

COMMITTEE ITEM	3.8
APPLICATION NO	LA03/2018/1097/F
DEA	MACEDON
COMMITTEE INTEREST	ADDENDUM TO COMMITTEE REPORT
RECOMMENDATION	REFUSE PLANNING PERMISSION
PROPOSAL	New 2-storey dwelling attached as an end-terrace property in the same design and style of No. 108
SITE/LOCATION	Land 10m east of beside No. 108 Glenview Park Whiteabbey Newtownabbey Co. Antrim BT37 0TG
APPLICANT	Paul Cargill
AGENT	Paul Anderson Chartered Architect Ltd
LAST SITE VISIT	27th June 2019
CASE OFFICER	Alicia Leathem Tel: 028 90340 Email: alicia.leathem@antrimandnewtownabbey.gov.uk

Full details of this application, including the application forms, relevant drawings, consultation responses and any representations received are available to view at the Planning Portal www.planningni.gov.uk

ASSESSMENT OF PLANNING ISSUES/MATERIAL CONSIDERATIONS

Since the preparation and publication of the Agenda report the following commentary has been prepared by the Council's Environmental Health Section in relation to the issues raised at the February Planning Committee on this application.

1. List of 5 dwellings given in Rey Gaston's 5th submission, (Document 04 stamped received 02 Dec 2019) said to be equidistant:

Page 4 of the report states "There are several existing dwellings near to the application site that are a similar distance (10m) from the nearest railway line as the proposed end of terrace property. They include:

- 5 Dillons Court – 14.9m
- 1 Dillons Court 14m
- 1 Abbeyville Park – 11m
- 8 Abbeyville Place – 11.3m
- 52 Dillons Avenue – 12.8m"

Please note the separation distances involved in the application under consideration are as follows:

- 0.63m from wall of proposed dwelling to site boundary
- 2.33m from wall of proposed dwelling to edge of railway embankment
- 9.23m to closest railway track

It can clearly be seen that the proposed dwelling is closer to the railway lines than the examples supplied by Rey Gaston.

2. List of 5 developments in other council areas where trench systems have been accepted as a train vibration mitigation measure, as reported within Rey Gaston's 5th submission (Document 04 stamped received 02 Dec 2019):

- 114 Queensway, Lambeg, May 2008. Comments - Belfast-Dublin railway line, different train speeds, carriage numbers, frequency of trains. 12 years ago, EHO involved since retired so cannot get full details however note that NIR Infrastructure were involved in agreeing trench design. No consultation with NIR Infrastructure on current proposal.
- 3A Beach Road Whitehead, 2009. Comments – Historic case, 11 years ago, only one train line involved, Belfast to Larne.
- 16A Balmoral Avenue, Whitehead 2007. Comments – Historic case, 13 years ago, only one train line involved, Belfast to Larne.
- Carnegie Mews, Belfast, 2007. Historic case, 13 years ago, different train line involved, Belfast to Dublin line.
- Montague Avenue, Ballymena, 2004. Historic case, 16 years ago, only one train line involved, Belfast – Londonderry.

In addition to the variables discussed above, it should be noted that knowledge and guidance has moved on in the intervening 16 years. Comments nowadays are made in light of current knowledge and based on site specific circumstances. When measuring vibration, ground conditions can influence vibration transmission significantly. By way of example, wet marshy ground, or waterlogged ground can allow vibration to transmit much more easily, resulting in increased measurements. Conversely, dry ground would not transmit vibration to the same extent, so lower measurements could be expected even at similar separation distances from the exact same railway line. For that reason, the vibration assessment and mitigation plan should always be site specific, to account for such variables.

Notwithstanding the above comments, Environmental Health are aware of planning application reference LA03/2018/0888/RM, residential development at Niblock Road, Antrim. This application involves a number of dwellings alongside the Belfast-Londonderry train line, with the separation distances in the region of 7-11m. The consultant's vibration assessment concluded "adverse comment probable" and recommended foundation isolation as a vibration mitigation measure to be applied to 40 dwellings and 2 apartment blocks. Trench solutions were not recommended. This demonstrates how other engineering solutions are possible, especially where site constraints, such as short separation distances and/or ground instability, mean trench systems are not a viable mitigation strategy.

3. Example of equidistant replacement dwelling at Whitehouse Park (presumed to be LA03/2017/0714/F) in which the Environmental Health Section did not request vibration assessment.

Although the separation distance is similar in this case, the application differs as it related to a replacement dwelling. Comments were made on this application at a time when it was standard practice across NI to attach an informative referring to a Supreme Court ruling that indicated statutory nuisance action is not always possible when a new noise receptor is introduced near to an existing noise source. Since that time, the outcome of the Supreme Court ruling has been clarified somewhat in subsequent court decisions and a number of legal opinions. In order to reflect this, it is no longer Environmental Health's approach to attach this informative.

4. Question concerning the vibration measurement obtained by the Environmental Health Section and equipment used.

Following review of Mr Gaston's first 3 submissions (March 2019, May 2019 and July 2019), it was noted that the vibration measurement results reported and relied upon within subsequent calculations related to 100Hz. This was most unusual as train movements are not normally associated with vibration above 80Hz. Furthermore, the calculation process used by Mr Gaston did not follow the method outlined in the British Standard used to evaluate human exposure to vibration within buildings - BS6472-1:2008, and resulted in an underestimation of the daytime and night-time Vibration Dose Values (VDV) – the cumulative vibration level received by a future occupant of the property over a 16hr period (daytime) and 8 hour period (night-time). For those reasons, the Environmental Health Section sought the help of UJJ and arranged to use their accelerometer, under their guidance/instruction, with a view to establish if the consultant's measurements were typical or maybe anomalous. The indicative measurement obtained by the Environmental Health Section was in keeping with expected values, in the region of 60Hz and so the consultancy was asked to comment on the differences in measurements and revisit their assessment.

In response to this, Mr Gaston emailed Gareth Thompson on 2nd September 2019 asking for further details on the frequency and axis of the measurement obtained. Gareth Thompson replied on 10th September 2019, clearly stating that the Environmental Health Section had not dictated that their measurement must be used, but instead asked that if fresh measurements were going to be undertaken by the consultant that the Environmental Health Section be informed and have the opportunity to attend. Mr Gaston did not reply to that email and instead submitted a 4th assessment report on 19th September 2019, in which the Vibration Dose Value was recalculated using the measurement obtained by the Environmental Health Section. The calculation process classified the VDV to fall within the highest "adverse comment probable" category of BS6472, meaning mitigation measures would be required. Mr Gaston recommended a trench be installed along the boundary of the site to break the vibration transmission path between source and receiver and reduce the VDV by 50%. No detail of location, depth, width or length of trench required was provided and so the Environmental Health Section requested further detail, with consideration to be given to the extremely restrictive site dimensions and the feasibility of constructing a trench on such a small site. Furthermore, it was highlighted that reduction of VDV by 50% would still fall within the "adverse comment possible" category, not the "low possibility of adverse comment" category as concluded by Mr Gaston.

A 5th report was subsequently submitted by Mr Gaston however it did not address any of the issues raised, instead cited examples of other approved developments reported to be at comparable distances.

5. The Environmental Health Section note that BS 5228, section 8.5.3.3 "Provision of cut-off trenches" states "there are serious limitations to the efficacy of trenches". It says that specialist advice is needed to determine the appropriate dimensions and location and that further specialist advice is required to ensure they do not become a safety hazard in terms of loss of ground stability or stability of the

structure they are seeking to protect. This has not been considered within the submitted reports.

6. As regards the “buyer beware” theory, the Environmental Health Section note that the applicant owns the adjacent property to the development, No. 108 Glenview Park, which is rented to a private tenant. The applicant has provided no evidence to suggest the proposed dwelling house will also not be privately rented. Therefore future occupants of the proposed dwelling will have an expectation that any adverse impact of vibration from the railway line will have been appropriately mitigated against at the planning stage.
7. Summary of timeline of reports/consultation responses as follows:
 - 1st submission “Document 02” date stamped 20 March 2019. Only considered 38 daytime train movements and 5 at night. The Environmental Health Section responded on 18th April 2019.
 - 2nd submission “Document 02A” date stamped 10 May 2019. Only considered 72 daytime train movements and 9 night-time. The Environmental Health Section responded 27th June 2019.
 - 3rd submission “Document 02/1” date stamped 01 July 2019. Correctly considered 100 daytime trains and 9 night-time trains. Amended their VDV calculation approach to reduce VDV and classify it as low possibility of adverse comment. The Environmental Health Section responded 19th August 2019, highlighting error in calculation process and asking for assessment to be revisited in light of measurement obtained by EH.
 - Email from Rey Gaston to Gareth Thompson 2nd September 2019 requesting axis of highest vibration measurement.
 - Email to Rey Gaston from Gareth Thompson emphasising that he had not asked for The Environmental Health Section's measured value to be used within the assessment, however had asked for his assessment to be revisited in light of the difference found. Gareth Thompson requested that he be notified of any new measurement exercise to allow his attendance. No reply from Rey Gaston.
 - 4th report submitted “Document 03” date stamped 19th September 2019 utilising EH's measurement value which classified Adverse Comment Probable. Trench suggested. The Environmental Health Section responded on 23 October 2019.
 - 5th report submitted “Document 04” date stamped 2 December 2019. Environmental Health responded 8th January 2020, highlighting concerns with suggested trench, it's effectiveness to reduce the vibration impact sufficiently and the impact it may have on structural stability of the proposed dwelling.

RECOMMENDATION

REFUSE PLANNING PERMISSION

PROPOSED REASON OF REFUSAL

1. The proposal is contrary to the policy provisions of the Strategic Planning Policy Statement and Policy QD 1 of Planning Policy Statement 7, Quality Residential Environments, in that it has not been demonstrated that there will be no unacceptable adverse effects on the proposed property in terms of vibration from trains using the adjacent railway lines.