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Clifton Scannell Emerson Associates

# Addendum to EIAR Chapter 4 Population & Human Health

### **Suir Island Infrastructure Links**



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### 4 Addendum to EIAR Chapter 4 Population and Human Health

#### 4.1 Introduction to Addendum

Tipperary Council submitted the Planning Application for the proposed Suir Island Infrastructure Links development on 25<sup>th</sup> September 2023. An Bord Pleanála issued a Request for Further Information (RFI) on 9<sup>th</sup> July 2024 in accordance with Section 51(4) of the Roads Act 1993, as amended.

RFI No. 5 stipulates that the response documentation should be in addendum format. Thus, this document sets out to address the necessary changes which pertains to EIAR Chapter 4 Population and Human Health. The additional information request Item No.3 (a) (i) reads:

a) (i) Chapter 4 should be updated to include for a cumulative assessment of the proposal with other permitted developments at construction stage.

In order to address the above RFI item, this addendum includes the following revisions or additions as shown in red text:

• Addition of Section 4.11 Cumulative Impact Assessment.

#### Additional Section(s)

#### 4.11 Cumulative Impacts

The potential for cumulative impact of the Proposed Development with any/all relevant other planned or permitted developments has been undertaken based on consideration of developments outlined in EIAR Chapter 1 Introduction Table 1-6 (amended).

The main outward emissions from the Proposed Development in conjunction with other developments during the construction phase that could be capable of resulting in cumulative impacts, and effects on human health and populations, are air quality (dust), noise, traffic (congestion and air quality) and landscape.

The implementation of mitigation measures outlined within each chapter and detailed in Section 4.6.1 of the EIAR, consolidated in chapter 17 and the OCEMP setting out the implementation strategy for mitigation, as well as the requirement for compliance of adjacent development with their respective planning permission condition will ensure there will be no significant cumulative potential for change in environmental receptors that have the potential to impact on human health and population during the construction phase of the Proposed Development.

Further details regarding air quality (dust), noise, vibration, and traffic during the construction phase capable of resulting in cumulative impacts, and the effects on human health and populations, are outlined below.

#### 4.11.1 Cumulative Impact – Air Quality (Dust) and Human Health

A cumulative impact assessment was carried out in EIAR Chapter 8 Air Quality Section 8.5.3. It outlined the following in relation to Air Quality and Human Health.

#### Construction Phase

Should the construction phase of the proposed development coincide with the construction phase of any other development within 350m then there is the potential for cumulative construction dust impacts to nearby sensitive receptors through the release of  $PM_{10}$  and  $PM_{2.5}$  emissions. As per Section 8.3.3 of Chapter 8 the surrounding area is of low sensitivity to dust related human health impacts and as per Section 8.5.2, Table 8.12, there is at most a low risk of dust impacts to human health associated with the proposed development. A review of recent planning permissions for the area was conducted as part

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of Chapter 8 Air Quality and it was found that there was 1 no. relevant site for which cumulative impacts may occur should the construction phase and that of the proposed development overlap: Planning Reg. Ref.: P82201 - Suir Island Gardens. However, since the preparation of the EIAR it has been established that the construction of this development will be completed prior to the construction of the proposed development and therefore, there is no potential for cumulative impacts.

The dust mitigation measures outlined in Section 8.6.1 of Chapter 8 will be applied throughout the construction phase of the proposed development which will avoid significant cumulative impacts on air quality. With the implementation of mitigation measures, and the low risk of dust impacts to human health associated with the proposed development, the predicted cumulative impacts on air quality and human health associated with the construction phase of the proposed development are deemed *temporary, localised, negative,* and *imperceptible*.

#### **Operational Phase**

As per Section 8.5.3 of Chapter 8 Air Quality of the EIAR there is the potential for cumulative impacts to air quality during the operational phase due to traffic associated with other existing and permitted developments within the area. The traffic data provided for the operational stage air quality assessment included cumulative traffic from committed developments within the wider area. A review of specific developments was conducted as part of the traffic impact assessment (see Chapter 12) in order to identify relevant cumulative developments. The following developments were deemed relevant for inclusion within the traffic figures for the proposed development: Clonmel Arms Hotel Redevelopment (*Planning Reg. Ref.* 18601355), and Clonmel Urban Design Project. The air quality assessment concluded a neutral impact on air quality. The cumulative operational stage impact on human health is therefore considered *long-term, localised, neutral, imperceptible.* 

#### 4.11.2 Cumulative Impacts – Noise and Vibration and Human Health

A cumulative impact assessment was carried out in EIAR Chapter 10 Section 10.9 (amended). This considered construction noise and vibration during construction and operation phases.

The following developments have been identified as having potential to result in cumulative impacts during the construction phase.

- 18601355 Clonmel Arms Hotel Extension
- Clonmel urban realm/Town Centre Enhancement Scheme

#### Construction Phase

For all construction works associated with the project in isolation or from cumulative effects from overlapping projects, the predicted noise levels are below those where impacts on hearing are likely to occur. Vibration is not considered to have the potential for in-combination effects. Regarding the possibility of noise-induced hearing loss, the WHO states that 'The highest safe exposure level is considered to be 85 dB for up to a maximum of 8 hours' (WHO 2015). The highest noise levels produced will not be continuous over extended periods of time but rather will be instantaneous or brief in duration, and will only occur during normal working hours, as stipulated in Chapter 10 of this EIAR. The are no works scheduled for night, hence there is no potential for sleep disturbance. Other health outcomes are likely to be annoyance and temporary psychological stress as a reaction to noise. There is no evidence for significant effects on health outcomes from transient levels of annoyance such as those from construction works across the majority of the population. The predicted noise impacts will be temporary to short term, and therefore unlikely to be attributable to a change in health status for the general resident population, although sensitive individuals are likely to experience a degree of annoyance, which may result in some complaints. On this basis, the predicted impact of noise and vibration on population health will be Negative, Moderate and Temporary on the neighbouring population.

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#### **Operational Phase**

During the operational phase, traffic associated with the Suir Island development, the Clonmel Arms Hotel and the Clonmel Urban Realm/ Town centre enhancement scheme has been assessed cumulatively with the Proposed Development in Section 10.6.2 of the EIAR. The associated effect is varied as some road links are predicted to experience an increase in noise while others are predicted to experience a decrease, albeit negligible in terms of perceptibility. These developments will not generate vibration during the operational phases and no in-combination effects were considered necessary for assessment. The cumulative effect is categorised as ranging from negative, imperceptible and long-term to positive, imperceptible and long-term, and therefore not significant in terms of human health.

#### 4.11.3 Cumulative Impacts – Traffic & Transportation on Human Beings

A cumulative traffic assessment was carried out in EIAR Chapter 12 Material Assets: Traffic and Transport section 12.19 Cumulative Impacts (amended).

#### Construction Phase

Potential cumulative impacts include additional traffic movements and temporary diversions. The traffic analysis concluded that the likelihood of impacts during the construction phases as a result of construction programmes coinciding is considered to be *negative*, *moderate* and *short-term* in the vicinity of Raheen Road, Coleville Road (R680), Waterford Road (R671) and Mountain Road (R678). It is noted that all traffic and transport assessments concluded that sufficient capacity is available in the network even considering future demand projections. With the implementation of mitigation measures (primarily traffic management plans) highlighted in respective EIAR's and traffic assessments, the potential impacts are considered to be *negative*, *slight*, *short-term*.

#### **Operational Phase**

As noted in EIAR Chapter 12 Section 12.9 Committed Developments, the projects which have received planning approvals, and which has the potential to impact on the proposed development cumulative impacts for the operational phases have been incorporated into the modelling undertaken for the 5 No. junctions located near the proposed realignment of the Quays. The modelling demonstrated that the road network in the vicinity of the site can accommodate the additional traffic resulting from the road changes proposed with the scheme.

On that basis, the cumulative operation phase traffic impact of the proposed development, in conjunction with permitted developments being implemented is considered to be *long-term, neutral,* and *imperceptible*.

#### 4.11.1 Cumulative Impact – Landscape, Amenity, Tourism

#### **Construction Phase**

There will be no significant negative cumulative impacts on the local parks, tourism or the larger amenity areas. The Proposed Development and permitted developments will not create any wastewater discharge which could have a potential impact on local amenities.

Visual impacts and amenity impacts perceived by individual persons are highly subjective and difficult to characterise however, generally, the effects of cumulative development would be negative since construction is an inherently, unavoidably unsightly activity. It is considered that the overall impact on the community will be **negative, moderate** and **short term** during the construction phase.



#### **Operational Phase**

The proposed development and permitted developments once operational will have a positive **not** *significant* and *long-term* impact in terms of amenity hospitality and tourism value as well as benefiting the urban- waterway landscape. All wastewater generated (from relocated public ablution unit located on North Plaza) will be connected to the existing public foul network and will not impact local amenities with foul odours or unsanitary conditions.

#### 4.11.2 Conclusion

While there is the potential for cumulative noise and vibration impacts between the Proposed Development and the other existing / permitted developments during a simultaneous construction phase; any developments will be required to incorporate appropriate mitigation measures including standard construction features and practices inherent in the developments (e.g. noise management, dust management, traffic management, etc) during the construction phase. These developments will not generate vibration during the operational phases and no in-combination effects were considered necessary for assessment. Therefore, the likely cumulative impact on human health and populations is considered to be negative, slight and temporary/short-term. During operation the only cumulative impact is traffic, and analysis has shown that there is adequate capacity on roadways resulting in a long-term imperceptible impact on air quality and human health

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