Technical Appendix 5.4: Residential Visual Amenity Assessment (RVAA)

Contents

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Introduction

This Residential Visual Amenity Assessment (RVAA) has been in accordance with Landscape Institute Technical Guidance Note (TGN) 2/19: Residential Visual Amenity Assessment (15 March 2019). The TGN states that:

"The purpose of carrying out a Residential Visual Amenity Assessment (RVAA) is to form a judgement, to assist decision makers, on whether a proposed development is likely to change the visual amenity of a residential property to such an extent that it becomes a matter of 'Residential Amenity'."

And further that:

"Changes in views and visual amenity are considered in the planning process. In respect of private views and visual amenity, it is widely known that, no one has 'a right to a view.' …

It is not uncommon for significant adverse effects on views and visual amenity to be experienced by people at their place of residence as a result of introducing a new development into the landscape. In itself this does not necessarily cause particular planning concern. However, there are situations where the effect on the outlook / visual amenity of a residential property is so great that it is not generally considered to be in the public interest to permit such conditions to occur where they did not exist before."

This assessment considers only what the resident may see from a property. Views or 'visual amenity' are just one component of residential amenity and the two should not be confused. The latter is a planning matter and may also include aspects such as noise, air quality, traffic, etc., in addition to residential visual amenity. This RVAA considers the visual amenity aspects of residential amenity. Where necessary, other aspects are considered in the relevant chapters of the EIA Report and it is for decision makers to weigh all these aspects, and documents/assessments relating to them, in determining the acceptability of a proposal.

Overall residential amenity is discussed within the planning statement accompanying the application for the Proposed Development.

This assessment, and the process of RVAA, seeks to identify where effects on residential visual amenity are of such a nature or magnitude that they may need to be considered in the overall balance of 'Residential Amenity' or 'Living Conditions'. The point at which this happens is referred to as the Residential Visual Amenity (RVA) Threshold.

Methodology

Study Area

There are no standard criteria for defining the RVAA study area and this is determined on a case by case basis. The guidance note identifies that for large structures, such as wind turbines, a preliminary study area of 1.5-2km radius may be appropriate to begin identifying properties for inclusion within RVAA, but for other developments the study area would be much reduced in proportion to their size. In this case, a study area of 2 km was proposed during scoping and not dissented from by consultees.

Properties are usually assessed individually but may be considered in groups where the outlook or views are essentially the same; for example a row of houses that all share an open outlook towards the site. Where properties are grouped for assessment, this will be clearly identified and reasons for grouping described.

Approach

TGN 2/19 advocates a four-step process to RVAA with the first three falling broadly within the scope of LVIA where the magnitude and level of visual effects is assessed. It follows the same general approach as that of the LVIA and may draw on its findings, supplemented by other information (ZTVs, visualisations, fieldwork) as required. The first three steps of the process can be summarised as:

- Preliminary review;
- Evaluation of baseline visual amenity; and
- Assessment of the likely change to visual amenity.

The fourth step involves a further assessment of the change to visual amenity of individual properties identified as *"having the greatest magnitude of change"* (i.e. Large magnitude within this assessment) and identifying whether the RVA threshold is reached. Where a magnitude of change is identified that is less than Large, this final step is not required as the effects would not reach the RVA threshold.

Preliminary Review and Evaluation of Baseline Visual Amenity

The first step considers whether a property requires more detailed assessment or if effects are *"judged unlikely to occur or so insignificant that it is not essential to consider them further"* (GLVIA3, para. 3.19), for example, where properties are outside of the ZTV or would experience such limited views that the change to the outlook would be negligible. These properties are identified, and a brief summary is provided but no further consideration is given to these within the assessment. Properties that are financially involved with the Proposed Development are also identified at this stage as, typically, it is understood that those with such a vested interest would be content with any consequential change to their living conditions.

Where it is identified that notable effects may arise at a property, the existing baseline visual amenity is described. This is done 'in the round' and considers both views from the dwelling itself, garden areas and driveways and views experienced when arriving or leaving the property. This step is informed by desk study and field surveys from nearby publicly accessible locations.

Assessment of the Likely Change to Visual Amenity

The changes to views and visual amenity as a result of the Proposed Development is described for each property and a judgement on the magnitude of change and level of effect[1] likely to be experienced is provided. This involves consideration of the following factors:

- Distance between the property and proposed development and their relative locations (e.g. up/down hill);
- Nature of available views (e.g. panoramic, enclosed) and the effect of daily or seasonal variations;
- Direction of view or aspect of property affected;
- Extent to which the proposed development may be visible from various parts of the property (e.g. dwelling, rooms, access, garden);
- Scale of change to views, including the proportion of view occupied by the proposed development;
- Compositional changes (e.g. loss/addition of landscape features such as woodland);
- Contrast or integration of new features with the existing views;
- Any uncertainties inherent to the design of the proposed development (e.g. micrositing allowances); and
- Duration and nature of changes (e.g. temporary/permanent, intermittent/continuous).

This stage may be supported by a range of visual aids as required including maps, ZTV studies, photography and visualisations. The choice of visual aids is determined on a case by case basis and may be informed by consultation. In line with best practice guidance the type of visualisation should be proportionate to the nature of the proposed development and assessment stage.

RVAA Judgement

This final stage is concerned with identifying "*whether the predicted effects on visual amenity and views at the property are such that it has reached the Residential Visual Amenity Threshold, therefore potentially becoming a matter of Residential Amenity"*. This is the key concern of RVAA and judgements on the RVA threshold are set out clearly and unambiguously for those properties where detailed assessment has identified the property or group of properties as likely to experience the greatest magnitude of change (Large) "*such that the Residential Visual Amenity Threshold may be engaged"*[2].

Cumulative Developments

The RVAA is undertaken against the baseline as set out within the LVIA/LVA and includes consideration of any pertinent consented developments unless there is clear reason to believe that they would not be built. Future, unconsented, cumulative development is generally not a RVAA consideration and is not included within this assessment.

Distances/Directions

Where distances and directions are given within the assessment, these are distances between the nearest part of the house (or nearest house in a group) and the nearest turbine. Distances given are rounded to the nearest 10 m to account for the level of accuracy available in techniques used to measure (usually based on aerial photography within a GIS). The distances may vary in practice by up to 100m due to the micrositing allowance, this has been taken account of in the assessment.

1 Note that in considering the level of effect, all residential receptors are treated as being of High sensitivity (high susceptibility and high value) as directed by TGN 02/19 para. 4.23

2 TGN 02/19 – Figure 1 RVAA Process

Assessment

Figure 5.4.1 included within Annex B, illustrates the location of individual and groups of properties within the 2 km RVAA study area. The assessment is provided below and is supported by further detailed illustrations and visualisations for individual properties/groups, as required, in Annex A.

Preliminary Assessment

For the preliminary assessment, all of the properties within the study area were reviewed, considering a combination of the ZTV study shown on the Figure, illustrative views A-E provided in Appendix 5.3, the visualisations provided in Annex A (which are produced to the same methodology as the illustrative views), and site visits. As a result of that review, each home was classified into one of five groups:

- **Views from garden and main windows** – These homes would have visibility of the turbines from the garden and main living space windows. **These homes are considered further in Table 1 below.**
- **Views from garden and minor windows** – These homes would have views from the garden and either upstairs windows or downstairs windows which are not the main outlook from living spaces. Effects on these homes would be at most Permanent, Large scale and of Localised extent (taking account of the areas of these homes affected). **The magnitude of impact would be Large/medium and effects would be Major/moderate and Adverse**.
- **Views from garden only** - These homes would have views from the garden only and not from windows. Effects on these homes would be at most Permanent, Large scale and of Localised extent (taking account of the areas of these homes affected). **The magnitude of impact would be Large/medium and effects would be Major/moderate and Adverse**.
- **Views from upstairs windows only** - These homes would have views from the upstairs windows only and not from the downstairs windows or garden. Effects on these homes would be at most Permanent, Large scale and of Limited extent (taking account of the areas of these homes affected). **The magnitude of impact would be Medium and effects would be Major/moderate and Adverse**.
- **Restricted or no visibility** – These homes would have limited visibility, with views of the turbines mostly or entirely screened by trees, buildings and/or terrain. Effects on these homes would be at most Permanent, Small scale (at most – more typically Negligible scale) and of Wide extent (taking account of the areas of these homes affected). **The magnitude of impact would be Small and effects would be Moderate and Adverse**.

Some homes are divided into flats. Where it is clear from the address data that a flat is on the ground floor then this has been taken into account. Where the data is not specific, all flats in the buildings have been classified identically.

For homes where effects are judged to be Large/medium, Medium or Small magnitude, effects would not be 'of the highest magnitude' and would not have the potential to exceed the RVA threshold. Those homes are not considered further.

Detailed RVAA

Property	Assessment
R1) Glenkin Cottage (1.45 km)	This home is set within a clearing in forestry, on a valley side which faces towards the Site. The house is formed of two buildings and ongoing development work will link these. Consented plans for this development work do not include a window on the nearest eastern facade to the Site, and the main facades are south facing from the former barn and the east-facing windows of the original house, including dormers. The main garden area is to the east of the former barn. As shown by the photowires and aerial view, the Proposed Development would be visible to the south-east and east from the garden, and front yard with T4 (1.52 km) to the southeast being the most openly seen, though it would not be the closest turbine. Views from south facing windows would be oblique (particularly towards T4 and turbines further north) rather than direct, and views from east facing windows would be partly constrained by the former barn. All three lights on the turbines would be visible at night. Permanent, changes to views would be Large scale for a Wide extent of the property and impacts would be of **Large magnitude**. Effects would be Major and Adverse. **RVAA Judgement**: The shape of the valley, presence of forestry and partial screening of the turbines by terrain would provide a sense of separation. Taking account of this, and the fact that views from windows would be primarily of the more distant turbines (T1 and T2), it is considered that the **effects would not exceed the RVA threshold**.

Property	Assessment
R2) 2 Stronsaul Cottages (1.24 km)	This single storey home, set among forestry has a main façade which faces east with windows also facing south onto the garden. It is set in a valley with young forestry on the land to the east which rises steeply, and longer views along the valley to the southwest from the south facing windows and garden. Although views would open up during certain points in the felling cycle, given the age of the trees to the east as shown in the photowire in Annex A, it is expected that views will become more enclosed for the long term. As shown by the photowire, and aerial view in Annex A, the turbines would be seen obliquely from the south facing windows, and more directly from the garden and east facing windows. They would be mostly screened by terrain and forestry, with the most open view being towards the most distant turbine (T1). At certain points in the felling cycle it is possible that there would be more open views towards T4, but given the age of the forestry this would not be expected to take place for several decades, and potentially not during the operation of the Proposed Development. The light on T1 would be seen at night, but the other two lights would be screened. Permanent changes to views would be Medium scale for a Wide extent of this property and the magnitude of impact would be **Medium**. Effects would be Major/moderate and Adverse with **no potential to exceed the RVA threshold**.
R3) Auchenblae (1.48 km)	This single-storey home is part of a group of homes slightly separated from the western edge of Sandbank. The main facades face east and west, and there are relatively open views looking out over steeply rising ground from the west facing façade, garden, patio and parking areas towards the Site, which also have views to the south. East and north views are restricted by the adjacent properties. As shown by the photowire and aerial view in Annex A, the Proposed Development would be visible to the south-west from the garden, patio, windows and parking area, though views would be constrained by the nearby hillside and woodland. T6 and T7 would be openly visible, with the other turbines screened by forestry or seen as blades above the hillside if the forestry is felled. The light on T7 would be visible at night, but the other two would be screened. Permanent, changes to views would be Large scale for a Wide extent of the property and impacts would be of **Large magnitude**. Effects would be Major and Adverse. **RVAA Judgement**: The partial screening of the turbines by rising ground and trees would provide a sense of separation and is considered that the turbines would not be experienced as 'overwhelming' or 'overbearing' and **effects would not exceed the RVA threshold**.
G4) Shore Road (1.94 km)	Windsor Lodge and Kiloran are two-storey houses, each split into two homes and have their main outlooks and gardens facing north-east across Holy Loch as shown by the aerial views in Annex A. Small rear gardens are located to the south-west and are surrounded by trees and nearby homes on rising ground. As shown by illustrative view C in Appendix 5.3, the most open views towards the Proposed Development from these homes would arise from the eastern ends of the front gardens and the upstairs windows, where turbines would be seen along the skyline beyond nearby trees and homes. Views from downstairs windows would benefit from greater screening by nearby vegetation and homes.. Permanent changes to views would be Large/medium scale for a Wide extent of these properties, giving rise to a **Large/medium magnitude** of impact. Effects would be Major and Adverse with **no potential to exceed the RVA threshold**.
G5) High Road, Massan View and Lorimer Terrace (1.82 km)	Homes in this group marked with red dots on the aerial view shown in Annex A have main facades which face broadly east and west towards the Site. Others in the group have their gable ends facing towards the Site and/or vegetation and adjacent homes which partly or wholly screen views to the west. As shown by illustrative view D in Appendix 5.3, the most open views towards the Proposed Development from these homes would arise from 1-8 Brae Cottages situated on the east side of High Road, which have open views from their front facades and gardens towards the Site. The proposed turbines would be seen standing above the forestry (or the open skyline when felling takes place). Homes on Massan View and Lorimer Terrace would see the turbines looking out over nearby bungalow roofs, but such views would still be largely open given the elevated skyline. The aviation light on T1 is likely to be screened by forestry on the skyline (until the trees are felled) and the other two lights would be openly visible at night. Permanent changes to views would be Large scale for a Wide extent of these properties, giving rise to a **Large magnitude** of impact. Effects would be Major and Adverse. **RVAA Judgement**: The distance and position of the proposed turbines beyond the nearby hillside would mean that they would not be experienced as 'overwhelming' or 'overbearing' and **effects would not exceed the RVA threshold**.

Summary and Conclusions

The aim of the RVAA seeks to identify where effects on residential visual amenity are of such a nature or magnitude that "*the effect on the outlook / visual amenity of a residential property is so great that it is not generally considered to be in the public interest to permit such conditions to occur where they did not exist before.*"

The majority of properties within 2 km of the Proposed Development would have limited visibility of the Proposed Development as illustrated by Figure 5.4.1 in Annex B. 118 homes in the study area would have more open visibility of the turbines from windows and/or garden, with 55 having open views from their garden and main living area windows and requiring detailed assessment.

Impacts at the following homes would not reach Large magnitude:

- 2 Stronsaul Cottages, and
- homes on Shore Road.

Impacts at Glenkin Cottage to the north-west of the Site, at Auchenblae and at the homes with open views near illustrative view D (see Appendix 5.3) on High Road, Lorimer Terrace and Massan View would be of Large magnitude. In each case the most visible turbines are set back beyond the skyline and a combination of distance and this partial screening would be sufficient that they would not be experienced as overwhelming or overbearing and the RVA threshold would not be exceeded.

References

Landscape Institute (2019). Technical Guidance Note (TGN) 2/19: Residential Visual Amenity Assessment. Available at: https://www.landscapeinstitute.org/technical-resource/rvaa/

Landscape Institute and Institute of Environmental Management and Assessment (2013). Guidelines for Landscape and Visual Impact Assessment: Third Edition (GLVIA3). Published by Routledge.

Landscape Institute (2019). Technical Guidance Note 06/19: Visual Representation of Development Proposals. Available at: https://www.landscapeinstitute.org/visualisation/

Annex A – Inset plans and Photowires

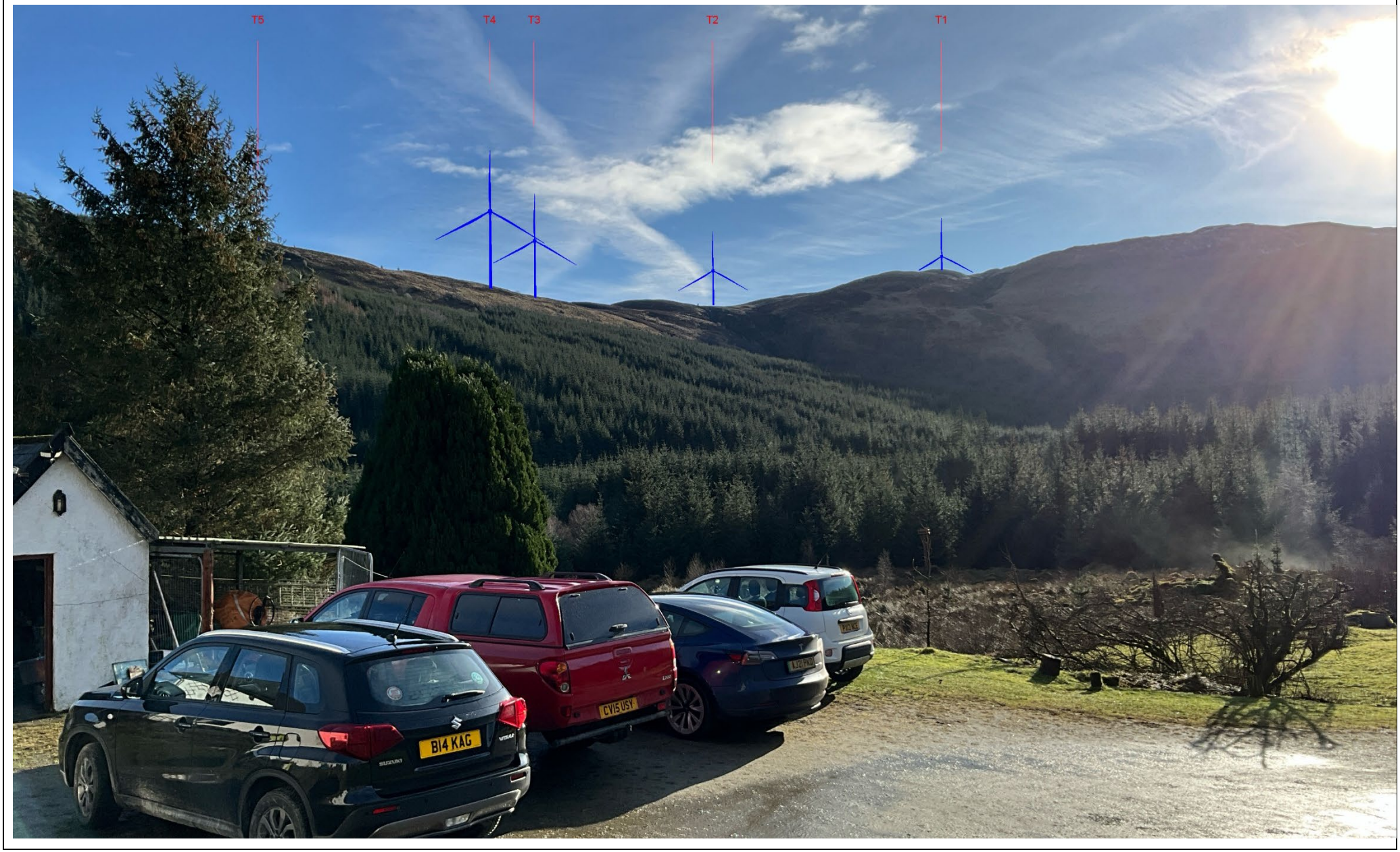
- R1) Glenkin Cottage – Aerial view, photowire from main façade, photowire from garden
- R2) 2 Stronsaul Cottages – Aerial view, photowire
- R3) Auchenblae – Aerial view, photowire
- G4 - Shore Road, Kiloran (aerial view)
- G4 - Shore Road, Windsor Lodge (aerial view)
- G5 – High Road, Massan View, Lorimer Terrace and Allan Terrace (aerial view)

Aerial views – key

Legend	
	Extent of turbines
	Nearest turbine

R1 – Glenkin Cottage (aerial view)

R1 – Glenkin Cottage (photowire – main facade)



R1 – Glenkin Cottage (photowire – garden)

R2 – 2 Stronsaul Cottages (aerial view)

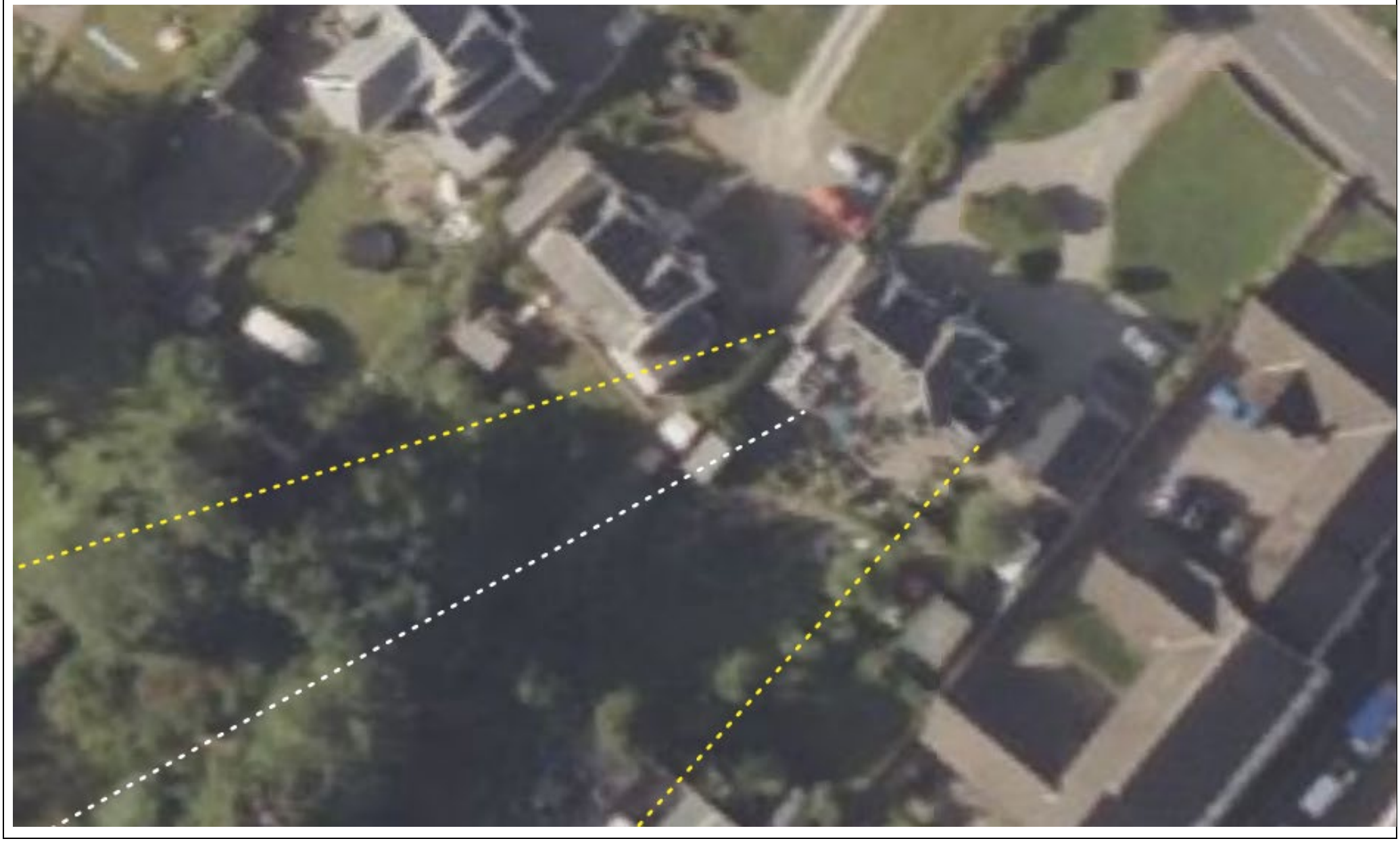
R2 – 2 Stronsaul Cottages (photowire)

R3 – Auchenblae (aerial view)

R3 – Auchenblae (photowire)

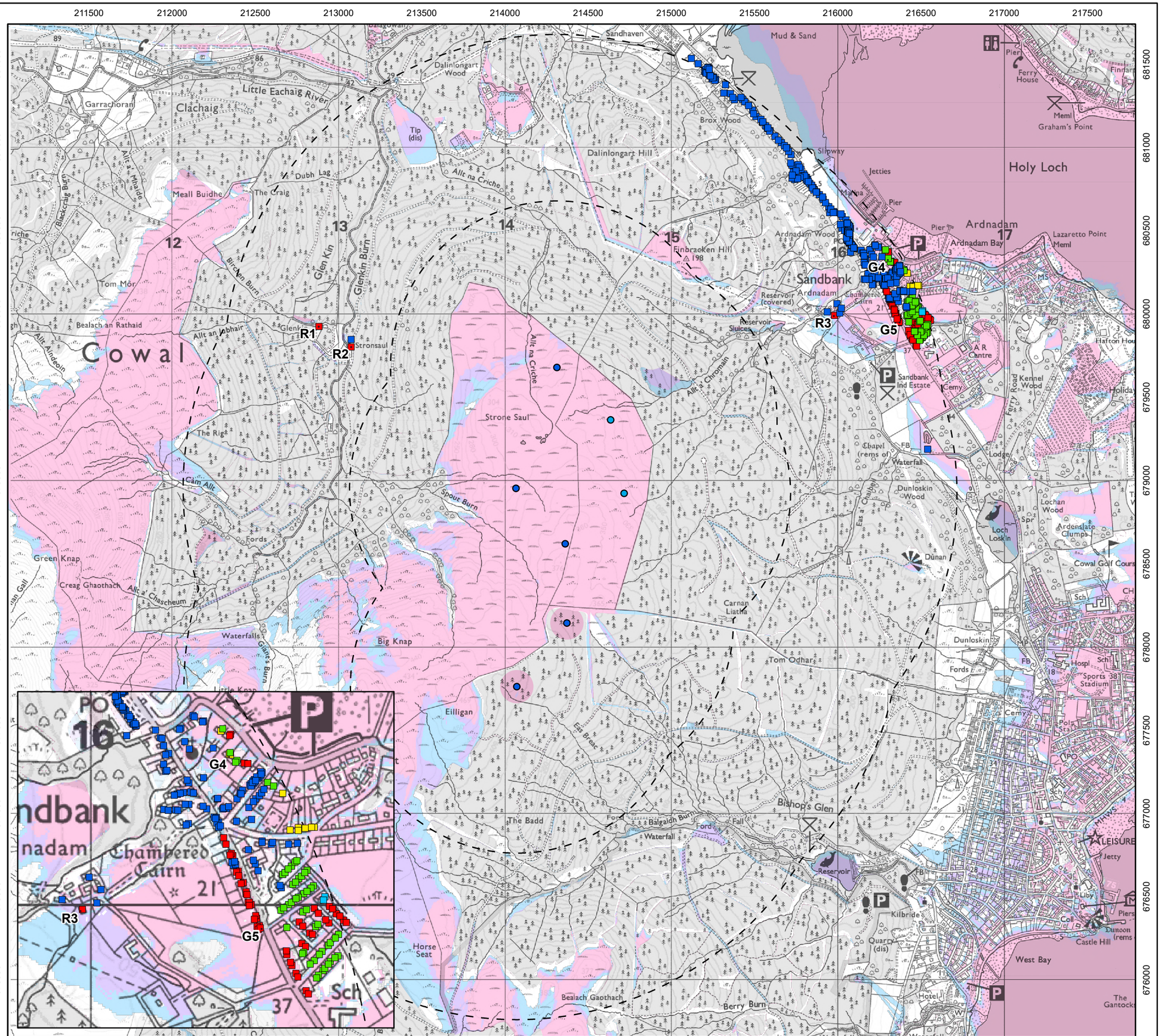
G4 – Shore Road, Kiloran (aerial view)

G4 – Shore Road, Windsor Lodge (aerial view)



G5 – High Road, Massan View, Lorimer Terrace and Allan Terrace (aerial view)

Annex B – Figures



Statkraft

Proposed Turbines
- 180m
- 200m
- Distance from turbines (1, 2km)

Residential Properties
- Views from garden and main windows
- Views from garden and minor windows
- Views from garden only
- Views from upstairs windows only
- Restricted or no visibility

Zone of Theoretical Visibility (blade tip)
- 1-2 turbines
- 3-4 turbines
- 5-7 turbines

0 0.5 1 Km

N

Produced By: MF	Version: 0.1
Checked By: ME	Date: 20/06/2025

Figure 5.4.1
Residential Properties

Giant's Burn Wind Farm
EIA Report