

7.0 CLIMATE

7.1 Methodology

Data on the climatic conditions of the proposed site were obtained from Met Éireann for the Cork Airport and Roche's Point synoptic weather stations. Averages were sought on a 30 year basis to give an overall impression of the general climatic configuration in the vicinity. Since the nearest station is over 30km from the site, the two stations are used to cover the range of potential meteorological conditions at the site. The dominant influence on Irish climate is the Atlantic Ocean. The proposed development is located in a coastal setting; thus meteorological data for coastal stations was used to assess the existing climatic regime.

7.2 Existing Environment

The long term weather patterns in this location reflect regional weather conditions of the South-Munster Area which is dominated by low-fronts from the west and south west during winter. During the summer more settled conditions prevail. For localised weather conditions meteorological measurements from nearby weather stations were consulted.

The nearest meteorological stations to the site are Cork Airport and Roche's Point, located approximately 45 km and 35 km south west of the site and at elevations of 153 m and 41.4m respectively. These weather stations are located in coastal regions and typify the meteorological conditions which occur on-site due to the site's location.

The following table illustrates the mean yearly weather parameters for both stations dating from 1961 to 1990.

Parameter	Cork Airport	Roches Point	Average
Mean Temperature (°C)	9.4	10.2	9.8
Mean Relative Humidity %	87	85	86
Mean Daily Sunshine (hours)	3.8	3.91	3.85
Mean Monthly Rainfall (mm)	1194.4	935.7	1065
Mean Monthly Wind Speed (knots)	11.1	13.2	11.65

Table 7.1 Summary of Yearly Weather Parameters

The nearest rain gauge station to the proposed site, referred to in the Cork County Council EIS for the extension of the nearby Youghal landfill is located at St. Raphael's Centre in Youghal town. Rainfall data from this gauge suggests rainfall in Youghal is on average 40mm per annum greater than at Roche's Point.

Average monthly wind speeds for 1961-1990 in this area is 11.65 knots. The average wind speeds and wind direction at Cork Airport from 1971 to 2000 is summarised on the following wind rose diagram (Figure 7.1). The prevailing wind direction is south westerly and the mean wind speed is 10.6 knots.

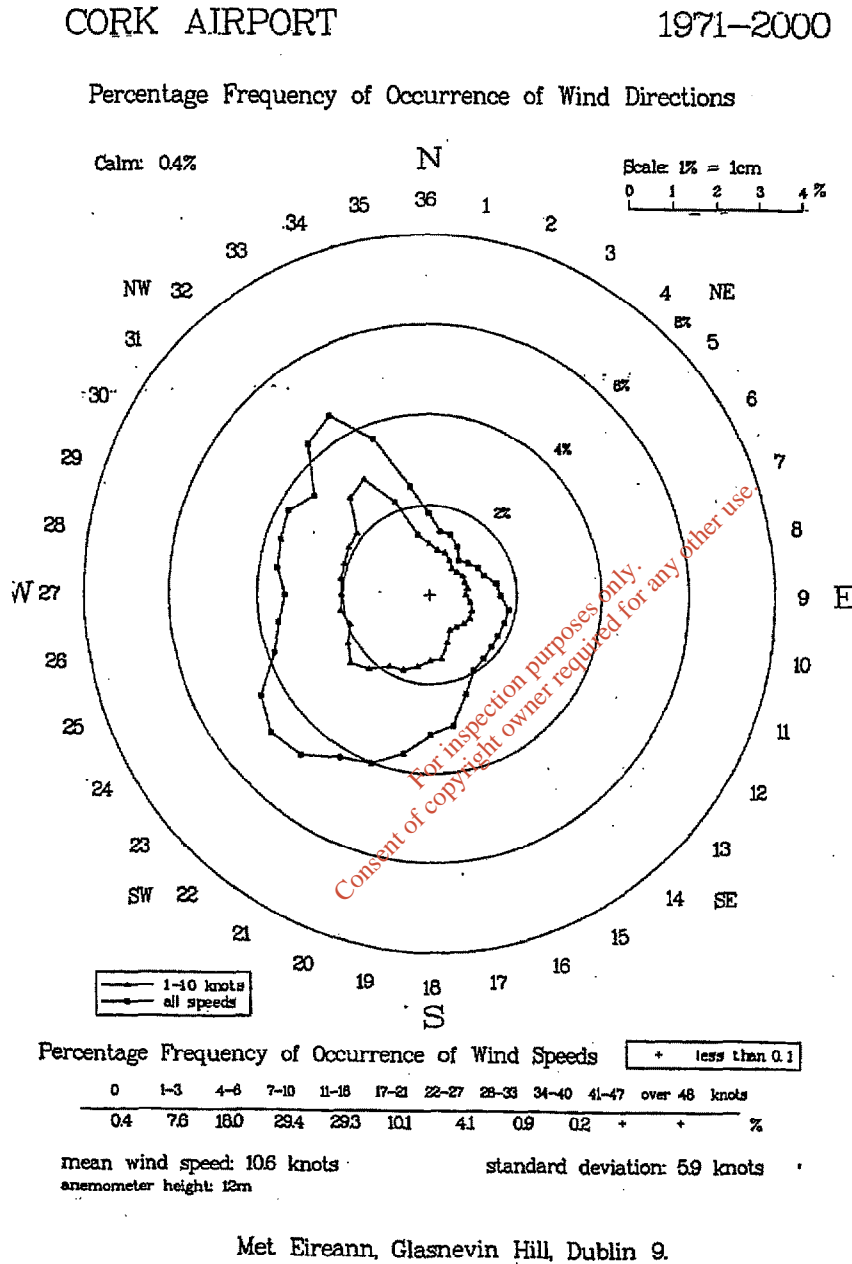


Figure 7.1 Wind Speeds and Wind Directions at Cork Airport, 1971-2000

7.3 Impact Assessment

No impacts are anticipated.

7.4 Mitigation Measures

No mitigation measures are required.