



An
Bord
Pleanála

Inspector's Report PL.27.247375

Development

Retention permission sought for shooting club facilities and permission sought to increase height of berm, modifications to existing shotgun shelters, modification to existing vehicular entrance and provision of domestic wastewater treatment system.

Location

Tithewer, Newtownmountkenny,
Co. Wicklow

Planning Authority

Wicklow County Council

Planning Authority Reg. Ref.

16/18

Applicant(s)

Pat and Marion Cooke

Type of Application

Permission

Planning Authority Decision

Refuse

Type of Appeal

First Party

Appellant(s)

Pat and Marion Cooke

Observer(s)

A. Smith, and The Drumbawn
Community Group

Date of Site Inspection

11th January 2017

Inspector

Kenneth Moloney

Contents

1.0 Site Location and Description	4
2.0 Proposed Development	4
3.0 Planning Authority Decision	5
3.2. Planning Authority Reports	6
3.4. Third Party Observations	7
4.0 Planning History.....	7
5.0 Policy Context.....	9
5.1. Development Plan.....	9
6.0 The Appeal	9
6.2. Applicant Response	15
6.3. Planning Authority Response	15
6.4. Observations.....	15
7.0 Assessment.....	17
8.0 Recommendation.....	29
9.0 Reasons and Considerations.....	29

1.0 Site Location and Description

- 1.1. The appeal site is located within a rural area and situated approximately 4km west of Newtownmoundkennedy, Co. Wicklow. The site is located off the regional road, i.e. R765, which provides access between Newtownmoundkennedy and Roundwood.
- 1.2. The road access serving the site is a narrow laneway which takes its access off the R765. This laneway provides access to 3 no. existing houses in addition to the applicant's dwelling. The site is located on a hill-top however the site is removed from the regional road.
- 1.3. The applicant's house is located adjacent to a farmyard and the fields surrounding the farmyard are used for grazing cattle. The existing shooting club is situated adjacent to the farmyard.
- 1.4. The shooting club comprises of an indoor pistol range and an outdoor 50m rifle range. The facility also includes two shotgun shooting shelters used for clay pigeon shooting.
- 1.5. The facility also includes 5 no. outdoor clay pigeon stands and 17 no. outdoor pistol bays.
- 1.6. The outdoor shooting facilities are enclosed by berms and planting.
- 1.7. The club also includes a reception area / office and changing rooms and toilets.

2.0 Proposed Development

- 2.1. Retention permission is sought for the following;
 - 17 no. outdoor pistol shooting bays and earthen beams enclosing them.
 - 5 no. clay pigeon stands and adjacent shooting area
 - Earthen beams enclosing the 'compact shotgun shooting area'
 - 2 no. shotgun shooting shelters
 - 50 metre rifle range shelter
 - Change of use of silage pit into an indoor pistol range

- Continued use of the 'canteen' building as an agricultural storage shed

2.2. Planning Permission is sought for the following;

- Extension and increase in height of the lower sections of the earthen berms to same height as the adjoining earthen berms.
- Modifications to the shooting shelters in the permitted shotgun shooting area and reduction in noise levels
- Opening of a new vehicular entrance onto R765 located 21m west of the existing entrance.
- Reducing the existing vehicular entrance to 1.5m to provide for pedestrians / cyclists.
- Provision of new biocycle effluent treatment system.

2.3. The maximum height of shotgun shelter no. 1 is 3.65 metres above ground level and the maximum height of shotgun shelter no. 2 is 3.56 metres above ground level.

3.0 Planning Authority Decision

3.1. Wicklow County Council decided to **refuse** planning permission for the following reason;

Having regard to:

- The insufficient information submitted in relation to the operational capacity of the proposed development.
- The insufficient information submitted in relation to the measured and predicted noise levels at noise sensitive receptors that would result from the existing authorised development and the proposed development when operating at capacity to allow a comparison of the two developments to be made.

It is considered that insufficient information has been submitted to allow a full assessment to be made of the noise impacts of the proposed development on the residential amenities of adjoining properties. In the absence of such information, the

Planning Authority is not satisfied that the proposed development would not result in a serious impact on the residential amenities of adjoining properties and therefore the proposed development would be contrary to the proper planning and sustainable development of the area.

3.2. Planning Authority Reports

3.2.1. The main issues raised in the planner's report are as follows;

- The main difference between the current proposal and the recent proposal (15/125) includes the reduction in the site area and the inclusion of a canteen building used as a storage shed and the reduction of the existing entrance to 1.5m
- The main difference from the L.A. Ref. 02/7261, which is a grant of permission for clay pigeon shooting, and the current development is the location of 2 pistol ranges in the clay pigeon shooting area to pistol bays. This is not considered a material change of use however as there are physical changes necessary for the change of use these works would require planning permission.
- The applicant was refused on the grounds of the noise in the recent application (15/125).
- There is a noise report (Karl Season & Associates) submitted with the current application.
- It is concluded that given the location of the development on hilltop and its scale, it is considered notwithstanding the mitigation measures proposed, the noise from the proposed development would seriously injure established residential amenities.
- The Environment Section recommends refusal.
- It is proposed to install a bio-cycle effluent treatment system and the source of water supply is a well.
- The EHO has no objections.
- The site is located 1km from the Carriggower Bog cSAC.

- An AA screening submitted by Roger Goodwillie & Associates concludes that the proposal will have no impact on the SAC and the Local Authority planner concurs with this conclusion.
- In relation to traffic a letter of agreement was submitted from the applicant's neighbour with respect to the relocation of the entrance.
- The Road Section requires that the road entrance is increased to 5.5m and a sightline provision of 160m in each direction is required.
- There is legal uncertainty regarding a right of way to the entrance to the site.
- The site is located in a landscape designated as Special Amenity and the local authority planner concluded that the proposal would be assimilated into the landscape without any adverse impacts.

3.2.2. Water and Environment; - Refusal recommended due to the impacts of noise disturbance on established residential amenities.

3.2.3. Additional information sought in relation to (a) submit a statement from a suitably qualified consultant, on why the predicted noise levels would not impact on residential amenities, and (b) submit all necessary information that demonstrates that the most proximate noise sensitive receptors will be improved.

3.3. **Third Party Observations**

There are 8 no. third party submissions and the issues raised have been noted and considered.

4.0 **Planning History**

- L.A. Ref. 15/125 – Retention permission for 17 no. outdoor pistol bays, change of use from silage pit to an indoor shooting gallery with a total floor area of 268 sq. m, shooting range including shooting shelter and a clay pigeon shooting area. Permission sought for (a) modifications to lower portions of the existing clay and sand acoustic – dampening berms

surrounding the clay pigeon shooting area, (b) treatment of existing shotgun areas with mitigation and reduce noise, new vehicular entrance, waste water treatment system. **Refused** due to unacceptable levels of noise nuisance and disturbance for nearby residents.

- L.A. Ref. 12/6508 (appeal ref. 242651) – Retention permission sought for bays, agricultural entrance, buildings associated with soft gaming, reinstatement of pistol bay into clay pigeon shooting area in compliance with previously granted permission L.A. Ref. 02/7261, retention of 5 outdoor pistol bays, retention of clay pigeon shooting area, retention of clay pigeon shooting, for change of use from silage pit to indoor shooting gallery, new access entrance onto R765 and waste treatment plant. The Planning Authority and An Bord Pleanala **refused** permission on the basis of the absence of any suitable mitigation measures which would result in unacceptable noise levels on established residential amenities.
- L.A. Ref. 11/4078 (appeal ref. 240842) – Retention permission sought for change of use from a silage pit to an indoor shooting gallery as built and permission for a 50 metre rifle range and construction of a replacement vehicular entrance. **Refused** (a) as this application relates to a concurrent planning application (L.A. Ref. 12/6508) which relies on the same infrastructure and gives rise to cumulative impacts. There is insufficient information to allow an adequate cumulative impact assessment. (b) the impacts of gunshot have not been adequately assessed.
- L.A Ref. 10/2449 – Retention permission for a change of use from silage pit to an indoor shooting gallery. Application **withdrawn**.
- L.A Ref. 00/2542 – Retention permission **granted** for an outdoor pursuits activity.

- L.A Ref. 02/7261 – Retention permission **granted** of clay pigeon shooting area consisting of 6m tower, novice driven trap and erection of new tower, 3 no. shelter huts, and revised boundary treatment.

5.0 Policy Context

5.1. Development Plan

The operational Development Plan is the Wicklow County Development Plan, 2016 – 2022.

This Chapter 10 – ‘Heritage’ sets out policy provisions in relation to landscape and views & prospects.

Section 9 of Appendix 1 sets out guidance for developments in relation to noise.

6.0 The Appeal

- 6.1. The following is the summary of a first party appeal submitted by Planning and Development Consultant Jim Brogan. The submission outlines proposed revisions to address refusal reasons, the background, planning history, details of the proposed development, relevant provisions of the County Development Plan and the main grounds of the appeal.

The following is a summary of the main grounds of appeal;

Revised Plans

- The applicant submits details that would result in the reduction of the scale of the proposed development and these include;
- Cease all shooting activities at the five clay pigeon shooting area and the adjacent sporting shooting area. The clay pigeon traps will be removed and the area planted with hardwood and evergreen trees. The subject area on the

south-east shooting area was coloured red on the related drawing submitted as additional information to the Council Drg. No. 017 Rev. A.

- The outdoor pistol shooting bays will be reduced from 17 to 12. These five shooting bays are identified in red in the above drawings. This area will be replaced with planting.
- The effect of the proposed tree planting will ensure that these abandoned ranges could not accommodate any shooting activity.
- The opening hours are revised such that there will be a 20% reduction in the hours of operation for the outdoor ranges.
- It is submitted that the principle of development for the proposed development has already been established by the planning inspector in relation to appeal ref. 242651.

Background

- The Hilltop Sporting Club was founded in 2000 by the applicant.
- The new sporting club was founded to provide a new source of income as the applicant's cattle herd was destroyed by BSE.
- The sports club focussed initially on quad-biking and other outdoor pursuits.
- Quad-biking has been replaced by clay pigeon shooting and rifle shooting.
- The applicant received retention permission for the clay pigeon shooting in 2003 (L.A. Ref. 02/7261). Therefore, there is an area within the development authorised for clay pigeon shooting.
- There was initially 20 members of the clay pigeon club now there are 200 members.
- The members engage in target shooting, using a range of guns and targets, which relate to clay pigeon shooting.
- Visiting parties are permitted to use the facility under strict supervision.
- The ranges are authorised by An Garda and documentation is attached to the submission.

- During the year there is a range of competitive shoots and there are generally on average 5 no. club shoots per annum.
- A national shoot will involve the participation of some of the club's own members but also invited members from other clubs.
- The national competition only involves pistol and rifle shooting.
- There are generally 3 no. national shoots a year and generally run from 10:00am to 4pm.
- The current application will also address issues arising from non-compliance with certain conditions attached to the grant of permission under L.A. Ref. 02/7261.

Principle of Development

- It is contended that many of the issues raised by submissions have been previously determined by the Board.
- It is submitted that the principle of development for the proposed development has already been established by the Planning Inspector in relation to appeal ref. 242651.
- The Board has not raised any objections to the principle of development in the previous Board decisions on the subject site.
- The use of part of the site for clay pigeon shooting was authorised by Wicklow County Council's grant of planning permission during in application L.A. Ref. 02/7261.

Operational Capacity

- In terms of overall capacity, the proposed development facilitates two shooting ranges. The first range accommodates 7 shooting stands and the second accommodates 5 shooting stands.
- Only one shooter in each shelter is permitted to shoot at any one time.

- The pistol bays generally feature fixed targets. This is authorised use which is issued by the Department of Justice.
- There are 11 no. shooters permitted to shoot simultaneously in pistol bay no. 1 as there is 11 no. targets.
- The overall number of shooters that could be firing in the 17 no. pistol bays at any one time would be 30.
- The 5 no. clay pigeon stands can accommodate 2 no. shooters each giving a total operational capacity of 10 no. shooters. Only one shooter per stand is permitted to shoot at any one time giving a maximum number of shooters at any one time of two.
- The indoor pistol range has 10 no. target stands.
- The rifle range has an operational capacity for 10 no. shooters with 10 no. target stands.
- There would be 47 no. permitted shotgun shooting areas should the overall project be permitted. This would be reduced to 37 should the development be permitted in accordance with the revised plans submitted with the additional information submission.
- Each range will have its own rules in terms of operation.
- At least one range officer is required to be present on each active range. This number increases with an increase in the number of shooters.
- As a result, it is not possible for all the ranges to operate simultaneously as the number of range officers required would exceed the number of shooters.
- The maximum level of operation would only occur in exceptional circumstances.

Visual Amenity

- The subject site is located within an area designated 'Area of Special Amenity'. The site is some distance from the public road.

- The development is located within and adjacent to an established complex of agricultural buildings.
- The buildings within the subject site are concealed and sheltered by the earthen beams constructed as noise mitigation measures.
- The level of screening will be further enhanced by the increased height of the berm network.
- The local authority concluded that the development would be assimilated into the landscape.
- In the case of appeal ref. 240842 the Planning Inspector concluded that the proposed development would not give rise a significant impact on the surrounding visual amenities. The Planning Inspector did conclude that the site would benefit from comprehensive landscaping.
- The same conclusion was reached by the Planning Inspector in appeal ref. 242651.
- The applicant has stated that they will commit to additional landscaping should the Board require it.
- The Board has raised no issues with visual amenity in their previous decisions.

Traffic

- The proposal includes a new vehicular entrance onto the R765.
- The Road's Section of the Council required that the access laneway be increased to 5.5m in width and the visibility sightlines at the re-sited entrance shall be 160m in length.
- It was accepted in the Planning Report that a private road did not require to be 5.5m in width and that the issues of visibility and provision of sightlines can be addressed by planning conditions.
- The Planning Inspector in appeal ref. 242651 considered that the proposed alteration to the entrance is beneficial in terms of road safety and will not

interfere with the existing right of way. The Planning Inspector considered that the sightlines were improved.

- The 1.5m wide entrance used by pedestrians, horses, bicycles will be maintained.
- The re-siting of the entrance has already been accepted by the Board.

Environmental Impact / Appropriate Assessment

- An AA screening report lodged with the appeal ref. 242651 determined that the development would have no significant effect on the Carriggower Bog SAC or the wildlife it supports. The Planning Inspector concluded with this determination.
- It is therefore considered appropriate to conclude that the Board agreed with the conclusions of the Planning Inspector.
- An AA screening determined by Roger Goodwillie determined that the proposed development will have no adverse impacts on the Carriggower Bog SAC or any other Natura 2000 site.
- The Council, in their assessment, agreed with the conclusions of the report by Roger Goodwillie.
- In relation to L.A. Ref. 12/8508 the An Bord Pleanála Planning Inspector concluded that a similar report by Roger Goodwillie was acceptable.
- It is submitted that there is no change of circumstances with regard the issue of determination of appeal ref. 242651 which would justify the Board arriving at a different conclusion in the current application.

Noise

- The second issue in relation to the Local Authority's refusal reason relates to insufficient information.

- The additional information submitted to the Council allows for a full assessment to be made of the noise impacts of the development on the residential amenities of adjoining properties.
- The noise emissions from the subject development on residential properties has been comprehensively assessed by a report prepared by Season and Associates, Consulting Engineers lodged with the original application. In addition, the submission presented to the Council in the additional information response addresses concerns in relation to noise.

6.2. Planning Authority Response

None

6.3. Observations

The following is a summary of an observation submitted by **A. Smith**;

- It is submitted that Mr. Karl Season (Season and Associates) did not always attend the noise measurements. The noise receptors were left unattended.
- It is contended that a trained eye should have been present during the noise recordings.
- It is contended that Season and Associates did not make it clear to Wicklow County Council in the Noise Report that the sound levels were still above the permitted levels.
- Between 2002 and 2016 there have been 19 planning applications.
- In relation to L.A. Ref. 02/7261 there was a history of non-compliance in relation to conditions no. 2,3 and 8.
- There is therefore a history of non-compliance.
- It is contended that a trained eye should have been present during the noise recordings.

The following is a summary of an observation submitted by **Drumbawn Community Group**;

- The observers live to the north-east of the appeal site.
- It is noted that a third sound report has been submitted as part of the appeal.
- It is submitted that the third sound report is no different than the first two.
- The noise report omits the sound levels measured at the nearest noise sensitive locations.
- It is accepted that measurements were taken and raw data has been provided but actual SNL calculations have not been provided.
- Reference is made to in the sound report to the CIEH 2003 Guidance Document 'Clay Target Shooting-Guidance on the Control of Noise'. This document recommends measuring and calculation procedures and recommends levels to be used when considering planning permissions.
- Reference is made to SNL's in other parts of the Sound Report but not for the actual competitive shoot measurements. This is stated to be due to the presence of high $L_{A-FmaxS}$. It is questioned why this information is not available in the report.
- It is contended that reference made to a total of 39 Lafmax readings exceeding 60dB (A) recorded in location 'B' during a competitive shoot and the claim that it is not possible to directly compute the mean SNL is inaccurate.
- The background level in location B was stated as 41.5 dB LAeq. However, the LA90 background noise level was previously recorded as 23.4db at location B in 2012 by EEC consultants.
- It is submitted that the Lafmax was 71.6 dB and that there were 24 other peaks exceeding 60 dB. There were also 80 peaks exceeding 55dB.
- The Searson Sound Report submits that it was not possible to calculate the SNL however this is inaccurate as the report from Flannery Nagel Environmental Ltd calculated the SNL.

- The mean SNL over 2 hours' period is 59.65 dB at location B. The current sound levels far exceed that recommended in the CIEH report and it therefore follows that planning permission should not be granted.
- It was claimed by the applicant that as no noise control condition applied to the original permission then any noise level is acceptable. It is considered that this ignores the neighbours effected by the noise.
- The main noise impacts are experienced by resident's north of the subject development. The two existing 6m berms do not reduce the noise levels to an acceptable level.
- It is contended that paragraph 35.1 of the appeal submission is inaccurate as fails to consider volley fire which is multiple shots at any one time.
- It is submitted that submitted drawing no. 1601 rev 017 clearly shows that the shotgun firing points are at elevations from 100.20 to 102.80 and the first line of existing berms are at elevations from 106.4 to 110.22 with a second line of berms from 103.50 to 108.12.
- It is submitted that paragraph 35.3 of the appeal submission states that SNL is primarily driven by shotgun use but the use of pistols, especially centre fire pistols can be equally loud.
- It is submitted that paragraph 35.4 of the appeal submission is inaccurate the NSL exceeds the CIEH guidance.
- It is submitted that paragraph 35.5 of the appeal submission is accurate and that the residents to the north east of the proposed development are especially sensitive to noise implications.

7.0 **Assessment**

7.1. Noise

In order to consider the merits of the subject development it is relevant to consider the planning history on the appeal site in detail as the Board has previously refused planning permission on two occasions and both refusal reasons related to noise.

In relation to appeal ref. 240842 (L.A. Ref. 11/4078) this application sought the retention of a change of use from silage pit to indoor shooting gallery and retention of a 50m rifle shooting range. The Planning Inspector in appeal ref. 240842 considered having regard to a concurrent application (L.A Ref. 12/6508) on the same site, which was later appealed, that the application to retain the shooting gallery and the shooting range in isolation of the remainder of the development on the subject site was project splitting. The Board concurred with this conclusion and decided to refuse permission. In relation to noise aspects of this development I would note that the rifle range is located outdoors and that the shooting gallery is located indoors. The Planning Inspector, in his assessment, concluded that the indoor shooting gallery will have no adverse noise implications on established amenities in the local area and considered that the outdoor rifle range, in isolation of other development on the site, is unlikely to impact on established residential amenities in the local area. The Planning Inspector however recommended that it was not possible to consider the noise implications from the shooting gallery and the shooting range without considering the overall development on the subject site.

The Board in refusing permission considered that the consideration of the shooting range and the rifle range in absence of an adequate cumulative impact noise assessment would seriously injure the established residential amenities. In relation to noise the Board was not satisfied that the particular attributes of gunshot noise arising from the proposed facility had been adequately characterised, or adequately assessed in combination with other noise generating activities on the site. In the Board's Direction the Board also listed a number of advisory notes outlining their dissatisfaction with the quality of the noise assessment accompanying the application and the appeal. In summary this includes;

- There are concerns in relation to the level of accuracy of the calculated SNL
- The lack of explanation for the significant difference between the LAeq and LA90.
- A better analysis of L1, LAE, LAFmax and Lpeak is required.

- Noise monitoring undertaken in November 2010, August 2011, and August 2012 failed to provide appropriate clarity on the representative nature of the monitored noise conditions.
- A future noise assessment should also assess other noise generating activities on the site such as Airsoft, as well as the permitted level of clay pigeon shooting to allow a cumulative assessment.
- Lack of regard to the separation distances outlined in 'Clay Target Shooting – Guidance on the Control of Noise'. (Chartered Institute of Environmental Health (2013)).
- Clarification of the planning status of the quad bike use.

The subsequent application on the appeal site was planning appeal ref. 242651 (L.A. Ref. 12/6508). I note that this application sought retention permission for the following;

- 15 outdoor pistol bays
- Retention of clay pigeon area and the subsequent omission of 2 outdoor pistol bays
- Retention of buildings associated with Airsoft gaming

In summary the Planning Inspector reporting on this case, having reviewed the submitted noise reports, concluded that noise mitigation should be part of any permission and the Planning Inspector did not consider that it would be appropriate to grant permission until mitigation measures have been adequately demonstrated. The Board in refusing permission decided that the cumulative impact of various components of the proposed development would, in absence of suitable mitigation measures, result in unacceptable levels of noise nuisance and disturbance for nearby residents. The Board concluded that in the absence of mitigation measures the development to be retained would result in serious injury to the residential amenities.

I would consider on the basis of my review of the planning history that a significant failing of the two previous appeals is largely due to the applicant's inadequate demonstration of suitable mitigation measures. As such an integral component of any successful application would be, in my view, a clear demonstration that any proposed mitigation measures are fit for purpose and capable of reducing noise emanating from the appeal site to an acceptable level. The proposed mitigation measures in the current proposal before the Board include (a) extension and increase in height of the lower sections of existing earthen berms to same height as the adjoining earthen berms and (b) modifications to the shooting shelters in the permitted shotgun shooting area and the reduction in noise levels. In relation to the landscape berms it is proposed to increase their height from 2.5m to 6m at the eastern end of the subject site, adjacent to the outdoor clay pigeon stands, and also to the front of the permitted clay pigeon shooting area, adjacent to the 'compact shotgun shooting area'.

Prior to considering the effectiveness of the proposed mitigation measures and the applicant's submitted noise report, which argues that they are fit for purpose, I would firstly consider the separation distances of the established residential properties from the existing shooting facility in the local area as separation distances are important when considering noise. In general terms noise (or sound pressure level) reduces with distance and noise prediction assessments commonly use the acoustic rule that double the distance results in a 6 dB reduction. In considering the impact of the proposed development on established residential amenities I note from page 2 of the applicant's noise report submitted to Wicklow County Council on the 12th January 2016 and also from the map which accompanied the same noise report that the residential properties to the north are located on the prevailing wind path from the proposed development. These properties include;

- Location A – 1,520m from source
- Location B – 1180m from source
- Location D – 940m from source

In acoustics it is generally accepted that naturally winds blown from the noise source towards the noise sensitive location will increase noise levels, until the wind itself becomes the dominant noise source or is so turbulent that it disperses the 'problem' noise. In general, the greater the separation distance the greater the influence of wind on noise levels.

I have reviewed all three noise reports submitted by the applicant as part of this current application and appeal. I would acknowledge from the submitted noise report and noise survey (submitted to Wicklow County Council on the 12th January 2016) that in general the proposed 6m berm has a noise reducing impact on established residential amenities in the local area. However, it is notable that in some instances in the submitted noise survey where noise sources are actually located in the shadow of the 6m berm the noise recording at the receptor is higher than noise sources in the shadow of the 2.5m berm and this may relate to the cumulative impact of other noise sources in this rural area. Table 3 of the submitted noise report illustrates un-attenuated noise and it is evident that these noise recordings are higher than noise recordings within the shadow of the berms. I would note from the submitted noise survey that the recorded LA_{eq} at Noise Sensitive Receptor (NSR) Location A is 43 dB (A) and noise recordings at in the same Noise Sensitive Receptor from noise sources in the shadow of the 6m berm is generally 42 dB (A) however two of the recordings were 58 dB (A) which is significantly higher and these higher noise levels are likely to have an impulsive impact on the residential amenities at Location A.

I would note the other noise recordings at noise sensitive locations within the submitted noise report. In summary the Noise Sensitive Receptor (NSR) in location B recorded LA_{eq} of 42 dB(A) and the submitted 'Firearms Noise Assessment' concludes that the peaks recorded in excess of this LA_{eq} are of a magnitude comparable to the existing noise-scape at the receptor. The submitted report concludes the same findings for the residential property at location C. I would note that the location of the NSR at location C is situated approximately 2km from the subject site. The report concludes that the attenuation effect of the 2.5m and 6m high

berms and the distance involved reduces the noise recording at the NSR Location C to that existing in respect of the no shoot noisescapes. I would note that Table 4 and Table 5 of the submitted noise report outlines the noise recorded at NSR location D, which is situated approximately 940m from the subject site, and it is notable that in general when the 6m berm is in use the noise recording rarely exceeds 55 dB. In relation to the NSR at location E I would note that Table 6 outlines several readings higher than 60 dB which is generally in excess of the general LAeq. In relation to NSR at location F the noise report concludes that the peaks recorded at this property are of a magnitude comparable to the existing noise-scape at the receptor.

In considering an assessment of the applicants submitted noise report, i.e. 'Firearms Noise Assessment', I would note that there are currently no Irish Guidelines for noise in respect to Shooting Clubs. The Clay Target Shooting Guidance on the Control of Noise, published by the Chartered Institute of Environmental Health (U.K.), 2003, offers guidance in relation to recreational shotgun shooting. Chapter 4 offers guidance in relation to noise buffer zones and topography. The guidelines recommend a noise buffer zone of 1.5km is provided and depending on topographical features no less than 1km. The guidelines advise that where shooting takes place on mainly flat open land in the absence of significant sound reflecting natural features such as rock faces, major roadways, woodland areas, lakes and large buildings that a buffer zone of 1.5km is recommended. It is also advised that where substantial topographical features interrupt the line of sight, reduced separation distances will generally be acceptable. Section 4.3 specifically states that topographical features such as hills, embankments, cuttings and depressions can, on occasion, afford substantial protection against noise due to the physical screening effect they offer and also offer an interruption of line of sight between the noise source and the noise sensitive premises. Based on a visual observation of the local area I would acknowledge that the appeal site is a hill-top setting and the general landscape character to the immediate north of the subject site is a plateau type character which is less likely to mitigate sound than a landscape comprising of substantial topographical features. Therefore, based on these guidelines, a visual observation of the local area and the prevailing wind pattern the residential

properties that I would be most concerned about are identified on the map which accompanied the applicant's noise report and are as follows;

- Location A – 1,520m from source
- Location B – 1180m from source
- Location D – 940m from source

In considering the noise implications for these properties I would note that there is an objection to Wicklow County Council from P. Coffey of Location A (also the author of observation from the Drumbawn Community Group) and this objection is supported by a noise report prepared by Noise Consultant Flannery Nagel. This noise report is critical of the background noise submitted by the applicant's noise consultant as it is argued that the appropriate noise measurement for background noise is LA90 rather than LAeq. The noise report from Flannery Nagles argues that the LAeq is generally expected to be 10 dB higher than the LA90. This noise report is also critical of the different noise output values recorded at source and argues that in some instances the difference in noise recordings is greater than 10 dB which in acoustic terms amounts to the doubling of loudness. The noise consultant's report refers to background noise recorded in a previous noise survey and prepared by EEC and concludes that having regard to the difference between the established background noise and the recorded noise values contained in the applicant's noise report at the NSR that it has not been adequately demonstrated that the proposed mitigation measures will provide adequate protection from noise nuisance to nearby residents.

I would acknowledge the background noise, i.e. LA90, is an important noise measurement when considering noise implications for the proposed development. The background noise is essentially the established noise in the local rural area without the retention of the proposed facility. The LAeq is defined as the A-weighted equivalent continuous steady sound level during the sample period and effectively represents an average value. The LA90 is the A-weighted sound level that is exceeded for 90% of the period and is used to quantify background noise more

accurately. Of the two noise measurements I would consider that LA90 would provide a better understanding of the actual background noise and would also give a better indication of any impulsive noise and any once-off type noise features whereas LAeq would have a higher value than LA90 to account for the once-off higher type noise values. In support of this conclusion I would acknowledge that the BS4142: 2014, which is used regularly to monitor noise from industrial and manufacturing processes in the UK, uses the LA90 as a baseline for noise assessments. In summary the BS 4142:2014 assesses the specific sound level (SSL) which is the LAeq of the noise source allowing for any tonal and impulsive noise impacts on the noise sensitive location and should the SSL be greater or less than 10 dB of the background noise (LA90) then the noise impact is considered significant. Although this is a UK standard the principle of the BS4142:2014 is widely referred to in Ireland. I have also reviewed the EPA 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4), 2016, and this guidance advises that while BAT must be applied on a case by case basis, noise attributable solely to on-site activities, expressed at any Noise Sensitive Location should generally not exceed the values below;

Daytime (07:00 to 19:00 hrs) – 55 dB AR, T (rated noise level)

Evening (19:00 to 23:00 hrs) – 50 dB AR, T (rated noise level)

Night-time (23:00 to 07:00 hrs) – 45dB LAeq T (over a sample period)

This guidance document also refers to quiet areas. Quiet areas, such as remote or rural settings, where the background noise levels are very low (e.g. below approximately 35 dB measured as L90) lower noise limit may be more appropriate and this may be reflected in more stringent noise conditions. The EPA publication also provides guidance on tonal noise and essentially any noise that is identified as a tonal noise source carries a 5db penalty. I would consider that in the absence of any planning guidance with regards to noise that the above guidelines would give an understanding of best practice.

Having regard to the proposed development I would note that the difference between the LA90 and the LAeq is evident from the additional information document submitted to Wicklow County Council on the 17th August 2016. This documentation provides a noise survey for a competitive. In most cases the difference is as much as 10 dB or greater. This level of change to the established soundscape is significant. I would also note the noise report in an earlier application and prepared by EEC refer to background noise levels starting at about of 30dB at NSR and would again indicate that the proposed development would result in a significant change to the existing soundscape.

In light of the above I would consider that the arguments submitted by the noise report prepared by Nagle Flannery, in which it was argued that the background level should be considered, would carry weight. Therefore, considering that a change in decibel by 10 dB is perceived as twice as loud for humans the level of change that the proposed facility would have on established background noise, even with mitigation measures in place, is significant and is likely to have an impact on established residential amenities. In conclusion therefore and having regard to the landscape characteristics to the north of the appeal site, which are described above as a plateau type character, the proposed development is likely to impact on the residential properties situated at Location B and D. Furthermore, the residential properties situated at Location H, E and G are all located closer to the subject site than the properties located to the north outlined above, and should the prevailing wind pattern change then impacts are likely on these properties to the south.

I would also be concerned that the application documentation does not adequately describe the effectiveness of the noise mitigation measures proposed for the existing shotgun shelters and the impacts that these measures will have on noise values at noise sensitive locations. In conclusion I would consider that having regard to the planning history, the submitted noise survey, the landscape character of the of the local area including the hill-top setting of the subject development and the separation distances of the established residential properties to the subject development that

the development to be retained would seriously injure the amenities or depreciate the value of property in the vicinity.

In considering whether to refuse the proposed development the Board will also be aware that the applicant has proposed a downward revision to the scale of the proposed development should the overall development be unacceptable. The proposed downward revision provides for the reduction of opening hours by 20%.

The proposed reduction in scale also includes ceasing all shooting activities at the five clay pigeon stands and the adjacent sporting shooting area. In relation to the 17 no. outdoor pistol shooting bays the applicants are proposing to reduce this to 12 no. bays. It is proposed to plant the areas proposed for closure with hardwood trees. I would consider that there is merit in this proposal as it would effectively amount to the omission of all shut gun activities which have a louder noise value than rifle or pistols and this is confirmed in the applicant's appeal submission.

However, given the scale of the proposed reduction I would be concerned having regard to paragraph 7.7 of the Development Management Guidelines, 2007, that any condition required to alter the scale as proposed by the applicant would significantly alter the subject development or involve a complete re-design of a development and therefore I would not recommend such a condition to the Board.

7.2. Landscape

The appeal site is located within a designated 'Area of Special Amenity' and this is set out in the existing Landscape Classification Map. However, the subject development is not visible from the public roads in the locality or in the immediate area due to the established berms which are situated in the perimeter of the subject site. The existing mature vegetation would also have a screening impact. Although the appeal site is situated on a hill-top setting much of the site is set within trenches below ground level.

The Board will note that in the previous applications or appeals that landscape or visual impact was not an issue. Overall I would consider that the subject

development would not have any adverse impacts on the established landscape or visual amenities in the local area.

7.3. Vehicular Access

The proposed vehicular access will provide a sightline provision of 120m in either direction. It is also proposed the revised vehicular entrance will be 5.5m in width. I would consider that the proposed vehicular entrance is an improvement on the established vehicular entrance.

There is an issue regarding the right of way on the established vehicular entrance however this is an issue outside the remit of the planning legislation and applicant may need to demonstrate under a separate code that legally the proposed modifications to the existing vehicular entrance can be achieved. Overall the proposed vehicular entrance is an improvement on the established vehicular entrance and therefore I would consider it acceptable.

7.4. Wastewater Treatment

The proposed development includes the provision of a new biocycle effluent treatment system. The planning application was accompanied by a Site Characteristic Form which recorded a T-value of 16.69. The E.P.A. publication, Code of Practice, Wastewater Treatment and Disposal Systems Serving Single Houses, 2009, advises that T value between 3 and 50 that the site is suitable for development of a septic tank or a secondary treatment system. The Site Characteristic Form recommends a proprietary packaged wastewater treatment system and a packaged tertiary treatment filter be used. I would consider this as an acceptable means to facilitate the proposed domestic waste water.

7.5. Appropriate Assessment

I would note from the NPWS website (www.npws.ie) that the nearest Natura 2000 designated site is The Carriggower Bog SAC (Site code 000716) which is situated approximately 1km north to the appeal site.

In considering the potential impacts of the subject development on the Natura 2000 site I would note that in the appeal, i.e. appeal ref. 242651, before the Board the Planning Inspector concluded that that subject development would not have any significant effect on the SAC and it was considered that the submitted appropriate assessment adequately demonstrated that a Stage 2 AA is not required.

A key difference with the current development before the Board is the provision of new biocycle effluent treatment system. However, I would note from the submitted Site Characterisation Form that it is stated that it is proposed to install an AQUAstar wastewater treatment system and a sub-surface soil polishing filter and it is stated this system can achieve a high quality of effluent, contains several fail-safe features, and will thereby mitigate the potential risk to the ground water.

The submitted AA-screening report concludes that given the separation distance from the proposed biocycle effluent treatment system and the SAC and also having regard to the high quality effluent achieved by the wastewater treatment system that the subject development will not have any significant effect on the Carriggower Bog SAC. I would conclude on the basis of the information available that it would be reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on any European Sites, i.e. site code 000716, in view of the sites conservation objectives and a stage 2 AA is therefore not required.

8.0 Recommendation

- 8.1. I have read the submissions on the file, visited the site, had due regard to the County Development Plan, and all other matters arising. I recommend that planning permission be refused for the reason set out below.

9.0 Reasons and Considerations

Having regard to the location of the site on a hill-top setting and the immediate landscape characteristics, the established background level noise (LA90) in this rural area, the nature of the noise activity related to the subject development, which would have an impulsive impact, and the relative close proximity of the established residential properties it is considered that the proposed mitigation measures, as demonstrated in the current application, would not adequately protect the established residential amenities in the local area. The development to be retained and the development proposed to be carried out would therefore seriously injure the amenities, or depreciate the value of property in the vicinity and as such would be contrary to the proper planning and sustainable development of the area.

Kenneth Moloney
Planning Inspector

25th January 2017