

Hagshaw Energy Cluster Western Expansion

Landscape & Visual Impacts

It is acknowledged from the outset that, in common with almost all commercial wind energy developments, some landscape and visual effects would occur as a result of the proposals, including some significant effects.

A key principle of the European Landscape Convention is that all landscapes matter and should be managed appropriately. It is also acknowledged that landscapes provide the surroundings for people’s daily lives and often contribute positively to the quality of life and economic performance of an area.

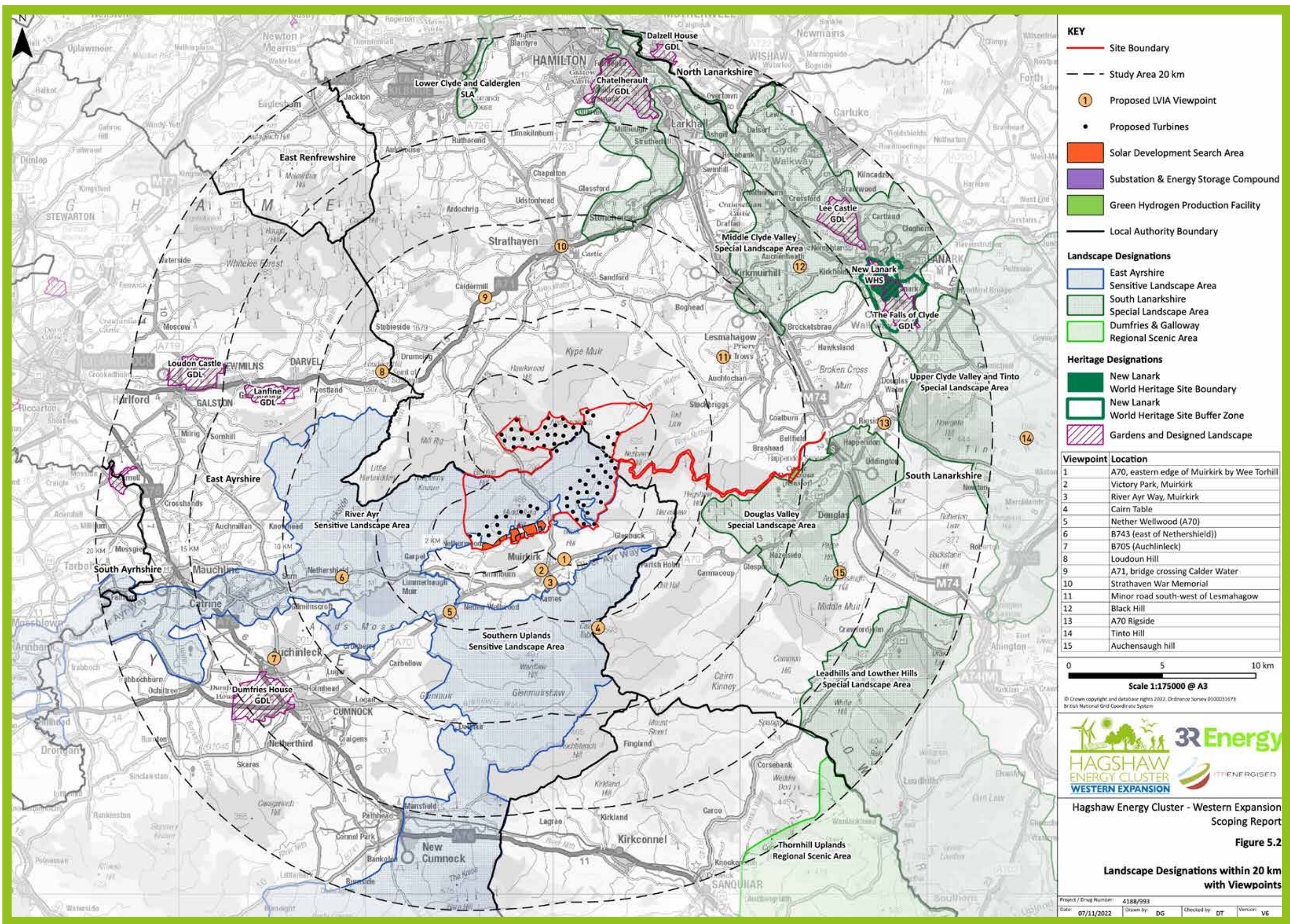
The EIA will therefore consider what impacts there will be on the local landscape and other viewpoints from the proposed development.

Study Area Landscape Character

The Proposed Development site adjoins an established cluster of wind farms around Hagshaw Hill (Known as the ‘Hagshaw Cluster’) and Dungavel Hill in rural South Lanarkshire.

The Proposed Development is predominantly located in the Plateau Moorland – Ayrshire Landscape Character Type (LCT 78) and the Plateau Moorlands – Glasgow & Clyde Valley Landscape Character Type (LCT 213), comprising principally of open moorland across the central and southern extents and commercial coniferous plantation and existing forestry tracks within the northern extent of the proposed development.

The site is not located within any of the identified Special Landscape Areas (SLAs) in South Lanarkshire and the western part of the site overlaps with the River Ayr Sensitive Landscape Area in East Ayrshire. Landscape designations within 20km of the Site are shown on the figure to the right.

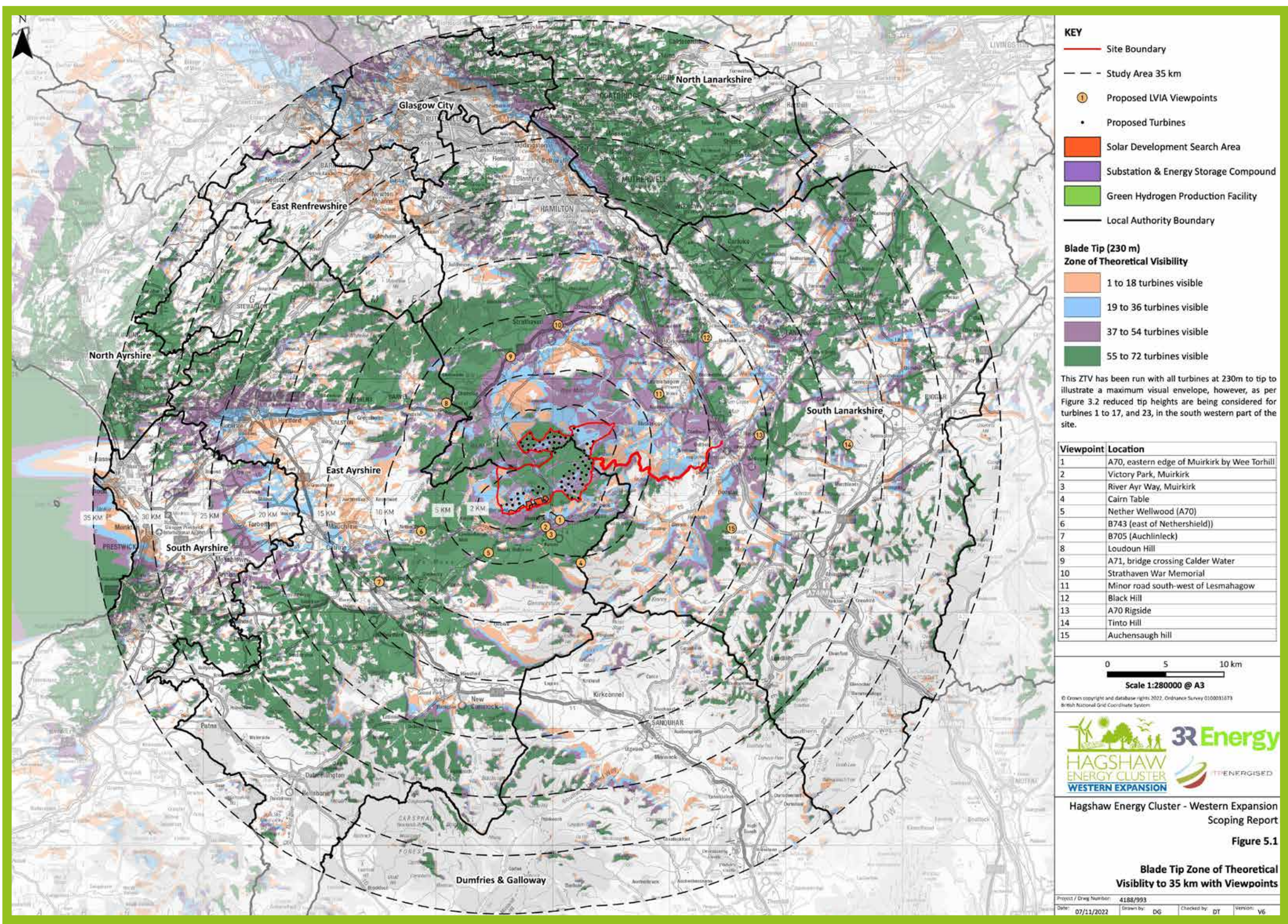


Selected Viewpoint Locations & ZTV

A series of key representative viewpoint locations around the local area have been identified and will be agreed with the Scottish Government Energy Consents Unit, South Lanarkshire Council, East Ayrshire Council and NatureScot for use in the landscape and visual assessment.

A zone of theoretical visibility (ZTV) map was created as a starting point to illustrate the geographical area within which views of development on site are theoretically possible. The ZTV is based on a ‘bare-earth’ scenario, whereby the screening effects of areas of existing vegetation, or built features in the landscape are not taken into consideration. The ZTV was modelled using the proposed max turbine tip height of 230m.

The ZTV and selected viewpoint locations are shown on the figure to the right.



Turbines over 150m are required by the Civil Aviation Authority to be fitted with visible aviation warning lighting. The Landscape & Visual Impact Assessment (LVIA) will therefore also include an assessment of the effects which would arise from this during low light conditions.

Design Iteration

Although the final specification of the turbines is not known at this time, they are likely to be up to 230m maximum tip height, each with a generating capacity of up to approximately 7 MW. The design and consultation process to date has identified 19 turbines, those closest to Muirkirk, that are being considered for a reduced tip height (as shown on the figure on the Proposed Development Board). This will be confirmed through further consultation, both with stakeholders and the local community, and further design iteration.

A series of visualisations have been prepared to show how the proposed development layout (shown on the figure on the Proposed Development Board) would look from the following locations:

- Viewpoint 2: Victory Park in Muirkirk
- Viewpoint 9: A71 north of Gilmourton
- Viewpoint 11: Minor road west of Lesmahagow

A reduction in height of the 19 turbines closest to Muirkirk would also result in a reduction in the power output of the smaller turbines. This would reduce the generating capacity of the turbines from the 7 MW noted above. We would be interested in hearing your views on the different turbine heights under consideration and have therefore provided two different scenarios for Viewpoint 2. The two scenarios show what the proposed development would look like with all tip heights at 230 m and then with those marked as ‘reduced height consideration’ shown at 200 m to tip with the remaining at 230 m to tip, where visible. The potential reduction in height of the 19 turbines closest to Muirkirk is not discernible from Viewpoints 9 or 11.

3R Energy

Hidden Area