

TECHNICAL NOTE

Noise Mitigation - Hickleton Conservation Area

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REPORT

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1 INTRODUCTION

- 1.1 This Report has been researched and prepared by RPS, on behalf of Equites Newlands (Goldthorpe) Ltd.
- 1.2 This report is to support live planning application with Barnsley Council, reference;2023/1105 and address concerns regarding noise mitigation measures and the built heritage of Hickleton. The Development Site lies around 3.5 km to the west of Hickleton. A proportion of the vehicles serving the Proposed Development are predicted to use the A635 to access the A1(M), which is routed directly through Hickleton. This has raised concerns regarding the potential road traffic noise impacts in the village of Hickleton from operation of the proposed B2/B8₁ class use development.
- 1.3 This report looks at the properties highlighted within Hickleton for requiring noise mitigation measures. It focuses purely on those in the Conservation Area of Hickleton and separates the listed and unlisted buildings. The report looks at where consent will be required and what options are available.
- 1.4 It should be noted that the Proposed Development Site falls within the boundary of Barnsley Metropolitan Borough Council (BMBC) who are therefore the relevant planning authority, while Hickleton is within the boundary of City of Doncaster Council (CDC).
- 1.5 In their planning consultation Response dated 6th February 2024 the City of Doncaster Council have asked for further information regarding the measures being proposed to ensure that these are; *“as sensitive as possible and are not detrimental to either the special interest of the listed buildings or the character and appearance of conservation areas”*. They detailed the current application required additional information *“to enable CDC to fully assess the impact to any heritage asset as a result of any mitigation measures proposed.”*
- 1.6 The findings of this report are based on the known conditions at the time of writing and all findings and conclusions are time limited to no more than 3 years from the date of this report. All maps, plans and photographs are for illustrative purposes only.

2 LEGISLATIVE AND PLANNING POLICY FRAMEWORK

2.1 The current national legislative and planning policy system identifies, through the National Planning Policy Framework (NPPF), that applicants should consider the potential impact of development upon 'heritage assets'. This term includes: designated heritage assets which possess a statutory designation (for example listed buildings and conservation areas); and non-designated heritage assets, typically identified by Local Planning Authorities (LPAs) and incorporated into a Local List and/or recorded on the Historic Environment Record.

Legislation

2.2 Where any development may affect certain designated heritage assets, there is a legislative framework to ensure proposed works are developed and considered with due regard to their impact on designated heritage assets. This extends from primary legislation under the Planning (Listed Buildings and Conservation Areas) Act 1990.

2.3 The relevant legislation in this case extends from section 16 of the 1990 Act which states that special regard must be given by the decision maker, in the exercise of planning functions, to the desirability of preserving or enhancing listed buildings.

2.4 Section 69(1) of the Act requires LPAs to '*determine areas of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance*' and to designate them as conservation areas. Section 69(2) requires LPAs to review and, where necessary, amend those areas '*from time to time*'.

2.5 For development within a conservation area section 72 of the Act requires the decision maker to pay '*special attention [...] to the desirability of preserving or enhancing the character or appearance of that area*'. The duty to give special attention is considered commensurate with that under section 66(1) to give special regard, meaning that the decision maker must give considerable importance and weight to any such harm in the planning balance. However, unlike the parallel duty under section 66, there is no explicit protection for the setting of a conservation area.

National Planning Policy

National Planning Policy Framework (Department for Levelling up Housing and Communities, December 2023).

2.6 The NPPF is the principal document that sets out the Government's planning policies for England and how these are expected to be applied.

2.7 It defines a heritage asset as a: '*building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest*'. This includes both designated and non-designated heritage assets.

2.8 Section 16: Conserving and Enhancing the Historic Environment relates to the conservation of heritage assets in the production of local plans and decision taking. It emphasises that heritage assets are '*an irreplaceable resource, and should be conserved in a manner appropriate to their significance*'.

2.9 For proposals that have the potential to affect the significance of a heritage asset, paragraph 200 requires applicants to identify and describe the significance of any heritage assets that may be affected, including any contribution made by their setting. The level of detail provided should be proportionate to the significance of the heritage assets affected. This is supported by paragraph 201, which requires LPAs to take this assessment into account when considering applications.

- 2.10 Under '*Considering potential impacts*' paragraph 205 states that '*great weight*' should be given to the conservation of designated heritage assets, irrespective of whether any potential impact equates to total loss, substantial harm or less than substantial harm to the significance of the heritage assets.
- 2.11 Paragraph 207 states that where a development will result in substantial harm to, or total loss of, the significance of a designated heritage asset, permission should be refused, unless this harm is necessary to achieve substantial public benefits, or a number of criteria are met. Where less than substantial harm is identified paragraph 208 requires this harm to be weighed against the public benefits of the proposed development.

National Guidance

Planning Practice Guidance (DCLG)

- 2.12 The Planning Practice Guidance (PPG) has been adopted to aid the application of the NPPF. It reiterates that conservation of heritage assets in a manner appropriate to their significance is a core planning principle.
- 2.13 The PPG defines the different heritage interests as follows:
- archaeological interest: As defined in the Glossary to the National Planning Policy Framework, there will be archaeological interest in a heritage asset if it holds, or potentially holds, evidence of past human activity worthy of expert investigation at some point.
 - architectural and artistic interest: These are interests in the design and general aesthetics of a place. They can arise from conscious design or fortuitously from the way the heritage asset has evolved. More specifically, architectural interest is an interest in the art or science of the design, construction, craftsmanship and decoration of buildings and structures of all types. Artistic interest is an interest in other human creative skill, like sculpture.
 - historic interest: An interest in past lives and events (including pre-historic). Heritage assets can illustrate or be associated with them. Heritage assets with historic interest not only provide a material record of our nation's history, but can also provide meaning for communities derived from their collective experience of a place and can symbolise wider values such as faith and cultural identity.

Overview: Historic Environment Good Practice Advice in Planning

- 2.14 Historic England have published a series of documents to advise applicants, owners, decision-takers and other stakeholders on managing change within the historic environment. These include Historic Environment Good Practice Advice in Planning (GPAs) documents and Historic England Advice Notes (HEANS).

GPA2: Managing Significance in Decision-Taking in the Historic Environment (March 2015)

- 2.15 This document provides advice on numerous ways in which decision making in the historic environment could be undertaken, emphasising that the first step for all applicants is to understand the significance of any affected heritage asset and the contribution of its setting to that significance. In line with the NPPF and PPG, the document states that early engagement and expert advice in considering and assessing the significance of heritage assets is encouraged. The advice suggests a structured, staged approach to the assembly and analysis of relevant information:
1. Understand the significance of the affected assets;

2. Understand the impact of the proposal on that significance;
3. Avoid, minimise and mitigate impact in a way that meets the objectives of the NPPF;
4. Look for opportunities to better reveal or enhance significance;
5. Justify any harmful impacts in terms of the sustainable development objective of conserving significance balanced with the need for change; and
6. Offset negative impacts to significance by enhancing others through recording, disseminating and archiving archaeological and historical interest of the important elements of the heritage assets affected.

Local Planning Policy

- 2.16 In considering any planning application for development, the planning authority will be mindful of the framework set by government policy, in this instance the NPPF, by current Development Plan Policy and by other material considerations

Doncaster Local Plan 2015-2035 (Adopted 2021).

Policy 34: Valuing our Historic Environment (Strategic Policy) Doncaster's historic environment will be conserved in accordance with the following principles:

Doncaster's historic environment will be conserved in accordance with the following principles:

- A. Proposals and initiatives will be supported which preserve and, where appropriate, enhance the heritage significance and setting of the Borough's heritage assets (including locally identified undesignated heritage assets), and especially those elements which contribute to the distinct identity of the Borough. These include:
 1. the nationally-important waterlogged archaeological remains at Sutton Common, Thorne Moor, and Hatfield Moor;
 2. the Roman camps and settlements, motte and bailey castles, historic houses, historic parks and gardens and villages, with special regard to those along the Southern Magnesian Limestone Ridge;
 3. the Georgian townscape and the railway heritage of Doncaster, its historic grain, including its street layouts and plot sizes and key views and vistas especially of the spires and towers of Doncaster's churches;
 4. the Borough's historic market towns such as Thorne, Hatfield, Bawtry, and Tickhill;
 5. early twentieth century suburban developments, including planned colliery villages; and
 6. sites and structures associated with aviation history including the heritage of the second world war and cold war.

- B. Proposals and initiatives will be supported which improve the accessibility and enjoyment of the Borough's existing and potential local, regional and national historic attractions in keeping with their heritage significance. These include:
 1. The Mansion House
 2. Cusworth Hall and its parkland
 3. Doncaster Minster (St. George's Church)
 4. Conisbrough Castle
 5. Brodsworth Hall and parkland.

- C. Proposals and initiatives will be supported which identify, promote and secure the long term future of Doncaster's heritage assets. These include:
 1. increasing and making publically available our knowledge and understanding of the historic environment gained through the planning process;
 2. continuing to review existing and prospective parks and gardens of local historic interest and consideration of the designation of buildings of local architectural and historic interest;
 3. the identification of heritage assets at risk and implementing strategies and initiatives to reduce their number through positive management;
 4. supporting the re-use of sites and buildings of heritage significance putting them to viable uses consistent with their conservation; and
 5. supporting investment in the repair and maintenance of Doncaster's historic buildings.

Barnsley Local Plan (Adopted 2019)

Policy HE1 The Historic Environment

We will positively encourage developments which will help in the management, conservation, understanding and enjoyment of Barnsley's historic environment, especially for those assets which are at risk

This will be achieved by:-

- a) Supporting proposals which conserve and enhance the significance and setting of the borough's heritage assets, paying particular attention to those elements which contribute most to the borough's distinctive character and sense of place.

These elements and assets include:-

The nationally significant industrial landscapes of the Don Valley which includes Wortley Top Forge and its associated water management system.

Elsecar Conservation Village, its former ironworks and its workshops which were once part of the Fitzwilliam Estate.

A number of important 18th and 19th century designed landscapes and parks including Wentworth Castle parkland (the only grade I Registered Park and Garden in South Yorkshire), and Cannon Hall Park.

The well preserved upstanding remains of the Cluniac and Benedictine monastery at Monk Bretton.

18 designated conservation areas of special and architectural interest including three town centre conservation areas, as well as large areas incorporating Stainborough Park, Cawthorne, Penistone and Thurlstone.

The 17th century Rockley Blast Furnace and its later engine house.

Gunthwaite Hall Barn, a large 16th century timber framed barn.

Barnsley Main Colliery Engine House and Pithead structures.

The 17th century Worsbrough Mill (the only historic working water mill in South Yorkshire)

Relatively widespread evidence of pre-historic settlements, and occupation which are often archaeological and below ground but sometimes expressed as physical or topographic features.

The boroughs more rural western and Pennine fringe characterised by upland and (often) isolated settlements or farmsteads surrounded by agricultural land and dominated by historic and vernacular buildings built from local gritstone.

- b) By ensuring that proposals affecting a designated heritage asset (or an archaeological site of national importance such as a Scheduled Ancient Monument) conserve those elements which contribute to its significance. Harm to such elements will be permitted only where this is outweighed by the public benefits of the proposal. Substantial harm or total loss to the significance of a designated heritage asset (or an archaeological site of national importance) will be permitted only in exceptional circumstances where there is a clearly defined public benefit.

- c) By supporting proposals that would preserve or enhance the character or appearance of a conservation area. There are 18 conservation areas in the borough and each is designated for its particular built and historic significance. This significance is derived from the group value of its constituent buildings, locally prevalent styles of architecture, historic street layouts and its individual setting which frequently includes views and vistas both into and out of the area. Particular attention will be given to those elements which have been identified in a Conservation Area Appraisal as making a positive contribution to its significance.
- d) By ensuring that proposals affecting an archaeological site of less than national importance or sites with no statutory protection conserve those elements which contribute to its significance in line with the importance of the remains. In those cases where development affecting such sites is acceptable in principle, mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, an understanding of the evidence to be lost must be gained in line with the provisions of Policy HE6.
- e) By supporting proposals which conserve Barnsley's non-designated heritage assets. We will ensure that developments which would harm or undermine the significance of such assets, or their contribution to the character of a place will only be permitted where the benefits of the development would outweigh the harm.
- f) By supporting proposals which will help to secure a sustainable future for Barnsley's heritage assets, especially those identified as being at greatest risk of loss or decay

3 NOISE MITIGATION MEASURES

Introduction

- 3.1 This report is to support live planning application with Barnsley Council, reference;2023/1105 and address concerns regarding noise mitigation measures and the built heritage of Hickleton. The Development Site lies around 3.5 km to the west of Hickleton. A proportion of the vehicles serving the Proposed Development are predicted to use the A635 to access the A1(M), which is routed directly through Hickleton. This has raised concerns regarding the potential road traffic noise impacts in the village of Hickleton from operation of the proposed B2/B8₁ class use development.
- 3.2 If mitigation measures in the short term are being considered within the villages of Hickleton and Marr to reduce sound within affected buildings further information would be needed. There are many historic buildings within these areas, including listed buildings. For this reason the precise nature of what measures are being proposed for each building (on a case-by-case basis for listed and non-listed historic buildings) needs to be known and assessed to ensure that they are as sensitive as possible and are not detrimental to either the special interest of the listed buildings and/or the character and appearance of conservation areas.
- 3.3 This report looks at where express planning consent is required for likely mitigation works. If express planning consent is not required, then there is no further need to assess heritage impact. Where express consent would be required (such as for listed buildings) this report looks at reasonable options for achieving the required mitigation aims (noting there will be additional options available), to provide comfort the mitigation proposals are achievable.
- 3.4 Noise mitigation can be addressed in several ways. The most common measure is addressing window treatments through window design, double glazing and/ or secondary glazing. This is because windows are particularly vulnerable to noise transmission due to their lightweight construction and lack of mass for sound absorption. Mechanical Ventilation can also be used to mitigate against noise.
- 3.5 for the purposes of this report secondary glazing is utilised as a case study given it is the most likely mitigation option. As set out above, there are other options available. The John O' Gaunts mitigation report (794-PLN-HER-00561.2) reviews mechanical ventilation options and concludes that options exist that will be acceptable in heritage terms. This would be relevant to other buildings within Hickleton (noting that express consent may not be required in many cases)

Options for mitigation

- 3.6 Window Design: Alterations to the window's design can be implemented to allow air to get into the room but reduce noise more than a standard partially open window would. That could include methods such as:
- Attenuated or plenum windows, dual windows with staggered openings and sound absorptive linings to the cavity reveals. These work because the noise has to travel through a non-direct path/opening, and it gets reduced as it does so;
 - Installing acoustically rated trickle vents, usually at the top of the windows;
- 3.7 Glazing: If there is a need to actually improve the performance of the glazing itself (i.e., to reduce the level noise being transmitted straight through the existing glass/frame). This would usually be achieved by;
- replacing the existing glazing with an improved unit (double/triple etc), and/or
 - by fitting secondary glazing.

Mechanical Ventilation; A fully mechanical system can be used to both supply and extract air to allow ventilation without having to open windows. These systems require inlet and outlets that result in ducts and vents having to be installed into the property. This is the most intrusive option and would only be considered when all other options have been exhausted.

Permitted Development Within a Conservation Area

- 3.8 The Town and Country Planning (General Permitted Development) (England) Order 2015. The structure of the rules on permitted development.
- 3.9 The rules on permitted development, set out in Schedule 2 of the Order, are sub-divided into a series of Parts.
- 3.10 Part 1 specifically deals with development within the curtilage of a house, this is sub-divided into Classes covering various types of development:
- Class A covers the enlargement, improvement or alterations to a house such as rear or side extensions as well as general alterations such as new windows and doors.
 - To clarify Part 1, Class A would allow general alterations such as new windows and doors to a dwelling house that has no other planning restrictions on it.
 - Class G covers the installation, alteration or replacement of a chimney, flue or soil and vent pipe on a dwellinghouse.
- 3.11 On article 2(3) land, i.e. conservation areas, AONB, Broads or Heritage site the chimney, flue or soil and vent pipe can't be installed on a wall or a roof slope that fronts the street or on a wall on the side elevation.
- 3.12 Properties in Conservation Areas still retain these rights, although there are some additional requirements as detailed above.

Article 4 Directions

- 3.13 Article 4 Directions are issued by local planning authorities in circumstances where specific control over development is required. This is usually to protect and preserve the character of an area of acknowledged importance.
- 3.14 The directions restrict certain permitted development rights from a site or area meaning planning permission is required.
- 3.15 According to the City of Doncaster's interactive map there are no Article 4 Directions in Hickleton.

Works to unlisted buildings in the Conservation Area

- 3.16 Unlisted buildings are able to exercise their permitted development rights.
- 3.17 This means through permitted development the unlisted buildings within the conservation area would be able to install new glazing, adapt their windows and install vents without needing to obtain planning permission.
- 3.18 While no approvals would be required to make adaptations to the windows or install mechanical ventilation it is important to have regard for the special character and appearance of the conservation area. It is therefore recommended a guidance brochure of best practice is provided to residents to help preserve the character and appearance of the conservation area.
- 3.19 This will detail the different types of mitigation available (including secondary glazing and mechanical ventilation), provide examples of products/ designs, look at the types of properties and give details on best practice including suggestions on the most appropriate design for the different window types within the conservation area and installation and specification of vents. The John O'

Gaunts mitigation report (794-PLN-HER-00561.2) provides such examples and is relevant in this instance.

Noise Mitigation on Listed Buildings

- 3.20 It is important to highlight that any works to adapt or replace windows and install mechanical ventilation on listed buildings would require listed building consent.
- 3.21 Mechanical Ventilation is the most intrusive option. It is considered less obtrusive options should be explored in the first instance. This Technical Note will focus on measures for the windows. The installation of mechanical ventilation can be carried out without the requirement for planning permission on unlisted buildings within the conservation area as long as chimneys, flues or vent pipes are not installed on a wall or a roof slope that fronts the street or on a wall on the side elevation. Listed Buildings would require individual Listed Building Consent.
- 3.22 There are 11 grade II listed buildings that have been identified as requiring mitigation against noise (Figure 1). One of these is John O'Gaunts which has been assessed separately in *TECHNICAL NOTE; John O'Gaunts – Noise and Air Mitigation*, it will therefore not be assessed in this Technical Note.
- 3.23 This leaves;
- East lodge and entrance gateway (LEN 1192104)
 - 8 and 9 (LEN 1151661)
 - 19 (LEN 1192185)
 - Old School (LEN 1192170)
 - 30-33 (LEN 1151662)
 - 34 and 35 (LEN 1286709)
- 3.24 It is important to consider the mitigation measures that could be applied and the impacts they may have on the listed building and whether they would amount to harm to its significance. It is also important to note that there is already a significant impact in terms of noise so an existing problem
- 3.25 Historic England have produced guidance on historic windows; *Traditional Windows Their Care, Repair and Upgrading, 2017*.
- 3.26 In this guidance Historic England acknowledge the importance of historic windows and detail why their preservation is important;
- 3.27 *"Windows are the eyes of a building - they let in light and give views out - and profoundly affect its appearance. In addition, traditional windows bear witness to the artistic, social, economic and technological developments of past ages. Their design and detailing were influenced by contemporary architectural fashion, and reflected the status of a dwelling (and often the individual rooms within it). They were further shaped by factors such as methods of taxation, building legislation and craft advances, particularly in glass manufacture."*
- 3.28 *"Surviving historic fenestration is an irreplaceable resource which should be conserved and repaired whenever possible."*
- 3.29 Taking this into account the adaption of windows to include the installation of trickle vents and/or attenuated openings would be invasive and have a negative visual impact, particularly where additional openings would be made as glazing bars would be widened to allow for the opening and non-opening parts. The adaption of historic windows would also erode the quality of their design and historic evidence they hold. This would cause a degree of harm to the listed building's significance. Given these measures would not improve the performance of the glazing itself the

benefit gained is not considered to be justified (National Planning Policy Framework, paragraph 206) and these options should be discounted.

3.30 In their guidance Historic England advises;

3.31 *“Windows are one of the most vulnerable parts of a building to noise transmission due to their relatively lightweight construction. Depending on the number of openings and the quality of the seals between the openings, a single glazed window without seals may only achieve a noise reduction of 18-25dBA. When closed, sealed double glazed units perform little better than single glazing because the two panes of glass are rigidly connected with a minimal cavity so the two panes resonate together. A secondary window with an air space of 100mm or more decouples the movement of the two panes of glass and reduces the resonance between the two. Sound insulation of up to 45dBA can typically be achieved. Higher levels of sound insulation are obtained as the gap increases, particularly if the reveals are lined with an acoustic material, though minimal improvements occur with cavities beyond 200mm. The use of thicker or acoustic laminate glass within the secondary window also improves the acoustic performance of the installation.”* (Historic England, 2017)

3.32 Taking this into account the most effective solution would be secondary glazing behind the existing glazing. Secondary glazing is endorsed by Historic England in their guidance as a less harmful option to window replacement. The listed buildings that require mitigation do not appear to have secondary glazing. We have therefore considered this mitigation measure in the first instance.

3.33 The design and specification of the secondary glazing is important to prevent unnecessary visual impacts that may cause harm to the listed building’s significance. Historic England discuss design options in their guidance;

3.34 *“Secondary glazing is available as open-able, removable or fixed units. The open-able panels can be either casements or sliding sashes. These allow access to the external window for cleaning and the opening of both the secondary glazing and external windows for ventilation. Other secondary glazing is designed to be removed in warmer months when its thermal benefits are not required.....Proprietary systems normally have painted aluminium frames. This allows the design of slim-line systems that can fit within the depth of the staff bead of a typical sash window, so shutters and window cills can be retained. Systems with more substantial framing sections are stronger and can accommodate seals, fixings and counterbalancing. The systems may use an aluminium outer frame fitted to a softwood ground or seasoned hardwood surround depending on the design and fixing details. Easily removable lightweight systems that use acrylic glazing and are fixed by magnets are also available. The suppliers of these systems provide design, manufacture and installation services.”*

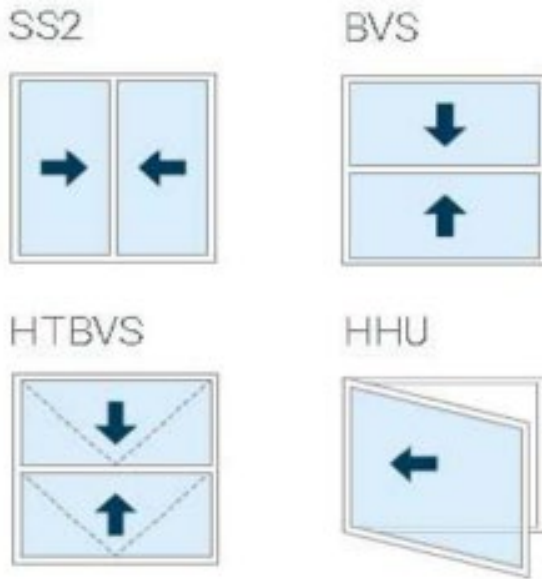
Different options for secondary glazing will be explored and each listed building will be looked at for the potential to install secondary glazing.

Options for Secondary Glazing

3.35 There are several options for secondary glazing including the different opening mechanisms and materials they are made from.

3.36 Openings include;

- SS2: = Classic 2 pane Horizontal Slider
- HHU: = Forte Hinge Unit
- BVS: = Classic Balanced Vertical Slider
- HTBVS: = Forte Balanced Vertical Slider



3.37 Material options include;

- Timber
- Aluminium
- uPVC
- Timber composite



Plate 1 - Horizontal sliding sash (Historic England, 2012)

3.38 Colour, profile thickness and finish of the frames will also affect the visual appearance of the units. Slim profile units in appropriate high quality materials are usually the most visually appropriate for traditional buildings.

3.39 In their Guidance Note; *Energy Efficiency and Historic Buildings, Secondary Glazing for Windows, 2012*, Historic England provide the following advice to reduce the visual impact of secondary glazing.

3.40 *“Secondary glazing can be visually intrusive externally and internally if badly designed. To minimise the visual effect of secondary windows externally, try to make sure the secondary glazing is not smaller than the glazed area of the existing window. Try to place any divisions in the glazing behind the window meeting rails or glazing bars.”*



Plate 2 - Timber side hung casement secondary glazing (the Sash Window Workshop)



Plate 3 - Timber vertical sash secondary glazing (the Sash Window Workshop)



Plate 4 - Aluminium horizontal sash window (elglaze.co.uk)

Listed Building Assessment;

Each listed building has been looked at below for the potential to install secondary glazing;

East lodge and entrance gateway (LEN 1192104)



Plate 5 - East Lodge with vertical sliding sash windows

- 3.41 The East Lodge has vertical sliding sash windows with a casement window in the attic. The attic floor appears to be uninhabited.
- 3.42 In this scenario a range of options could be considered, these include a single casement behind the window or a vertical sash with the meeting rail directly behind the existing window, to respect the existing proportions of the window. The meeting rail may be seen obliquely so it may be the most appropriate visual option to opt for a single glazed casement. The additional benefit of this option would be that the same style could be used across the building. These could be timber or metal framed.

8 and 9 (LEN 1151661)

- 3.43 The property has side hung multi-pane casement windows with applied glazing bars and stone mullions in between. It is difficult to tell but the windows appear to be double glazed. The current windows are modern to a traditional design but they do include some modern detailing with the clumsy frames and drip detail on the bottom rail.
- 3.44 In this scenario a simple casement window or fixed secondary glazed unit would be the most visually appropriate given the slim glazing bars and division of the panes. These could be timber or metal framed.



Plate 6 - 8 and 9 side hung casement.



Plate 7 - 8 and 9 front elevation

19 (LEN 1192185)



Plate 8 - 19 front elevation

- 3.45 Number 19 has traditional multi-pane casement windows with slender frames. In this instance slim metal framed casement or fixed secondary glazing would be the most visually appropriate.

Old School (LEN 1192170)



Plate 9 - The Old School split into two residences



Plate 10 - The windows on the east side of Old School



Plate 11 - The windows on the west side of Old School

- 3.46 The Old School consists of two dwellings. On the east side the windows are multi-pane casement windows with slender frames.
- 3.47 On the west side the windows vary, on the first floor the outer windows are multi-pane casement (similar to the east side of the property) and the central window is designed to have a similar appearance to with the multi-pane profile but there is a wider central horizontal bar which appears to divide the two halves. This design is repeated on the ground floor.
- 3.48 Although the window designs differ on this property given the slim frame profile and the multi-pane design it is considered a slim metal framed casement or fixed secondary glazing would have the least visual impact for both dwellings.

30-33 (LEN 1151662)



3.49 The windows on these three dwellings are single pane side hung casement windows. In this instance slim metal framed casement or fixed secondary glazing would have the least visual impact.

34 and 35 (LEN 1286709)



Plate 12 - 34 and 35

3.50 Numbers 34 and 35 both have traditional multi-pane casement windows with slender frames. In this instance slim metal framed casement or fixed secondary glazing would have the least visual impact.

Summary

- 3.51 Having looked at the listed buildings that require mitigation it appears that there is scope to install secondary glazing with minimal visual impact in all the properties. As previously noted this will require listed building consent applications.
- 3.52 Applications for listed building consent can address any physical impacts to fabric on a case by case basis. Measures can be taken to prevent/ mitigate against physical impacts to historic fabric, these can include fixing into mortar joints or where fabric is most precious removable lightweight systems that use acrylic glazing and are fixed by magnets can be considered.



Plate 13 - Single glazed timber casement with secondary glazing incorporated (Historic England)

4 CONCLUSION

- 4.1 This Technical Note has been prepared to support live planning application with Barnsley Council, reference;2023/1105 and address concerns regarding noise mitigation measures and the built heritage of Hickleton.
- 4.2 The report has considered properties highlighted within Hickleton for requiring noise mitigation measures. It focuses purely on those in the Conservation Area of Hickleton and separates the listed and unlisted buildings.
- 4.3 The report has found that no permissions would be required for unlisted buildings within the conservation area but it has recommended a guidance brochure of best practice is produced and provided to residents to preserve the character and appearance of the conservation area. This will be included as part of the mitigation mechanism secured by S106
- 4.4 With regards to the listed buildings that require mitigation the report has looked at the different measures available and concluded there are various options available and for example secondary glazing could be used. It appears that none currently have secondary glazing so each property was considered individually.
- 4.5 Having looked at the listed buildings that require mitigation the report finds there would be scope to install secondary glazing with minimal visual impact in all the properties. Physical impacts can be minimised through listed building consent applications on a case by case basis to ensure no harm to historic fabric. It therefore concluded that there is scope to install secondary glazing as a noise mitigation measure without causing harm to the significance of the listed buildings affected.



APPENDICIES

Appendix A

Figures



Legend

Listed Buildings

Grade

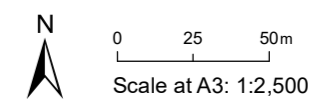
- I
- II*
- II

▭ Hickleton Conservation Area

▭ Buildings requiring mitigation measures

Significant effect predicted

- Windows confirmed
- Windows unconfirmed



Hickleton Conservation Area Plan

Project Ref: W:\documents\Archaeology_Jobs\794-PLN-HER-0001-0999\00561 - Land to the south of Deame Valley Parkway_Goldthorpe\Graphics\GIS\Hickleton map.r.mxd

REFERENCES

England Historic Energy Efficiency and Historic Buildings: Secondary glazing for windows [Online] // Historic England. - March 2012. - 12 June 2024. - <https://historicengland.org.uk/images-books/publications/eehb-secondary-glazing-windows/heag085-secondary-glazing/>.

Historic England Adapting Historic Buildings for energy and Carbon Efficiency - Historic England Advice Note 18 (HEAN 18) [Online] // Historic England. - July 2024. - 22 July 2024. - <https://historicengland.org.uk/images-books/publications/adapting-historic-buildings-energy-carbon-efficiency-advice-note-18/heag321-adapting-historic-buildings-energy-carbon-efficiency/>.

Historic England Traditional Windows Their Care, Repair and Upgrading [Online] // Historic England. - February 2017. - 2 May 2024. - <https://historicengland.org.uk/images-books/publications/traditional-windows-care-repair-upgrading/heag039-traditional-windows-revfeb17/>.