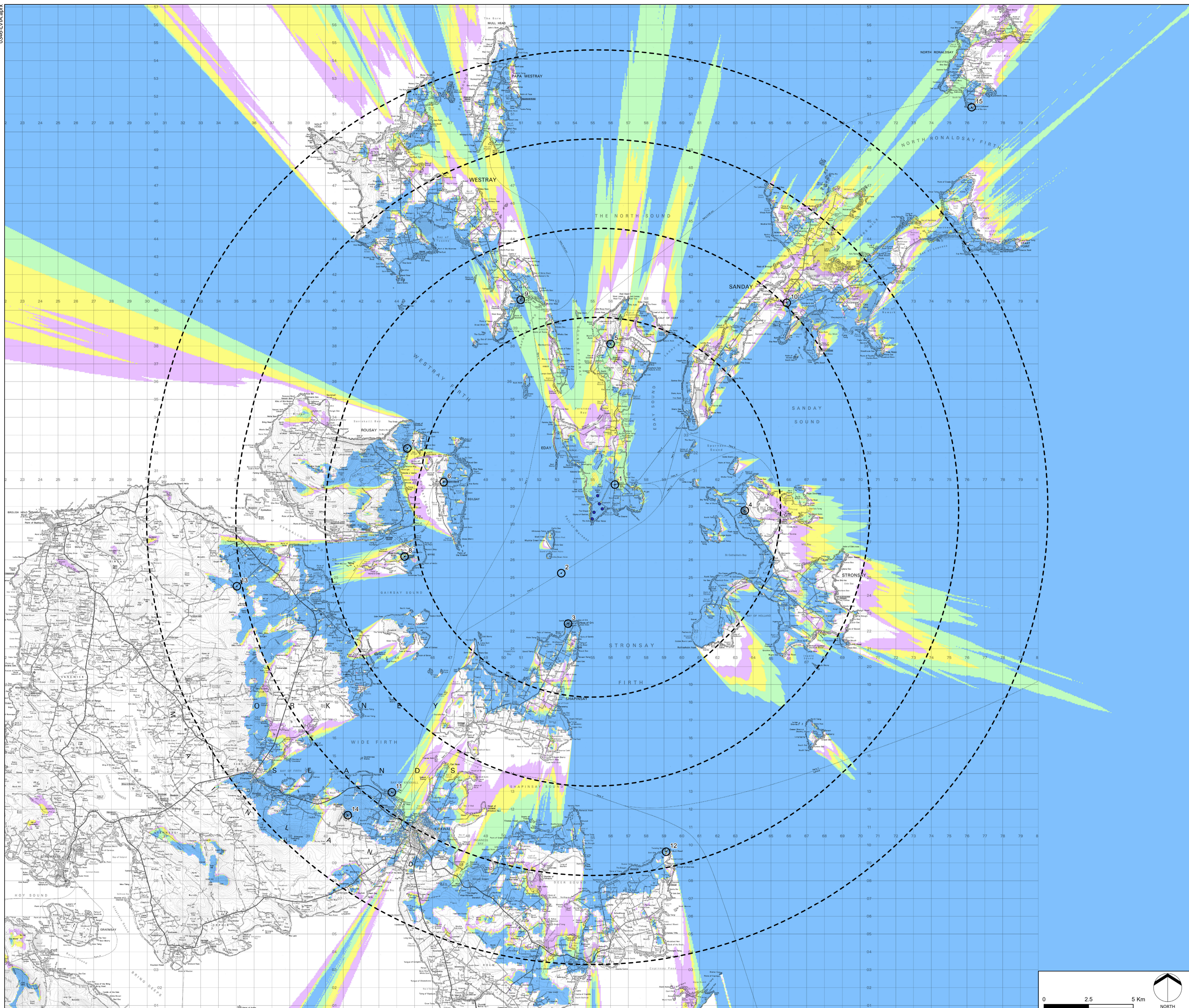


NEVEN POINT WIND FARM, ORKNEY

FIGURE 6.7

Zone of Theoretical Visibility to Hub Height and Blade Tip with Screening



KEY

- Neven Point
- ⊖ Distance Radii from Outermost Turbines (10, 15, 20, 25km)
- ⊙ Viewpoints

Zone of Theoretical Visibility

- 1 - 2 hubs (112m) and any number of blade tips may be visible
- 3 - 4 hubs (112m) and any number of blade tips may be visible
- 5 hubs (112m) and any number of blade tips may be visible
- Any number of blade tips (180m) only may be visible

FIGURE DATA:
 This figure has been based on the following data:

Layout file: D009-obvs-HH-T5-20km.shp; D009-obvs-HH-T50-45km.shp; D009-obvs-BT-T5-20km.shp; D009-obvs-BT-T50-45km.shp
 Terrain data: T5-DSM.asc; T50-DSM.asc
 Viewer's eye height: 2m above ground level
 Calculation grid size: 5m (to 20km from turbines) / 50m beyond

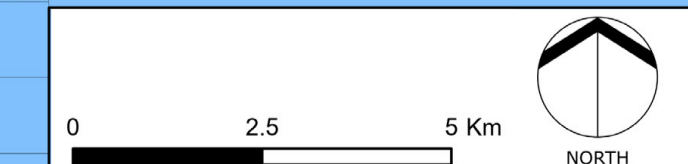
NOTES:
 This drawing is based upon computer generated Zone of Theoretical Visibility (ZTV) studies produced using the Viewshed routine in the Visibility Analysis plugin for QGIS.

The areas shown are the maximum theoretical visibility, taking into account topography, principal woodlands and buildings.

A digital surface model (DSM) has been derived from OS Terrain 5 height data (to 20km from turbines) / 50m beyond with the locations of woodland and buildings taken from the OS Open Map Local dataset. Buildings have been modelled with an assumed height of 7.5m and woodland an assumed height of 15m, representing a conservative estimate of average heights within the study area.

The model does not take into account some localised features such as small copses, hedgerows or individual trees and therefore still gives an exaggerated impression of the extent of visibility. The actual extent of visibility on the ground will be less than that suggested by this plan.

The ZTV includes an adjustment that allows for Earth's curvature and light refraction. It is based on a derived DSM and has a 5m² (to 20km beyond turbines) / 50m² resolution.



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