



	1	2	3	4	5	6	7
00	Z P W S F	Z W C P W S F	Z W C P W P W C S F	Z W C P C P C S F	Z W C P W P C P S F	Z W C P C P C P W S F	
01	Z P W C S F	Z P W P W S F	Z P W P W P W C S F	Z P W P C U S F	Z P C U P W P W S F	Z P W P W C U C U S F	
02	Z P C S F	Z W C U C S F	Z P C U P C S F	Z W C U C U S F	Z W C U P W P W C U S F	Z W C U C U C U S F	
03	Z W V C S F	Z P W U W S F	Z P W U W C V C S F	Z P W U W U W S F	Z P W U W U W C V S F	Z P W U W U W C V C V C S F	
04	Z W C H S F	Z H W C H C V C S F	Z W C H C H S F	Z W C H W U W C S F	Z W C H C V C H C V C S F	Z W C H C V C H C V C V C S F	
05	Z W C V C S F	Z W C O S F	Z W C O I O S F	Z W C V C O W S F	Z W C O C O V S F	Z W C O I O C O S F	
06	Z W C V C S F	Z W C O S F	Z W C O C S F	Z W C V C O C S F	Z W C O C O S F	Z W C O I O C O S F	
07	Z W C I C S F	Z W C O S F	Z W C O C I C S F	Z W C O I O V S F	Z W C O C O V S F	Z W C O C O C O S F	Z W C O C O C O V S F
08	Z V C D C I S F	Z V C D C D C I S F	Z V W O C D C I S F	Z V C K V W O C I S F	Z V W O W O C I S F	Z V W O W O W O C I S F	
09	Z V C D C I S F	Z V C D C D C I S F	Z V W O C D C I S F	Z V C K V W O C I S F	Z V W O W O C I S F	Z V W O W O W O C I S F	
10	Z V W I V C S F	Z V W I W I V C S F	Z V W D W D V C S F	Z V W D W I W I V C S F	Z V W D W D W D V C S F	Z V W D W D D W I V C S F	
11	Z V W I V C S F	Z V W I W I V C S F	Z V W D W D V C S F	Z V W D W I W I V C S F	Z V W D W D W D V C S F	Z V W D W D D W I V C S F	
12	Z V W I W S F	Z V W I W I V C S F	Z V W D W D V C S F	Z V W D W D W S F	Z V W D W D W I W S F	Z V W D W D I W I V C S F	
13	Z V D P S F	Z P I V W S F	Z P D P S F	Z V D P D V W S F	Z V D P D V D V W S F	Z V D P D P D V W S F	
14	Z V P S F	Z V P I P W S F	Z I P I P S F	Z I P V P V P S F	Z V P V P I P S F	Z V P D P D P S F	
15	Z I P S F	Z I W C I P S F	Z I P I P S F	Z I P V P I W C S F	Z I P V P I P S F	Z I P I P I P S F	Z I P I P V P I P S F
16	Z V P S F	Z P C W C S F	Z V P C P S F	Z V P C P C W C S F	Z V P C V P I V W C S F	Z P C P C P S F	Z V P C P C V P C P S F
17	Z I P C S F	Z V P C V W C S F	Z I P C P C S F	Z V P C P C I V S F	Z V P C P C P C S F	Z V P C P C P C I V I V S F	Z V P C P C V P C P S F
18	Z I P C S F	Z V P W H S F	Z I U I U S F	Z V P W P W V S F	Z V P C I U I H S F	Z V P C I U I U S F	Z I U I U I V P W P C S F
19	Z I H S F	Z V P W P W S F	Z V U C U C S F	Z V U C U C V S F	Z V U C U C H S F	Z V U C U C U S F	
20	Z V U C I S F	Z V H C H C S F	Z V U C H C I S F	Z V U C U C I S F	Z V U C H V U C I S F	Z V U C U C U C S F	Z I U C U C U C I S F
21	Z I H C S F	Z I H C H C S F	Z V H C H C V C S F	Z V H C H C H C S F	Z V U W U W V H C S F	Z V H C H C H C H C S F	Z I U C U C U C I S F
22	Z I H C S F	Z V U W U W S F	Z V H C V C U W S F	Z V U W U W U W S F	Z V H C V C U W U W S F	Z V H C H C U W U W S F	
23	Z V H W S F	Z V H W H W S F	Z V U W U W S F	Z V H C V C U W S F	Z V U C U C U C S F	Z V H C H C U W U W S F	Z V U W U W U W U W S F
24	Z V H W S F	Z V H W H W S F	Z V H W O C S F	Z V H W H W O S F	Z V H W O C O S F	Z V H W H W O C O S F	Z V H W H W O C O I S F
25	Z I D C D Y S F	Z I D C D C D Y S F	Z I O W I D C D Y S F	Z I O W O W I D Y S F	Z I O W O W I D C S F	Z I O W O W I D C D C S F	
26	Z I D C D C S F	Z I D C D C D Y S F	Z I O W I D C D Y S F	Z I O W O W I D Y S F	Z I O W O W I D C S F	Z I O W O W I D C D C S F	
27	Z I D C D C S F	Z I D C D C D Y S F	Z I O W I D C D Y S F	Z I O W O W I D Y S F	Z I O W O W I D C S F	Z I O W O W I D C D C S F	
28	Z C D W S F	Z C D W I W S F	Z C I W I W C I W S F	Z I D W D W C I W S F	Z C D W D W C D W S F	Z I K W C D W C D W S F	
29	Z C D W S F	Z C D W I W S F	Z C I W I W C I W S F	Z I D W D W C I W S F	Z C D W D W C D W S F	Z I K W C D W C D W S F	
30	Z C D W S F	Z C D W I W S F	Z C I W I W C I W S F	Z I D W D W C I W S F	Z C D W D W C D W S F	Z I K W C D W C D W S F	
31	Z C I P S F	Z C I P W C W C S F	Z C I P I P W S F	Z C I P I P W C W S F	Z C I P V P I P S F	Z C I P V P I P V P S F	
32	Z C I P S F	Z C I P W C W C S F	Z C I P I P S F	Z W C I P I P W C W C S F	Z C I P I P I P S F	Z C I P I P I P I V S F	
33	Z W C W C W C S F	Z C I P W C W C S F	Z C I P I P S F	Z W C I P I P W C W C S F	Z C I P I P I P S F	Z C I P I P I P I V S F	
34	Z W C P W C S F	Z C P C W C S F	Z W C P C P C W S F	Z W C P C P C P S F	Z W C P C P C P S F	Z W C P C P C P C P S F	
35	Z W C P W C S F	Z W C P W C W C S F	Z W C P C P S F	Z W C P C P C W S F	Z W C P C P C P S F	Z W C P C P C P C P S F	
40	Z W g L F	Z W g L Z L F	Z W g L Z L Z W g L F	Z W g L Z L Z W g L Z L F			

All marks are rounding marks except for those in a (box) which are passing marks

Marks coloured red shall be rounded/passed to port

Marks coloured green shall be rounded/passed to starboard

Courses were designed with the aid of Soft Touch Programmes

Racing Marks 2006 (Approximate)

ID	Name	Shape	Colour	Latitude (N)		Longitude (W)	
				Deg	Min	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	24.50	06	05.44
D	Dungeon	Conical	Yellow	53	24.73	06	03.85
E	East	Conical	Black	53	26.00	06	02.20
F	Finish	Cylindrical	Orange	53	24.12	06	04.33
G	Garbh	Conical	Black	53	25.00	06	02.32
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
M	Malahide	Conical	Black	53	27.23	06	05.59
N	North	Conical	Black	53	27.99	06	03.40
O	Osprey	Conical	Orange	53	25.41	06	03.52
P	Portmarnock	Conical	Black	53	25.89	06	06.30
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
T	Talbot	Conical	Black	53	27.31	06	01.30
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	Spherical	Yellow	Upwind of Start Line			

NAVIGATION MARKS AND OBSTRUCTIONS

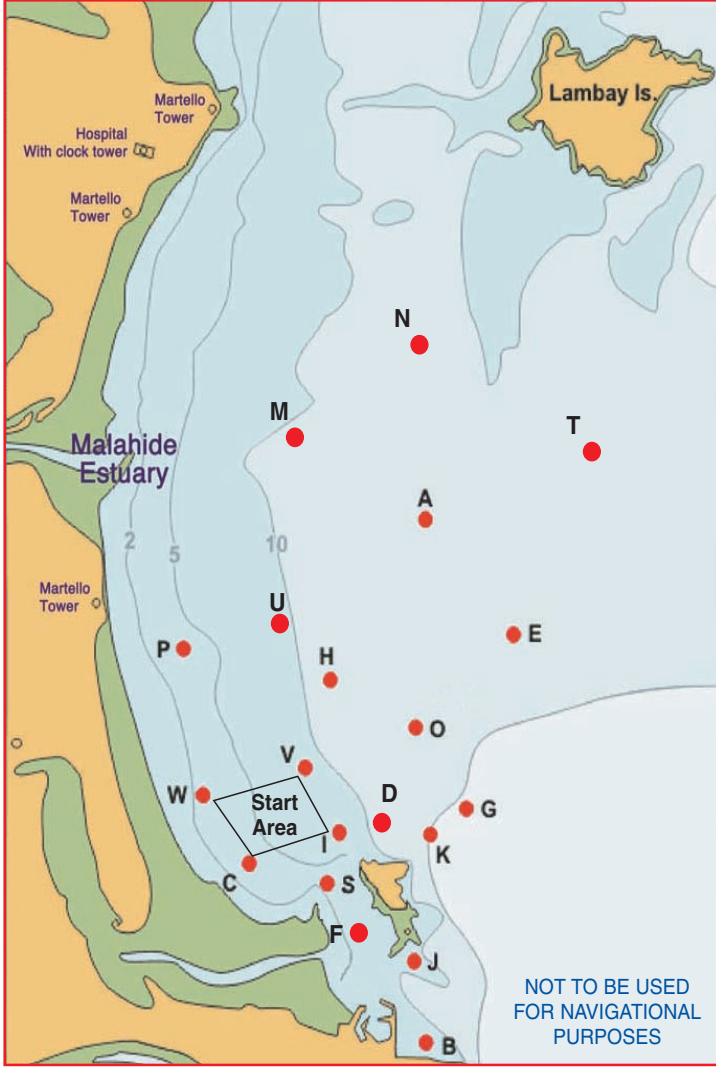
The Navigation Marks in and around Howth Sound shall be left as follows-

South Rowan: to be passed to the West and South
Rowan Rocks: to be passed to the East and South

Any part of Ireland's Eye capable of being touched by a boat while racing is designated as an obstruction to sea room.

Competitors are reminded of a trawler wreck in Howth Sound, south of the Carrgran Rocks on Ireland's Eye, which is submerged at most stages of the tide.

Boats racing in the vicinity of Baldoyle Spit shall sail North and East of the Spit Mark (S).



COURSE SELECTION

- Courses will be designated by three numeral boards.
- The first two boards will indicate the beat. ie 07 = 070°
- The third board indicates the column number across the top of the page.
Therefore Course 073 is the third course in from the left on line 07.

TIDES

	H	W
Sunday, September 17th	8.47	
Sunday, September 24th	13.18	
Sunday, October 1st	6.30	
Sunday, October 8th	12.59	
Sunday, October 15th	7.04	
Saturday, October 21st	11.58	

Olympic Style Courses - Row 40

ID	NAME	SHAPE	COLOUR	Note for row 40 Mark F (Finish Mark) is positioned up-wind of Last mark. Mark L positioned downwind of D
D	Distance	Round	Orange	
Z	Windward	Spherical	Yellow	
Wg	Wing	Round	Yellow	
L	Leeward	Round	Orange	

2006 Race Marks - Relative Bearings Table - Magnetic (Approx)

	A	B	C	D	E	G	H	I	J	K	M	N	O	P	Q	S	T	U	V	W
A		186°	216°	196°	146°	168°	220°	207°	188°	184°	295°	002°	192°	250°	185°	203°	071°	248°	215°	229°
B	006°		319°	352°	019°	024°	350°	336°	357°	010°	347°	005°	002°	331°	010°	331°	022°	347°	340°	321°
C	036°	139°		084°	058°	081°	032°	077°	126°	092°	004°	025°	058°	346°	121°	111°	047°	015°	038°	327°
D	016°	172°	264°		043°	078°	347°	272°	170°	110°	344°	011°	023°	315°	161°	233°	036°	342°	312°	287°
E	326°	199°	238°	223°		190°	264°	233°	204°	207°	307°	346°	238°	273°	202°	225°	028°	284°	246°	252°
G	348°	204°	261°	258°	010°		305°	263°	214°	236°	325°	354°	306°	297°	211°	249°	021°	314°	281°	275°
H	040°	170°	212°	167°	084°	125°		191°	168°	151°	342°	021°	125°	285°	164°	187°	055°	334°	205°	238°
I	027°	156°	257°	092°	053°	083°	011°		148°	101°	353°	018°	048°	326°	140°	177°	043°	357°	350°	293°
J	008°	177°	306°	350°	024°	034°	348°	328°		018°	345°	006°	004°	326°	062°	317°	026°	345°	334°	312°
K	004°	190°	272°	290°	027°	056°	331°	281°	198°		337°	003°	350°	310°	190°	259°	028°	332°	304°	288°
M	115°	167°	184°	164°	127°	145°	162°	173°	165°	157°		066°	152°	204°	163°	173°	094°	166°	173°	193°
N	182°	185°	205°	191°	166°	174°	201°	198°	186°	183°	246°		187°	225°	184°	196°	125°	214°	202°	214°
O	012°	182°	238°	203°	058°	126°	305°	228°	184°	170°	332°	007°		292°	180°	215°	040°	319°	256°	260°
P	070°	151°	166°	135°	093°	117°	105°	146°	146°	130°	024°	045°	112°		143°	151°	071°	073°	136°	178°
Q	005°	190°	301°	341°	022°	031°	344°	320°	242°	010°	343°	004°	360°	323°		308°	024°	342°	329°	308°
S	023°	151°	291°	053°	045°	069°	007°	357°	137°	079°	353°	016°	035°	331°	128°		039°	357°	353°	309°
T	251°	202°	227°	216°	208°	201°	235°	223°	206°	208°	274°	305°	220°	251°	204°	219°		249°	229°	236°
U	068°	167°	195°	162°	104°	134°	154°	177°	165°	152°	346°	034°	139°	253°	162°	177°	069°		180°	213°
V	035°	160°	218°	132°	066°	101°	025°	170°	154°	124°	353°	022°	076°	316°	149°	173°	049°	000°		264°
W	049°	141°	147°	107°	072°	095°	058°	113°	132°	108°	013°	034°	080°	358°	128°	129°	056°	033°	084°	