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ENERGY SERVICES

An Coimisiún Pleanála
64 Marlborough Street
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16 July 2025

Our Ref: WHI001SSFI
Your Ref: ABP-322078-25

Dear Sir/Madam,

Re: Planning application for a 110 kilovolt electricity substation, approximately 8.8 kilometres of underground electricity line, an electrical control unit and all associated works at Shankill and Ballygorteen, County Kilkenny; and Moanmore, Lackan and Baunreagh, County Carlow.

We refer to your notice dated 11 June 2025 requesting a response to the matters raised in submissions made in relation to the abovementioned Strategic Infrastructure Development (SID) planning application.

On behalf White Hill Wind Limited ('the Applicant'), we have carefully examined each of the submissions received, identified what we consider are the matters relevant to this planning application and set out our detailed responses in turn below and in the accompanying annexes.

1.0 KILKENNY COUNTY COUNCIL

Kilkenny County Council submits that mitigation measures should be considered in respect of the construction of access tracks to reduce noise levels below the 65dba threshold.

Section 11.3.1.1 of Chapter 11 (Volume I) of the Environmental Impact Assessment Report (EIAR) sets out that, in respect of residential receptors and in accordance with BS 5228-1:2009+A1:2014 *Code of Practice for Noise and Vibration Control on Construction and Open Sites – Noise* (Annex E, Section E.3.2), a construction noise threshold of 65dB $L_{Aeq,T}$ at the external façade of the receptor is appropriate.

As described at Section 11.5.2.1 (Chapter 11), the construction of access tracks in excess of 45m from residential receptors (dwellings) will give rise to noise levels of up to 64dB $L_{Aeq,T}$. Accordingly, the construction noise threshold of 65dB $L_{Aeq,T}$ is not assessed as likely to be reached or exceeded.

A short section of access track is proposed to be constructed c. 35m to the west of a residential dwelling located to the north of the electricity substation. At this dwelling, it is predicted that noise levels, in the absence of mitigation measures, will be 67dB $L_{Aeq,T}$ which represents an exceedance of the construction noise threshold by 2dB. As further described at Section 11.5.2.1, construction of the access track at such a proximity to the dwelling will be for an extremely short duration of c. 2-3 days.

With respect to Table 11.3 (Chapter 11), which interprets construction noise thresholds in accordance with the United Kingdom National Highways guidance document *Design Manual for Roads and Bridges (DMRB) Sustainability & Environment Appraisal LA 111 Noise and Vibration Revision 2* (UKHE, 2020); an exceedance of the construction noise threshold by 2dB is assessed to have a 'Moderate to Significant' effect. However, as the duration of the effect will not exceed either of the temporal thresholds specified at Table 11.3 (Chapter 11); consisting of 10 no. or more days or nights in a consecutive 15-day period or a total number of days exceeding 40 no. in a 6-month period; it is assessed that a significant effect will not arise.

Notwithstanding that a significant effect is not assessed as likely, Section 11.6.1.1 (Chapter 11) describes a set of best practice measures to be employed during the construction phase to limit noise emissions and ensure that significant effects do not occur, including exhaust silencers, attenuated compressors, the shut-down or throttling-back of plant and machinery when not in use, and the implementation of portable acoustic enclosures or screens as appropriate. With the implementation of these mitigation measures, in combination with the findings of the assessment at Section 11.5.2.1 (Chapter 11), it is assessed that the implementation of further mitigation measures is not warranted in this instance and that significant effects are not likely to be experienced at any residential receptor.

Kilkenny County Council requests additional information in respect of the duration of electricity line installation works and the mitigation measures to reduce noise levels below the 65dba threshold.

As described at Section 11.3.1.2 (Chapter 11) of the EIAR submitted, the appropriate construction noise threshold for construction activities associated with the underground electricity line is 70db $L_{Aeq,T}$ for weekdays and 65dB $L_{Aeq,T}$ on Saturdays. This is based on the Transport Infrastructure Ireland (TII) guidance document *Good Practice Guidance for Treatment of Noise during the Planning of National Road Schemes* (TII, 2014) ('the TII guidance'). Section 11.5.2.3 (Chapter 11) assesses that, at a distance of 40m or greater from the underground electricity line, the predicted noise level is 69dB $L_{Aeq,T}$; while, at distances of 25m and 20m, noise levels are assessed as likely to be 74dB $L_{Aeq,T}$ and 78dB $L_{Aeq,T}$ respectively.

Section 11.5.2.3 (Chapter 11) also sets out that the underground electricity line is likely to be installed (and associated works undertaken) at a rate of 50-100m per day. The precise rate of installation will depend on various factors including ground conditions, the requirement for installation of jointing plinths or the crossing of watercourses. Accordingly, and as described at Section 11.5.2.3 (Chapter 11), works will therefore "*be in the immediate proximity of the closest NSLs* [noise sensitive locations] *for a limited amount of time, i.e. less than 1-day.*"

Evidently, therefore, any adverse noise effects experienced by the public at, for example, residential properties, will be of an extremely limited, short-term duration. It should also be noted that the characteristics of the construction activities and noise generating equipment will be similar to standard road works or agricultural activities and are not likely to be perceived as unusual in this general location. Furthermore, construction plant and machinery which will generate noise emissions will operate intermittently and will not be continuously operational. Moreover, numerous examples of similar underground grid connections with the public road have been permitted by the Commission.

Notwithstanding that predicted noise levels at less than 25m are likely to, on occasion,

exceed the respective thresholds of 70db $L_{Aeq,T}$ and 65dB $L_{Aeq,T}$, Section 11.5.2.3 (Chapter 11) assesses that a significant noise effect is not likely to arise and that any effects experienced will be of a short-term and temporary duration. While predicted noise levels are likely to, on occasion, exceed the construction noise threshold at particular locations, the assessment of no likely significant effect is consistent with the criteria at Table 11.3 (Chapter 11) which sets out that moderate-to-significant (and greater) effects may arise where the noise levels exceed the construction noise threshold by 10 no. or more days or nights in a consecutive 15-day period or a total number of days exceeding 40 no. in a 6-month period. Given the rate of construction activities as described above, neither of these criteria will be met or exceeded by the proposed development.

While it is assessed that mitigation measures are not required, Section 11.6.1.1 (Chapter 11) describes a set of best practice measures to be employed during the construction phase to limit noise emissions and ensure that significant effects do not occur, including exhaust silencers, attenuated compressors, the shut-down or throttling-back of plant and machinery when not in use, and the implementation of portable acoustic enclosures or screens as appropriate. Additionally, and given the reduced construction noise threshold as applicable to works on Saturdays, the Applicant can confirm that no underground electricity line installation works will be undertaken within 40m of a noise sensitive location (i.e. residential property) on Saturdays.

Kilkenny County Council queries which noise guidelines are applicable to the assessment of noise effects.

There are no specific Irish guidelines for the assessment of noise effects for the construction of underground electricity line infrastructure. As set out at Section 11.3.1.2 (Chapter 11), the TII guidance has been utilised in the assessment to identify appropriate construction noise thresholds (refer to Table 11.2 of Chapter 11 [Volume I] of the EIAR) and "*are assessed a* [sic] *relevant to determine the likelihood of significant noise effects arising from the underground electricity line.*"

The assessment also draws on guidance from the United Kingdom National Highways guidance document *Design Manual for Roads and Bridges (DMRB) Sustainability & Environment Appraisal LA 111 Noise and Vibration Revision 2* (UKHE, 2020) to assist in the further evaluation and interpretation of the construction noise thresholds as identified in accordance with the TII guidance (refer to Section 11.3.1.3 and Table 11.3 of Chapter 11).

Kilkenny County Council requests information on the monitoring of vibration during the construction phase.

The electricity substation compound is located c. 165m south of the nearest residential dwelling while the electrical control unit compound is located c. 200m from the nearest dwelling. Due to the intervening separation distances and the construction methodologies proposed, vibration effects are not likely to be experienced at these properties.

The access track leading to the electricity substation is located c. 35m west of the nearest property; while the access track leading to the electrical control unit is located c. 60m from the nearest property. As above, it is assessed that, at these distances and having regard to the proposed construction techniques and temporary nature of the works, significant levels of vibration are not assessed as likely to arise.

While the underground electricity line will pass in close proximity to a number of properties and the trench backfill material will be compacted in layers, vibration is not assessed as likely to be experienced beyond the immediate works area.

Accordingly, and as set out at Section 11.5.2.5 (Chapter 11), it is assessed that due to the localised nature of construction activities which could generate vibration, the distance from such activities to properties and the temporary nature of the works, vibration effects are not assessed as likely to be experienced.

Strictly without prejudice to the above, as part of the Construction Environment Management Plan (CEMP), a designated Community Liaison Officer will be appointed to liaise with local residents. In the event that complaints are received by the Applicant during the construction phase related to vibration, the matter will be immediately investigated and, if it is found that vibration is being experienced, vibration monitors will be installed to measure vibration levels and mitigation measures will be employed to remediate the effects. The completion of any such monitoring and implementation of mitigation measures would be conducted in consultation with the relevant property owner and Kilkenny County Council.

Kilkenny County Council submits that working hours on Saturdays should be between the hours of 08:00 and 13:00.

The Applicant submits that working hours on Saturdays of between 07:00 and 13:00 are appropriate for a development of this type and at this location, and the proposed mitigation measures will ensure that significant effects on residential amenity are not likely to occur. However, in the event that the Commission considers it appropriate, the Applicant is satisfied to generally restrict construction activities to between the hours of 08:00 and 13:00 on Saturdays.

It should be noted, as described at Section 3.5 of Chapter 3 (Volume I) of the EIAR, that it may be occasionally necessary to carry out works outside of these hours in exceptional circumstances or in the event of an emergency. Where construction activities are necessary outside of the normal working hours, local residents and Kilkenny County Council will receive prior notification.

Kilkenny County Council states that it is unclear whether vibrations from piling activities have been assessed.

Having regard to the characteristics of ground conditions at the proposed development site (refer to Section 6.3.3.1 of Chapter 6 [Volume I] of the EIAR) and those of the proposed development, no piling activities are assessed as likely to be required.

Kilkenny County Council questions whether all SPAs and SACs have been mapped where noise and vibration may be more injurious.

All Special Protection Areas (SPAs) and Special Areas of Conservation (SACs[1]) located within 20-kilometres (km) of the proposed development have been identified and are

[1] It should be noted that the Natura Impact Statement erroneously referred to the River Nore and River Barrow designated site as a 'candidate Special Area of Conservation' ('cSAC'). Statutory Instrument (S.I.) 648/2024 - *European Union Habitats (River Barrow and River Nore Special Area of Conservation 002162) Regulations 2024* conferred full SAC status to the designated site on 20 November 2024 during the preparation of the NIS. It should be noted, however, that the designated site was assessed as though it had been conferred full status and the assessment contained within the NIS is entirely unaffected by this error.

mapped at Figure 2A of Appendix A of the Natura Impact Statement (NIS). It should be noted that the proposed development site is not located within any Natura 2000 site; with the nearest such site being the River Nore and River Barrow SAC located c. 2.7km to the southeast.

Noise and vibration were each assessed in the NIS as effects related to the proposed development which could potentially result in disturbance to or displacement of species and result in a reduction in species populations and densities. It is assessed at Table 6-1 of the NIS that Otter, as a qualifying interest of the River Nore and River Barrow SAC, could be disturbed or displaced by activities related to the proposed development, including the effects of noise and vibration, if the species was to utilise the watercourses present within the proposed development site. However, as set out at Table 6-3, the species is not known to be sensitive to disturbance and, with the implementation of mitigation measures set out at Section 6.6.1.7 of the NIS, it is assessed that there is no risk of an adverse effect on the integrity or conservation objectives of the SAC.

Kilkenny County Council queries whether the generation of dust from excavated material stockpiles has been assessed.

The likelihood of significant dust effects arising during the construction phase from earthworks, general construction activities and trackout have been assessed in full at Section 8.5.1.1 of Chapter 8 (Volume I) of the EIAR. Having regard to the sensitivity of the area and the magnitude of dust emissions from earthworks, it is assessed that, prior to mitigation, there is a Medium risk of nuisance dust arising and a Low risk to human health.

Following the implementation mitigation measures (refer to Section 8.6.1 of Chapter 8), it is assessed that the residual effects on air quality during the construction phase are likely to be imperceptible and short-term.

Kilkenny County Council questions whether air quality monitoring has been conducted.

Having regard to the characteristics of the receiving environment (rural location with no evidence of poor air quality), the characteristics of the proposed development (no significant emission sources) and the annual monitoring undertaken by the Environmental Protection Agency (EPA), it was assessed that baseline air quality monitoring is not warranted in this instance and same has not been undertaken. This is general standard practice for developments of this nature.

The methodology employed in the assessment is described in full at Chapter 8; and it is assessed that the proposed development will, cumulatively with the permitted White Hill Wind Farm (An Coimisiún Pleanála Reference ABP-315365-22), result in a long-term positive effect on air quality and climate.

Kilkenny County Council submits that weekly or daily dust monitoring should be implemented.

The Planning-Stage Dust Minimisation Plan, enclosed at Annex 8.1 (Volume II) of the EIAR, provides for regular on-site and off-site monitoring including checks for dust soiling of surfaces. Monitoring will be undertaken by the appointed Environmental Manager (EM) and at a schedule deemed to be appropriate based on weather conditions and construction activities being undertaken at that time; with an increased rate of monitoring during excavations at the electricity substation and

during prolonged periods of dry and/or windy conditions.

Given the characteristics of construction activities associated with the underground electricity line, dust monitoring is not assessed as likely to be required; however, any requirement for monitoring will be continuously assessed by the EM as part of the CEMP.

Kilkenny County Council requests additional information as to the material to be used in the construction of the internal road.

The proposed access tracks will be constructed of clean, well graded granular stone generally comprising 6F1 and 6F2, with Clause 804 used as the surface layer.

Kilkenny County Council questions how the spoil management areas have been sized.

As part of the planning-stage design process, the estimated volume of excavated material to be generated during the construction phase was quantified; as detailed at Table 3.1 (Chapter 3). The design process also quantified the estimated volume of material which could be re-used in the landscaping and reinstatement of the proposed development and the volume of remaining excess material.

Having regard to the quantity of excess material, the spoil deposition areas were appropriately sized and designed to maximise the storage of excess material on-site and to minimise the requirement for off-site disposal of material at an approved waste management facility which, in turn, minimises the generation of construction traffic and exhaust emissions from HGVs.

Further details on the management of excavated material are provided at Section 3.4.4 (Chapter 3) and we refer the Commission to same.

Kilkenny County Council queries the location of waste storage facilities.

As described at Section 3.4.1.6 (Chapter 3) and Section 3.4 of Annex 3.5 (Volume II of the EIAR), the temporary construction compound will contain a dedicated waste management area where waste will be sorted, stored and collected by a licensed service provider. Further details on the management of construction waste materials are provided at Section 3.5.5 (Chapter 3) and at the Waste Management Plan enclosed at Annex 3.5 and we refer the Commission to same.

Kilkenny County Council queries the storage of fuel and hazardous substances and concrete chute cleaning procedures.

As described at Section 3.4.1.6 (Chapter 3) of the EIAR, the temporary construction compound will provide for the safe and bunded storage of components and materials including fuels, lubricants and oils.

Section 7.5.1.5 of Chapter 7 and Section 4.5.5 of Annex 3.5 set out procedures for the cleaning of chutes where concrete is delivered to site, and we refer the Commission to same. In summary, chutes will be washed into lined concrete washout ponds within the temporary construction compound and all waters will be removed and disposed of at an approved waste management facility.

Kilkenny County Council requests that any drains to be diverted should be illustrated and associated methodologies and measures provided.

The construction of the electricity substation compound will necessitate the diversion of a single agricultural drainage ditch; as illustrated at Drawing No. 6607-JOD-SS-ZZ-

DR-C-1011 enclosed within the Planning-Stage Surface Water Management Plan (SWMP) at Annex 3.5. Any flows within this channel will be diverted to perforated land drains around the perimeter of the electricity substation which will be appropriately designed and sized to accommodate the catchment area. The perforated land drains will direct any flows towards the wider proposed drainage and onwards to the existing site drainage network.

The perforated land drain shall be installed prior to the backfilling of the existing drainage ditch to ensure that flows are uninterrupted and that there are no adverse effects on drainage at the proposed development site or within adjacent third party lands. During the installation of the land drains and backfilling of the existing drainage ditch, appropriate surface water control measures will be employed; including silt fencing, straw bales, etc.; as described at Section 3.4.5.1 (Chapter 3), Section 7.5.1.1 (Chapter 7) and at Annex 3.5.

With the implementation of this diversion methodology and surface water control measures, there will be no adverse effect on the drainage regime at the proposed development site or its environs nor will there be any deterioration in downstream water quality.

Kilkenny County Council queries whether the presence of aquifers has been considered in respect of surface and waste water plans.

The characteristics of the hydrogeological environment and the likely effects of the proposed development on same have been assessed in full at Chapter 7 (Volume I) of the EIAR. In particular, the characteristics of the hydrological environment; including the presence of aquifers; are described in detail at Sections 7.3.7, 7.3.8 and 7.3.9 of Chapter 7; while the likely effects are assessed at Section 7.4. We refer the Commission to same for further details; however, in summary, it is assessed that the proposed development will have no likely significant effect on the hydrogeological environment including in respect of groundwater quantity, groundwater quality, drinking water supplies or the Water Framework Directive status of groundwater bodies.

Kilkenny County Council refers to the presence of the underground electricity line within an outer source protection area for the Paulstown PWS.

As identified by Kilkenny County Council, and discussed at length at Section 7.3.12 (Chapter 7), approximately 1.6km of the underground electricity line is located within the outer source protection area of the Paulstown Public Water Supply (PWS). The likely effects of the proposed development on the PWS have been assessed, in full, at Section 7.4.3.8 (Chapter 7) and we refer the Commission to same. The assessment finds that, prior to the implementation of mitigation measures, the likely effect is indirect, negative, imperceptible and short-term; while no residual effect (Section 7.6.1.7 [Chapter 7]) is assessed as likely.

Kilkenny County Council submits that drainage flows at the proposed development site have not been noted and that a surface water inspection schedule should be prepared.

In the first instance, the Applicant can confirm that the proposed development site has been fully surveyed and that all existing surface water channels have been recorded and the effects of the proposed development on same have been assessed. Firstly, we refer to Figure 7.2 (Chapter 7) which illustrates all natural

watercourses located within the proposed development and their wider geographic context. Furthermore, the drainage regime of the site of the electricity substation and electrical control unit have been surveyed and mapped within the Planning-Stage SWMP at Annex 3.5. The Applicant, therefore, has a clear understanding of the hydrological/drainage regime of the proposed development site and wider environs and the design of the proposed development (e.g. horizontal directional drilling [HDD] of watercourse crossings and drainage of electricity substation site) has been prepared in this context.

Section 7.5.1.1 (Chapter 7) of the EIAR provides for the monitoring of all excavations, earthworks, the surface water management system and discharge areas on a daily basis during the construction phase. Furthermore, Section 7.7 (Chapter 7) provides for ongoing monitoring by the EM in accordance with a Water Quality Inspection & Monitoring Plan to be agreed with Kilkenny County Council, as part of the CEMP, prior to the commencement of development. The monitoring plan will provide for field testing, laboratory analysis and regular monitoring of the drainage system to confirm the efficacy of the control measures.

Kilkenny County Council submits that all material excavated from the public road should be treated as waste.

As described at Section 3.4.4 (Chapter 3), all road pavement material (i.e. asphalt, etc.) will be treated as waste and disposed of at an approved waste management facility to prevent soil contamination. However, it is assessed that once all road pavement material has been removed from the trench, material from the lower horizons of the trench will not pose any risk of soil contamination.

Accordingly, therefore, the Applicant submits that the re-use of excavated material (excluding road pavement material) in the backfilling of the trench or disposal at a spoil deposition area is an appropriate spoil management measure and its disposal off-site is not warranted in this instance.

Kilkenny County Council questions how it is proposed to manage spillages from heavy plant, machinery and equipment.

Section 7.5.1.3 (Chapter 7) provides a set of measures to prevent and manage the release of hydrocarbons at the proposed development site including those arising from accidental spillage. These measures are further described at Sections 3.5 and 4.5.3 of Annex 3.5 and will be incorporated into the CEMP to be agreed with Kilkenny County Council prior to the commencement of development.

Kilkenny County Council requests confirmation of the drilling fluid to be used during directional drilling.

The Applicant can confirm that bentonite will be used in the HDD process. The methodology to be employed and mitigation measures to be implemented are described in detail at Section 3.4.5.1 (Chapter 3) and Section 7.5.1.6 (Chapter 7), and we refer the Commission to same for further details.

The Applicant can further confirm that these measures will be incorporated into the CEMP to be agreed with Kilkenny County Council prior to the commencement of development and implemented in full during the drilling operations.

With respect to the protection of surface waters, Kilkenny County Council submits that, prior to the commencement of development, the Applicant should provide (i)

detailed drainage drawings, (ii) a Surface Water Management Plan, (iii) regular water sampling, (iv) for the induction of all staff, (v) for monitoring of construction activities, (vi) the reseeding of the spoil deposition areas as soon as possible, (vi) for the installation of silt fencing, (vii) method statements for watercourse crossings, and (vii) a method statement for horizontal directional drilling.

The Applicant can confirm that the above requests of Kilkenny County Council shall be addressed in full prior to the commencement of development. It should be noted that the Applicant has committed to many of these requirements in the EIAR; as follows:-

- The provision of a Surface Water Management Plan and drainage design (including provision of silt fencing) drawings has been committed to at Section 3.4.5.1 (Chapter 3);
- Regular water sampling has been committed to at Section 7.7 (Chapter 7);
- Environmental awareness, including surface water protection, will be addressed during site induction as described at Section 7.0 of Annex 3.5;
- The implementation of the surface water drainage system will be supervised by a Design Engineer to ensure its appropriate installation (Section 5.0 of Annex 3.5) while the EM will monitor the efficiency of the system during the construction phase;
- Prior to the establishment of the spoil deposition areas, the vegetated topsoil layer will be removed from the footprint of the areas. Once the deposition areas have been fully established and all material deposited therein, the vegetated layer will be replaced atop the deposition areas (Section 3.4.4 [Chapter 3]). Alternatively, any bare ground will be allowed to vegetate naturally or may be reseeded; and,
- Method statements will be prepared by the appointed contractor for the crossing of each watercourse via HDD (Section 3.4.2 [Chapter 3]).

Kilkenny County Council requests that a Waste Management Plan be prepared prior to the commencement of development.

A Waste Management Plan has been prepared and is enclosed within the Planning-Stage CEMP at Annex 3.5. As described at Section 1.2 thereof, the contractor will be responsible for updating the plan in accordance with specific waste management details and proposals prior to the commencement of development.

Kilkenny County Council sets out requirements for the storage of tanks and drums and for the bunding of such storage areas.

Section 3.4.1.6 (Chapter 3) provides for the storage of fuels, lubricants and oils within the temporary construction compound. Further details are also provided regarding the bunding of such areas; while all stormwater arising will be passed through an oil interceptor prior to its discharge to the drainage network.

Kilkenny County Council submits that the construction, operation and decommissioning of the proposed development shall be undertaken in a manner that significant noise, dust, reflectance, shadow flicker, air emissions and/or odours do not significantly affect amenities or the environment.

The proposed development has been comprehensively assessed in respect of all

relevant environmental factors in the EIAR submitted and it is assessed that the proposed development will have no likely significant effects on amenities or the environment.

Kilkenny County Council submits that the Applicant shall provide a Site Works Plan, Vehicle Inspection & Maintenance Plan and project Liaison Officer for the relevant phases of the proposed development.

The appointed contractor(s) shall prepare a set of Construction Method Statements (or Site Works Plans); including a Vehicle Inspection & Maintenance Plan; which shall be incorporated into the CEMP.

Section 6.0 of Annex 3.5 provides for the appointment of a Project Manager who shall act on behalf of the Applicant. The Project Manager shall be responsible for liaising with Kilkenny County Council; while a Community Liaison Officer will also be appointed to engage with members of the public and local community.

Kilkenny County Council understands that 1 no. set of underground electricity line ducting is to used for the White Hill Wind Farm while the remainder are for future use by the Applicant or third parties. Kilkenny County Council queries whether the ducting is to remain in private use of transferred to EirGrid or ESB Networks.

The Applicant wishes to clarify that, as Kilkenny County Council has set out, it is proposed to install a total of 5 no. sets of ducts within the trench; 2 no. of which will be used to connect the White Hill Wind Farm to the proposed electricity substation, while the remainder may be used in the future by other third parties. The Applicant considers it prudent to incorporate future capacity within the proposed development to avoid the need for future excavations in case other parties wish to connect to the electricity substation along the route of the underground electricity line.

The underground electricity line, and associated ducting (2 no. sets), will form part of the private assets of the White Hill Wind Farm and shall not be transferred to EirGrid or ESB Networks. Similarly, the remaining 3 no. sets of ducts will also remain in the Applicant's private ownership and will not be transferred to EirGrid or ESB Networks; however, in the event that a third party wishes to utilise the spare ducting in the future, ownership would be transferred to that party subject to all necessary agreements being entered into.

Kilkenny County Council submits that details have not been provided relating to the long-term maintenance of the proposed development within the public road network and any interaction with the carrying out of the local authority's statutory duties.

In the first instance, it is important to highlight that the design of the proposed development has sought to maximise the extent of underground electricity line to be installed within private lands and, consequently, to minimise the interaction with the public road network. In this regard, it should be noted that within County Kilkenny an extremely short length of the overall underground electricity line (approximately 430m) is located within the corridor of the public road network; therefore, the potential for interaction between the proposed development and the local authority's statutory duties is minimal.

Following the installation of the ducting and electricity line, the excavated trench will be appropriately backfilled with excavated material (where appropriate) or by imported aggregates and reinstated in accordance with the requirements of Kilkenny County Council. As described at Section 3.4.2 (Chapter 3), all public roads along

which it is proposed to install the underground electricity line will be subject to a full-carriageway reinstatement (re-surfacing) of the section where the electricity line is installed thus ensuring that there are no long-term effects on the public road network. Accordingly, following the completion of carriageway re-surfacing, the public roads in question will be returned to their current (or better) condition. The presence of the underground electricity line will be appropriately marked and will not preclude Kilkenny County Council from carrying out future re-surfacing, or other, works to the public road network should they be required.

Similarly, the presence of the underground electricity line will not preclude Kilkenny County Council from carrying out any maintenance works to roadside drainage features. As part of the post-consent detailed design process, the proposed development will be appropriately designed to maximise the separation to existing drainage features and any sub-surface services.

Finally, the Applicant wishes to highlight that the installation of underground electrical and telecommunications infrastructure within public road corridors is common practice in Ireland, particularly for renewable energy developments. While it is acknowledged that the presence of such infrastructure will require increased cooperation and consultation between local authorities and the owners of such infrastructure in the event of future maintenance works to the affected public roads; which the Applicant is committed to; it is assessed that there is no likelihood of significant effects on the ability of Kilkenny County Council to carry out its statutory duties.

Kilkenny County Council submits that policies or commercial options to interconnect energy farms to minimise the duplication of underground infrastructure have not been fully developed to rationalise the grid connection network and to minimise the cumulative impacts to road assets and road users.

As Kilkenny County Council has previously recognised, the proposed development comprises the installation of 5 no. sets of ducts within the proposed trench, with only 2 no. ducts being utilised by the White Hill Wind Farm. The decision of the Applicant to install additional/spare ducts was taken in response to the concerns of local authorities (including Kilkenny County Council) regarding the potential for multiple developments seeking to install electrical infrastructure along the same route resulting in the public road network being subject to extended periods of construction activity, road closures and traffic disruption.

Contrary to the assertion of Kilkenny County Council that options to rationalise the grid network and minimise the cumulative impacts to road assets and road users have not been developed, the Applicant submits that the installation of spare ducting is evidence of a proactive, future-proofing approach being adopted in seeking to ensure that should any future energy developments in this general area seek to connect to the proposed electricity substation, substantial construction activities within, and any impacts on, the road network can be avoided due to the presence of the proposed spare ducting. This will, in turn, significantly reduce, or avoid, the likelihood of cumulative effects on the road network and on road users.

Kilkenny County Council expresses its "preference" that the ducting be installed in third party lands or via overhead lines due to concerns regarding the public road network being "sterilised" for private development.

The Applicant wishes to again highlight that, of the c. 3.3km of underground electricity

line to be installed within County Kilkenny, c. 2.8km will be installed within private lands with only c. 430m being installed within the public road corridor. Evidently, therefore, the Applicant has sought to minimise the length of electricity line to be installed within the public road network and to minimise, to the greatest possible degree, the likelihood of adverse effects on traffic and access. While the Applicant notes Kilkenny County Council's "*preference*" that all infrastructure be located off-road, it has not been possible to obtain the consent of all private landowners to enable such an approach. Notwithstanding the presence of a short length of underground electricity line within the public road corridor, it is assessed that no significant effects on the public road network are likely to arise.

Similarly, noting Kilkenny County Council's reference to the installation of overhead lines, the Applicant refers the Commission to Section 4.7.4 of the *Draft Revised Wind Energy Development Guidelines 2019* which states that "*…it is considered that underground grid connections for wind energy projects are the most appropriate environmental and/or engineering solution…Therefore, this should be the default approach.*" As a consequence of the clear national policy preference towards underground electricity lines, and the availability of various options for the route of an underground electricity line, the Applicant concluded that the development of overhead line options was not preferable in this instance.

Accordingly, the Applicant submits that the design of the proposed development is the most appropriate technical/engineering approach and, given that no likely significant effects on the environment have been identified in the EIAR or NIS, environmental solution.

As described below, and following consultation with Kilkenny County Council, the Applicant has agreed to increase the depth of cover to ducting located within the public road network in County Kilkenny from 750mm to 950mm. The increased depth of cover will enable Kilkenny County Council to install services above the proposed ducting, as may be necessary, thus ensuring that the proposed development does not result in a sterilisation of the public road corridor.

Kilkenny County Council states that indemnification of Kilkenny County Council shall be required for any works related to the underground electricity line. Kilkenny County Council also submits that licence agreements shall be required to facilitate the laying, installation and maintenance of conduits or cables within the public road as Kilkenny County Council will not be responsible for any future costs relating to the relocation or protection of the electricity line.

The Applicant can confirm that all necessary indemnities and licence agreements shall be entered into with Kilkenny County Council in due course and prior to the commencement of development. Subject to a grant of planning permission, the Applicant shall enter into post-consent consultation with Kilkenny County Council to ensure that all relevant matters are appropriately addressed within said agreements.

Kilkenny County Council requests that trench backfill arrangements are reviewed to avoid significant linear strips of concrete being installed within the public road corridor.

As described at Section 3.4.2 (Chapter 3) and illustrated at Figure 7.04 of the Planning Application Drawings, the electricity line trench, containing 5 no. ducts which will be installed within the public road network, will not be backfilled with concrete. Backfill material within trench sections located within the public road network will comprise

imported sand and stone.

Kilkenny County Council submits that in the event that joint pit chambers are installed within the public road, the structure shall be no less than 600mm below finished road level.

As described at Section 3.4.2 (Chapter 3), traditional joint bay chambers will not be required and are not proposed. The lengths of electricity line will be joined at 'jointing plinths' which will comprise a slab of concrete installed at the base of the trench. Moreover, the design of the proposed development is such that all jointing plinths will, insofar as practicable, be installed within private lands and not within the public road network.

Kilkenny County Council requests that further consultation is undertaken regarding the precise alignment of the underground electricity line and road reinstatement requirements.

The Applicant has committed, at Section 12.2.5.1 (Chapter 12), to further consultation regarding all works to be undertaken within the public road corridor. Furthermore, the Applicant has also committed to the reinstatement of all public roads to the satisfaction of Kilkenny County Council (Section 3.4.2 [Chapter 3].

Kilkenny County Council refers to interim guidance provided by the Department of Transport (Circular RW 07 0f 2025) regarding medium or high voltage electricity assets and the reference therein that the depth of cover to the high-voltage transmission cables should be no less that 950mm unless otherwise agreed.

Firstly, it is important to note that the *Interim Guidance to Road Authorities Regarding The Proposed Placement of Medium or High Voltage Electricity Assets, Including Ducts, Cables, and Associated Infrastructure Under Public Roads* states that the depth of cover to "*Transmission HV*" or high-voltage cable ducts should be no less than 950mm. Kilkenny County Council has stated its intention to apply this requirement to all associated grid connection service ducting including telecommunications ducting.

However, the underground electricity line to be installed within the public road corridor is of a medium-voltage type and, therefore, the requirement for 950mm of cover above high-voltage power ducts is not applicable in this instance. Secondly, the guidance does not refer to the requirement for the 950mm of cover to apply to telecommunication and ancillary ducting. It is, therefore, unclear as to Kilkenny County Council's rationale for applying such a requirement to the ancillary service ducting.

Without prejudice to the above, the Applicant is, following consultation with Kilkenny County Council, satisfied to provide 950mm of cover above the telecommunications ducting for the c. 430m section where the electricity line will be installed within the public road corridor within County Kilkenny. An updated typical trench detail for this section of the electricity line route has been prepared and is enclosed at **Annex 1**.

Kilkenny County Council submits that full road reconstruction may be required to accommodate the underground electricity line. Furthermore, Kilkenny County Council submits that a full assessment of existing roadside drainage shall be undertaken to ensure that the proposed development does not adversely affect roadside drainage.

As committed to at Section 12.2.5.1 (Chapter 12) and as discussed above, the Applicant is committed to post-consent consultation with Kilkenny County Council regarding the detailed design of the underground electricity line. In the event that the detailed design process, in consultation with Kilkenny County Council, determines that the re-construction of a section of the public road network is required, the Applicant can confirm that these works will be undertaken in conjunction with, and to the satisfaction of, Kilkenny County Council.

Similarly, as part of the detailed design process, a survey of roadside drainage features along the relevant section of the L6673 shall be undertaken and the final design shall account for local drainage infrastructure.

Kilkenny County Council requests that a structure/bridge report should be prepared to determine how the installation of the underground electricity line will affect the bridge/structure.

The underground electricity line will not be installed within or beneath any existing bridging structures. The proposed horizontal directional drilling (HDD) will be undertaken at watercourse crossings within private lands and no existing bridging structures are present at these locations.

Kilkenny County Council submits that any thrust bores must be at a sufficient depth to avoid any adverse effect on any structure or watercourse bed.

As set out above, HDD will not be undertaken in the environs of any bridging structures and, therefore, significant effects are not likely to arise.

In accordance with standard best-practice, Section 3.4.2 (Chapter 3) states that the HDD bore will be at a minimum depth of 2.5m below the stream channels to avoid any impact on the watercourses.

Kilkenny County Council states that the Applicant has not commented on the potential future development of the electricity substation nor the potential for cumulative effects.

As described at Section 3.2 (Chapter 3), the primary purpose of the proposed development is to enable the connection of the permitted White Hill Wind Farm to the national electricity network. The location of the electricity substation was identified following a comprehensive assessment of alternative substation locations (refer to Section 2.3.2 (Chapter 2)); while the precise siting of the electricity substation was selected having regard to localised site characteristics and environmental constraints, including the presence of residential dwellings to the north.

The development of 110kV electricity substations, such as that proposed, must conform with strict EirGrid specifications and requirements, including in respect of the footprint of the electricity substation compound. Additionally, EirGrid specifications require a developer to select a site location which could enable a future expansion of the electricity substation in the event that same was required. Accordingly, the site of the proposed electricity substation was selected having regard to its environmental characteristics and absence of particularly sensitive environmental receptors; its ability to accommodate an electricity substation of the type require to connect the permitted White Hill Wind Farm to the national electricity network; and, should it be required, sufficient capacity to accommodate an expansion of the electricity substation should EirGrid decide to do so.

At the time of writing, the Applicant is unaware of any further future development at, or expansion of, the electricity substation and, as a result, a cumulative assessment of same cannot be undertaken. However, any future development which may be undertaken would be subject to a separate consenting and environmental assessment process which would be required to assess the cumulative effects of that project with the subject proposed development.

Moreover, and as described above, the decision of the Applicant to install spare/additional ducts within the electricity line trench is a proactive measure to avoid substantial future construction works in this general area in the event that a third party wishes to connect to the proposed electricity substation. Again, at the time of writing, the Applicant is unaware of any such third party seeking to connect to the proposed electricity substation.

Kilkenny County Council raises concerns with the use of the L66732 local road to access the site of the electricity substation.

Following consultation with Kilkenny County Council regarding concerns relating to the proposed use of, and increased width of, the L66732, it is proposed to avoid the use of the section of L66732 leading to the proposed site entrance by heavy-goods vehicles (HGVs) and other construction traffic during the construction phase. It is now proposed to utilise and upgrade an existing agricultural access point at the junction of the L6673 and L66732 and to construct a section of temporary access track which shall accommodate traffic during the construction phase of the proposed development only. The site entrance proposed in the planning application will provide access during the operation phase when construction traffic volumes are substantially reduced.

The revised access proposals (refer to **Annex 2**) have been discussed with Kilkenny County Council (Roads Design Office) in a meeting dated 24 June 2024; while a drawing of the revised proposals was also shared with the Roads Design Office.

The proposed/upgraded site entrance will not be required to accommodate any abnormal size loads but will be designed to ensure ease of access and egress for standard HGVs which will deliver construction materials and electrical apparatus to the site. Works at the site entrance will comprise the removal of an existing agricultural gate, post-and-rail fencing and c. 5m of hedgerow/trees. Following the establishment of the entrance, it will be appropriately fenced off and gated to prevent unauthorised access. Access gates will be set back 18m from the road edge to allow HGVs pull off the public road before accessing the site which will prevent any disruption to local road users. Following the completion of construction, the site entrance will be returned to its current condition with gates and fencing installed and hedgerow replanted.

Having regard to the characteristics of the proposed site entrance, and its proximity to the junction of the L6673 and L66732, it will not be possible to provide visibility splays which accord with Section 13.22.1 of the *Kilkenny City & County Development Plan 2021-2027*. However, for the duration of the construction phase, comprehensive traffic management measures will be implemented to ensure that there are no adverse effects on public or road safety due to the reduced visibility splays. In particular, warning signage will be installed on all approaches and flagmen will be stationed at the site entrance for the duration of the construction phase to control traffic accessing and egressing the proposed development site to ensure that road safety is maintained. Additionally, priority will be given to traffic accessing the site over that egressing the site to ensure that HGVs can pull off the public road thus preventing any

disruption to other road users. As described at Section 3.5.1 (Chapter 3), a detailed Traffic Management Plan will be prepared and agreed with Kilkenny County Council prior to the commencement of development and will include all details regarding the management of construction traffic, including at the proposed temporary construction access point.

From the site entrance, a section of access track (c. 160m in length) will be constructed as described at Sections 3.4.1.5 and 3.5.3 (Chapter 3). Following the completion of the construction phase, the access track shall be removed and the area soiled over and reseeded. A short section of existing hedgerow (c. 10m) will also be required to be removed to accommodate the access track. Again, following the removal of the access track, the hedgerow shall be replanted to ensure that there is no overall loss of hedgerow or loss of ecological connectivity.

In light of the above revised access proposals, the Applicant can confirm that construction traffic and HGVs will not be required to utilise the L66732 leading towards the originally proposed site entrance. Accordingly, it is no longer required or proposed to increase the width of the carriageway of the L66732 by c. 1.5m over a distance of 130m. As described above, the revised access arrangements will be implemented during the construction phase only and the originally proposed site entrance will be utilised during the long-term operations of the electricity substation. During the operation phase, as described at Section 3.5 (Chapter 3), the electricity substation will be visited on 1-2 no. occasions per week by a light commercial vehicle which will have no perceptible effect on the public road network.

As requested by Kilkenny County Council, a detailed site entrance drawing (**Annex 3**) of the long-term operation phase site entrance has been prepared and illustrates the achievement of visibility splays and the maintenance of existing roadside drainage channels.

The revised access proposals have been assessed in respect of each of the environmental topics/chapters set out in the EIAR. Overall, having regard to the small-scale and localised nature of the revised proposals, the characteristics of the receiving environment and the implementation of all mitigation measures set out in the EIAR, it is assessed that:-

- The revised proposals will have no likely significant effect on population and human health. Due to the reduced interaction with the L66732 local road and likely reduction to disruption experienced by local residents and landowners, the revised proposals are likely to reduce the significance of effects experienced by the local community;
- The revised proposals will result in the temporary loss of hedgerow and improved agricultural grassland habitats; however, following the completion of construction, the site entrance will be returned to its current condition and access track removed and the affected area reseeded. The area of the proposed site entrance is not assessed to be of significance for birds or bats and no increased effects are assessed as likely. Similarly, no increased level of effects are likely for terrestrial mammals or aquatic ecology;
- The construction of the site entrance and access track will necessitate an increased level of excavations of topsoil and subsoil; however, all excavated material will be used in the reinstatement of the site entrance and access track;

- There are no natural surface water features within the alignment of the site entrance or access track. While the increased level of excavations will result in an increased risk of surface water contamination, the implementation of all surface water control measures included in the EIAR (including drainage infrastructure as illustrated at **Annex 2**) will ensure that there are no adverse effects on water quality;
- No significant effect on air quality or climate are assessed as likely;
- Following the completion of construction and the reinstatement of the temporary site entrance and access track, there will be no long term evidence of its presence or effect on the landscape;
- There are no cultural heritage features within the footprint of the site entrance or access track. With the implementation of all previously committed-to mitigation measures, any previously unrecorded heritage features which may be encountered during excavations will be appropriately recorded and managed;
- While the revised access proposals will necessitate an increased level of construction activities, significant noise effects are not assessed as likely to occur; and,
- The revised proposals are assessed as having a positive effect on transport and access due to a reduced likelihood of direct effects on the L66732 public road and reduced risk of disruption to users of the L66732.

The revised access proposals have also been assessed as having no effect on the conclusions reached in the NIS; which found that "*it can be concluded, beyond all reasonable scientific doubt that the project, either alone or in combination with other plans or projects, will not undermine the conservation objectives of any European sites or have any significant effects thereon. It can therefore be concluded that the project will not have an adverse effect on the integrity of any European site.*"

Kilkenny County Council requests that a detailed construction programme and detailed traffic information be provided.

As described at Section 3.5.1 (Chapter 3) and Section 12.2.5.1 (Chapter 12), a detailed Traffic Management Plan will be prepared prior to the commencement of development and agreed with Kilkenny County Council and shall address matters relating to *inter alia* construction material haul routes, details of vehicle specifications, a construction programme, delivery schedule, warning signage, deployment of flagmen, road closures and diversionary routes, and road reinstatement details.

The Traffic Management Plan will be informed by the detailed design process and the delivery schedule shall include a breakdown of daily, weekly and monthly traffic volumes.

Kilkenny County Council submits that, notwithstanding the implementation of a one-way system for the movement of construction traffic, the provision of passing bays may be required.

During a meeting with Kilkenny County Council (Roads Design Office) on 24 June 2024, the Applicant was advised that, following a further review of the proposed construction material delivery routes, the provision of passing-bays would not be required.

Kilkenny County Council submits that all diversionary routes shall be subject to an assessment to determine their suitability to cater for diverted traffic.

The Applicant can confirm that Kilkenny County Council shall be consulted with as part of the identification of diversionary routes during the installation of the underground electricity line within the public road network. In the event that surveys or assessments of the identified routes are required, same shall be carried out at the expense of the Applicant and any works arising shall also be carried out by, or at the expense of, the Applicant.

Kilkenny County Council advises that it intends to apply the requirements for Exceptional Abnormal Loads (2024) to the proposed development and that the Applicant shall consult with Kilkenny County Council regarding the appropriate assessment of structures.

As Kilkenny County Council has identified, the maximum-weight load to be delivered to the proposed development site will have a weight of approximately 68-tonnes. As per Circular RW18 of 2024, issued by the Department of Transport, Exceptional Abnormal Loads are classed as "*superloads greater than 180 tonnes*". Accordingly, as the proposed development does not involve the delivery of any loads in excess of 180-tonnes, the circular issued by the Department is not applicable to the proposed development and it is unclear as to why Kilkenny County Council is seeking to extend the scope of the circular to abnormal loads which do not exceed the 180-tonne threshold.

Notwithstanding the above, the Applicant recognises the requirement to ensure the protection of the public road network and can confirm that it will, via the appointed transport contractor, liaise with Kilkenny County Council to ensure that all required surveys and assessments are completed and, as per the normal course, that all relevant licences, permits and consents are in place prior to the delivery of any abnormal loads.

Kilkenny County Council contends that Chapter 4 (Population & Human Health) does not adequately assess the likely effects of the proposed development on groundwater and public drinking supplies and due to noise and vibration.

As described at Section 4.1 (Chapter 4), many of the likely effects on population and human health are addressed in specific chapters elsewhere within the EIAR and, to prevent repetition, are not assessed at Chapter 4; including, for example, the likely effects on groundwater, drinking suppliers, noise and vibration.

The likelihood of significant effects on groundwater and drinking supplies is comprehensively assessed at Section 7.4 (Chapter 7; and specifically at Sections 7.4.3.8 and 7.4.4 and 7.4.6); while the likely effects of noise during the construction and operation phases are assessed at Sections 11.5.2 and 11.5.3 (Chapter 11).

We refer the Commission to the abovementioned chapters for further details of the assessments undertaken and to responses provided above in relation to groundwater, drinking supplies and noise/vibration.

Kilkenny County Council suggests that effects arising from the proposed development will include the displacement of culverts and diversion of natural watercourses.

The Applicant wishes to clarify that the proposed development will have no effect whatsoever on existing culverts or watercourse bridging structures and there will be

no displacement of culverts. Furthermore, the proposed development does not involve the diversion of any natural watercourses. As discussed above, a single man-made agricultural drain located within the footprint of the electricity substation compound will be diverted to accommodate the electricity substation. This drain is not an EPA marked watercourse. The proposed methodology for the diversion of this drain has been provided above in response to previous comments of Kilkenny County Council.

Kilkenny County Council asserts that it is unclear whether there may be impacts on the Paulstown Public Water Supply.

The likelihood of significant adverse effects on drinking water supplies; including the Paulstown Public Water Supply, Castlewarren Group Water Scheme, Shankill Group Water Scheme and Bagenalstown Abstraction Points; has been comprehensively assessed at Chapter 7 of the EIAR submitted and we refer the Commission to same for full details of the assessment undertaken.

Chapter 7 describes *inter alia* the location of the water supply sources (including source protection areas) and their geographic context *vis-à-vis* the proposed development (Section 7.3.12), the likelihood of effects during the construction (Section 7.4.3.8) and operation (Section 7.4.4) phases, the likelihood of effects on human health (Section 7.4.6), and provides a set of mitigation measures (Section 7.5.1.7) to ensure the protection of all drinking water supplies.

With specific reference to the Paulstown Public Water Supply; it is assessed (Section 7.5.1.7) that the nature of construction works to be undertaken within its catchment, the lack of surface water pathways and the implementation of drainage control and pollution prevention measures will ensure that the proposed development will have no effect on the water supply.

Kilkenny County Council contends that a limited number of viewpoints have been used in the assessment of visual effects and that additional viewpoints should be considered, such as farther east of VP6 along the LP2625 local road.

The locations selected to provide representative views of the proposed development were informed; as described at Section 9.3.3.3 (Chapter 9); following the completion of a zone of theoretical visibility analysis undertaken to identify locations from where the proposed development may be visible and following field verification of the suitability of the identified locations. In addition to the zone of theoretical visibility analysis, viewpoints were selected to provide views from various perspectives, distances and contexts to ensure a comprehensive assessment of the likely visual effects. The method applied complies fully with standard best-practice for landscape and visual impact assessments.

As is evident from Figure 9.6 (Chapter 9); the selected viewpoints provide short-range (VP2 and VP3), mid-range (VP5 and VP6) and long-range (VP1 and VP6) views of the proposed development from varying viewing angles and geographic contexts (e.g. VP1 is located on elevated ground above the proposed development site while the remainder are at lower elevations).

Accordingly, the Applicant submits that a broad range of viewing contexts have been provided for in the selected viewpoint locations and that an increased number of viewpoints would not introduce increased value to the assessment as all receptor category types (Section 9.3.3.3) have been appropriately accounted for. Moreover,

as also described at Section 9.3.3.3, the inclusion of every location from where the proposed development would be visible would result in an unwieldy report from which it would be difficult to identify and assess the likely significant effects.

The Applicant further submits that the preparation of photomontages from additional locations along the L2625, farther east of VP6, is not warranted given the location of VP4 and VP5; each of which provide comparable viewing distances and angles to any further VPs which may be identified along the L2625. In particular, views towards the proposed development site from the crossing of the M9 by the L2625 are heavily screened by tall mature vegetation while, further east, views while be interrupted by vegetation and residential properties to the north of the L2625 thus precluding any clear views of the proposed development.

Kilkenny County Council submits that the effects on residential amenity at the 3 no. nearest dwellings to the electricity substation must be fully assessed and protected.

The likely effects of the proposed development on residential amenity, including the nearest dwellings, have been fully assessed throughout the EIAR including; but not limited to; human health, general amenity and well-being, electromagnetic radiation, major accidents and natural disasters, water quality and drinking water supplies, air quality, visual effects, noise & vibration, and traffic disruption.

No significant effects have been assessed as likely to occur and, accordingly, a significant effect on residential amenity is similarly assessed to be unlikely.

Kilkenny County Council contends that the proposed development gives rise to a risk of flooding due to an absence of surface water management proposals.

Kilkenny County Council has not provided any evidence to support the suggestion that the proposed development will give rise to a risk of flooding. A dedicated Flood Risk Assessment has been prepared (refer to Annex 7.1 [Volume II]) and concludes that:-

- the proposed development is located in a low flood risk zone (Flood Zone C);
- an existing surface flooding/ponding will not be exacerbated by the proposed development; and,
- with the implementation of standard mitigation and surface water control measures, the proposed development will not result in any increased flood risk.

Furthermore, and contrary to the contention of Kilkenny County Council, the Applicant has provided detailed surface water management proposals (refer to Annex 3.5) to ensure that there is no deterioration in the quality of downstream surface waters or of groundwaters and to ensure that any surface water runoff arising from the proposed development is appropriately managed.

Kilkenny County Council suggests that the assessment of visual impacts is misleading, that the assessment should include open areas from the public road network and that some viewpoints were chosen where views are partially or fully obscured.

In the first instance, the Applicant does not accept any suggestion that the landscape and visual impact assessment is misleading, not sufficiently robust or deficient regarding the selection of viewpoints. As described at Section 9.1.1 (Chapter 9), the assessment has been undertaken by a highly reputable and experienced consultant and in accordance with all relevant best practice guidance, including the

Landscape Institute and the Institute of Environmental Management and Assessment (IEMA) *Guidelines for Landscape and Visual Impact Assessment, 2013 (GLVIA3)* and the Landscape Institute Technical Guidance Note 06/2019 *Photography and Photomontage in Landscape and Visual Impact Assessment*.

Paragraph 6.19 of GLVIA3 states that viewpoints generally fall into 3 no. categories – Representative Viewpoints, Specific Viewpoints and Illustrative Viewpoints. Representative Viewpoints are selected to "*represent the experience of different types of visual receptor, where larger numbers of viewpoints cannot all be included individually and where the significant effects are unlikely to differ*"; while Specific Viewpoints are chosen "*because they are key and sometimes promoted viewpoints within the landscape, including for example specific local visitor attractions, viewpoints in areas of particularly noteworthy visual and/or recreational amenity such as landscapes with statutory landscape designations, or viewpoints with particular cultural landscape associations.*"

As described at Section 9.2.6 (Chapter 9), representative views were deemed to be most appropriate in the case of the subject proposed development to represent views from main thoroughfares and pedestrian areas within the vicinity of the proposed development. When identifying suitable viewpoint locations, it is important to represent the variable nature of visual effects arising from a proposed development having regard to the characteristics of the local environment. As is evident from the photomontages presented, the local landscape is heavily screened with successive layers of mature vegetation limiting visibility to short distance views. Accordingly, it is important to represent this in the visual impact assessment and to, as Kilkenny County Council suggest, specifically identify "*open areas*" for the preparation of photomontages would be inappropriate, would not align with best practice and would not be reflective of the visual effects likely to be experienced by local receptors.

The level of visual screening present in the landscape is evidenced by the fact that the views of the proposed development presented in the photomontages are interrupted by intervening vegetation and buildings (VP2, VP3, VP4, VP5, and VP6), including from the closest viewpoint locations to the proposed development (VP2 and VP3). Furthermore, the heavily contained and screened nature of the landscape is further evidenced by the photomontages prepared from VP1 which, despite its elevated position above the electricity substation and being located at a distance of 1.5km, fails to offer clear visibility of the proposed development.

Accordingly, the Applicant rejects the assertion of Kilkenny County Council that the assessment undertaken is misleading or deficient, and submits that the assessment is highly accurate in portraying the occasional and fleeting views of the electricity substation which will be experienced by local residents, road users and other receptors.

2.0 CARLOW COUNTY COUNCIL

Carlow County Council requests that the development be appropriately coordinated with the adjoining permitted development to minimise impacts on the residential amenities of the area.

The Applicant can confirm that the proposed development, particularly during the construction phase, will be appropriately coordinated with the construction of the White Hill Wind Farm to ensure that any adverse effects on residential amenity is

minimised to the greatest possible extent.

The EIAR and NIS have each undertaken a cumulative assessed with existing, permitted and proposed developments and it is assessed that no significant cumulative effects are likely to arise. With the implementation of all proposed mitigation measures, and those related to the permitted White Hill Wind Farm, cumulative effects are not assessed as likely to be significant.

Carlow County Council submits that the proposed development must not alter any local drainage system or the drainage of the public road network.

As described at Section 3.4.2 (Chapter 3), the underground electricity line will be installed with the carriageways of the L6673, L6738, L7117 and L71172 and will have no direct effect on roadside drainage features whatsoever. Where the underground electricity line interacts with any piped culverts, the ducting will, insofar as possible, be installed either above or below the culvert without affecting the structure of the culvert. However, where necessary, the exiting pipe/culvert will be replaced on a like-for-like basis (where appropriate) and suitably sized to ensure that there are no hydraulic/flow restrictions.

During the construction phase, roadside drainage features will be protected to ensure that excavated material does not enter drains and result in flow restrictions which, in turn, may cause surface water ponding/flooding.

At the proposed site entrances (electricity substation and electrical control unit), existing roadside drains will be piped to ensure that existing drainage flows are maintained.

At the electricity substation and electrical control unit, surface water management systems have been designed to ensure that any surface water arising is appropriately intercepted, treated and attenuated prior to its discharge to the existing drainage network.

With the strict implementation of the above design and mitigation measures, and all such measures described in the EIAR, it is assessed that the proposed development is not likely to have a significant effect on drainage systems, rivers or adjacent properties.

Carlow County Council submits that the proposed development should not have a negative impact on the visual amenity of the area.

The likely visual effects arising from the proposed development are assessed at Chapter 9 (Volume I) of the EIAR submitted and we refer the Commission to same. In summary; it is assessed that residual visual effects, following the implementation of landscaping and visual screening measures, will not be significant and are not assessed as likely to exceed a significance of 'slight-imperceptible'.

Carlow County Council recommends a number of matters which should be addressed by way of condition should planning permission be granted. .

With respect the matters referred to by Carlow County Council, the Applicant comments as follows:-

- The implementation of landscaping and visual screening measures has been proposed at Section 3.4.6 (Chapter 3);
- A Traffic Management Plan will be prepared as part of a CEMP prior to the

commencement of development which will include traffic management proposals and measures to minimise disruption to local road users and ensure that construction and public traffic is appropriately managed. As described at Section 3.5.1 (Chapter 3), the construction phase will be supervised by a range of environmental and engineering specialist personnel, and an experienced and qualified traffic management coordinator shall be appointed to manage and coordinate the implementation of the Traffic Management Plan;

- Given the Applicant's proposal (Section 3.4.2 [Chapter 3]) that all public roads along which the underground electricity line is to be installed are to be subject to a full-carriageway reinstatement (i.e. full-road width) and that all such reinstatement works are to be completed to the satisfaction of respective planning authorities, the Applicant submits that pre- and post-construction surveys of the electricity line route are not warranted in this instance;
- The Applicant can confirm that the detailed CEMP, to be prepared and agreed with the planning authorities prior to the commencement of development, shall include further details regarding the protection of existing waster service infrastructure;
- The Applicant can confirm that a detailed CEMP and SWMP shall be prepared and agreed with the planning authorities prior to the commencement of development;
- The Applicant can confirm that all mitigation measures in the EIAR and NIS shall be implemented in full; and,
- The Applicant can confirm that any conditions of consent relating to development contributions and/or securities shall be agreed prior to the commencement of development.

3.0 INLAND FISHERIES IRELAND

Inland Fisheries Ireland (IFI) states that the storage, management and conveyance of materials on site must not allow any matter to reach surface water systems and that there must be no runoff from fuels, oils, concrete or from stockpiled materials.

As described at Section 3.4.5 (Chapter 3), Section 7.5 (Chapter 7) and Annex 3.5, the proposed development provides for a comprehensive surface water management system and set of surface water control measures to ensure that there no deleterious matter is discharged from the proposed development site; including run-off which may be contaminated by fuel, oil, concrete, silt or sediment. In particular, we refer the Commission to Section 7.5 of Chapter 7 which states that "*The overarching objective of the proposed mitigation measures is to ensure that all surface water runoff is comprehensively attenuated such that no silt or sediment laden waters or deleterious material is discharged into the local drainage system.*"

IFI states that there should be no interference with any watercourse without prior notification of IFI.

The proposed development includes the installation of 1 no. bridging structure over an unnamed stream. As committed to at Section 3.4.1.5 (Chapter 3), IFI will be consulted prior to the installation of the bridging structure while, as required, a Section

50 licence application will also be made to the Office for Public Works.

It should also be noted that the electricity line will, at watercourse crossings, be installed via HDD to prevent any direct effects on, or interaction with, the stream bed or channel.

IFI states that all mitigation measures set out in the EIAR, NIS and CEMP shall be implemented and adhered to in full.

The Applicant can confirm that all measures set out in the EIAR, NIS and CEMP will be implemented in full during the construction, operation and decommissioning phase as relevant.

IFI requests the method statements are submitted to IFI relating to HDD activities and the installation of the bottomless culvert over on the access track leading to the electricity substation.

The Applicant can confirm that method statements will be prepared for HDD works and the installation of the bridging structure over the unnamed watercourse and same shall be furnished to IFI.

4.0 UISCE ÉIREANN

Uisce Éireann has not raised any specific matters in relation to the proposed development and concludes that "*given the distance and the limited nature of the construction activity associated with the cabling the risk can be considered low. The EIAR has proposed sufficient mitigation measures.*"

5.0 DEPARTMENT OF HOUSING, LOCAL GOVERNMENT AND HERITAGE

The Department of Housing, Local Government and Heritage submits that advance archaeological testing should be carried out of all greenfield areas of the proposed development site.

As described at Chapter 10 (Volume I) of the EIAR submitted, the assessment of effects on cultural heritage has been informed by desktop surveys, field surveys, a geophysical survey and archaeological test trenching. Given the nature of the proposed development and construction methodologies, the geophysical survey and archaeological test trenching focused on the site of the electricity substation as it was assessed that the completion of such investigations elsewhere within the proposed development site (i.e. along the route of the underground electricity line) was not warranted.

The assessments undertaken have not identified any likelihood of previously unrecorded features (additional to those identified through the geophysical survey and archaeological test trenching) being encountered during the construction of the proposed development; however, it is proposed that archaeological monitoring of all excavations will be undertaken to ensure that any material which may be encountered is appropriately managed. On the basis of the assessments undertaken, it is assessed that additional archaeological test trenching is not warranted and that the proposed mitigation measures are sufficient in ensuring that any features encountered are protected and appropriately managed.

The Department of Housing, Local Government and Heritage recommends that a suitably qualified archaeologist is retained to advise on the establishment of exclusion

zones around heritage assets located within the proposed development site.

The Applicant can confirm that a suitably qualified archaeologist will be appointed and will advise on the implementation of exclusion zones around recorded and identified heritage assets within the proposed development site.

6.0 SHANKILL GROUP WATER SCHEME

The Shankill Group Water Scheme (GWS) submits that the proposed development poses a risk to the well which serves the GWS and refers to "inconsistencies" in the consideration of ground water.

The likelihood of effects on ground water and drinking supplies, including the Shankill GWS, have been assessed in full and we refer the Commission to Chapter 7 of the EIAR and particularly Section 7.4.3.8 thereof for effects during the construction phase, Section 7.4.4 for effects during the operation phase, Section 7.4.6 for the likelihood of effects on human health, and Section 7.5.1.7 relating to mitigation measures to ensure the protection of all drinking water supplies. In summary, it is assessed that the proposed development does not pose a risk of likely significant effects on the source of the Shankill GWS.

While the Shankill GWS claims that there are inconsistencies in the assessment of effects on ground waters, this contention is not supported by any evidence of same. Notwithstanding the absence of any supporting evidence, the Applicant submits that the assessment contained within Chapter 7 is fully informed by desktop research and field surveys which provide a clear understanding of the characteristics of the existing environment. This understanding; in combination with a clear description and understanding of the characteristics of the proposed development and its construction methodologies and operation phase activities; enable a complete assessment of the likelihood of significant effects .

The Shankill GWS refers to concerns regarding the potential effects on the GWS network arising from traffic movements during the construction phase.

As a consequence of the revised access arrangements for the construction phase of the proposed development (refer to **Section 1.0** above), the potential interaction of the proposed development with the pipework of the GWS is significantly diminished, given that construction traffic and HGVs will no longer travel along a significant portion of the L66732 within which pipework is installed. Consequently, the only likely interaction of note is where construction traffic will traverse the pipework at the revised site entrance and at the crossing of the private laneway to the north of the electricity substation. At each of these locations, the Applicant proposes to install a concrete slab above the pipework to prevent any disturbance of the pipework or subsidence of the surrounding ground as per normal good construction practice.

Therefore, with the revised access arrangements and the proposed installation of concrete slabs at locations where construction traffic will traverse pipework associated with the GWS, it is assessed that there is no likelihood of significant effects on the operation of the GWS. The Applicant will continuously monitor the pipework during the construction phase and, in the unlikely event that any damage is caused to the pipework which is directly attributable to the proposed development, it shall be remediated immediately by, and at the expense of, the Applicant.

The Shankill GWS submits that no reference has been made to adequate mitigation

measures to avoid contamination of the ground water source.

Section 7.5 (Chapter 7) of the EIAR provides a comprehensive set of mitigation measures to ensure the protection of the hydrological and hydrogeological environment and we refer the Commission to same for full details. Collectively, the implementation of these measures will ensure that the proposed development does not pose a risk of likely significant effects on surface or ground waters, including the source of the Shankill GWS.

7.0 DERMOT & ORLA MAHER AND CHRISTINE KELLY

Mr. & Mrs. Maher and Ms. Kelly submit that the area in the vicinity of the electricity substation has recently been subject to flooding and that the planning application fails to address this matter.

As described at Section 7.3.5 (Chapter 7), there are no recurring flood events recorded in the environs of the electricity substation. A Flood Risk Assessment has been prepared (Annex 7.1) which concludes that the proposed development is not at risk of flooding, will not exacerbate any flooding or surface ponding and, with the implementation of the proposed surface water management infrastructure, will not give rise to an increased risk of flooding. We refer the Commission to the Flood Risk Assessment for full details of the assessment.

Mr. & Mrs. Maher and Ms. Kelly further refer to the installation of a culvert along the access track leading to the electricity substation and the consequential risk of flooding. Section 3.4.1.5 (Chapter 3) states that the bridging infrastructure will comprise a bottomless culvert (or similar) to avoid "*any restrictions to the hydraulic capacity of the channel.*" Furthermore, the Applicant is required to obtain a Section 50 licence from the Office for Public Works which, if granted, will ensure that the culvert has been appropriately designed to avoid any restriction to water flow rates.

Mr. & Mrs. Maher and Ms. Kelly submit that sufficient details have not been provided regarding the reprofiling of ground levels at the electricity substation and the potential risk of flooding as a result.

Flooding has been addressed in the previous response provided and we refer the Commission to same.

As described at Section 3.3 (Chapter 7), existing ground levels at the electricity substation site range from 68m to 73m above ordnance datum and are illustrated at Figure 5.02 of the Planning Application Drawings. As further specified at Figure 5.02, the finished ground level (FGL) of the electricity substation compound will be 69.75m. Accordingly, it will be necessary to undertake groundworks to construct the substation compound. These groundworks will involve a 'cut and fill' process which is described at Section 3.4.1.1 (Chapter 3). The spatial extent of cut and fill works associated with the electricity substation compound are also illustrated as part of the Planning-Stage SWMP provided at Annex 3.5.

Additionally, Section 3.4.4 (Chapter 3) provides details of the volume of materials to be excavated at the site of the electricity substation; while Section 3.4.7 (Chapter 3) provides details on the level of materials which shall be imported to make up levels at the electricity substation site.

Mr. & Mrs. Maher and Ms. Kelly contend that the calculation of 140m of hedgerow to be lost fails to include hedgerow to be lost as part of the widening of the L66732, the

entrance to the electricity substation site and the construction of access tracks.

Section 3.4.1.1 of Chapter 3 (Volume I) of the EIAR states that 140m of hedgerow will be required to be removed to accommodate the footprint of the electricity substation. Additional hedgerow will unavoidably be removed to accommodate the construction of the access track leading to the electricity substation, to accommodate the crossing of the private laneway to the north of the electricity substation, at locations where the electricity line passes through hedgerows, at the entrance to the electrical control unit, and to accommodate the access track leading to the electrical control unit.

However, as described at Section 3.4.6 (Chapter 3), all hedgerow to be removed will be replanted to ensure that there is no net loss of hedgerow habitats as a consequence of the proposed development. In fact, as set out at Table 5.14 (Chapter 5), the proposed landscaping measures will result in a net gain of c. 25m of hedgerow habitat at the proposed development site. The proposed hedgerow planting and replacement measures, and their ecological/biodiversity contribution, have also been further assessed and specific measures for their planting, establishment and management are provided at Sections 5.7 and 5.8 (Chapter 5) and we refer the Commission to same for further details.

Given that there will be a net gain of hedgerow habitat arising from the proposed development, and that a net loss will not occur, the Applicant submits that the proposed development complies with the requirements of Sections 9.2.5.1, 13.29 and 13.22.1 of the *Kilkenny City & County Development Plan 2021-2027* regarding the protection of hedgerows.

Mr. & Mrs. Maher and Ms. Kelly raise concerns regarding the potential development of a well to serve the electricity substation.

As described at Section 3.4.1.2 (Chapter 3), it is proposed to develop a well to serve the electricity substation in the event that a connection to the Shankill GWS cannot be obtained. During the operation phase, as set out at Section 3.6 (Chapter 3), the electricity substation will be visited on 1-2 occasions per week. On the basis of 1-2 visits per week by 2-persons, the likely demand on either the GWS or the bored well would be c. 60-litres per day or c. 5m^3 per annum. Given the extremely low demand, it is assessed that neither connection to the GWS nor the boring of a well would result in a likely significant effect on water resources.

Mr. & Mrs. Maher and Ms. Kelly raise concerns regarding the use to the L66732 by construction traffic and HGVs.

As discussed in response to similar matters raised by Kilkenny County Council (refer to **Section 1.0** above), revised access arrangements have been proposed and we refer the Commission to same.

Mr. & Mrs. Maher and Ms. Kelly raise further concerns regarding the contamination of surface water, ground water and effects on the public road network.

Each of these matters have been addressed in previous responses provided above and we refer the Commission to same.

Mr. & Mrs. Maher and Ms. Kelly allege that the noise impact of the proposed development has been "dismissed" by the Applicant.

Chapter 11 provides a comprehensive assessment of the likely noise effects arising

during the construction, operation and decommissioning phases of the proposed development. The operation phase assessment has; on the basis of the recorded baseline noise levels, previous assessments of noise arising from electricity substations and the recommended noise limits/criteria described at Section 11.3.2.1 (Chapter 11); concluded that, given the intervening separation distances between the electricity substation and the nearest residential dwelling(s), significant noise effects are not likely to be experienced.

Mr. & Mrs. Maher and Ms. Kelly contend that emergency measures have not been provided in the event of contamination of watercourses or water supply during the construction and operational phases.

A Planning-Stage Environmental & Emergency Response Plan for the construction phase has been prepared and is enclosed at Annex 3.5. The response plan, which will be further developed by the appointed construction contractor(s) prior to the commencement of development, provides details of notification procedures should an emergency or pollution event arise.

An Environmental & Emergency Response Plan will also be prepared for the operation phase and will contain notification procedures in the unlikely event that a pollution event occurs.

Mr. & Mrs. Maher and Ms. Kelly submit that the Applicant has failed to adequately assess alternatives to the proposed development.

As described at Section 2.1 (Chapter 2), the Environmental Impact Assessment (EIA) Directive requires an EIAR to include "*A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of environmental effects.*"

Chapter 2 provides a detailed description of the process adopted by the Applicant in assessing alternatives at the macro-scale (i.e. the 'do-nothing' scenario and site locations) to the micro-scale (i.e. substation design options, electricity line route options and construction material sources and delivery routes.

While the assessment of project alternatives has, by necessity, required consideration of technical, operational and commercial factors; the proposed development is assessed as the most appropriate method of connecting the permitted White Hill Wind Farm to the national electricity network.

Mr. & Mrs. Maher and Ms. Kelly raise concerns with the use of the L66732 local road to access the site of the electricity substation.

This matter has been addressed in previous responses provided the Kilkenny County Council above and we refer the Commission to same.

Mr. & Mrs. Maher and Ms. Kelly contend that the electricity substation has not had an adequate assessment of social and environmental impacts.

The Applicant does not accept this contention and submits that the proposed development, as a whole, has been subject to a comprehensive assessment of the likelihood of significant effects on the environment. The assessment process, as set out in the EIAR, identifies the wide range of alternatives which were assessed prior to the selection of the proposed development as the most appropriate means of

connecting the permitted White Hill Wind farm to the national electricity network (as described at Chapter 2).

Subsequently, the proposed development has been assessed, in detail, in respect of the likely effects arising on the environment; including in respect of human health, biodiversity, water quality, visual effects, noise and effects on transport and access; and no significant effects have been assessed as likely during either the construction, operation or decommissioning phases.

Mr. & Mrs. Maher and Ms. Kelly suggest that the bat surveys undertaken were inadequate and that no survey of the agricultural shed to be demolished has been undertaken.

As set out at Section 5.2.3.3 (Chapter 5), the scope of bat surveys was initially informed by a desk study to compile information on known bat roosts and foraging habitats followed by a site walkover to identify potential bat roost features and to undertake an initial site risk assessment for bats, including an assessment of potential commuting features. The site walkover and risk assessment found that all potential bat roost features identified were of "*low suitability*" and there was no evidence of any active roosts being present. Accordingly, and based on the experience and professional judgement of the surveyors and chapter authors (refer to Section 5.1.3 [Chapter 5]), no further bat surveys were assessed as being required.

The Applicant con confirm that the agricultural shed which is to be demolished to accommodate an access track leading to the electricity substation has been surveyed for the presence of bats and bat roosts. As described at Section 5.3.5.5 (Chapter 5), the agricultural shed to be removed (identified as Potential Roost Feature 9 [PRF9]) is assessed as having "*negligible*" roosting suitability and no evidence of roosting bats was observed.

Mr. & Mrs. Maher and Ms. Kelly submit that the proposed development will result in a reduction in the value of their properties.

Mr. & Mrs. Maher and Ms. Kelly contend that, due to "*the material reduction in our clients residential amenity and the negative impact of the proposal on their properties*", there would be a material and significant reduction in the value of their properties. However, they have adduced no evidence to substantiate this claim.

The EIAR has assessed that the proposed development will result in no likely significant adverse effects in terms of population or human health, air quality and climate, landscape, and noise and vibration and complies with all applicable statutory and best-practice guidelines. With respect to transport and access, while significant effects were not assessed as likely, the revised construction phase access arrangements will serve to further reduce the likelihood of significant effects being experienced by local residents and road users.

In particular, the project has been designed to minimise the likely effects on residential amenity, including:-

- separation distances between the proposed electricity substation and residential properties have been maximised to reduce the likelihood of significant effects on population and human health and effects arising as a consequence of dust, noise and vibration; and,
- the siting of the electricity substation has been carefully selected to minimise its prominence in the landscape while, in order to reduce its visibility further,

landscaping measures have been proposed to screen the substation and assist in its absorption within the landscape.

Therefore, given the absence of any likely significant effects on local residents or residential amenity, the Applicant submits that the proposed development is not likely to result in any adverse effect on property values.

8.0 DENIS & PAULA MCGRATH

Mr. & Mrs. McGrath raise concerns regarding the potential effects from electromagnetic fields.

Firstly, it is important to reiterate that the proposed development provides for medium-voltage electricity lines and high-voltage infrastructure will only be installed at the electricity substation.

Section 4.5.2.2 (Chapter 4) sets out that the proposed development will operate in strict compliance with the international guidelines set by the International Commission on Non-Ionizing Radiation Protection (ICNRP). Based on the infrastructure to be installed within the electricity substation, it is predicted that electromagnetic field (EMF) levels will be approximately 5-microteslas (μT) at the electricity substation. This level of EMF is very substantially below the accepted limit of 100μT as set out by the ICNRP; and will reduce further with increased distance from the substation.

The ESB document *EMF & You*[2] notes that magnetic fields experienced directly above a high-voltage (110kV) underground electricity line is 0.13-microteslas (μT). In the case of the proposed development, the voltage of the underground electricity line (33kV) is substantially lower and, therefore, the level of EMF likely to be experienced directly above the electricity line is negligible.

The ESB document also refers to the findings of a number of health studies as to the effects of EMF, including by the World Health Organisation and the Irish Government. The studies have consistently found that there is no adverse effect on human health as a result of EMF. Accordingly, significant effects are not assessed as likely.

Mr. & Mrs. McGrath submit that the construction phase will cause disruption due to road closures, the presence of machinery and construction noise.

Each of the matters raised by Mr. & Mrs. McGrath have been assessed in full in the EIAR and we refer the Commission to Chapters 11 (Noise & Vibration) and 12 (Material Assets) for full details of the assessments undertaken.

In respect of noise, Section 11.5.2.3 (Chapter 11) sets out that the underground electricity line is likely to be installed (and associated works undertaken) at a rate of 50-100m per day and, as described at Section 11.5.2.3, works will therefore "*be in the immediate proximity of the closest NSLs* [noise sensitive locations] *for a limited amount of time, i.e. less than 1-day.*"

Evidently, therefore, any adverse noise effects experienced by Mr. & Mrs. McGrath at their property will be of an extremely short-term duration. It should also be noted that the characteristics of the construction activities and noise generating equipment will be similar to standard road works or agricultural activities and are not likely to be perceived as unusual in this general location. Furthermore, construction plant and

[2] EMF & You (ESB, 2017)

machinery which will generate noise emissions will operate intermittently and will not be continuously operational.

Having regard to the assessment undertaken, it is assessed that a significant noise effect is not likely to arise and that mitigation measures are not required. Notwithstanding this, Section 11.6.1.1 (Chapter 11) describes a set of best practice measures to be employed during the construction phase to limit noise emissions and ensure that significant effects do not occur, including exhaust silencers, attenuated compressors, the shut-down or throttling-back of plant and machinery when not in use, and the implementation of portable acoustic enclosures or screens as appropriate.

Accordingly, therefore, the Applicant submits that there will be no prolonged or significant noise effects experienced by Mr. & Mrs. McGrath and any effects will be temporary and short-term and similar to standard road works or agricultural activities.

Section 12.2.4.1 (Chapter 12) assesses that the proposed development will result in direct and indirect effects on transport & access during the construction phase. During the installation of the underground electricity line, and due to the narrow profile of the local roads involved, full road closures will be implemented on a rolling basis as construction activities progress along the route. However, the section of road to be closed at any particular time will be short (c. 100m) and appropriate measures (such as diversionary routes and the maintenance of local access) will be implemented. Given the extensive road network in the immediate environs of the proposed development site; diversionary routes are readily available, while local access for residents, landowners, and business operators will be maintained at all times.

In the absence of mitigation measures, it is assessed that the effect on transport & access is likely to be slight, negative but short-term in nature. Section 12.2.5.1 (Chapter 12) provides a set of mitigation measures to minimise the level of effects on road users and the public road network to the greatest possible extent and includes the preparation of a detailed Traffic Management Plan prior to the commencement of development and the implementation of appropriate traffic management measures, including diversionary routes. With the implementation of mitigation measures, it is assessed that residual effects will be slight-to-imperceptible, negative and short-term in duration.

Mr. & Mrs. McGrath raise concerns regarding access for emergency services during the construction phase.

As described at Section 12.2.4.1 (Chapter 12), local access for residents, landowners, and business operators will be maintained at all times; and specific provisions for access of emergency services will, following consultation with the emergency services, be set out in the Traffic Management Plan to be prepared prior to the commencement of development.

Appropriate provision will be made to maintain access for emergency services including prior notification of road closures and diversionary routes; while emergency services will be escorted through a works area if required. Accordingly, the Applicant submits that there will be no likely significant effect on emergency services.

Mr. & Mrs. McGrath refer to concerns relating to flooding and property values.

Each of these matters have been addressed in responses to Mr. & Mrs. Maher and Ms. Kelly above, and we refer the Commission to same.

Mr. & Mrs. McGrath submit that the public consultation undertaken was inadequate.

During the design phase of the proposed development and prior to the submission of the planning application, the Applicant carried out an extensive phase of public consultation including door-to-door visits, leaflet drops (with contact details provided should further information be requested) and a 2-day public information event. Further details of the Applicant's approach to public consultation are provided at Section 1.10.2.1 (Chapter 1) and at Annex 1.8 and we refer the Commission to same.

9.0 ROGER & MARIE MCGRATH

Each of the matters raised by Mr. & Mrs. Roger & Marie McGrath have been addressed in responses Mr. & Mrs. Denis & Paul McGrath at **Section 8.0** above.

10.0 MARTIN MAHER

Mr. Maher contends that he was not consulted with and that he will not allow the placement of the underground electricity line within his property.

The Applicant can confirm that the residence of Mr. Maher was visited by the Community Liaison Officer and that information leaflets (with contact details) were delivered to the property. Moreover, as described in response to Mr. & Mrs. McGrath at **Section 8.0** above, additional consultation opportunities were afforded to the public, including Mr. Maher, through the public information event. Full details of the community consultation process are described at Section 1.10.2.1 (Chapter 1) and at Annex 1.8 and we refer the Commission to same.

The Applicant can further confirm that the proposed development is not located within any private property under the ownership of Mr. Maher.

Mr. Maher raises further concerns relating to property values, traffic disruption, pollution, effects on groundwater, residential amenity, bat surveys and surface water runoff.

Each of these matters have been addressed by the Applicant in previous responses provided to Kilkenny County Council (**Section 1.0**), Mr. & Mrs. Maher and Ms. Kelly (**Section 7.0**) and Mr. & Mrs. McGrath (**Section 8.0**); and we refer the Commission to same.

11.0 CONCLUSION

We trust that the information provided herein satisfactorily addresses each of the matters raised in the submissions and observations received by the Commission. This submission has, as agreed in writing with the Commission, been provided in digital format; however, hard copies can be provided on request.

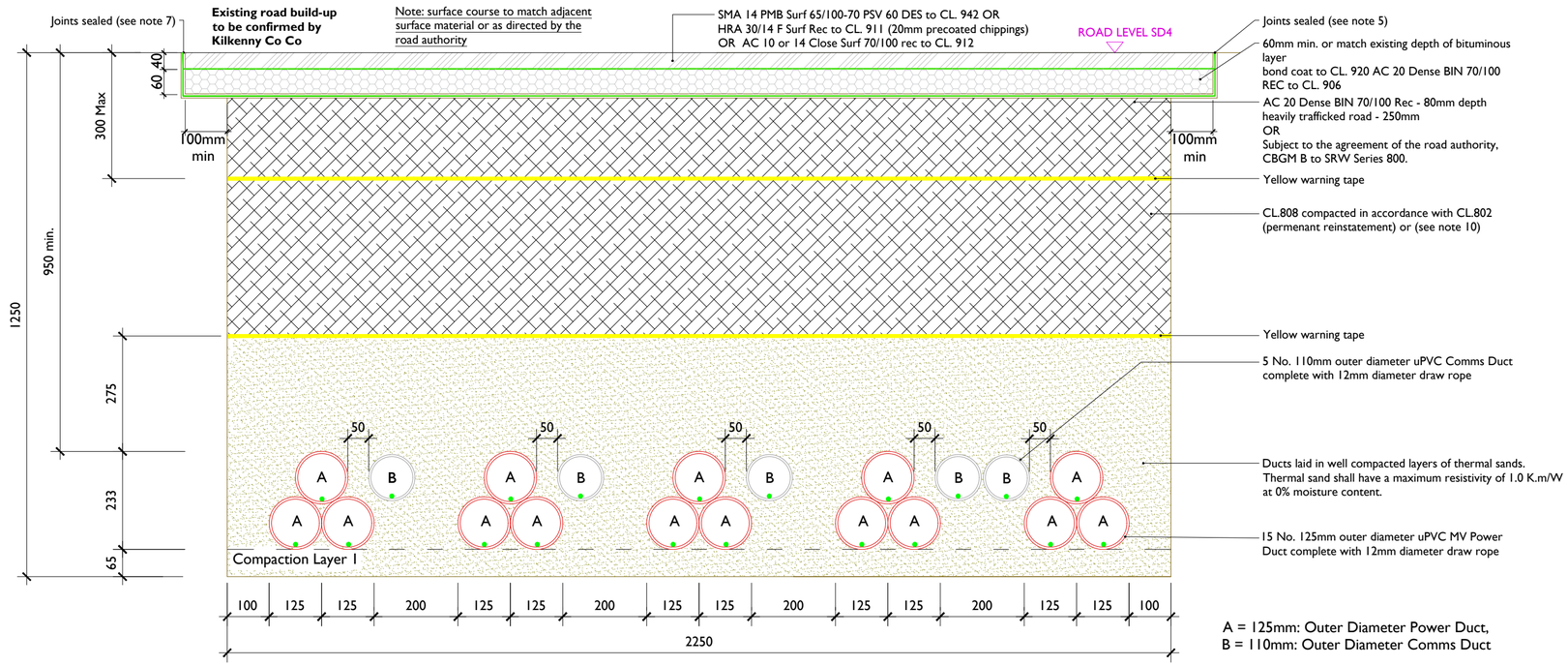
Kind Regards,

Galetech Energy Services

Galetech Energy Services

ANNEX 1 – REVISED TYPICAL ELECTRICITY LINE TRENCH DETAIL FOR IN-ROAD SECTIONS IN COUNTY KILKENNY

ISO A2 420mm x 594mm



Section Through Permanent Reinstatement of Longitudinal Opening In Roadway

SCALE 1:10

ALL REINSTATEMENT WORKS ARE TO BE IN ACCORDANCE WITH LOCAL AREA ENGINEERS REQUIREMENTS AND GUIDELINES FOR MANAGING OPENINGS IN PUBLIC ROADS

Note:

1. Refer to Guidelines for managing Openings in Public Roads (Purple Book - April 2017), Chapter 6 'Specifications' for guidance on Duct type / colour and Marker Tape type / colour.
2. All bound edges shall be saw cut to expose the full vertical thickness of each layer prior to excavation. All edges shall be essentially straight, smooth and vertical.
3. Where a temporary surface has been used, material shall be planed out to the depth specified in this drawing. The new permanent surface shall be machined laid and mechanically compacted with a vibrating roller.
4. Where the trimmed edge of excavation is within 400mm* of a joint / edge, ironwork or other reinstatement, this trimmed edge shall be extended to include same and the area of reinstatement shall be extended accordingly (* increase to 800mm where this is pre-existing practice).
5. Any damaged area adjacent to the opening and resulting from the excavation operation shall be included within the area to be reinstated.
6. Clause 808 or Cement Bound Granular Material surface to be sprayed per clause 920 prior to application of Asphalt Concrete Layer.
7. Joint sealer shall be a hot 50 pen bitumen binder or cold thixtropic bitumen 50 -70 pen to be applied to all vertical cuts in accordance with B.S.594987 prior to application of bituminous materials.
8. For roads without asphalt concrete surface (e.g. may be Cl.804 with double surface dressing), the road authority may as its discretion permit the temporary reinstatement surface of asphalt concrete to be regulated in lieu of excavation and reinstatement; and subsequently surface dressed.
9. On highly trafficked roads services must have a minimum cover of 750mm.
10. Where required by the Road authority the trench may be reinstated with a Cement Bound Granular Material.
11. Full carriage way reinstatement will be carried out where the cable is in the local public road

Project Management Initials: Designer: CH Checked: DB Approved: JC

tli GROUP

Head Office
Beenreigh, Abbeydorney,
Tralee, Co. Kerry, Ireland
Tel: 00353 66 7135710

PROJECT

White Hill Wind Farm Grid Connection

CLIENT

White Hill Wind Limited

CONSULTANTS

GALETECH ENERGY SERVICES

NOTES: -

- This drawing is to be read in conjunction with relevant drawings, specifications and reports
- Dimensions are in millimeters, unless noted otherwise
- Drawings are not to be scaled use figured dimensions only
- Hand excavation only above pipeline crossing sections

LEGEND: -

ISSUE/REVISION

I/R	DATE	DESCRIPTION
P1	01.07.25	Issued for Planning

PROJECT NUMBER

300-101087

SHEET TITLE

Section through Roadway

SHEET NUMBER

300101087-DR-122

ANNEX 2 - REVISED ELECTRICITY SUBSTATION CONSTRUCTION-PHASE SITE ENTRNACE DETAILS

SITE NOTICE

TEMPORARY CONSTRUCTION SITE ENTRANCE & ACCESS TRACK
(TO BE USED FOR THE CONSTRUCTION PHASE OF THE PROJECT ONLY)

EXISTING KELLIS TO KILKENNY
110kV OVERHEAD LINE

SITE NOTICE

HORIZONTAL DIRECTIONAL DRILLING LOCATION

SITE NOTICE

EXISTING KELLIS TO KILKENNY
110kV OVERHEAD LINE

SITE NOTICE

110Kv

6m
28m
112m
76m
63m
31m

LEGEND:

- LANDOWNERSHIP BOUNDARY
- PLANNING APPLICATION BOUNDARY
- UNDERGROUND ELECTRICITY LINE
- EXISTING WAYLEAVE
- EXISTING OVERHEAD LINE
- SECURITY PALISADE FENCE
- SUBSTATION ACCESS TRACKS
- TEMPORARY CONSTRUCTION SITE ENTRANCE & ACCESS TRACKS
- SOIL DEPOSITION AREAS
- +68.559 SPOT HEIGHT

NOTES:

1. ALL DIMENSIONS MUST BE CHECKED ON SITE AND NOT SCALED FROM THIS DRAWING.
2. ALL DIMENSIONS IN METRES UNLESS OTHERWISE STATED.
3. DIMENSIONS MAY VARY DEPENDING ON SITE CONDITIONS.

N

Date:	Rev:	Description:	Drawn By:

Prepared By:

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Client:
WHITE HILL WIND LIMITED

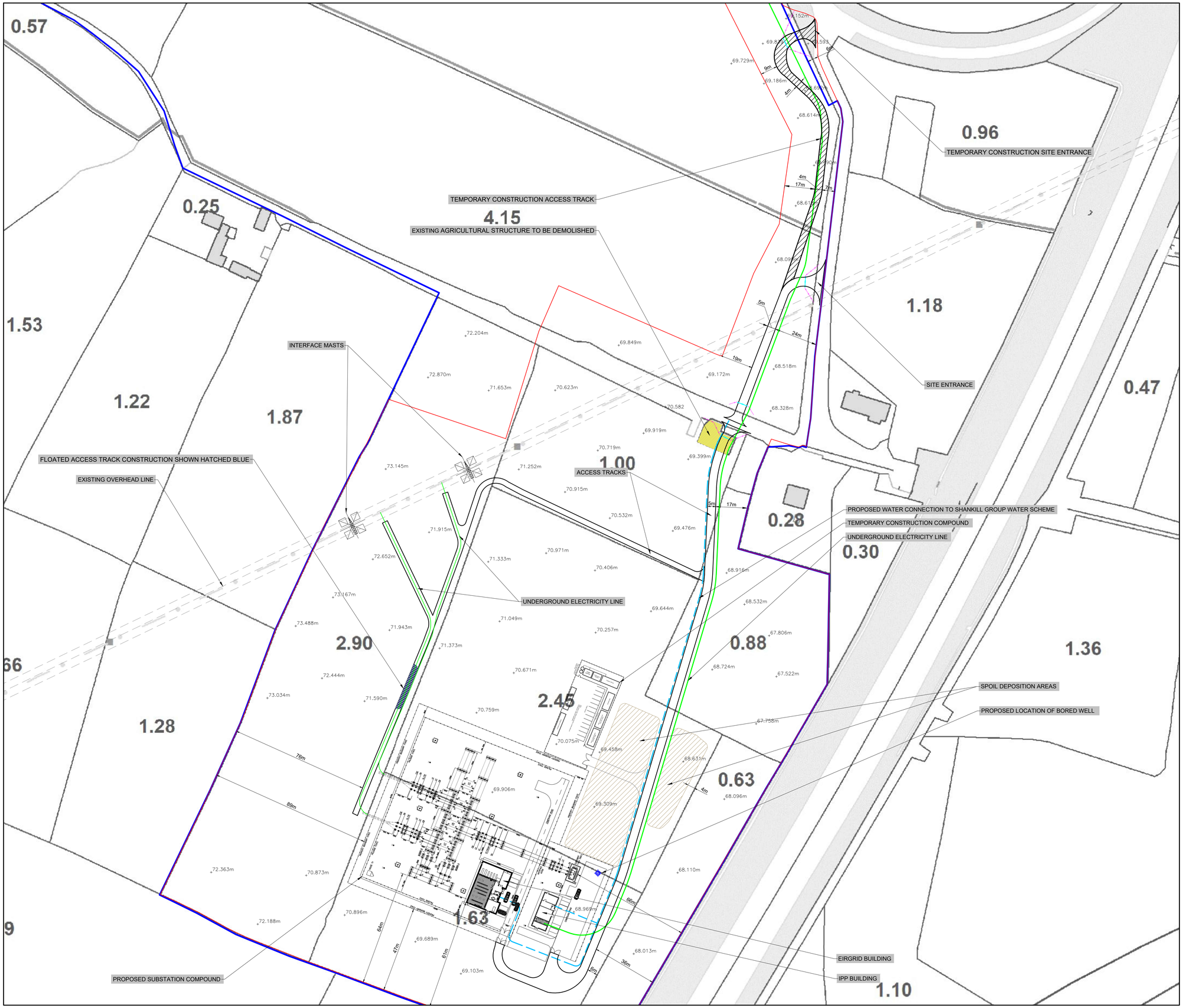
Job Title:
White Hill Wind Farm Electricity Substation & Electricity Line

Drawing Title:
FIGURE 4.05: SITE LOCATION PLAN 5 OF 5
(1:2,500)

Drawing No.	Stage.
WHI001SS_PLAN_LOC-0.08	PLANNING F.I.

Scale:	Date:	Revision No.:
(A1) 1:2500	08/07/2025	REV 03

Drawn By:	Checked By:	Confirmed By:
EF	JB	SC



LEGEND:

- LANDOWNERSHIP BOUNDARY
- PLANNING APPLICATION BOUNDARY
- UNDERGROUND ELECTRICITY LINE
- PROPOSED WATER CONNECTION
- SECURITY PALISADE FENCE
- STOCK-PROOF FENCING
- ACCESS GATES
- FLOATED ACCESS TRACK
- ACCESS TRACKS
- TEMPORARY CONSTRUCTION SITE ENTRANCE & ACCESS TRACKS
- SOIL DEPOSITION AREAS
- SPOT HEIGHT (e.g. 68.559)
- PROPOSED BORED WELL

NOTES:

1. ALL DIMENSIONS MUST BE CHECKED ON SITE AND NOT SCALED FROM THIS DRAWING.
2. ALL DIMENSIONS IN METRES UNLESS OTHERWISE STATED.
3. DIMENSIONS MAY VARY DEPENDING ON SITE CONDITIONS.

N

Date:	Rev:	Description:	Drawn By:

Prepared By:

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Client:

WHITE HILL WIND LIMITED

Job Title:

White Hill Wind Farm Electricity Substation & Electricity Line

Drawing Title:

FIGURE 5.01: SITE LAYOUT PLAN

Drawing No.	Stage.
WHI001SS_PLAN_LAY-0.01	PLANNING F.I.

Scale:	Date:	Revision No.:
(A1) 1:1000	08/07/2025	REV 03

Drawn By:	Checked By:	Confirmed By:
EF	JB	SC

NEW STOCK PROOF FENCING TO BE ERECTED AND TIED INTO EXISTING HEDGEROW

ACO CHANNEL SET IN CONCRETE APRON

SITE ENTRANCE GATES

TEMPORARY CONSTRUCTION SITE ENTRANCE & ACCESS TRACKS (TO BE USED FOR THE CONSTRUCTION PHASE OF THE PROJECT ONLY)

STOCK PROOF FENCING

ACO CHANNEL SET IN CONCRETE APRON

PUBLIC ROAD

ROAD EDGE

SITE ENTRANCE GATES

ACCESS TRACK

SITE ENTRANCE GATES

STOCK PROOF FENCING

ACCESS POINTS AT PRIVATE LANEWAY

ELECTRICITY SUBSTATION SITE ENTRANCE

EXISTING OVERHEAD LINE

PRIVATE LANEWAY

STOCK PROOF FENCING

EXISTING AGRICULTURAL STRUCTURE TO BE DEMOLISHED

SITE ENTRANCE GATES

4.15

0.96

1.18

1.00

69.874
18m
69.152m
69.839
68.593
69.729m
9m
6m
69.186m
26m
68.992m
68.614m
68.480m
4m
17m
7m
68.618m
68.099m
72.204m
69.849m
71.606m
69.024
69.172m
68.518m
71.653m
71.173m
111m
70.623m
68.559
69.582
68.328m
72.028m
69.919m
70.719m
18m
5m
24m
22m
71.252m
70.915m

LEGEND:

- LANDOWNERSHIP BOUNDARY
- PLANNING APPLICATION BOUNDARY
- UNDERGROUND ELECTRICITY LINE
- STOCK-PROOF FENCING
- ACCESS GATES
- ACO CHANNEL
- ACCESS TRACKS
- TEMPORARY CONSTRUCTION SITE ENTRANCE & ACCESS TRACKS
- 68.559 SPOT HEIGHT

NOTES:

1. ALL DIMENSIONS MUST BE CHECKED ON SITE AND NOT SCALED FROM THIS DRAWING.
2. ALL DIMENSIONS IN METRES UNLESS OTHERWISE STATED.
3. DIMENSIONS MAY VARY DEPENDING ON SITE CONDITIONS.

N

Date:	Rev:	Description:	Drawn By:

Prepared By:

Galetech Energy Services
Clondargan, Stradone
Co. Cavan, H12 NV06

info@galetechenergyservices.com
www.galetechenergyservices.com

Client: WHITE HILL WIND LIMITED

Job Title: White Hill Wind Farm Electricity Substation & Electricity Line

Drawing Title: FIGURE 5.03: ELECTRICITY SUBSTATION ENTRANCE (1:500)

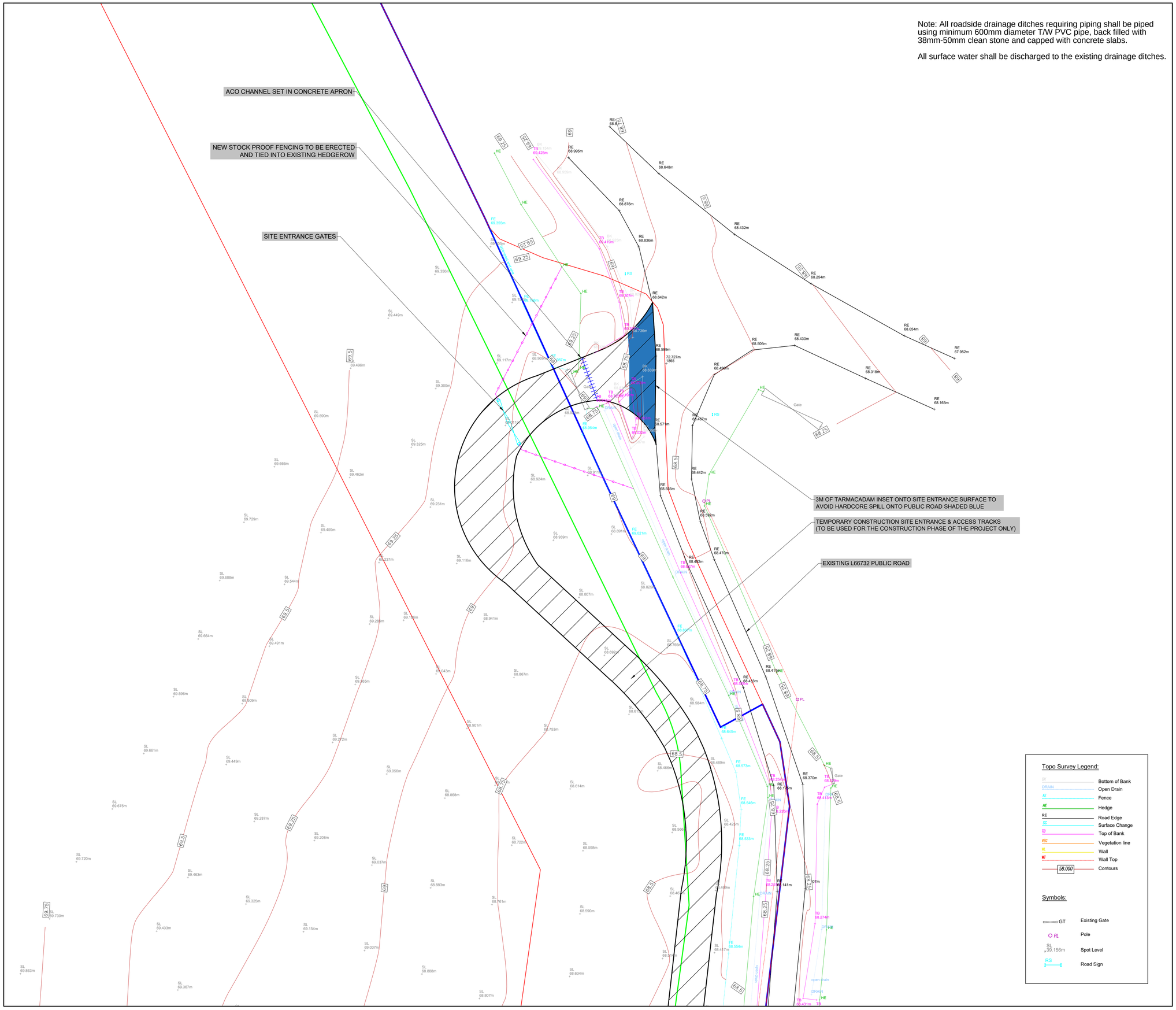
Drawing No.	Stage.
WHI001SS_PLAN_LAY-0.03	PLANNING F.I.

Scale:	Date:	Revision No.:
(A1) 1:500	08/07/2025	REV 03

Drawn By:	Checked By:	Confirmed By:
EF	JB	SC

Note: All roadside drainage ditches requiring piping shall be piped using minimum 600mm diameter T/W PVC pipe, back filled with 38mm-50mm clean stone and capped with concrete slabs.

All surface water shall be discharged to the existing drainage ditches.



Topo Survey Legend:

- BK — Bottom of Bank
- DRAIN — Open Drain
- FE — Fence
- HE — Hedge
- RE — Road Edge
- SC — Surface Change
- TB — Top of Bank
- VEG — Vegetation line
- WL — Wall
- WT — Wall Top
- 58.000 — Contours

Symbols:

- GT — Existing Gate
- PL — Pole
- SL 39.156m — Spot Level
- RS — Road Sign

LEGEND:

- LANDOWNERSHIP BOUNDARY
- PLANNING APPLICATION BOUNDARY
- UNDERGROUND ELECTRICITY LINE
- STOCK-PROOF FENCING
- ACCESS GATES
- ACO CHANNEL
- TEMPORARY CONSTRUCTION SITE ENTRANCE & ACCESS TRACKS
- 68.559 SPOT HEIGHT

NOTES:

1. ALL DIMENSIONS MUST BE CHECKED ON SITE AND NOT SCALED FROM THIS DRAWING.
2. ALL DIMENSIONS IN METRES UNLESS OTHERWISE STATED.
3. DIMENSIONS MAY VARY DEPENDING ON SITE CONDITIONS.

Date:	Rev:	Description:	Drawn By:

Prepared By:

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Client:

WHITE HILL WIND LIMITED

Job Title:

White Hill Wind Farm Electricity Substation & Electricity Line

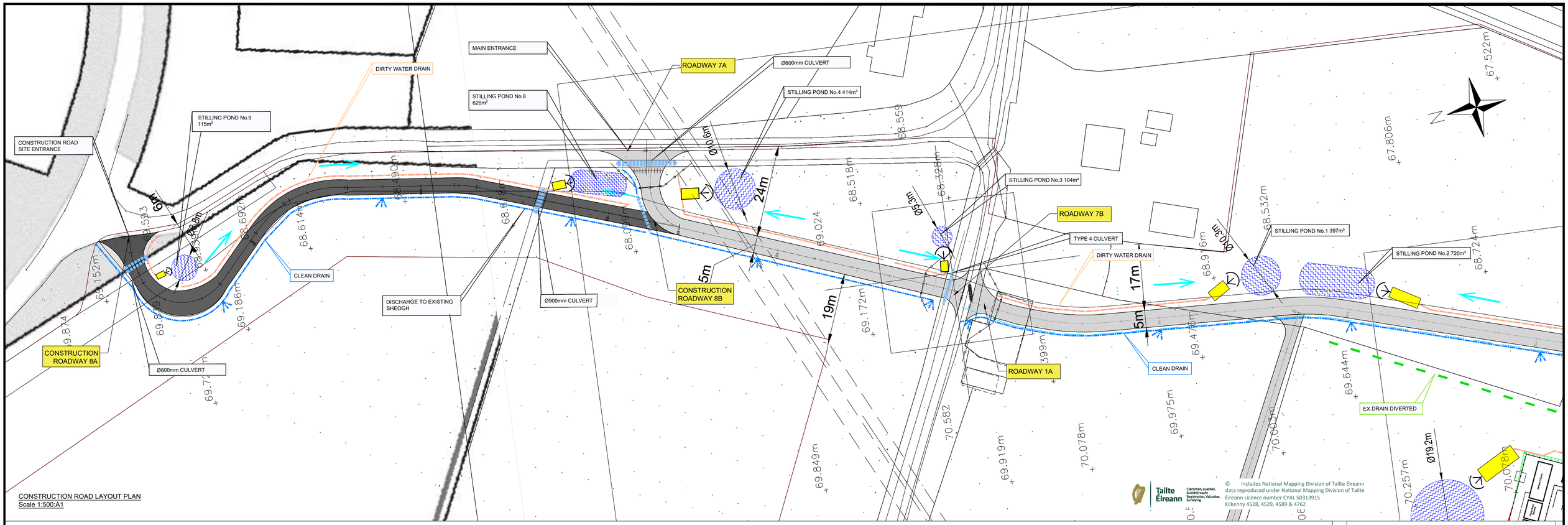
Drawing Title:

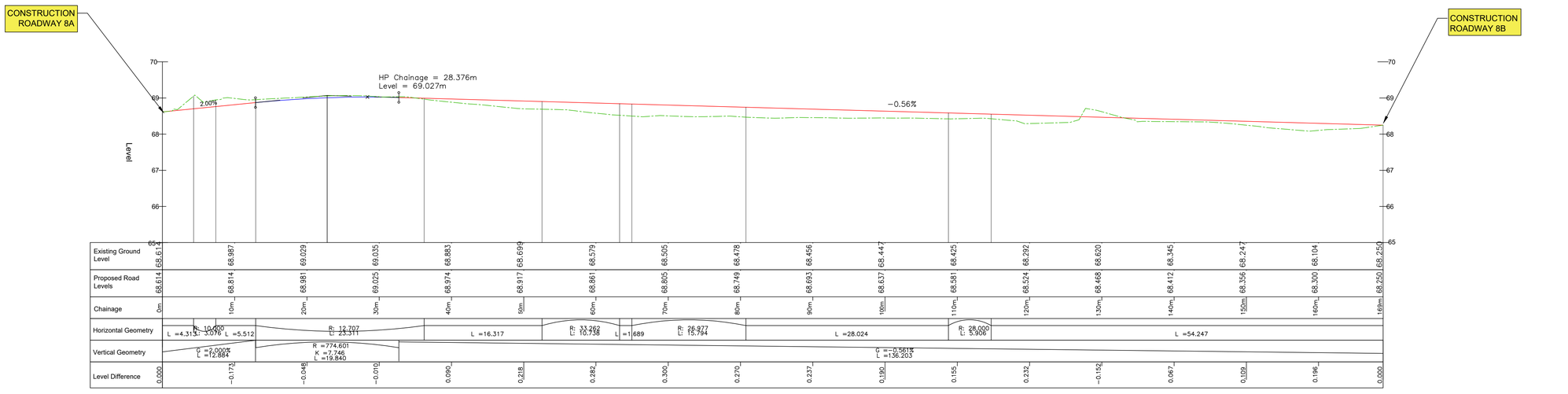
FIGURE 5.05: TEMPORARY CONSTRUCTION SITE ENTRANCE DETAIL (1:200)

Drawing No.	Stage.
WHI001SS_PLAN_LAY-0.05	PLANNING F.I.

Scale:	Date:	Revision No.:
(A1) 1:200	08/07/2025	REV 03

Drawn By:	Checked By:	Confirmed By:
EF	JB	SC





NOTES
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.
2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE.
3. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES.

PROPOSED FOUL MANHOLE
PROPOSED FOUL SEWER
PROPOSED STORM SEWER
PROPOSED STORM MANHOLE
PALISADE FENCE
POST AND RAIL FENCE
SHEOUGH EXISTING
SHEOUGH DIVERTED
PROPOSED OPEN DRAIN
ø150mm PERFORATED LAND DRAIN WRAPPED IN NON-WOVEN GEOTEXTILE LAYER
CUT MATERIAL
FILL MATERIAL
FLOATED ROAD
PROPOSED CLEAN WATER DRAINAGE
PROPOSED DIRTY WATER DRAINAGE
STILLING POND NUMBER, CATCHMENT AREA & FLOW DIRECTION
PROPOSED CULVERT TO EXISTING OPEN DRAIN
SPOIL DEPOSITION AREA
PROPOSED LAGOON - TYPE SEDIMENT TRAP

SEE DRAWING
6607-JOD-SS-ZZ-DR-C-1001 LAYOUT PLAN
6607-JOD-SS-ZZ-DR-C-1002 CROSS SECTION
6607-JOD-SS-ZZ-DR-C-1003 CUT AND FILL
6607-JOD-SS-ZZ-DR-C-1004 CONTROL BUILDING LAYOUT PLAN
6607-JOD-SS-ZZ-DR-C-1005 FOR ROAD LAYOUT PLAN
6607-JOD-SS-ZZ-DR-C-1006 FOR ROAD SECTIONS
6607-JOD-SS-ZZ-DR-C-1007 FOR ROAD WIDENING
6607-JOD-SS-ZZ-DR-C-1010 FOR DRAINAGE OVERALL LAYOUT PLAN
6607-JOD-SS-ZZ-DR-C-1011 FOR DRAINAGE LAYOUT PLAN
6607-JOD-SS-ZZ-DR-C-1012 FOR DRAINAGE SECTIONS
6607-JOD-SS-ZZ-DR-C-1013 FOR CONSTRUCTION ROAD PLAN & SECTION
6607-JOD-SS-ZZ-DR-C-1020 FOR COMPOUND LAYOUT PLAN
6607-JOD-SS-ZZ-DR-C-1051 to 1054 FOR DRAINAGE DETAILS

Civil Designer
JENNINGS O'DONOVAN
an RSK company

Client
WHITE HILL WIND LTD.

NOTES:
1 FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.
2 ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE.
3 ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES.
4 THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.
5 ING CO-ORDINATES.

Rev	Date	By	Amendments
P02	14/07/25	R.M	Issue for Planning
P01	03/07/25	N.C	Issue for Review

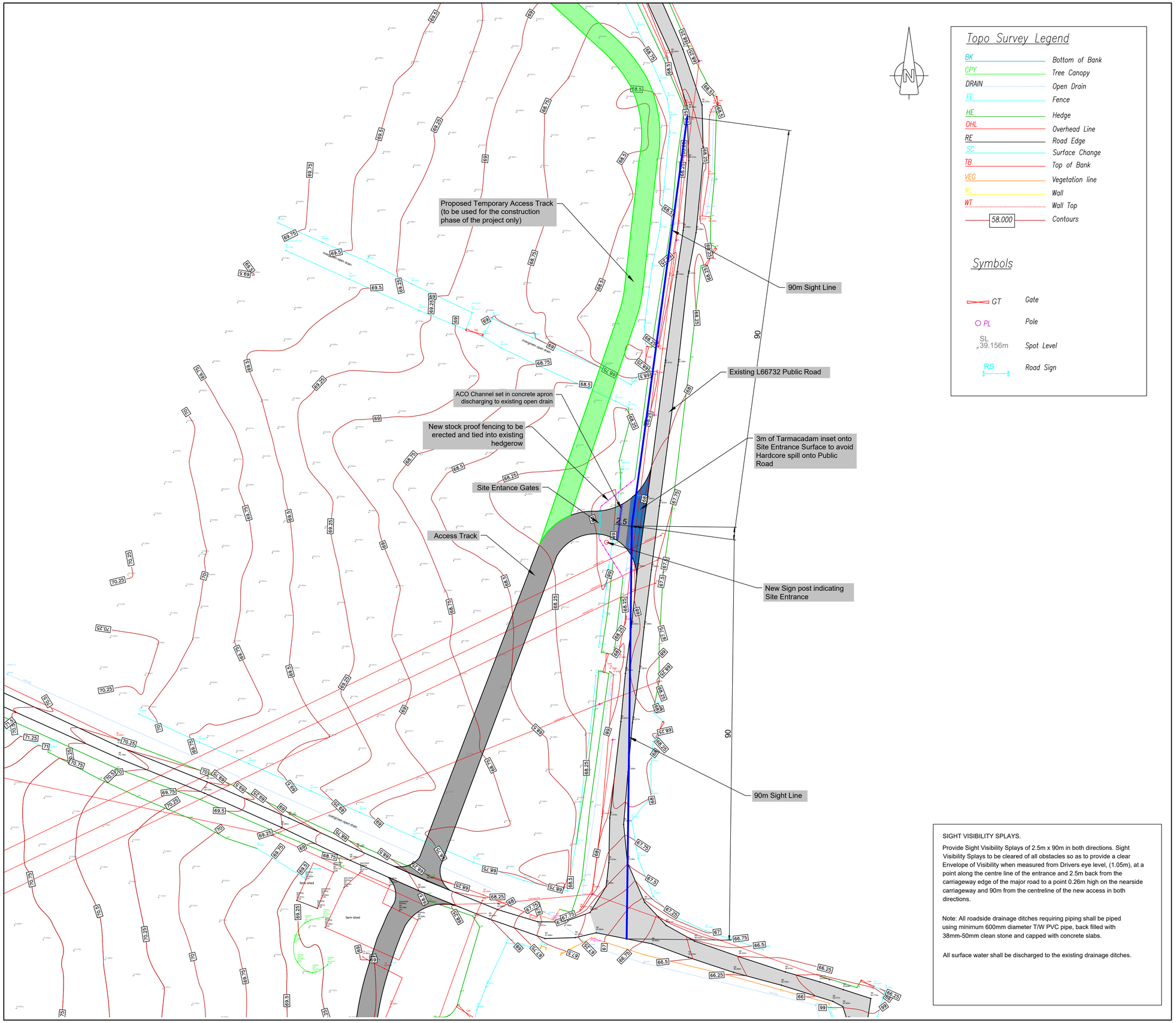
Project
WHITE HILL WINDFARM

Title
LAYOUT PLAN OF PROPOSED WHITE HILL WINDFARM SUBSTATION CONSTRUCTION ROAD PLAN & SECTION

Issue Details			
Designed: N.C	Information		
Drawn: N.C	Approval	X	
Checked: J.McE	Tender		
Approved: J.McE	Construction		
Scale: AS SHOWN (A1)	Record		

Office Use Only
Drawing Number: 6607-JOD-SS-ZZ-DR-C-1013
Date: JULY 2025
Rev. P02

ANNEX 3 - OPERATIONAL PHASE SITE ENTRNACE DETAILS



Topo Survey Legend

BK	Bottom of Bank
CPY	Tree Canopy
DRAIN	Open Drain
FE	Fence
HE	Hedge
OHL	Overhead Line
RE	Road Edge
SC	Surface Change
TB	Top of Bank
VEG	Vegetation line
WL	Wall
WT	Wall Top
58.000	Contours

Symbols

GT	Gate
PL	Pole
SL 39.156m	Spot Level
RS	Road Sign

SIGHT VISIBILITY SPLAYS.

Provide Sight Visibility Splays of 2.5m x 90m in both directions. Sight Visibility Splays to be cleared of all obstacles so as to provide a clear Envelope of Visibility when measured from Drivers eye level, (1.05m), at a point along the centre line of the entrance and 2.5m back from the carriageway edge of the major road to a point 0.26m high on the nearside carriageway and 90m from the centreline of the new access in both directions.

Note: All roadside drainage ditches requiring piping shall be piped using minimum 600mm diameter T/W PVC pipe, back filled with 38mm-50mm clean stone and capped with concrete slabs.

All surface water shall be discharged to the existing drainage ditches.

Date:	Rev:	Description:	Drawn By:

Prepared by:

GALETECH ENERGY SERVICES

Galetech Energy Services,
Clondargan,
Stradone,
Co. Cavan

Client:

White Hill Wind Ltd

Job Title:

White Hill Wind Farm Electricity Substation & Electricity Line

Drawing Title:

Figure 5.04: Electricity Substation Operational Phase Entrance Detail

Drawing No.:	Revision No.:
WHI001SS__PLAN__LAY-0.04	Rev00
Scale:	**Date:**
(A1) 1:400	02/07/2025

Drawn By:	Checked By:	Confirmed By:
C.M.P	J.B	S.C