Figure 49: Image of 13, 5m tall deciduous trees along northern boundary fence

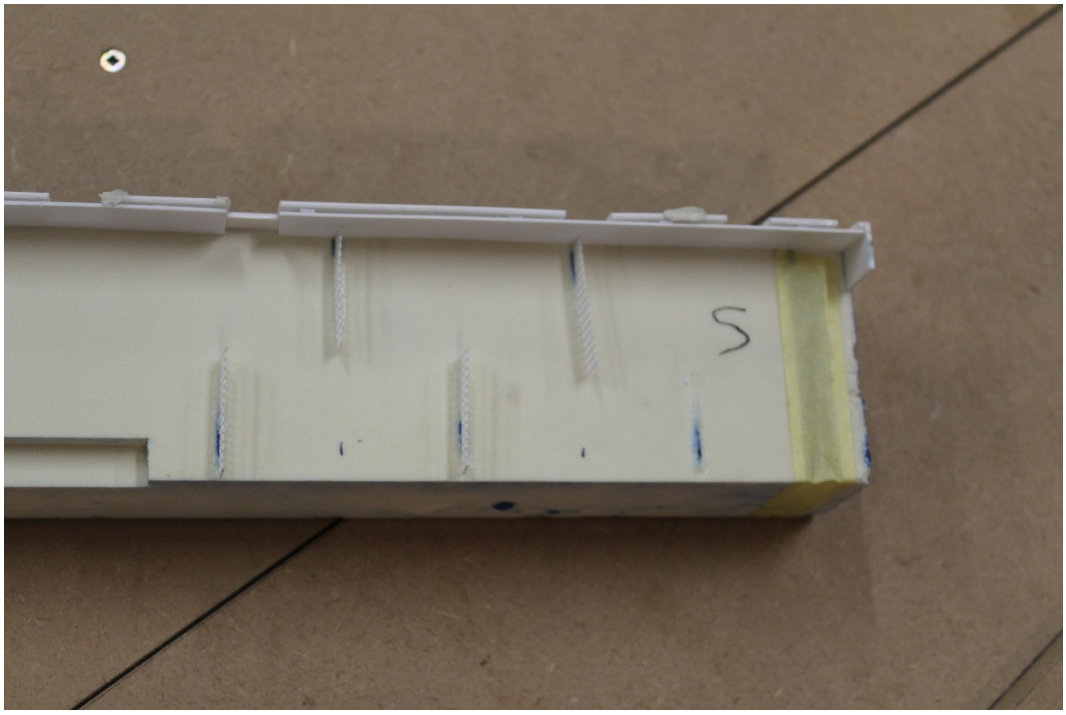

Figure 50: Image of 3m tall, 10m deep 50% porous baffles underneath car park massing

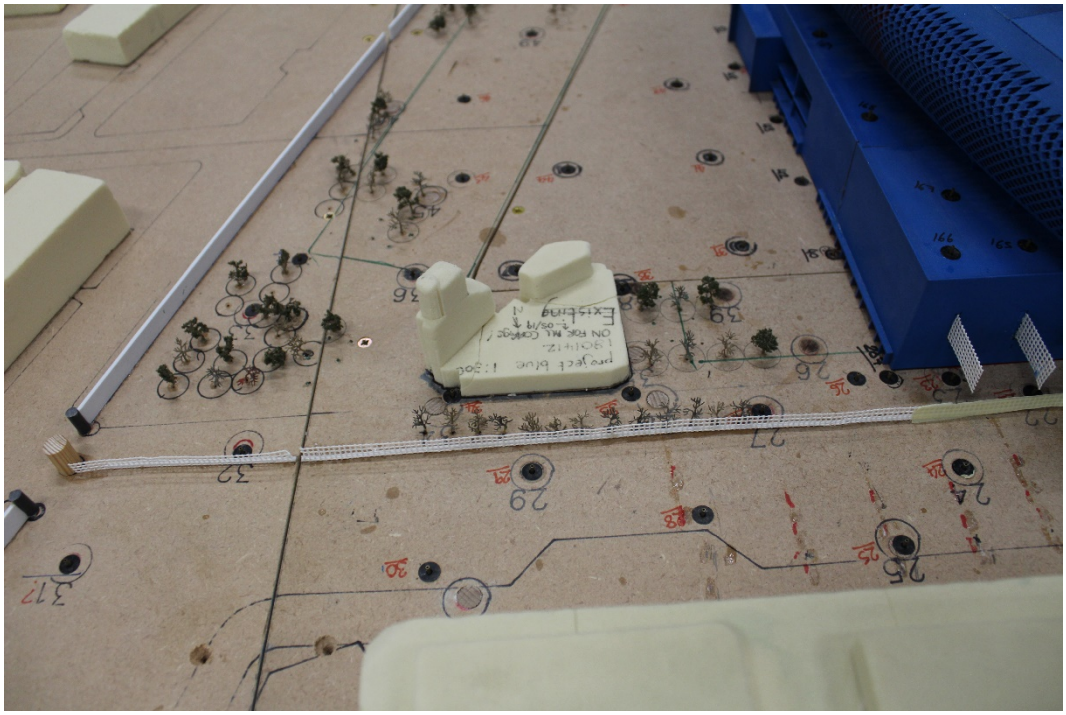

Figure 51: Image of 50% porous section of northern boundary fence

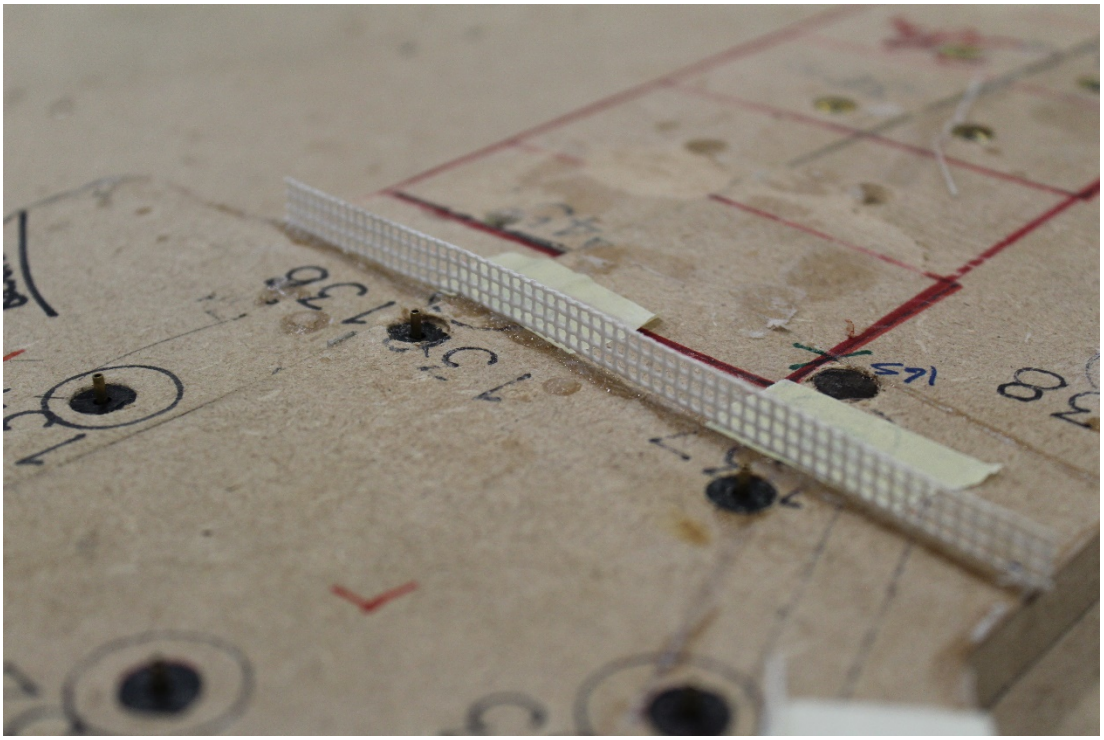

Figure 52: Image of 2m tall, 50% porous south-west boundary fence

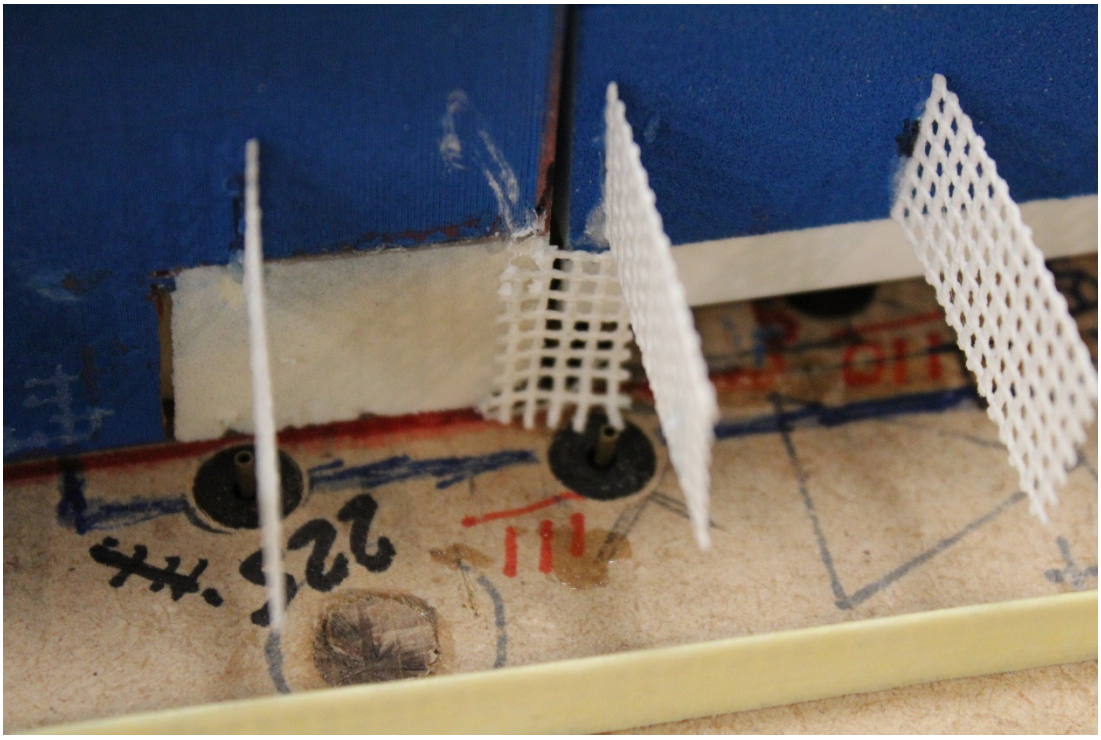

Figure 53: Image of 4m wide, 50% porous floor-to-ceiling screen at north end of car park massing

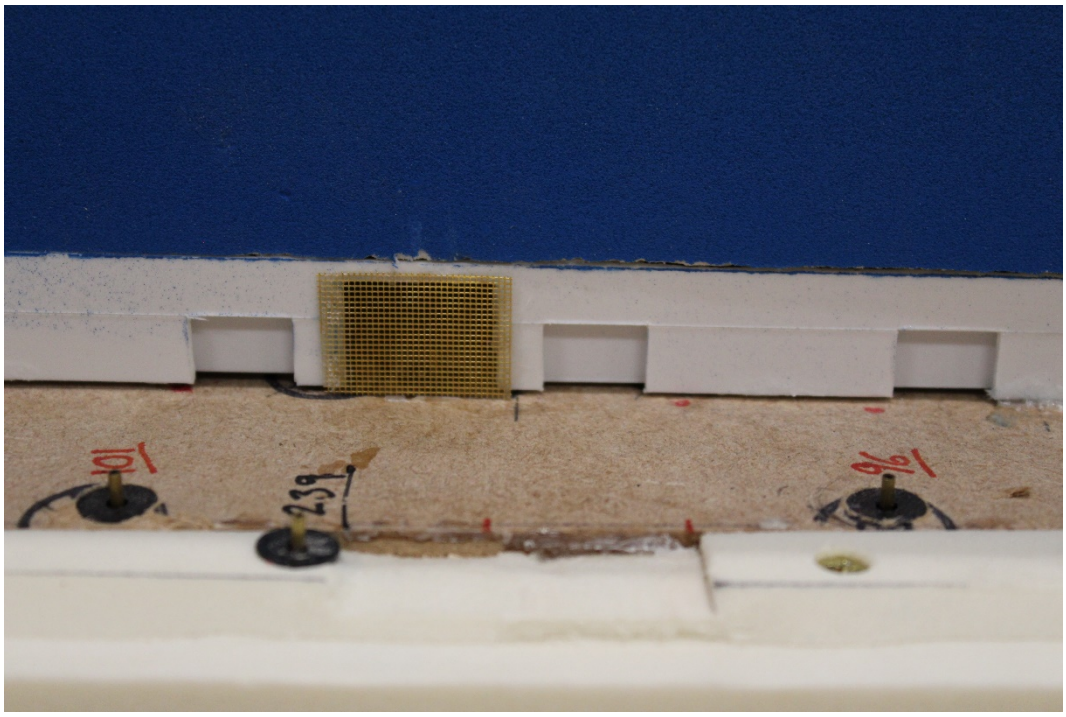

Figure 54: Image of 30% porous gate covering entrance at the centre of car park massing

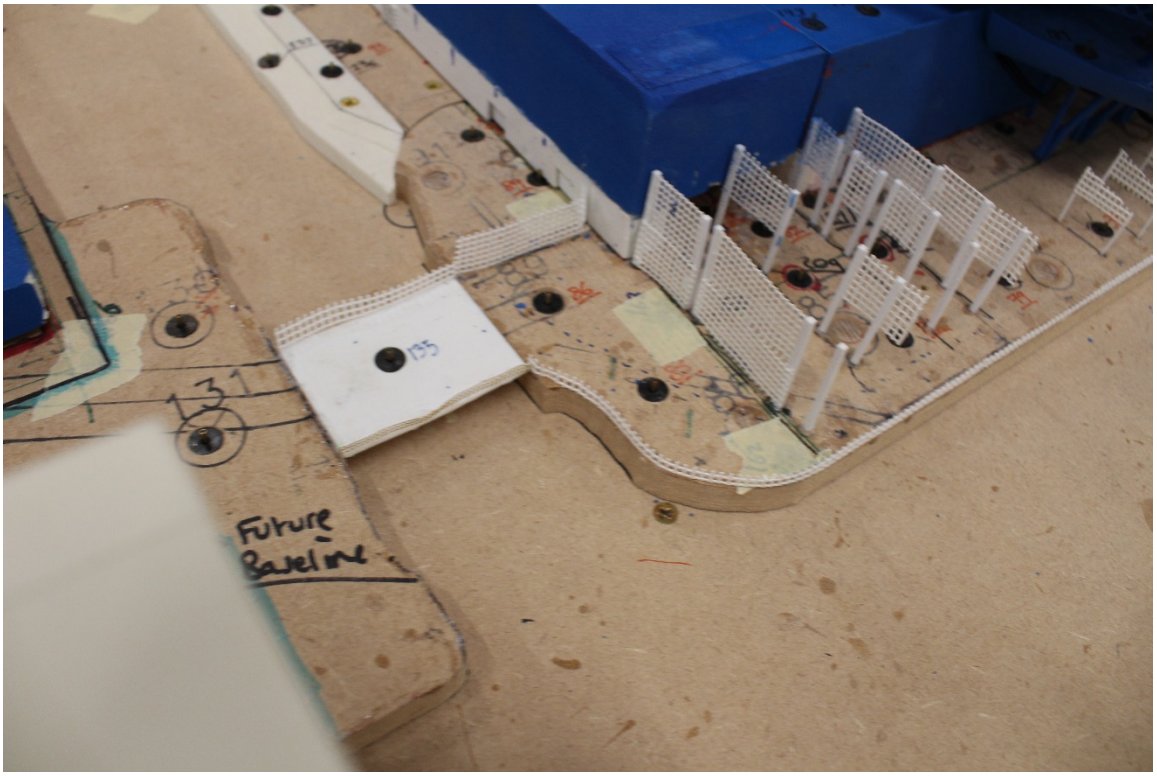

Figure 55: 5m tall, 50% porous fence running from the western end of the south-west bridge to the western façade of the car park massing

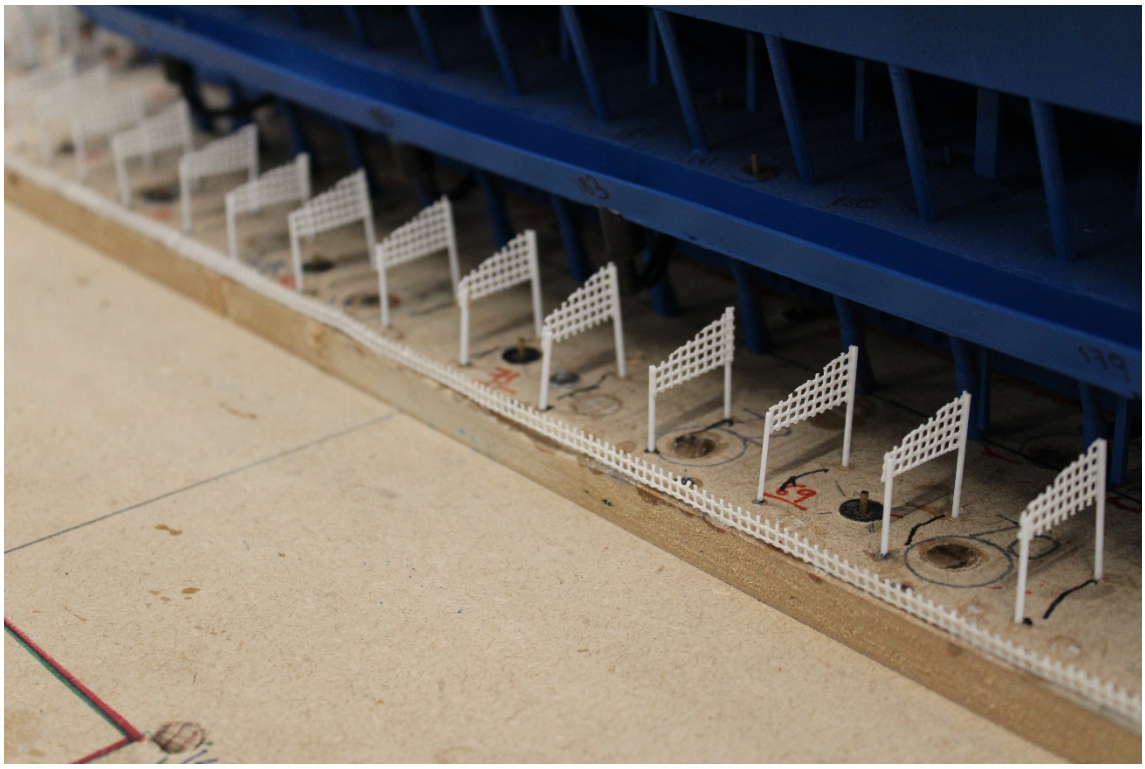

Figure 56: Image of seventeen 7.5m wide, tapered baffles which are 9m tall the southern end and 6m tall at the northern end, spaced 10m apart running along the southern thoroughfare

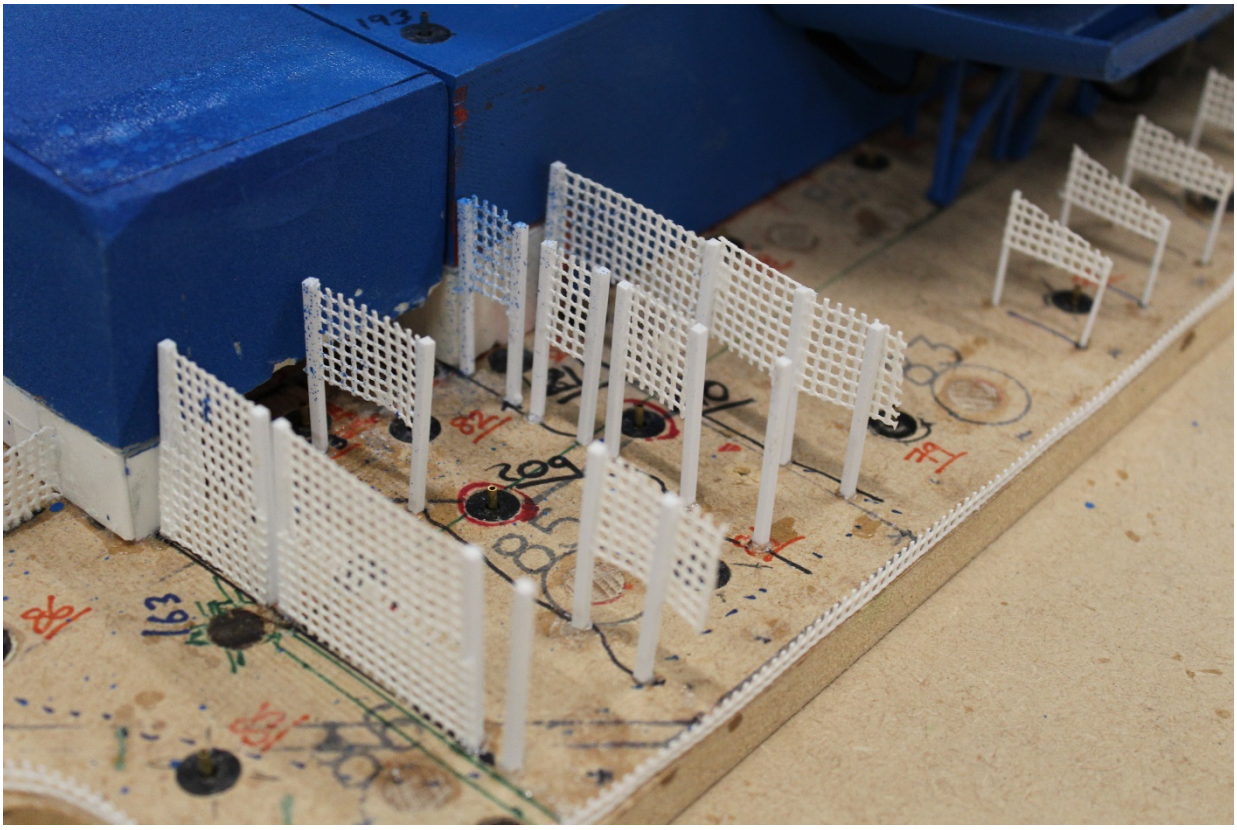

Figure 57: Image of nine 6m tall 50% porous baffles of varying width and 6m ground clearance at the south-west corner of the stadium

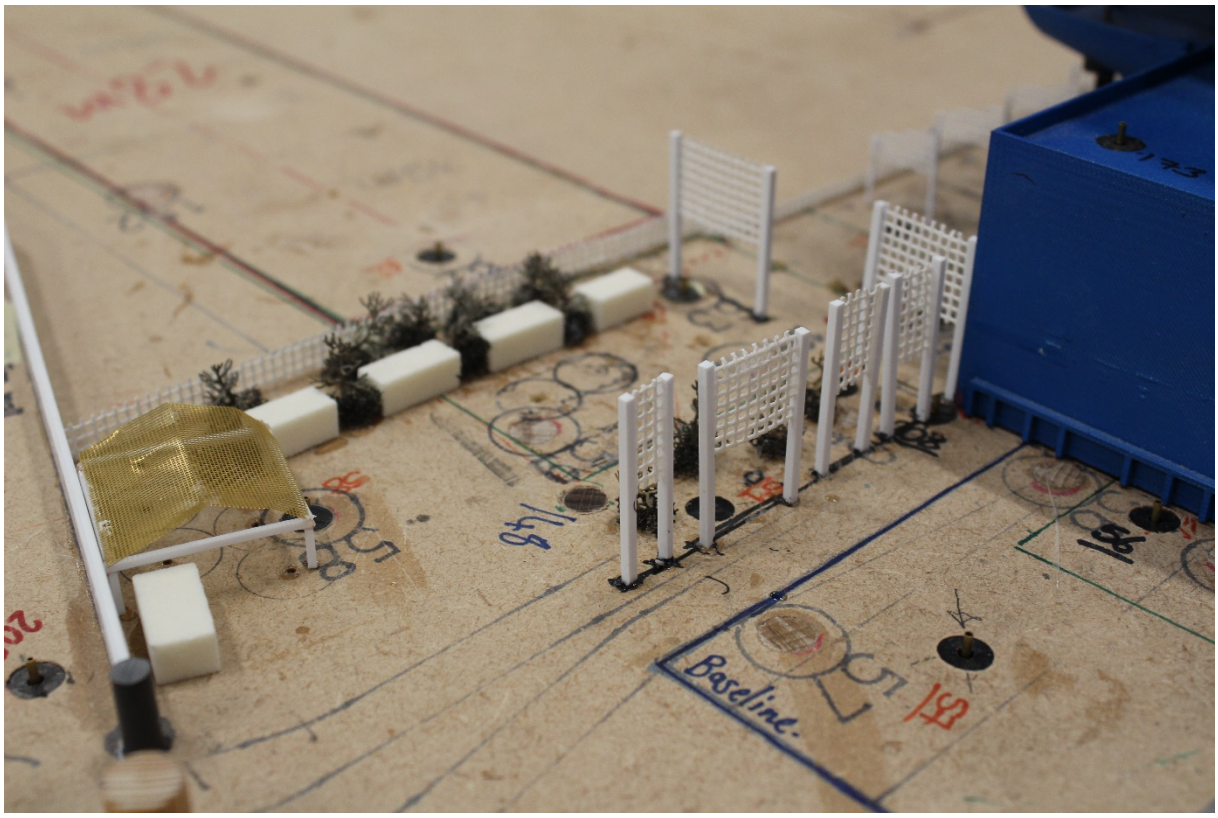

Figure 58: Image of six 6m tall 50% porous baffles of varying width and 6m ground clearance at the south-east corner of the stadium

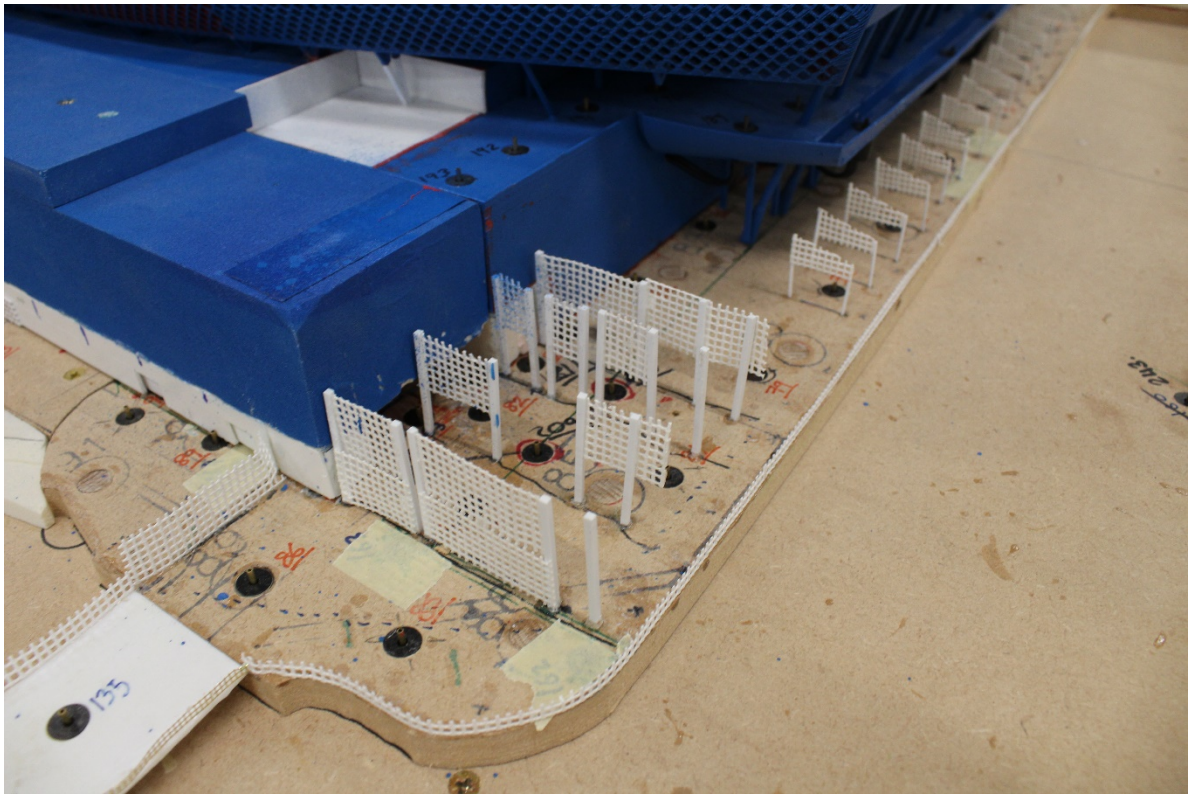

Figure 59: Image of two 12m tall, varying width, 50% porous screens at the south-west corner of the stadium

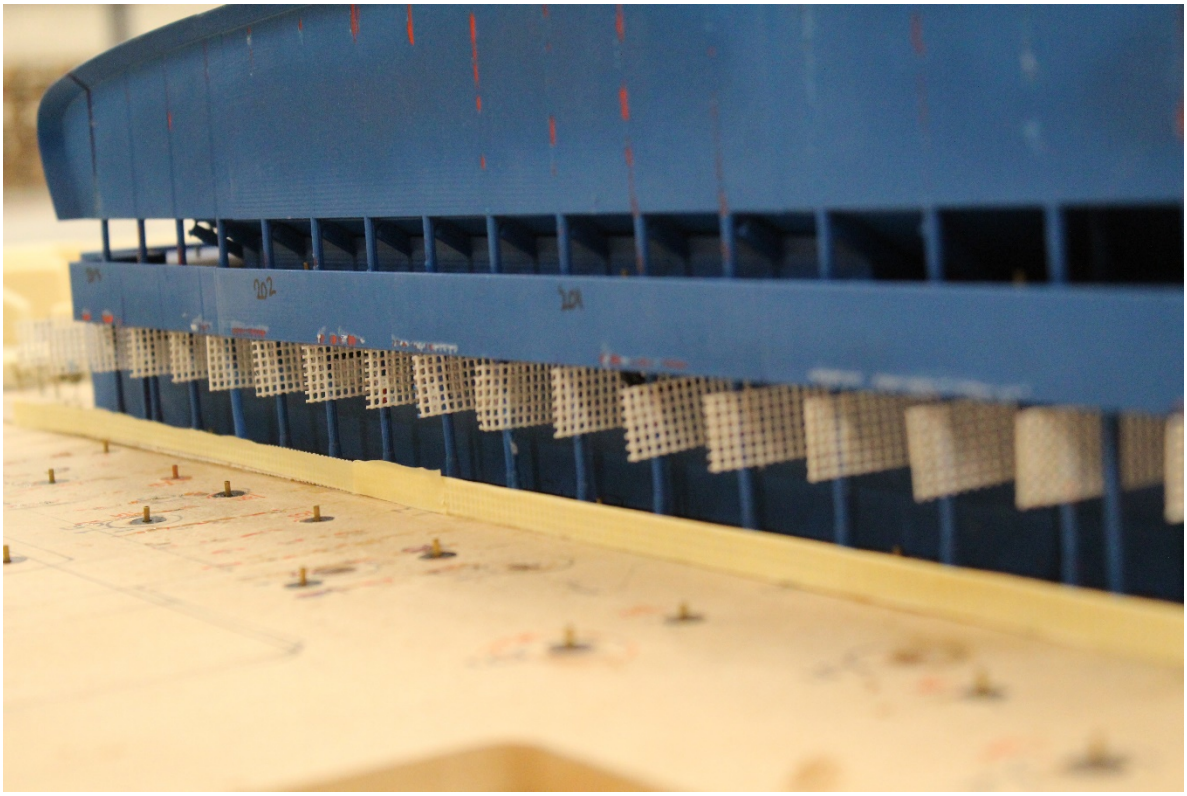

Figure 60: Image of 22, 10m wide, 3m tall, 50% porous baffles with 7m ground clearance at the north façade of the stadium

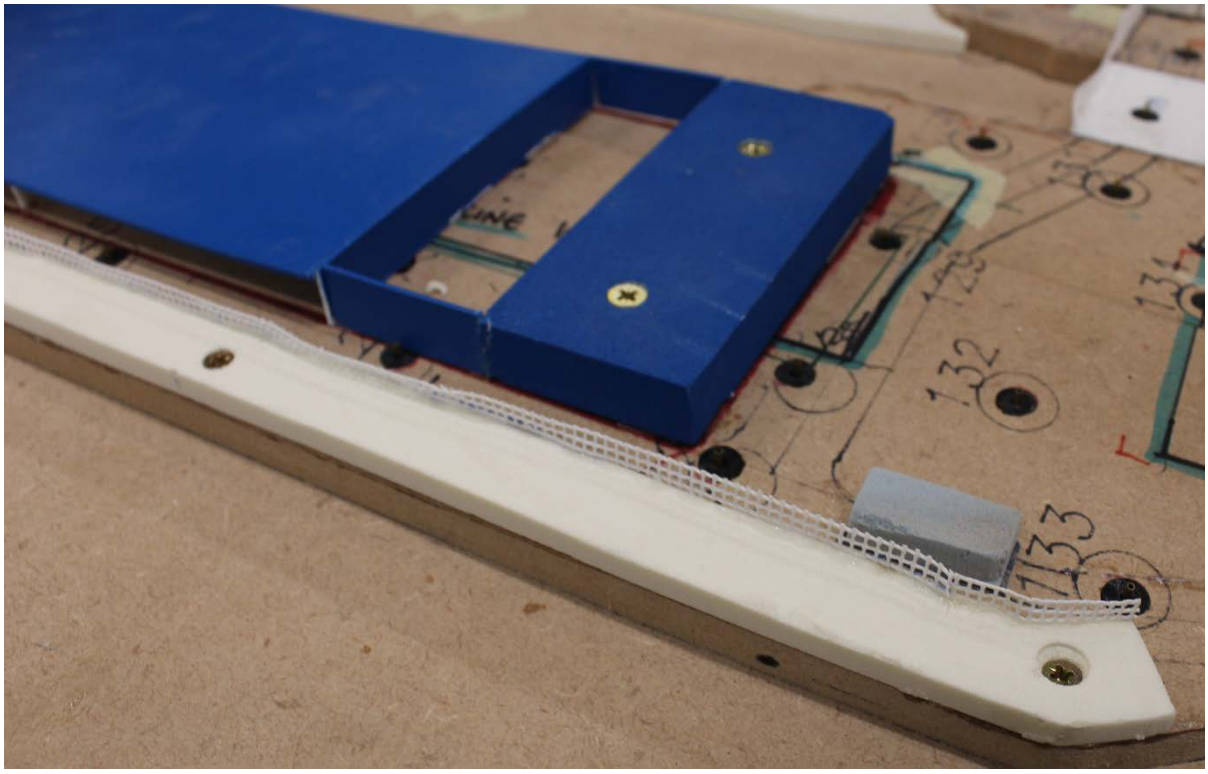

Figure 61: Image of 2m tall, 50% porous wall at the eastern edge of the Mersey Wall to the west of the Proposed Development

APPENDIX B

APPENDIX B: METEORLOGICAL DATA

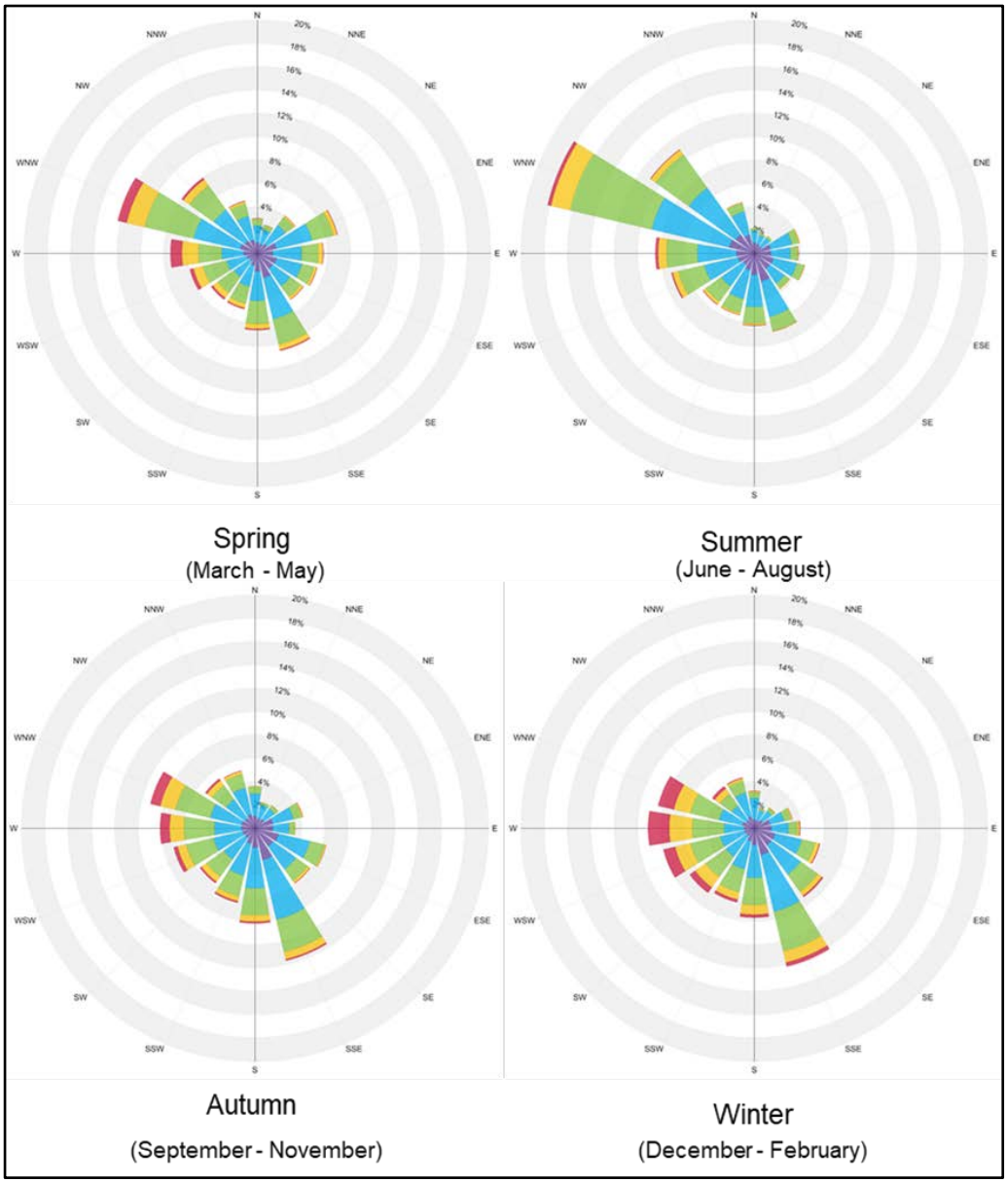

Figure 62: Seasonal Wind Data for Liverpool John Lennon Airport

APPENDIX C

APPENDIX C: SAFETY TABLE

Table 4: Annual exceedance of strong winds

Location	Threshold Exceedance	Wind Direction	Hours per Annum
Configuration 1: Existing Site with Existing Surrounding Buildings			
1	S15	290	3.0
2	S15	290	9.9
3	S15	290	4.5
4	S15	300	9.8
5	S15	290	14.6
6	S15	270	6.4
7	S15	290	8.4
8	S15	290	3.3
9	S15	300	18.6
10	S15	300	12.9
11	S15	280	21.2
12	S20	270	4.4
13	S15	290	19.7
14	S15	290	10.6
15	S15	280	28.6
16	S15	280	17.0
17	S15	280	14.4
18	S15	280	4.6
19	S15	280	6.0
20	S15	280	5.6
22	S15	280	5.7
29	S15	300	2.8
30	S15	290	7.2
34	S15	270	8.5
35	S15	270	18.4

36	S15	250	3.2
39	S15	270	2.3
43	S15	270	10.7
47	S15	230	13.7
48	S15	240	10.6
51	S15	160	5.7
60	S15	280	5.2
63	S15	280	3.9
64	S15	280	9.3
65	S15	280	8.8
66	S15	280	10.3
67	S15	280	23.3
68	S15	280	5.4
69	S15	290	25.7
70	S15	280	15.1
71	S20	290	4.1
72	S20	290	2.6
73	S15	300	25.8
74	S20	300	3.7
75	S15	300	14.7
76	S15	310	15.8
77	S15	310	8.1
78	S15	310	7.4
79	S15	280	10.7
81	S15	290	27.7
82	S20	290	11.5
83	S20	300	17.5
84	S15	290	24.0
85	S15	310	5.5
86	S15	290	2.3
87	S15	300	21.9
88	S15	290	14.4
89	S15	180	4.8

92	S15	260	3.9
98	S15	290	2.5
103	S15	280	4.1
106	S15	290	7.5
108	S15	290	4.5
113	S15	300	6.4
114	S15	280	3.1
121	S15	290	11.6
122	S15	280	5.6
129	S15	280	6.7
130	S15	290	4.8
131	S15	290	9.8
133	S15	260	13.6
134	S15	290	5.3
136	S15	280	4.9
137	S15	290	3.5
139	S15	270	6.4
140	S15	280	11.6
141	S15	280	7.0
142	S15	240	3.4
143	S15	280	13.0
144	S15	230	13.0
145	S15	240	17.1
148	S15	280	3.1
149	S15	280	16.1
150	S15	310	16.9
151	S15	300	2.9
152	S15	280	7.5
153	S15	300	29.8
154	S20	300	4.9
158	S15	300	4.4
159	S20	300	2.8
160	S15	290	10.4

161	S15	290	15.8
162	S15	300	25.8
163	S15	290	18.0
164	S15	310	4.5
165	S15	300	6.6
166	S15	290	3.7
206	S15	280	14.4
209	S20	310	2.9
210	S15	290	12.9
211	S15	280	4.3
212	S15	280	23.0
226	S15	280	25.4
227	S15	280	23.4
228	S15	300	8.0
229	S15	290	9.6
230	S15	280	11.0
231	S15	280	4.6
232	S15	280	2.8
233	S15	280	8.8
234	S15	280	3.3
Configuration 2: Existing Site with Cumulative Surrounding Buildings			
1	S15	260	22.9
2	S15	270	8.0
3	S15	270	5.9
5	S15	270	9.2
6	S15	270	5.5
8	S15	270	2.3
11	S15	300	12.6
12	S20	280	3.1
13	S15	270	3.3
14	S15	300	11.2
15	S15	280	17.6

16	S15	280	12.6
17	S15	280	12.3
18	S15	280	5.5
19	S15	280	6.9
20	S15	300	15.6
23	S15	300	4.2
26	S15	300	2.5
28	S15	220	3.1
29	S15	340	4.8
30	S15	220	5.4
32	S15	280	9.7
33	S15	150	3.1
38	S15	280	5.0
43	S15	300	3.9
44	S20	280	2.5
51	S15	320	3.8
57	S20	290	10.4
59	S15	290	6.1
60	S15	300	3.0
61	S15	300	11.3
64	S15	300	6.5
66	S15	300	3.1
72	S15	230	9.6
73	S15	300	4.4
74	S15	320	9.3
76	S15	320	15.5
78	S15	330	4.7
82	S15	320	9.3
83	S15	320	8.0
85	S15	320	5.1
86	S15	300	10.1
87	S15	320	6.2
90	S15	320	9.6

92	S15	310	2.9
93	S15	310	8.7
96	S15	300	2.3
100	S15	280	6.9
102	S15	280	19.1
103	S20	280	12.1
104	S20	310	13.4
105	S20	280	32.4
106	S15	290	6.2
107	S15	280	35.6
108	S20	290	5.8
113	S15	270	4.7
114	S15	270	9.3
115	S20	270	5.6
116	S20	260	6.4
117	S20	270	3.1
118	S20	280	5.8
119	S20	290	11.2
120	S20	280	24.9
121	S20	290	76.5
122	S20	260	3.9
123	S15	260	10.2
125	S15	290	4.5
126	S15	290	4.6
127	S15	290	8.2
128	S20	290	6.4
130	S15	250	6.6
131	S20	290	8.0
132	S20	280	6.3
135	S20	290	10.2
137	S15	310	4.8
138	S15	300	12.9
139	S15	300	10.3

142	S15	310	3.1
143	S15	320	4.3
144	S15	310	26.2
145	S15	330	9.6
148	S15	280	19.8
153	S20	300	2.4
154	S15	230	26.8
155	S20	300	13.8
156	S15	300	20.9
157	S15	320	2.5
160	S15	300	3.3
162	S15	320	11.2
163	S15	300	2.3
165	S15	310	8.1
167	S15	280	5.0
207	S15	300	2.6
212	S15	320	3.8
228	S15	310	3.7
231	S15	310	4.9
232	S15	300	6.0
Configuration 3: Proposed Development with Existing Surrounding Buildings, Proposed Landscaping Scheme and Design Interventions			
6	S15	250	2.8
10	S15	300	4.0
12	S20	280	2.8
13	S15	300	13.6
15	S15	320	31.8
16	S15	300	37.8
17	S20	300	4.4
18	S15	320	28.9
19	S20	320	2.6
21	S15	320	10.6
24	S15	320	26.0

25	S15	320	11.0
28	S15	320	9.2
30	S15	210	3.1
90	S20	290	3.8
93	S15	280	34.9
96	S15	280	6.1
99	S15	280	3.4
107	S15	260	3.1
108	S15	250	6.9
174	S15	160	2.9
175	S15	160	11.4
177	S15	200	2.7
178	S15	210	9.9
187	S20	270	3.3
188	S20	270	3.1
189	S15	270	8.8
191	S15	280	8.7
192	S20	290	2.3
193	S15	160	20.6
196	S15	330	7.1
203	S20	320	4.0
236	S20	280	4.0
237	S15	280	11.4
238	S15	280	10.5
239	S15	280	8.4
241	S15	260	5.3
Configuration 4: Proposed Development with Cumulative Surrounding Buildings, Proposed Landscaping Scheme, Design Interventions and Mitigation Measures			
6	S15	270	2.4
9	S15	270	2.8
10	S15	300	3.1
12	S15	280	32.5

13	S15	300	13.8
15	S15	320	39.1
16	S15	300	31.0
19	S20	300	5.8
21	S15	160	4.9
25	S15	170	3.7
28	S15	320	12.9
90	S15	290	23.6
93	S15	280	23.4
96	S15	280	8.8
101	S15	300	3.2
113	S15	250	2.6
131	S15	260	6.4
132	S15	250	7.8
133	S15	260	3.3
134	S15	260	22.5
136	S15	270	9.6
178	S15	230	5.5
188	S15	280	10.9
189	S15	290	3.1
191	S15	280	4.2
192	S15	290	30.9
193	S15	220	5.1
196	S15	330	7.8
203	S20	320	4.2
236	S15	280	25.4
238	S15	280	17.2
239	S15	280	5.1

Appendix 14.2

PREVIOUS WIND MICROCLIMATE STUDIES

CBRE

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ENGINEERING

The People's Project, Bramley Moore Dock, Liverpool

Previous Wind Microclimate Studies

0040026

3 January 2020

Revision PO3

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Revision	Description	Issued by	Date	Checked
P01	First Draft	FM	13/11/19	LB
P02	Final Draft – Re formatted and re structured	FM	18/11/19	LB
PO3	Final	FM	03/01/20	LB/BV

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date	**18/11/19**

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