Appendix 4.4 Section 36 Gatecheck Report

Contents

A copy pf the Section 36 Gatecheck Report sent to the Scottish Government Energy Consents Unit in March 2019

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Douglas West Wind Farm Extension

Part of a Coordinated Strategy for the Future of the Hagshaw Wind Cluster

Section 36 Gatecheck Report

March 2019

3R Energy
CHP • Wind • Biomass

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Quality Management

	Version 1	Version 2	Version 3	Version 4
Date	07/01/19			
Prepared by	Various			
Signature	-			
Checked by	Anna Hudson Principal Consultant	Theo Philip Client		
Signature	AHudson			
Authorised by				
Signature				
Project number	EDI_1016			

3R Energy

Lanark Auction Market

Hyndford Road

Lanark

ML11 9AX

ITPEnergised

7 Dundas Street

Edinburgh

EH3 6QG

Registration Number: SC450178

Contact: Anna Hudson – Anna.Hudson@itpenergised.com

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1 Introduction

1.1 Introduction

1.1.1 Douglas West Extension Limited, part of the same group of companies as 3R Energy Solutions Ltd, (hereafter referred to as "the Applicant") intend to apply to the Scottish Ministers for consent under Section 36 of the Electricity Act 1989 for the construction and operation of Douglas West Wind Farm Extension (hereafter referred to as the "Proposed Development"), at site centre British National Grid (BNG) NS 80399 32105 in rural South Lanarkshire (refer to Figure 1).

1.2 Background

1.2.1 The Applicant submitted an Environmental Impact Assessment (EIA) Scoping Report for the Proposed Development in November 2018 to the Energy Consents Unit (ECU) at the Scottish Government. The Applicant received an EIA Scoping Opinion in February 2019.

1.2.2 This Section 36 Gatecheck Report provides ECU with an update on the status of the Proposed Development and progress with the EIA Report. It summarises the design iteration process which the Applicant has undertaken to date and how the Applicant intends to respond to the points raised within the EIA Scoping Opinion.

2 Design Iterations

2.1 Scoping Design

2.1.1 In November 2018, as part of the EIA Scoping Report, the Applicant submitted an indicative turbine layout for the Proposed Development of 13 turbines (refer to Figure 2).

2.2 EIA Scoping Opinion Comments on Design

2.2.1 The following comments were received from ECU and consultees on the design of the Proposed Development presented in the EIA Scoping Report.

Table 2-1 – EIA Scoping Opinion – Design

Consultee	Scoping Comment	Page No.	Response to Consultee	Further EIA Consultation
Scottish Envionment Protection Agency (SEPA)	It is advised that watercourse crossings are designed to accommodate the 1 in 200 year event and other infrastructure is located well away from watercourses.	A37	The final design took into consideration buffers around watercourses and a proposed watercourse crossing schedule will be provided within the EIA Report (Chapter 11 Hydrology)	N/A
	Existing built infrastructure must be re-used or upgraded wherever possible, and the layout designed to minimise the extent of new works on previously undisturbed ground.	A40	The final design has sought to use existing onsite infrastructure where possible and design considerations are laid out in Chapter 2 of the EIA Report.	N/A

Consultee	Scoping Comment	Page No.	Response to Consultee	Further EIA Consultation
Forestry Commission Scotland (FC)	Site boundary include the proposed turbines and infrastructure and leave remaining woodland felling to be consented via the Forestry Act through the existing Forest Plan. Forested areas where turbines are proposed should be keyholed and woodland felling kept to a minimum.	A7	This will be included within the EIA Report (Chapter 16 Forestry)	Further consultation has been undertaken directly with the FCS and a joint site visit undertaken.
Scottish Natural Heritage (SNH)	Track construction methods for any new track to be constructed should be clearly described, along with the rationale for their type and location, and all direct and indirect impacts assessed.	A52	This will be considered within the EIA Report (described in Chapter 2 Design Iteration and asessed in technical chapters 5-16)	N/A
	Crucial that consideration is given to the design of the Proposed Development and how it will work with other turbines within the wind farm cluster.	A53	This will be considered within the EIA Report (Chapter 2 Design Iteration and Chapter 6 Landscape and Visual)	N/A

2.3 Design Iterations

2.3.1 Since the submission of the EIA Scoping Report and the receipt of the EIA Scoping Opinion the Applicant has undertaken design iterations to maximise the capacity of the Proposed Development while minimising the environmental impacts. The main iterations are described below and shown on Figures 2 to 4. These iterations have taken into consideration the existing wayleaves and on-site environmental and engineering constraints to reduce the impacts on the commercial forestry operations and avoid watercourses and sensitive habitats (refer to Figure 5). A separate Landscape Review of the proposed layout, in conjunction with the neighbouring Hagshaw Hill Repowering project, was undertaken prior to submission of the EIA Scoping Report.

Table 2-2 – Design Iterations to Date

Design Iteration	No. Turbines	Date	Description
A (Figure 2)	13	November 2018	Original scoping report design maximising capacity on the site and maximal use of existing on site infrastructure.
B (Figure 3)	13	January 2019	Turbines (T4, T7, T11 and T13) moved to reflect environmental constraints and foresry operations. Infrastructure including the temporary site compound, lay-down areas and access tracks moved.
C (Figure 4)	13	January 2019	Turbines moved following comments from Landowner including the movement of T6 to ensure appropriate turbine spacing. Site boundary rationalised following legal agreements. Substation and laydown areas moved to the entrance of the main body of the site to minimise impact on existing forestry and to ensure efficient construction.

2.4 Future Design Iterations

2.4.1 The Applicant, together with the EIA team have gathered environmental baseline information for the site across the various technical disciplines to identify a design layout that considers the environmental constraints identified and the consultee opinions received to date. Details of the design iterations leading to a finalised design will be provided within Chapter 2 of the EIA Report. Figure 5 shows the local environmental and engineering constraints considered in the iterative design process for the Proposed Development. No further design iterations are anticipated at this stage.

3 Planning and Policy

3.1.1 The following comments were received as part of the EIA Scoping Opinion on planning policy.

Table 3-1 – EIA Scoping Opinion – Planning Policy

Consultee	Scoping Comment	Page No.	Response to Consultee	Further EIA Consultation
Energy Consents Unit (ECU)	Consideration should be given to: The Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments (Second Edition)	7	This will be considered within the EIA Report.	N/A
FC	The area proposed for development is covered by a grant funded Long Term Forest Plan, measures should be compliant and future proposals for felling or replanting should be integrated into this.	A7	This will be considered within the EIA Report.	N/A
SEPA	Engineering works in the vicinity of inland surface waters or wetlands need authorisation under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR)	A38	This will be considered within the EIA Report.	N/A
	Management of surplus peat or soils may require exemption under The Waste Management Licensing (Scotland) Regulations 2011. Crushing or screening will require a permit under The Pollution Prevention and Control (Scotland) Regulations 2012.	A38	This will be considered within the EIA Report.	N/A
	A Site Management Plan should be submitted in accordance with Paragraphs 52 to 57 of Planning Advice Note 50 Controlling the Environmental Effects of Surface Mineral Workings (PAN 50).	A43	The Applicant will provide a Site Management Plan prior to undertaking any works with regard any potential borrow pits. As part of the proposals a borrow pit search area has been identified but futher site investigations will need to be undertaken post-consent to determine the details of any future borrow pit workings.	N/A

5 EIA Report Requirements

5.1.1 The following comments were received as part of the EIA Scoping Opinion on the EIAR.

Table 5-1 – EIA Scoping Opinion – EIAR

Consultee	Scoping Comment	Page No.	Response to Consultee	Further EIA Consultation
ECU	Request they are kept informed of relevant discussions regarding the refinement of the design of the Proposed Development.	8	Noted – the EIA Report will also document all consultation undertaken for the Proposed Development.	N/A
	When finalising the EIA report, the Applicant should provide a summary in tabular form of where within the EIA report each of the specific matters raised in the scoping opinion are addressed.	8	This will be included within the EIA Report. Each technical chapter will contain a table of the consultation(s) undertaken for that discipline.	N/A
	The mitigation measures suggested for any significant environmental impacts identified should be presented as a conclusion to each chapter. The Applicant is also asked to provide a consolidated schedule of all mitigation measures proposed in the environmental assessment, provided in tabular form, where that mitigation is relied upon in relation to reported conclusions of likelihood or significance of impacts.	8	This will be included within the EIA Report (Chapter 18 and 19).	N/A
	To facilitate uploading to the Energy Consents portal, the EIA Report and its associated documentation should be divided into appropriately named separate files of sizes no more than 10 megabytes (MB). In addition, a separate disc containing the EIA Report and its associated documentation in electronic format will be required.	9	The EIA Report and all associated documentation will be divided into files of less than 10MB where required and be appropriately named for ease of reference. An electronic copy of all documentation will also be provided.	N/A
SEPA	All maps must be based on an adequate scale with which to assess the information. This could range from OS 1: 10,000 to a more detailed scale in more sensitive locations. Each of the maps below must detail all proposed upgraded, temporary and permanent site infrastructure.	A37	All maps will be at an appropriate scale	N/A
South Lanarkshire Council (SLC)	Request that there is a standalone chapter within the EIA Report that contains a summary of all the proposed mitigation and enhancement measures associated with the Environmental Impact of the proposals.	A1	This will be included within the EIA Report (Chapter 18 Environmental Commitments).	N/A

Consultee	Scoping Comment	Page No.	Response to Consultee	Further EIA Consultation
SNH	Recommend that the EIA report should include information and assessment of which activities associated with the construction and operations of the development are development are likely to have direct and indirect (including cumulative) significant environmental effects on the relevant natural heritage receptors, along with clear details of any mitigation. A schedule of environmental mitigation should be provided in an annex for developments with impacts on natural heritage interests. The schedule should compile all the environmental mitigation/ enhancement measures into one list/table, for ease of reference.	A46	This will be included within the EIA Report (within the individual technical assessments and a summary schedule of all mitigation measures proposed for the Proposed Development included within Chapter 18 Environmental Commitments).	N/A

6 Landscape and Visual

6.1.1 The following comments were received as part of the EIA Scoping Opinion on the landscape and visual assessment.

Table 6-1 – EIA Scoping Opinion – Landscape and Visual

Consultee	Scoping Comment	Page No.	Response to Consultee	Further EIA Consultation
East Ayrshire Council (EAC)	The Council is broadly content with the proposed approach of the LVIA. Agrees with the use of viewpoint 10 (Victory Park, Muirkirk); 14 (Nether Wellwood, A70); and 15 (Cairn Table) within the LVIA.	A4	Noted	N/A
	Recommend a visible turbine lighting assessment be undertaken extended to a 20 km ZTV given the proposed turbine height and need for it all to be lit. This to be accompanied by a cumulative turbine lighting ZTV, including but not limited to proposed and consented schemes within the Hagshaw Cluster and wider area. Suggest that consideration be given to aviation activated lighting as a means of mitigation for night time lighting.	A4	We note the comments with regards to study area and cumulative ZTVs. We will consider a 20 km radius and we will provide the necessary ZTVs, all within an Appendix to Chapter 6 (LVIA). As a point of clarification, it should be noted that not all turbines within the Proposed Development are required to be lit, Chapter 6 will confirm which turbines are proposed to be lit.	N/A
ECU	The scoping report identified viewpoints at Table 4.2 page 16 of the scoping report, to be assessed within the landscape and visual impact assessment. The approach is generally noted as acceptable, but further engagement is required in relation to the study area for a lighting assessment and for cumulative ZTVs.	7	Noted – see note above in response to EAC.	

Consultee	Scoping Comment	Page No.	Response to Consultee	Further EIA Consultation
SNH	Broadly content with the proposed LVIA methodology and viewpoints	A53	Noted	N/A
	Adverse cumulative landscape and visual effects may occur due to the range of designs and heights of existing and proposed turbines in this wind farm cluster. Care needs to be taken given the larger turbine design proposed to ensure that they do not dominate the Douglas Valley and related settlements.	A53	The turbine layout design has been considered and the LVIA will consider the cumulative effects as necessary.	N/A
SLC	No comment provided on Landscape	N/A	No response required.	Content with proposed viewpoints (email dated 07/01/2019)

7 Ecology and Nature Conservation

7.1.1 The following comments were received as part of the EIA Scoping Opinion on ecology and nature conservation.

Table 7-1 – EIA Scoping Opinion – Ecology and Nature Conservation

Consultee	Scoping Comment	Page No.	Response to Consultee	Further EIA Consultation
ECU	Request the Applicant takes account of the advice provided by Marine Scotland Science and SNH and include full details of the fisheries surveys carried out for neighboruing wind farm developments. All surveys should be carried out in accordance with up to date guidance.	A7	Results of fisheries surveys for local wind farm projects were considered as part of the assessment, in particular the neighbouring Douglas West Wind Farm where sample points were located downstream of watercourses found within the site. Surveys for Douglas Westfollowed best practice Scottish Fisheries Co-ordination Centre (SFCC) procedures and guidelines.	N/A
Fisheries Management Scotland (FMS)	The Proposed Development should be conducted in consultation with Clyde River Foundation.	A6	It was agreed with SNH that sufficient baseline data exists from local wind farm projects surrounding the site to be able to accurately evaluate the likely impacts associated with the Proposed Development. No further consultation was deemed necessary.	N/A

Consultee	Scoping Comment	Page No.	Response to Consultee	Further EIA Consultation
	Consideration should be given to FMS guidelines throughout planning, construction and monitoring to assess for impacts on migratory fish species and the fisheries they support.	A6	FMS guidance relating to terrestrial wind farms[1] was consulted to provide a basis for survey requirements and assessment of fish species.	N/A
SLC	This chapter and Ornithology should include peat depth assessments and aquatic surveys to assess the impact of the proposals on the water environment. Also recommend that the EIA endorses the establishment of a habitat management plan / group to manage the long term biodiversity enhancement of the site.	A1	The ecology assessment considered SNH's Carbon Peatland Map, and using National Vegetation Classification survey results, determined the extent of peat-based habitats and groundwater dependent terrestrial ecosystems across the site. Aquatic surveys on behalf of the Douglas West project were considered as part of the assessment. Mitigation measures that were appropriate for minimising effects to non-significant levels, and consistent with ongoing commercial forestry operations within the site, are outlined in Chapter 7. A peat depth survey has been undertaken and the results will be provided in Chapter 11 (Geology, Hydrology and Hydrogeology).	N/A
SNH	Recommend that ecological chapters are split into topics, e.g. protected areas, species, habitats, etc.	A46	The ecology assessment has been separated into appropriate ecological feature groups – designated sites, habitats, protected species (including bats).	N/A
	Note that table 5.1 of the scoping report "Ecology Designated Sites within 5 km of the proposed development" is missing Ree Burn and Glenbuck Loch SSSI, Shiel Burn SSSI and Birkenhead Burn SSSI. However SNH do not consider that any of these sites are connected to the development site or require further consideration.	A47	Noted. These SSSIs are not designated for any ecological features. Ecological designated sites within potential zones of influence from the Proposed Development have been considered in the assessment.	N/A
	Advise that species surveys should have been completed no more than 18 months prior to submission of the application.	A47	Baseline surveys within the site for habitats and protected species were conducted in summer 2018.	N/A
	Full details of survey methodologies, areas surveyed and details of any limitations to survey efforts should be included. Where survey methods or other work deviates from published guidance, deviations should have been agreed in writing with SNH in advance of carrying out survey work. The EIA report should include a full description of metholodogy used and an explanation of why any deviations were considered appropriate.	A48	Full survey methods and results are presented in the ecology technical Appendices 7.1, 7.2 and confidential annex C.1. Limitations to surveys are included in these documents and summarised in the Limitations to Assessment section of Chapter 7.	N/A

[1] ASFB-RAFTS advice to DSFBs and Fishery Trusts on Terrestrial Windfarm Planning Process (Mar 2012)

Consultee	Scoping Comment	Page No.	Response to Consultee	Further EIA Consultation
	Recommend that a pre-construction update otter survey prior to commencement of construction. Recommend this be undertaken as close to commencement of construction as possible but no greater than eight months preceding. This should include all watercourses and water features within 250 m upstream and downstream of the Proposed Development/infrastructure locations. If changes in the use of the development site by otter are identified, an updated assessment of the impacts on the development on otter must be completed and appropriate mitigation measures identified (if required).	A48	Pre-construction surveys would be carried out by the Ecological Clerk of Works (ECoW) or suitably qualified ecologist, as part of the management process which would be outlined in the Species Protection Plan. Any required mitigation or management would ensure no signficant effects on otter or other protected species.	N/A
	As only brief details of the bat surveys carried out on the site are provided, SNH cannot comment fully on their adequacy at this stage. Therefore SNH are unable to comment on any detailed bat mitigation likely to be required at this stage.	A49	Full survey methods are provided in technical Appendix 7.2.	N/A
	Agree that no further great crested newt surveys are necessary.	A49	Noted. Habitat suitability survey results and rationale for scoping out further surveys are provided in Confidential Annex C.1 and summarised in Chapter 7.	N/A
	Recommend that in conjunction with the pre-construction update otter survey there should be surveys done of suitable habitiat for water vole activity. If water vole and their habitat could be affected by the proposal a water vole protection plan should be prepared.	A49	Pre-construction surveys as part of the Species Protection Plan would search for water vole occupation.Suitable mitigation measures would be enforced should the species be present.	N/A
	Recommend the Applicant should undertake a pre-construction update badger survey prior to commencement of construction. SNH recommend this survey should be undertaken as close to commencement of construction as possible, but no greater than eight months preceding. If changes in the use of the development site by badger are identified, an updated assessment of the impacts on the development on badger must be completed and appropriate mitigation measures identified (if required).	A50	Pre-construction surveys as part of the Species Protection Plan would search for badger occupation (e.g. setts). Suitable mitigation measures would be enforced should the species be potentially affected by the Proposed Development.	N/A
	As tree felling is proposed as part of the development, SNH recommend that a pre-construction update red squirrel survey should be carried out as close to commencement of construction as possible, but no greater than eight months preceding commencement of construction. If this survey work finds that red squirrel could be affected by the proposal a red squirrel protection plan should be prepared.	A50	Pre-construction surveys as part of the Species Protection Plan would search for red squirrel occupation.Suitable mitigation measures would be enforced should the species be present.	N/A

Consultee	Scoping Comment	Page No.	Response to Consultee	Further EIA Consultation
	As tree felling is proposed as part of the development, SNH recommend that a pre-construction update pine marten survey should be carried out as close to commencement of construction as possible, but no greater than eight months preceding commencement of construction. If this survey work finds that pine marten could be affected by the proposal a pine marten protection plan should be prepared.	A51	Pre-construction surveys as part of the Species Protection Plan would search for pine marten occupation. Suitable mitigation measures would be enforced should the species be present.	N/A
	The EIA report should include full details of the fisheries surveys carried out for neighbouring wind farm developments, in particular the Douglas West Wind Farm which shares the same catchment of watercourses, including maps of the survey locations and dates they were carried out.	A51	Results of fisheries surveys from local wind farm projects are presented in Chapter 7, with particular attention paid to the Douglas West survey which was undertaken downstream of the site. Sample points are shown on EIAR Figure 7.12.	N/A
	Recommend that if deer are present on or will use the development site, an assessment of the potential impacts on deer welfare, habitats, neighbouring and other interests (e.g. access and recreation, road safety, etc.) should be presented. If the development would, or could, result in significant impacts, a draft deer management statement should be provided, setting out how the impacts will be addressed.	A51	Deer are likely to be present in small numbers within the site, and stalking currently occurs to control numbers. The construction impacts associated with the Proposed Development are considered to be sufficiently similar to ongoing commercial forestry activities within the site, and with habitat change limited to key-holed areas and small sections of new access track, significant effects on deer or large-scale displacement of deer from the site is unlikely. No deer management plan is considered necessary, although if it is decided that it should be a condition of consent, such a plan would be agreed with consultees prior to commencement of construction.	N/A
	The EIA report should include a map of the NVC survey results with the wind farm boundary, proposed turbines, tracks and infrastructure layout overlapping.	A52	NVC results and Proposed Development infrastructure are presented in Figure 7.2.	N/A

8 Ornithology

8.1.1 The following comments were received as part of the EIA Scoping Opinion on ornithology.

Table 8-1 – EIA Scoping Opinion – Ornithology

Consultee	Scoping Comment	Page No	Response to Consultee	Further EIA Consultation
SLC	This chapter and Ecology should include peat depth assessments and aquatic surveys to assess the impact of the proposals on the water environment. Also recommend that the EIA endorses the establishment of a habitat management plan / group to manage the long term biodiversity enhancement of the site.	A1	The ecology assessment considered SNH's Carbon Peatland Map, and using National Vegetation Classification survey results, determined the extent of peat-based habitats and groundwater dependent terrestrial ecosystems across the site. Aquatic surveys on behalf of the Douglas West project were considered as part of the assessment. Mitigation measures that were appropriate for minimising effects on ornithological features to non-significant levels, and consistent with ongoing commercial forestry operations within the site, as well as peatland impacts, are outlined in Chapter 8. A peat depth survey has been undertaken and the results will be provided in Chapter 11 (Geology, Hydrology and Hydrogeology).	N/A
SNH	The Proposed Development lies approximately 3.7 km north east of Muirkirk and North Lowther Uplands Special Protection Area (SPA), not 5 km as detailed in table 5.2 of the scoping report. The Proposed Development will be within the core foraging range for Merlin, and forest felling associated with the wind farm construction and operation could also make the area more attractive to Merlin. Therefore, require further details regarding the proposed felling regime and reserve judgement until they have considered the full ornithology survey.	A46	Baseline survey results in 2018 and historic surveys for other local wind farm projects within 2 km have not recorded breeding merlin, and the species appears to be present only rarely. Consideration of potential effects within an EIA context, and a Habitats Regulations Appraisal (HRA) context on the SPA population are presented in Chapter 8.	N/A
	Proposed Development lies approximately 3.7 km north west of the Muirkirk Uplands SSSI, not 6 km as listed in table 5.2 of the scoping report. Reserve judgement until they have considered the full ornithology survey.	A46	Chapter 8 provides information on designated sites and ornithological qualifying features associated with these sites that were found during surevys within the local area. It was concluded that connectivity is unlikely and no designated sites would be affected by the Proposed Development.	N/A

Consultee	Scoping Comment	Page No	Response to Consultee	Further EIA Consultation
	Advise that species surveys should have been completed no more than 18 months prior to submission of the application.	A48	Full survey methods and results are presented in the ornithology technical Appendix 8.1. Limitations to surveys are included in these documents and summarised in the Limitations to Assessment section of Chapter 8.	N/A
	Full details of survey methodologies, areas surveyed and details of any limitations to survey efforts should be included. Where survey methods or other work deviates from published guidance, deviations should have been agreed in writing with SNH in advance of carrying out survey work. The EIA report should include a full description of metholodogy used and an explanation of why any deviations were considered appropriate.	A52	Measures to ensure that breeding birds would not be affected by construction activities associated with the Proposed Development would be presented in a Breeding Bird Protection Plan. Pre-construction surveys would be carried out by an ECoW or suitably qualified ornithologist.	N/A
	With regards to breeding birds it is recommended that ground or vegetation clearnace works are undertaken out-with the main bird nesting season (March-August inclusive). If not possible, a suitably experienced ecologist should check the development site before work commences to determine the presence of any nesting birds. If nesting birds are found, a suitably sized buffer zone should be set up around the nest and no work withi this zone should commence until the young have fledged or the nest is no longer in use.	A1	The ecology assessment considered SNH's Carbon Peatland Map, and using National Vegetation Classification survey results, determined the extent of peat-based habitats and groundwater dependent terrestrial ecosystems across the site. Aquatic surveys on behalf of the Douglas West project were considered as part of the assessment. Mitigation measures that were appropriate for minimising effects on ornithological features to non-significant levels, and consistent with ongoing commercial forestry operations within the site, as well as peatland impacts, are outlined in Chapter 8. Measures to ensure that breeding birds would not be affected by construction activities associated with the Proposed Development would be presented in a Breeding Bird Protection Plan. Pre-construction surveys would be carried out by an ECoW or suitably qualified ornithologist.	N/A

9 Noise and Vibration

9.1.1 The following comments were received as part of the EIA Scoping Opinion on noise and vibration.

Table 9-1 – EIA Scoping Opinion – Noise

Consultee	Scoping Comment	Page No	Response to Consultee	Further EIA Consultation
SLC	Should note the acoustic climate for the development area is complex as a result of the extent of renewable development. This service generally agree that the prevailing background level shall be based on historical measurements in the absence of current development. It is envisaged that all developments shall show compliance with their previously consented conditions and as appropriate their controlling receptors. The cumulative levels at any receptors shall not exceed: - day time noise (7am to 11pm) from the wind turbines must not exceed a noise level of 40dB LA90 (10 min) or background LA90 (10 min) +5dB, whichever is the greater, at the boundary of the curtilage of any noise sensitive premises at all times at wind speeds of up to 12 metres per second at 10m height as measured within the site. - night time noise (11pm to 7am) from the wind turbines must not exceed a noise level of 43dB LA90 (10 min) or background LA90 (10 min) +5dB, whichever is the greater, at the boundary of the curtilage of any noise sensitive premises at all times at wind speeds of up to 12 metres per second at 10m height as measured within the site.	11	The layout (and operational constraints, if necessary) for the Proposed Development will ensure that the cumulative noise levels at any receptor locations will not exceed the noise limits presented in the Scoping Opinion.	N/A
	The following generalities should also be adhered to: - Priority should be given to development in chronological order of planning consent. In cases were the cumulative is exceeded the later development shall provide the mitigation. - As appropriate the wind shear should be recalculated to determine the wind speeds standardised to 10 m height at wind speeds up to 12m/s. This relates to the new tip/hub heights. - Initially hemispherical propagation should be assumed to provide a conservative evaluation of the imissions. This will assist in ensuring that the development operational levels are within the available headroom.	12	- It is understood that in the event that the cumulative noise levels are found to exceed the noise limits, the Proposed Development will apply noise mitigation measures. - Wind shear for the appropriate turbine height will be applied when deriving the wind speed at 10 m as referenced in the noise limits. - The term *hemispherical* is understood to mean spherical sound propagation over a reflective plane, and allowing for ground attenuation effects, as set out in ISO 9613-2:1996 and specified in the IOA Good Practice Guide.	N/A

10 Cultural Heritage

10.1.1 The following comments were received as part of the EIA Scoping Opinion on cultural heritage.

Table 10-1 – EIA Scoping Opinion – Cultural Heritage

Consultee	Scoping Comment	Page No	Response to Consultee	Further EIA Consultation
Historic Environment Scotland (HES)	No designated heritage assests are located within the site boundary however it is recommended that an impact assessment should be undertaken to consider nearby heritage assests.	A11	The assessment of impacts on the settings of heritage assets will be included in the EIA Report (Chapter 10) following the approach outlined in the Scoping Report.	N/A
	Recommended that particular attention be given to the following assets, although this is not an exhaustive list: - Douglas Village, Earl of Angus' Monument; - St Bride's Chapel; - St Bride's Church; - Thorril Castle; - Glenbuck Ironworks.	A11	Based on the blade tip height ZTV, there will be no visibility from Thorril Castle (SM5425) or from Glenbuck Ironworks (SM2931). Photomontages will be provided for the Earl of Angus' Monument (LB1457) and for St Bride's Chapel (LB1490). Wirelines will be provided for St Bride's Church (SM90265) and for Wildshaw Hill Cairn (SM4511) and Auchensaugh Hill Cairn (SM4234).	N/A
	Recommend that a ZTV is applied to provide a basis for selecting assets in the wider area which should be assessed. Where impacts are likely to be highest appriopriate visualisations should be provided.	A12	The blade tip height ZTV will be used to identify designated heritage assets in the wider study area for inclusion in the assessment.	N/A
	Consideration should be given to the cumulative impacts from a combination of the Proposed Development with other existing and proposed developments within the surrounding area.	A12	An assessment of cumulative impacts will be included in the EIA Report (Chapter 10).	N/A

12 Hydrology, Hydrogeology and Geology

12.1.1 The following comments were received as part of the EIA Scoping Opinion on hydrology, hydrogeology and geology.

Table 12-1 – EIA Scoping Opinion – Hydrology and Hydrogeology

Consultee	Scoping Comment	Page No	Response to Consultee	Further EIA Consultation
Coal Authority	The Proposed Development site boundary falls partly within the Development High Risk Area (DHRA). Coal mining legacy is unlikely to pose a constraint however consideration should be given to the implications posed by past coal extraction operations.	A54	A coal Mining Risk Assessment will be provided within the EIA Report (Appendix 11.4)	N/A
ECU	Where there is a demonstrable requirement for peat landslide hazard and risk assessment, the assessment should be undertaken as part of the EIA process to provide Ministers with a clear understanding of whether the risks are acceptable and capable of being controlled by mitigation measures. The Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments (Second Edition), published at http://www.gov.scot/Publications/2017/04/8868, should be followed in the preparation of the EIA report, which should contain such an assessment and details of mitigation measures.	7	A Peat Slide Risk Assessment and Outline Peat Management Plan will be included within the EIA Report (Appendix 11.1)	N/A
ECU	The Applicant are to contact Scottish Water (via EIA@scottishwater.co.uk) and make further enquires to confirm whether there are any Scottish Water assets which may be affected by the development, and includes details in the EIA Report of any relevant mitigation measures to be provided.	7	It is unlikley that there are any Scottish Water assests within or in close proximity to the Proposed Development. Recent responses by Scottish Water to local wind farm applications have been taken into consideration	N/A
	Request that the Applicant investigate the presence of any private water supplies (PWS), which may be impacted by the development. The EIA Report should include details of any supplies identified by this investigation, and if any supplies are identified, the Company should provide an assessment of the potential impacts, risks, and any mitigation which would be provided.	7	The Applicant consulted directly with bth SEPA and SLC with regards to PWS. Efforts have been made to identify any potential PWS from OS mapping and site survey work. No PWS have been identified.	N/A
SEPA	Map and assessment of all engineering activities in or impacting on the water environment including proposed buffers, details of any flood risk assessment and details of any related CAR applications.	A36	Details of proposed new and altered water crossings are provided in Appendix 11.2. A Stage 1 Flood Risk Assessment is provided in Appendix 11.3.	N/A

Consultee	Scoping Comment	Page No	Response to Consultee	Further EIA Consultation
	Map and assessment of impacts upon Groundwater Dependent Terrestrial Ecosystems, including 100 m or 250 m buffer dependent on excavation depth.	A37	A map of potential GWDTE identified from an NVC survey is provided in Figure 7.4a-f. Potential effects on GWDTE are discussed in Chapter 11.	N/A
	Map and assessment of impacts upon groundwater abstractions including 100 m or 250 m buffer dependent on excavation depth.	A37	This will be addressed within the EIA Report Chapter 11.	N/A
	Schedule of mitigation including pollution prevention measures.	A37	This will be included addressed witin the EIA Report Chapter 11 and 18.	N/A
	Borrow Pit Site Management Plan of pollution prevention measures.	A37	This will be addressed within the EIA Report Chapter 11.	N/A
	Maps of proposed waste water drainage layout, proposed surface water drainage layout, and proposed water abstractions including details of the proposed operating regime.	A37	This will be addressed within the EIA Report Chapter 11. Outline information on the proposed drainage strategy is provided in EIAR Chapter 3.	N/A
	If water abstractions or dewatering are proposed, a table of volumes and timings of groundwater abstractions and related mitigation measures must be provided.	A37	This will be addressed within the EIA Report Chapter 11.	N/A
	Decommissioning statement.	A37	Outline decommissioning proposals are provided in Chapter 3 and effects are assessed in this chapter as appropriate	N/A
	Further clarification whether any Private Water Supplies may be impacted on by the Proposed Development.	A37	Efforts have been made to identify any potential PWS from OS mapping and site survey work. No PWS have been identified.	N/A
	Based on the information provided at this stage it seems unlikely that any development will take place within 250 m of a groundwater supply source; if this is the case it would be helpful if the ES provides evidence to confirm this.	A37	This will be addressed within the EIA Report Chapter 11.	N/A
	Design of watercourse crossings advised to accommodate the 1 in 200 year event, and other infrastructure located well away from watercourses.	A37	This will be addressed within the EIA Report Chapter 11 and indicative watercrossing schedule provided within Appendix 11.2 of the EIA Report.	N/A
	Map detailing the following: - all proposed infrastructure overlain with all waterbodies and watercourses; - a 50 m buffer around waterourses and waterbodies; - layout of mitigation measures including all cut off drains, location, number and size of settlement ponds.	A37	This will be addressed within the EIA Report Chapter 11.	N/A

Consultee	Scoping Comment	Page No	Response to Consultee	Further EIA Consultation
	Application be supported by a site specific Peat Management Plan. Required:- peat depth survey and table detailing re-use proposals.	A37	This will be provided in outline within Appendix 11.1 of the EIAR.	N/A
	The following information on borrow pits: - Map of size, location and dimensions. - A map of any stoks, soils, temporary infrastructure, drainage, etc. - Justification for each borrow pit and evidence of suitability of material to be excavated. - Ground investigation report with the exisiting water table. - Map of all drains and settlement lagoons. - Map of proposed water abstractions. - A map of pollution prevention measures. - A map of soil storage. - Details of restoration. - Details of rock processing.	A42	This will be addressed within the EIA Report Chapter 11. At present the proposals only outline search areas for any potential borrow pit(s).	N/A
SNH	Advise that detailed peat surveys of the site, measuring the peat deposit to full depth, should be undertaken in accordance with Scottish Government guidance. The results should also be used to inform a peat slide risk assessment. SNH recommend that peat survey results should be used to inform the design and layout process, so that the development avoids, where possible, fragile and priority habitats and other sensitive areas (e.g. blanket bog and peat). Where this is not possible, suitable restoration and/or compensation measures should be presented in the ES in the form of a draft Habitat Management Plan (HMP).	A52	Peat depth survey was undertaken across the Proposed Development footrpint, the results are presented with Chapter 11 and Appendix 11.1 of the EIA Report.	N/A
	Recommend early engagement with SEPA with regard to excavated peat reuse and disposal.	A53	Consultation with SEPA was undertaken. Peat surveys did not identify large depths of peat within the Proposed Development footrpint.	N/A
	Recommend that an assessment of impacts of hydrological changes (particularly related to groundwater) on habitats is also included.	A53	This will be addressed within the EIA Report Chapter 11.	N/A

12 Traffic and Transport

12.1.1 The following comments were received as part of the EIA Scoping Opinion on traffic and transport.

Table 12-1 – EIA Scoping Opinion – Traffic and Transport

Consultee	Scoping Comment	Page No	Response to Consultee	Further EIA Consultation
SLC	Should include swept path analysis to ensure that the delivery of the larger components can be accommodated within the public road.	A2	Noted and swept path analyis will be included (Appendix 12.1 of the EIAR).	N/A
Transport Scotland	Methods adopted to assess likely traffic and transportation impacts on flows and infrastructure should include the following: - determination of baseline conditions, sensitivity of the site and identification of receptors - determination of predicted construction and operational requirements - assessment of predicted impacts	A57	Noted and Traffic and Transport assessment will be prepared in accordance with Transport Scotland's Scoping response.	N/A
	Require an Abnormal Loads Assessment to ensure larger blade size can be accommodated at trunk road junctions.	A57	Noted. Full Abnormal Load Assessment will be provided prior to turbine deliveries commencing (once final turbine model is selected), but swept path assessments for maximum component sizes will be included within the EIAR.	N/A

13 Socio-Economics, Recreation and Tourism

13.1.1 The following comments were received as part of the EIA Scoping Opinion on socio-economics, tourism and recreation.

Table 13-1 – EIA Scoping Opinion – Socio-Economics, Tourism and Recreation

Consultee	Scoping Comment	Page No	Response to Consultee	Further EIA Consultation
ScotWays	There may be rights of way affected by the site in question and it is recommended that the Core Paths Plan is consulted. It is also suggested that formal consultation with ScotWays may be of benefit.	13.19 13.26	Construction and operational effects on rights of way and core paths are considered in the EIA (Chapters 3 and 13).	N/A
SLC	Should include local recreational facilities and the EIA Report should consider the impact of the development proposals on the existing public access network. There are	13.19	Effects on local tourism and recreational facilities are considered as part of the EIA (Chapter 13).	N/A

Consultee	Scoping Comment	Page No	Response to Consultee	Further EIA Consultation
	a number of core paths, wider access network routes and rights of way which bi-sect the site. Opportunities for enhancing and extending the provision of access infrastructure should be included as mitigation measures. It is recommended that an outdoor access plan for the site is prepared as part of the assessment process.	13.25-13.27	Construction and operational effects on rights of way and core paths are considered in the EIA. An outdoor access plan will be prepared and opportunities for non-motorised public access to the new Proposed Development infrastructure are included in mitigation measures.	

14 Aviation, Radar, Television and Telecommunication

14.1.1 The following comments were received as part of the EIA Scoping Opinion on aviation, radar, television and telecommunication.

Table 14-1 – EIA Scoping Opinion – Aviation, Radar, Television and Telecommunication

Consultee	Scoping Comment	Page No	Response to Consultee	Further EIA Consultation
Glasgow Airport	The site is located within the radar safeguarding area and turbines are likely to be detected by primary surveillance radar. This is expected to have an unacceptable impact on Glasgow Air Traffic Control and a safeguarding objection is highly likely.	A10	The Applicant is undertaking an aviation assessment (Chapter 14 of the EIA Report) and is in ongoing communication with Glasgow Airport regarding a mitigation solution.	There is ongoing consultation between the Applicant and Glasgow Airport. Mitigation has been identified and will be subject to assessment before being confirmed and contracted.
	Recommendation that Terma mitigation may be a potential option.	A10		
MOD	No objection to the proposal.	A19	No response required.	N/A
	Request that in the interest of air safety the development be fitted with aviation safety lighting.	A20	An indicative lighting plan with be included withiin the EIA Report.	N/A
	Wish to be advised on the following prior to commencement of construction: - date construction starts and ends; - maximum height of construction equipment; - latitude and longitude of every turbine. Also wish to be consulted and notified of any alterations to the application and the progression of submissions.	A20	No response required at his time.	N/A
NATS Safeguarding	Based on preliminary findings, the Proposed Development does conflict with their safeguarding criteria. Therefore they object to the proposal.	A21	The Applicant is undertaking an aviation assessment (Chapter 14 of the EIA Report) and is in ongoing communication with NATS regarding a mitigation solution.	There is ongoing consultation between the Applicant and NATS. Mitigation has been identified and will be subject to assessment before

Consultee	Scoping Comment	Page No	Response to Consultee	Further EIA Consultation
	Glasgow, Lowther and Cumbernauld primary radars may be affected. The turbine screening available will not adequaetly attenuate the signal, therefore some of the turbines are likely to cause false primary plots to be generated. A reduction in the radar's probability of detection for real aircraft is also anticipated.	A28/ A28		being confirmed and contracted.
Joint Radio Company Ltd.	This proposal was cleared with respect to radio link infrastructure operated by Scottish Power and Scotia Gas Networks. JRC does not foresee any potential problems based on known interference scenarios and the data provided.	A15	No response required.	JRC was consulted on the final layout and cleared with respect to radio link infrastructure operated by Scottish Power and Scotia Gas Networks (07/02/2019)
BT	The project will not cause intereference with BT's current and presently planned radio networks.		No response required.	BT was consulted on the final layout and cleared of any interference.
Arqiva	No comment	N/A	No response required.	Arqiva was consulted on the final layout and raised no concerns.
Atkins	No comment	N/A	No response required.	Atkins was consulted on the final layout and raised no ojbection.

15 Shadow Flicker

15.1.1 No comments were received as part of the EIA Scoping Opinion with regards to shadow flicker. The Applicant has consulted directly with the SLC EHO with regards to the proposed methodology and received confirmation on the scope (email dated 12 February 2019).

16 Forestry

16.1.1 The following comments were received as part of the EIA Scoping Opinion on forestry.

Table 16-1 – EIA Scoping Opinion – Forestry

Consultee	Scoping Comment	Page No	Response to Consultee	Further EIA Consultation
FC	The report should include a stand alone chapter on 'Woodland Management and Tree Felling' prepared by a suitably qualified professional and supported by existing records, site surveys and aerial photographs. The chapter should describe and recognise the social, economic and environmental values of the forest and the woodland habitat and take into account the fact that, once mature, the forest would have been managed into a subsequent rotation, often through a restructuring proposal that would have increased the diversity of tree species and the landscape design of the forest.	A7	The EIA Report will contain a forestry assessment (Chapter 16), prepared by a suitably qualified professional and supported by all necessary data and maps.	Pre-application consultation and site inspection were conducted with FCS to agree proposals in advance.
	The chapter should describe the baseline conditions of the forest, including its ownership. This will include information on species composition, age class structure, yield class and other relevant crop information. The chapter should clearly indicate proposed areas of woodland for felling to accommodate the proposed infrastructures, including access roads, tracks and any ancillary structures. Details of the area to be cleared around those structures should also be provided, along with evidence to support the proposed scale and phasing of felling. The chapter should consider the combined impact of this proposal and the neighbouring Cumberhead Extension proposal on the woodland, especially in regard to wind stability.	A7	This will be considered within the EIA Report. The forestry assessemnt will also be supported by the following figures: - Figure 16.1 Baseline Forest Felling Plan - Figure 16.3 Proposed Development Felling Plan Summary of changes relating to the timing and scale of felling programmes, timber production, haulage, species composition and age structure will also be provided.	N/A
	The chapter should describe the changes to the forest structure, the woodland composition and describe the work programme. The felling plan should clearly identify which areas are to be felled and when. Trees felled must be replaced by on-site (replanting) or off-site compensatory planting. On-site replanting must always be considered first. The replanting plan should show which areas are to be replanted and when during the life of the project. The plan should clearly identify and describe the replanting operations including changes to the species composition, age class structure, timber production and traffic movements.	A7	Comparisons of the Baseline and Proposed Development Forest Plans are provided detailing changes to felling programmes, timber production, timber haulage, age structe and species composition over the course of the 20-year Forest Plan period as well as associated with the Proposed Development.	N/A

Consultee	Scoping Comment	Page No	Response to Consultee	Further EIA Consultation
	Applicant should consider potential cumulative impact of the development in respect to the local and regional context. Consideration should be given to the implication of felling operations on such things as habitiat connectivity, landscape impact, impact on timber transport network and forestry policies included in the local and regional Forestry and Woodland Strategies and local development plans.	A8	Cumulative impacts of wind farm developments are detailed in the Forestry Chapter 16.	
	Specifics of proposed mitigation should be included in a replanting plan, appropriately described in the EIA Report, to understand the development in full.	A8	Mitigation measures relating to replanting and compensatory planting are detailed in Chapter 16	
	Both felling operations and on and off-site compensatory planting must be carried out in accordance to good forestry practice- the EIA Report must clearly state that the project will be developed and implemented in accordance with the UK Forestry Standard.	A8	A commitment to deliver all forestry operations to UKFS and UKWAS standards is included in the forestry chapter along with a compensatory planting plan (Figure 16.6).	
	FC Scotland should be consulted throughout the development of the proposal to ensure that proposed changes to the woodland are appropriate and address the requirements of policy on control of woodland removal and the principles of sustainable forest management.	A9	Pre-application consultation was carried out with FCS as well as a site meeting and provision of draft proposals which were agreed before use in the EIA Report.	
SEPA	Require a map and table detailing forest removal	Plan 5	Woodland removal is detailed on Figure 16.5 and in Chapter 16.	
	Require the inclusion of a comprehensive breakdwon on all aspects of the 'forestry works' planned at the site, including proposals for the use of 'forestry by-products'.	16-23	A forest residue management plan is provided in the Forestry Chapter (16).	

18 Other Consultees

18.1.1 No responses to the scoping request were received from the following consultees:

- Civil Aviation Authority – Airspace;
- Coalburn Community Council;
- Douglas Community Council;
- Glasgow Prestwick Airport;
- RSPB Scotland;
- Scottish Rights of Way and Access Society;
- Scottish Water;
- Scottish Wildlife Trust; or
- Visit Scotland.

Figures

KEY

Site Boundary

0 0.45 0.9 km

Scale 1:20,000 @ A3

3R Energy

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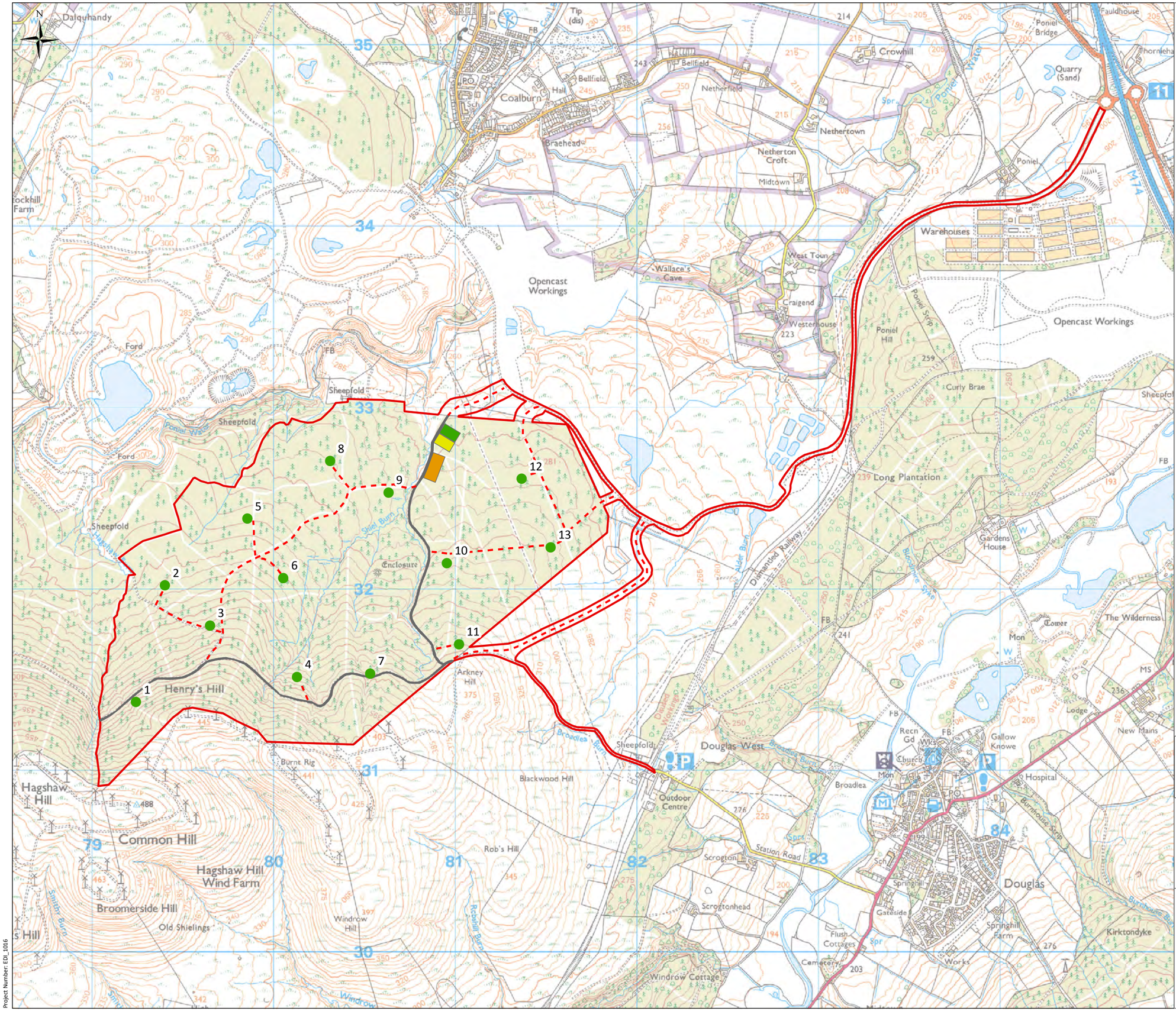
Douglas West Wind Farm Extension
Section 36 Gatecheck Report

Figure 1

Site Location Plan

Project Number: EDL 1016 / AH / 25-02-2019 / V1



KEY

- Site Boundary
- Indicative Turbine Locations
- Indicative Site Roads
- Main Arterial Forest Route
- Indicative Turbine Component Laydown Area (Temporary)
- Indicative Construction Compound & Concrete Batching Area (Temporary))
- Indicative Substation, Control Room & Energy Storage Facility Location

0 0.45 0.9 km

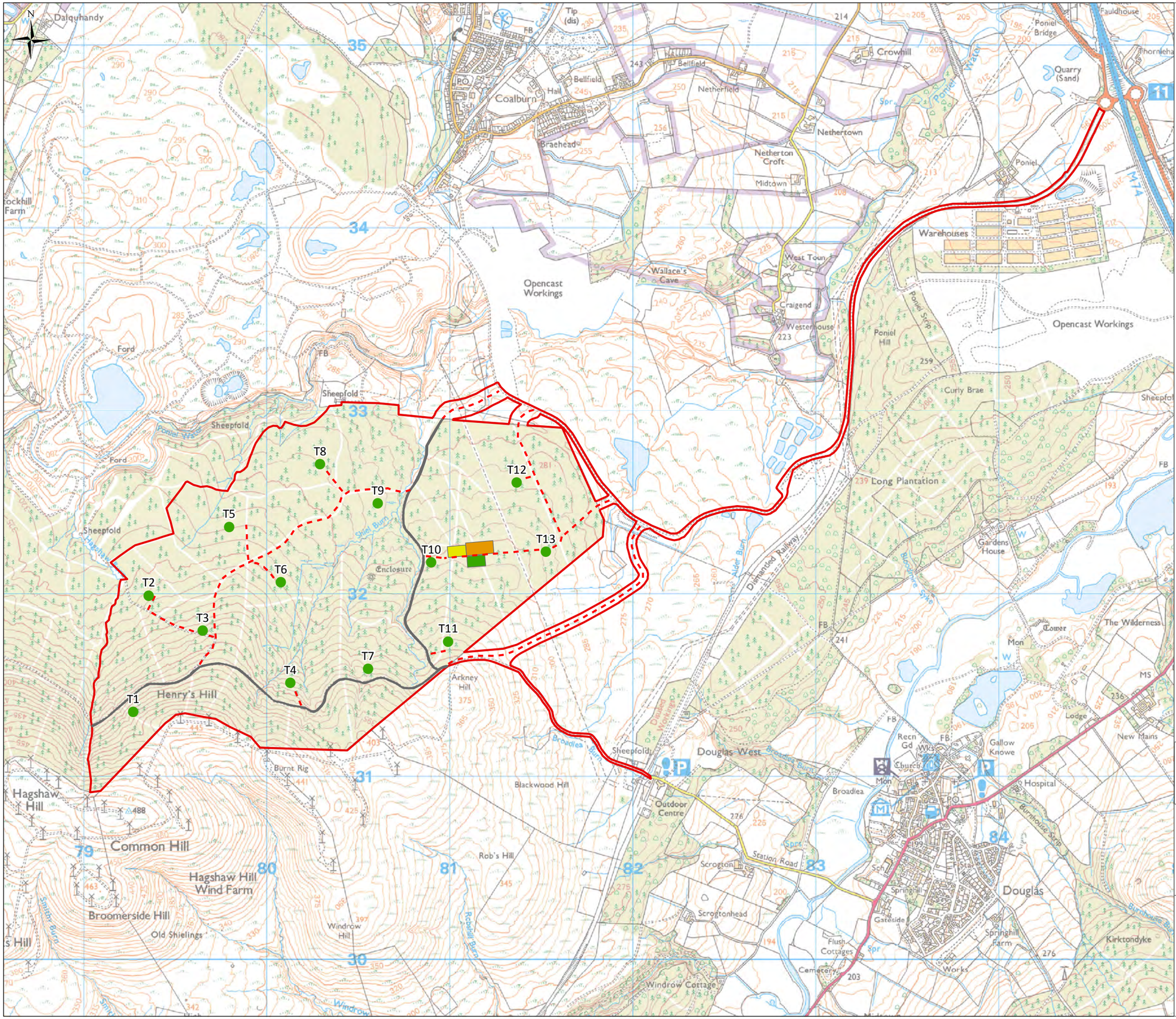
Scale 1:20,000 @ A3

Douglas West Wind Farm Extension
Section 36 Gatecheck Report

Figure 2

Site Layout A

Project Number: EDI_1016



KEY

- Site Boundary
- Indicative Turbine Locations
- Indicative Site Roads
- Main Arterial Forest Route
- Indicative Turbine Component Laydown Area (Temporary)
- Indicative Construction Compound & Concrete Batching Area (Temporary))
- Indicative Substation, Control Room & Energy Storage Facility Location

0 0.45 0.9 km

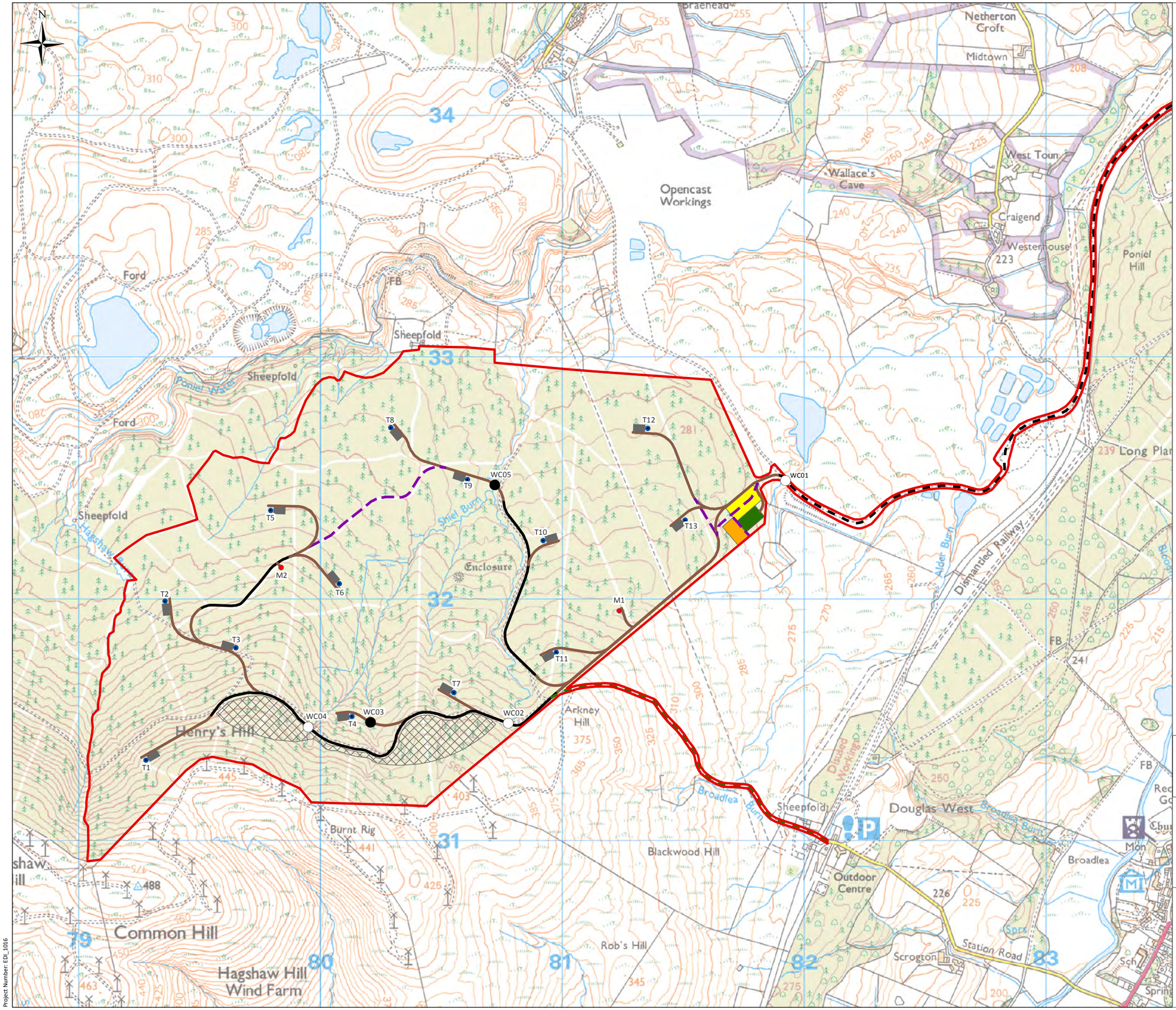
Scale 1:20,000 @ A3

Douglas West Wind Farm Extension
Section 36 Gatecheck Report

Figure 3

Site Layout B

Project Number: EDI_1016



KEY

- Site Boundary
- T1 Turbine Location
- Hardstanding
- Substation, Control Room & Energy Storage Facility
- Temporary Construction Compound & Concrete Batching Area
- Temporary Turbine Component Laydown Area
- Borrow Pit Search Area
- M1 Indicative New Met Mast Location
- WC01 Existing Water Crossing
- WC02 New Water Crossing
- Existing Access Road (Coal Road)
- Existing Timber Haul Road
- Indicative Access Track in Existing Tree Break
- Indicative New Access Track and Tree Felling Corridor
- Indicative New Temporary Access Track

NOTE

The Proposed Development infrastructure, in particular access tracks, has been drawn to reflect the true locations of forestry wayleaves on the ground rather than that shown on the Ordnance Survey base mapping.

0 0.35 0.7 km

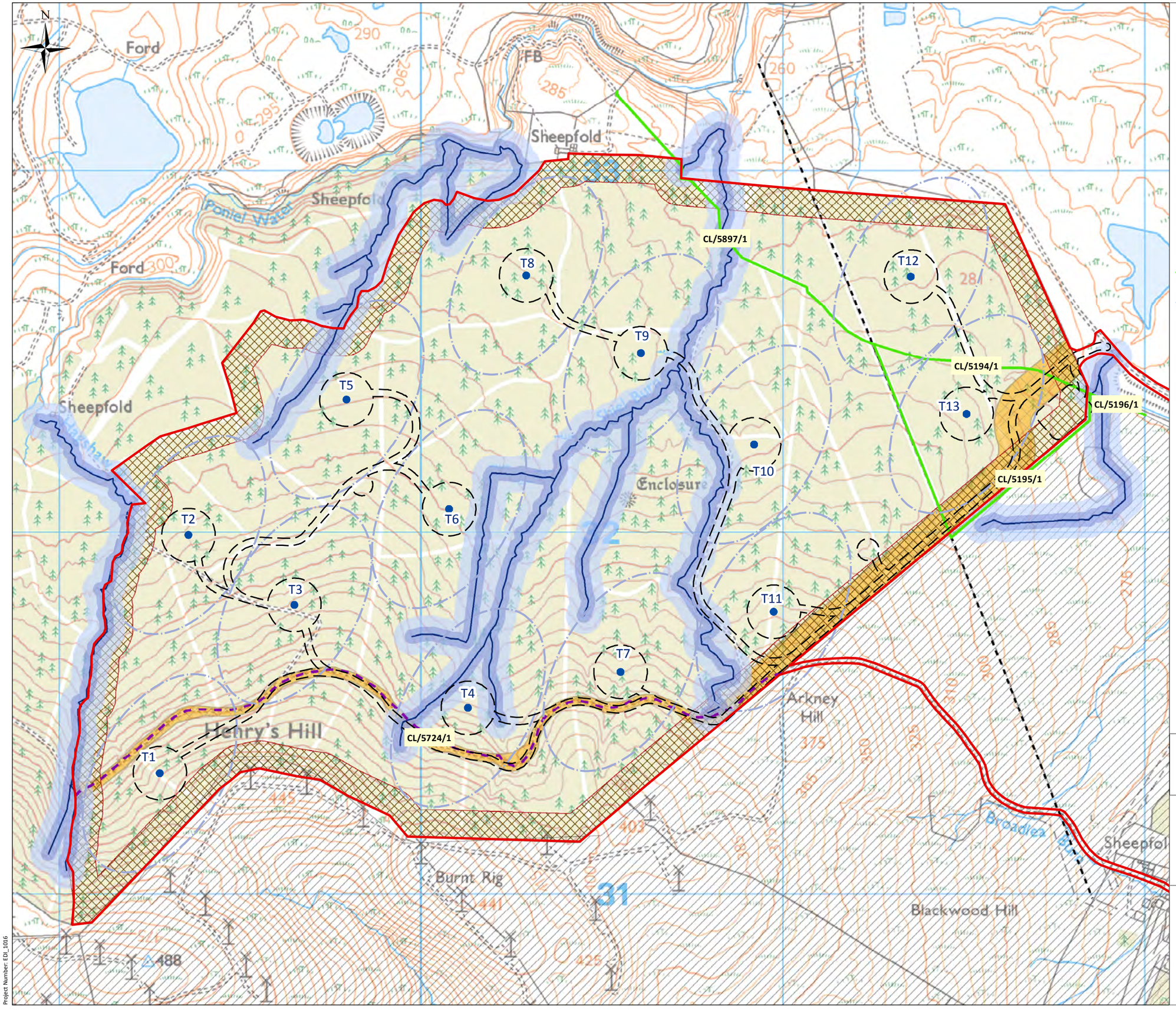
Scale 1:15,000 @ A3

Douglas West Wind Farm Extension
Section 36 Gatecheck Report

Figure 4

Site Layout C

Project Number: EDI_1016



KEY

- Site Boundary
- Turbine Location
- Internal Oversail Buffer (76m)
- Internal Access Area (Wayleave)
- Turbine Wake Ellipses
- Bat Mitigation /Tree Free Zone
- Overhead Line
- Aspirational Core Path
- Wider Network Path
- Watercourse
- Watercourse (20m buffer)
- Watercourse (50m buffer)
- Douglas Valley SLA

0 0.2 0.4 km

Scale 1:10,000 @ A3

Douglas West Wind Farm Extension
Section 36 Gatecheck Report

Figure 5

Local Constraints to Development

Project Number: EDI_1016

ITPENERGISED
Earth. Smart. Solutions

Registered Address:

7 Dundas Street

Edinburgh

EH3 6QG

+44 (0) 131 557 8325