

Contents

Introduction	3-1
Need for the Development	3-1
Essential Aggregates: Providing for Ireland’s needs to 2040	3-2
Meath County Development Plan 2021-2027	3-3
Construction Aggregates	3-4
Do Nothing Alternative	3-5
Alternative Sources of Aggregates	3-5
Alternative Locations	3-5
Alternative Designs / Layouts	3-7
Residence Consideration	3-7
Ecological Consideration.....	3-7
Landscape & Visual Consideration.....	3-7
Alternative Processes	3-7

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Meath County Council - Viewing Purposes Only!

Introduction

- 3.1 This Environmental Impact Assessment Report (EIAR) provides supporting information to accompany a planning application to Meath County Council submitted by BD Flood Unlimited Company (referenced as BD Flood within the EIAR), in respect of a proposed development at their existing sand and gravel pit at Baltrasna, Murrens and Annagh townlands, Oldcastle, Co. Meath. The overall Sand & Gravel Pit site is familiarly known as and referred to as the Murrens. The application site is located with the Murrens townland.
- 3.2 The proposed development being applied for under this planning application will consist of:
- Extraction of sand and gravel (dry working) over a lateral extension extraction area of c. 4.2 hectares adjacent to the existing sand and gravel pit development permitted by planning permission KA/141129 (ABP PL17.245257) with access gained from the existing pit.
 - Restoration of the lands will form part of the overall adjacent sand and gravel pit restoration site, returning the lands to a combination of agricultural grazing and beneficial ecological habitat.
 - The development will be commensurate with the life of existing site permission (P. Ref. KA14/1129 & ABP PL.17.245257) which is due to expire in December 2036.
 - All associated site ancillary works within an overall application area of c. 5.8 hectares.
- 3.3 In the consideration of alternatives below, the need for the development, the do-nothing alternative and the issues of alternative sources of aggregates and alternative site locations have been addressed.

Need for the Development

- 3.4 Project Ireland 2040 was published in February 2018 and is the overarching policy and planning framework for the social, economic and cultural development of the country for the next 20 years and further. It includes the National Development Plan: a ten-year strategy for public capital investment to 2027 and the 20-year National Planning Framework.
- 3.5 The National Planning Framework 2018 is the high-level strategic plan for influencing future growth and development up to the year 2040. The framework is intended to guide public and private investment, to protect and enhance the environment and create and promote opportunities.
- 3.6 The National Planning Framework states that:
- “Extractive industries are important for the supply of aggregates and construction materials and minerals to a variety of sectors, for both domestic requirements and for export. The planning process will play a key role in realising the potential of the extractive industries sector by identifying and protecting important reserves of aggregates and minerals from development that might prejudice their utilisation. Aggregates and minerals extraction will continue to be enabled where this is compatible with the protection of the environment in terms of air and water quality, natural and cultural heritage, the quality of life of residents in the vicinity, and provides for appropriate site rehabilitation”.*
- 3.7 The extractive industries are considered important not just as a source of supply to a variety of sectors both domestic and for export, but extractive industries supply aggregates that are an essential requirement for Irelands future. Project 2040 will not happen without a secure supply of aggregates.

- 3.8 The recovery in output in the Irish construction industry since 2013 has led to increased demand for construction aggregates and it is anticipated that demand will increase further in coming years following the pressure to increase residential housing output and the planned spend of almost €116 billion between the State and State-owned commercial companies under the National Development Plan and Project Ireland 2040 in the ten years from 2018 to 2027.
- 3.9 It is estimated that each new residential house typically requires 300-400 tonnes of aggregate. Every new school typically requires some 3,000 tonnes of aggregates and every 1km of roadway requires up to 30,000 tonnes of aggregates. On average each person within the EU consumes 6 tonnes of aggregate per year, however the current demand for aggregates in Ireland is twice that figure, at 12 tonnes per capita per year.
- 3.10 Based upon an average consumption rate of c. 350 tonnes of aggregates for every new house, the proposed extension development at the Murrens is equivalent to supplying enough building aggregates to construct nearly 2,500 houses, albeit this material is already permitted by the extant planning permission KA14/1129 & ABP PL.17.245257.

Essential Aggregates (2019 report): Providing for Ireland's needs to 2040

- 3.11 It is estimated that Ireland will need to produce an estimated 1.5 billion tonnes of aggregates to meet housing and infrastructure targets set down under the Government's Project Ireland 2040 plan, according to the Irish Concrete Federation¹ (ICF) in a major publication issued by them in October 2019. This report is provided in **Appendix B** of the accompanying Planning Report.
- 3.12 "*Essential Aggregates: Providing for Ireland's needs to 2040*" is an industry led call for Government to ensure that Ireland's future supply of aggregates (crushed rock, sand and gravel) is planned, monitored and managed in a sustainable manner, to provide for Ireland's future infrastructure development.
- 3.13 The report identifies that demand for aggregates in Ireland at 12 tonnes per capita is twice the current EU average, due to Ireland's infrastructural deficit, dispersed pattern of settlement and resulting large road network. The Federation warns that scarcities of some aggregates are now emerging in the Eastern and Midland regions, due to natural shortages, a lack of forward planning and delays and other shortcomings in the planning process. The report also highlights that:

"Ireland has abundant natural reserves of high-quality aggregates, but their future accessibility must be planned for and protected by Government. A lack of future planning and priority in the planning process and delays in achieving prospective quarry planning permissions will result in future shortages in the supply of some types of construction aggregates in certain areas of the country. The future supply of aggregates needs to be prioritised and addressed in a planned manner if we are to reach the ambitious construction targets as laid out in Project Ireland 2040".

Essential Aggregates (2025 Report): An Evidence-Based Assessment to Inform Ireland's Planning Policy

- 3.14 As a follow up to the 2019 report, the ICF commissioned RPS to examine current replenishment rates of authorised aggregate reserves in Ireland to determine the current timeframes for planning decisions and provide recommendations to facilitate the long-term sustainably supply of essential aggregates with the State in order to deliver on housing and

¹ BD Flood is a member of the ICF

infrastructure needs, upon which the national strategic plans such as 'Project Ireland 2040' and 'Housing for All' are highly dependent upon.

- 3.15 The report is provided in **Appendix C** of the accompanying Planning Report for reference, with its headline finding on aggregate supply noting a worrying trend downwards:

“Over the past eight years (2017-2024) the ‘replenishment’ of aggregate reserves has been running behind annual consumption. On average, only 61% of the annual consumption has been replenished by means of new planning authorisations.

At current levels of land area authorisation, the replenishment rate of authorised aggregates will fall to 52% over the 2025 – 2040 period as demand for aggregates increases due to Ireland’s growing population.

Planning permission has been refused for over half the volume (56%) of aggregate extraction for which authorisation was sought over the 2017 – 2024 period within the Greater Dublin Area (Dublin, Kildare, Meath and Wicklow).

At current levels of land area authorisation, the replenishment rate of authorised aggregates will be 24% over the 2025 – 2040 period in the Greater Dublin Area.”

Meath County Development Plan 2021-2027

- 3.16 The Meath County Development Plan (MCDP) 2021-2027 is the statutory plan detailing the development objectives/policies of the authority, covering the application area. The plan was originally adopted on 22nd September 2021 and was superseded by the Consolidated version of the Meath County Development Plan 2021-2027 (incl. Variations 1 & 2 adopted on the 13th May 2024 & Variation 3 adopted on the 27th January 2025). The aim of the plan is to provide a positive vision for Meath which will enable the county to continue to make a significant contribution to national economic recovery by promoting sustainable development and facilitating stable economic growth thus delivering long term benefits for the citizens of the county.

- 3.17 Several references are made within the Plan to the importance of and the contributions made by the extractive industry:

- 3.18 In Section 4.6.1 under the main heading of Changing Economic Climate (Section 4.6) it states:

“While much attention has been given to FDI and the successes achieved since the preparation of the Economic Development Strategy, the more traditional economic base of the count must continue to be supported, including extractive activities (mining and quarrying), meat processing, other agri-food, engineering and furniture making etc. ...”

- 3.19 In Section 4.11.1 under the heading of Rural Enterprise, it states that:

“It is the policy of the Council to support the location of once off medium to large-scale rural enterprise if it is demonstrated, to the satisfaction of the council, that the enterprise can be more readily accommodated in a rural setting than provided in a designated settlement centre and subject to standard development management considerations being applied. It is equally accepted that there are certain types of rural enterprises, especially those that involve processing of natural resources, which serve rural communities which have a critical role to play in sustainable rural development. There are already a number of successful enterprises of this nature existing in the County in the food processing and development areas, as well as the extractive industry.”

- 3.20 Section 9.11 of the MCDP Extractive Industry and Building Materials Production, whilst recognising the need and importance of extractive industries in terms of supply of aggregate materials for the construction sector and for delivering transport infrastructure projects, there

is the potential for conflict in the operation of these industries with wider environmental issues which needs careful consideration.

“Meath contains a variety of natural resources such as building raw materials in the form of sand, gravel, stone reserves including high purity limestones and shale used in cement and magnesia manufacture, and base metal deposits. The potential of these resources to underpin construction output and provide employment and economic growth in the local and regional economy is recognised as is the need to exploit such resources in an environmentally sound and sustainable manner.”

- 3.21 The extractive industries are considered an essential source of supply to meet the demands to not only maintain existing infrastructure but to also allow for new infrastructure in order that the future economic development needs of the county are met.

Construction Aggregates

- 3.22 Natural rock, sands and gravels (called aggregate in the extraction industry) are important, valuable and highly prized resources in the construction materials sector. The aggregates have a use in almost all residential, commercial, retail and industrial building, including the manufacture of ready-mixed concrete, mortar, blocks, pipes, pre-cast floors, slabs, walls and tanks, construction of road foundations, production of road surfacing materials (asphalt), use as rail bedding, backfill to structures and trench support for water supply / wastewater pipes, use for surface water and land drainage etc.
- 3.23 The supply of high-quality aggregates has presented problems for the Irish construction sector in the past and continues to do, principally as a consequence of;
- the relative shortage of such permitted resources nationally;
 - their distance from key markets;
 - their occurrence in environmental sensitive areas; and
 - deficiencies in connecting road transport infrastructure.
- 3.24 The construction end-use ultimately determines specific requirements for the grade and quality of the aggregates to be used in construction. The sand and gravel which occurs at the site is of a quality that is suitable for multiple uses including concrete, mortar, and asphalt production. The continued and ever-increasing regulation of the construction industry and construction materials sector is also driving the requirement and demand for high-grade construction materials.
- 3.25 There is a portion (c. 4 hectares) of the existing permitted development of P. Ref. KA/141129 / ABP PL17.245257, located in the southwest area of the permitted extension which will now not be extracted due to the poor quality of the materials that has been tested to date. This is shown as Area 1 on **Figure 1-3**.
- 3.26 This planning application site (shown as Area 2 on **Figure 1-3**) is a new proposed extension extraction area of c. 4.2 hectares that will effectively be a replacement source of sand and gravel materials with extraction to be commensurate with the life of P. Ref. KA14/1129 / ABP PL17.245257 which is due to expire in December 2036.
- 3.27 The existing site is located in an area favourable to extraction activities, due to, *inter alia*:
- extension area is adjacent to existing and permitted extractive site and will effectively be operated within the same confines of planning permission KA14/1129 / ABP PL17.245257, albeit over a partially different extraction area to that originally permitted;
 - previous history of sand and gravel extraction at this site and in the general geographic location;

- application site is a proven source of high-quality sand and gravels;
- ongoing and continued increases in the level of construction and development activity in the midlands and eastern regions is generating ever increasing demand for construction materials;
- within an appropriate topographic setting i.e. well screened from surrounding areas;
- remote location, but with access to the regional and national roads network and a low annual extraction rate will minimise HGV traffic movements on the local road network;
- best practice industry standard extraction methods can be used; and
- the proposed development will be carried out by a long established and experienced operator in the extractive and ancillary concrete manufacturing industry with a proven track record in planning and environmental compliance within their overall pit / quarry portfolio.

Do Nothing Alternative

- 3.28 If the proposed development does not take place, the extension lands would remain in use for agricultural/forestry purposes, and there would be a loss of a proven and valuable aggregate supply within the lands. The existing pit would continue to operate under the confines of P. Ref. KA14/1129 / ABP PL17.245257, with extraction ceasing prior to the expiry date in 2036 due to the portion of lands (Area 1) that will no longer be extracted.

Alternative Sources of Aggregates

- 3.29 In the medium term there are no real alternatives to the current land-based sources of construction aggregates.
- 3.30 Until such time as end of waste criteria in respect of construction & demolition (C&D) materials is formally implemented, these materials cannot be relied upon and for the foreseeable future there are no real alternatives to primary naturally won aggregates.
- 3.31 Notwithstanding the above, the volume of C&D waste suitable for recycling into secondary aggregates would be considered very low in comparison to the overall demand for aggregates. The demographic spread of the population results in only the large urban centres potentially being capable of generating sufficient volumes of construction and demolition (C&D) waste to justify a commercial operation producing secondary aggregates going forward.
- 3.32 In the longer term (>25 years), there may be some scope for extraction of minerals from marine sources.
- 3.33 In the absence of significant volumes of aggregates from recycled / secondary and marine sources, it is clear that land-based deposits (such as the proven reserves at the Murrens) will continue to be the main source of construction aggregates in Ireland, including Meath and the wider midlands and eastern regions.

Alternative Locations

- 3.34 This development is not comparable to a factory or other commercial enterprise that can be located at many potential locations. It is a resource-based development and therefore the aggregates can only be worked (extracted) where they are present in-situ, as acknowledged in Section 9.11 of the MCDP 2021-2027.

- 3.35 It is further recognised within paragraph 4.13 of the *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment* prepared by the Department of Housing, Planning and Local Government in August 2018:
- “For example, some projects may be site specific so the consideration of alternative sites may not be relevant.”²**
- 3.36 Aggregates can only be worked where they exist and where the environmental effects of working them can be minimised. However, this is not the only prerequisite which determines a suitable location for an aggregates site. Others include a willing vendor, distance from market, required quality and quantity to justify capital investments, etc. It is usually the case that a number of these prerequisites are not met, and the alternative is discounted.
- 3.37 The provision of aggregates is essential to meet the needs of society. As reserves of sand and gravel and rock are finite resources and eventually become exhausted at their location, it is therefore necessary for quarry operators to continually seek out new greenfield sites in tandem with maximising or extending extraction at existing established sites. Both options are essential and required to replace existing supplies that are being worked out and to provide a security of supply of aggregates and building materials to the construction sector.
- 3.38 At the current time, the application site is considered the most suitable replacement sand and gravel location available to the applicant, given its proximity to the existing extraction and processing operations.
- 3.39 The existing site at the Murrens is an established pit in a relatively remote location and has a local road network providing access to and from it that has proven to be suitable for this type of development previously.
- 3.40 Notwithstanding the continual search for suitable development sites, the lands at the Murrens application site are proven to contain an economically viable volume of quality sand and gravel reserves. The site is deemed appropriate for the following reasons:
- suitability of the economic sand and gravel reserve;
 - extent of the lands over which the applicant has an interest in, and which are available for development;
 - access and road infrastructure at the existing pit with proximity to the national road network and key transport corridors, namely the M4/M3 motorways and R195/R154 regional roads;
 - low environmental impact: topography and surrounding forestry assists with screening of the development (no significant visual intrusion), no recorded monuments within the application area; and not within a designated ecological or landscape area;
 - detailed water and ecology studies indicate the development can proceed without impacts on the surrounding hydrogeological and ecological regimes.
- 3.41 On the basis of the above, it is considered that the proposed extension development of the existing pit, subject to implementation of best environmental management practice and compliance with appropriate planning controls (i.e. planning conditions and standard emission limit values for the sector) can be carried out without any significant environmental impacts on the surrounding area.

² Guidelines for Planning Authorities and An Bord Pleanála on carrying out EIA, August 2018

Alternative Designs / Layouts

- 3.42 Alternative designs, including alternative layouts within the site were considered with particular attention being paid to the location of the processing plant and ancillary facilities in general being located away from the public road and nearest residences where possible, along with the direction of working within the extension area.
- 3.43 The design layout that was chosen for the proposed extension area is considered to best minimise the potential impacts on the environment from noise, dust, visual and landscape impacts, through the design proposed. This will be achieved through extraction operations commencing on the floor of the existing pit and gradually advancing southeast, thereby using the existing face as screen.

Residence Consideration

- 3.44 The proposed extraction scheme will be worked at distances in excess of c. 260m from the closest residential properties located to the southeast of the application site. The pit will be worked in a southeast direction towards the nearest residences, using the pit face as a screening barrier. This, along with the intervening dense hedgerows and forestry, both along the application site boundary and within the applicants landholding will provide dust, acoustic and visual screening. Further to this, no extraction operations are planned for Saturdays, Sundays or Public Holidays.

Ecological Consideration

- 3.45 It is proposed to work the sand and gravel pit from the existing pit floor in a southeasterly direction so that it will lead only to a gradual land take over a period of c. 10-11 years³, instead of immediate overburden stripping and extraction over the full extraction footprint. This gradual land take will not have a dramatic or sudden impact on the fauna of the area, instead it will allow them to adapt to the pit workings and relocate to adjoining forestry and agricultural lands for the duration of the proposed development. There is a single section of hedgerow (c. 140m in length) to be removed at the onset of extraction activities, that will be replaced during the restoration stage.

Landscape & Visual Consideration

- 3.46 The proposed pit will be worked in mainly a southeasterly direction and in a gradual manner in order to minimise the land disturbance at any one time. Established forestry to the east and southeast of the application site within the applicants landholding boundary will further afford full visual screening of the site from the nearest residences to the southeast and the R195 regional road. There is no requirement for any processing plant, or buildings as part of this planning application.
- 3.47 Perimeter mature hedgerows around the northern, eastern and southern boundaries will be permanently retained.

Alternative Processes

- 3.48 BD Flood are a company with expertise and experience in the field of quarrying, aggregates production and the manufacture of value-added products.

³ Up to the expiry of the current planning permission KA14/1129 / ABP PL17.245257 due to expire in December 2036

- 3.49 As the proposed development comprises the extension of an existing pit with standard extraction and processing methods to be implemented, alternative processes are not considered relevant in this instance.