Legend Zero Carbon Liverpool Project Land boundary EWT DW61 Tower 6. Amenity Considerations Oversail Required spacing Topple distance +10% Noise Current practice on controlling wind farm noise involves applying noise limits at the nearest noisesensitive properties. These limits apply to private external locations where a quiet environment is desirable. Noise limits at these locations should be no more than 5dB(A) above background levels, subject to a minimum of 35dB(A) for daytime and 43dB(A) for night-time (as these minimums reflect quiet rural background levels). The proposed wind turbine is of a modern design and offers several means of reducing operational noise. For example, serrations will be added to the blade to reduce aerodynamic noise from the turbine **Shadow Flicker** (see image above). certain combinations Under Background noise monitoring has been completed and this geographical position, time of day and concluded that the turbine would comfortably meet the above time of year, the sun may pass behind a noise requirements at the nearest residential dwellings to the turbine rotor and cast a shadow over turbine This compliance is demonstrated by the graph below. neighbouring properties. When the blades Rotten Row Dwellings - Daytime Noise Impact rotate a shadow forms for short periods and this effect is know as 'shadow flicker'. This is an issue that can be completely mitigated, if required, through understanding the periods of concern and then shutting down the turbines appropriately during these periods. Guidance states that generally, where suitable separation is provided between wind turbines and nearby dwellings (as a general rule this is 10 rotor diameters), "shadow flicker" should not be a problem. 29 receptors (both permanent and temporary dwellings) were identified as being within 10 rotor diameters (609m) of the proposed wind turbine (as determined using worstcase assumptions). The potential for impact can

be completely mitigate with a

minimal overall impact on

resulting energy yield.

turbine

operations

and

Community Consultation

Zero Carbon Liverpool are keen to hear feedback from the local community regarding any potential concerns or queries they may have so as to understand the overall level of local support/objection for this scheme. To date, the local community have been kept aware of the project via social media and three public meetings, and to date there has been a good level of overall support for the scheme.