PURSER

RECEIVED: 02/11/2024

Volume 2:

03

Site Location and Context

RECEIVED: 02/11/2024

3.0 Site Location and Context

The purpose of this chapter is to provide a clear description of the location, characteristics, and surrounding context of the proposed development site, which forms part of the former Lisheen Mine complex. The information in this chapter serves as the foundation for understanding the environmental and planning context, providing a basis upon which the potential impacts of the proposed development are assessed in subsequent chapters.

This chapter has been prepared in accordance with Annex IV(1) of the amended EIA Directive (2014/52/EU), which mandates the inclusion of *"a description of the project, including in particular a description of the location of the project."* This chapter is also aligned with the EPA's 2022 *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports*, which emphasise the importance of accurately presenting the baseline environmental setting of a project.

3.1 Site Location

The proposed development site lies within the former Lisheen Mine complex in the townlands of Derryfadda, Cooleeny, and Killoran, in County Tipperary, Ireland. (See **Figure 3.1** below.) It is approximately 14 km northeast of Thurles and 6.3 km southwest of Urlingford. The application site is situated within Tipperary's designated Decarbonisation Zone.

The site is accessed via the L5612 local road, which links to the R502 regional road. The R502 provides access to the M8 motorway at Junction 4, approximately 12 km to the northeast. This motorway is the primary north-south route between Dublin and Cork, enhancing the site's accessibility within Ireland's transport network.

Regionally, the Lisheen site is situated in northeastern County Tipperary in a predominantly rural area. Nearby towns, such as Urlingford (6.3 km northeast) and Templemore (approximately 12.6 km southeast), offer essential services and facilities. The surrounding landscape is primarily agricultural, with past areas designated for peat harvesting and existing wind energy installations.

Nationally, the site occupies a central location in Ireland, with proximity to the M8 motorway. This location allows for straightforward access to Dublin, approximately 120 km to the northeast, and Cork, about 115 km to the south. Positioned along the M8, the site benefits from efficient transport connections and accessibility to major national infrastructure, supporting potential logistics and distribution routes across Ireland.

RECEIVED: 02/11/2024

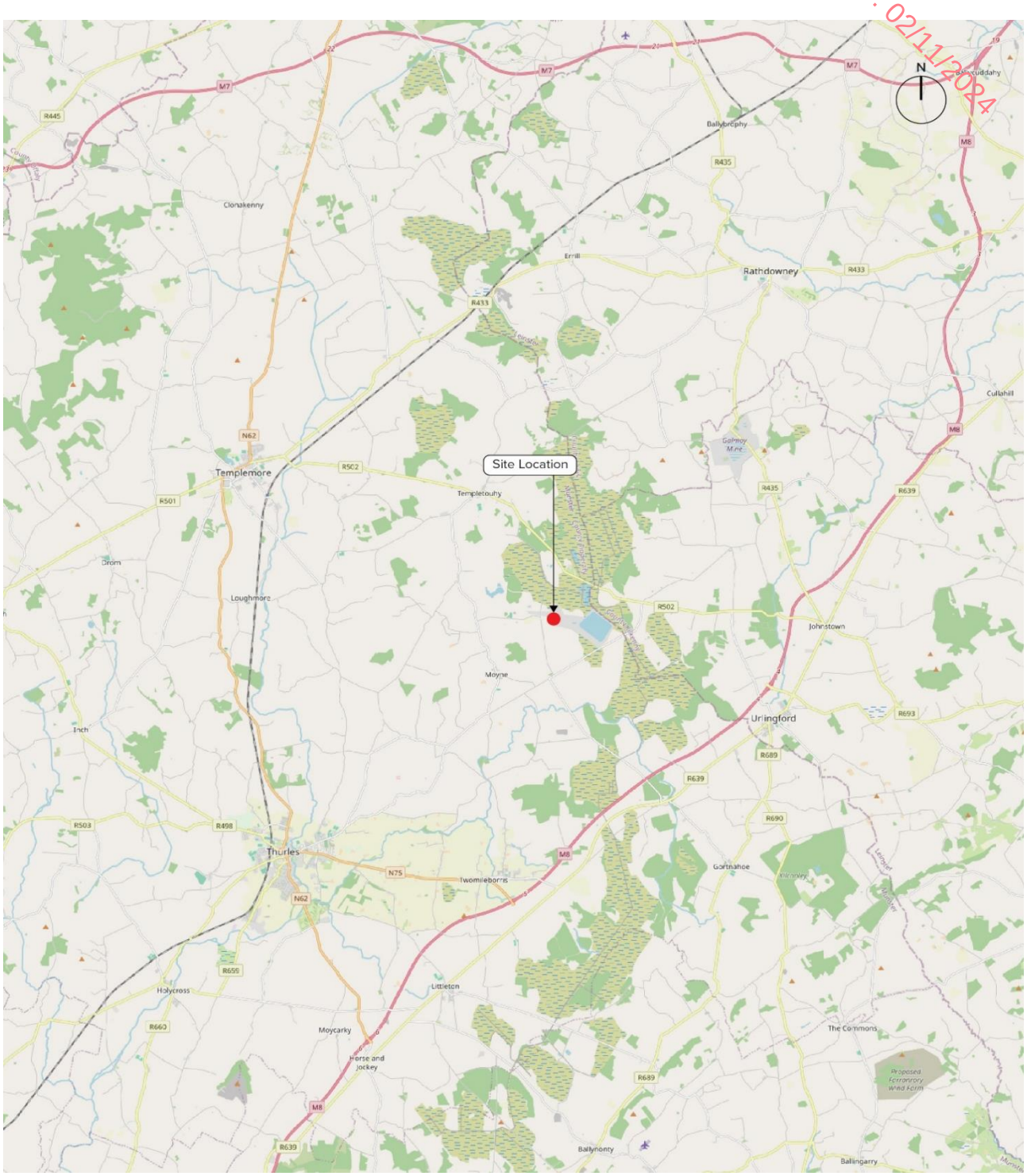

Figure 3.1: Site Location. Indicative site location indicated by red dot. Source of base map: Open Street Map, annotated by Purser. Not to scale.

RECEIVED: 02/11/2024

3.2 Site Description

The application site comprises part of the former Lisheen Mine complex, located in Killoran, Moyne, Thurles, Co. Tipperary. It is primarily bordered by other lands associated with the former mine to the north, south, and east, and by agricultural lands to the west. (See **Figure 3.2** below.)

Spanning approximately 5.5 hectares[1], the application site is classified as 'brownfield', having previously operated as a lead-zinc-silver mine until mining ceased in 2015. Since rehabilitation and levelling, which occurred between 2016 and 2018, the application site has remained largely vacant and is characterised by recolonised scrub and ground vegetation, along with a mature hedgerow along the western boundary. The terrain is generally flat, reflecting the site's history as a reclaimed industrial area. The sealed historic mine entrance is located on the western portion of the site, and the Cooleeny Stream flows c. 200 metres to the south.

Notable nearby structures include the former Lisheen Mine maintenance depot, which is permitted (TCC Reg. Ref. 211171) for redevelopment as the Irish Bioeconomy Foundation's Research and Development Unit. A former office and laboratory building from the mine's operational period stands vacant near the site's western edge, while Acorn Recycling / AQS Environmental Solutions operates to the southeast.

Additional remnants from previous mining operations are found throughout the wider site, such as a tailings pond and internal access roads, which still serve as access routes within the complex. Centrally located within the larger Lisheen property, an ESB substation lies approximately 200 metres northeast of the application site.

The wider Lisheen complex includes additional industrial and renewable energy activities, such as the Lisheen Wind Farm, which comprises 18 turbines on the former mine site and additional turbines nearby, connecting to the existing substation. Revive Environmental is constructing a facility (permitted under TCC Reg. Ref. 21709) near the main site entrance, approximately 800 meters to the southeast.

3.2.1 Wider Site Context

The wider area surrounding the former Lisheen Mine complex is predominantly rural, characterised by agricultural land, peatlands historically managed by Bord na Móna, and forestry. Land use in the area mainly includes agriculture, forestry, and renewable energy production, with the Lisheen complex and nearby lands hosting multiple wind turbines as part of the Lisheen and Bruckana Wind Farms. These renewable energy projects, along with emerging bio-based industries, are gradually shifting local employment from traditional agriculture to sustainable energy and bioeconomy sectors.

The application site is located at a considerable distance from settlements and populated areas. The closest settlements include the villages of Urlingford - 6.3 kilometres to the southeast - and Templemore, approximately

[1] Please refer to Figure 3.2, which illustrates the principal development site area as well as areas included within the application site boundary for the purposes of providing an electricity supply connection to the proposed development and an outfall connection to the Cooleeny Stream.

RECEIVED: 02/12/2024

12.6 kilometres to the northwest. Housing in the area is low-density and predominantly rural, consisting mainly of farmhouses and individual dwellings along country roads. The nearest residence situated approximately 750 metres to the west.

3.3 Historical Use of the Application Site

The Lisheen deposit of lead and zinc was discovered by Chevron Ltd. in 1990, with mine development beginning in 1997 by Minorco Lisheen Limited, including the construction of the main mine decline and facilities. Operating under an Integrated Pollution Control (IPC) licence from the EPA, mining activities were initially conducted by Ivernia West and Anglo-American.

Production officially commenced in 1998, and by 1999, the first ore was brought to the surface. Over its 17-year operational life, Lisheen Mine produced approximately 22.4 million tonnes of ore, averaging 6,000 tonnes of lead and zinc ore per week, equating to around 300,000 tonnes annually. At its peak, the mine employed around 400 staff and ranked as the 12th largest zinc mine globally.

The Lisheen Mine spanned a total landholding of 455 hectares, with ore extracted from four main ore bodies: Main Zone, Derryville Zone, Bog Zone, and Derryville Island Zone, reaching depths of up to 200 meters below ground. Following the cessation of mining operations in December 2015, a closure plan, approved by the EPA in 2016, was implemented, which included the “Closure, Restoration & Aftercare Management Plan” (C.R.A.M.P.) (The Lisheen Mine, 2016; refer to EIAR Volume 3: Appendix 9.2).

The decommissioning process involved the removal of all surface and underground infrastructure, in line with the C.R.A.M.P., and was completed by February 2018.

(Please refer to **EIAR Volume 3: Appendix 3.1**, which includes a comprehensive table detailing the planning history specific to the Mine.)

RECEIVED: 02/11/2024

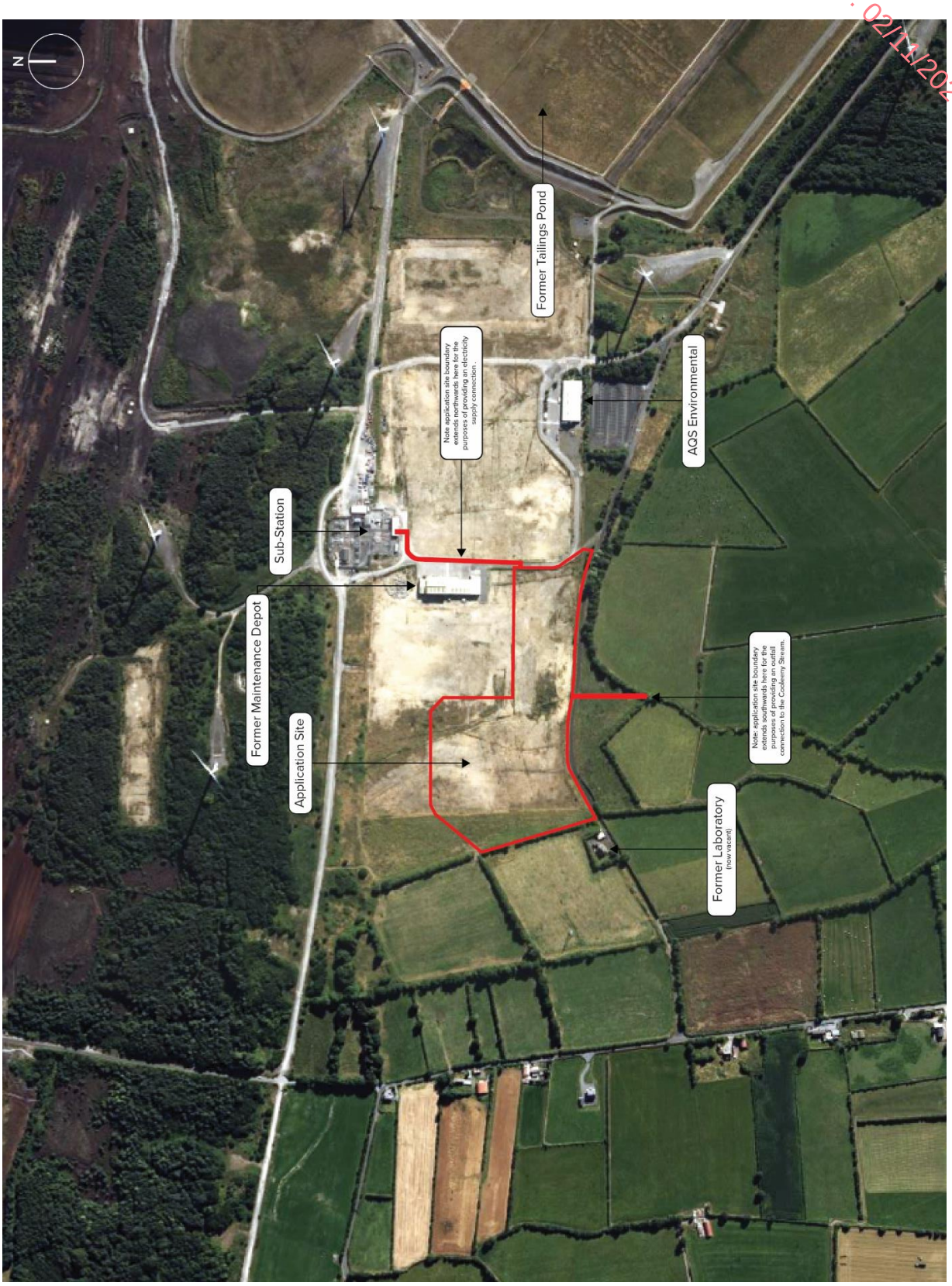

Figure 3.2: Aerial view of the application site and surrounding context. (Source of base map: Bing maps, annotated by Purser to identify key existing features.)

RECEIVED: 02/11/2024

3.4 Key Operational and Planned Developments

The application site is located in close proximity to a number of planned, permitted, and operational projects on and around the former Lisheen Mine site. This existing and planned infrastructure highlights the area's ongoing transition from a historic mining hub to a centre for renewable energy, bioeconomy, and other light industrial uses.

The Lisheen Wind Farm became operational in August of 2009, with eighteen (18 No) wind turbines erected across the former Lisheen Mine complex, and another 24 No. wind turbines located at the neighbouring the site, all of which connect into the sub-station at the former Lisheen Mine Site. The presence of these wind turbines help to reinforce the sites position as a green campus, promoting the use of sustainable energy sources.

The Irish Bioeconomy Foundation (IBF) are headquartered in Lisheen. The Irish Bioeconomy Foundation aims to transform the 455-hectare former Lisheen Mine into the National Bioeconomy Campus, creating a hub for collaboration among leaders in agribusiness, forestry, marine, energy, and bioeconomy. The campus will foster synergies among sustainable initiatives and support innovative projects, providing an integrated ecosystem for research, training, and the production of high-value biochemical products. As outlined above and below, the former Lisheen Mine maintenance depot is permitted (TCC Reg. Ref. 211171) for redevelopment as the Irish Bioeconomy Foundation's Research and Development Unit.

An overview of key developments is provided below.

a) Acorn Recycling Workshop and Truck Washout (Tipperary Co. Co. Reg. Ref. 2360281): A development consisting of a workshop building, truck washout facility, yard area, water storage, solar panels, and other associated siteworks, adjacent to the application site, is currently under construction.

b) Irish Bioeconomy Foundation Research and Development Unit (Tipperary Co. Co. Reg. Ref. 211171): Located adjacent to the application site, this project permits the redevelopment of the former mine maintenance depot into a Research and Development Unit with expanded office and industrial space, PV panels, and ancillary works.

c) Soleirtricity Solar PV Farm (Tipperary Co. Co. Reg. Ref. 211128): A large-scale solar farm, with a maximum capacity of up to 122MW, is permitted approximately 500 m from the site, enhancing the renewable energy profile of the area.

d) Revive Environmental Facility (Tipperary Co. Co. Reg. Ref. 21709): This facility, approximately 1 km from the application site, includes a large industrial building for mechanical assembly and administration, with supporting infrastructure for water, solar power, and emergency storage.

(For a complete list of all relevant permitted and planned projects within proximity to the application site, refer to the **Planning and Environmental Report** included with this application and **Volume 3: Appendix 21.1**.)

RECEIVED: 02/11/2024

3.5 Environmental and Physical Characteristics

3.5.1 Topography

The site is relatively flat with a gentle slope south-eastward towards the Cooleney Stream. Ground elevations range from approximately 131.10 meters above Ordnance Datum (mOD) along the northwest boundary to around 125.8 mOD at the southernmost extent near the Cooleney Stream (DOBA, 2024). (Please refer to **Drawing No. 2429-DOB-XX-XX-DR-C-0010 Rev P01** and the **Infrastructure Design Report** Ref. 2429-DOB-XX-SI-RP-C-0001 dated September 2024 enclosed as part of the Application.)

3.5.2 Proximity to Designated Sites and Habitats

The proposed development site is not located within or directly adjacent to any EU-designated Special Area of Conservation (SAC) or Special Protection Area (SPA). There are eight European sites within 15 km of the site, including five SACs, one SPA, and several Natural Heritage Areas (NHAs). The closest European site is Galmoy Fen SAC, situated approximately 9.8 km north-east of the application site. (See **Figure 3.3** below.)

The site itself, once a mine, has been recolonised by various plant species since operations ceased in 2015. It supports low biodiversity in its current form, featuring habitats such as scrub, recolonising bare ground, hedgerows, and artificial surfaces. (Please refer to **Volume 2: Chapter 8 (Biodiversity)** for more information.)

3.5.3 Watercourses and Surface Water

The application site is within the Suir Catchment (Catchment ID: 16) and the Suir_SC_040 Sub-Catchment (ID: 16_21), which drains towards tidal waters in Co. Waterford. The site is mapped within the Drish_040 Sub-basin (EU Code: IE_SE_16D020100).

The closest watercourse, the Cooleeny Stream, lies approximately 20 meters south of the site, flowing southeast before joining the Drish River 3.64 km downstream. Historically, the Cooleeny Stream drained the Lisheen Bog and later received treated discharge from the tailings management facility (TMF) during mining operations. After mine closure in 2015, the discharge was redirected through a constructed wetland and attenuation pond before flowing into the Cooleeny Stream.

Additional nearby watercourses include: Rossestown River - Located approximately 1.79 km northwest, flowing southwest into the Suir; and Derryfadda Stream - Positioned about 1.28 km northeast, flowing south to the Drish River. (Please refer to **Volume 2: Chapter 10 (Hydrology and Hydrogeology)** for more information.)

RECEIVED: 02/11/2024

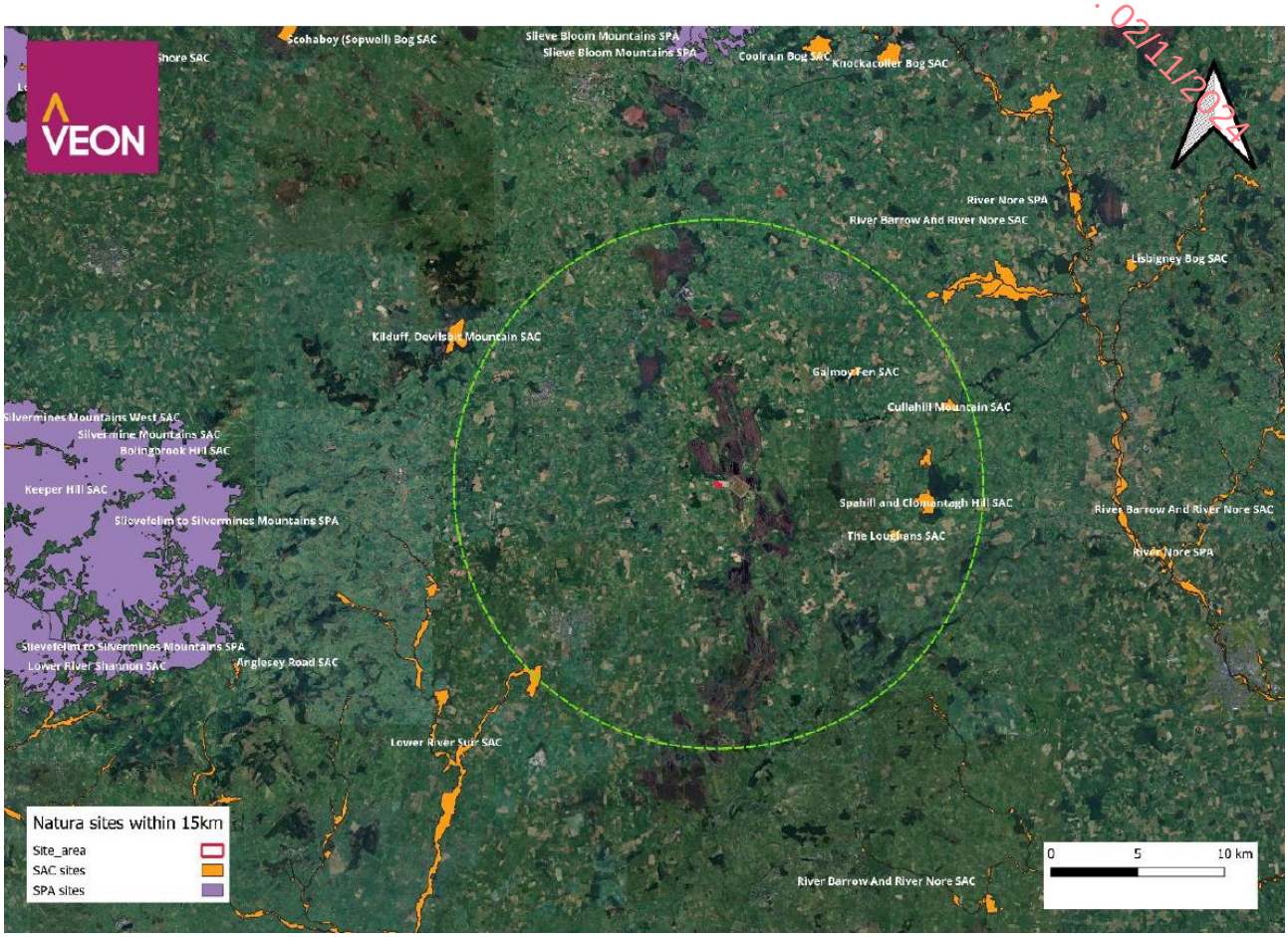

Figure 3.3: SACs and SPAs in relation to proposed development site. (Source: Veon Ecology, 2024.)

3.5.4 Existing Surface Water Drainage Infrastructure

There is no public surface water network near the site. Runoff currently drains through infiltration into the aquifer and overland flow into the Cooleeny Stream, approximately 20 meters to the south of the principal application site. (DOBA, 2024). As noted above, the application site boundary extends southwards here for the purposes of providing an outfall connection to the Cooleeny Stream. (Please refer to the **Infrastructure Design Report** Ref. 2429-DOB-XX-SI-RP-C-0001 dated September 2024 enclosed as part of the Application.)

3.5.5 Utilities

A private 75mm water main, managed by the Moyne Group Water Scheme, runs along the southern boundary of the site, providing water access as part of existing infrastructure (DOBA, 2024). (Please refer to the **Infrastructure Design Report** Ref. 2429-DOB-XX-SI-RP-C-0001 dated September 2024 enclosed as part of the Application.)

RECEIVED: 02/11/2024

Additionally, the site has access to an ESB substation and overhead power lines, which reflect its previous use as an industrial site and support ongoing utility needs. These utilities position the site well for future requirements. (Please refer to **Volume 2: Chapter 10 (Hydrology and Hydrogeology)** for more information.)

3.5.6 Surrounding Road Network

The site is well-connected via:

- M8 Motorway: Connecting Dublin and Cork, with the nearest access at Junction 4.
- R639: Parallel to the M8, linking Johnstown, Urlingford, and Littleton.
- R502: Running east-west north of the site, linking Templemore and Johnstown.
- L3201: A minor road south of the Lisheen Mine site, connecting the R502 to the L4115.
- L4115: Running north-south between the L3201 and the R639.

The application site is accessible via a private road that served the Lisheen Mine before its closure, connecting to the L3201 at a priority junction. Please see **Figure 3.4** below. (Please refer to **Volume 2: Chapter 14 (Traffic and Transportation)** for more information.)

Figure 3.4: Site Location and Road Network. (Source: Google Earth, annotated by Systra.)

RECEIVED: 02/11/2024

3.6 References

- Environmental Protection Agency (2022) Guidelines on the Information to be contained in Environmental Impact Assessment Reports (May 2022) (EPA 2022 Guidelines).

- Department of Housing, Planning, Community and Local Government (2018) Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018).