Chapter 13:

Interactions Between Environmental Factors

13.0 Interactions Between Environmental Factors

13.1 Introduction

All environmental factors are interlinked to a degree such that interrelationships exist on numerous levels. Interactions within the study area can be one-way interactions, two-way interactions and multiple-phase interactions which can be influenced by the proposed development.

As this EIAR document has been prepared by a number of specialist consultants, an important aspect of the EIA process is to ensure that interactions between the various disciplines have been taken into consideration. This chapter of the EIAR was prepared by Paul Turley, BA, MRUP, Dip Environmental & Planning Law, MIPI, Executive Director with JSA and Luke Wymer, BA, MRUP, Adv. Dip. Planning and Environmental Law, Dip. Project Management, MIPI, Senior Planner at JSA.

The purpose of this requirement of an EIAR is to draw attention to significant interaction and interrelationships in the existing environment. *John Spain Associates, Planning & Development Consultants*, in preparing and coordinating this EIAR ensured that each of the specialist consultants liaised with each other and dealt with the likely interactions between effects predicted as a result of the proposed development during the preparation of the proposals for the subject site and ensuring that appropriate mitigation measures are incorporated into the design process and the relevant EIAR chapters.

Having regard to the above, JSA require that a specific section on Interactions is included in each of the environmental topic chapters of the EIAR. This approach is considered to meet with the requirements of Part X of the Planning and Development Act 2000, as amended, and Part 10, and Schedules 5, 6 and 7 of the Planning and Development Regulations 2001, as amended.

Having regard to the approach taken, the aspects of the environment likely to be significantly affected by the proposed development, during both the construction and operational phases, have been considered in detail in the relevant Chapters of this EIAR document. In addition, the interactions between one topic and another have been discussed under each topic Chapter by the relevant specialist consultant.

The primary interactions can be summarised as follows:

- Population and human health with transportation, air and climate, water, and noise and vibration;
- Biodiversity with water and landscape and visual impact;
- Landscape and visual impact with biodiversity, land and soils, and archaeology;
- Land and soils with material assets:
- Noise and vibration and traffic;
- Air quality and climate and traffic and material assets.

The relevant consultants liaised with each other and the project architects, engineers and landscape architects where necessary to review the proposed scheme and incorporate suitable mitigation measures where necessary. As demonstrated throughout this EIAR, most inter-relationships are neutral in impact when the mitigation measures proposed are incorporated into the design, construction or operation of the proposed development.

In addition to the above a series of standalone reports have been prepared to accompany the application and which have helped inform the final scheme design and the relevant chapters of the EIAR. DBFL have prepared a Traffic and Transport Assessment Report, Infrastructure Design Report, Site Specific Flood Risk Assessment, and CEMP. Byrne Environmental Consulting Ltd. have produced a Construction and Demolition Waste Management Plan and an Operational Waste Management Plan. In addition, Openfield have prepared a Natura Impact Statement for the purposes of Stage 2 Appropriate Assessment.