

# 2022 TECHNICAL SHEET FOR COURSE CARDS

## High Water - Howth (Local Time)

| Tuesdays |       |        | Wednesdays |       |        | Saturdays |       |        |
|----------|-------|--------|------------|-------|--------|-----------|-------|--------|
| Date     | Time  | Height | Date       | Time  | Height | Date      | Time  | Height |
| 26-Apr   | 21:52 | 3.54m  | 27-Apr     | 22:40 | 3.75m  | 30-Apr    | 12:07 | 4.07m  |
| 03-May   | 13:51 | 3.81m  | 04-May     | 14:26 | 3.63m  | 07-May    | 16:41 | 3.05m  |
| 10-May   | 20:11 | 3.11m  | 11-May     | 21:07 | 3.34m  | 14-May    | 10:53 | 4.09m  |
| 17-May   | 13:11 | 4.22m  | 18-May     | 13:59 | 4.09m  | 21-May    | 16:49 | 3.43m  |
| 24-May   | 20:24 | 3.38m  | 25-May     | 21:20 | 3.51m  | 28-May    | 10:59 | 3.78m  |
| 31-May   | 12:53 | 3.74m  | 01-Jun     | 13:29 | 3.65m  | 04-Jun    | 15:30 | 3.28m  |
| 07-Jun   | 18:15 | 3.11m  | 08-Jun     | 19:18 | 3.19m  | 11-Jun    | 09:26 | 3.81m  |
| 14-Jun   | 12:07 | 4.10m  | 15-Jun     | 12:58 | 4.08m  | 18-Jun    | 15:37 | 3.70m  |
| 21-Jun   | 18:40 | 3.36m  | 22-Jun     | 19:42 | 3.35m  | 25-Jun    | 09:43 | 3.49m  |
| 28-Jun   | 11:56 | 3.57m  | 29-Jun     | 12:35 | 3.59m  | 02-Jul    | 14:31 | 3.49m  |
| 05-Jul   | 16:38 | 3.31m  | 06-Jul     | 17:30 | 3.28m  | 09-Jul    | 20:32 | 3.53m  |
| 12-Jul   | 23:25 | 4.21m  | 13-Jul     | 11:56 | 3.96m  | 16-Jul    | 14:29 | 3.96m  |
| 19-Jul   | 16:58 | 3.54m  | 20-Jul     | 17:52 | 3.39m  | 23-Jul    | 20:51 | 3.30m  |
| 26-Jul   | 23:16 | 3.70m  | 27-Jul     | 23:56 | 3.84m  | 30-Jul    | 13:35 | 3.66m  |
| 02-Aug   | 15:22 | 3.59m  | 03-Aug     | 16:02 | 3.53m  | 06-Aug    | 18:49 | 3.39m  |
| 09-Aug   | 22:17 | 3.93m  | 10-Aug     | 23:13 | 4.18m  | 13-Aug    | 13:26 | 4.10m  |
| 16-Aug   | 15:32 | 3.83m  | 17-Aug     | 16:14 | 3.64m  | 20-Aug    | 18:57 | 3.15m  |
| 23-Aug   | 22:08 | 3.45m  | 24-Aug     | 22:54 | 3.65m  | 27-Aug    | 12:36 | 3.76m  |
| 30-Aug   | 14:17 | 3.88m  | 31-Aug     | 14:52 | 3.83m  | 03-Sep    | 17:09 | 3.48m  |

## 400 & 500 Course Marks

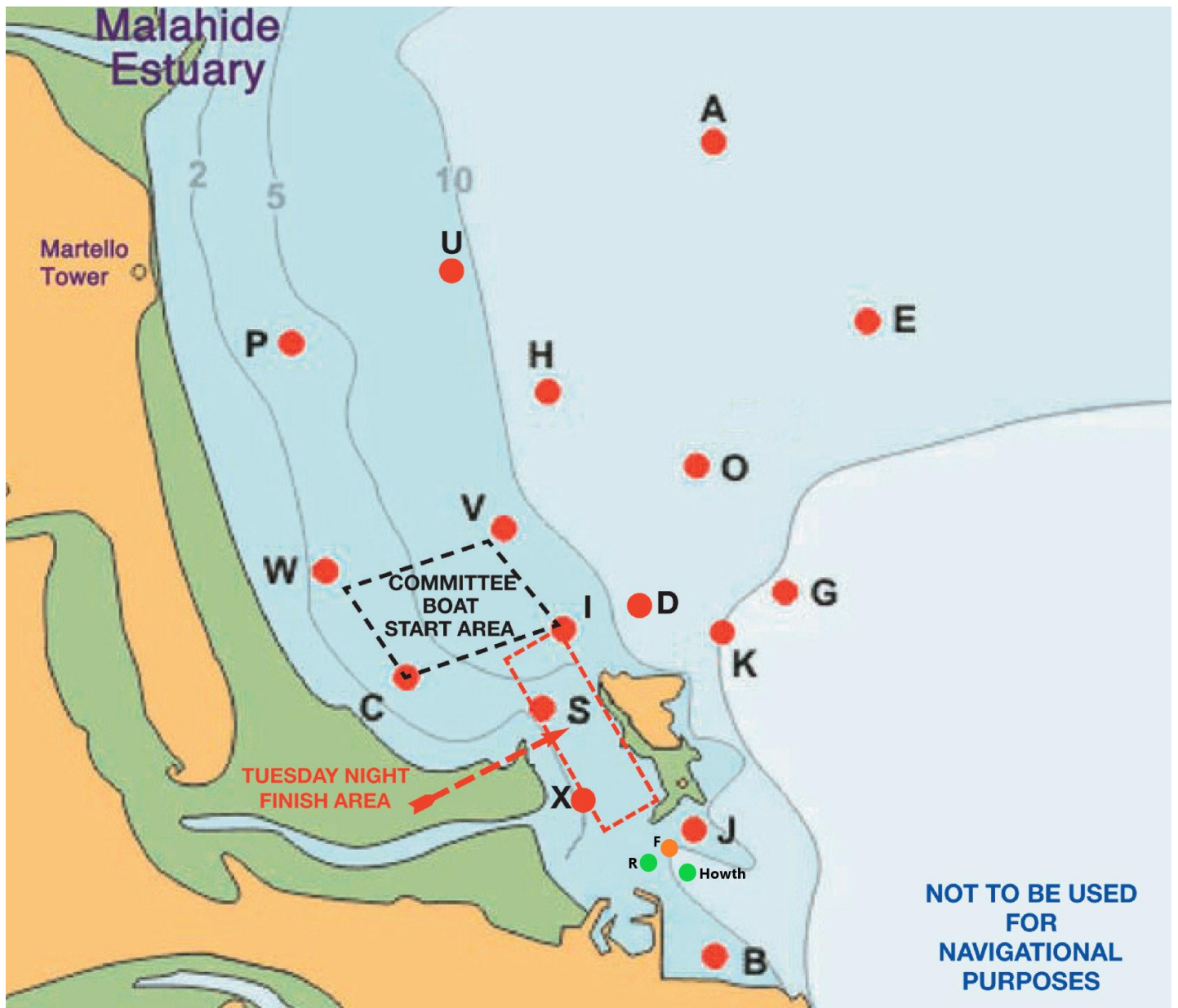
| ID | Name     | Shape      | Colour |
|----|----------|------------|--------|
| 1  | Windward | Inflatable | Black  |
| 2  | Gybe     | Round      | Yellow |
| 2  | Offset   | Round      | Yellow |
| 3  | Leeward  | Round      | Orange |
| F  | Finish   | Round      | Orange |

## Pier Course Boards

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

## MARK DESCRIPTIONS / POSITIONS (Approx)

| ID | Name        | Shape       | Colour | Latitude (N)<br>Deg Min             | Longitude (W)<br>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 |     |