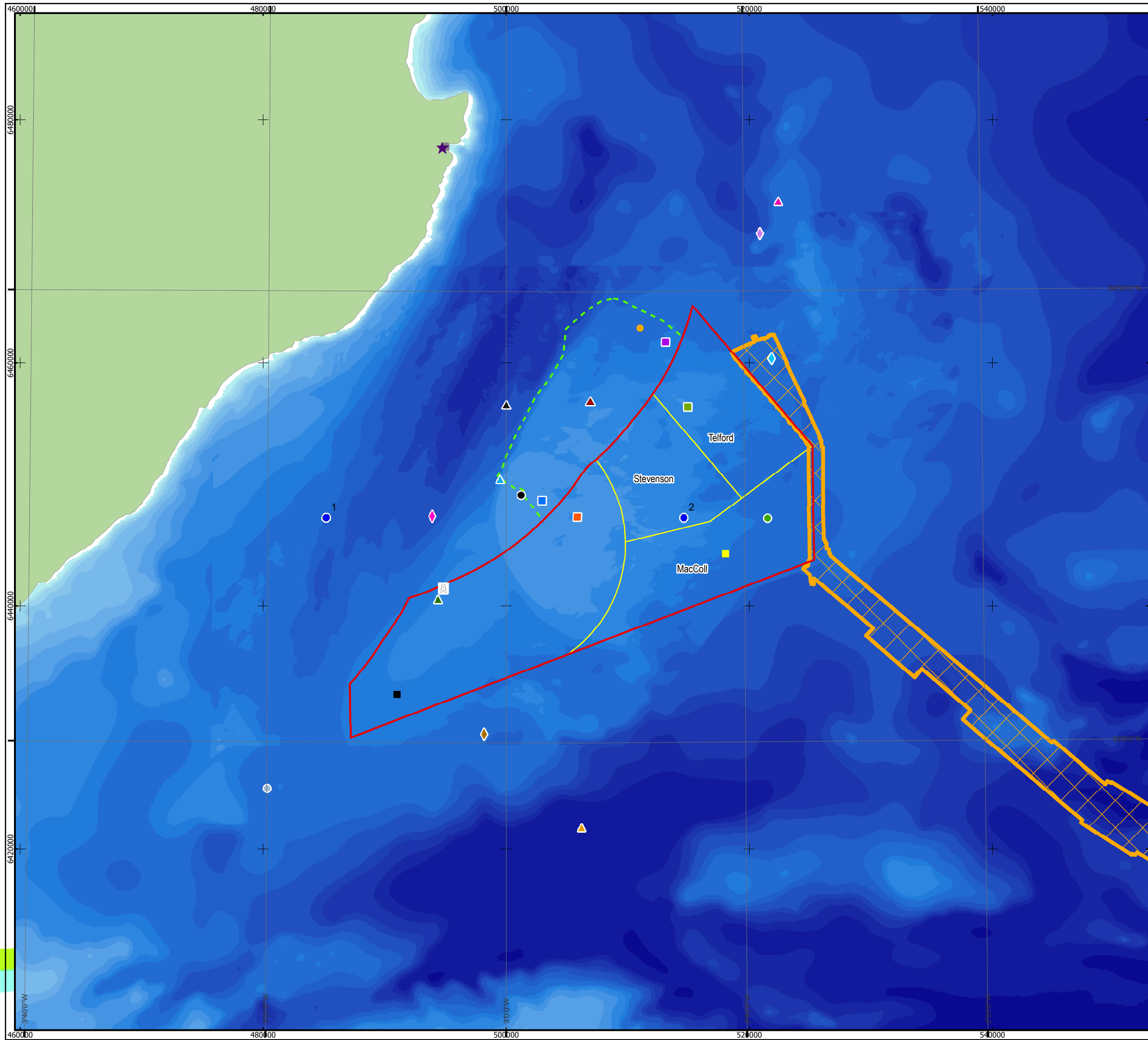


NOTE: For bathymetry legend see Figure 1. © ABPmer. All rights reserved, 2012. This document is the property of contractors and sub-contractors and shall not be reproduced nor transmitted without prior written approval. Moray Offshore Renewables Ltd © 2012.



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KEY

- MORL Zone Boundary
 - Windfarm Boundaries
 - Offshore Export Cable Route
 - BOWL Zone Boundary
 - NOC Surge Predictions (Centroid)
 - Moray AWAC 3c
 - Moray AWAC 4c
 - ▲ Analysis Point 1
 - Beatrice AWAC 2a
 - Beatrice AWAC 3a
 - Beatrice Wave Buoy
 - Moray Wave Buoy
 - Jacky Platform Wave Buoy
 - Beatrice Alpha Oil Platform
 - Moray AWAC 2c
 - Moray AWAC 5c
 - WaveNet Moray Firth Wave Buoy
 - ◆ Tidal Diamond F
 - ◆ Tidal Diamond G
 - ◆ Tidal Diamond M
 - ◆ Tidal Diamond N
 - ★ Wick Airport Weather Station
 - Wick Tide Gauge
 - ▲ Analysis Point
 - Beatrice Wave Buoy
- BODC Data Locations**
- ▲ b0014185
 - ▲ b0020756
 - ▲ b0020953
 - ▲ b0029252
 - ▲ b0049799

Horizontal Scale: 1:300,000 A3 Chart
N

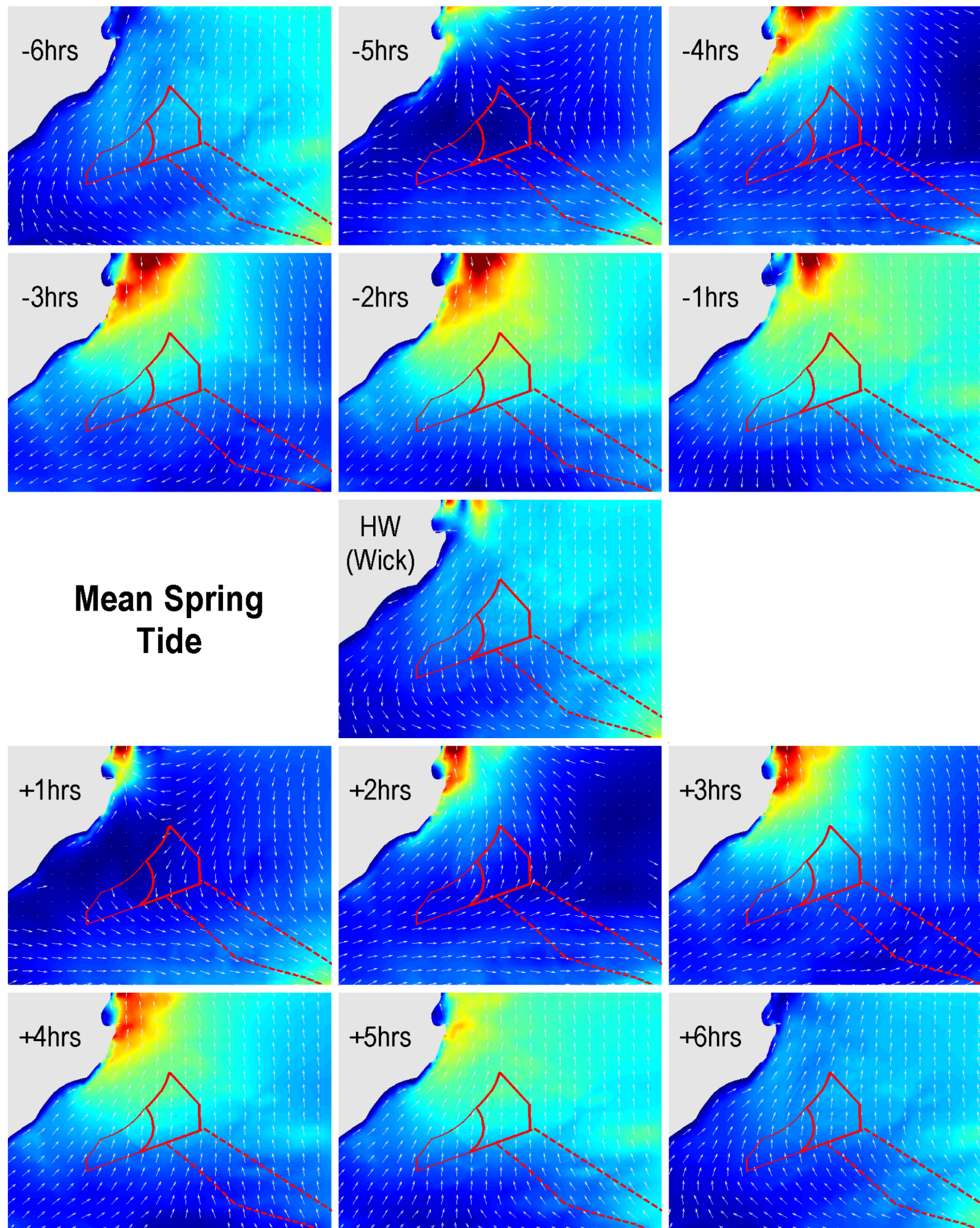
Geodetic Parameters: WGS84 UTM Zone 30N

Produced: MCE
 Reviewed: NMW
 Approved: PH

Date: 04/05/2012 Revision: A
 REF: 8460001-PPW0201-ABP-MAP-004

Fig 3.4-1 - Data and Deployment Locations in the Moray Firth

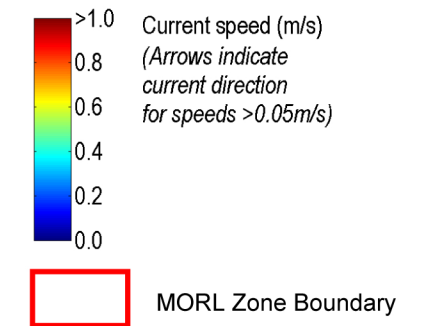
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**Mean Spring
Tide**



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A3 Chart

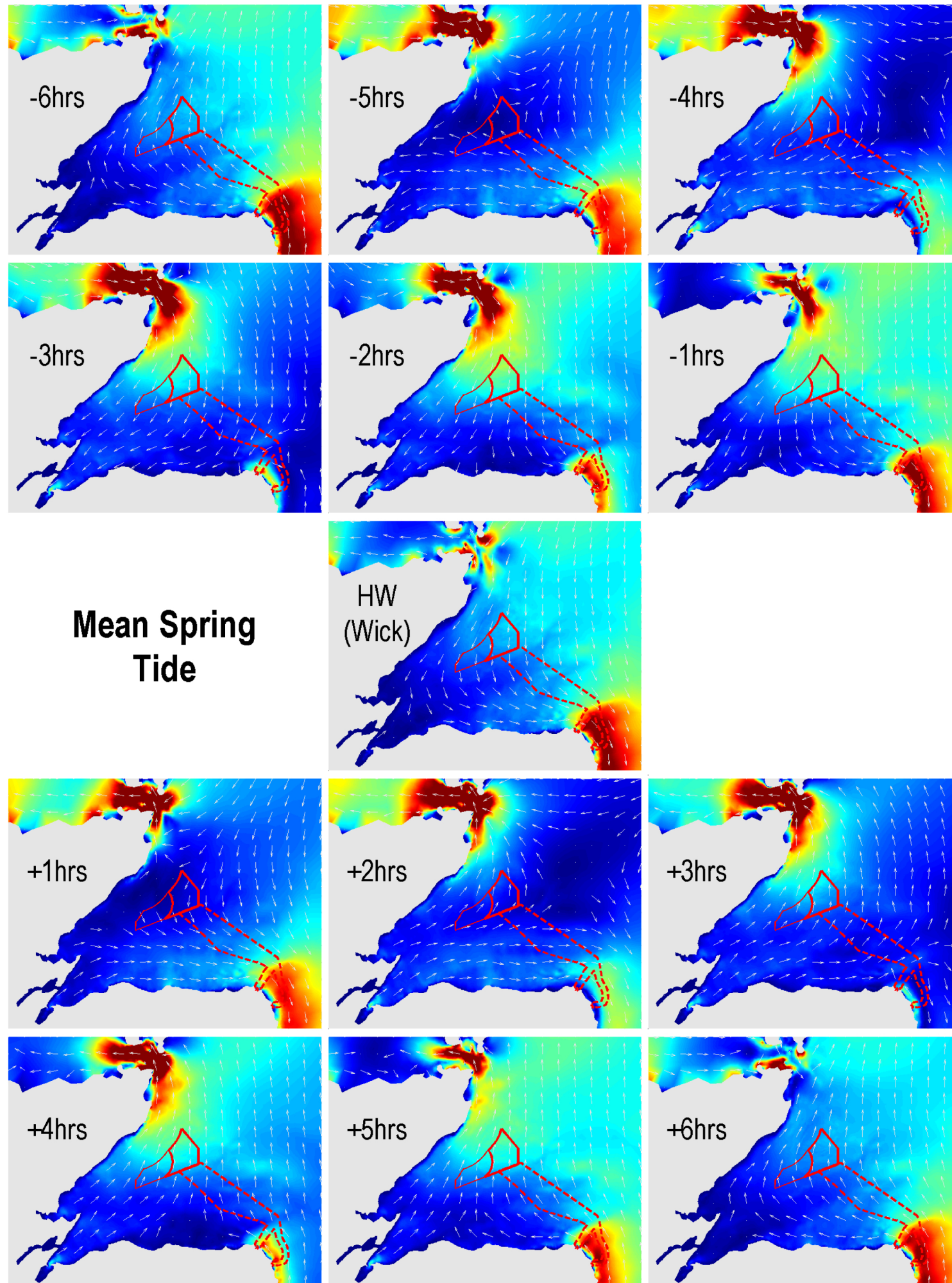
Produced: DOL
Reviewed: CLH
Approved: PH

Date: 30/5/12 | Revision: A

REF: 8460001-PPW0201-SMR-MAP-005

Fig 3.4-2 - Modelled Near-Field Spring Tidal Flow Patterns

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Mean Spring Tide



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>1.0 Current speed (m/s)
 (Arrows indicate current direction for speeds >0.05m/s)

0.8
0.6
0.4
0.2
0.0

MORL Zone Boundary

A3 Chart

Produced: DOL
 Reviewed: CLH
 Approved: PH

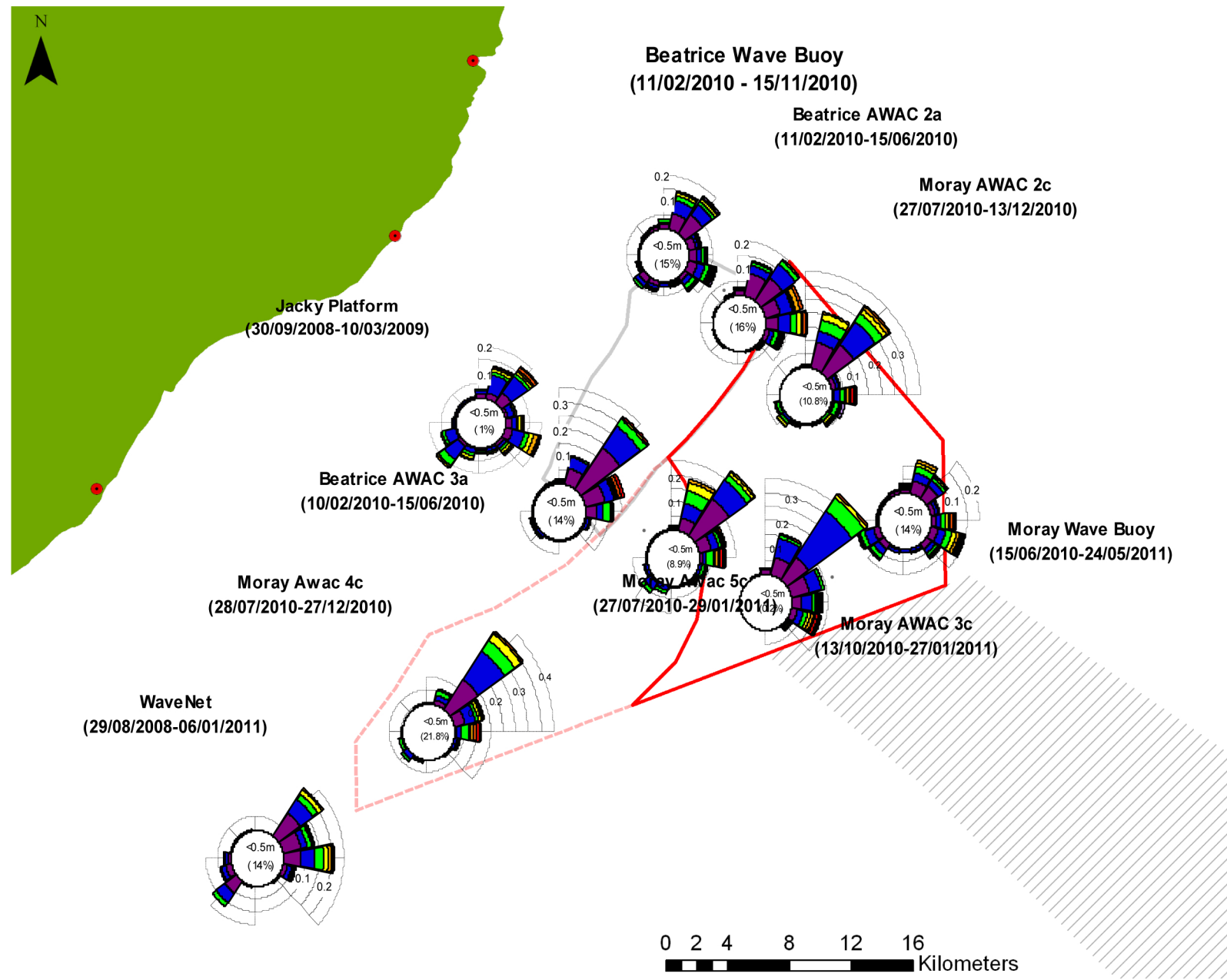
Date: 30/5/12

Revision: A

REF: 8460001-PPW0201-ABP-MAP-006

Fig 3.4-3 - Modelled Far-Field Spring Tidal Flow Patterns

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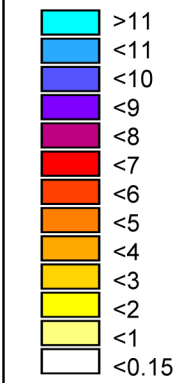
Produced: DOL
 Reviewed: CLH
 Approved: PH

Date: 30/5/12 Revision: A

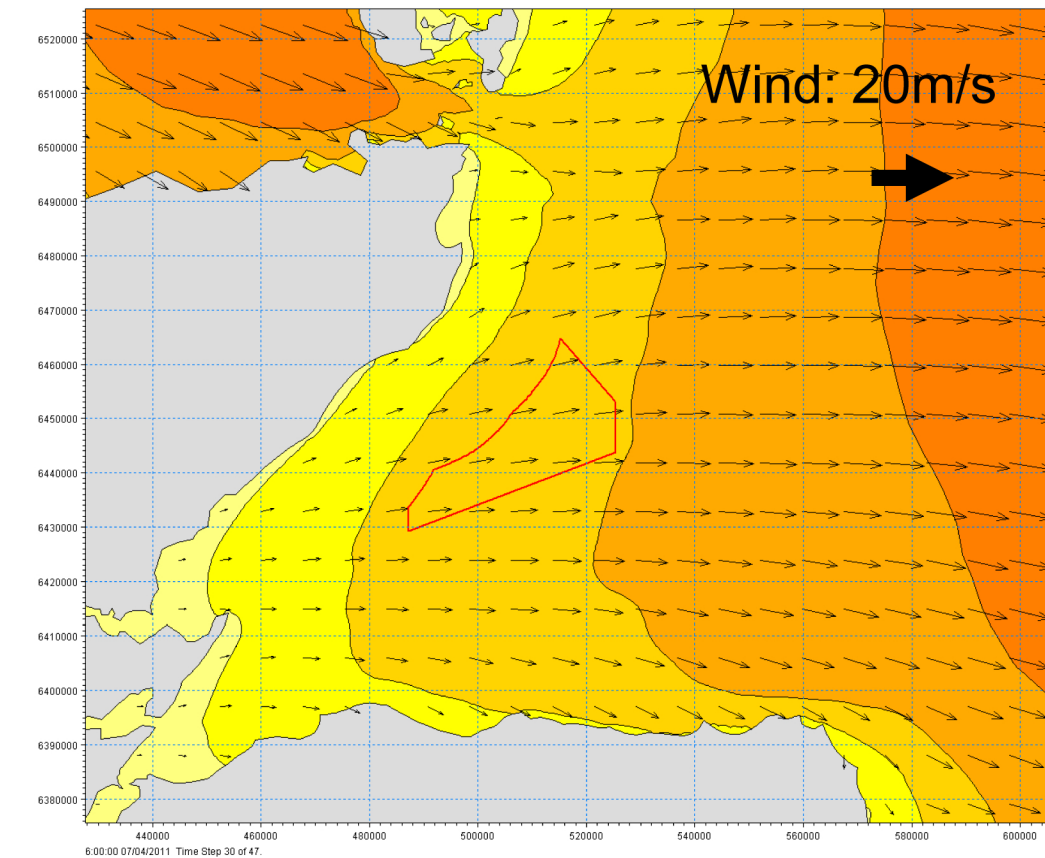
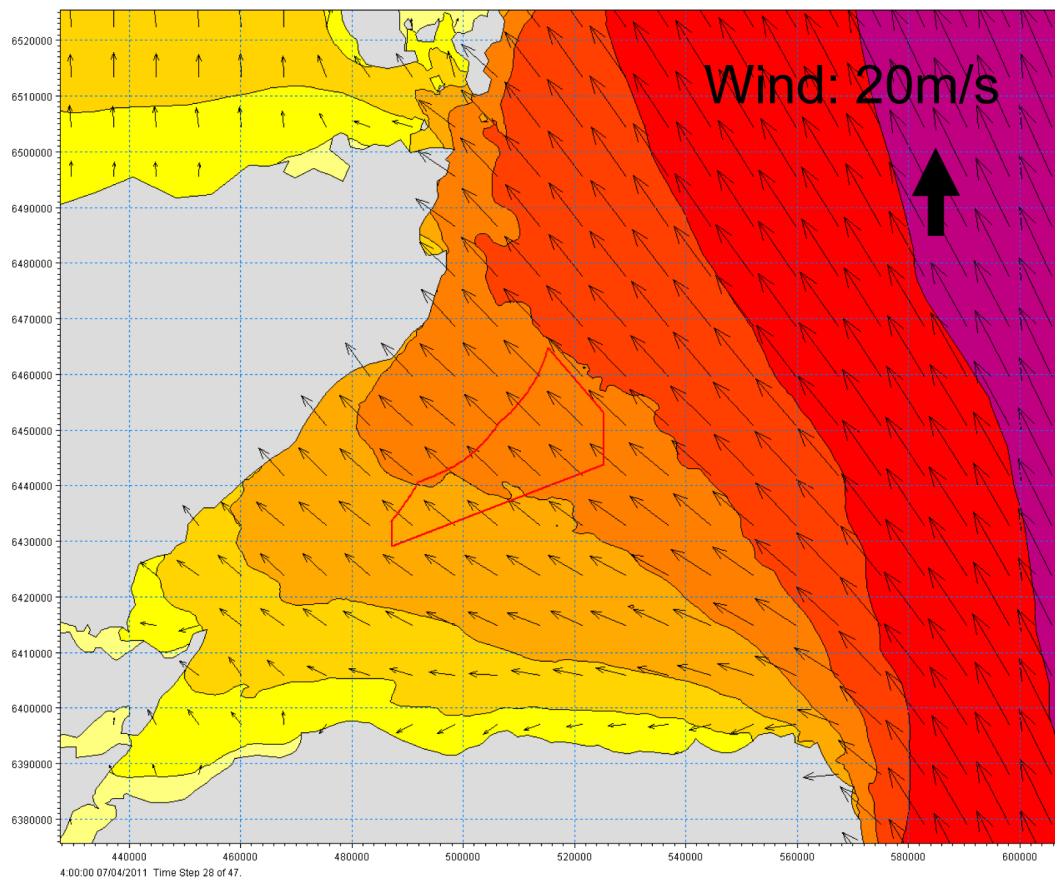
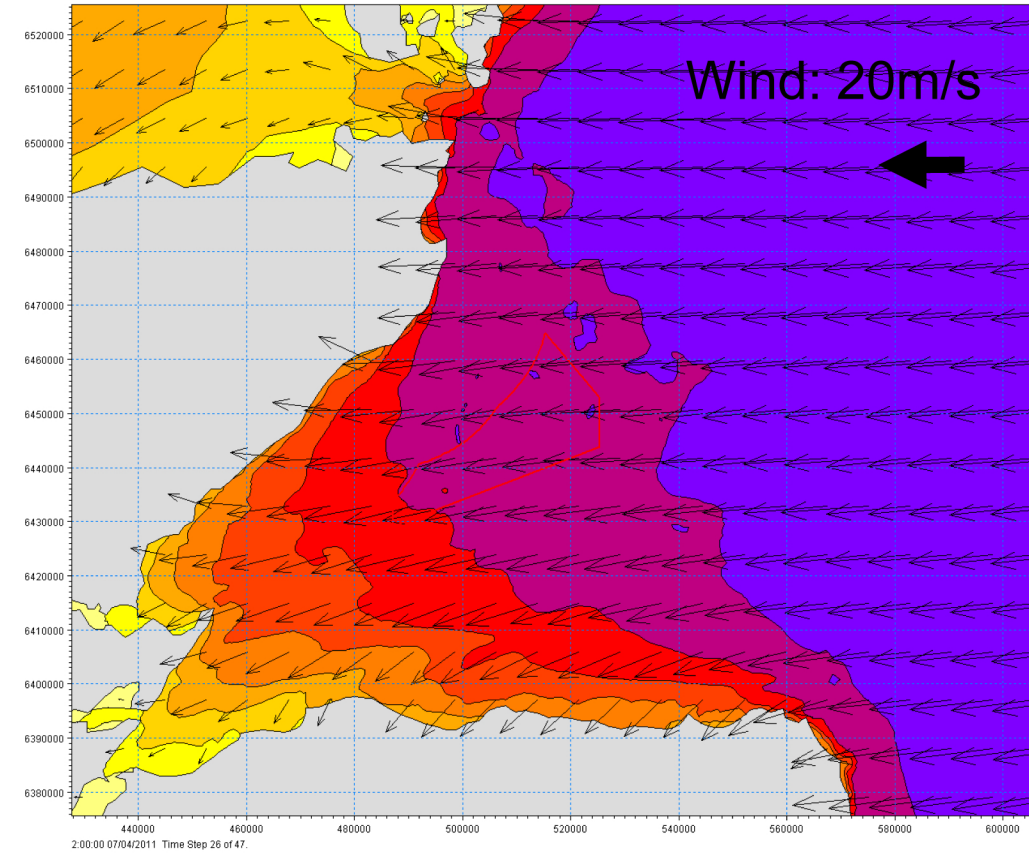
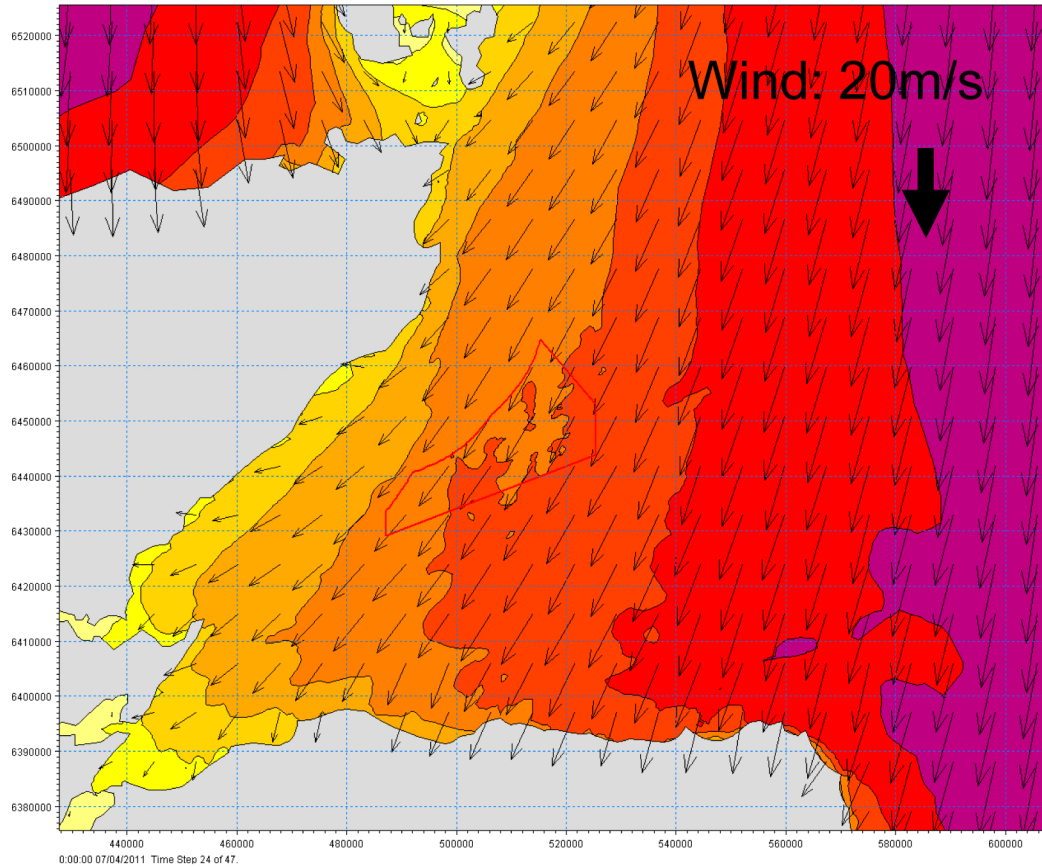
REF: 8460001-PPW0201-ABP-MAP-007

Fig 3.4-4 - Observational Wave Records from within and Nearby to the Project Area

Significant Wave Height (m)



MORL Zone Boundary



A3 Chart

Produced: DOL
Reviewed: CLH
Approved: PH

Date: 30/5/12

Revision: A

REF: 8460001-PPW0201-ABP-MAP-008

Fig 3.4-5 - Significant Wave Heights Resulting from Key Wind Directions