

#### **TABLE OF CONTENTS**

### 1.0 INTRODUCTION

- 1.1 Preamble
- 1.2 EIA Process
- 1.3 Need for Environmental Impact Assessment Report Screening
- 1.4 Purpose of the Environmental Impact Assessment Report
- 1.5 Scoping of the Environmental Impact Assessment Report
- 1.6 EIAR Methodology and Format
- 1.7 Consultation
- 1.8 EIAR Study Team and Guarantee of Competency and Independence

### 2.0 SITE LOCATION AND CONTEXT

- 2.1 Location of the Subject Site
- 2.2 Description of the Subject Site and Context
- 2.3 Existing Quarry
- 2.4 Surrounding Area
- 2.5 Planning Context
- 2.6 Planning History

# 3.0 DESCRIPTION OF DEVELOPMENT

- 3.1 Introduction
- 3.2 Summary of Proposed Development and Rationale
- 3.3 The Quarrying Process
- 3.4 Phasing of Works
- 3.5 Potential for Environmental Impacts
- 3.6 Quarrying Operations
- 3.7 Planning History

### 4.0 EXAMINATION OF ALTERNATIVES

- 4.1 Rationale for the Proposed Development
- 4.2 Main Alternatives Studied
- 4.3 Conclusion

### 5.0 POPULATION AND HUMAN HEALTH

- 5.1 Introduction
- 5.2 Methodology
- 5.3 The Proposed Development
- 5.4 Receiving Environment
- 5.5 Potential Impacts on Human Beings
- 5.6 Socio-Economic Impacts
- 5.7 'Do Nothing' Impact
- 5.8 Mitigation Measures
- 5.9 Residual Impacts



#### 6.0 BIODIVERSITY

- 6.1 Introduction
- 6.2 Proposed Development
- 6.3 Methodology
- 6.4 Results
- 6.5 Potential Ecological Impacts

### 7.0 SOILS AND GEOLOGY

- 7.1 Introduction
- 7.2 Assessment Methodology
- 7.3 Existing Environment
- 7.4 Direct Impacts of Development on Receiving Environment
- 7.5 Mitigation Measures
- 7.6 Residual Impacts
- 7.7 Interaction with Other Impacts
- 7.8 Do Nothing Scenario

# 8.0 HYDROLOGY AND HYDROGEOLOGY

- 8.1 Introduction
- 8.2 Assessment Methodology
- 8.3 Existing Environment
- 8.4 Review of the Subject Development
- 8.5 Site Investigations
- 8.6 Conceptual Groundwater Model
- 8.7 Impact Assessment
- 8.8 Conclusions
- 8.9 Bibliography and References

### 9.0 AIR AND CLIMATE

- 9.1 Introduction
- 9.2 Characteristics of the Proposed Development
- 9.3 Methodology
- 9.4 The Receiving Environment
- 9.5 Identification of Likely Significant Impacts
- 9.6 Air Quality Impact Assessment
- 9.7 Do Nothing Scenario
- 9.8 Human Health Impacts
- 9.9 Residual Impacts
- 9.10 Interactions Arising
- 9.11 Monitoring
- 9.12 Accidents or Unplanned Events
- 9.13 References

# 10.0 NOISE AND VIBRATION

- 10.1 Introduction
- 10.2 Characteristics of the Proposed Development



- 10.3 Methodology
- 10.4 The Receiving Environment
- 10.5 Identification of Likely Significant Impacts
- 10.6 Noise and Vibration Impact Assessment
- 10.7 Do Nothing Scenario
- 10.8 Human Health Impacts
- 10.9 Residual Impacts
- 10.10 Interactions Arising
- 10.11 Monitoring
- 10.12 Accidents or Unplanned Events
- 10.13 References

## 11.0 MATERIAL ASSESTS - WASTE

- 11.1 Introduction
- 11.2 Methodology
- 11.3 Waste Management Policy and Regulation
- 11.4 The Receiving Environment
- 11.5 The Proposed Development
- 11.6 The Predicted Impact of the Proposed Development
- 11.7 Remedial and Mitigation Measures
- 11.8 Cumulative Impacts
- 11.9 Residual Impacts
- 11.10 Interactions Arising
- 11.11 Conclusions

### 12.0 TRAFFIC

- 12.1 Introduction
- 12.2 Methodology
- 12.3 Receiving Environment
- 12.4 Impacts
- 12.5 Baseline Scenario
- 12.6 Prevention and Mitigation Measures
- 12.7 Assessment of Impacts
- 12.8 Interactions with other Environmental Attributes
- 12.9 Residual Impacts

### 13.0 ARCHAEOLOGY

- 13.1 Introduction
- 13.2 Methodology
- 13.3 Receiving Environment
- 13.4 Characteristics of the Proposed Development
- 13.5 Potential Impact of the Proposed Development
- 13.6 References

# 14.0 LANDSCAPE AND VISUAL IMPACT

- 14.1 Introduction
- 14.2 Statement of Authority



- 14.3 Assessment Methodology
- 14.4 Landscape and Visual Policy Context and Designations
- 14.5 Existing Environment
- 14.6 Mitigation and Restoration Measures
- 14.7 Identification of Viewshed Reference Points as a Basis for Assessment
- 14.8 Impact Assessment
- 14.9 Cumulative and In-combination Impact
- 14.10 Interactions with other Environmental Attributes
- 14.11 Residual Impacts
- 14.12 Monitoring
- 14.13 Difficulties Encountered

## 15.0 INTERACTIONS AND CUMULATIVE IMPACTS

- 15.1 Introduction
- 15.2 Inter-relationships/Interactions
- 15.3 Cumulative Impact
- 15.4 'Do Nothing' Scenario
- 15.5 Mitigation and Monitoring Measures

### 16.0 MITIGATION

- 16.1 Examination of Alternatives
- 16.2 Population & Human Health
- 16.3 Biodiversity
- 16.4 Soils and Geology
- 16.5 Water (Hydrology / Hydrogeology)
- 16.6 Air and Climate
- 16.7 Noise and Vibration
- 16.8 Landscape and Visual Impact
- 16.9 Traffic
- 16.10 Archaeology
- 16.11 Waste and Material Assets
- 16.12 Interactions

# 17.0 DIFFICULTIES ENCOUNTERED IN COMPILING ANY SPECIFIED INFORMATION

### **LIST OF APPENDICES**

- Appendix 1.1 Qualifications Sheet
- Appendix 1.2 Response from GSI
- Appendix 3.1 Environment Management Manual
- Appendix 7A Historic BH Logs
- Appendix 7B 2021 Site Investigation Results Monitoring Wells & Production Wells Detail
- Appendix 7C Geophysical Report Apex (2022)
- **Appendix 8.A Previous Planning Determinations**
- Appendix 8.B IE Licence P0487-07
- Appendix 8.C Desktop Hydrology & Hydrogeology Reports
- Appendix 8.D Long Term Local Area Groundwater Levels
- Appendix 8.E Site Investigation Results: Production Well Logs



Appendix 8.F Mathematical Analysis of Site Investigation Tests

Appendix 8.G Water Quality Analysis Result Tables & Certificates of Analysis

Appendix 8.H CWSL Reports for Rain and Flow Monitoring

Appendix 8.1 Site Specific Flood Risk Assessment (Envirologic, 2022)

Appendix 9.1 Windroses for Mullingar

Appendix 10.1 Noise Monitoring Locations NSR1 – NSR9

Appendix 12.1 TRICS Data

Appendix 12.2 Traffic Survey Data

Appendix 12.3 Visibility Splays

Appendix 12.4 Junction Capacity Results

Appendix 14.1 Kinnegad Quarry Deepening LVIA Photomontages

Appendix 16.1 Bat Management Plan for Lagan Cement at Killaskillen

Appendix 16.2 Lagan Cement Biodiversity Action Plan