Unit 6 Belturbet Business Park Creeny Belturbet Co. Cavan H14AY93

T: +353 49 9522236 E: info@alantraynor.com W: www.alantraynor.com Bond House 9-10 Lower Bridge St Dublin 8 D08TH76

T: +353 1 9697881 E: dublin@alantraynor.com W: www.alantraynor.com



Alan Traynor Consulting Ltd

Structural Report

Relating to

Derelict Properties at

42,43 & 44 Brews Hill, Navan, Co Meath.

For

Meath County Council

Prepared by – Pauric Loughlin File Ref: 22/120 Dated 13th September 2022 **Surveyor:** Pauric Loughlin

Date of Inspection: 8th August 2022.

Weather Conditions: Dry and sunny during inspection.

1 Scope of Inspection:

1.1 This survey has taken the form of an appraisal of the property arising out of a visual inspection only. Parts of the structure are inaccessible and/or unexposed as it was deemed unsafe to access the full extent of the property due to it poor condition. No opinion can therefore be given on these areas and it must be appreciated that defects such as woodworm or dry rot may be present but cannot be conclusively identified. No tests were carried out on the electrical, plumbing, heating, or drainage installations.

2 Use of Report:

2.1 This report is for the sole use of Meath County Council and the Design Team and shall not be given to or used by a third party without the expressed written consent of Alan Traynor Consulting Engineers Ltd.

3 Background:

3.1 Meath County Council intend to develop the site and have requested that we carrying out a structural survey to give our opinion on the structural integrity of the existing buildings.

4 Inspection:

- 4.1 From inspection of the properties it is evident that little maintenance has been carried out for some time and the buildings have fallen into disrepair. It is evident from aerial views that there is a significant amount of missing slates to Units 43 & 44 with large portion of the slates on the front roof slope clipped which indicates failure or corrosion of fixings.
- 4.3 There was no access internally to No 43 & 44 Brews hill as it was deemed to be unsafe due to the poor condition of the property. Given the extend of missing roof slates there will be considerable damp penetration which will have a negative affect on structural timbers which will result in wetrot. This wetrot will result in collapsed ceilings and floors. The roof of 42 brews hill is covered in corroded corrugated sheeting and supported on a timber truss with t7g ceiling which is partially collapsed. It would appear that this property was originally covered in thatch with some remaining above the t&g sheeting ceiling.

- 4.4 There is significant detached render to the rear elevation which indicates walls are of mass concrete which appears loose and crumbly which may be due to persistent damp penetration. Given the age of the property it is assumed that some walls will also be a mixture of brick and stone rubble most likely constructed of lime mortar.
- 4.5 There is a suspended wooden floor to 42 Brews Hill which is rotten due to wetrot and does not allow full access to property. It would appear that subfloor vents are also provided to 43 Brews Hill which would indicate that suspended timber floors are also provided to this property.

5 Recommendation/Method Statement:

- 5.1 From visual inspection of the property it is evident that the property has not been occupied or maintained for some time and is in a very dilapidated state of repair. As the building is constructed of thick mass concrete and/or stone rubble walls with lime mortar joints it will have no traditional strip foundations and will be constructed of a slightly wider stone foundation which may be at shallow depths. As the roof covering and gutters have not been maintained the ground conditions can become soft under these stone walls which may require underpinning. The damp penetration onto the external stonework has a detrimental affect on the lime mortor joints and any timber in contact with the external walls.
- 5.2 To modernise this building and upgrade the ground floor in terms of insulation, radon barrier and plumbing services the rotten suspended timber floors will require excavating and installation of a new concrete ground floor slab. As existing stone walls may have shallow foundations it may not be possible to excavate down to facilitate the depth of the new floor and insulation therefore underpinning of existing walls may be required.
- 5.3 The walls of this property are of mass concrete and/or stone with lime mortor and from the age of the building the lintels would most likely be of hardwood timber. As the property has not been adequately maintained for some time water has been allowed to penetrate internally due to missing slates, gutters and damaged window and doors. This dampness may result in wetrot of timber lintels and beams. All timber lintels should be replaced with concrete. Cracks to existing stone walls will also require stitching where movement has occurred.

- 5.4 Due to the extent of damp penetration and fact that first-floors have collapsed these floors will require replacement. As the external walls are very damp it would be advisable to support floors on steel beams instead of supporting into existing pockets in the external walls as new timber will become damp which may result in wet-rot or dry-rot of timber.
- 5.5 The fixings for the natural slate are starting to corrode and fail as there are a lot of slipped and missing slates. The entire roof structure will require replacement and it would be recommended to provide a breathable roofing felt under the new slatting battons.
- 5.6 Given the poor condition of this property and the defects encountered it would be the main walls which would only be retained, and these will most likely require underpinning, stitching of cracks, damp proofing and replacing of timber heads. In our opinion it would be cost prohibitive to renovate the existing properties which would require temporary propping and a specialist contractor with experience of such works. There is also the increased risk of unforeseen works and the additional costs associated when renovating older properties.
- 5.7 Newly constructed dwellings can be easier to accommodate insulation, radon barrier/dpm, air tightness, heat recovery ventilation and modern services. Newly constructed properties will have properly designed foundations suitable for the ground conditions and would be significantly easier to heat and maintain.

I trust this report is of benefit to you, however should you have any queries regarding this report, please do not hesitate to contact me.

Yours faithfully

Pauric Loughlin

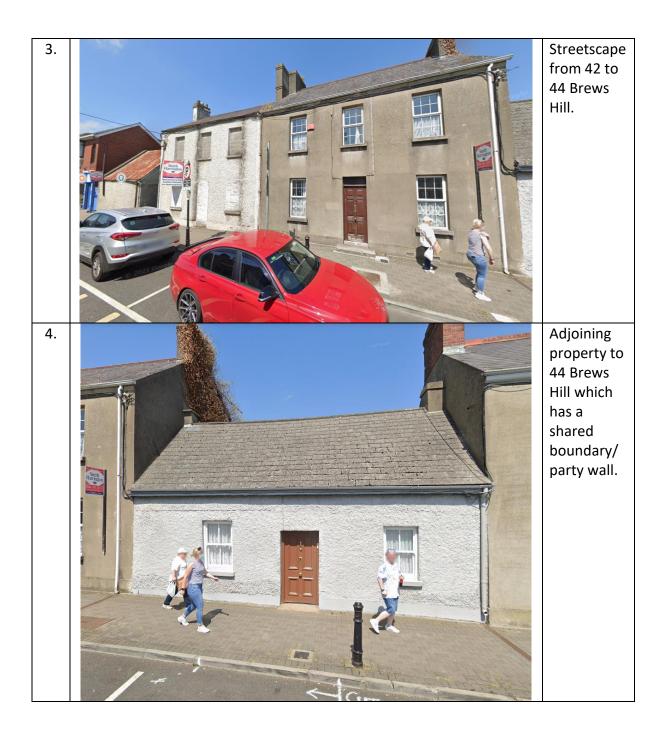
B.Sc (Hons), AB Eng.

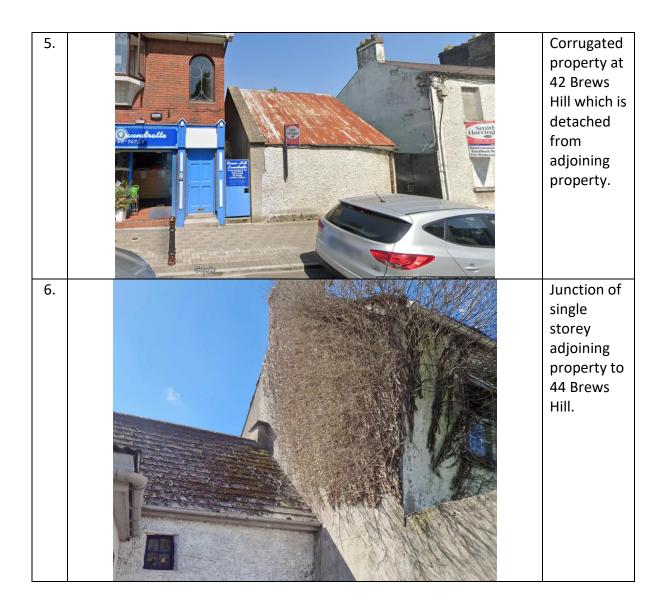
Panice Laught.

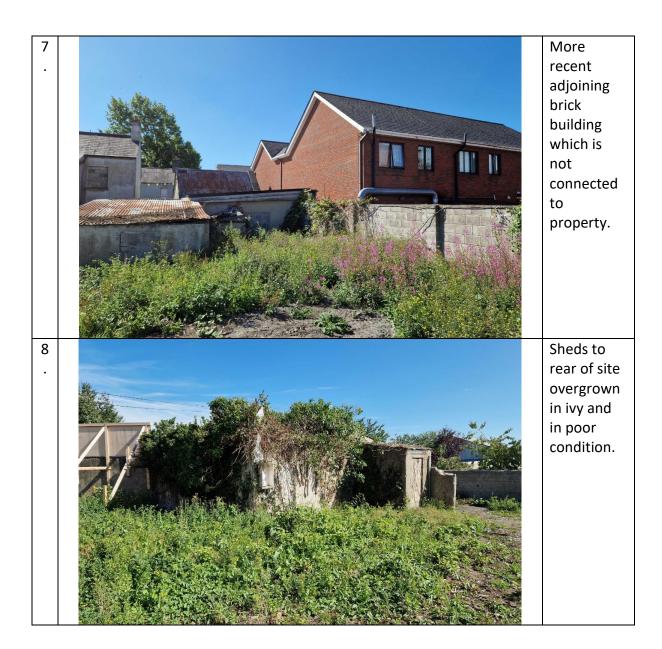
For and on behalf of Alan Traynor Consulting Engineers Ltd

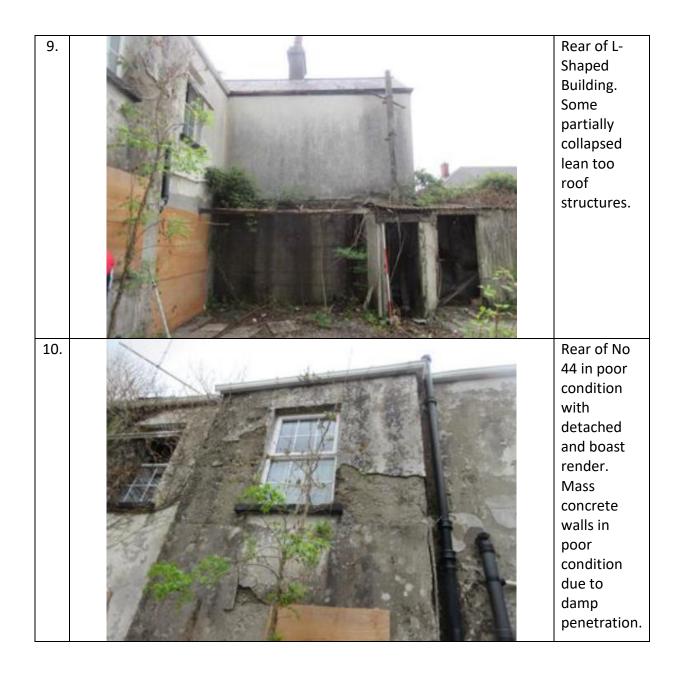
Appendix A of Photographs

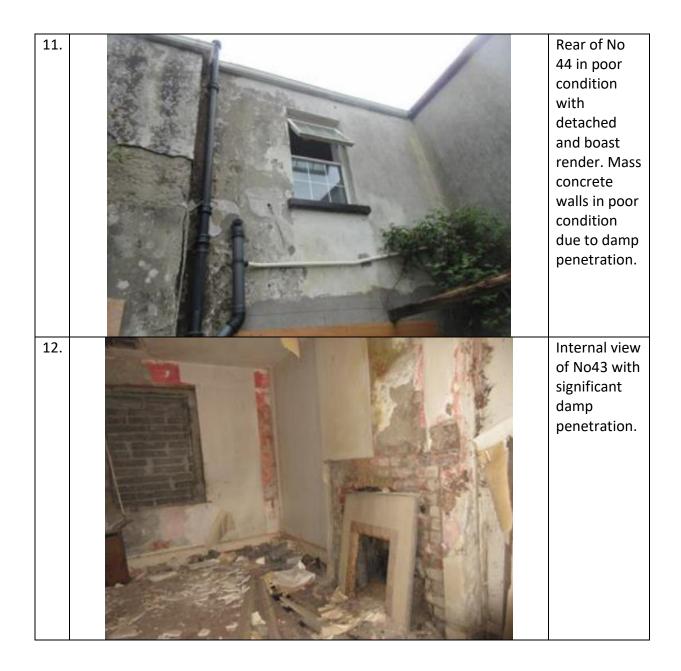












13.



Internal view of No43 with significant damp penetration and collapsed ceilings.

14.



Existing storage building to rear of No 42.

15.	Considerable damp penetration to 42 Brews Hill.
16.	Old thatch roof evident above t&g sheeting.