

2023 TECHNICAL SHEET FOR COURSE CARDS

High Water - Howth (Local Time)

Tuesdays			Wednesdays			Saturdays		
Date	Time	Height	Date	Time	Height	Date	Time	Height
02-May	22:41	3.62m	03-May	10:47	3.86m	06-May	12:45	4.10m
09-May	14:56	3.72m	10-May	15:51	3.50m	13-May	19:30	3.29m
16-May	22:25	3.84m	17-May	10:37	3.99m	20-May	12:45	3.95m
23-May	14:43	3.48m	24-May	15:27	3.30m	27-May	18:20	2.99m
30-May	21:12	3.36m	31-May	21:56	3.56m	03-Jun	11:39	3.94m
06-Jun	14:02	3.86m	07-Jun	14:54	3.74m	10-Jun	17:56	3.41m
13-Jun	21:05	3.59m	14-Jun	21:57	3.71m	17-Jun	11:45	3.72m
20-Jun	13:46	3.57m	21-Jun	14:26	3.48m	24-Jun	16:36	3.19m
27-Jun	19:17	3.18m	28-Jun	20:14	3.30m	01-Jul	10:25	3.69m
04-Jul	13:03	3.93m	05-Jul	13:55	3.94m	08-Jul	16:29	3.68m
11-Jul	19:29	3.43m	12-Jul	20:30	3.44m	15-Jul	10:44	3.45m
18-Jul	12:53	3.58m	19-Jul	13:30	3.59m	22-Jul	15:18	3.47m
25-Jul	17:23	3.26m	26-Jul	18:18	3.23m	29-Jul	09:01	3.40m
01-Aug	12:02	3.90m	* 04-Aug	14:28	4.09m	05-Aug	15:13	4.00m
08-Aug	17:43	3.48m	09-Aug	18:45	3.34m	12-Aug	09:37	3.19m
15-Aug	11:59	3.54m	16-Aug	12:34	3.64m	19-Aug	14:13	3.73m
22-Aug	15:53	3.49m	23-Aug	16:36	3.40m	26-Aug	20:02	3.39m
29-Aug	10:58	3.76m	30-Aug	11:49	4.00m	02-Sep	14:02	4.26m

* NOR 9: Due to a low tide on Wed 2nd August, racing is transferred to Friday 4th August

400 & 500 Course Marks

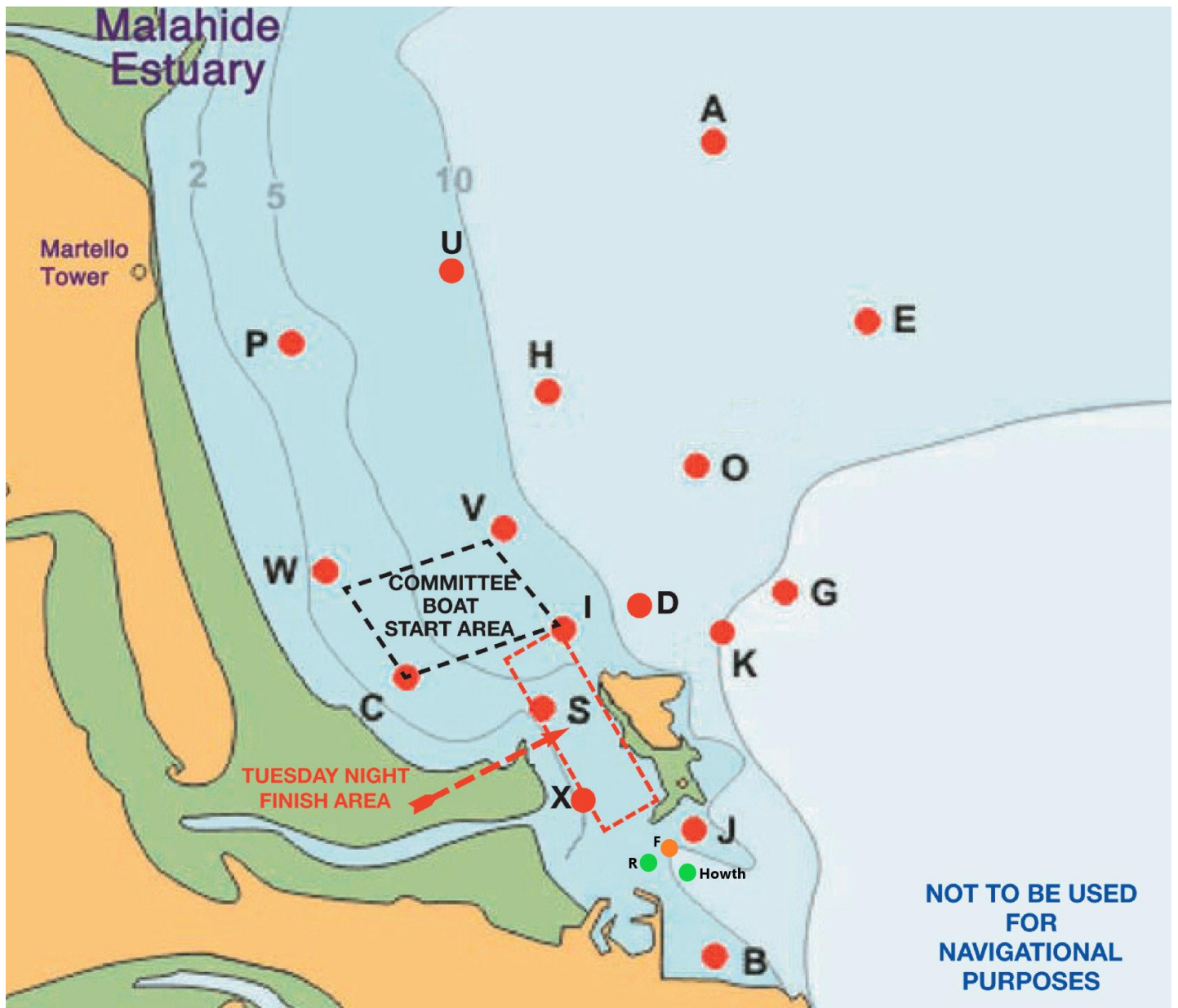
ID	Name	Shape	Colour
1	Windward	Inflatable	Black
2	Gybe	Round	Yellow
2	Offset	Round	Yellow
3	Leeward	Round	Orange
F	Finish	Round	Orange

Pier Course Boards

Wind Direction Two digit	Starting Line A South Rowan B Finish Mark C Howth Mark
..... read top to bottom corresponds to <u>line</u> on Course Card	Selected Course corresponds to <u>column</u> on Course Card

MARK DESCRIPTIONS / POSITIONS (Approx)

ID	Name	Shape	Colour	Latitude (N) Deg Min	Longitude (W) Deg Min
A	Apex	Conical	Black	53 26.76	06 03.26
B	Balscadden	Conical	Orange	53 23.30	06 03.26
C	Cush	Conical	Black	53 24.61	06 05.45
D	Dunbo	Conical	Yellow	53 24.73	06 03.85
E	East	Conical	Black	53 26.00	06 02.20
F	Finish	Cylindrical	Orange	Between Island Mark and Howth Sound	
G	Garbh	Conical	Black	53 25.00	06 02.32
	Howth	IALA	Green	53 23.69	06 03.56
H	Hub	Conical	Black	53 25.71	06 04.43
I	Island	Conical	Black	53 24.70	06 04.36
J	Thulla	Conical	Black	53 23.80	06 03.40
K	Stack	Conical	Black	53 24.60	06 03.11
O	Osprey	Conical	Orange	53 25.41	06 03.52
P	Portmarnock	Conical	Black	53 25.63	06 05.80
Q	Rowan Rocks	IALA	Black	53 23.88	06 03.22
R	South Rowan	IALA	Green	53 23.78	06 03.88
S	Spit	Conical	Black	53 24.35	06 04.48
U	Ulysses	Conical	Orange	53 26.22	06 04.97
V	Viceroy	Conical	Orange	53 25.12	06 04.78
W	West	Conical	Black	53 24.96	06 06.07
X	Xebec	Barrel	Black	53 24.12	06 04.33
Z	Zephyr	Inflatable	Black	Upwind of Start Line	



Race Marks - Relative Bearings - Magnetic (approx)
The Relative Bearings are a guideline only.

	A	B	C	D	E	G	H	I	J	K	O	P	Q	S	U	V	W	X
A		183	216	196	146	168	220	207	185	184	192	236	185	203	248	215	229	200
B	003		319	352	019	024	347	336	357	010	002	331	010	331	347	340	321	328
C	036	139		085	058	081	029	084	126	091	055	348	121	117	010	038	314	127
D	016	172	265		043	078	347	266	170	110	023	308	161	227	342	307	282	212
E	326	199	238	223		190	264	237	204	207	238	263	202	225	284	246	252	220
G	348	204	261	258	010		305	259	214	236	306	289	211	249	314	281	275	239
H	040	170	209	167	084	125		180	168	151	125	265	164	187	334	205	238	184
I	021	156	264	086	057	079	000		148	101	039	317	140	195	349	332	287	172
J	005	177	306	350	024	034	348	328		018	004	326	062	317	345	334	312	305
K	004	190	270	290	027	056	331	281	198		350	303	190	256	332	304	288	242
O	012	182	235	203	058	126	305	219	184	170		279	180	215	319	256	260	207
P	056	151	168	128	083	109	085	138	146	123	099		143	151	040	130	194	153
Q	005	190	301	341	022	031	344	320	242	010	360	323		308	342	329	308	295
S	023	151	297	047	045	069	007	015	137	076	035	327	128		357	350	304	160
U	068	167	190	162	104	134	154	169	165	152	139	220	162	177		180	213	176
V	035	160	218	127	066	101	025	152	154	124	076	310	149	170	000		264	171
W	049	141	136	102	072	095	058	107	132	108	080	013	128	129	033	084		135
X	020	148	307	032	040	059	004	352	125	062	027	333	115	340	356	351	315	