



Development at Kilnahue

Proposed Residential Development

5100

TELECOMMUNICATION SIGNAL INTERFERENCE REPORT

Kilnahue
Gorey
Co.Wexford

Gerard Gannon Properties

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Contents

Section		Page
1	Introduction	4
2	Findings and Summary	5
3	Geographical location and greater area map	6
Appendix	None	



1 Introduction

1.1 Document purpose

This report gives information on the assessment of interference to existing telecommunications signals as a result of the new proposed development. High rise buildings or tall structures could potentially interfere, disturb or block an existing telecommunication signal. Officially licenced telecommunications signals operating in the correct designated area or path should not be adversely affected by the new development or if assessed to be effecting an existing signal should try to accommodate the signal provider to allow redirection or similar process.

1.2 Instruction

DKPartnership (DKP) have been commissioned by Gannon Properties, to carry out the analysis and report for the proposed development at Kilnahue, Gorey, Co.Wexford.

1.3 Brief development description

A proposed Strategic Housing Development consisting of the demolition of the dilapidated structures on site and the construction of 421 no. residential units comprising duplex units, apartment units, and houses, all with associated car parking; a creche facility with outdoor play areas, 2 no. retail units and 2 no. community rooms, all with associated car parking; new vehicular accesses onto Carnew Road (R725) and associated road upgrade works, new vehicular accesses onto Kilnahue Lane (L10112) and associated road upgrade works; landscaping including neighbourhood park, pocket parks, a playground and multi-purpose sports court; boundary treatments; public lighting; and all associated engineering and site works necessary to facilitate the development including proposed upgrade works to existing engineering infrastructure on Carnew Road, Kilnahue Lane, Main Street and Esmonde Street'.



2 Findings and Summary

2.1 Finding existing tv/radio/telecommunication

It is not as easy to establish if there are existing licenced television/radio/telecommunication signals present in the area as the Department of Environment, Climate and Communications and/or ComReg do not provide such information in the interest of home security as it is quoted to us. The only reasonable method currently available is scanning the tallest adjoining buildings for existing aerials and identify buildings occupied by blue light services.

2.2 Typical frequency ranges

TV signal providers use radio wave (30MHz-3000MHz) signals which are generally transmitted using multi directional aerials and by nature are typically long range (100km-200km) with multiple Fresnel zones and as a result are unlikely to be effected. Blue light services (Gardy, Ambulance, Fire Services and Coast Guard) use micro wave (30MHz-300MHz) signals which are generally transmitted using multi directional aerials and by nature are typically shorter range (10km-20km) with multiple Fresnel zones and also less likely to be effected. Telecommunication providers micro wave links, radar systems, satellite telemetry (300MHz-30GHz) signals generally require line of sight and could therefore be affected by taller structures. These signals also have multiple Fresnel zones but rely on the first Fresnel zone to be at least 60% clear. Long range signals have a very large first Fresnel zone and are unlikely to be affected, short range (1km-2km) point-to-point signals have a small (50m-100m) first Fresnel zone and could be more than 60% effected by a structure resulting in interference, disturbing or loss of signal.

2.3 Our search range

To identify possible interference to point-to-point signals we use a 1.5km diameter or a 3km search range from the location of the proposed development in all directions identifying exiting taller buildings / structures which are most likely used for transmitting/receiving telecommunication signals. See page 6 for search range area.

2.4 Findings

The search for roof / tall structures in the 3km zone around the new proposed development has not revealed any particular telecommunication company mast location with any dish or aerials nor is there any gardai station or other blue light services in this area.

2.5 Assessment and conclusion

Based on the search findings we conclude that there appears to be no telecommunication signals directly crossing the new development site and the fact that the proposed development mainly consists of 2 storey dwellings and duplexes without any high rise buildings it is very unlikely that the new development will interfere, disturb or block any existing licenced telecommunication signals. Any telecommunication signals crossing the site from greater distances beyond the 3km range will not be adversely affected as the signals would be outside the first Fresnel zones.

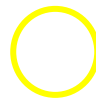


Geographical overview

Approximate site location (green outline) and 3 km search range (yellow circle)



Approximate site outline / location



3km range circle

