# MATERIAL ASSETS 11

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Making Sustainability Happen

## INTRODUCTION

### Background



- 11.1 This Chapter of the Environmental Impact Assessment Report (EIAR) relates to the potential effects on material assets of the proposed increase in permitted soil and stone intake capacity and extended operational life of the existing soil recovery facility operated by Kilsaran Concrete Unlimited Company ('Kilsaran') at Halverstown, Kilcullen, Co. Kildare.
- 11.2 The proposed development provides for:
  - an increase in the permitted total intake of soil and rock waste to the existing licensed recovery facility, from 1.2 million tonnes to 2.06 million tonnes. The additional intake to the facility will comprise a mix of soil and stone managed as waste (as heretofore) and as (non-waste) by-product;
  - (ii) an extension to the permitted life of the existing facility of 3 years (to December 2029) in order to accommodate the additional soil and stone intake;
  - (iii) continued shared use of existing, co-located site facilities, structures and infrastructure (including the site office, staff welfare facilities, weighbridge (with dedicated office), wheelwash, hardstand areas, fuel storage tanks and site access road);
  - (iv) continued soil and stone intake at a rate of up to 300,000 tonnes per annum, of which no more than 95,000 tonnes (per annum) will be managed as waste;
  - (v) continued separation of any construction and demolition waste (principally concrete, metal, timber, PVC pipework and plastic) inadvertently imported to the facility, prior to removal off-site to authorised waste disposal or recovery facilities;
  - (vi) continued use of a section of the existing concrete block curing shed as a waste inspection and quarantine facility;
  - (vii) continued environmental monitoring of noise, dust and groundwater for the duration of the site recovery and restoration activities and for a short period thereafter (and in accordance with EPA waste licence requirements);
  - (viii) continued temporary stockpiling of topsoil pending its re-use as cover material for final restoration of the site; and
  - (ix) ultimate restoration of the modified final landform (entailing harrowing, topsoiling and seeding) to establish a native woodland habitat on the northern side of the access road and grassland habitat on the southern side.
- 11.3 Further detail in respect of the proposed development and the application site are provided in Chapter 1 and Chapter 2 of this EIAR.

### Scope of Work / EIA Scoping

- 11.4 According to the EPA (EPA (2003) Advice Notes on Current Practice: *"Resources that are valued and that are intrinsic to specific places are called 'material assets'. They may be of either human or natural origin and the value may arise for either economic or cultural reasons".*
- 11.5 Under Schedule 6 of the Planning and Development Regulations (2001) as amended, material assets also refer to architectural and archaeological heritage and to cultural heritage.
- 11.6 Article 3(1) of the amended EIAR Directive provides the revised headings by which an EIAR is to be written. The EPA subsequently released 'Guidelines on the Information to



be Contained in Environmental Impact Assessment Reports', which were finalised in 2022, and it sets out the information to be contained in an EIAR Material Assets chapter.

11.7 The EPA guidelines in relation to the preparation of EIAR<sup>1</sup> note the following in respect of material assets:

"Material assets can now be taken to mean built services and infrastructure. Traffic is included because in effect traffic consumes roads infrastructure."

The specific headings in the guidelines in relation to material assets refer to built services, waste management and roads / traffic.

- 11.8 Chapter 12 of this EIAR addresses architectural heritage, archaeological heritage and cultural heritage, while Chapter 14 addresses roads and traffic separate to this Chapter.
- 11.9 As a result, this material assets impact assessment focusses on existing resources pertinent to the proposed development, application site and surrounding area that are not addressed elsewhere in this EIAR, as well as likely development impacts on those resources. On this basis, it is primarily focussed on built services and waste management aspects of the proposed development. Built services are understood to refer to electricity, telecommunications, gas, water supply infrastructure and sewerage.

#### **Consultations / Consultees**

11.10 External consultation was not undertaken in the preparation of this chapter of the EIAR. There was however significant consultation with other specialist contributors to this EIA Report.

### **Contributors / Author(s)**

11.11 This chapter of the EIAR was prepared by Lynn Hassett, of SLR Consulting Ireland. Lynn Hassett. Lynn is an EIA Co-ordinator (BSc, MSc) and has experience of Environmental Impact Assessment, project management and planning, with extensive experience of carrying out EIARs throughout Ireland and the UK.

#### **Difficulties Encountered**

11.12 No limitation or difficulties were encountered in the preparation of this chapter of the EIAR.

## **REGULATORY BACKGROUND**

#### Guidelines

11.13 As outlined above, this Chapter of the EIAR has been prepared on the basis of the Guidelines on the Information to be contained in Environmental Impact Assessment Reports by the EPA (2022).

#### **Technical Standards**

11.14 There are no technical standards relevant to this section of the EIAR.

### Legislation

- 11.15 There is no specific legislation relevant to this chapter of the EIAR. However, the information provided within this chapter is informed by:
  - Section 37D and 171A of the Planning and Development Act, 2000 (as amended);
  - Section 94 and Schedule 6 of the Planning and Development Regulations, 2001 (as amended);



<sup>&</sup>lt;sup>1</sup> Environmental Protection Agency (2022). Guidelines on the Information to be contained in Environmental Impact Assessment Reports.

• European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018.

## Planning Policy and Development Control

- 11.16 This Chapter of the EIAR is informed by the National Planning Framework 2040 (NPF 2040) and the Kildare County Development Plan 2023-2029 (KCDP).
- 11.17 The Kildare County Development Plan (KCDP) 2023-2029<sup>2</sup> is the statutory plan detailing the development objectives / policies of the authority, covering the application site.
- 11.18 Chapter 15 of that plan is titled 'Development Management Standards' and identifies information that should be considered as part of a planning application for any industrial / commercial / business development, including:
  - "Availability of adequate services to cater for the development, or the ability of the applicant to provide these services in a manner which does not adversely impact on surrounding properties or the broader environment." and
  - "Proposals for the safe storage and disposal of waste in a manner which is visually and environmentally acceptable."

## **RECEIVING ENVIRONMENT**

#### **Study Area**

- 11.19 The application site comprises lands originally developed as a sand and gravel pit (to the south of the access road through the site) and lands previously only ever used for agricultural use, principally grassland (in the north-eastern part of the application site). There is an existing concrete block plant (operated by the Applicant) located to the northwest of the application site and accessed by the road running through it.
- 11.20 The application site has been developed as a soil waste recovery facility, principally to facilitate the backfill and restoration of the worked-out sand and gravel pit to levels approaching former / surrounding ground level. The application site adjoins Kilsaran's existing concrete block plant immediately to the north-west. This plant has remained in service since sand and gravel extraction ceased at the former pit and is supplied by aggregate from other pits and quarries.
- 11.21 The application site is located entirely within the townland of Halverstown, approximately 4.5 km south of Kilcullen and just over 2km north-east of Calverstown village. The site is bounded to the north by L6083 local road, by the R448 Regional Road (the former N9 National Primary Road) to the east and by farmland interspersed with one-off housing and agricultural buildings to the south and west. The application site is accessed via an existing junction and entrance leading off the R448 Regional Road.
- 11.22 The study area for the purposes of this EIAR Chapter relates to dwellings and infrastructure within 1km radius of the application site.

### **Baseline Study Methodology**

11.23 The baseline study comprises a desk-top review of online and published resources, information provided by the Applicant and information presented in other chapters of this EIAR. Ordnance Survey maps and publicly available aerial photography resources such as Google Maps were also examined.



<sup>&</sup>lt;sup>2</sup> Kildare County Development Plan 2023-2029:

https://kildarecoco.ie/AllServices/Planning/DevelopmentPlans/KildareCountyDevelopmentPlan2023-2029/Vol1Chapters1-17

## Sources of Information

- 11.24 Baseline information was obtained from the following sources:
  - Myplan.ie (http://myplan.ie/index.html);
  - Kildare County Development Plan 2023 2029;
  - Environmental topic chapters of this EIAR;
  - OS Maps;
  - Aerial photographs;
  - openstreetmap.org.

#### Site Context

- 11.25 The application site is a former sand and gravel extraction site. Kildare County Council granted planning permission in December 2018 (Planning Ref. 18/453), for an inert soil recovery facility to import c. 1,200,000 tonnes of natural materials, principally excess soil, stone and/or broken rock to backfill and restore the former sand and gravel pit void at or close to surrounding ground level and improve agricultural land. The application provided for sharing of established site facilities and services with the Applicant's concrete block plant which is co-located on the same landholding. The soil recovery facility commenced operation in 2020 and is now fully operational in accordance with the existing planning permission.
- 11.26 The application site is situated within a rural area, surrounded by largely agricultural land interspersed with one-off houses and agricultural buildings. As indicated in Figure 11-1, there are 23 receptors (principally residential dwellings) within 500m of the application site. There are further clusters of residential dwellings receptors within 1,000m of the site, principally located to the north east and the north west, also shown on Figure 11-1.

#### **Built Services**

- 11.27 There are overhead powerlines traversing the application site. Electrical power is currently provided to the application site via mains supply through the overhead line, as indicated in Figure 11-2. Electricity is the principal source of energy for office lighting and heating.
- 11.28 It is envisaged that site-based staff overseeing backfilling and recovery operations at the application site will continue to be contactable by mobile phone only and that e-mail and broadband connections to the site office will be provided via a mobile (4G) network.
- 11.29 An existing septic tank is currently used to treat waste water at the site. It is located on the landholding and outside of the application site. Effluent from the tank is discharged to ground via a percolation area. Further details of this system are set out in Chapter 7 of this EIAR.
- 11.30 Potable water is provided to the site via a pre-existing groundwater supply well in the block yard that is located outside of the application site. Residences in the vicinity of the site are on a mains water supply. Figure 11.2 shows the Irish Water mains distribution infrastructure running underneath the local roads surrounding the application site.

#### Waste Management

#### General Waste Management

11.31 Waste oils, batteries, tyres, domestic waste and scrap metal are stored on site in designated areas and collected and recycled or disposed of by an authorised waste contractor.

11-4

March 2024



#### Soil Waste Management

- 11.32 As set out earlier, development is ongoing at the application site, in compliance with the existing planning permission (Planning Ref. 18/453) and the EPA waste licence (Ref. W309-01) which provides for recovery and placement of imported soil and stone waste for backfilling and restoration purposes.
- 11.33 The procedure for acceptance and placement of imported soil and stone for backfilling and recovery purposes at the site is outlined in summary below:
  - All soil and stone imported to the facility for backfilling and recovery is weighed at the existing weighbridge. Details of each consignment brought to the site is recorded on the site register and includes, as a minimum all information required by way of the EPA Draft National by-product decision<sup>3</sup> or the EPA waste licence (and any update / review thereof), as appropriate;
  - All contractors bringing soil and stone materials to the recovery facility must hold a valid waste collection permit;
  - Visual inspection of imported materials is undertaken by the Applicant's site staff as it is imported at the weighbridge and subsequently end-tipped at active backfilling / recovery areas across the site;
  - If subsequently to placement, there is any concern about the nature of the materials imported to site, they will be re-loaded onto HGVs and re-directed to the waste inspection and quarantine facility for closer examination and inspection;
  - Should inspection or testing of suspect soil at the inspection and quarantine facility identify any unacceptable or non-inert material which cannot be accepted or recovered at the facility, it is segregated and temporarily stockpiled (quarantined) pending removal off-site by permitted waste collectors to an authorised waste disposal or recovery facility.
  - The imported soil and stone is generally placed and compacted directly at active backfilling / recovery areas so as to minimise double handling. Only if necessary for operational reasons or as a result of logistical constraints will material be stockpiled prior to placement and compaction in-situ.

#### **Local Receptors**

- 11.34 The application site is surrounded by agricultural land that is interspersed with one-off housing and agricultural buildings.
- 11.35 The closest residential dwellings to the application site include a dwelling located beside (immediately south of) the existing site entrance, which is owned by the Applicant (and currently occupied), and three properties immediately to the south of the boundary. The closest of these is noted as being c. 10m from the site boundary. There are also a number of agricultural buildings located to the south of the application site. A primary school is located along the L6091 Local Road to the east of the R448 and is approximately 240m from the application site.
- 11.36 Figure 11-1 identifies residential properties and community facilities within the locality, within 500m and 1km offsets from the application boundary.



<sup>&</sup>lt;sup>3</sup> EPA Draft National By-Product Criteria : Reference Number: BP-N002/2023 of the 03rd of October 2023 establishing detailed criteria on the application of the conditions of Regulation 27(1)(a) - (d) when making the decision that greenfield soil and stone can be regarded as a by-product under Regulation 27 of the EU (Waste Directive) Regulations 2011 - 2020.

## IMPACT ASSESSMENT

### **Evaluation Methodology**



based on the quantitative and qualitative analysis of potential effects on the environment undertaken in other chapters of this EIAR. The assessment also takes into account review of relevant literature and professional judgement in relation to impacts on builto services and waste.

#### **Built Services**

11.37

#### **Construction Stage Impacts**

11.38 All of the site preparation works and installation / commissioning of site infrastructure required to facilitate the proposed development (i.e. continuation of backfilling and recovery activities) has been completed previously on foot of the existing planning permission (Planning Ref. 18/453). The proposed development does not therefore require a separate construction phase impact assessment.

#### **Operational Stage Impacts**

- 11.39 During the operational stage, soil and stone will continue to be imported and placed within the application site. As outlined Chapter 2 of this EIAR (project Description), precautions / control measures will be implemented to ensure that any potential impact of site-based activities on local surface waters and/or groundwater underlying the application site (e.g. accidental oil or fuel spills) is minimised in order to safeguard and protect land quality and any potential water supply source (refer also to Chapter 7 of this EIAR for further detail).
- 11.40 The septic tank and percolation area and water supply well are located away from the active backfilling and recovery area and any future development. There will therefore be no direct effects on the wastewater treatment system or water supply during the operational stage.
- 11.41 Electricity supply will continue to be supplied to the site through connection with overhead powerlines that have been successfully relocated to the site perimeter by previous permitted site works. Management of any future development works at the site will be undertaken giving full and careful consideration to the protection of above and below ground utilities infrastructure.

#### **Post-Operational Stage Impacts**

- 11.42 During the post-operational stage, no further soil and stone material will be accepted at the application site and site activities will be limited to aftercare of restored areas.
- The septic tank and percolation area and the water supply well are located away from the 11.43 development areas. There will therefore be no effects on the wastewater treatment system or water supply during the post-operational stage.
- Aftercare activities do not have the potential to impact overhead powerlines or existing 11.44 services / utilities during the post-operational stage.

#### Waste

#### **Operational Stage Impacts**

11.45 There are existing waste management arrangements in place at the application site / existing soil recovery facility in respect of general waste management. There are management systems in place to control and manage all potential waste streams, to avoid waste generation where possible and to maximise re-use or re-cycling opportunities thereafter.



- 11.46 General office and food waste produced at the site offices is minimised insofar as possible. Arrangements are in place for periodic collection of general / tecyclable waste by authorised waste contractors and for submission of collected waste for recovery or disposal, as appropriate, at authorised waste facilities.
- 11.47 Waste oils, batteries, domestic waste and scrap metal are stored in designated (bunded) storage areas at the existing workshop and are collected and recycled or disposed of at authorised off-site waste facilities by authorised waste contractors.
- 11.48 The existing (and proposed continuation of) development at the application site will continue to comply with all waste management responsibilities prescribed by existing and/or revised conditions attached to any new grant of planning permission and/or EPA waste licence review. All imported soil and stone will be the subject of a pre-clearance / acceptance procedure and any unsuitable material will be quarantined at the waste inspection and quarantine facility prior to removal off site by a licenced contractor.
- 11.49 In light of the above, and the limited volume of wastes generated, it is considered that the generation of waste by on-site activities over the extended backfilling / soil recovery period will not give rise to any significant short-to-long term effects on land or groundwater quality or on local waste collection / off-site waste management capacity.

#### **Post-Operational Stage Impacts**

- 11.50 During the post-operational stage, no further inert soil and stone material will be accepted on site and any risks associated with importation and handling of imported soil and stone to the application site / facility will be eliminated.
- 11.51 Any waste generated on the site will be limited to general waste produced by any employees that are engaged in aftercare on an intermittent basis over the post-closure period. Any such waste will be handled in accordance with the established management systems on site and will be removed by a licenced contractor.
- 11.52 It is considered, therefore, that the generation of waste during this period will be shortterm, temporary and slight in its effects.

#### **Unplanned Events (i.e. Accidents)**

- 11.53 According to the EPA guidelines, unplanned events, such as accidents, can include "spill from traffic accidents, floods or land-slides affecting the site, fire, collapse or equipment failure on the site". The 2014 EIA directive refers to "major accidents, and/or natural disasters (such as flooding, sea level rise, or earthquakes)". In addition, the EPA guidelines note that "Some types of factors are particularly vulnerable to unplanned events that have the potential to cause significant sudden environmental effects".
- 11.54 In this instance, the vulnerability of the proposed development to accidents, unplanned events or natural disasters is relatively limited owing to
  - the relatively straight-forward nature of the backfilling and restoration works;
  - the uncontaminated / inert nature of the soil and stone to be backfilled and recovered on-site and the relatively rural location of the existing facility;
  - the proven capability and performance of the plant, equipment and technologies to be used in executing the works; and
  - the well-established procedures which will continue to be employed to manage and control site activities.
- 11.55 Unplanned events in relation to the proposed development could potentially relate to:
  - instability arising from over-steep placement of imported soil and stones;
  - spill from HGVs and other plant or vehicles moving within the application site;



- flooding.
- 11.56 It is considered that the material assets as outlined in this chapter are not particularly vulnerable to such unplanned events and would be unlikely to cause significant, sudden environmental effects in respect of built services or waste.

#### **Cumulative / Synergistic Impacts**

- 11.57 A search of the Kildare County Council online planning search facility indicates that there are no major other planned developments in the vicinity of the application site in the townlands of Oldkillcullen, Yellowbogcommon, Castlefish, Kilgowan, Calverstown and Moortown that have been granted planning permission subsequent to that for the existing soil recovery facility (Planning Ref. 18/453<sup>4</sup>) which could have the potential for significant adverse cumulative impacts on the local environment.
- 11.58 The only planning permissions that have been granted planning permission in the intervening period (since 2018) relates to small scale residential and ancillary development to existing uses (of an agricultural and/or educational nature).
- 11.59 A review of major development with potential for environmental effects was undertaken through checking planning applications mapped on the EIA Portal<sup>5</sup> in the 10km area surrounding the application site. A road improvement project, industrial and mixed-use projects north of the application site, on the other (eastern) side of the M7 motorway and at distances at least 8km away were not considered to have any potential for cumulative effects with the proposed development.
- 11.60 Planning permission was granted for an extension of c. 10.3 hectares of a gravel pit and early reinstatement of another 10.3-hectare area within a site owned by the Applicant approximately 6km to the north-east of the application site (Planning Ref. 20/324). The development effectively relates to the continuation of ongoing works within that area, and as such is not new development with potential for additional / cumulative impact.
- 11.61 A planning application for an extension of 11.4 hectares to an existing sand and gravel pit and continued ancillary processing and concrete production uses within an overall area of c. 39.5 hectares at Ballysaxhills townland was refused permission by Kildare County Council in July 2021 (Planning Ref. 21/618) but subsequently granted permission by An Bord Pleanála in December 2023 (ABP Ref. PL09.310965). This permission effectively provides for continuation of established activities at the development site (c. 2.8 north west of the application site) that have co-existed with those at the application site for a number of years.
- 11.62 Planning permission was granted by Kildare County Council in August 2020 for the backfilling of a former sand and gravel pit using 1.24m tonnes of imported soil and stone at a site in Usk townland approximately 4km to the south east of the proposed development (Planning Ref. 19/949). A waste licence application in respect of this activity is currently being assessed by the EPA (W0309-01). Given its separation distance, this development has no potential for cumulative impact on material assets.
- 11.63 Planning permission for a new sand and gravel pit of c. 32.2 hectares located approximately 4.7km west of the application site was refused by Kildare County Council in November 2019 (Planning Ref. 19/1097). A planning permission was subsequently granted in June 2021 following appeal to An Bord Pleanála (PL09.306297). Given its separation distance, this development has no potential for cumulative impact on material assets.



<sup>&</sup>lt;sup>4</sup> Online KCC planning portal search undertaken using townland names

<sup>&</sup>lt;sup>5</sup> https://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f104ecbb206e7e5f84b71f1

11.64 In summary therefore, it is considered that the impacts outlined by this Chapter of the EIAR do not have the potential for any significant cumulative impact in tespect of material assets.

#### Transboundary Impacts (If any)

11.65 The application site is not located in proximity to any international borders and is not of sufficient scale that would have any significant transboundary effects on material assets.

#### Interaction with Other Impacts (if any)

11.66 It is not anticipated that the effects of the proposed development on material assets would interact significantly with other impacts.

#### 'Do-nothing Scenario'

- 11.67 In a 'do-nothing scenario', it would not be possible to complete the approved backfilling of the worked-out pit or the restoration of the site to the approved landform and surrounding ground levels (in view of the in-situ density of soil placed at the site being 20% higher than initially assumed at the time the previous planning application was submitted).
- 11.68 The opportunity would also be lost to optimise intake / backfilling / recovery capacity at the existing facility and require capacity to be provided at alternative sites and locations, which may be less strategically located or give rise to more significant environmental impact.

## **MITIGATION MEASURES**

### **Operational Stage**

- 11.69 As outlined above, imported soil and stone will continue to be managed in accordance with existing acceptance and handling procedures prior to placement and compaction on site.
- 11.70 Relatively small volumes of domestic style waste are expected to continue to be generated by the proposed development. This waste will continue to be stored appropriately and removed off site by an authorised waste collector. Aside from the implementation of established good practice and housekeeping, no additional mitigation measures are proposed in relation to waste management.

#### **Post – Operational Stage**

11.71 Volumes of waste generated during the post operation stage are expected to low. Any such waste will be handled in accordance with the established practices on site and will be removed by a licenced contractor. Aside from the implementation of established good practice and housekeeping, no additional mitigation measures are proposed in relation to waste management.

## **RESIDUAL IMPACT ASSESSMENT**

#### **Operational Stage**

11.72 As no additional mitigation measures are proposed, the residual effects of the development on waste and built services are predicted to be as per the impact assessment outline above.



## **Post – Operational Stage**

11.73 As no additional mitigation measures are proposed, the residual effects of the development on waste and built services are predicted to be as per the impact 5, 28103100 × assessment outline above.

## MONITORING

11.74 No environmental monitoring is proposed in respect of material assets.

## REFERENCES

Kildare County Council (2023), Kildare County Development Plan 2023 - 2029



# MATERIAL ASSETS 11



## FIGURES

Figure11-1 : Local Receptors Figure 11-2 : Services Plan





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