# ENVIRONMENTAL STATEMENT: 6.3 APPENDIX 21-2 INTRA-PROJECT EFFECTS ASSESSMENT

DECARBONISATION

## Cory Decarbonisation Project

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# 1. INTRODUCTION

## 1.1. BACKGROUND

1.1.1. An Intra-Project Effect is defined as the following:

*The interaction and combination of different residual environmental effects of the Proposed Scheme affecting the same receptor, these are termed as 'Common Receptors'. For example, visual and noise effects during construction affecting nearby Public Rights of Way (PRoW).*

## 1.2. PURPOSE OF ASSESSMENT

1.2.1. The purpose of this Appendix is to set out, and undertake, the step-by-step process for the assessment of intra-project effects resulting from the Proposed Scheme on sensitive receptors.

1.2.2. This is in line with the Infrastructure Planning (Environmental Impact Assessment (EIA)) Regulations 2017 (the EIA Regulations)[1] and other best practice guidance. The methodology of this assessment is described in **Section 21.5** of **Chapter 21: Cumulative Effects (Volume 1)**.

1.2.3. This Appendix is intended to be read in conjunction with **Chapter 21: Cumulative Effects (Volume 1)** and as part of the wider Environmental Statement (ES). Please refer to the appropriate technical chapter for further details on Common Receptors.

# 2. STEP A – SCREENING OF SENSITIVE RECEPTORS

2.1.1. Step A is the assessment to identify 'Common Receptors', these Common Receptors being receptors which could be impacted by more than one environmental topic, which could therefore potentially result in more than one type of residual effect.

2.1.2. Numerous interactions between different technical topics are considered in the individual chapters, **Chapter 5: Air Quality (Volume 1)** to **Chapter 20: Marine Navigation (Volume 1)**. Where types of effects or Common Receptors are already considered within one of the assessments, or not considered for reasons explained in the technical chapter itself, the findings reported are not considered in this assessment to avoid repetition. These are listed in **Chapter 21: Cumulative Effects (Volume 1)**.

2.1.3. Common Receptors identified for inclusion in this assessment, alongside their relevant corresponding topics, are in **Table 2-1**.

**Table 2-1: Common Receptors**

| Common Receptors | Environmental Topics |
|---|---|
| **Residential Area of Belvedere** | • Air Quality (operation phase only)<br>• Noise and Vibration<br>• Townscape and Visual |
| **Residential Area of Thamesmead – Operation Phase** | • Air Quality<br>• Townscape and Visual |
| **Hospitality Receptors: Travelodge London Belvedere** | • Air Quality (operation phase only)<br>• Noise and Vibration<br>• Townscape and Visual<br>• Population and Human Health (construction phase only)<br>• Socioeconomics (construction phase only) |
| **Hospitality Receptors: The Morgan Public House and Starbucks Drive Thru** | • Air Quality (operation phase only)<br>• Townscape and Visual<br>• Population and Human Health (construction only)<br>• Socioeconomics (construction phase only) |
| **Locally Designated Ecological Sites: Crossness LNR** | • Terrestrial Biodiversity<br>• Water Environment and Flood Risk |

| Common Receptors | Environmental Topics |
|---|---|
| **Locally Designated Ecological Sites: River Thames and Tidal Tributaries SINC** | • Terrestrial Biodiversity<br>• Marine Biodiversity (construction phase only)<br>• Water Environment and Flood Risk |
| **Business / Places of Work: Munster Joinery, Iron Mountain Records Storage Facility, ASDA Belvedere Distribution Centre and Lidl Warehouse/Belvedere Regional Distribution Centre** | • Air Quality (operation phase only)<br>• Townscape and Visual<br>• Population and Human Health (construction phase only)<br>• Socio-economics (construction phase only) |
| **Business / Place of Work: Others within 1km of Site – Construction Phase** | • Townscape and Visual<br>• Population and Human Health<br>• Socio-economics |
| **PRoW: FP1, FP2 and FP4.** | • Air Quality (operation phase only)<br>• Townscape and Visual<br>• Population and Human Health<br>• Landside Transport (construction phase only) |
| **PRoW: England Coast Path, FP3 and NCN1** | • Air Quality (operation phase only)<br>• Townscape and Visual<br>• Population and Human Health<br>• Landside Transport (construction phase only) |
| **Users of Accessible Open Land** | • Air Quality (operation phase only)<br>• Townscape and Visual<br>• Population and Human Health |
| **Users of the Local Road Network – Construction Phase** | • Townscape and Visual<br>• Landside Transport |

# 3. STEP B – DETERMINE COMMON RECEPTOR'S RESIDUAL EFFECTS

3.1.1. A summary of residual effects from each chapter, **Chapter 5: Air Quality (Volume 1)** to **Chapter 20: Marine Navigation (Volume 1)**, on each of the Common Receptors is presented in **Table 3-1**.

3.1.2. There is no potential for intra-project effects where residual effects have been identified in **Chapter 5: Air Quality (Volume 1)** to **Chapter 20: Marine Navigation (Volume 1)** and do not affect Common Receptors identified in Step A above, consequently these have not been presented in these tables.

**Table 3-1: Residual Effects on Common Receptors**

| Common Receptors | Air Quality | Noise and Vibration | Terrestrial Biodiversity | Marine Biodiversity | Townscape and Visual | Water Environment and Flood Risk | Population Health and Land Use | Socio-economics | Landside Transport |
|---|---|---|---|---|---|---|---|---|---|
| **Residential Area of Belvedere – Construction Phase** | N/A | Construction Noise:<br>C1 - Clydesdale Way – Moderate Adverse (Not Significant)<br>C2 - North Road and C4 – Jenningtree Way – Minor Adverse (Not Significant) | N/A | N/A | Townscape Character:<br>Slight-Moderate Adverse (Not Significant)<br><br>Visual Amenity: Slight-Moderate Adverse (Not Significant) | N/A | N/A | N/A | N/A |
| **Residential Area of Belvedere – Operation Phase** | Slight Adverse (Not Significant) | Operation Noise:<br>C1 - Clydesdale Way – Minor Adverse (Not Significant) | N/A | N/A | Visual Amenity: Slight-Moderate Adverse (Not Significant) (Year 1) | N/A | N/A | N/A | N/A |
| **Residential Area of Thamesmead – Operation Phase** | Slight Adverse (Not Significant) | N/A | N/A | N/A | Visual Amenity: Slight Adverse (Not Significant) (Year 1) | N/A | N/A | N/A | N/A |
| **Hospitality Receptors: Travelodge London Belvedere – Construction Phase** | N/A | Construction Noise (C5): Moderate Adverse (Not Significant) | N/A | N/A | Townscape Character: Slight-Moderate Adverse (Not Significant) | N/A | N/A | GVA[1] Generation: Minor Beneficial (Not Significant) | N/A |
| **Hospitality Receptors: Travelodge London** | Slight Adverse (Not Significant) | Operation Noise (C5): Minor Adverse (Not Significant) | N/A | N/A | Townscape Character: Slight-Moderate Adverse (Not Significant) (Year 1) | N/A | N/A | N/A | N/A |

[1] Gross Value Added

| Common Receptors | Air Quality | Noise and Vibration | Terrestrial Biodiversity | Marine Biodiversity | Townscape and Visual | Water Environment and Flood Risk | Population Health and Land Use | Socio-economics | Landside Transport |
|---|---|---|---|---|---|---|---|---|---|
| **Belvedere – Operation Phase** | | | | | | | | | |
| **Hospitality Receptors: The Morgan Public House and Starbucks Drive Thru – Construction Phase** | N/A | N/A | N/A | N/A | Townscape Effects: Slight-Moderate Adverse (Not Significant) | N/A | N/A | GVA[2] Generation: Minor Beneficial (Not Significant) | N/A |
| **Hospitality Receptors: The Morgan Public House and Starbucks Drive Thru – Operation Phase** | Slight Adverse (Not Significant) | N/A | N/A | N/A | Townscape Effects: Slight-Moderate Adverse (Not Significant) (Year 1) | N/A | N/A | N/A | N/A |
| **Locally Designated Ecological Sites: Crossness LNR – Construction Phase** | N/A | N/A | Noise and Vibration: Minor Adverse (Not Significant)<br>Changes in Air Quality: Minor Adverse (Not Significant) | N/A | N/A | Quality of Surface Water Features: Slight Adverse (Not Significant) | N/A | N/A | N/A |
| **Locally Designated Ecological Sites: Crossness LNR – Operation Phase** | N/A | N/A | Changes in Air Quality: up to Moderate Adverse (Significant) | N/A | N/A | Quality of Surface Water Features: Slight Adverse (Not Significant) | N/A | N/A | N/A |
| **Locally Designated Ecological Sites: River Thames** | N/A | N/A | Noise and Vibration: Minor Adverse (Not Significant) | N/A | N/A | Surface Water Quality, Quantity of Surface Water Features, WFD | N/A | N/A | N/A |

[2] Gross Value Added

| Common Receptors | Air Quality | Noise and Vibration | Terrestrial Biodiversity | Marine Biodiversity | Townscape and Visual | Water Environment and Flood Risk | Population Health and Land Use | Socio-economics | Landside Transport |
|---|---|---|---|---|---|---|---|---|---|
| **and Tidal Tributaries SINC – Construction Phase** | | | Changes in Air Quality: Minor Adverse (Not Significant) | | | Designated Water Bodies and Flood Risk: Slight Adverse (Not Significant) | | | |
| **Locally Designated Ecological Sites: River Thames and Tidal Tributaries SINC – Operation Phase** | N/A | N/A | Changes in Air Quality: up to Moderate Adverse (Significant) | N/A | N/A | Surface Water Quality, Quantity of Surface Water Features, WFD Designated Water Bodies and Flood Risk: Slight Adverse (Not Significant) | N/A | N/A | N/A |
| **Business / Places of Work: Munster Joinery, Iron Mountain Records Storage Facility, ASDA Belvedere Distribution Centre and Lidl Warehouse/Belvedere Regional Distribution Centre – Construction Phase** | N/A | N/A | N/A | N/A | Townscape Character: Slight-Moderate Adverse (Not Significant) | N/A | Munster Joinery: Major Adverse (Significant)<br>Iron Mountain Records Storage, ASDA Belvedere Distribution Centre, Lidl Belvedere Regional Distribution Centre: Minor Adverse (Not Significant) | GVA Generation: Minor Beneficial (Not Significant) | N/A |
| **Business / Places of Work: Munster Joinery, Iron Mountain Records Storage Facility, ASDA Belvedere Distribution Centre and Lidl** | Slight Adverse (Not Significant) | N/A | N/A | N/A | Townscape Character: Slight-Moderate Adverse (Not Significant) (Year 1) | N/A | N/A | N/A | N/A |

| Common Receptors | Air Quality | Noise and Vibration | Terrestrial Biodiversity | Marine Biodiversity | Townscape and Visual | Water Environment and Flood Risk | Population Health and Land Use | Socio-economics | Landside Transport |
|---|---|---|---|---|---|---|---|---|---|
| **Warehouse/Belvedere Regional Distribution Centre – Operation Phase** | | | | | | | | | |
| **Business / Place of Work: Others within 1km of the Site Boundary – Construction Phase** | N/A | N/A | N/A | N/A | Townscape Effects: Slight-Moderate Adverse (Not Significant) | N/A | N/A | GVA Generation: Minor Beneficial (Not Significant) | N/A |
| **PRoW: FP1, FP2 and FP4– Construction Phase** | N/A | N/A | N/A | N/A | Visual Amenity: FP1/FP2/FP4 Moderate Adverse (Significant) | N/A | FP1: Minor Adverse (Not Significant) FP2 and FP4: Moderate Adverse (Significant) | N/A | N/A |
| **PRoW: FP1, FP2 and FP4– Operation Phase** | Slight Adverse (Not Significant) | N/A | N/A | N/A | Visual Amenity: Moderate Adverse (Significant) (Year 1) | N/A | Minor Adverse (Not Significant) | N/A | N/A |
| **PRoW: England Coast Path, FP3 and NCN1 – Construction Phase** | N/A | N/A | N/A | N/A | Visual Amenity: Slight-Moderate Adverse (Not Significant) | N/A | Effects on Walkers and Cyclists: Moderate Adverse (Significant) | N/A | N/A |
| **PRoW: England Cost Path, FP3 and NCN1 – Operation Phase** | Slight Adverse (Not Significant) | N/A | N/A | N/A | Visual Amenity Slight-Moderate Adverse (Not Significant) (Year 1) | N/A | FP3: Minor Adverse (Not Significant) | N/A | N/A |
| **Users of Accessible Open Land – Construction Phase** | N/A | | | | Effects on Townscape Character: | | | | |

| Common Receptors | Air Quality | Noise and Vibration | Terrestrial Biodiversity | Marine Biodiversity | Townscape and Visual | Water Environment and Flood Risk | Population Health and Land Use | Socio-economics | Landside Transport |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Slight-Moderate Adverse (Not Significant)<br>Effects on Visual Amenity: Moderate Adverse (Significant) | | | | |
| **Users of Accessible Open Land - Operation Phase** | Slight Adverse (Not Significant) | N/A | N/A | N/A | Effects on Townscape Character: Slight-Moderate Adverse (not significant) (Year 1)<br>Effects on Visual Amenity: Large Adverse (Significant) (Year 1) | N/A | N/A | N/A | N/A |
| **Users of the Local Road Network – Construction Phase** | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | Public Transport Users: Minor Adverse (Not Significant) |

# 4. STEP C – ASSESSMENT OF INTRA-PROJECT EFFECTS

4.1.1. To determine the levels of any intra-project effects that may occur as the result of interactions of multiple non-negligible residual effects, the Common Receptors with multiple non-negligible residual effects have proceeded to Step C. These Common Receptors taken from Step B are as follows:

- residential area of Belvedere – Construction and Operation Phases;
- residential area of Thamesmead – Operation Phase;
- hospitality receptors: Travelodge London Belvedere – Construction and Operation Phases;
- hospitality receptors: The Morgan Public House and Starbucks Drive Thru – Construction and Operation Phases;
- Locally Designated Ecological Sites: Crossness LNR – Construction and Operation Phases;
- Locally Designated Ecological Sites: River Thames and Tidal Tributaries SINC – Construction and Operation Phases;
- business/places of work: Munster Joinery, Iron Mountain Records Storage Facility, ASDA Belvedere Distribution Centre and Lidl Warehouse/Belvedere Regional Distribution Centre – Construction and Operation Phases;
- business/places of work: Others within 1km of the Site Boundary – Construction Phase;
- PRoW: FP1, FP2, and FP4 – Construction and Operation Phases;
- PRoW: England Coast Path, FP3 and NCN1 – Construction and Operation Phases; and
- Users of Accessible Open Land – Construction and Operation Phases.

4.1.2. The result of intra-project effects assessment on Common Receptors for the Construction and Operation stages is presented in **Table 4-1** and **Table 4-2**. Mitigation recommendations are included if the intra-project effect is determined to be significant (Moderate Adverse or higher).

**Table 4-1: Intra-Project Effects Assessment - Construction**

| Common Receptor | Residual Effects | Intra-Project Effects | Mitigation |
|---|---|---|---|
| **Residential Area of Belvedere** | **Noise and Vibration**<br>C1 - Clydesdale Way: Moderate Adverse (Not Significant)<br>C2 - North Road and C4 – Jenningtree Way: Minor Adverse (Not Significant)<br>**Townscape and Visual**<br>Townscape Character: Slight-Moderate Adverse (Not Significant)<br>Visual Amenity: Slight-Moderate Adverse (Not Significant) | Residents of Belvedere will experience magnification of effects due to the interaction of noise, townscape character and visual amenity effects. These effects are temporary and intermittent, and act in a localised context, such that Moderate effects are limited to Clydesdale Way during one construction activity, the views of the Site being largely limited to those orientated towards the Site. Therefore, a significant magnification of effects is not anticipated, resulting in a **Minor Adverse (Not Significant)** intra-project effect. | None required. |
| **Hospitality Receptors: Travelodge London Belvedere** | **Noise and Vibration**<br>Construction Noise (C5): Moderate Adverse (Not Significant)<br>**Townscape and Visual** | The Travelodge London Belvedere is likely to experience magnification of effects due to the interaction of noise, townscape character and GVA generation effects. Due to these being temporary and intermittent and acting in a localised context, a significant magnification of effects is not anticipated, resulting in a **Minor Adverse (Not Significant)** intra-project effect. | None required. |

| Common Receptor | Residual Effects | Intra-Project Effects | Mitigation |
|---|---|---|---|
| | Townscape Character: Slight-Moderate Adverse (Not Significant)<br>**Socioeconomics**<br>GVA[3] Generation: Minor Beneficial (Not Significant) | | |
| **Hospitality Receptors: The Morgan Public House and Starbucks Drive Thru** | **Townscape and Visual**<br>Townscape Character: Slight-Moderate Adverse (Not Significant)<br>**Socioeconomics**<br>GVA Generation: Minor Beneficial (Not Significant) | These effects are not anticipated to interact or result in a magnification of one effect compared to that effect in isolation. As a result, a **Negligible (Not Significant)** effect is anticipated. | None required. |
| **Locally Designated Ecological Sites: Crossness LNR** | **Terrestrial Biodiversity**<br>Noise and Vibration – Minor Adverse (Not Significant)<br>Changes in air quality – Minor Adverse (Not Significant) | The Crossness LNR is likely to experience magnification of effects due to the interaction of changes to air quality, noise and vibration and surface water quality. Changes in air quality, increased noise levels, and lower water quality of the designation means the ecological value will be | None required. |

[3] Gross Value Added

| Common Receptor | Residual Effects | Intra-Project Effects | Mitigation |
|---|---|---|---|
| | **Water Environment and Flood Risk**<br>Quality of surface water features: Slight Adverse (Not Significant) | degraded during construction activities. These effects are all anticipated to be not significant and the effects as a result of noise and vibration, air quality and flood risk would occur intermittently throughout the construction phase. As a result, the magnification of these effects, while measurable compared to individual effects in isolation, would not significantly magnify the effects on the receptor. Therefore, a **Minor Adverse (Not Significant)** intra-project effect is anticipated. | |
| **Locally Designated Ecological Sites: River Thames and Tidal Tributaries SINC** | **Terrestrial Biodiversity**<br>Noise and Vibration – Minor Adverse (Not Significant)<br>Changes in Air Quality – Minor Adverse (Not Significant)<br>**Water Environment and Flood Risk**<br>Surface Water Quality, Quantity of Surface Water Features, WFD Designated Water Bodies and Flood Risk: Slight Adverse (Not Significant) | The River Thames and Tidal Tributaries SINC, is likely to experience magnification of effects due to the interaction of changes to air quality, noise and vibration and surface water quality/quantity and flood risk. These effects are all anticipated to be not significant and the effects as a result of noise and vibration, air quality and flood risk would occur intermittently throughout the construction phase. As a result, the magnification of these effects, while measurable compared to individual effects in isolation, would not significantly magnify the effects on the receptor. Therefore, a **Minor Adverse (Not Significant)** intra-project effect is anticipated. | None required. |

| Common Receptor | Residual Effects | Intra-Project Effects | Mitigation |
|---|---|---|---|
| **Business/Places of Work: Munster Joinery, Iron Mountain Records Storage Facility, ASDA Belvedere Distribution Centre and Lidl Warehouse/Belvedere Regional Distribution Centre** | **Townscape and Visual**<br>Townscape Character: Slight-Moderate Adverse (Not Significant)<br>**Population Health and Land Use**<br>Effects on Terrestrial Businesses (Munster Joinery): Major Adverse (Significant)<br>Effects on Terrestrial Businesses (Iron Mountain Records Storage, ASDA Belvedere Distribution Centre, Lidl Belvedere Regional Distribution Centre): Minor Adverse (Not Significant)<br>**Socio-economics**<br>GVA Generation: Minor Beneficial (Not Significant) | The receptors will likely experience magnification of effects due to the interaction the effects on townscape and terrestrial businesses. With the exception of Munster Joinery (which is subject to demolition but not yet certainty on relocation), these effects are all not significant. As a result, the magnification of these effects, while measurable compared to individual effects in isolation, would not significantly magnify the effects on the receptors. Therefore, a **Minor Adverse (Not Significant)** intra-project effect is anticipated. | None required. |
| **Business/Place of Work: Others within 1km of Site** | **Townscape and Visual**<br>Townscape Character: Slight-Moderate Adverse (Not Significant) | These effects are not anticipated to interact or result in a magnification of one effect compared to that effect in isolation due to the nature of the impacts. As | None required. |

| Common Receptor | Residual Effects | Intra-Project Effects | Mitigation |
|---|---|---|---|
| | **Socio-economics**<br>GVA Generation: Minor Beneficial (Not Significant) | a result, a **Negligible (Not Significant)** effect is anticipated. | |
| **PRoW: FP1, FP2 and FP4** | **Townscape and Visual**<br>Visual Amenity:<br>Moderate Adverse (significant)<br>**Population Health and Land Use**<br>Effects on Walkers and Cyclists:<br>FP1: Minor Adverse (Not Significant)<br>FP2 and FP4: Moderate Adverse (Significant) | PRoW receptors will experience magnification of effects as a result of the interaction on recreational experience of the receptors and visual amenity from these receptors. The factors used to determine these effects, visual amenity for recreational users and the overall experience of recreational users (as considered in **Chapter 14: Population Health and Land Use (Volume 1)**), are already similar in nature. As a result, the potential for interaction is limited due to similar considerations between each effect in each assessment. As a result, a **Negligible (Not Significant)** intra-project effect is anticipated. | None required. |
| **PRoW: England Cost Path, FP3 and NCN1** | **Townscape and Visual**<br>Visual Amenity:<br>Slight-Moderate Adverse (Not Significant)<br>**Population Health and Land Use**<br>Effects on Walkers and Cyclists: | PRoW receptors will experience magnification of effects as a result of the interaction on recreational experience of the receptors (as considered in **Chapter 14: Population Health and Land Use (Volume 1)**) and visual amenity from these receptors. The factors used to determine these effects, visual amenity for recreational users and experience of recreational users, are already similar in nature. As a | None required. |

| Common Receptor | Residual Effects | Intra-Project Effects | Mitigation |
|---|---|---|---|
| | Moderate Adverse (Significant) | result, the potential for interaction is limited due to similar considerations between each effect in each assessment. As a result, a **Negligible (Not Significant)** intra-project effect is anticipated. | |
| **Users of Accessible Open Land** | **Townscape and Visual**<br>Effects on Townscape Character: Slight-Moderate adverse (Not Significant)<br>Effects on Visual Amenity: Moderate Adverse (Significant)<br>**Population Health and Land Use**<br>Effects on Terrestrial Recreation: Moderate Adverse (Significant) | Users of Accessible Open Land are likely to experience magnification of effects on human receptors (recreational use), due to the interaction between effects on townscape character, visual amenity and terrestrial recreation. The recreational experience of the designation will be degraded during to construction activities and the associated temporary changes to townscape will all lead to a magnification of effects on the experience of Accessible Open Land. The multiple interacting effects on the receptor are likely to lead to a significant magnification of effects compared to any individual effect in isolation. As a result, it is anticipated a **Moderate Adverse (Significant)** intra-project effect will occur. | All practicable mitigation has been offered in **Chapter 10: Townscape and Visual (Volume 1)** and **Chapter 14: Population, Health and Land Use (Volume 1)**. |

**Table 4-2: Intra-Project Effects Assessment – Operation**

| Common Receptor | Residual Effects | Intra-Project Effects | Mitigation |
|---|---|---|---|
| **Residential Area of Belvedere** | **Air Quality**<br>Slight Adverse (Not Significant)<br>**Noise and Vibration**<br>Operational Noise: Minor Adverse (Not Significant)<br>**Townscape and Visual**<br>Visual Amenity: Slight-Moderate Adverse (Not Significant) (Year 1) | Residents of Belvedere will experience magnification of effects due to the operational Proposed Scheme. The changes in air quality, increased operational noise and affected visual amenity would interact measurably but not result in a magnification beyond a local level nor significantly elevate the level of magnitude of effect compared to an individual effect in isolation. As this would not result in a significant magnification of effect, a **Minor Adverse (Not Significant)** intra-project effect is anticipated. | None required. |
| **Residential Area of Thamesmead** | **Air Quality**<br>Slight Adverse (Not Significant)<br>**Townscape and Visual**<br>Visual Amenity: Slight Adverse (Not Significant) (Year 1) | Residents of Thamesmead will experience magnification of effects due to the operational Proposed Scheme. The changes in air quality and affected visual amenity have limited and localised potential for interaction. The effects on air quality would be spread out across Thamesmead while those on visual amenity would be very localised. As this would not result in a significant magnification of effect, a **Minor Adverse (Not Significant)** intra-project effect is anticipated. | None required. |

| Common Receptor | Residual Effects | Intra-Project Effects | Mitigation |
|---|---|---|---|
| **Hospitality Receptors: Travelodge London Belvedere** | **Air Quality**<br>Slight Adverse (Not Significant)<br>**Noise and Vibration**<br>Operational Noise (C5): Minor Adverse (Not Significant)<br>**Townscape and Visual**<br>Townscape Character: Slight-Moderate Adverse (Not Significant) (Year 1) | The Travelodge London Belvedere is likely to experience magnification of effects due to the interaction of air quality, operational noise and townscape character effects. In all cases, these effects are acting in a localised context, and their interaction would not lead to a significant magnification of effects, resulting in a **Minor Adverse (Not Significant)** intra-project effect. | None required. |
| **Hospitality Receptors: The Morgan Public House and Starbucks Drive Thru** | **Air Quality**<br>Slight Adverse (Not Significant)<br>**Townscape and Visual**<br>Townscape Character: Slight-Moderate Adverse (Not Significant) (Year 1) | The receptors are likely to experience magnification of effects due to the interaction of air quality and townscape effects. In all cases, these effects are acting in a localised context, and their interaction would not lead to a significant magnification of effects, resulting in a **Minor Adverse (Not Significant)** intra-project effect. | None required. |
| **Locally Designated Ecological Sites: Crossness LNR** | **Terrestrial Biodiversity**<br>Changes in Air Quality: Up to Moderate Adverse (Significant) | The Crossness LNR is likely to experience magnification of effects due to the interaction of changes to air quality and surface water quality. Changes in air quality and the potential for polluted run-off to be generated by the Proposed Scheme | None required. |

| Common Receptor | Residual Effects | Intra-Project Effects | Mitigation |
|---|---|---|---|
| | **Water Environment and Flood Risk**<br>Quality of surface water features: Slight Adverse (Not Significant) | means the ecological value of the designation will be degraded during operational activities. However, this magnification is not anticipated to be significant. The effects as a result of changes in air quality are already anticipated to be significant. Meanwhile, the effects on surface water quality, as a result of potential polluted run-off to be generated by the Proposed Scheme are temporary, indirect, and short term. As a result, their interaction would not lead to a magnification of effects, resulting in a **Minor Adverse (Not Significant)** intra-project effect. | |
| **Locally Designated Ecological Sites: River Thames and Tidal Tributaries SINC** | **Terrestrial Biodiversity**<br>Changes in Air Quality: Up to Moderate Adverse (Significant)<br>**Water Environment and Flood Risk**<br>Surface Water Quality, Quantity of Surface Water Features, WFD Designated Water Bodies and Flood Risk: Minor Adverse (Not Significant) | The River Thames River Thames and Tidal Tributaries SINC, is likely to experience magnification of effects due to the interaction of changes to air quality, noise and vibration and surface water quality/quantity and flood risk. These effects are all anticipated to be not significant with an exception to changes in air quality. The receptor itself is very large and the magnification of these effects, while measurable, are likely to occur locally within the marine environment (the River Thames) around the Proposed Scheme. Therefore, the resulting intra-project effect is not anticipated to be significant and a **Minor Adverse (Not Significant)** intra-project effect is appraised. | None required. |

| Common Receptor | Residual Effects | Intra-Project Effects | Mitigation |
|---|---|---|---|
| **Business/Places of Work: Munster Joinery, Iron Mountain Records Storage Facility, ASDA Belvedere Distribution Centre and Lidl Warehouse/Belvedere Regional Distribution Centre** | **Air Quality**<br>Slight Adverse (Not Significant)<br>**Townscape and Visual**<br>Townscape Character: Slight-Moderate Adverse (Not Significant) (Year 1) | The receptors are likely to experience magnification of effects due to the interaction of air quality and townscape effects. In all cases, these effects are acting in a localised context, and their interaction would not lead to a significant magnification of effects, resulting in a **Minor Adverse (Not Significant)** intra-project effect. | None required. |
| **PRoW: FP1, FP2 and FP4** | **Air Quality**<br>Slight Adverse (Not Significant)<br>**Townscape and Visual**<br>Visual Amenity: Moderate Adverse (Significant) (Year 1)<br>**Population Health and Land Use**<br>Effects on Walkers and Cyclists: Minor Adverse (Not Significant) | PRoW are likely to experience magnification of effects due to the interaction of the effects on air quality, visual amenity on users of the receptors, and on walkers and cyclists. The factors used to determine these effects, visual amenity for recreational users and the overall experience of walkers and cyclists (as considered in **Chapter 14: Population Health and Land Use (Volume 1)**), are already similar in nature. As a result, the potential for interaction is limited due to similar considerations between each effect in each assessment. Furthermore, the not significant nature of the air quality would not significantly magnify the overall effects compared to the significant adverse effects on visual amenity or effects on walkers and | None required. |

| Common Receptor | Residual Effects | Intra-Project Effects | Mitigation |
|---|---|---|---|
| | | cyclists in isolation. A **Minor Adverse (Not Significant)** intra-project effect is anticipated. | |
| **ProW: England Coast Path, FP3 and NCN1** | **Air Quality**<br>Slight Adverse (Not Significant)<br>**Townscape and Visual**<br>Visual Amenity:<br>Slight-Moderate Adverse (Not Significant) (Year 1)<br>**Population Health and Land Use**<br>Effects on Walkers and Cyclists: FP3 Only - Minor Adverse (Not Significant) | PRoW are likely to experience magnification of effects due to the interaction of the effects on air quality, visual amenity on users of the receptors, and on walkers and cyclists of FP3. The factors used to determine these effects, visual amenity for recreational users and the overall experience of walkers and cyclists (as considered in **Chapter 14: Population Health and Land Use (Volume 1)**), are already similar in nature. As a result, the potential for interaction is limited due to similar considerations between each effect in each assessment. Furthermore, the not significant nature of the air quality would not significantly magnify the overall effects compared to the significant adverse effects on visual amenity or effects on walkers and cyclists in isolation. A **Minor Adverse (Not Significant)** intra-project effect is anticipated. | None required. |
| **Users of Accessible Open Land** | **Air Quality**<br>Slight Adverse (Not Significant)<br>**Townscape and Visual** | The Accessible Open Land is likely to experience magnification of effects due to the interaction of effects from air quality, townscape and visual that are localised in nature on human receptors (recreational use). However, the impacts on visual amenity are direct and permanent, and would occupy a large | All practicable mitigation has been offered in **Chapter 5: Air Quality (Volume 1)**, and **Chapter** |

| Common Receptor | Residual Effects | Intra-Project Effects | Mitigation |
|---|---|---|---|
| | Effects on Townscape Character: Slight-Moderate Adverse (not significant) (Year 1)<br><br>Effects on Visual Amenity: Large Adverse (Significant) (Year 1) | portion of the views. This interaction between multiple interacting effects with the higher magnitude of visual amenity impacts is likely to lead to significant magnification of effects compared to any individual effect in isolation. Therefore, a **Moderate Adverse (Not Significant)** intra-project effect is anticipated. | **10: Townscape and Visual (Volume 1)**. |

# 5. REFERENCES

[1] UK Government. (2017). 'The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017'. UK Statutory Instruments. No. 572. Available at: https://www.legislation.gov.uk/uksi/2017/572/contents/made

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