Attenuation Tank 3)	26.808	0.600	6.122	5.943	0.179
S1.015	S1-15 (Hydro-Brake)	7.890	S1-16	13.695	0.600	5.440	5.349	0.091
S4.000	S4-0 (Bioretention Area)	8.708	S4-1 (Orifice)	2.987	0.600	7.283	7.263	0.020
S4.001	S4-1 (Orifice)	8.728	S2-3 (Attenuation Tank 3)	14.603	0.600	7.263	7.166	0.097
S7.000	S7-0 (Bioretention Area)	8.367	S7-1 (Orifice)	3.000	0.600	6.942	6.922	0.020
S7.001	S7-1 (Orifice)	8.299	S2-3 (Attenuation Tank 3)	12.493	0.600	6.922	6.839	0.083
S5.000	S5-0 (Bioretention Area)	8.590	S5-1 (Orifice)	3.000	0.600	7.165	7.145	0.020
S5.001	S5-1 (Orifice)	8.663	S2-3 (Attenuation Tank 3)	5.100	0.600	7.145	7.111	0.034
S6.000	S6-0 (Bioretention Area)	8.590	S6-1 (Orifice)	3.000	0.600	7.090	7.070	0.020
S6.001	S6-1 (Orifice)	8.559	S2-3 (Attenuation Tank 3)	4.002	0.600	7.070	7.043	0.027
S2.003	S2-3 (Attenuation Tank 3)	8.563	S2-4	27.166	0.600	5.943	5.762	0.181
S2.004	S2-4	7.864	S2-5 (Hydro-Brake)	31.489	0.600	5.762	5.605	0.157
S2.005	S2-5 (Hydro-Brake)	7.886	S1-16	19.331	0.600	5.605	5.508	0.097
S1.016	S1-16	7.821	S1-17	11.124	0.600	5.349	5.275	0.074
S1.017	S1-17	7.766	S1-18	41.500	0.600	5.200	4.923	0.277
S1.018	S1-18	7.803	S1-19	48.757	0.600	4.923	4.598	0.325
S1.019	S1-19	7.613	S1-20	12.123	0.600	4.598	4.517	0.081
S1-20	S1-20	7.528	S1-21	36.205	0.600	4.517	4.276	0.241
S1-21	S1-21	7.254	S1-22 (Outfall)	2.060	0.600	4.276	4.262	0.014

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Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024				
C02	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C03	ISSUED FOR PLANNING REVIEW	LL	08.04.2025				
C04	ISSUED FOR PLANNING	LL	09.06.2025				

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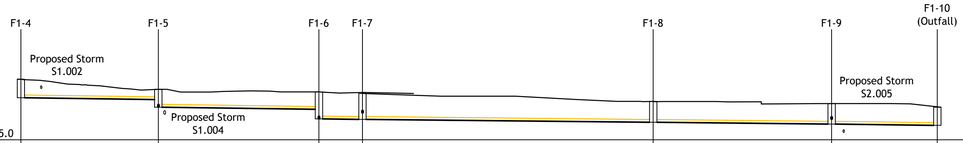
PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK
Title: DRAINAGE TABLES

Drawn:	Date drawn:	Technician Check:	Engineer Check:	Approved:
Liam Lonergan	10.09.2024	Liam Lonergan	Simeon Solomons	Niamh Cronin

Project No:	Model Ref:	Drawing Status:
214130	214130-PUNCH-XX-XX-M2-C-0105	A0 (Planning)

Scale @ A1:	Document No:	Revision No:
NTS	214130-PUNCH-XX-XX-DR-C-0105	C04



Vert exaggeration = 2.0

Datum = 5.0

Link Name		F1.004	F1.005	F1.006	F1.007	F1.008	F1.009	
Section Type		225mm	225mm	225mm	225mm	225mm	225mm	
Slope (1:X)		1:150.0	1:150.0	1:200.0	1:200.0	1:200.0	1:162.8	
Cover Level (m)		9.950	9.116	8.914	8.787	8.134 / 8.129	7.944	7.656
Invert Level (m)		8.431	8.281 / 7.663	7.488 / 6.705	6.669 / 6.669	6.432 / 6.432	6.286 / 6.286	6.180
Length (m)		22.429	26.215	7.103	47.462	29.125	17.254	

FOUL SEWER LONGITUDINAL SECTION F1-4 TO F1-10 (OUTFALL)

SCALE 1:500(H) 1:100(V)

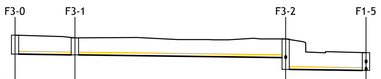
Vert exaggeration = 2.0

Datum = 9.0

Link Name		F2.000	
Section Type		225mm	
Slope (1:X)		1:150.0	
Cover Level (m)		12.000	11.527
Invert Level (m)		10.850	10.786
Length (m)		9.597	

FOUL SEWER LONGITUDINAL SECTION F2-0 TO F1-2

SCALE 1:500(H) 1:100(V)



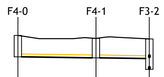
Vert exaggeration = 2.0

Datum = 6.0

Link Name		F3.000	F3.002	F3.003	
Section Type		225mm	225mm	225mm	
Slope (1:X)		1:150.0	1:150.0	1:150.0	
Cover Level (m)		10.537	10.323 / 10.351 / 10.166	10.232 / 9.105	9.116
Invert Level (m)		9.000 / 8.935	8.935	8.706 / 7.750	7.663
Length (m)		9.768	34.407	13.118	

FOUL SEWER LONGITUDINAL SECTION F3-0 TO F1-5

SCALE 1:500(H) 1:100(V)



Vert exaggeration = 2.0

Datum = 6.0

Link Name		F4.000	F4.001	
Section Type		225mm	225mm	
Slope (1:X)		1:150.0	1:150.0	
Cover Level (m)		10.525	10.278	10.232
Invert Level (m)		8.778	8.693 / 8.693	8.635
Length (m)		12.741	8.714	

FOUL SEWER LONGITUDINAL SECTION F4-0 TO F3-2

SCALE 1:500(H) 1:100(V)

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Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024				
C02	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C03	ISSUED FOR PLANNING	LL	09.06.2025				

Client: FRONVILLE LTD

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Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
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Project: KINSALE ROAD LRD, KINSALE ROAD , CORK				
Title: FOUL DRAINAGE LONGITUDINAL SECTIONS SHEET 1				
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-MZ-C-0175-177		Drawing Status: A0 (For Planning)	
Scale @ A1: AS SHOWN	Document No: 214130-PUNCH-XX-XX-DR-C-0175			Revision No: C03

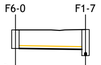
Vert exaggeration = 2.0

Datum = 5.0

Link Name		F5.000	F5.001	
Section Type		225mm	225mm	
Slope (1:X)		1:200.0	1:200.0	
Cover Level (m)		8.000	7.942 9.000	8.914
Invert Level (m)		7.000	6.921 6.921	6.705
Length (m)		15.834	43.298	

FOUL SEWER LONGITUDINAL SECTION F5-0 TO F1-6

SCALE 1:500(H) 1:100(V)



Vert exaggeration = 2.0

Datum = 5.0

Link Name		F6.000	
Section Type		225mm	
Slope (1:X)		1:150.6	
Cover Level (m)		8.761 8.722	8.787
Invert Level (m)		7.250	7.174
Length (m)		11.444	

FOUL SEWER LONGITUDINAL SECTION F6-0 TO F1-7

SCALE 1:500(H) 1:100(V)

Vert exaggeration = 2.0

Datum = 5.0

Link Name		F7.000	F7.001	F7.002	
Section Type		225mm	225mm	225mm	
Slope (1:X)		1:150.0	1:150.0	1:150.0	
Cover Level (m)		8.529	7.986	7.891	7.944
Invert Level (m)		7.050	6.920 6.920	6.746 6.746	6.654
Length (m)		19.479	26.146	13.781	

FOUL SEWER LONGITUDINAL SECTION F7-0 TO F1-9

SCALE 1:500(H) 1:100(V)

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Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024				
C02	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C03	ISSUED FOR PLANNING	LL	09.06.2025				

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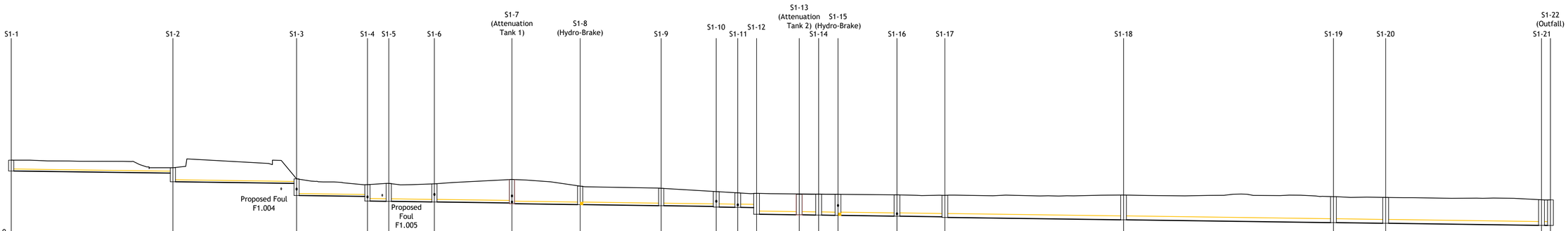
Project: KINSALE ROAD LRD, KINSALE ROAD , CORK

Title: FOUL DRAINAGE LONGITUDINAL SECTIONS SHEET 2

Drawn:	Date drawn:	Technician Check:	Engineer Check:	Approved:
Liam Lonergan	10.09.2024	Liam Lonergan	Simeon Solomons	Niamh Cronin

Project No:	Model Ref:	Drawing Status:
214130	214130-PUNCH-XX-XX-MZ-C-0175-177	A0 (For Planning)

Scale @ A1:	Document No:	Revision No:
AS SHOWN	214130-PUNCH-XX-XX-DR-C-0176	C03



Vert exaggeration = 2.0 Datum = 3.0

Link Name	S1.001	S1.002	S1.003	S1.004	S1.005	S1.006	S1.007	S1.008	S1.009	S1.010	S1.011	S1.012	S1.013	S1.014	S1.015	S1.016	S1.017	S1.018	S1.019	S1-20	S1-21
Section Type	225mm	225mm	225mm	300mm	300mm	300mm	300mm	300mm	300mm	375mm	375mm	375mm	375mm	375mm	375mm	375mm	450mm	450mm	450mm	450mm	450mm
Slope (1:X)	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0
Cover Level (m)	11.857, 11.857	10.872, 10.980	9.680	9.006	9.151	9.107	9.615	8.837	8.588	8.204	8.054	8.004	7.882	7.912	7.890	7.821	7.736, 7.766	7.683	7.803	7.913	7.613, 7.523, 7.528	7.354, 7.238
Invert Level (m)	10.600	10.350, 9.350	9.158, 7.750	7.640, 7.100	7.067, 7.067	6.996, 6.996	6.876, 6.796	6.690, 6.690	6.564, 6.564	6.479	6.404, 6.371	6.371, 6.342	5.566	5.500, 5.500	5.470, 5.470	5.440, 5.440	5.349, 5.349	5.275, 5.200	4.923, 4.923	4.598, 4.598	4.517, 4.517	4.276, 4.288
Length (m)	37.549	28.730	16.459	4.958	10.594	18.011	15.845	18.831	12.782	5.000	4.364	9.904	4.517	4.497	13.695	11.124	41.500	48.757	12.123	36.205	2.060

SURFACE WATER SEWER LONGITUDINAL SECTION S1-1 TO S1-22 (Outfall)

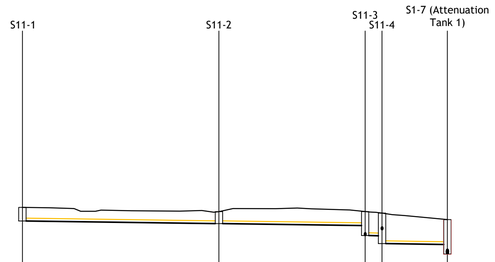
SCALE 1:500(H) 1:100(V)

Vert exaggeration = 2.0 Datum = 6.0

Link Name	S9.004	
Section Type	225mm	
Slope (1:X)	1:150.0	
Cover Level (m)	9.000	9.006
Invert Level (m)	7.500, 7.464	
Length (m)	5.462	

SURFACE WATER SEWER LONGITUDINAL SECTION S9-4 TO S1-4

SCALE 1:500(H) 1:100(V)



Vert exaggeration = 2.0 Datum = 5.0

Link Name	S11.001	S11.002	S11.003	S11.004	
Section Type	225mm	225mm	225mm	225mm	
Slope (1:X)	1:150.0	1:150.0	1:150.0	1:150.0	
Cover Level (m)	10.607	10.258, 10.550	10.268	10.145	9.615
Invert Level (m)	9.500	9.286, 9.286	9.127, 8.308, 8.290	7.650	7.579
Length (m)	32.081	23.872	2.757	10.666	

SURFACE WATER SEWER LONGITUDINAL SECTION S11-1 TO S1-7

SCALE 1:500(H) 1:100(V)

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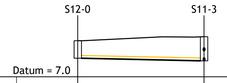
Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024				
C02	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C03	ISSUED FOR PLANNING REVIEW	LL	08.04.2025				
C04	ISSUED FOR PLANNING	LL	09.06.2025				

Client: FRONVILLE LTD

PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

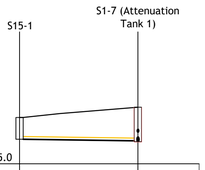
Project: KINSALE ROAD LRD, KINSALE ROAD, CORK				
Title: SURFACE WATER DRAINAGE LONGITUDINAL SECTIONS SHEET 1				
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0200-202		Drawing Status: A0 (Planning)	
Scale @ A1: 1:500/1:100	Document No: 214130-PUNCH-XX-XX-DR-C-0200			Revision No: C04



Vert exaggeration = 2.0

	Datum = 7.0		
Link Name		S12.000	
Section Type		225mm	
Slope (1:X)		1:100.0	
Cover Level (m)		9.939	10.268
Invert Level (m)		8.514	8.308
Length (m)		20.613	

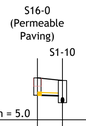
SURFACE WATER SEWER LONGITUDINAL SECTION S12-0 TO S11-3
SCALE 1:500(H) 1:100(V)



Vert exaggeration = 2.0

	Datum = 5.0		
Link Name		S15.001	
Section Type		225mm	
Slope (1:X)		1:150.0	
Cover Level (m)		8.778	9.615
Invert Level (m)		7.000	6.871
Length (m)		19.317	

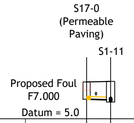
SURFACE WATER SEWER LONGITUDINAL SECTION S15-1 TO S1-7
SCALE 1:500(H) 1:100(V)



Vert exaggeration = 2.0

	Datum = 5.0	
Link Name	S16.000	
Section Type	225mm	
Slope (1:X)	1:100.0	
Cover Level (m)	8.422	8.204
Invert Level (m)	6.997 6.956	
Length (m)	4.080	

SURFACE WATER SEWER LONGITUDINAL SECTION S16-0 TO S1-10
SCALE 1:500(H) 1:100(V)



Vert exaggeration = 2.0

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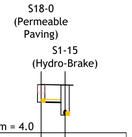
Link Name		S17.000	
Section Type		225mm	
Slope (1:X)		1:100.0	
Cover Level (m)		8.012	8.054
Invert Level (m)		6.587 6.548	
Length (m)		3.920	

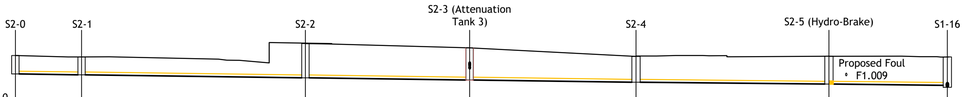
SURFACE WATER SEWER LONGITUDINAL SECTION S17-0 TO S1-11
SCALE 1:500(H) 1:100(V)



Vert exaggeration = 2.0

	Datum = 4.0		
Link Name		S18.000	
Section Type		225mm	
Slope (1:X)		1:150.0	
Cover Level (m)		7.927	7.890
Invert Level (m)		6.500 6.474	
Length (m)		3.907	

SURFACE WATER SEWER LONGITUDINAL SECTION S18-0 TO S1-15
SCALE 1:500(H) 1:100(V)



Vert exaggeration = 2.0

	Datum = 4.0						
Link Name		S2.000	S2.001	S2.002	S2.003	S2.004	S2.005
Section Type		225mm	225mm	225mm	225mm	225mm	225mm
Slope (1:X)		1:150.0	1:150.0	1:150.0	1:150.0	1:200.0	1:200.0
Cover Level (m)		7.938	7.821 7.338 7.000	8.911 8.876	8.563	7.864 7.938 7.828	7.886 7.885 7.821
Invert Level (m)		6.438	6.366 6.366	6.122 6.122	5.943 5.943	5.762 5.762	5.605 5.605 5.508
Length (m)		10.801	36.537	26.808	27.166	31.489	19.331

SURFACE WATER SEWER LONGITUDINAL SECTION S2-0 TO S1-16
SCALE 1:500(H) 1:100(V)

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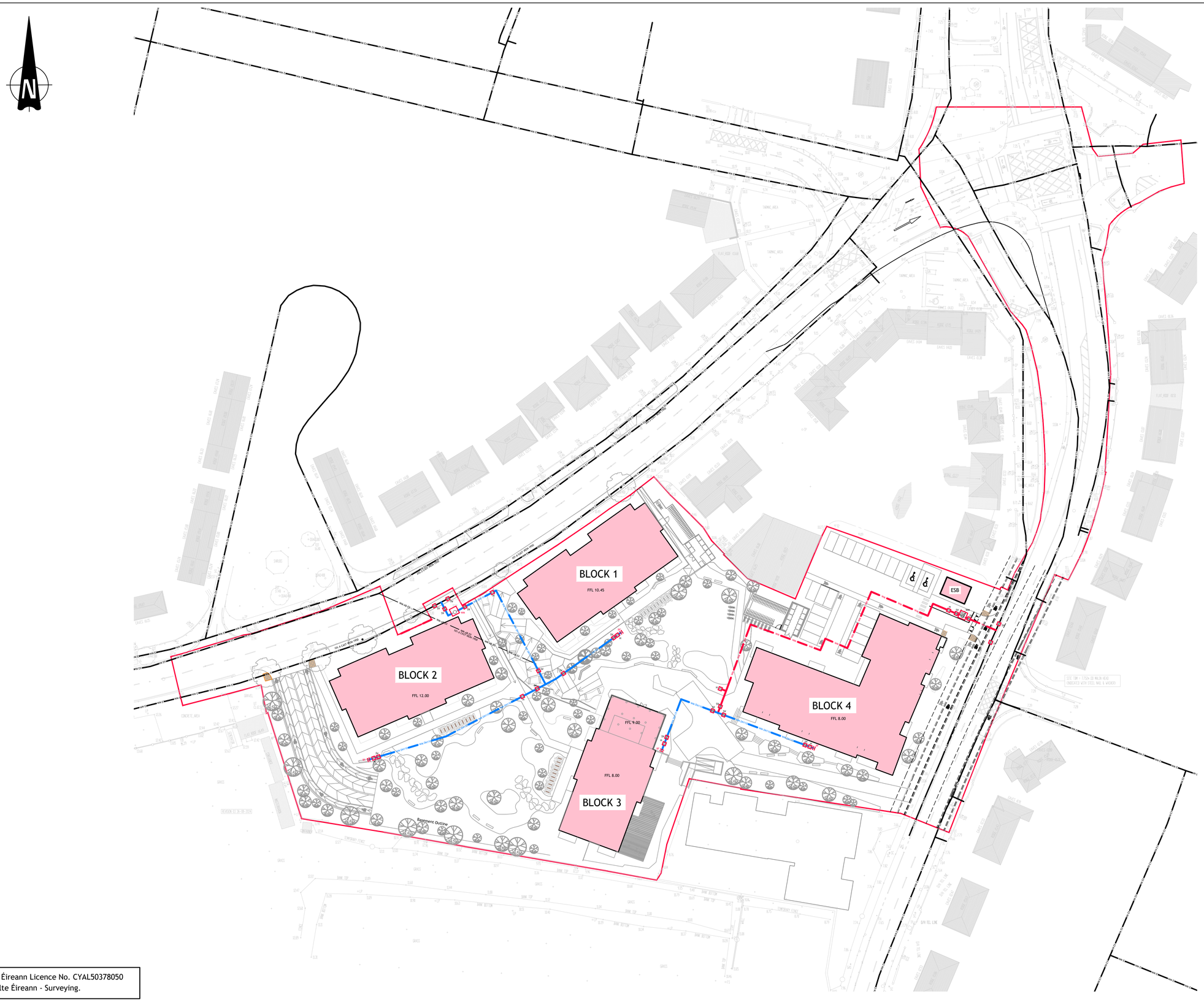
Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C03	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
C04	ISSUED FOR PLANNING	LL	09.06.2025

Client: FRONVILLE LTD

PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK				
Title: SURFACE WATER DRAINAGE LONGITUDINAL SECTIONS SHEET 2				
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-MZ-C-0200-202		Drawing Status: A0 (Planning)	
Scale @ A1: 1:500/1:100	Document No: 214130-PUNCH-XX-XX-DR-C-0201			Revision No: C04



WATERMAIN LEGEND

EXISTING WATERMAIN	WM EX — WM EX
EXISTING WATERMAIN TO BE ABANDONED, DEMOLISHED & REMOVED	WM-AB-EX
PROPOSED WATERMAIN (160 OD PE80 SDR11 PIPE) MATERIALS MUST BE IN ACCORDANCE WITH UISCE EIREANN STANDARDS	WM — WM
PROPOSED WATERMAIN (110 OD PE80 SDR11 PIPE) MATERIALS MUST BE IN ACCORDANCE WITH UISCE EIREANN STANDARDS	WM DN110
PROPOSED FIRE HYDRANT TO BE PROVIDED IN ACCORDANCE WITH UISCE EIREANN STANDARD DETAIL STD-W-16.	H
PROPOSED SLUICE VALVE TO BE PROVIDED IN ACCORDANCE WITH UISCE EIREANN STANDARD DETAIL STD-W-15	SV
PROPOSED MECHANICAL WATERMETER & CHAMBER TO IRISH WATER DETAIL STD-W-26A. KIOSK REQUIRED TO IW DETAIL STD-W-36.KIOSK LOCATION TO BE AGREED WITH ARCHITECT	WM
PROPOSED BLANK FLANGE	BF

GENERAL NOTES:

1. DO NOT SCALE. ALL DIMENSIONS ON DRAWINGS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE. USE FIGURED DIMENSIONS ONLY.
2. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE EXISTING PUMPHOUSE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING OF LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. BEFORE RELATED WORK COMMENCES THE CONTRACTOR SHALL SUBMIT A METHOD STATEMENT AND SEQUENCE OF WORK TO THE ENGINEER FOR APPROVAL.
3. WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDUM. OTHER STANDARDS MAY ONLY BE CONSIDERED FOLLOWING PRIOR APPROVAL BY THE ENGINEER.
4. THE CONTRACTOR IS TO ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND SUBCONTRACTORS DRAWINGS PRIOR TO CONSTRUCTION.
5. OPTIONS WHERE INDICATED ARE FOR CONTRACTORS CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CHANGES NECESSARY IF HE CHOOSES AN OPTION AND HE SHALL COORDINATE ALL DETAILS.
6. ALL LEVELS ARE RELATED TO THE ORDNANCE DATUM (O.D.) - MALIN HEAD UNLESS NOTED OTHERWISE
7. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING ALL GROUND AND SURFACE WATER WITHIN THE SITE DURING THE CONSTRUCTION WORKS. AT NO POINT SHOULD ANY CONTAMINATED WATER FROM THE SITE BE DISCHARGED TO AN EXISTING DRAIN OR SEWER.
8. ANY PROPRIETARY PRODUCTS REFERENCED ON THE DRAWINGS CAN BE SUBSTITUTED WITH EQUIVALENT ALTERNATIVES, FOLLOWING APPROVAL BY EITHER THE ENGINEER.
9. PROPRIETARY PRODUCT NAMES, MANUFACTURER'S NAMES, SUPPLIERS NAMES, NATIONAL STANDARDS. WHERE A SPECIFICATION OR A DESCRIPTION OF A PRODUCT OR ELEMENT OF WORK INCLUDES A SPECIFIC MAKE OR SOURCE SUCH AS A PRODUCT NAME OR MANUFACTURERS NAME OR A SUPPLIERS NAME, OR A NATIONAL STANDARD, THE SPECIFICATION OR DESCRIPTION SHALL BE DEEMED TO BE ACCOMPANIED BY THE WORDS "OR EQUIVALENT" NOTWITHSTANDING THAT THOSE EXACT WORDS MAY NOT IN FACT ACCOMPANY THE NAME OR STANDARD. THIS ALSO APPLIES WHERE THE NAME OR STANDARD IS ACCOMPANIED BY OTHER WORDS SUCH AS "OR EQUAL APPROVED" OR SUCHLIKE PHRASES.

WATERMAIN:

1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS & MANUFACTURERS DRAWINGS & SPECIFICATIONS.
2. ALL PIPE DIAMETERS ARE NOMINAL.
3. WHERE CONNECTION IS REQUIRED TO AN EXISTING PUBLIC WATERMAIN, THE CONTRACTOR MUST ISSUE DETAILED DOCUMENTATION FOR APPROVAL TO THE RELEVANT LOCAL AUTHORITY AND UISCE EIREANN. THIS DOCUMENTATION MUST BE ISSUED AT LEAST 40 WORKING DAYS IN ADVANCE OF THE PLANNED WORKS OR AS AGREED WITH THE LOCAL AUTHORITY AND UISCE EIREANN.
4. ALL THRUST BLOCKS MUST BE CAST AGAINST UNDISTURBED GROUND. FLEXIBLE PIPES SHOULD BE WRAPPED IN ONE LAYER OF 1000 GAUGE POLYTHENE TO AVOID DIRECT CONTACT WITH THE CONCRETE.
   MARKER POSTS AND PLATES TO BE PROVIDED FOR ALL VALVES, METERS AND HYDRANTS.
5. CHLORINATION AND BACTERIOLOGICAL TESTS TO BE UNDERTAKEN BY EXTERNAL TESTER AND TEST CERTIFICATION TO BE SUBMITTED TO ENGINEER.
6. MARKER POSTS AND PLATES TO BE PROVIDED FOR ALL VALVES.
7. IN ADVANCE OF TESTING OF THE WATERMAINS, THE CONTRACTOR MUST PRESENT TO THE ENGINEER A CALIBRATION CERTIFICATE FOR THE APPARATUS TO BE USED IN THE TEST.
8. ALL EXISTING WATERMAINS TO BE ADEQUATELY PROTECTED. ANY WATERMAINS DAMAGED DURING THE COURSE OF CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR AT THEIR COST.
9. ALL ROCKER PIPES SHALL BE NO MORE THAN 150mm FROM THEIR ASSOCIATED CHAMBER
10. PROVIDE ANCHOR/THRUST BLOCKS ON ALL BENDS EQUAL TO OR IN EXCESS OF 22.5°, DEAD ENDS AND TEES ON ALL PIPES
11. TRENCHES IN EXISTING SURFACES TO BE SAW CUT.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING OUT WATERMAINS & SLUICE VALVES TO ENSURE NO CLASHES WITH SERVICE DUCTS OR PIPES.

NOTES FOR CONNECTION TO UISCE EIREANN SERVICES

1. CONTRACTOR TO LIAISE WITH UISCE EIREANN PRIOR TO MOBILISATION ON SITE TO DETERMINE THE DURATION OF THE APPROVAL PROCESS AND WHAT DOCUMENTATION AND FEES ARE REQUIRED BY UISCE EIREANN AND THE LOCAL AUTHORITY AND PROGRAM THIS INTO THE CONSTRUCTION PROGRAM. CONTRACTOR TO CONFIRM EXTENT OF NOTICE REQUIRED BY UISCE EIREANN TO INSPECT WORKS AND ALSO PROGRAM INTO THE CONSTRUCTION PROGRAM.
2. UISCE EIREANN TO BE CONTACTED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF ANY WATERMAIN WORKS. ALL DETAILS TO BE AGREED WITH UISCE EIREANN. UISCE EIREANN TO BE GIVEN 40 WORKING DAYS NOTICE FOR ALL FOUL SEWER AND WATERMAIN CONNECTION WORKS.
3. EXACT LOCATION AND DEPTH OF THE EXISTING WATERMAINS SHOULD BE ESTABLISHED BY THE CONTRACTOR IN ADVANCE OF THE MAIN EXCAVATION FOR THE WORKS SO AS TO AVOID THE POSSIBILITY OF DAMAGE TO THE EXISTING WATERMAIN DURING CONSTRUCTION WORKS. 3 NO. SLIT TRENCHES TO BE UNDERTAKEN TO VERIFY LOCATION.
4. THE CONTRACTOR SHALL APPLY FOR A ROAD OPENING LICENSE AND PAY THE REQUIRED ROAD OPENING LICENSE FEE FOR WORKS THAT ARE REQUIRED ON THE PUBLIC ROAD. THIS FEE IS A NON-NEGOTIABLE AND NON-REFUNDABLE FIGURE. THE CONTRACTOR SHALL BE DEEMED TO HAVE INCLUDED IN HIS TENDER PRICE FOR ALL REQUIREMENTS SUCH AS CONTRIBUTION FOR CONNECTIONS TO PUBLIC INFRASTRUCTURE, LICENSE APPLICATION, PAYMENT OF FEE(S), STATUTORY TIME PERIODS, TRAFFIC MANAGEMENT PLANS AND APPLICATION, REINSTATEMENT, ETC.

BUILDING INFORMATION MODELLING (BIM) IS. EN ISO 19650-2:2018 NSAI Certified

Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024				
C02	ISSUED FOR PLANNING	LL	23.10.2024				
C03	ISSUED FOR PLANNING	LL	04.02.2025				
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025				
C06	ISSUED FOR PLANNING	LL	09.06.2025				

Client: FRONVILLE LTD

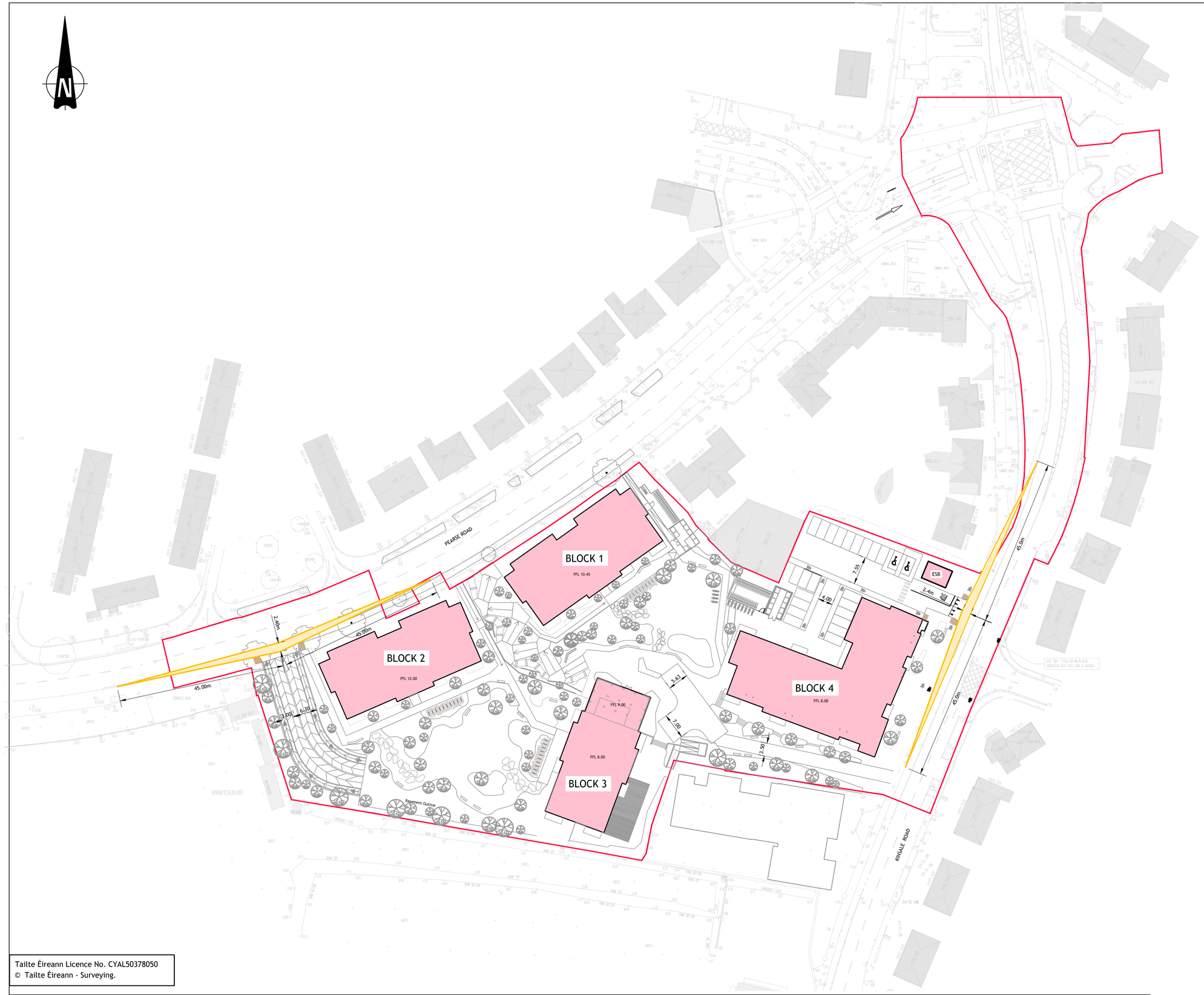
PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK
Title: PROPOSED WATERMAIN LAYOUT

Drawn:	Date drawn:	Technician Check:	Engineer Check:	Approved:
Liam Lonergan	10.09.2024	Liam Lonergan	Simeon Solomons	Niamh Cronin

Project No:	Model Ref:	Drawing Status:
214130	214130-PUNCH-XX-XX-M2-C-0300	A0 (Planning)

Scale @ A1:	Document No:	Revision No:
1:500	214130-PUNCH-XX-XX-DR-C-0300	C06



SIGHT VISIBILITY LEGEND:

SIGHT VISIBILITY SPLAY

SIGHT VISIBILITY CRITERIA USED (DMURS)	
DESIGN SPEED (km/hr)	SSD STANDARD (metres)
50	45

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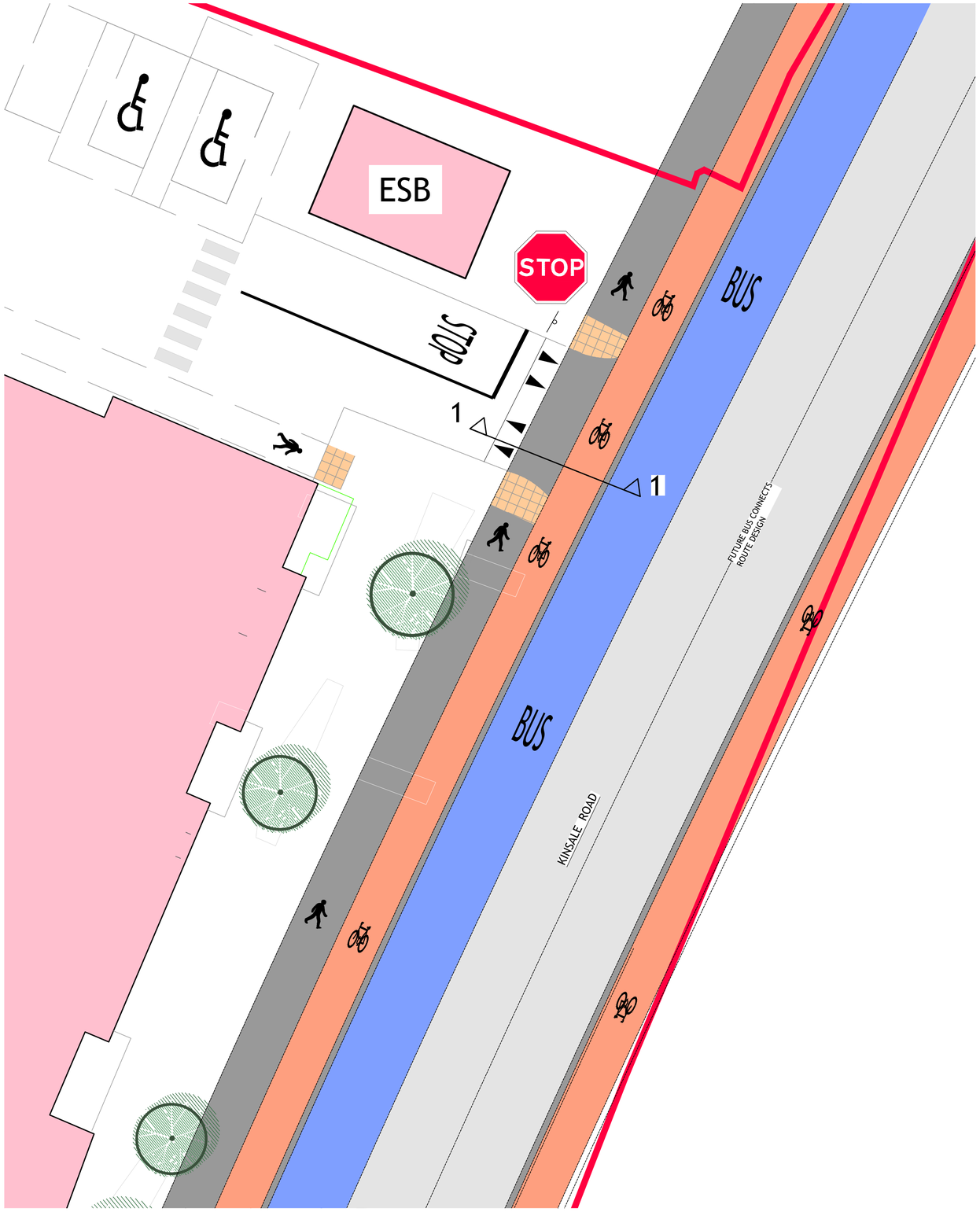
Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024				
C02	ISSUED FOR PLANNING	LL	23.10.2024				
C03	ISSUED FOR PLANNING	LL	04.03.2025				
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025				
C06	ISSUED FOR PLANNING	LL	09.06.2025				

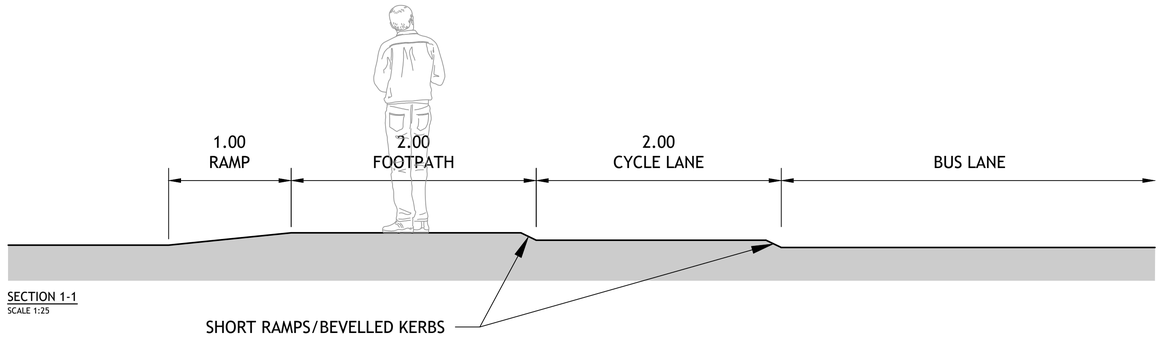
Client:
FRONVILLE LTD

PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK			
Title: PROPOSED ROADS LAYOUT			
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0400	Drawing Status: A0 (Planning)	
Scale @ A1: 1:500	Document No: 214130-PUNCH-XX-XX-DR-C-0400	Revision No: C06	



FUTURE ACCESS JUNCTION TO KINSALE ROAD - BUS CONNECTS LAYOUT
SCALE 1:100



SECTION 1-1
SCALE 1:25

LEGEND:

PROPOSED ROADWAY

PROPOSED FOOTPATH

PROPOSED CYCLE LANE

PROPOSED BUS LANE

PROPOSED TACTILE PAVING (BUFF COLOUR)

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I.S. EN ISO 19650-2:2018
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Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024				
C02	ISSUED FOR PLANNING	LL	04.03.2025				
C03	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C04	ISSUED FOR PLANNING REVIEW	LL	08.04.2025				
C05	ISSUED FOR PLANNING REVIEW	LL	29.05.2025				
C06	ISSUED FOR PLANNING	LL	09.06.2025				

Client:
FRONVILLE LTD

PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK				
Title: FUTURE JUNCTION LAYOUT TO KINSALE ROAD - BUS CONNECTS				
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0401		Drawing Status: A0 (Planning)	
Scale @ A1: 1:500	Document No: 214130-PUNCH-XX-XX-DR-C-0401			Revision No: C06

LEGEND:

FINISHED FLOOR LEVEL	FFL:12.000
PROPOSED SLOPE	1:100
PROPOSED ROAD / PATH LEVEL	10.000
EXISTING LEVEL	10.000

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Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024				
C02	ISSUED FOR PLANNING	LL	23.10.2024				
C03	ISSUED FOR PLANNING	LL	04.03.2025				
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025				
C06	ISSUED FOR PLANNING	LL	09.06.2025				

Client: FRONTVILLE LTD

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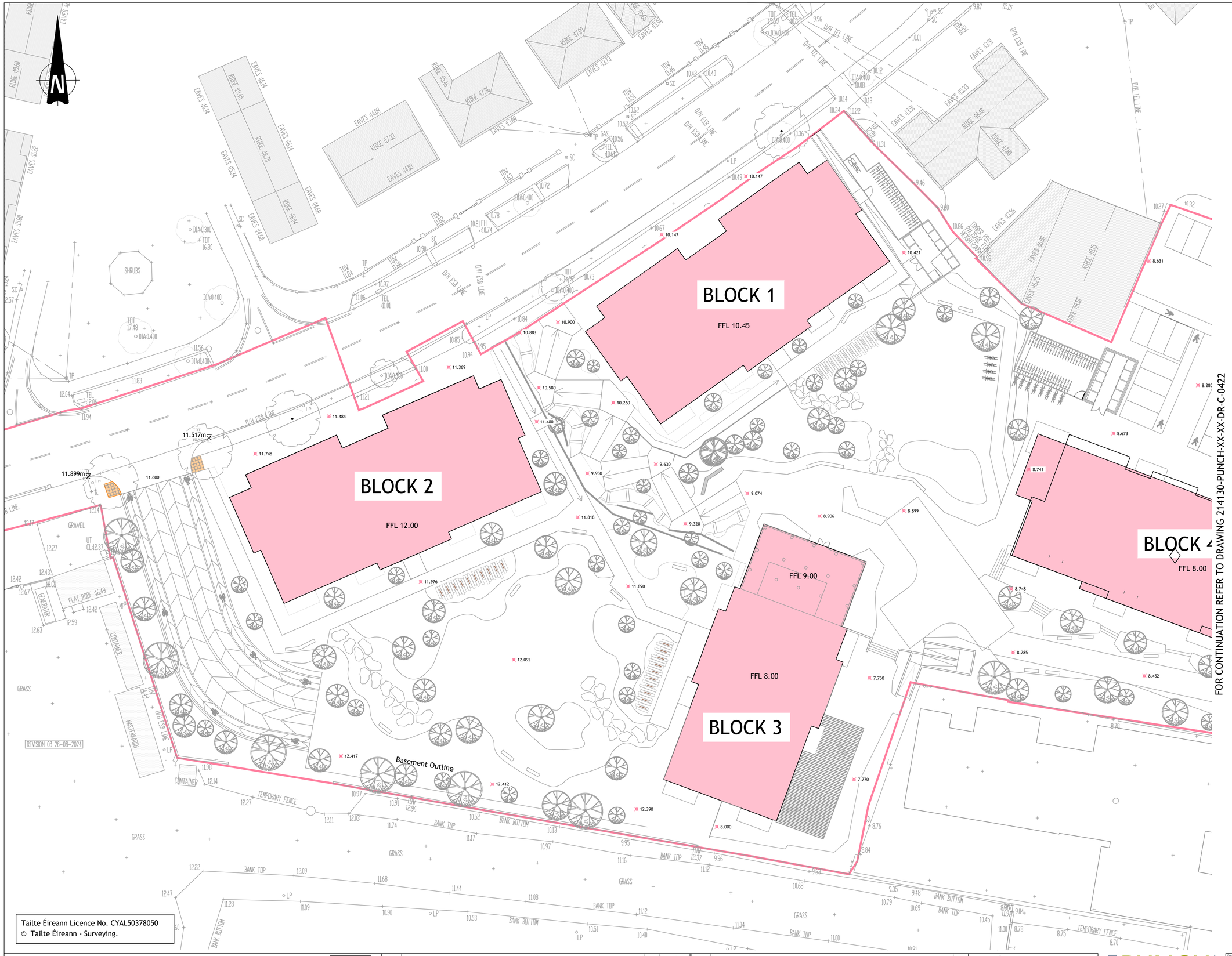
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK
Title: SITE LEVELS LAYOUT - GENERAL ARRANGMENT

Drawn:	Date drawn:	Technician Check:	Engineer Check:	Approved:
Liam Lonergan	10.09.2024	Liam Lonergan	Simeon Solomons	Niamh Cronin

Project No:	Model No:	Drawing Status:
214130	214130-PUNCH-XX-XX-M2-C-0420-422	A0 (Planning)

Scale @ A1:	Document No:	Revision No:
1:500	214130-PUNCH-XX-XX-DR-C-0420	C06



LEGEND:

FINISHED FLOOR LEVEL	FFL:12.000
PROPOSED SLOPE	1:100
PROPOSED ROAD / PATH LEVEL	10.000
EXISTING LEVEL	10.000

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Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024				
C02	ISSUED FOR PLANNING	LL	23.10.2024				
C03	ISSUED FOR PLANNING	LL	04.03.2025				
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025				
C06	ISSUED FOR PLANNING	LL	09.06.2025				

Client: FRONTVILLE LTD

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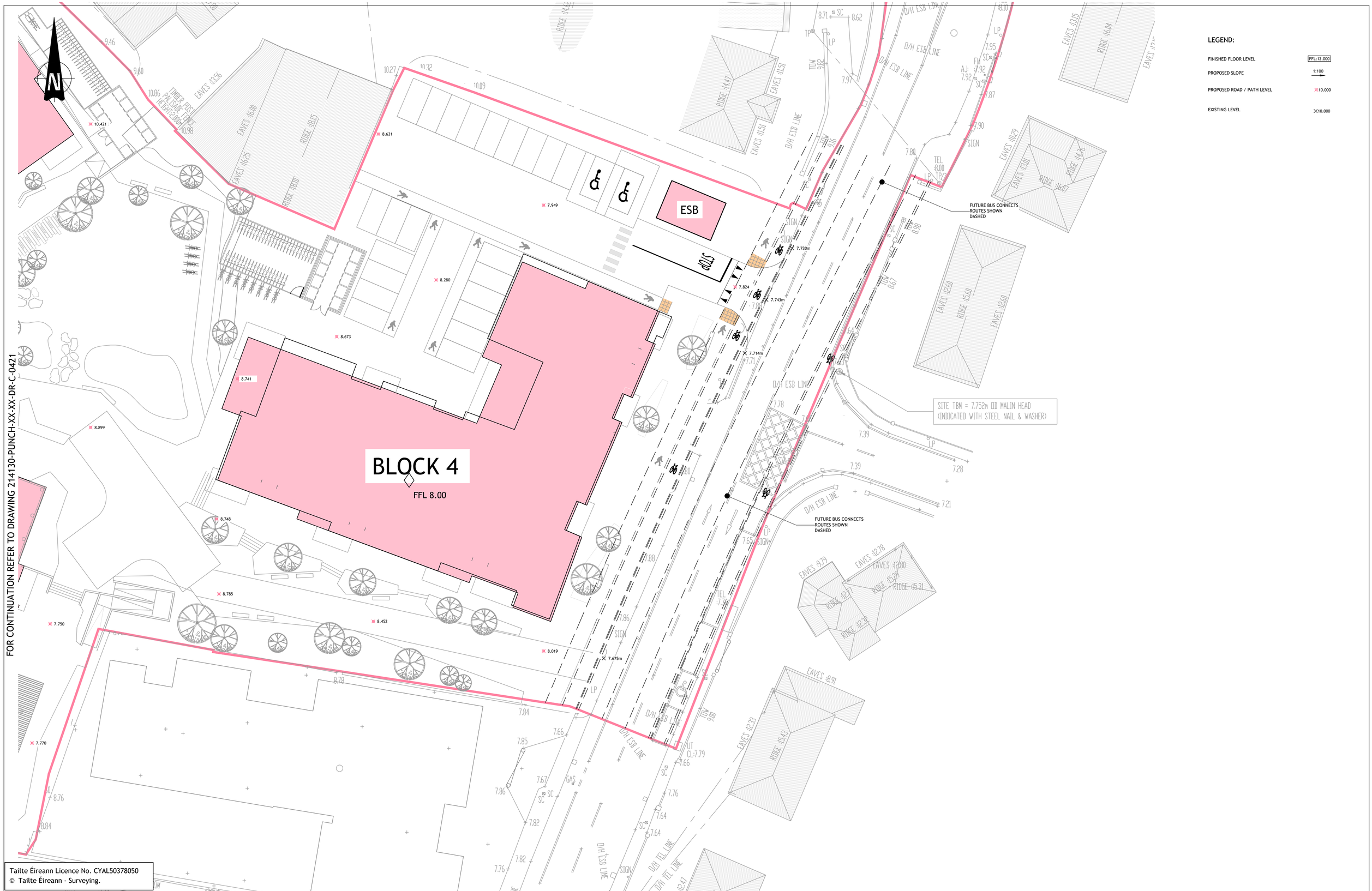
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK				
Title: SITE LEVELS LAYOUT - SHEET 1 OF 2				
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0420-422		Drawing Status: A0 (Planning)	
Scale @ A1: 1:250	Document No: 214130-PUNCH-XX-XX-DR-C-0421			Revision No: C06



FOR CONTINUATION REFER TO DRAWING 214130-PUNCH-XX-XX-DR-C-0421

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C01	ISSUED FOR PLANNING	LL	03.10.2024				
C02	ISSUED FOR PLANNING	LL	23.10.2024				
C03	ISSUED FOR PLANNING	LL	04.03.2025				
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025				
C06	ISSUED FOR PLANNING	LL	09.06.2025				

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Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK
Title: SITE LEVELS LAYOUT - SHEET 2 OF 2

Drawn:	Date drawn:	Technician Check:	Engineer Check:	Approved:
Liam Lonergan	10.09.2024	Liam Lonergan	Simeon Solomons	Niamh Cronin

Project No:	Model Rev:	Drawing Status:
214130	214130-PUNCH-XX-XX-M2-C-0420-422	A0 (Planning)

Scale @ A1:	Document No:	Revision No:
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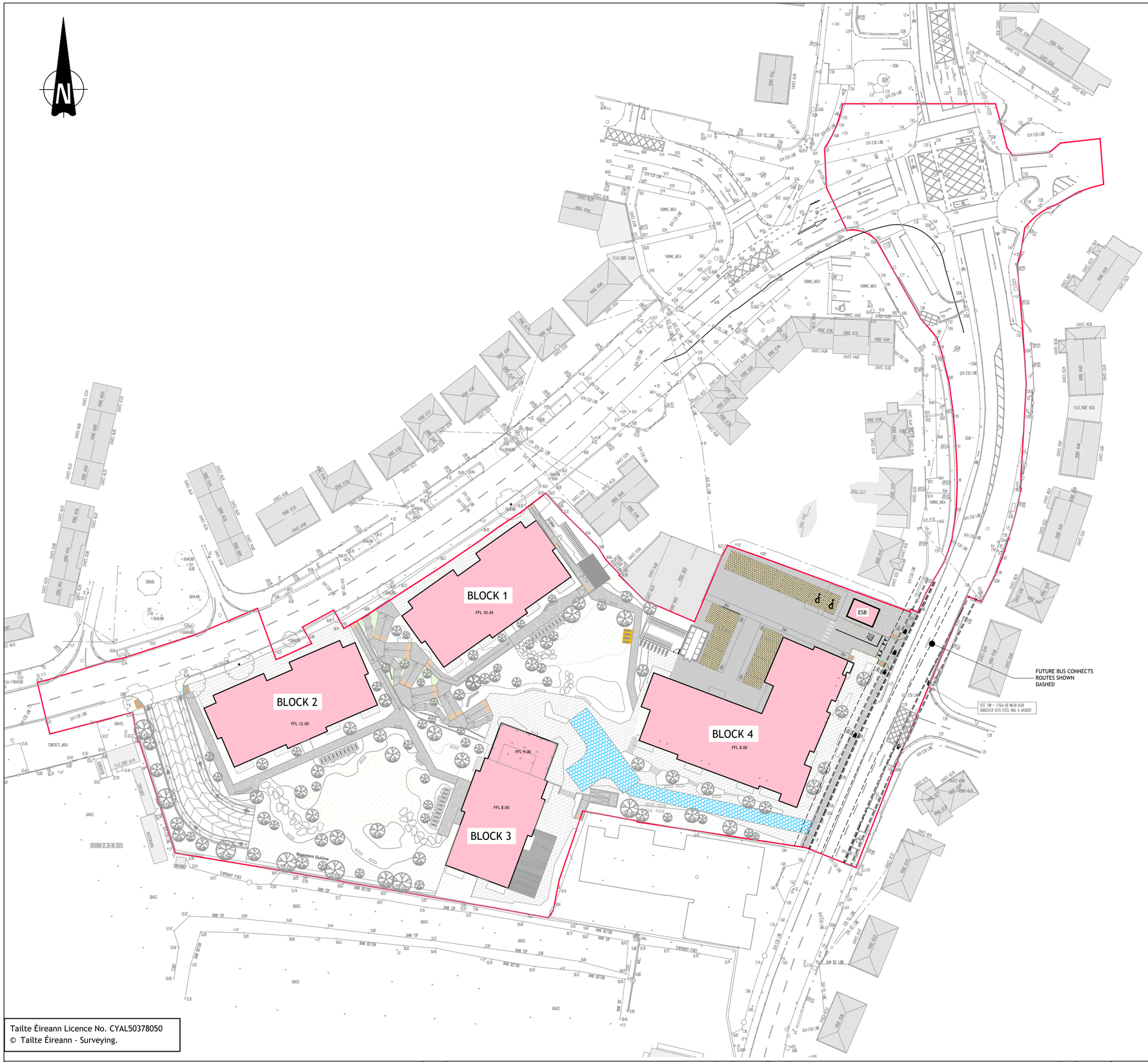

LEGEND:

- PROPOSED BUILDING
- PROPOSED ASPHALT ROAD
- PROPOSED CONCRETE FOOTPATH
- PROPOSED NON-TRAFFICKED PAVING TO ARCHITECT'S SPECIFICATION
- PROPOSED TRAFFICKED PAVING TO ARCHITECT'S SPECIFICATION
- PROPOSED PERMEABLE PAVING
- PROPOSED CONCRETE PLINTH
- PROPOSED TACTILE PAVING (BUFF COLOUR)
- PROPOSED CORDURY PAVING
- 6mm HIGH KERB -K-6-
- 125mm HIGH KERB -K-125-

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Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024	C07	ISSUED FOR PLANNING	LL	09.06.2025
C02	ISSUED FOR PLANNING	LL	23.10.2024				
C03	ISSUED FOR PLANNING	LL	04.03.2025				
C04	ISSUED FOR PLANNING	LL	21.03.2025				
C05	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C06	ISSUED FOR PLANNING REVIEW	LL	08.04.2025				

Client: FRONVILLE LTD

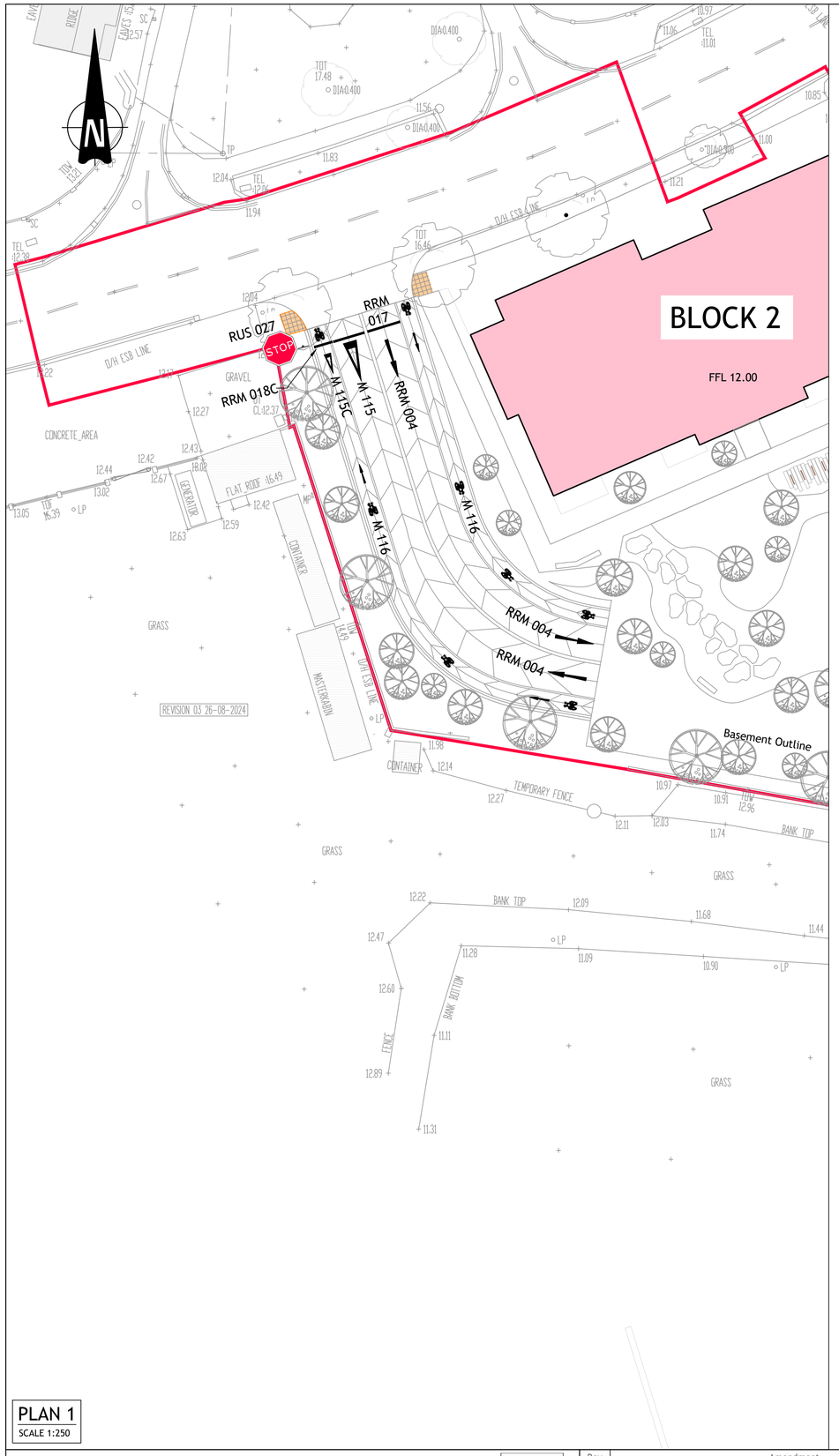
PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK
Title: PAVEMENT FINISHES LAYOUT

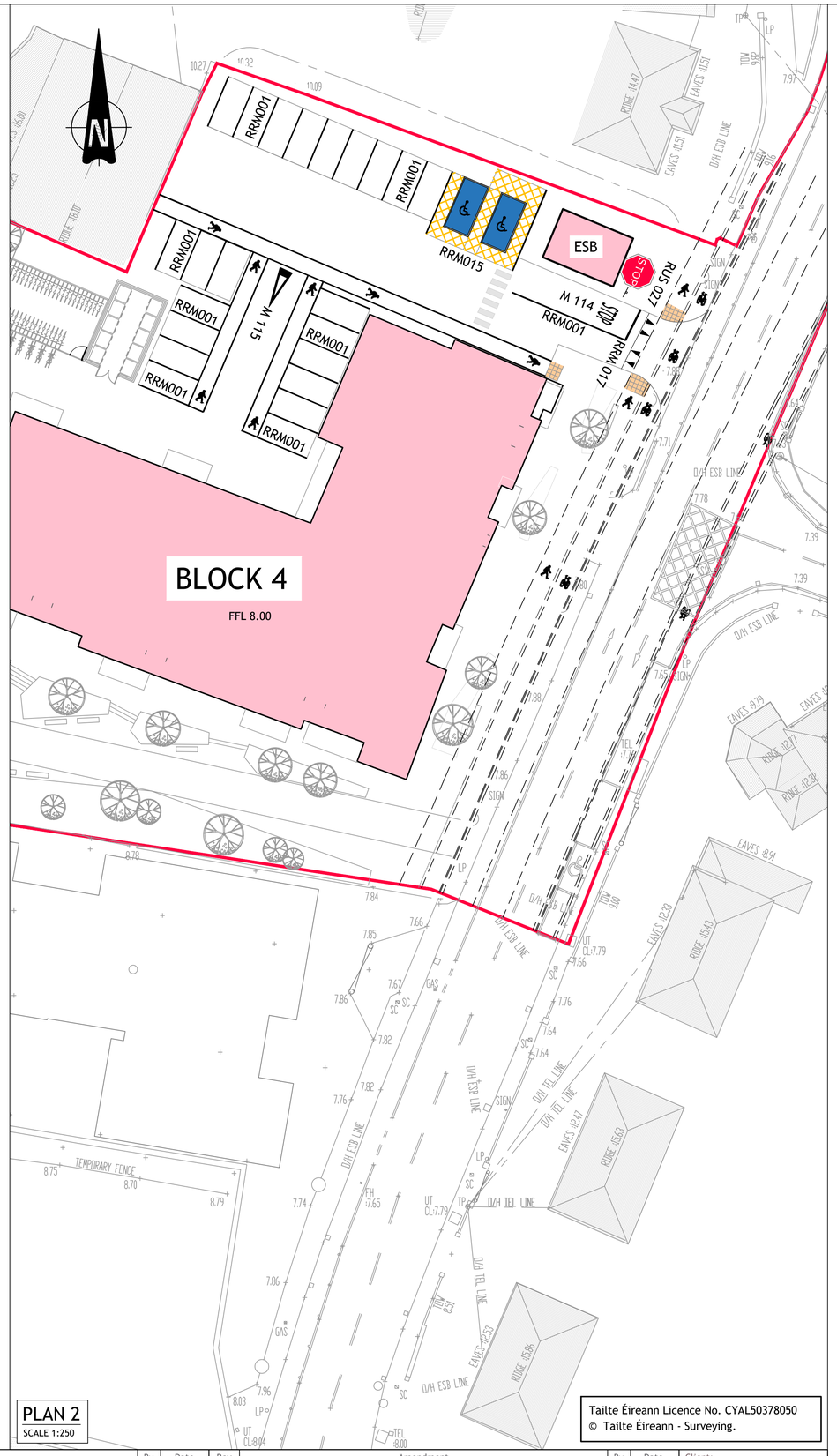
Drawn:	Date drawn:	Technician Check:	Engineer Check:	Approved:
Liam Lonergan	10.09.2024	Liam Lonergan	Simeon Solomons	Niamh Cronin

Project No:	Model No:	Drawing Status:
214130	214130-PUNCH-XX-XX-M2-C-0440-0442	A0(Planning)

Scale @ A1:	Document No:	Revision No:
1:500	214130-PUNCH-XX-XX-DR-C-0440	C07



PLAN 1
SCALE 1:250

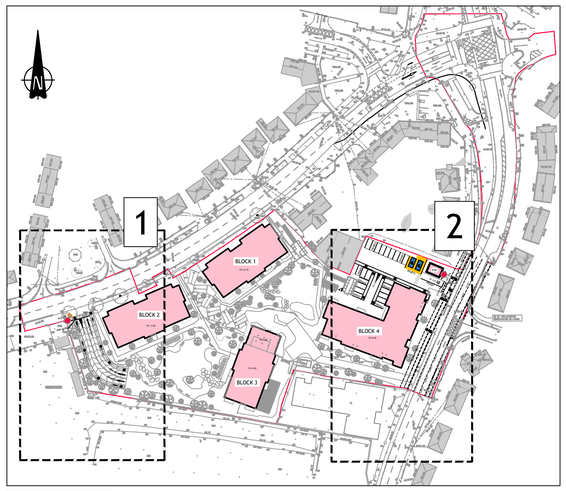


PLAN 2
SCALE 1:250

ROAD MARKING AND SIGNAGE LEGEND

DESCRIPTION	*DTTSM REF
100mm WIDE CONTINUOUS WHITE LINE	RRM 001
100mm WIDE WHITE EDGE LINE	RRM 022
200mm WIDE STOP LINE	RRM 017
STOP ROAD MARKING	M 114
150mm WIDE BROKEN YIELD LINE	RRM 018
YIELD ROAD MARKING	M 115
CYCLE TRACK YIELD LINE	RRM 018C
CYCLE TRACK YIELD ROAD MARKING	M 115C
CYCLE SYMBOL	M 116
100mm WIDE CONTINUOUS WHITE CYCLE TRACK EDGE LINE	RRM 022
100mm WIDE BROKEN WHITE CYCLE TRACK EDGE LINE	RRM 023
RUS 027 - STOP SIGN	STOP RUS 027

*DTTSM: DEPARTMENT OF TRANSPORT TRAFFIC SIGNS MANUAL



KEY PLAN
NOT TO SCALE

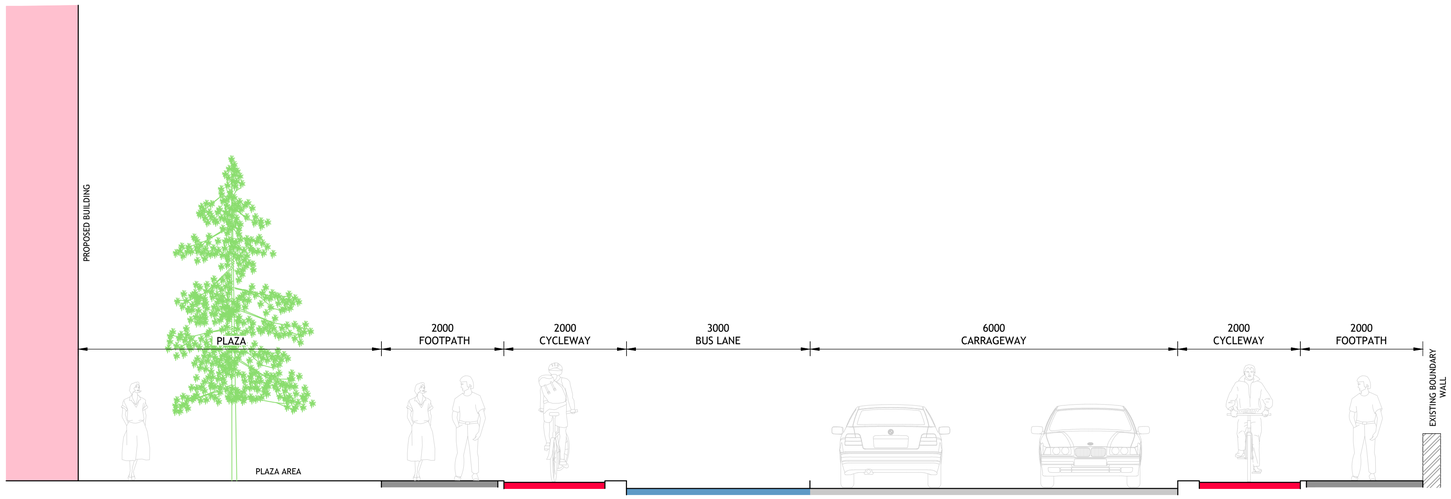
BUILDING INFORMATION MODELLING (BIM) IS EN ISO 19650-2:2018
NSAI Certified

Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024				
C02	ISSUED FOR PLANNING	LL	03.03.2025				
C03	ISSUED FOR PLANNING	LL	19.03.2025				
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025				
C06	ISSUED FOR PLANNING	LL	09.06.2025				

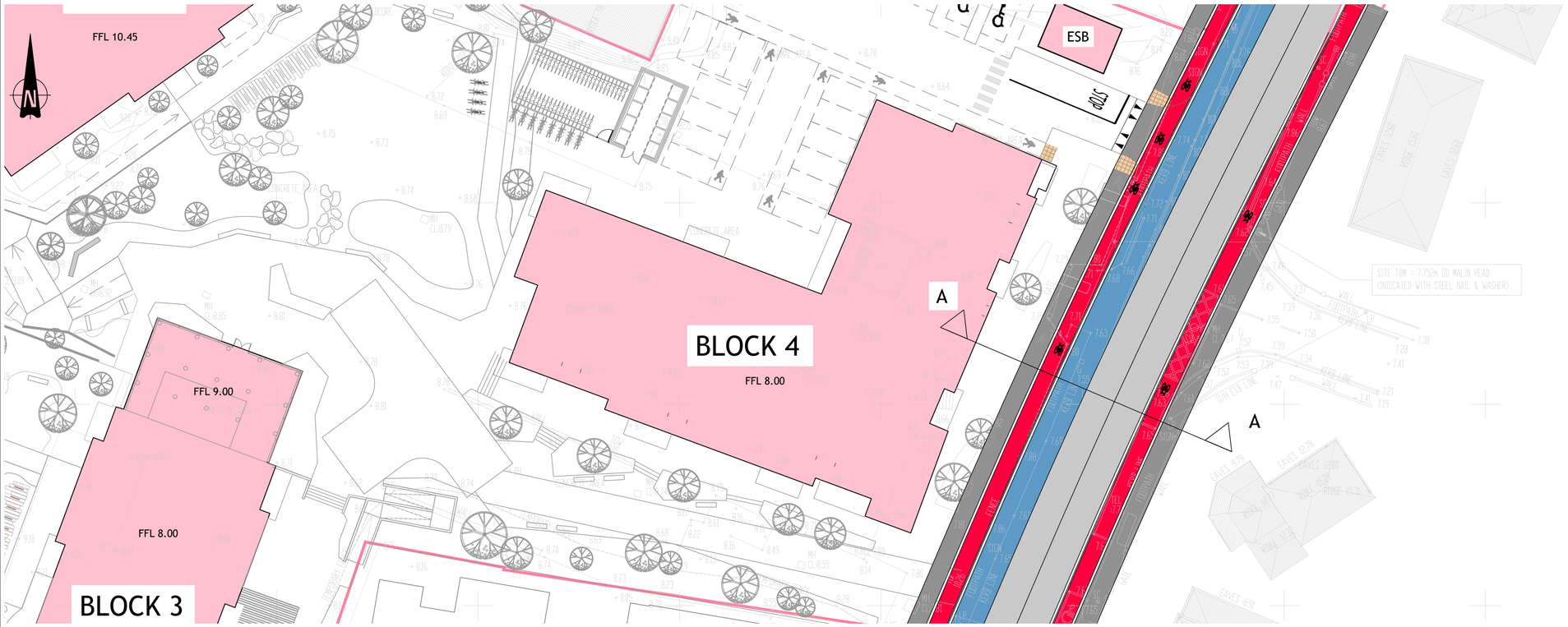
Client: FRONVILLE LTD

PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
97 Henry Street, Limerick, V94 YC2H
t +353 61 221 200 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK				
Title: ROAD MARKINGS AND SIGNAGE				
Drawn: Liam Lonergan	Date drawn: September 2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
Project No: 214130	Model File: 214130-PUNCH-XX-XX-M2-C-0460		Drawing Status: A0 (Planning)	
Scale @ A1: AS SHOWN	Document No: 214130-PUNCH-XX-XX-DR-C-0460			Revision No: C06



SECTION A-A
PROPOSED SECTION THROUGH KINSALE ROAD
SCALE 1:50



SITE LAYOUT
SCALE 1:250

BUILDING INFORMATION MODELLING (BIM) I.S. EN ISO 19650-2:2018
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Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
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Client: FRONVILLE LTD

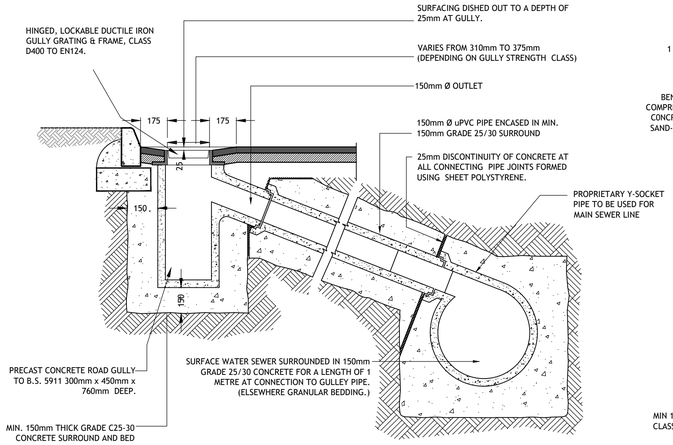
PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK
Title: KINSALE ROAD SECTION

Drawn:	Date drawn:	Technician Check:	Engineer Check:	Approved:
Liam Lonergan	08.04.2025	Liam Lonergan	Simeon Solomons	Niamh Cronin

Project No:	Model Ref:	Drawing Status:
214130	214130-PUNCH-XX-XX-M2-C-0461	A0 (Planning)

Scale @ A1:	Document No:	Revision No:
AS SHOWN	214130-PUNCH-XX-XX-DR-C-0461	C03

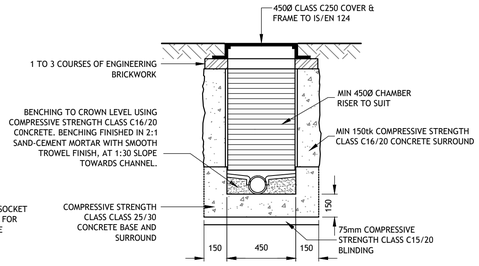


FOR STRENGTH CLASS OF GULLY REFER TO EN 124 : 2015, CLAUSE 5

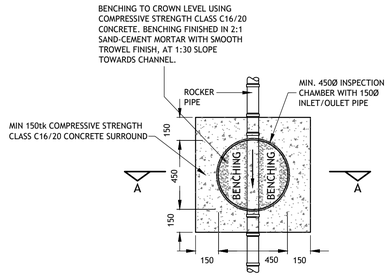
NOTE 1 : PLACE OF INSTALLATION & FIGURES 9A AND 9B PROPRIETARY FITTINGS TO BE USED ON ALL PIPEWORK CONNECTIONS

NOTE 2 :
GROUP 1 - MIN. CLASS A15 GROUP 4 - MIN. CLASS D400
GROUP 2 - MIN. CLASS B125 GROUP 5 - MIN. CLASS E600
GROUP 3 - MIN. CLASS C250 GROUP 6 - MIN. CLASS F900

PRECAST CONCRETE GULLY IN MACADAM AREA
SCALE 1:20

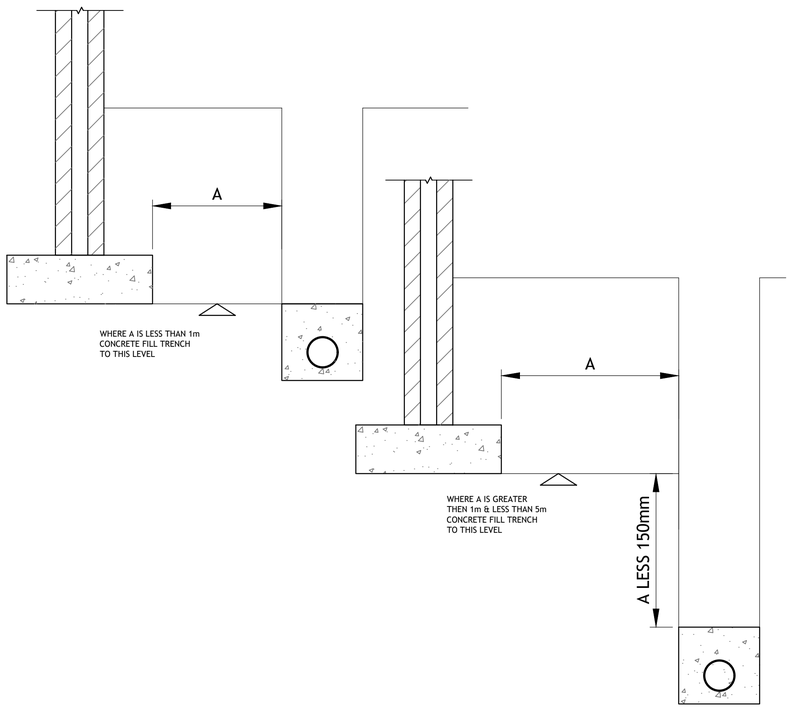


SECTION A-A



BASE PLAN

INSPECTION CHAMBER UP TO 1.0m DEEP
SCALE 1:20



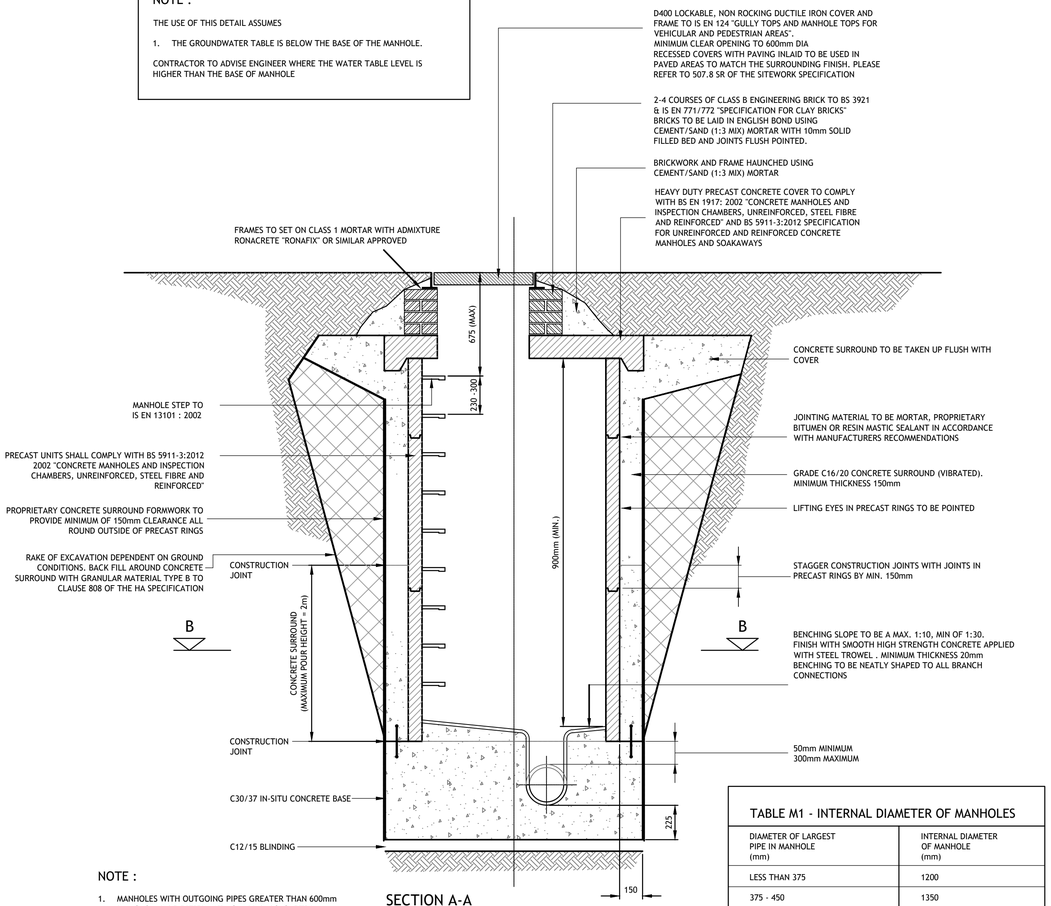
CONCRETE SURROUND TO PIPE RUN NEAR BUILDING
SCALE 1:25

NOTE :

THE USE OF THIS DETAIL ASSUMES

1. THE GROUNDWATER TABLE IS BELOW THE BASE OF THE MANHOLE.

CONTRACTOR TO ADVISE ENGINEER WHERE THE WATER TABLE LEVEL IS HIGHER THAN THE BASE OF MANHOLE



SECTION A-A
SCALE 1:20

NOTE :

1. MANHOLES WITH OUTGOING PIPES GREATER THAN 600mm DIA. SHOULD BE FITTED WITH GUARD BARS, SAFETY CHAINS OR OTHER SAFETY DEVICES.
2. FOR DEPTHS TO INVERT >2.700m AN ACCESS SHAFT OF MIN. 900mm DIAMETER AND REDUCING SLAB MAY BE USED.
3. WHERE THE DEPTH TO INVERT IS 1.00m OR LESS A 450mm x 450mm (OR 450mm DIA.) INSPECTION CHAMBER WITH MINIMUM COVER SIZES OF 450mm DIA. MAY BE USED SUBJECT TO ACCOMMODATION OF CONNECTIONS AND APPROVAL OF THE LOCAL AUTHORITY.
4. ON COMPLETION OF CONSTRUCTION INTERNAL SURFACES OF MANHOLE & SEWERS TO THOROUGHLY CLEANSED TO REMOVE ALL DELETERIOUS MATERIAL, WITHOUT SUCH MATTER BEING PASSED FORWARD INTO PUBLIC SEWERS OR WATERCOURSES
5. FIRST MANHOLE UPSTREAM FROM CONNECTION TO THE (EXISTING) PUBLIC SEWER TO BE FITTED WITH A SCREEN IN ORDER TO PREVENT DEBRIS ENTERING THE PUBLIC SEWER. THE SCREEN NOT TO BE REMOVED UNTIL IMMEDIATELY PRIOR TO OCCUPATION OF PREMISES TO BE SERVED BY SEWER.

TABLE M1 - INTERNAL DIAMETER OF MANHOLES

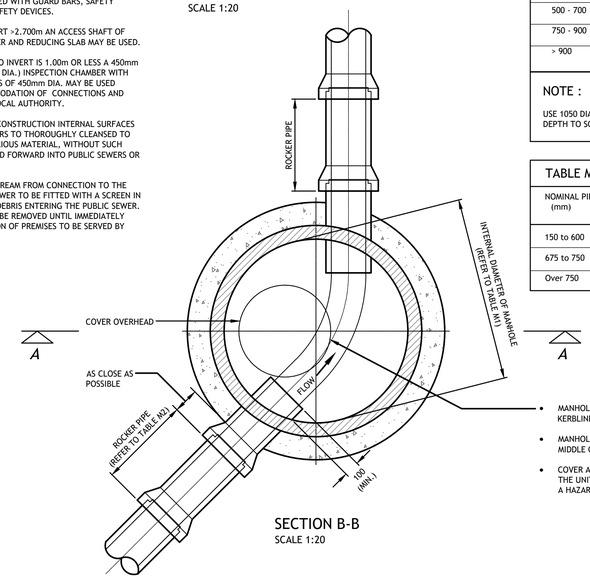
DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIAMETER OF MANHOLE (mm)
LESS THAN 375	1200
375 - 450	1350
500 - 700	1500
750 - 900	1800
> 900	CONSULT LOCAL AUTHORITY

NOTE :

USE 1050 DIAMETER RINGS FOR PIPES LESS THAN 375mm DIAMETER WHERE DEPTH TO SOFFIT IS 1.35 - 1.5m

TABLE M2 - ROCKER PIPE LENGTH

NOMINAL PIPE DIAMETER (mm)	EFFECTIVE LENGTH (M)
150 to 600	0.6
675 to 750	1.0
Over 750	1.2



- MANHOLE COVER TO BE HINGED AT RIGHT ANGLES TO KERBLINE SO THAT THEY CLOSE IN DIRECTION OF TRAFFIC.
- MANHOLE COVERS ON ROADS SHOULD BE LOCATED IN THE MIDDLE OF TRAFFICKED LANES INSIDE WHEEL TRACKS
- COVER AND FRAME TO BE INSTALLED SO THAT NO PART OF THE UNIT IS RAISED OR SUNKEN IN A WAY THAT COULD CAUSE A HAZARD TO PEDESTRIAN OR VEHICULAR TRAFFIC

SECTION B-B
SCALE 1:20

PRECAST MANHOLE DETAIL
SCALE 1:20

BUILDING INFORMATION MODELLING (BIM) I.S.EN ISO 19650-2:2018
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C03	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
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Client: FRONVILLE LTD

PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK				
Title: DRAINAGE CONSTRUCTION DETAILS - SHEET 1				
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0500		Drawing Status: A0 (For Planning)	
Scale @ A1: AS SHOWN	Document No: 214130-PUNCH-XX-XX-DR-C-0500			Revision No: C04

UISCE EIREANN - WASTEWATER STANDARD DETAILS

Detail No.	Detail Title
STD-WW-03	Drain & service connection pipework
STD-WW-04	Typical sewer / service pipe connection
STD-WW-05	Typical service layout indicating separation distances
STD-WW-05A	Wastewater service connection vertical separation distances
STD-WW-06	Restrictions on wastewater infrastructure works adjacent to trees
STD-WW-06A	Restrictions on new trees/shrubs planting adjacent to sewers
STD-WW-07	Trench backfill & bedding
STD-WW-08	Concrete protection slab, bed, haunch & surround to wastewater pipes
STD-WW-09	Blockwork manhole (<450mm dia.)
STD-WW-10	Pre-cast concrete manhole with cast in-situ base
STD-WW-10A	Pre-cast concrete manhole with pre-cast base
STD-WW-11	In-situ concrete manhole
STD-WW-12	Backdrop and cascade manholes
STD-WW-13	Private side inspection chamber
STD-WW-19	Duct chamber
STD-WW-28	Cast in-situ Indicative submersible pumping station
STD-WW-34	Vent stack

UISCE EIREANN - WATER STANDARD DETAILS

Detail No.	Detail Title
STD-W-01	Water service connection responsibility
STD-W-02	Typical layout for watermains within developments
STD-W-03	Customer connection and boundary box (25mm OD pipe)
STD-W-04	General pipe connections (Sheet 1 of 7)
STD-W-05	General pipe connections (Sheet 2 of 7)
STD-W-06	General pipe connections (Sheet 3 of 7)
STD-W-07	General pipe connections (Sheet 4 of 7)
STD-W-08	General pipe connections (Sheet 5 of 7)
STD-W-09	General pipe connections (Sheet 6 of 7)
STD-W-10	General pipe connections (Sheet 7 of 7)
STD-W-11	Typical service layout indicating separation distances
STD-W-12	Restrictions on Water Infrastructure works adjacent to existing trees
STD-W-12A	Restrictions on new trees / shrubs planting adjacent to Water mains
STD-W-13	Trench Backfill / bedding & reduced cover protection slab detail
STD-W-14	Sluice valve for ductile iron (D.I.) pipe (<350mm dia.) (Sheet 1 of 2)
STD-W-15	Sluice valve for polyethylene (P.E.) pipe (<350mm dia.) (Sheet 2 of 2)
STD-W-16	On-line hydrant for ductile iron (D.I.) pipe (Sheet 1 of 4)
STD-W-17	Off-line hydrant for ductile iron (D.I.) pipe (Sheet 2 of 4)
STD-W-18	On-line hydrant for polyethylene (P.E.) pipe (Sheet 3 of 4)
STD-W-19	Off-line hydrant for polyethylene (P.E.) pipe (Sheet 4 of 4)
STD-W-20	On-line air valve for ductile iron (D.I.) pipe (Sheet 1 of 4)
STD-W-21	Off-line air valve for ductile iron (D.I.) pipe (Sheet 2 of 4)
STD-W-15	Sluice valve for polyethylene (P.E.) pipe (<350mm dia.) (Sheet 2 of 2)
STD-W-23	Off-line air valve for polyethylene (P.E.) pipe (Sheet 4 of 4)
STD-W-26	Electromagnetic meter chamber (dn80 - dn250mm Dia.)
STD-W-26A	Chamber for flanged mech. meter without strainer (dn40 - dn250mm Dia.)
STD-W-26G	Flow meter chamber (25-32mm O.D. Dia.)
STD-W-27	Marker posts / plates
STD-W-28	Water main thrust and support blocks
STD-W-29	Duct chamber
STD-W-30A	Washout hydrant
STD-W-30B	Scour chamber to storm sewer arrangements
STD-W-36	Flow meter kiosk
STD-W-38	Watermain loop detail ductile iron option
STD-W-39	Watermain loop detail polyethylene option

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C02	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C03	ISSUED FOR PLANNING REVIEW	LL	08.04.2025				
C04	ISSUED FOR PLANNING	LL	09.06.2025				

Client: FRONTVILLE LTD

PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK
Title: CONSTRUCTION DETAILS - UISCE EIREANN

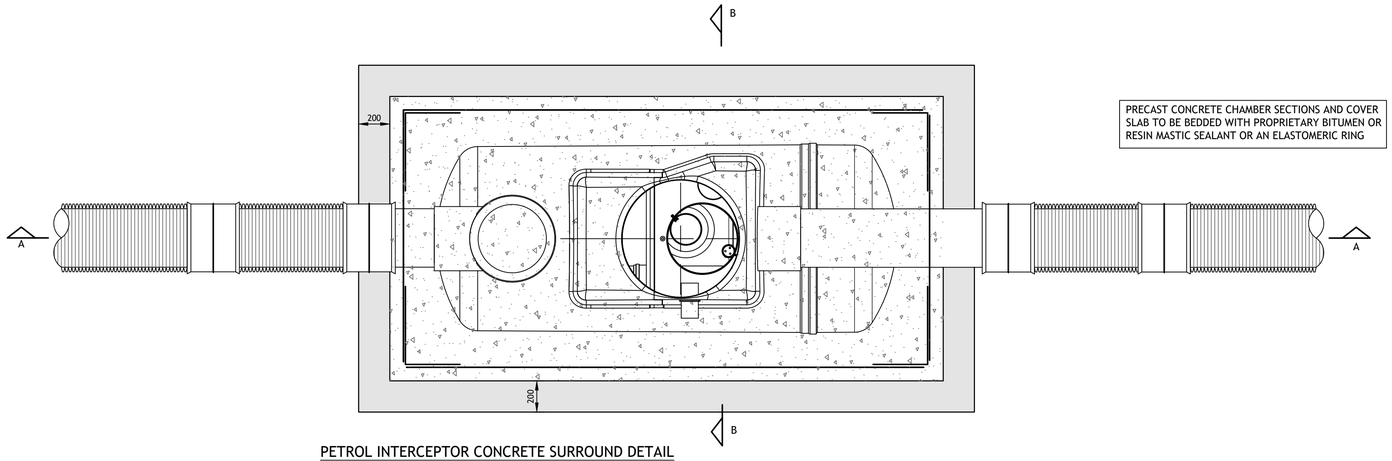
Drawn:	Date drawn:	Technician Check:	Engineer Check:	Approved:
Liam Lonergan	10.09.2024	Liam Lonergan	Simeon Solomons	Niamh Cronin

Project No:	Model Ref:	Drawing Status:
214130	214130-PUNCH-XX-XX-M2-C-0501	A0 (For Planning)

Scale @ A1:	Document No:	Revision No:
NTS	214130-PUNCH-XX-XX-DR-C-0501	C04

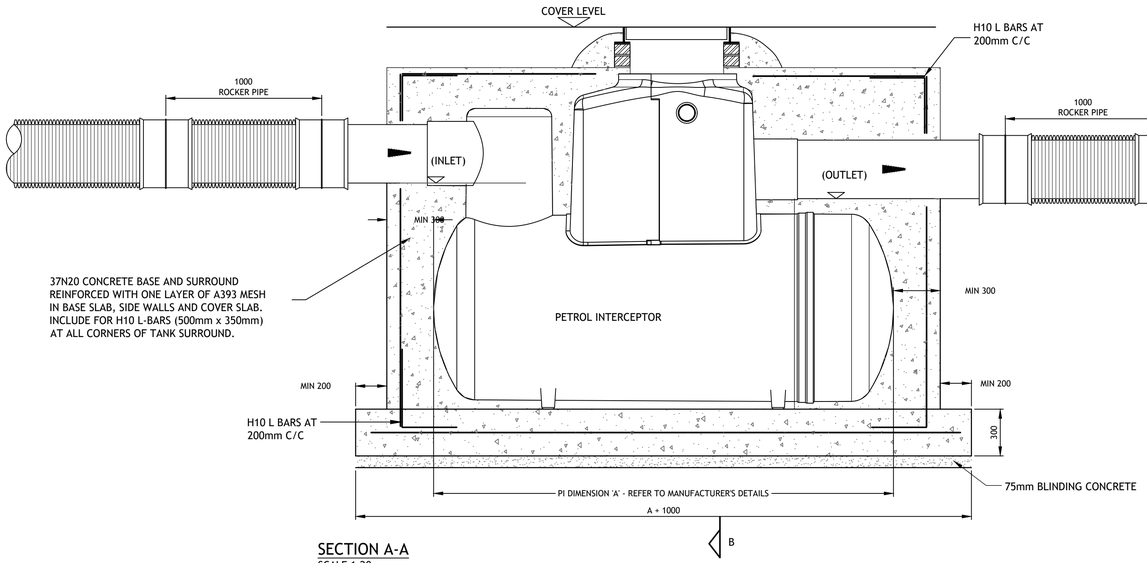
GENERAL NOTES

1. DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS & ENGINEERS DRAWINGS & SPECIFICATIONS. DO NOT SCALE USE FIGURED DIMENSIONS ONLY.
2. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY OR DETERMINE ALL DIMENSIONS AND LEVELS REQUIRED PRIOR TO COMMENCEMENT OF CONSTRUCTION OR PRODUCTION OF FABRICATION DRAWINGS.
3. FOR DETAILS OF SETTING OUT OF RWP, SVP, WVP AND ALL OPENINGS SEE THE RELEVANT ARCHITECTS DRAWINGS.
4. FOR INSULATION DETAILS REFER TO ARCHITECTS DRAWINGS.
5. TO BE READ IN CONJUNCTION WITH IRISH WATER DETAILS.



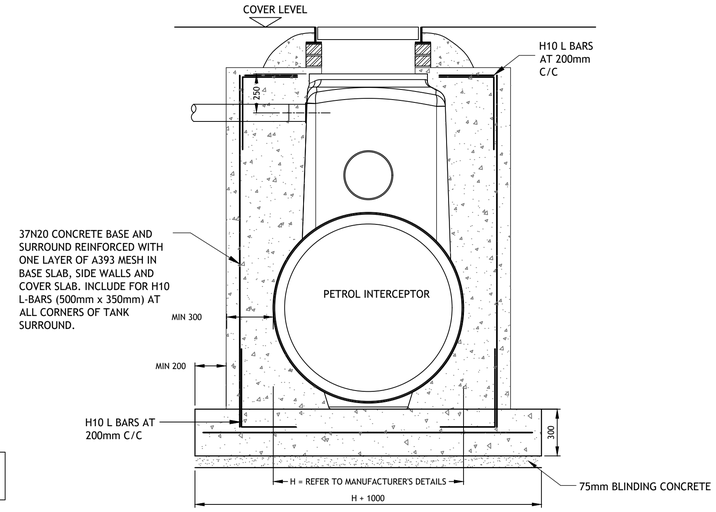
PRECAST CONCRETE CHAMBER SECTIONS AND COVER SLAB TO BE BEDDED WITH PROPRIETARY BITUMEN OR RESIN MASTIC SEALANT OR AN ELASTOMERIC RING

PETROL INTERCEPTOR CONCRETE SURROUND DETAIL
PLAN
SCALE 1:20



SECTION A-A
SCALE 1:20

BACKFILL MATERIAL TO BE GRANULAR MATERIAL TYPE B TO CL 808 OF THE NRA SPECIFICATION FOR ROADWORKS



SECTION B-B
SCALE 1:20 @ A1

SIZING FOR KLARGESTER CLASS 1 BYPASS PETROL INTERCEPTOR TO BE AS PER TABLE BELOW.EQUIVALENT PETROL INTERCEPTOR PROPOSED BY THE CONTRACTOR TO CATER FOR DRAINAGE AREA BEING SERVED BY THE PETROL INTERCEPTOR ENSURING PETROL INTERCEPTOR CAN ACCOMODATE PEAK FLOW RATE.

Product code	Flow (l/s)	Peak Flow Rate (l/s)	Drainage area (m 2)	Storage Capacity (Ltrs)	Storage Capacity (Ltrs)	Length (mm)	Diameter (mm)	Access Shaft Diameter (mm)	Base Inlet Invert (mm)	Base to Outlet Invert (mm)	Standard Fall Across (mm)	Min Inlet Invert (mm)	Standard Pipework Diameter (mm)
-	-	-	-	Silt	Oil	-	-	-	-	-	-	-	-
NSBP003	3	30	1670	300	45	1700	1350	600	1760	1660	100	500	315
NSBP004	4.5	45	2500	450	60	1700	1350	600	1760	1660	100	500	315
NSBP006	6	60	3335	600	90	1700	1350	600	1760	1660	100	500	315
NSBE010	10	100	5560	1000	150	2072	1220	750	1450	1350	100	700	315
NSBE015	15	150	8335	1500	225	2950	1220	750	1450	1350	100	700	315
NSBE020	20	200	11111	2000	300	3896	1220	750	1450	1350	100	700	375
NSBE025	25	250	13890	2500	375	3576	1420	750	1680	1580	100	700	375
NSBE030	30	300	16670	3000	450	4266	1420	750	1680	1580	100	700	450
NSBE040	40	400	22222	4000	600	3230	1920	600	2185	2035	150	1000	500
NSBE050	50	500	27778	5000	750	3960	1920	600	2185	2035	150	1000	600
NSBE075	75	750	41667	7500	1125	5841	1920	600	2235	2035	200	950	675
NSBE100	100	1000	55556	10000	1500	7661	1920	600	2235	2035	200	950	750
NSBE125	125	1250	69444	12500	1875	9548	1920	600	2235	2035	200	950	750

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C03	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
C04	ISSUED FOR PLANNING	LL	09.06.2025

Client: FRONVILLE LTD

PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project:	KINSALE ROAD LRD, KINSALE ROAD, CORK
Title:	DRAINAGE CONSTRUCTION DETAILS - SHEET 3
Drawn: Liam Lonergan	Date drawn: 10.09.2024
Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons
Approved: Niamh Cronin	
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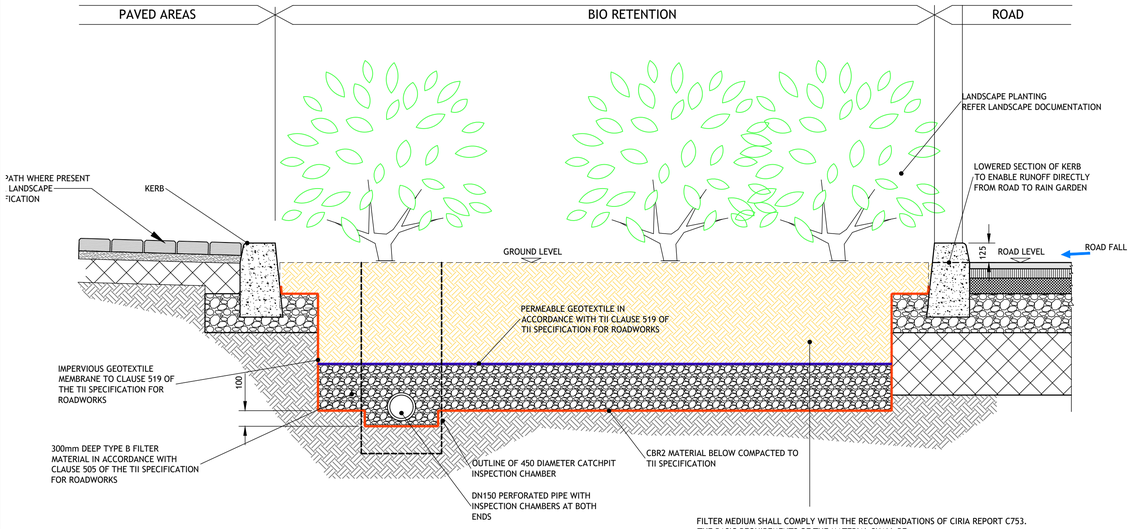
Revision No: C04	



BIO RETENTION - TYPICAL SECTION

SCALE 1:20

FILTER MEDIUM SHALL COMPLY WITH THE RECOMMENDATIONS OF CIRIA REPORT C753.
THE BASIC REQUIREMENTS OF THE MATERIAL SHALL BE:

SATURATED HYDRAULIC CONDUCTIVITY TO BE BETWEEN 100mm/h - 300mm/h - TESTED IN-SITU USING THE SINGLE RING INFILTRATION TEST - EN ISO 22282-5:2012

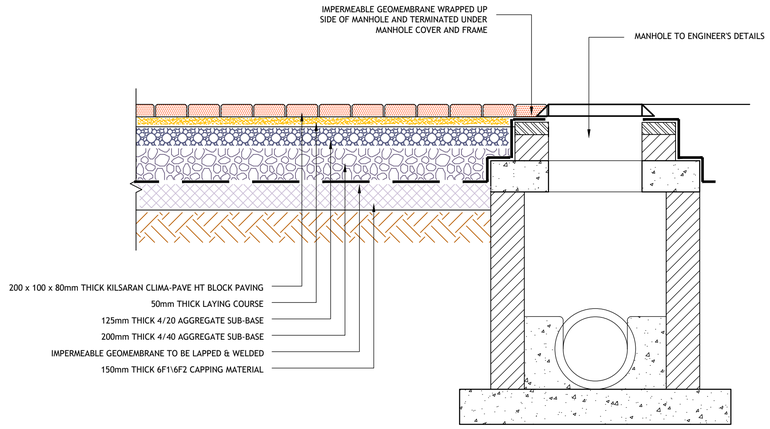
POROSITY > 30% (WHEN TESTED IN ACCORDANCE WITH BS 1377-2:1990)

PARTICLE SIZE DISTRIBUTION

6mm	100% PASSING
2mm	90-100% PASSING
0.6mm	40-70% PASSING
0.2mm	5-20% PASSING
0.063mm	<5% PASSING

ORGANIC MATER CONTENT - 3-5% (w/w)

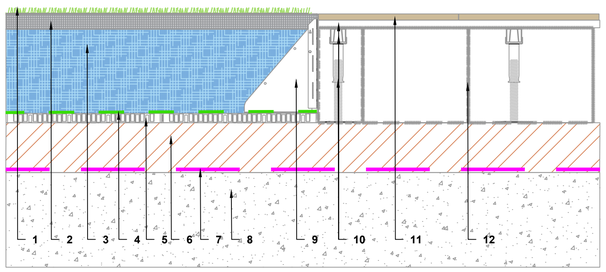
SOILS SHALL BE ASSESSED BY HORTICULTURIST TO ENSURE THAT IT WILL SUPPORT HEALTHY VEGETATION COMMUNITY. ANY COMPONENT FOUND TO CONTAIN HIGH LEVELS OF SALT, CLAY OR SILT PARTICLES OR OTHER EXTREMES WHICH MAY BE CONSIDERED RETARDENT TO PLANT GROWTH SHALL BE REJECTED. THE FILTER MEDIUM LAYER MATERIAL SHALL NOT BE COMPACTED WHEN PLACED. DEPTH TO LANDSCAPE SPECIFICATION, MAXIMUM 1.2M DEEP



PERMEABLE PAVING/MANHOLE JUNCTION DETAIL- TYPICAL SECTION

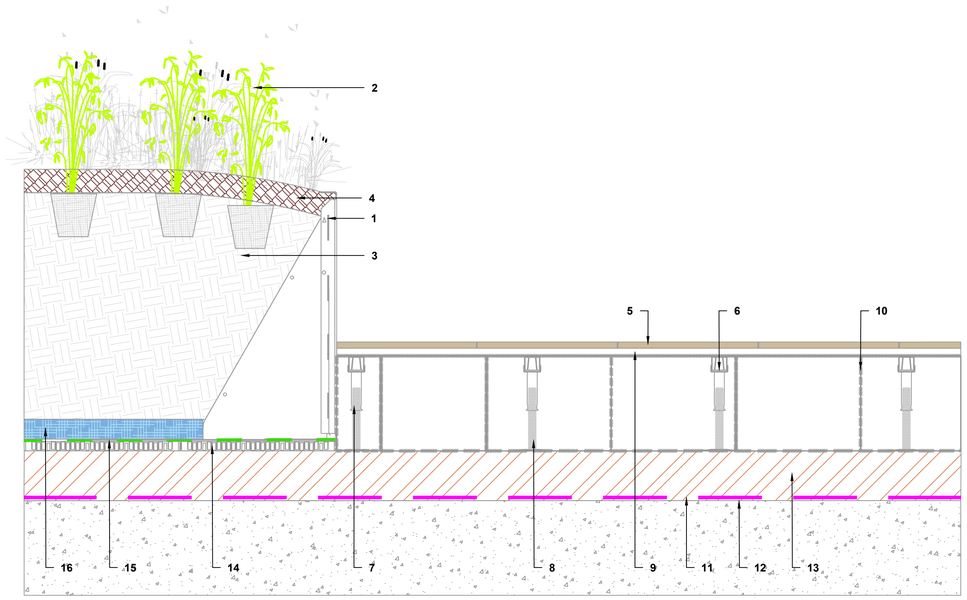
SCALE 1:20

1. 20mm FIRE-R ARTIFICIAL GRASS, COLOUR: GREEN.
2. SHOCKPAD, AS PER PLAY SPECIALIST SPECIFICATION.
3. VOID FORMER BLOCK
4. GEOTEXTILE
5. DRAINAGE SYSTEM.
6. INSULATION (AS PER APPOINTED ARCHITECT'S SPECIFICATIONS).
7. WATER PROOFING MEMBRANE AND PROTECTION BOARD LAYER (AS PER ARCHITECT'S SPECIFICATIONS)
8. PODIUM SLAB
9. RETAINING WALL. VISIBLE FACES FINISH TO BE POLYESTER POWDER COATED, COLOUR: TBC.
10. CLASS A FIRE-RATED NON-COMBUSTIBLE PAVING SUPPORT RAIL SYSTEM: ALUMINIUM TOP RAIL, ALUMINUM LOWER JOIST AND WITH ADJUSTABLE HEIGHT SUPPORT PEDESTALS, PROVIDED WITH T-SHAPED PAVING SPACERS AND PAVING STOPS. WORKS TO BE CARRIED OUT WITH PAVERAIL NON-COMBUSTIBLE PAVING SYSTEM, AS SUPPLIED BY STONEPAVE OR SIMILAR AND APPROVED. ADJUSTABLE NON-COMBUSTIBLE SUPPORT PEDESTAL - AS SUPPLIED BY STONEPAVE OR SIMILAR AND APPROVED. ALUMINIUM LOWER JOIST - AS SUPPLIED BY STONEPAVE OR SIMILAR AND APPROVED, SECURELY BOLTED TO SUPPORT PEDESTAL. ALUMINIUM TOP RAIL - AS SUPPLIED BY STONEPAVE OR SIMILAR AND APPROVED, SECURELY BOLTED TO ALUMINIUM LOWER JOIST.
11. PORCELAIN FLAGS, DIM. 900X 450X20MM, COLOUR: GREY AND DARK GREY, LAYING PATTERN: 90° STRETCHER BOND PATTERN.
12. ACOUSTIC FELT, 2MM THICK, ON TOP OF QUINN LITE CONCRETE BLOCK. 400X215MM. TO APPROVED DETAIL.



ARTIFICIAL GRASS OVER BLUE ROOF TYPICAL SECTION

SCALE 1:10



1. RETAINING WALL MODULE.VISIBLE FACES FINISH TO BE POLYESTER POWDER COATED, COLOUR: TBC.
2. SHRUB PLANTING
3. LIGHTWEIGHT GROWING MEDIUM TO BS 3882
4. BARK MULCH TO 75MM DEPTH.
5. PORCELAIN FLAGS, DIM. 900X 450X20MM, COLOUR: GREY AND DARK GREY, LAYING PATTERN: 90° STRETCHER BOND PATTERN.
6. CLASS A FIRE-RATED NON-COMBUSTIBLE PAVING SUPPORT RAIL SYSTEM: ALUMINIUM TOP RAIL, ALUMINUM LOWER JOIST AND WITH ADJUSTABLE HEIGHT SUPPORT PEDESTALS, PROVIDED WITH T-SHAPED PAVING SPACERS AND PAVING STOPS. WORKS TO BE CARRIED OUT WITH PAVERAIL NON-COMBUSTIBLE PAVING SYSTEM.
7. ADJUSTABLE NON-COMBUSTIBLE SUPPORT PEDESTAL.
8. ALUMINIUM LOWER JOIST ,SECURELY BOLTED TO SUPPORT PEDESTAL.
9. ALUMINIUM TOP RAIL, SECURELY BOLTED TO ALUMINIUM LOWER JOIST.
10. ACOUSTIC FELT, 2MM THICK, ON TOP OF QUINN LITE CONCRETE BLOCK. 400X215MM.
11. WATER PROOFING MEMBRANE AND PROTECTION BOARD LAYER (AS PER ARCHITECT'S SPECIFICATIONS.)
12. PODIUM SLAB.
13. INSULATION (AS PER APPOINTED ARCHITECT'S SPECIFICATIONS).
14. DRAINAGE SYSTEM.
15. GEOTEXTILE
16. VOID FORMER BLOCK

EXTENSIVE GREEN ROOF TYPICAL SECTION

SCALE 1:10

BUILDING INFORMATION MODELLING (BIM)
I.S. EN ISO 19650-2:2018
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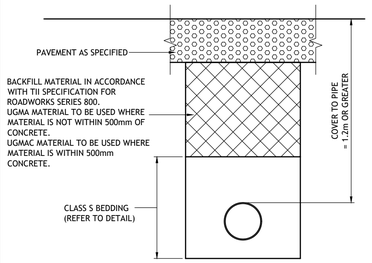
Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C03	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
C04	ISSUED FOR PLANNING	LL	09.06.2025

Client: FRONVILLE LTD

PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

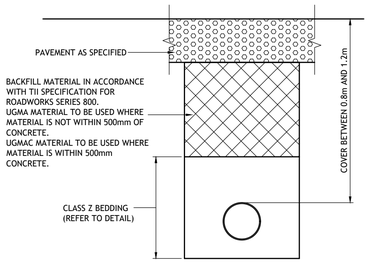
Project: KINSALE ROAD LRD, KINSALE ROAD, CORK				
Title: DRAINAGE CONSTRUCTION DETAILS - SHEET 4				
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0503		Drawing Status: A0 (Planning)	
Scale @ A1: AS SHOWN	Document No: 214130-PUNCH-XX-XX-DR-C-0503			Revision No: C04

DETAIL A



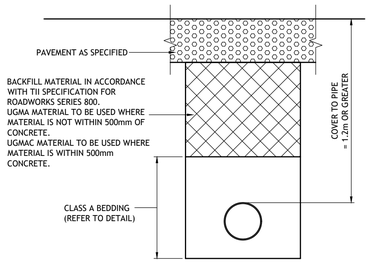
PERMANENT REINSTATEMENT OF LONGITUDINAL TRENCH IN ROADWAYS AND PATHS WITH MINIMUM 1.2m COVER (FLEXIBLE PIPES)

DETAIL B



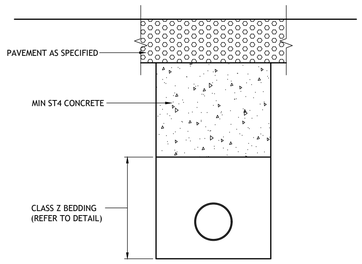
PERMANENT REINSTATEMENT OF LONGITUDINAL TRENCH IN ROADWAYS AND PATHS WITH COVER BETWEEN 0.8m and 1.2m

DETAIL C



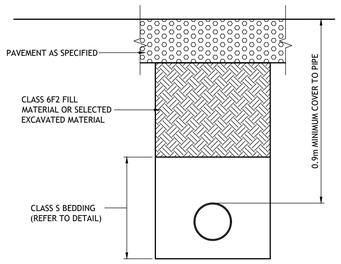
PERMANENT REINSTATEMENT OF LONGITUDINAL TRENCH IN ROADWAYS AND PATHS WITH MINIMUM 1.2m COVER (RIGID PIPES)

DETAIL D



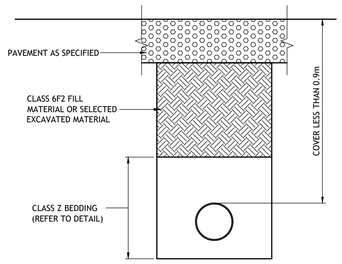
IMMEDIATE PERMANENT REINSTATEMENT OF TRENCH (INCLUDING ALL TRANSVERSE ROAD CROSSINGS) (ALL PIPE MATERIALS)

DETAIL E



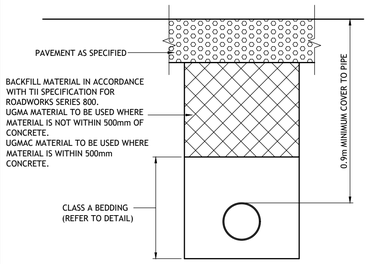
PERMANENT REINSTATEMENT OF TRENCH IN OPEN SPACES & FOOTPATHS NOT ADJACENT TO ROADS WITH MINIMUM 0.9m COVER (FLEXIBLE PIPES)

DETAIL F



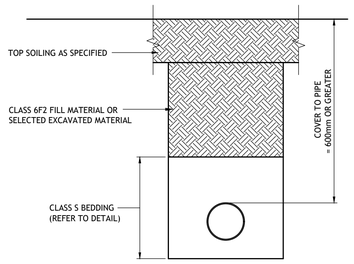
PERMANENT REINSTATEMENT OF TRENCH IN OPEN SPACES & FOOTPATHS NOT ADJACENT TO ROADS WITH LESS THAN 0.9m COVER (ALL PIPE MATERIALS)

DETAIL G



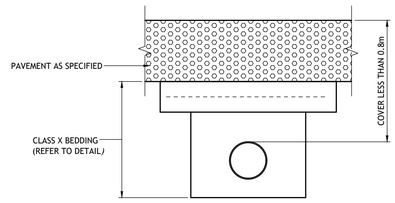
PERMANENT REINSTATEMENT OF TRENCH IN OPEN SPACES & FOOTPATHS NOT ADJACENT TO ROADS WITH MINIMUM 0.9m COVER (RIGID PIPES)

DETAIL H



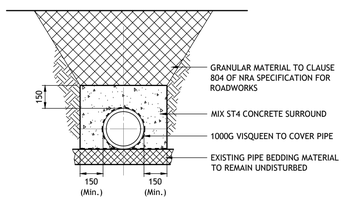
PERMANENT REINSTATEMENT OF TRENCH IN GARDENS OR LANDSCAPED AREAS WITH MINIMUM 0.6m COVER

DETAIL J

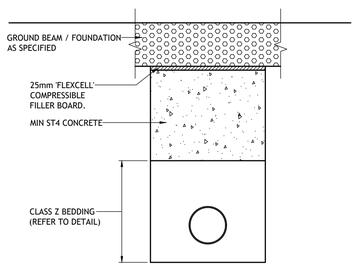


PERMANENT REINSTATEMENT OF LONGITUDINAL TRENCH IN ROADWAYS AND PATHS WITH LESS THAN 0.8m COVER (ALL PIPE MATERIALS)

DETAIL K



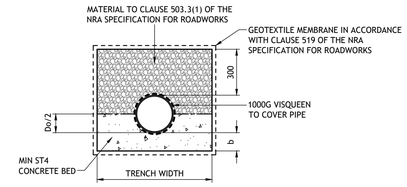
CONCRETE SURROUND PROTECTION TO EXISTING SEWER



IMMEDIATE PERMANENT REINSTATEMENT OF TRENCH CROSSING UNDER BUILDING FOUNDATION (ALL PIPE MATERIALS)

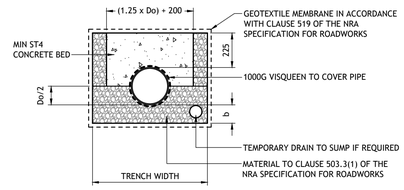
ALTERNATIVE EQUIVALENT DESIGN MIX	
STANDARD PRESCRIBED MIX	ALTERNATIVE EQUIVALENT MIX IF SUPPLIED FROM A THIRD PARTY ACCREDITED READYMIX CONCRETE SUPPLIER N/mm^2
ST1	C12/15
ST2	C12/15
ST3	C12/15
ST4	C16/20

TABLE 3



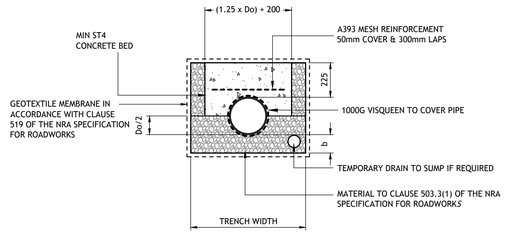
CLASS A BEDDING
(CONCRETE BED AND GRANULAR SURROUND)
SCALE 1:20

NOTE:
CLASS A BEDDING FOR USE WITH RIGID PIPES ONLY

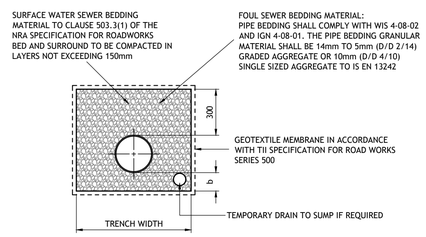


CLASS B BEDDING
(CONCRETE ARCH TO PIPELINES)
SCALE 1:20

NOTE:
CLASS B BEDDING FOR USE WITH RIGID PIPES ONLY

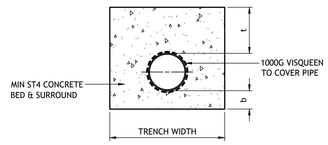


CLASS C BEDDING
(REINFORCED CONCRETE ARCH TO PIPELINES)
SCALE 1:20

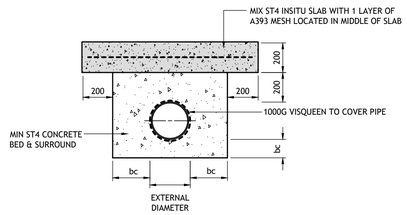


CLASS S BEDDING
(GRANULAR BED AND SURROUND)
SCALE 1:20

NOTE:
CLASS S BEDDING FOR USE WITH FLEXIBLE PIPES ONLY



CLASS Z BEDDING
(CONCRETE BED AND SURROUND)
SCALE 1:20



CLASS X BEDDING
(CONCRETE BED AND SURROUND)
(WITH REINFORCED CONCRETE SLAB)
SCALE 1:20

TRENCH WIDTHS AND DIMENSIONS FOR FOUL AND SURFACE WATER DRAINS				
PIPE DIAMETER (mm)	"Do" (mm)	"b" (mm)	"t" (mm)	TRENCH WIDTH (mm)
100	150	150	150	600
150	210	150	150	700
225	300	150	150	750
300	400	150	150	850
375	480	150	150	950
450	560	150	150	1000
525	650	150	150	1100
600	735	150	150	1200
675	850	200	200	1350
750	910	200	200	1450
900	1080	200	200	1650

TABLE 1

DIMENSION-bc

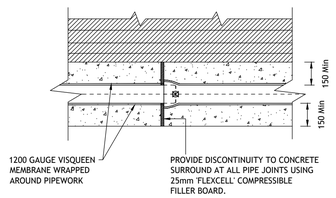
NOMINAL PIPE DIAMETER (mm)	100-450 incl.	525-600 incl.	750	900	1050	1200
bc (mm)	100	150	200	225	250	300

TABLE 2

NOTES (PIPE BEDDING)

1. CLAY PUDDLE SHALL BE INCORPORATED IN THE PIPE BED & SURROUND AND TRENCH BACKFILL MATERIAL IN ACCORDANCE WITH THE SPECIFICATION AT 50m INTERVALS
2. IN ROCK OR MIXED SOILS CONTAINING BOULDERS OR HARD SPOTS INCREASE PIPE BEDDING DEPTH BY 100mm
3. THE EMPLOYER'S REPRESENTATIVE MAY INSTRUCT THAT SPECIFIC PROVISION FOR DRAINAGE ALONG THE PIPE TRENCH BE MADE BY MEANS OF CONCRETE OR OTHER LAND DRAINAGE PIPES WHERE THE WATER TABLE LEVEL SO REQUIRES.
4. FOR DIMENSIONS "b" , "Do/2" AND TRENCH WIDTH REFER TO TABLE 1
5. FOR DIMENSIONS "bc" REFER TO TABLE 2
6. Do = PIPE OUTER DIAMETER

PIPE BEDDING DETAILS



CONCRETE SURROUND TO PIPELINES DETAIL
SCALE 1:20 @ A1

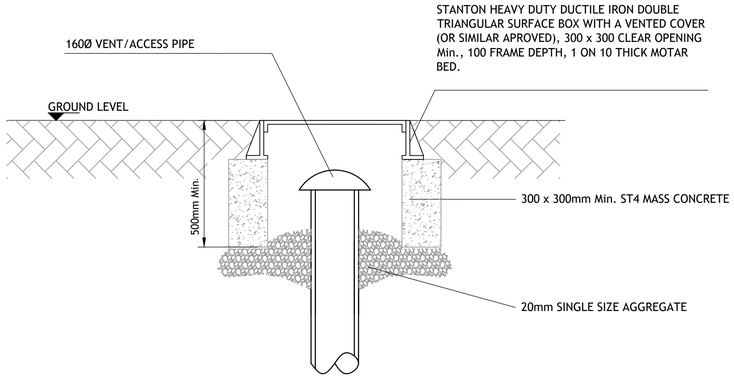
BUILDING INFORMATION MODELLING (BIM) IS EN ISO 19650-2:2018
NSAI Certified

Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024				
C02	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C03	ISSUED FOR PLANNING REVIEW	LL	08.04.2025				
C04	ISSUED FOR PLANNING	LL	09.06.2025				

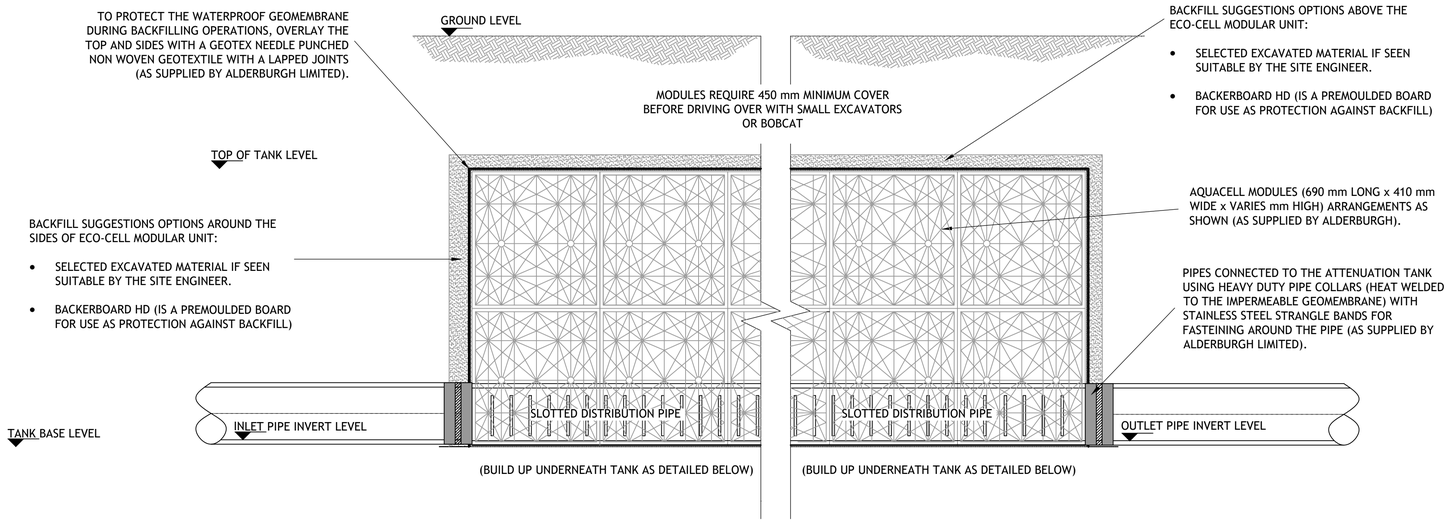
Client: FRONVILLE LTD

PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK			
Title: DRAINAGE CONSTRUCTION DETAILS - SHEET 5			
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0504	Drawing Status: A0 (Planning)	
Scale @ A1: AS SHOWN	Document No: 214130-PUNCH-XX-XX-DR-C-0504	Revision No: C04	



VENTILATION BOX DETAIL



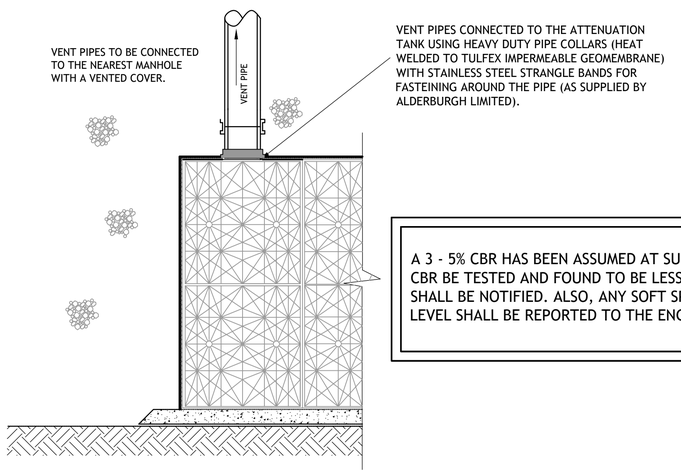
TYPICAL INLET PIPE CONNECTION

TYPICAL OUTLET PIPE CONNECTION

TYPICAL DETAILS OF ATTENUATION TANK USING AQUACELL MODULAR UNITS (SIDE VIEW)

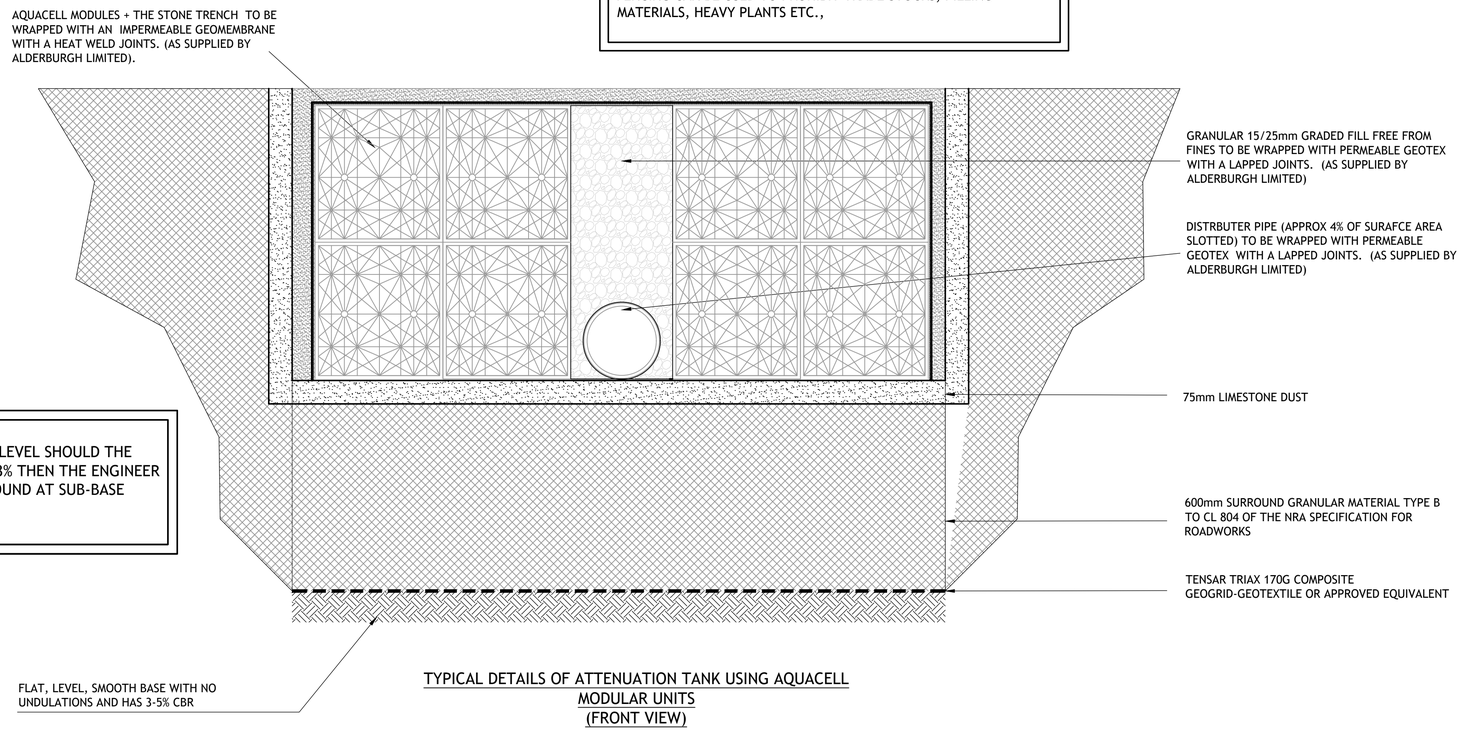
INLET/OUTLET PIPES MUST BE SUPPORTED WITH CONCRETE TO PROTECT IT DURING BACKFILLING

THE CONTRACTOR SHALL PROHIBIT THE MOVEMENT OF CONSTRUCTION PLANT ACROSS THE STORAGE TANK AND WHERE NECESSARY PROVIDE ADDITIONAL SUPPORT AND PROTECTION TO THE STRUCTURE. PARTICULARLY POST CONSTRUCTION. TEMPORARY FENCING CAN BE USED TO PROHIBIT TRADE STOCKS, PILLING MATERIALS, HEAVY PLANTS ETC.,



TYPICAL 160Ø VENT/ACCESS PIPE CONNECTION

A 3 - 5% CBR HAS BEEN ASSUMED AT SUB-BASE LEVEL SHOULD THE CBR BE TESTED AND FOUND TO BE LESS THAN 3% THEN THE ENGINEER SHALL BE NOTIFIED. ALSO, ANY SOFT SPOTS FOUND AT SUB-BASE LEVEL SHALL BE REPORTED TO THE ENGINEER



TYPICAL DETAILS OF ATTENUATION TANK USING AQUACELL MODULAR UNITS (FRONT VIEW)

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NSAI Certified

Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024				
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C04	ISSUED FOR PLANNING	LL	09.06.2025				

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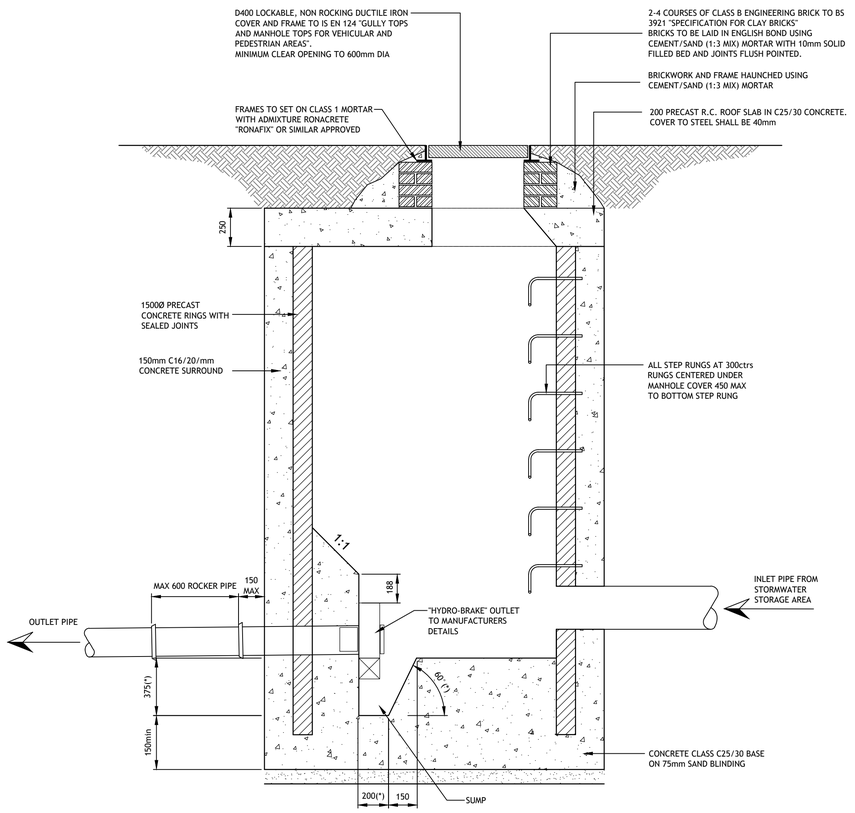
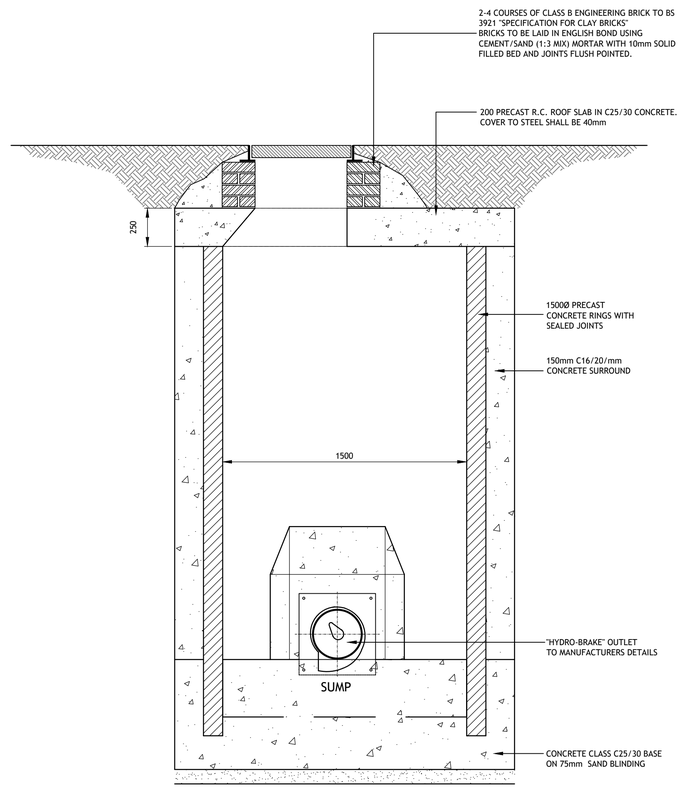
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK				
Title: DRAINAGE CONSTRUCTION DETAILS - SHEET 6				
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0505		Drawing Status: A0 (Planning)	
Scale @ A1: AS SHOWN	Document No: 214130-PUNCH-XX-XX-DR-C-0505			Revision No: C04

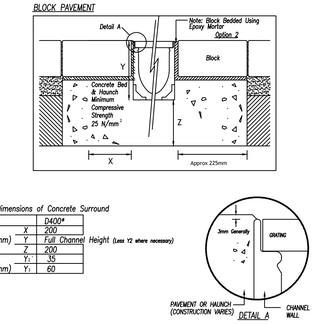


(*) DIMENSION TO BE APPROVED BY HYDRO-BRAKE" SUPPLIERS

SECTION A-A
SCALE 1:20



SECTION B-B
SCALE 1:20



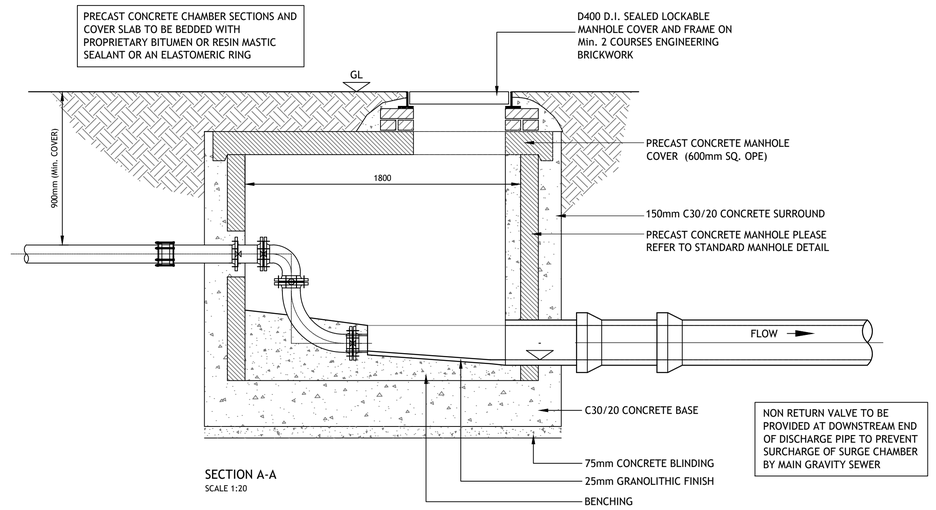
7.0 Minimum Dimensions of Concrete Surround

Load Class		D400*
Minimum Dimensions (mm)	X	200
	Y	Full Channel Height (Less Y2 where necessary)
	Z	200
Maximum Dimensions (mm)	Y1	35
	Y1	60

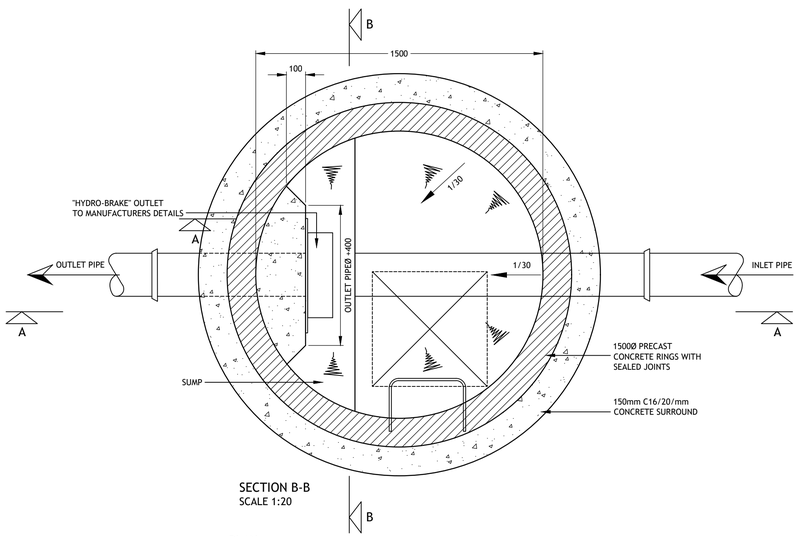
ACO CHANNEL - IN PAVED AREAS
SCALE 1:20

NOTES :

1. THE CHANNEL MUST BE SUPPORTED AND THEREFORE BLOCKS MUST BE RESTRAINED FROM LATERALLY MOVEMENT BY BEDDING SECURELY. E.G. BY USING AN EPOXY OR POLYMER MODIFIED MORTAR FOR BED AND PERPENDICULAR JOINTS. (FOR EXAMPLE RONAFIX MORTAR MIX C OR SIMILAR: FROM RONACRETE TEL ENGINEERING ADVICE MAY BE REQUIRED. 01279 638700).
2. JOINT SEALANT: ACO DRAIN CHANNEL JOINTS AND FITTINGS ARE TO BE SEALED WITH FLEXIBLE SEALENT
3. SURFACE PROTECTION: IN ASPHALT PAVEMENTS AVOID CONTACT BETWEEN COMPACTION EQUIPMENT AND CHANNEL/GRATING. THIS MAY BE ACHIEVED BY ENSURING THAT THE FINISHED SURFACE LEVEL LIES ABOVE THE GRATING LEVEL (BY AT LEAST 3mm). STONES SHOULD BE REMOVED FROM GRATING PRIOR TO LAYING/ROLLING WEARING COURSE.



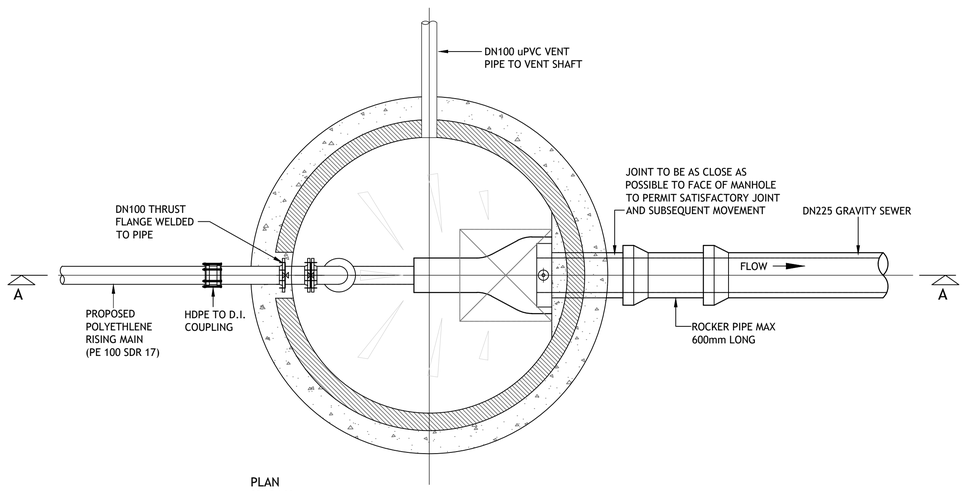
SECTION A-A
SCALE 1:20



SECTION B-B
SCALE 1:20

PLAN
SCALE 1:20

TYPICAL "HYDROBRAKE" MANHOLE DETAIL
SCALE 1:20



PLAN
SCALE 1:20

SURGE CHAMBER
SCALE 1:20

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Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
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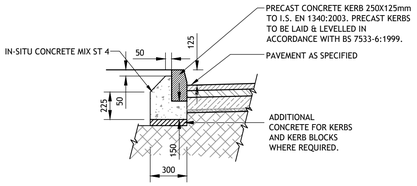
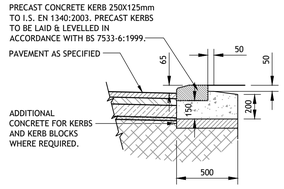


STANDARD KERB DETAIL

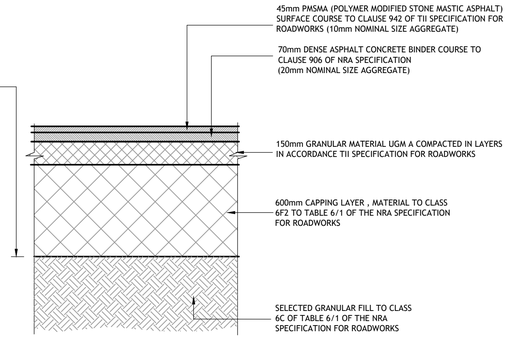
SCALE 1:25



MOUNTABLE KERB DETAIL

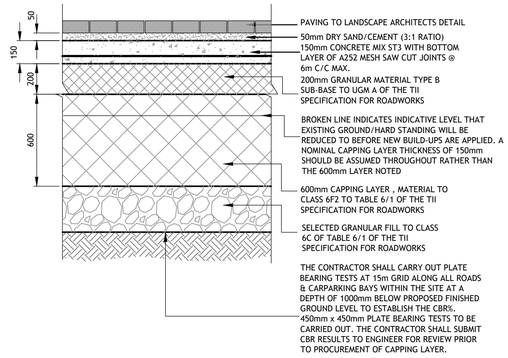
TYPICAL DETAIL AT ENTRANCES TO PRIVATE DWELLINGS
SCALE 1:25

THE CONTRACTOR SHALL CARRY OUT PLATE BEARING TESTS AT 15m GRID ALONG ALL ROADS & CARPARKING BAYS WITHIN THE SITE AT A DEPTH OF 870mm BELOW PROPOSED FINISHED GROUND LEVEL TO ESTABLISH THE CBR%. 450mm x 450mm PLATE BEARING TESTS TO BE CARRIED OUT. THE CONTRACTOR SHALL SUBMIT CBR RESULTS TO ENGINEER FOR REVIEW PRIOR TO PROCUREMENT OF CAPPING LAYER.



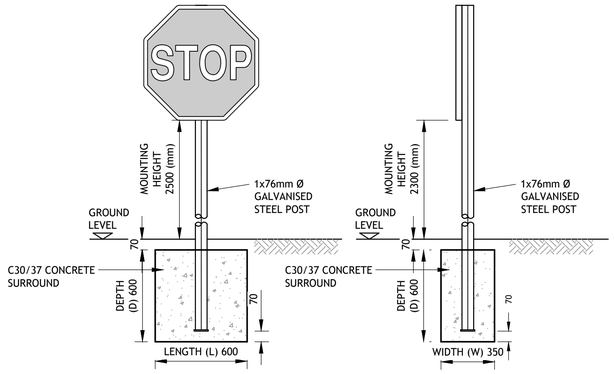
ACCESS ROAD BUILD-UP
SCALE 1:20

NOTE:
BUILD UP DETAILS SUITABLE FOR LOCATIONS WHERE CBR TEST RESULTS = 2% OR GREATER

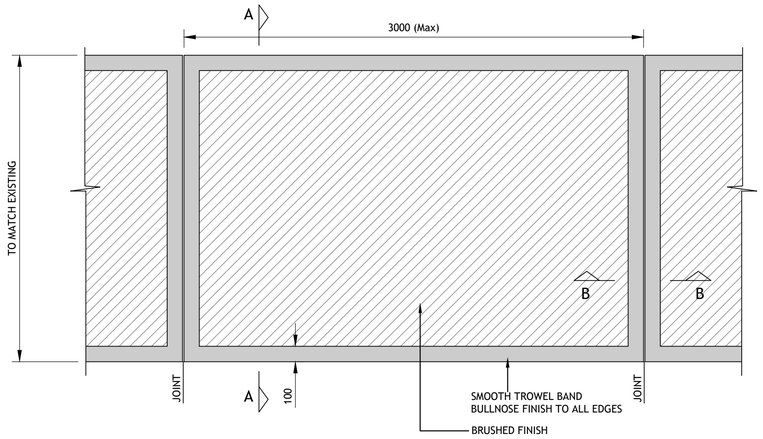


TRAFFICKED AREAS WITH PAVING
SCALE 1:20

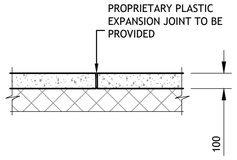
NOTES:
ALL SIGNS TO BE FITTED WITH LOCKABLE SLEEVE CAST INTO FOUNDATIONS FOR EASE OF REMOVAL/REPLACEMENT



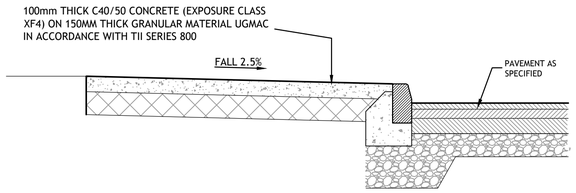
TYPICAL SINGLE POST SIGN DETAIL
Scale 1:20



PLAN
SCALE 1:20



SECTION B-B (JOINT DETAIL)
SCALE NTS



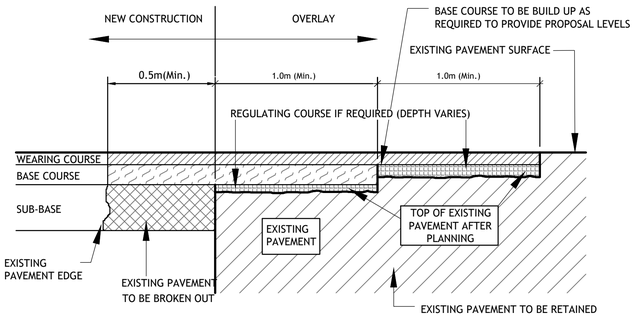
SECTION A-A
SCALE 1:20

IN-SITU CONCRETE FOOTPATH & KERB

SCALE 1:20

NOTES :

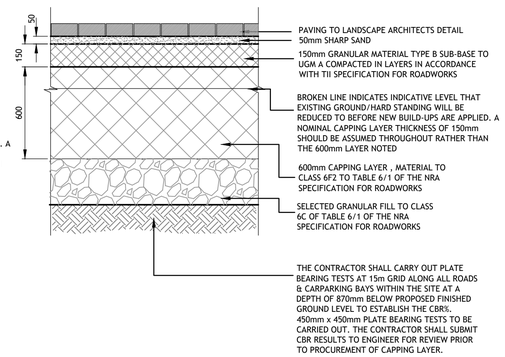
1. AT VEHICULAR ACCESS POINTS CONCRETE SLAB THICKNESS TO BE 150mm REINFORCED WITH A393 MESH TOP & BOTTOM.
2. ALL CONCRETE EDGES AND JOINTS SHALL HAVE BULLNOSED TROWEL FINISH.



TRANSVERSE JOINT BETWEEN PROPOSED FLEXIBLE PAVEMENT & EXISTING ROAD
NTS

AS AN ALTERNATIVE TO DEWATERING DEEP EXCAVATIONS BELOW THE WATER TABLE TII CLASS 6A FILL MATERIAL CAN BE USED AS FILL BELOW STANDING WATER TABLE IN LIEU OF CLASS 6C

BROKEN LINE INDICATES INDICATIVE LEVEL THAT EXISTING GROUND/HARD STANDING WILL BE REDUCED TO BEFORE NEW BUILD-UPS ARE APPLIED. A NOMINAL CAPPING LAYER THICKNESS OF 150mm SHOULD BE ASSUMED THROUGHOUT RATHER THAN THE 600mm LAYER NOTED



NON-TRAFFICKED AREAS WITH PAVING
SCALE 1:20

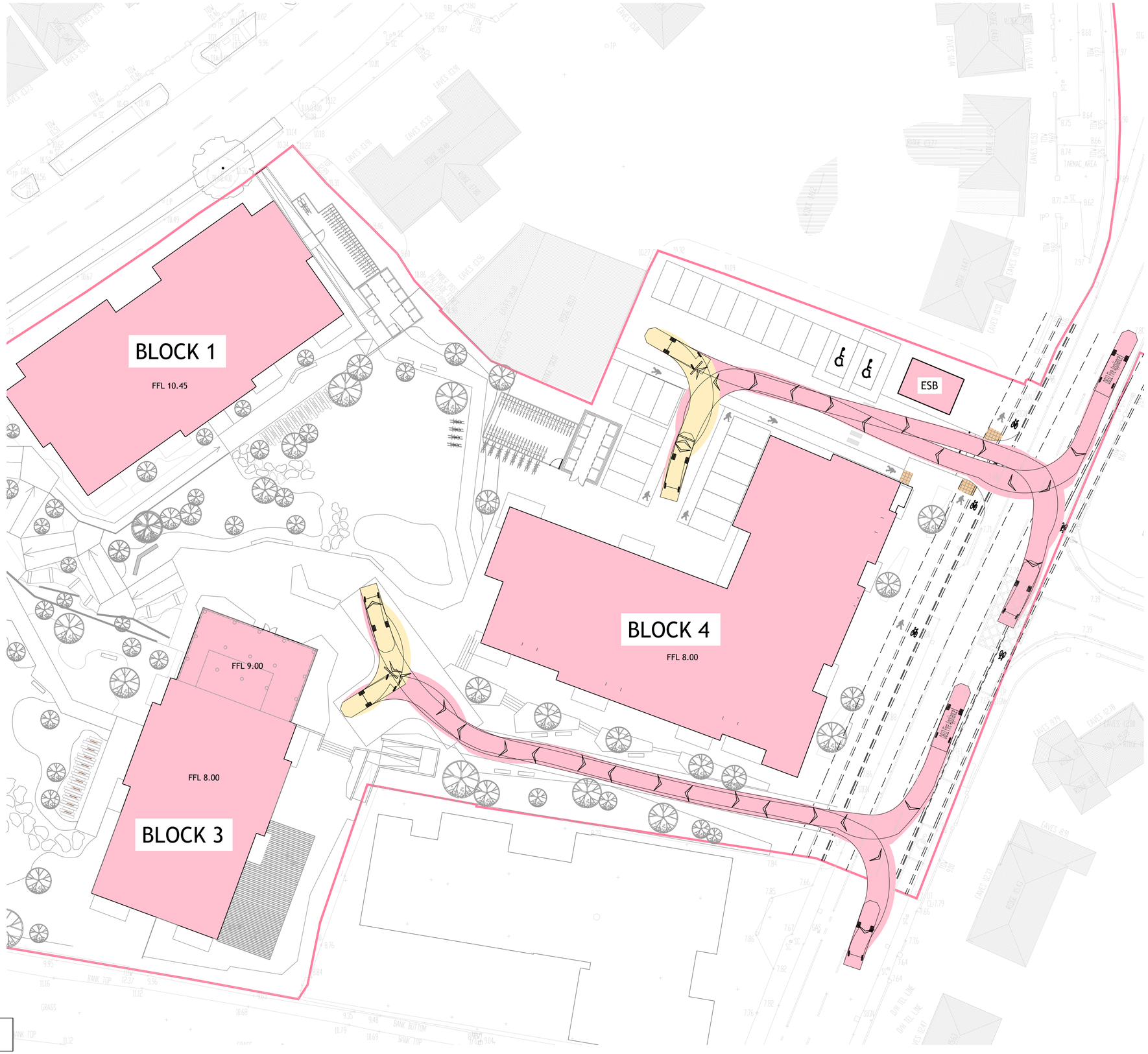
BUILDING INFORMATION MODELLING (BIM)
I.S. EN ISO 19650-2:2018
NSAI Certified

Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C03	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
C04	ISSUED FOR PLANNING	LL	09.06.2025

Client: FRONVILLE LTD

PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

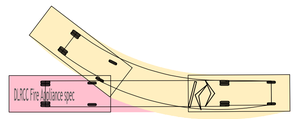
Project: KINSALE ROAD LRD, KINSALE ROAD, CORK			
Title: CONSTRUCTION DETAILS - SHEET 1			
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0550	Drawing Status: A0(Planning)	
Scale @ A1: AS SHOWN	Document No: 214130-PUNCH-XX-XX-DR-C-0550	Revision No: C04	

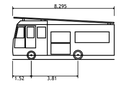


AUTOTRACK LEGEND

VEHICLE MOVING FORWARD

VEHICLE IN REVERSE





DLRCC Fire Appliance spec

Overall Length	8.295m
Overall Width (Inc. mirrors)	2.990m
Overall Body Height	3.452m
Min Body Ground Clearance	0.337m
Max Track Width	2.121m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	7.910m

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BUILDING INFORMATION MODELLING (BIM)
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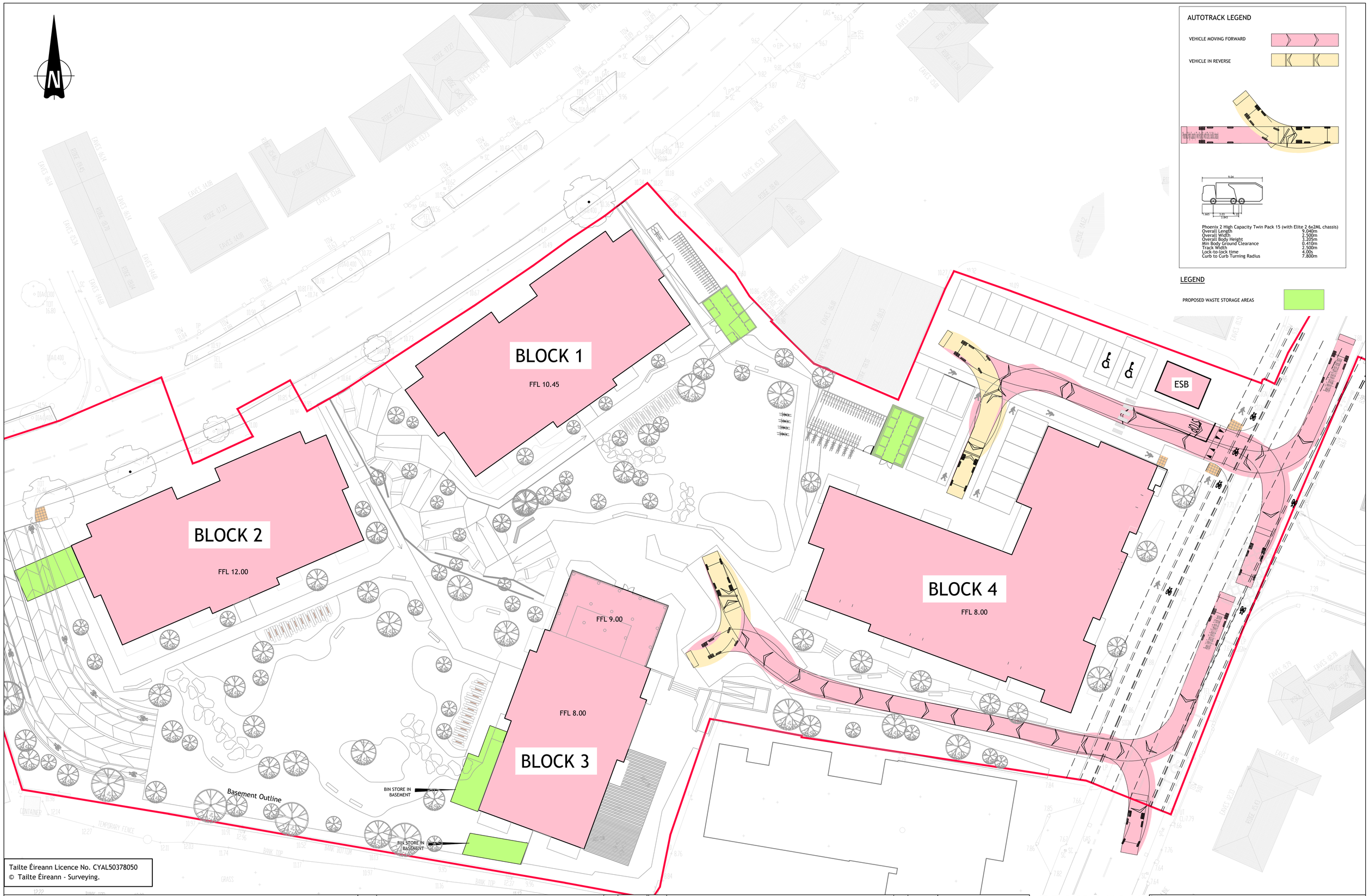
NSAI Certified

Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING	LL	04.03.2025
C03	ISSUED FOR PLANNING	LL	21.03.2025
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
C06	ISSUED FOR PLANNING	LL	09.06.2025

Client: FRONVILLE LTD

PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK				
Title: AUTOTRACK ANALYSIS - FIRE TENDER				
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0600		Drawing Status: A0 (Planning)	
Scale @ A1: 1:250	Document No: 214130-PUNCH-XX-XX-DR-C-0600			Revision No: C06



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Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	27.09.2024	C07	ISSUED FOR PLANNING	LL	09.06.2025
C02	ISSUED FOR PLANNING	LL	23.10.2024				
C03	ISSUED FOR PLANNING	LL	04.03.2025				
C04	ISSUED FOR PLANNING	LL	21.03.2025				
C05	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C06	ISSUED FOR PLANNING REVIEW	LL	08.04.2025				

Client: FRONVILLE LTD

PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK
Title: AUTOTRACK ANALYSIS - REFUSE TRUCK

Drawn:	Date drawn:	Technician Check:	Engineer Check:	Approved:
Liam Lonergan	10.09.2024	Liam Lonergan	Simeon Solomons	Niamh Cronin

Project No:	Model Res:	Drawing Status:
214130	214130-PUNCH-XX-XX-M2-C-0601	A0 (Planning)

Scale @ A1:	Document No:	Revision No:
1:250	214130-PUNCH-XX-XX-DR-C-0601	C07