Drumshanbo Town Centre Regeneration

Structural Assessment Survey and Site Investigation Report

for former Bank of Ireland Building, Early's Building and Adjacent Derelict Building, Drumshanbo, Co Leitrim

On behalf of **Leitrim County Council**

Prepared by:

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December 2023

Civil
Structural
Traffic

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Document Control Sheet

Revision History:	R0								
Purpose of Issue: P=Preliminary PG=Progress C=Comment I=Information FC=Fire Cert Q=Quotation PL=Planning T=Tender CN=Construction CT=Contract	I								
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Originator:	SR								
Checked By:	COC								
Approved By:	COC								

Approved for issue by:

Signed: Cathal Ó Connell

Date: 4th December 2023

Cathal O'Connell
Chartered Engineer
BEng (Hons) MSc CEng MIEI

1. Introduction

Leitrim County Council propose to repurpose the former Bank of Ireland building and adjacent derelict buildings in Drumshanbo known as the Drumshanbo Town Centre Regeneration Project. This will provide 614m^2 of smart working hub space to support the clustering of 76 jobs, development of two creative studios, back lands access for recreation and business use plus realignment of car parking and integration with existing Market Yard public carpark, and in the final phase, completion works to the People's Park and link to The Food Hub.

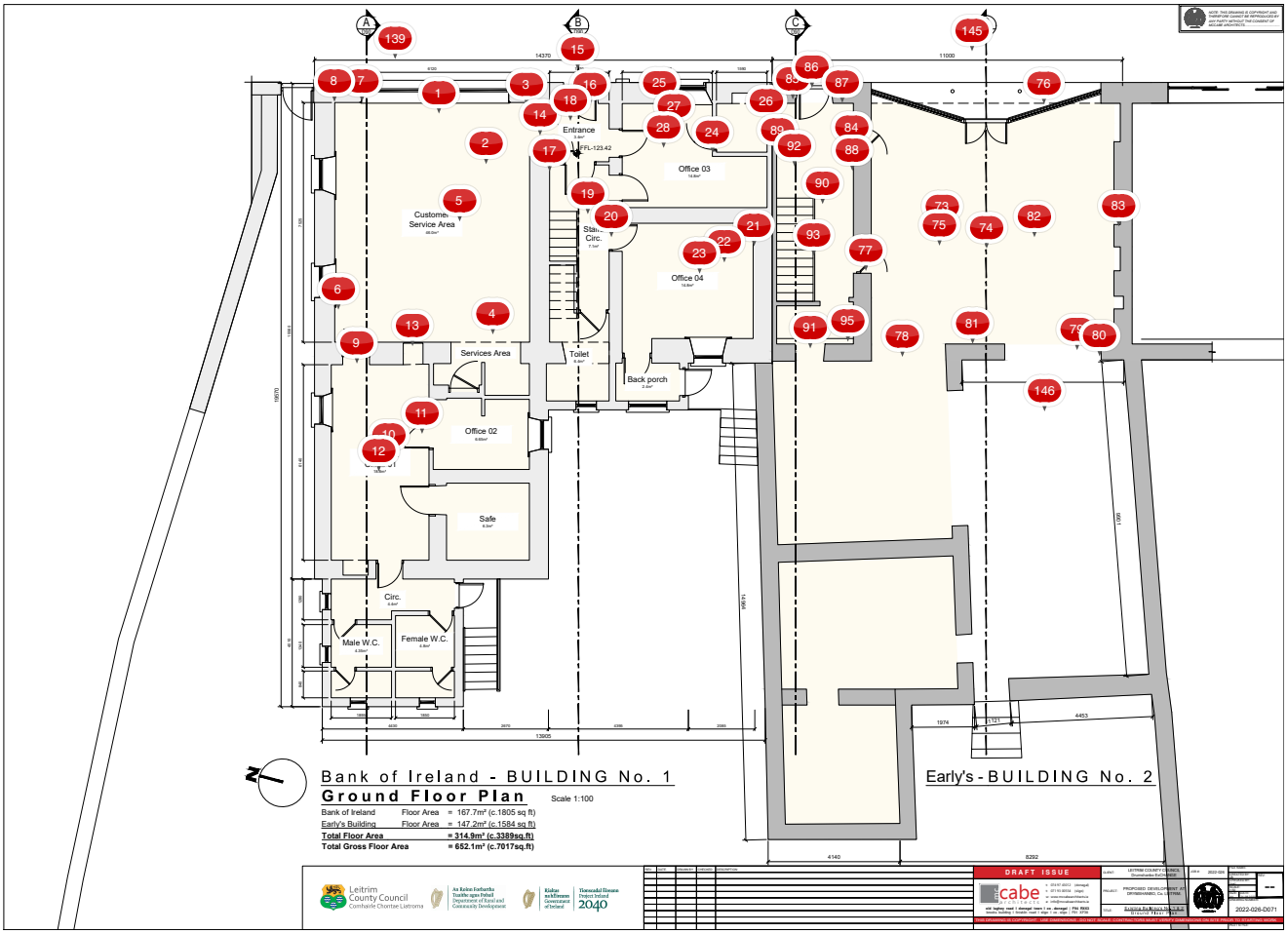
On the 14th and 30th November, 2023 we, Cathal O' Connell and Swathy Rajan, carried out a visual walk through structural inspection of the properties. The purpose of the inspection was to assess the structural conditions of the properties and make recommendations as regards the of extent of remedial works required to retain the existing buildings in the proposed new scheme. Trial holes were also opened to assess the ground conditions.

2. Description of Property

The three storey properties facing on to the Main Street form part of a terrace of houses. The external and internal ground floor walls of these properties are constructed in rubble masonry. Both properties contain a number of internal load bearing walls that extend up to roof level to support the upper floors. All other internal walls are non-loadbearing stud walls. A number of light weight partitions were observed on the first floor. The ground floor of Building No 3 (formerly Early's Building) would appear to be a concrete slab on grade while the ground floor of Building No 1 (former Bank of Ireland) is a suspended concrete floor supported in steel beams. The upper floors of Building 1 and 2 were constructed using timber joists supported on load-bearing walls. The roof structure over both buildings was formed using traditional cut timbers.

The two storey Buildings to the rear of the main buildings are being referred to as Building 3 and 4. These buildings have been derelict for a long number of years. The ground floors of both properties are covered in earth and it is possible that stone flags were original used and may have been removed over time. The internal and external walls of the properties were constructed in rubble masonry. The roof over Building No 3 is no longer there while the cut timber roof over Building No 4 is collapsed as is some of the external and internal walls.

3. Observations and Comments


Bank of Ireland - BUILDING No. 1
Ground Floor Plan
Scale 1:100
Bank of Ireland Floor Area = 167.7m² (c.1805 sq ft)
Early's Building Floor Area = 147.2m² (c.1584 sq ft)
Total Floor Area = 314.9m² (c.3389sq.ft)
Total Gross Floor Area = 652.1m² (c.7017sq.ft)
Early's - BUILDING No. 2
Entrance
Office 03
Office 04
Office 02
Customer Service Area
Services Area
Toilet
Back porch
Safe
Circ.
Male W.C.
Female W.C.
DRAFT ISSUE
Leitrim County Council
cabe
2022-026-D071

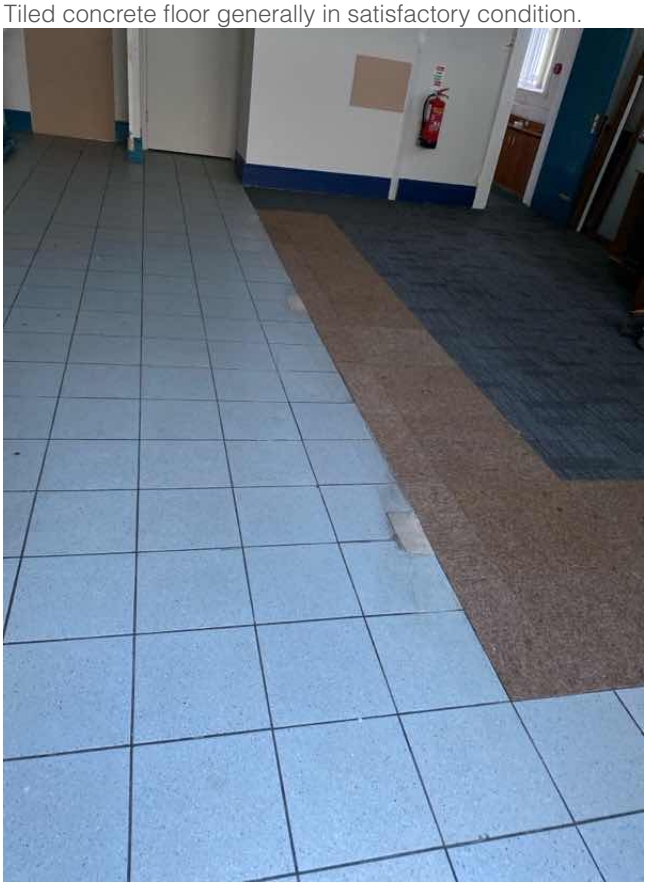
Shell

1

Cracking to window heads could indicate damage to the existing lintels that needs to be repaired

2

Tiled concrete floor generally in satisfactory condition.



3

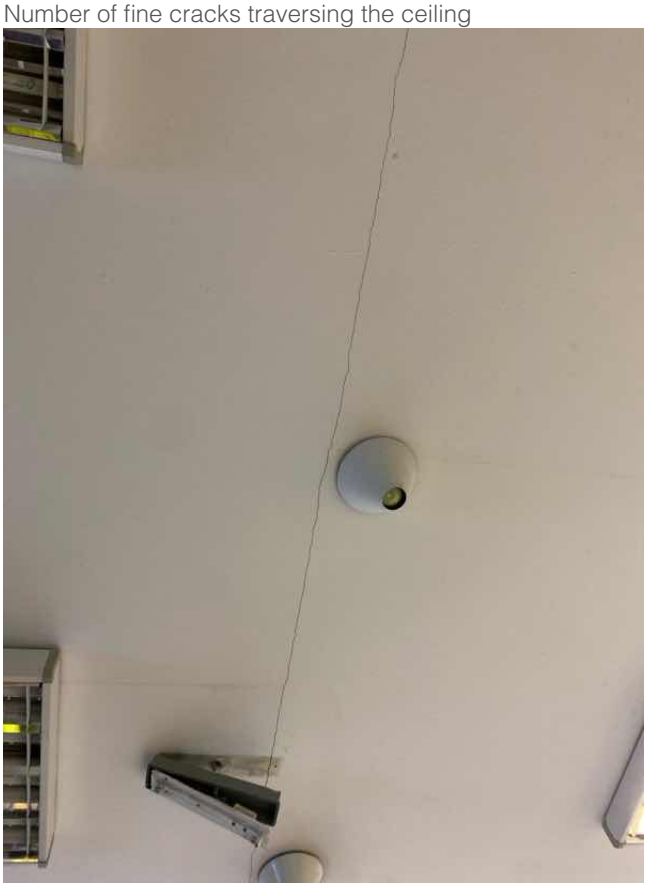
Signs of damp ingress at the edge of ceiling.

4

There are few hairline cracks in tiles

5

Number of fine cracks traversing the ceiling



6

Evidence of cracking to the head of window. Opening up will be required to confirm the condition of the existing lintels

7

Damp ingress through out the sides of window

8

Evidence of damp ingress at the corner

9

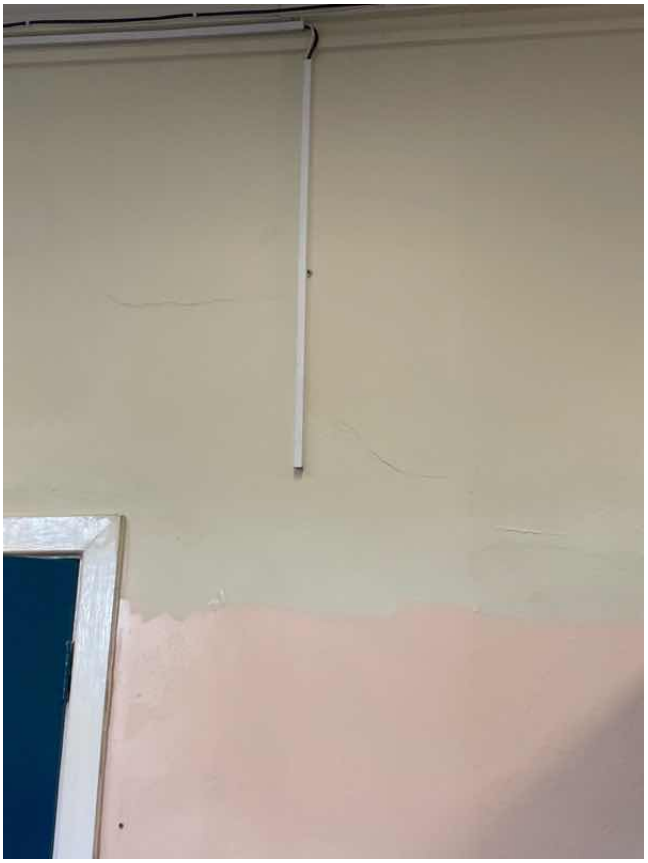
Hairline crack above door

10

Carpet tiles on concrete floors

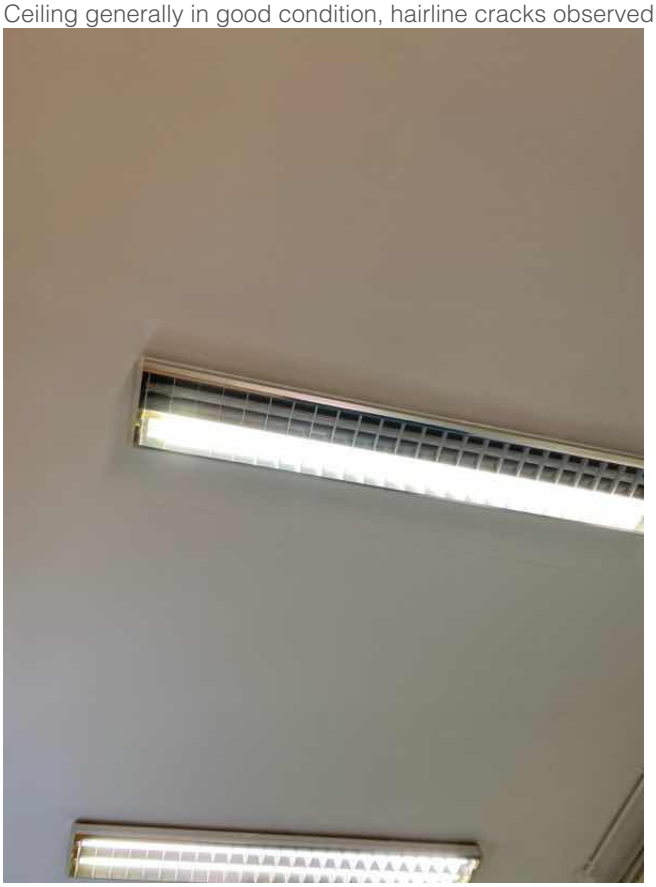
11

Hairline cracks on walls



12

Ceiling generally in good condition, hairline cracks observed at the centre of ceiling



13

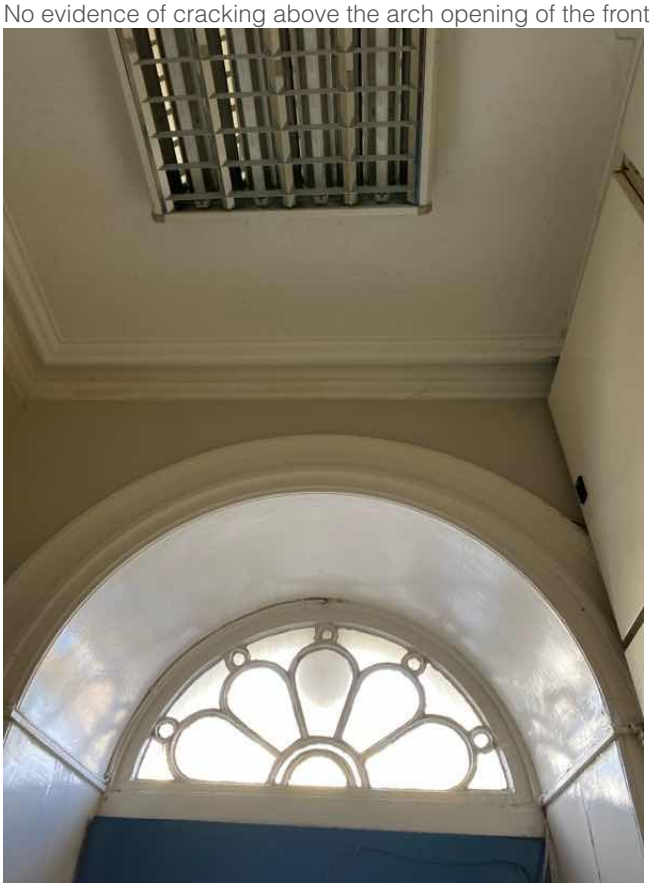
Lintel missing under masonry wall opening

14

Evidence of cracking to the head of door. Opening up will be required to confirm the condition of the existing lintels

15

No evidence of cracking above the arch opening of the front door



16

Ceiling appears in satisfactory condition

17

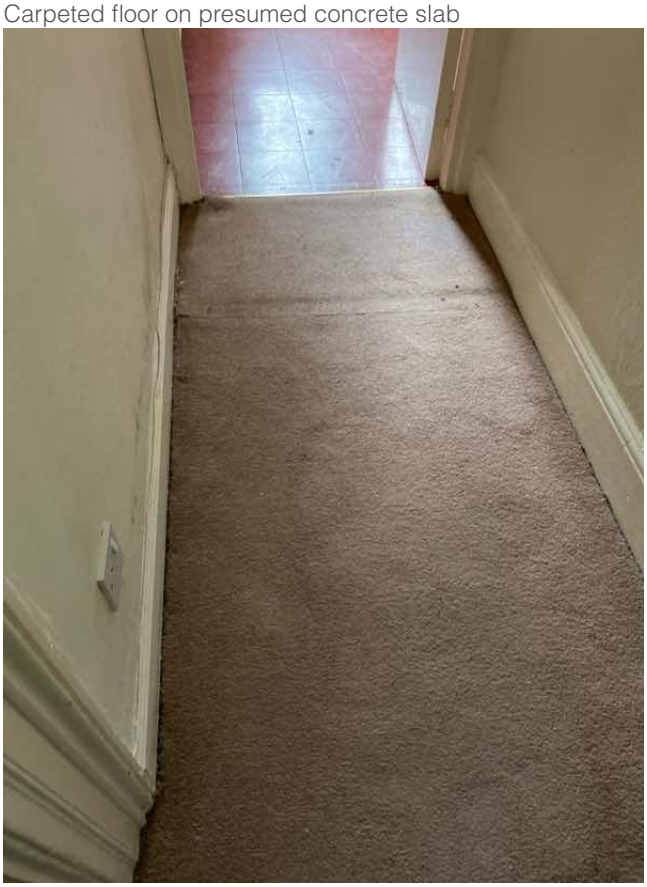
Surface mould growth on walls

18

Tiled flooring on presumed concrete ground bearing slab in reasonable condition

19

Carpeted floor on presumed concrete slab



20

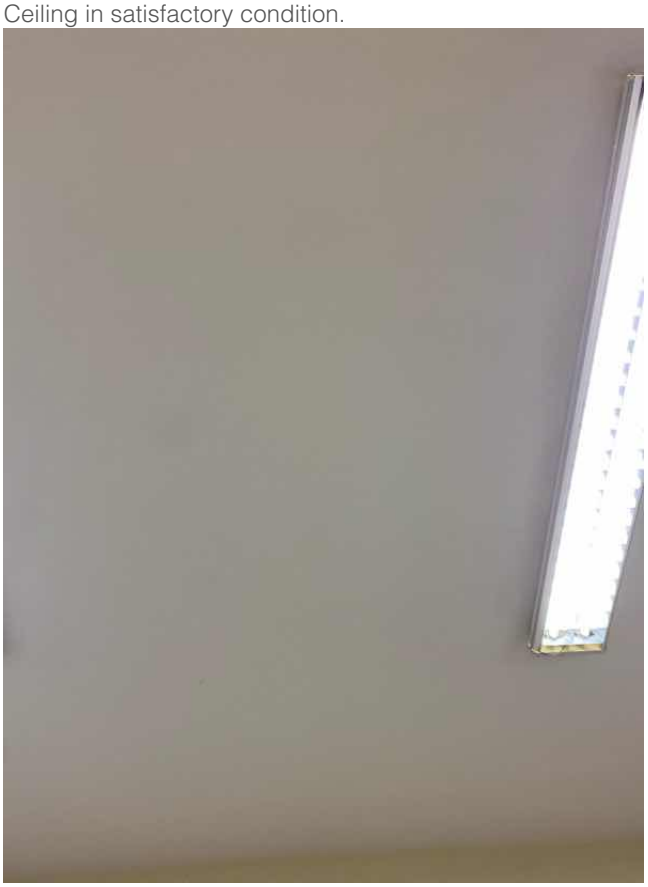
Evidence of cracking to the head of door. Opening up will be required to confirm the condition of the existing lintels

21

Walls have been dry lined. No signs of cracking.

22

Ceiling in satisfactory condition.



23

Carpeted floor on presumed ground bearing slab

24

Non load bearing stud wall forms the storage room within room.

25

Front external wall appears to be in satisfactory condition.

26

Party wall has been dry lined

27

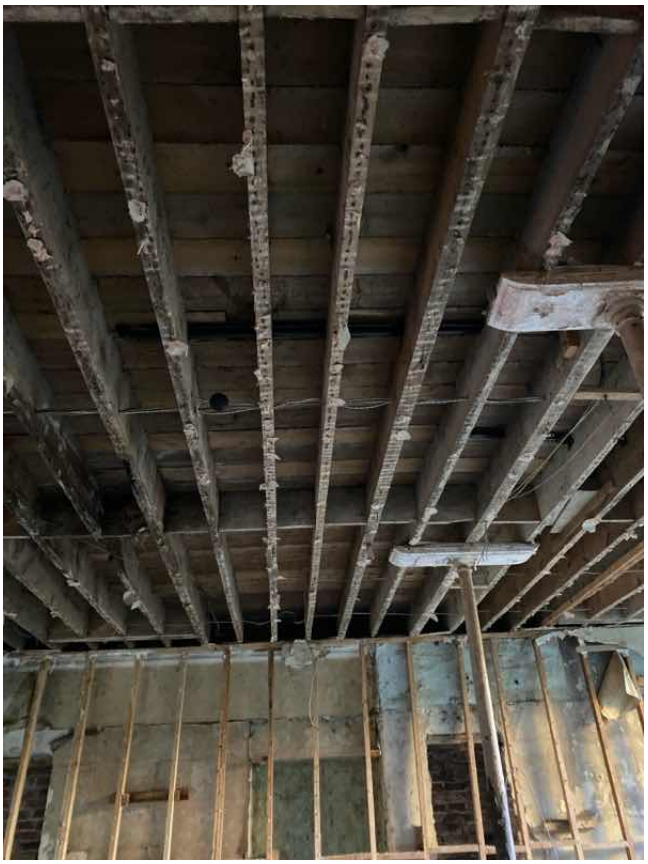
Ceiling generally in satisfactory condition, a few hair line cracks observed.

28

Carpeted floor on ground bearing concrete slab

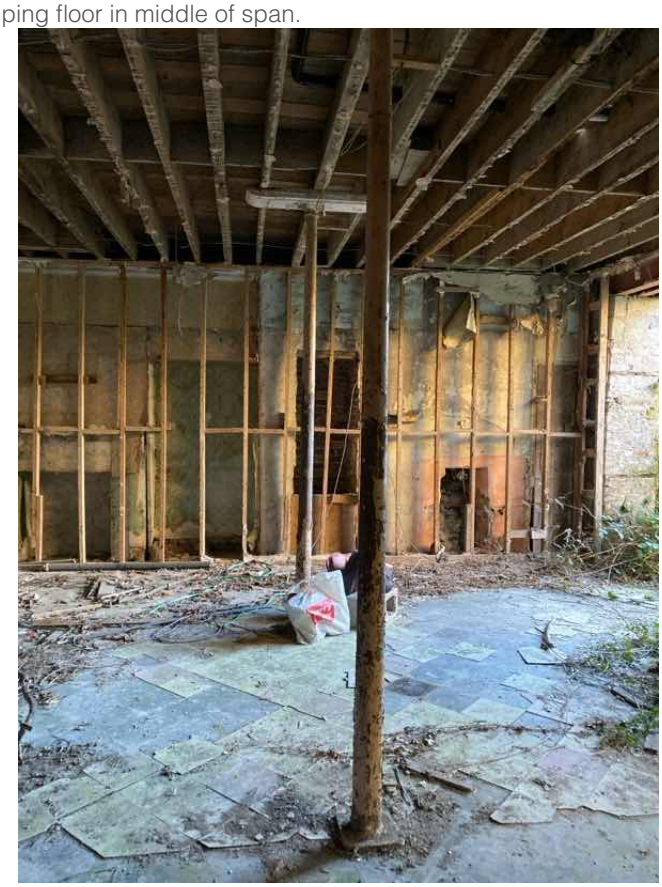
73

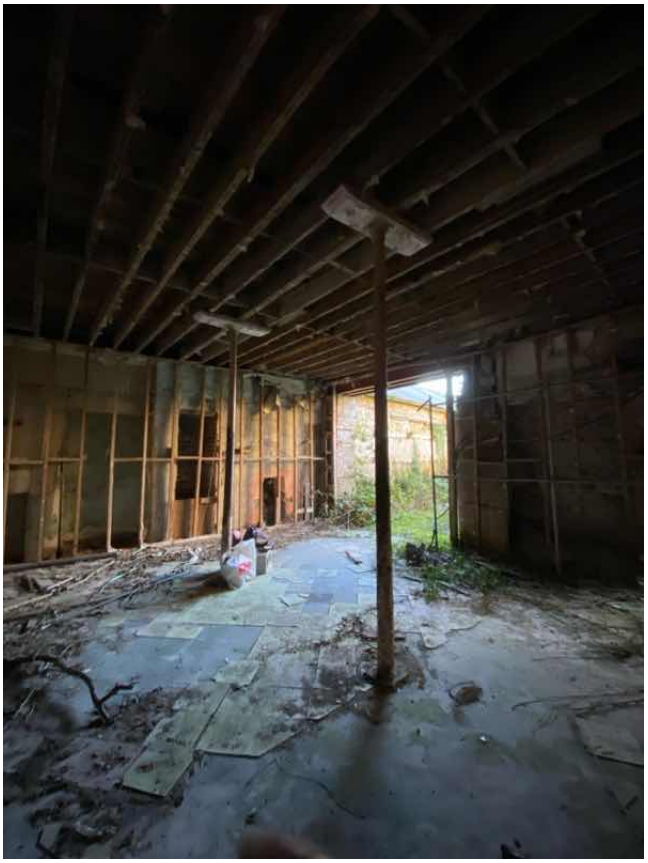
Floor Joist are 250x50 @ 300 centres.



74

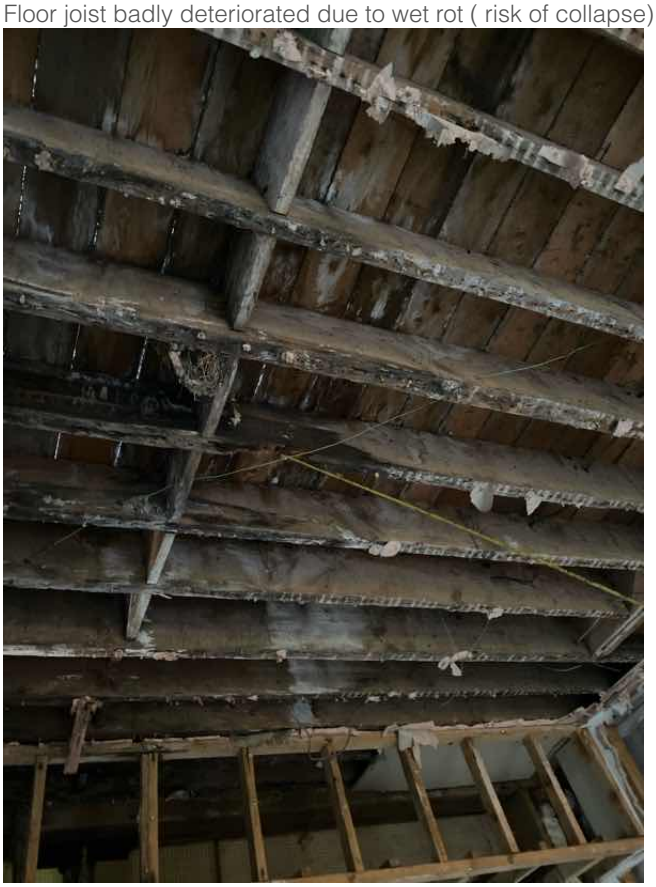
100mm diameter tapered cast iron columns (2 number) propping floor in middle of span.





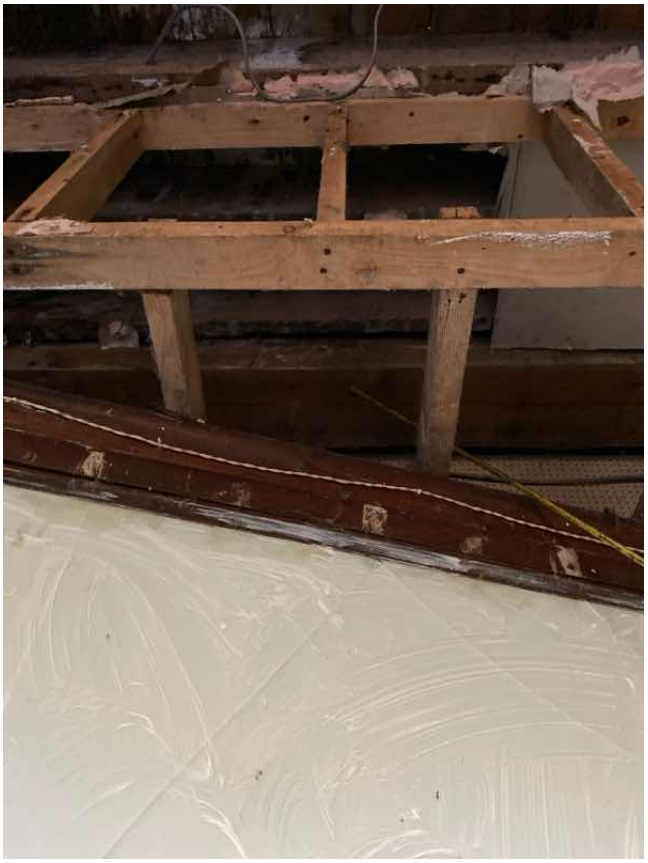
75

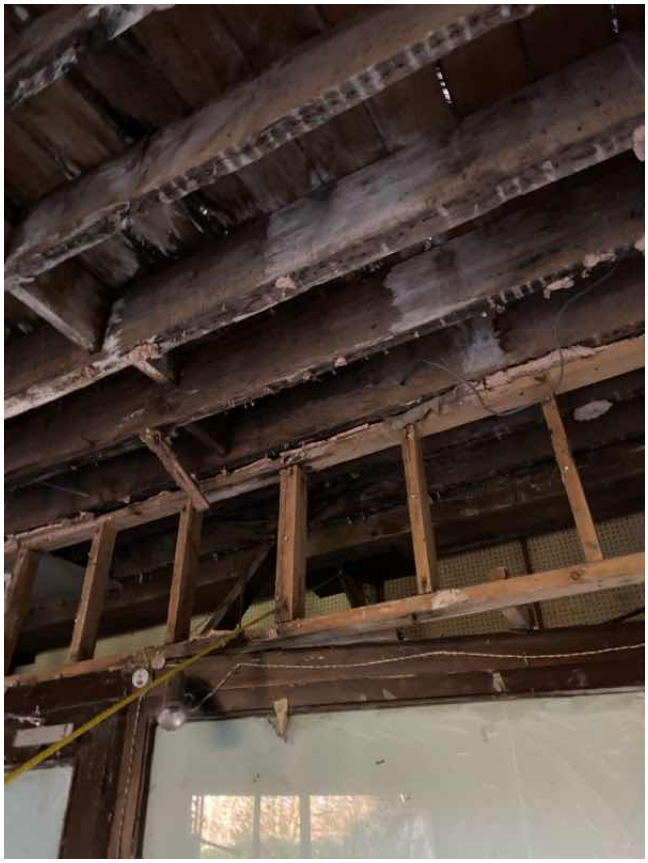
Floor joist badly deteriorated due to wet rot (risk of collapse). Temporary propping recommended.



76

Timber beam used to form head of shop front. Bearing ends of beam to checked for deterioration. Timber beams supported using two number cast iron columns at approximately one third points on span.





77

Appears to be no lintels above door opening into hallway.

78

3 number steel beams are used to form the head of opening. Further opening required to confirm the condition of the lintel as significant amount of corrosion evident to underside of steel beams.

79

Steel beams 225x115 wide, appear to be in good condition apart from some surface rust. No concrete bearing pads where steel bears onto masonry.

80

Rotten timber embedded into masonry pier.

81

Middle masonry pier on back wall has opening in middle of same (most likely an original window that has been bricked up). This weakens the load bearing pier, so we would be recommending to build up the opening to strengthen the pier.

82

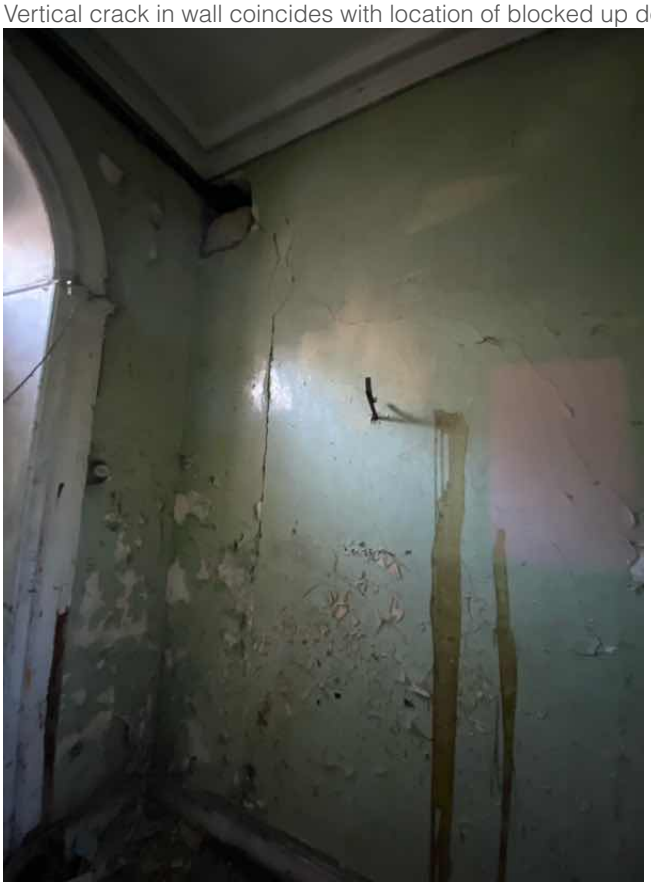
Concrete floor slab in place. Unclear if DPM and insulation exist under the same. Opening up required to verify this.

83

Disused fireplace with flue, a number of recesses in masonry with timber lintels over same. All timber lintels to be opened up to inspect the condition of same.

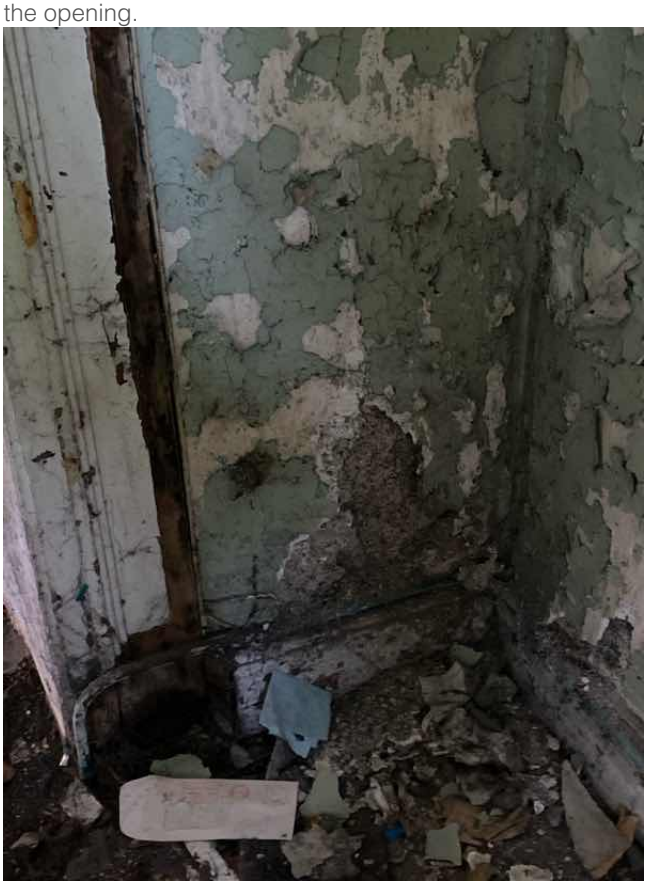
84

Vertical crack in wall coincides with location of blocked up door.



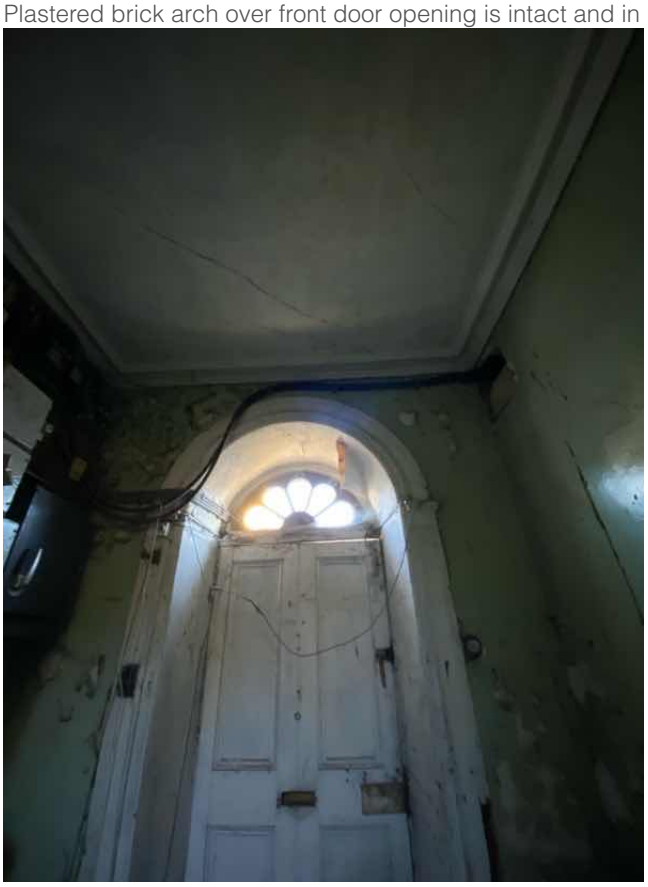
85

Evidence of rising dampness in masonry either side of front door. Plaster coming away and evidence of rotten timber liners to the opening.



86

Plastered brick arch over front door opening is intact and in reasonable condition.



87

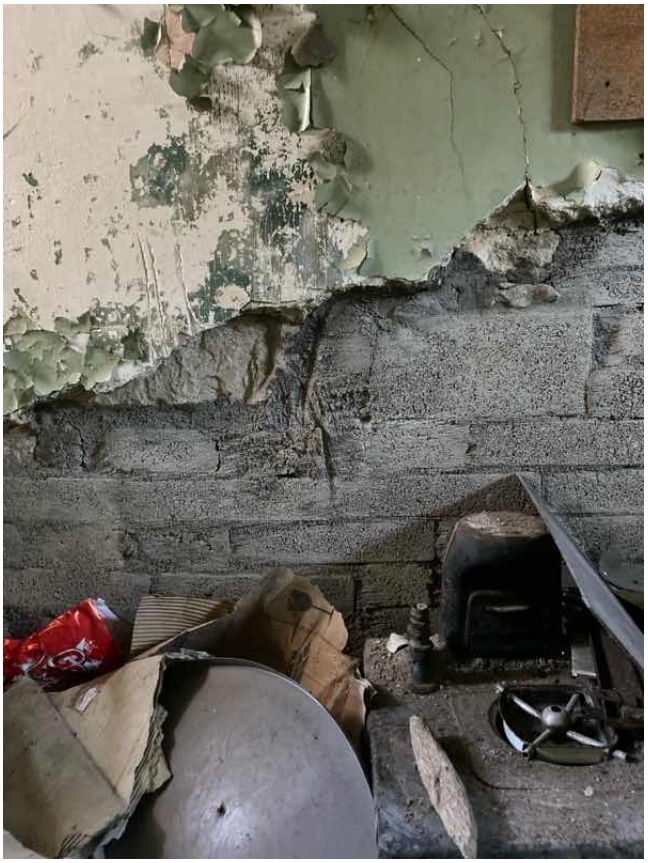
Diagonal crack to top right hand side of front door opening. This crack appears to have been as a result of opening formed in internal wall for electrical cables.

88

Generally throughout building paint is flaking off walls, more than likely due to old age rather than damp ingress.

89

Exposed concrete blocks in this area may have been as a result of repair works required to party wall.



90

Number of cracks in existing ceiling and mould growth on ceiling surface due to the fact that building is opened to weather.

91

Lath and plastered ceiling/stairs landing to storage room under stairs has come away and timber joist supporting ceiling have badly deteriorated and at risk of collapse. Temporary propping required.

92

Tiling on presumed concrete floor

93

Number of spindles are missing from stairs balustrading.

95

Evidence of dry rot of timber in stud wall at stair landing

139

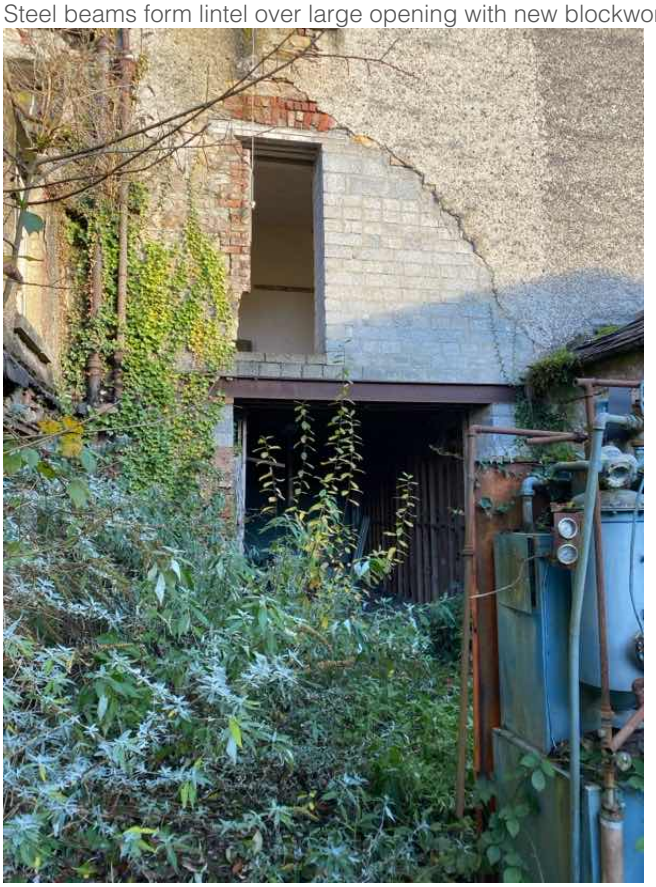
Fine cracks to top corners of window opening

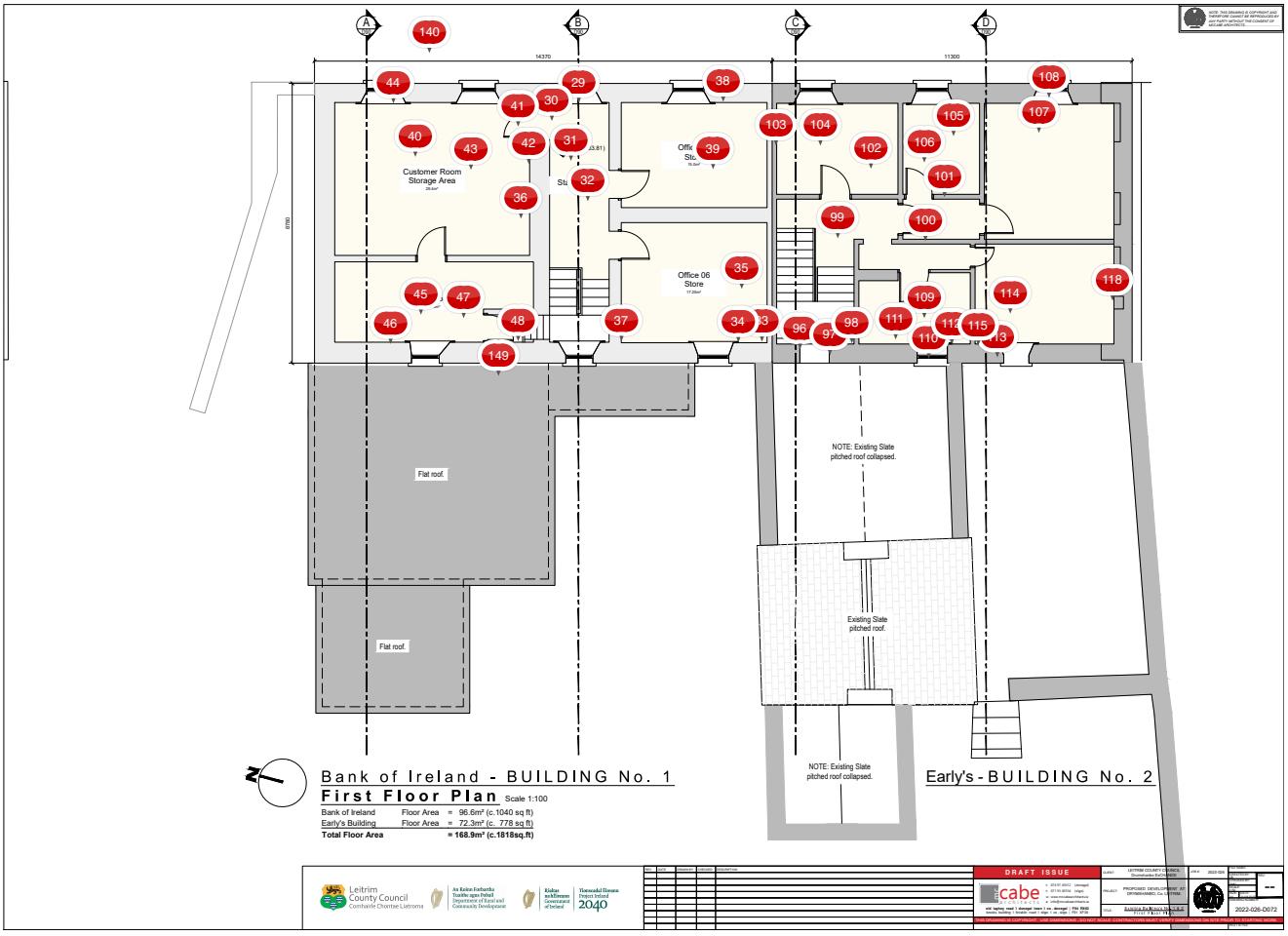
145

Cracking to ends of shopfront lintel could indicate defective end bearings

146

Steel beams form lintel over large opening with new blockwork over




Customer Room
Storage Area
Office 06
Store
Flat roof.
Flat roof.
NOTE: Existing Slate
pitched roof collapsed.
Existing Slate
pitched roof.
NOTE: Existing Slate
pitched roof collapsed.
Bank of Ireland - BUILDING No. 1
First Floor Plan
Scale 1:100
Bank of Ireland Floor Area = 96.6m² (c.1040 sq ft)
Early's Building Floor Area = 72.3m² (c. 778 sq ft)
Total Floor Area = 168.9m² (c.1818sq.ft)
Early's - BUILDING No. 2
DRAFT ISSUE
cabe
Leitrim County Council
2022-026-D072

Shell

29

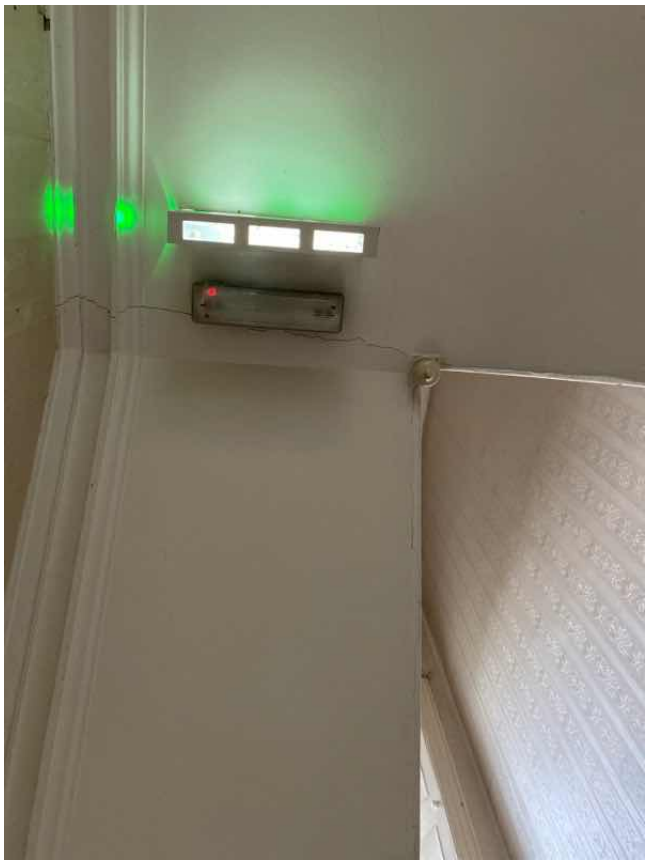
Wall Paper has fallen away locally at head of window which could be due to damping ingress

30

Evidence of cracking to the head of window. Opening up will be required to confirm the condition of the existing lintels

31

Observed hairline cracks in Cieling, generally in satisfactory condition



32

Carpeted timber floor feels solid to walk on

33

Deterioration of skirting board would indicate damp ingress through rear external wall

34

Rear external wall has been dry lined

35

Extensive mould growth on Cieling

36

Carpeted timber floor though out the first floor

37

Cieling at the corner has been damaged where the pipes penetrates

38

Front wall is dry lined

39

Cieling in satisfactory condition, observed hairline cracks at the lights

40

Significant spring in floor , likely as a result of under designed timber joist which span parallel to front exterior wall

41

Evidence of cracking to the head of door. Opening up will be required to confirm the condition of the existing lintels

42

Black streaks on plastered wall above wallpaper likely from condensation

43

Hairline cracks in Cieling

44

Timber linings around existing sash windows

45

Damp ingress observed at interface between external wall and Cieling.

46

External wall is dry lined

47

Wallpaper coming away from ceiling

48

Significant ingress of water on rear external wall, wall damp to touch indicates an active leak

96

Timber lintel over opening to be opened up to inspect condition of same.

97

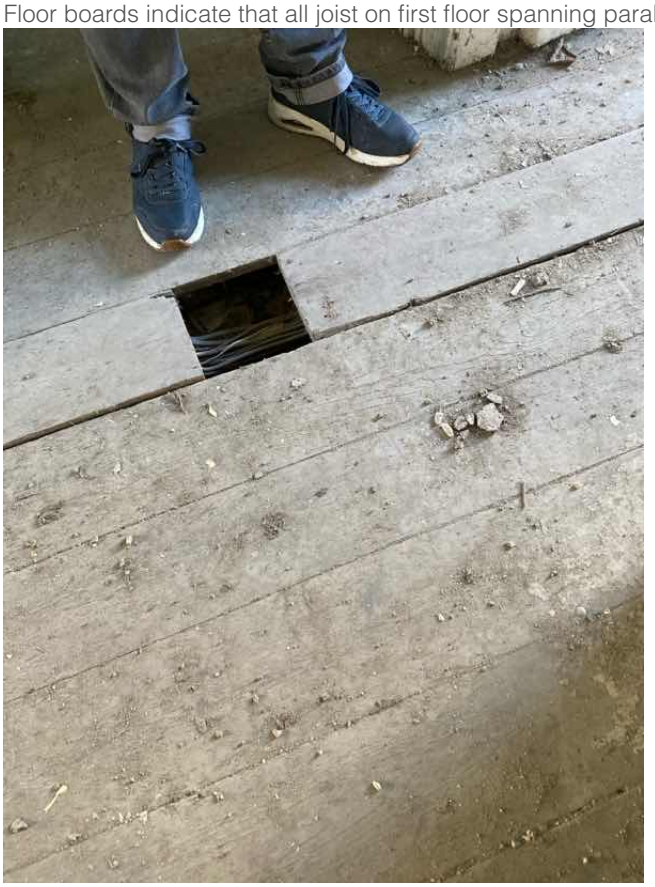
Defective embedded timbers in masonry walls throughout the property will need to be removed and gaps filled in with masonry.

98

Evidence of significant damping ingress on wall adjacent to window

99

Floor boards indicate that all joist on first floor spanning parallel to front wall of building.



100

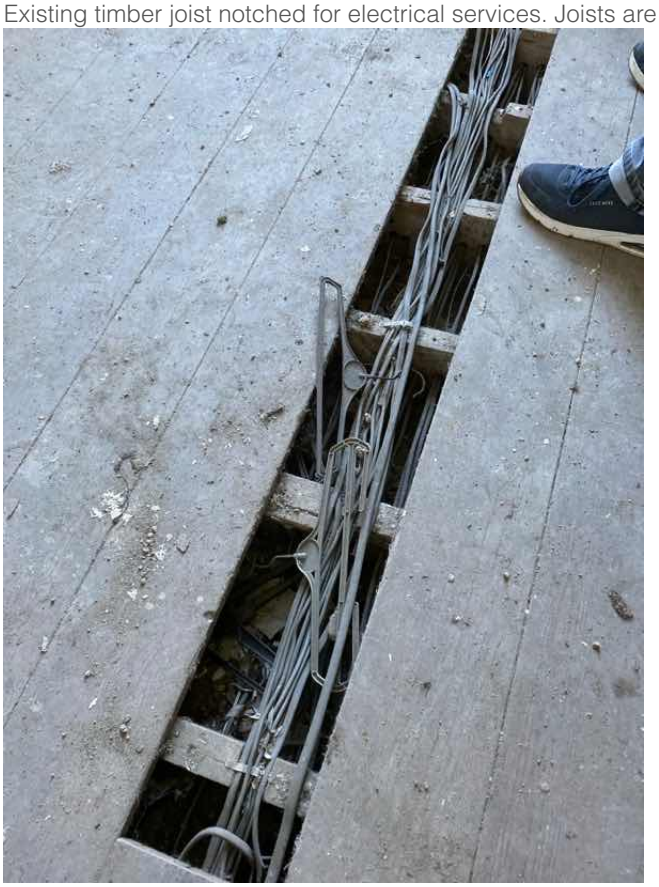
Load bearing masonry spine wall on first wall is used to support floor joist above on second floor. Location of this wall coincides with location of cast iron columns and heavier timber joist that will be observed on the ground floor.

101

All other walls on first floor and light weight stud partition.

102

Existing timber joist notched for electrical services. Joists are 145x 45 wide @ 300 centres.



103

Masonry has come away from fire place.

104

Cracking evident in Cieling and paint flaking

105

Lath and plaster of Cieling has fallen away, revealing badly deteriorated floor joist spaning on to external wall

106

Noticeable sagging floor.

107

Lath and plaster of Cieling has fallen away, revealing badly deteriorated floor joist spaning on to front exterior wall. This floor above is unsafe to walk on.

108

Timber lintel over window head has collapsed and it's unsafe.

109

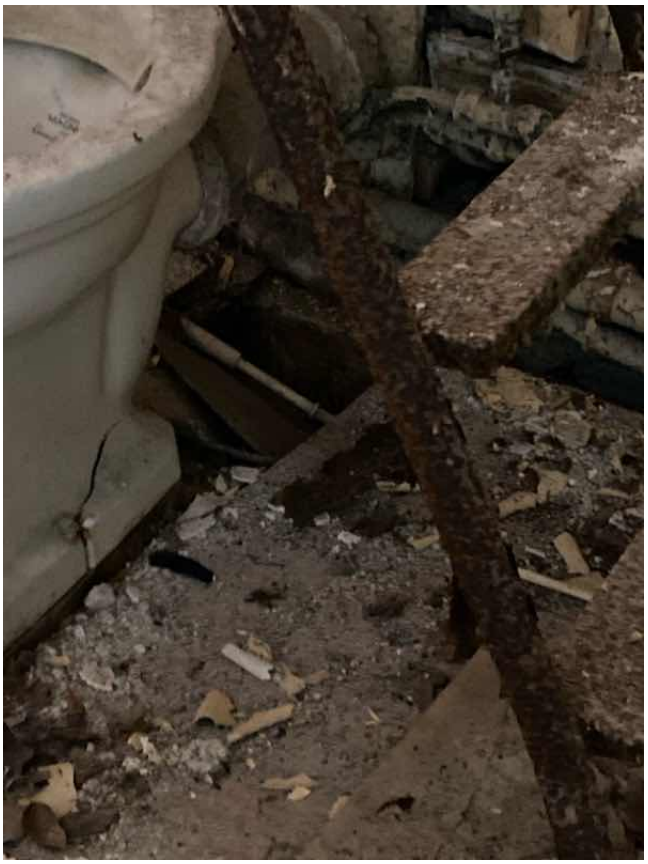
Lath and plaster of Cieling has fallen away, revealing badly deteriorated floor joist spaning on to back wall

110

Timber lintel badly deteriorated.

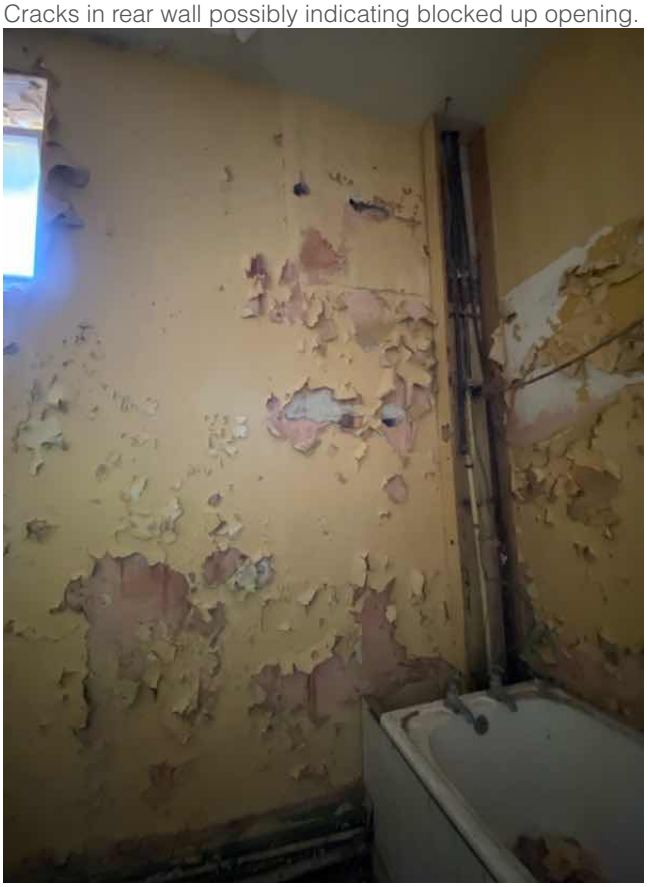
111

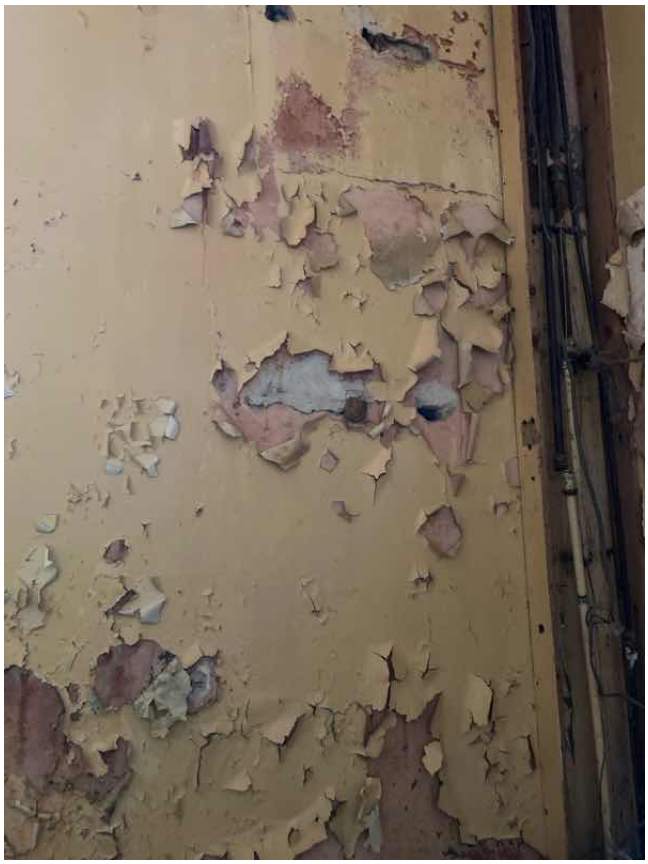
Hole in floor to rear of toilet.



112

Cracks in rear wall possibly indicating blocked up opening.



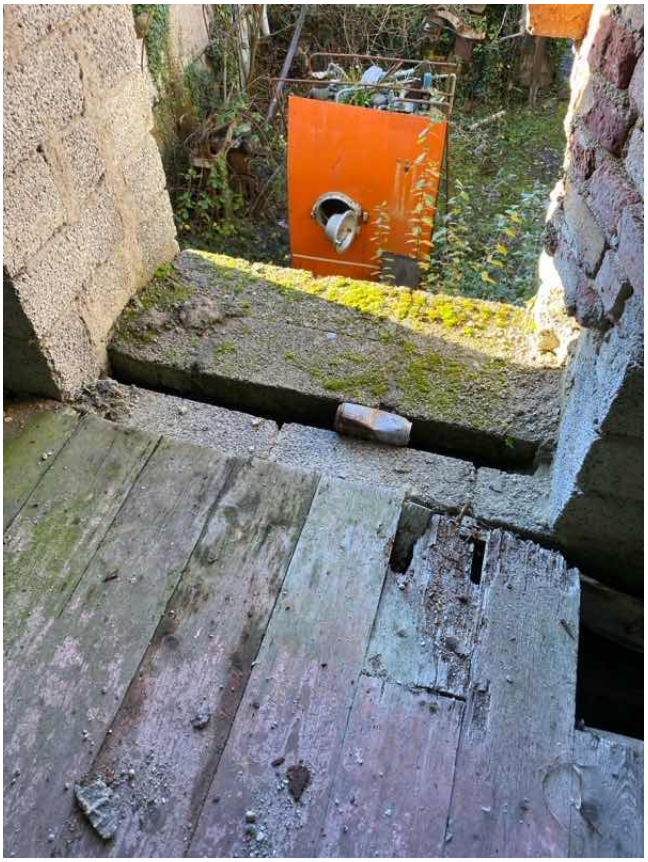


113

Rear wall partially rebuilt in concrete block work with precast lintel over window opening.

114

Floor joist badly deteriorated and collapsed adjacent to rear wall. Floor boards generally in poor condition with number of holes in same.



115

Lath and plaster of Cieling has fallen away, revealing badly deteriorated floor joist spaning on to back exterior wall. This floor above is unsafe to walk on.

118

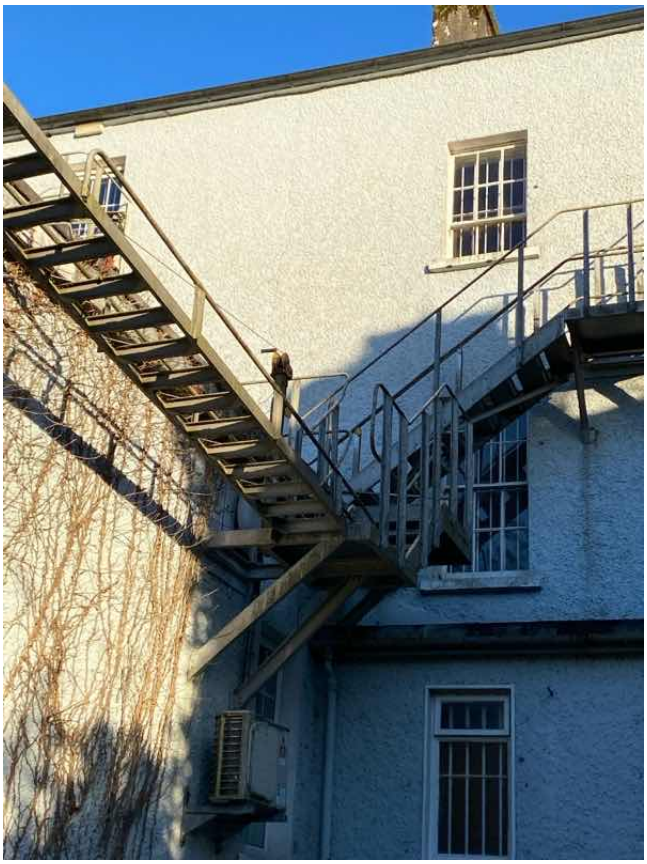
Evidence of cracking in wall above fire place. Masonry partially collapsed in fire place

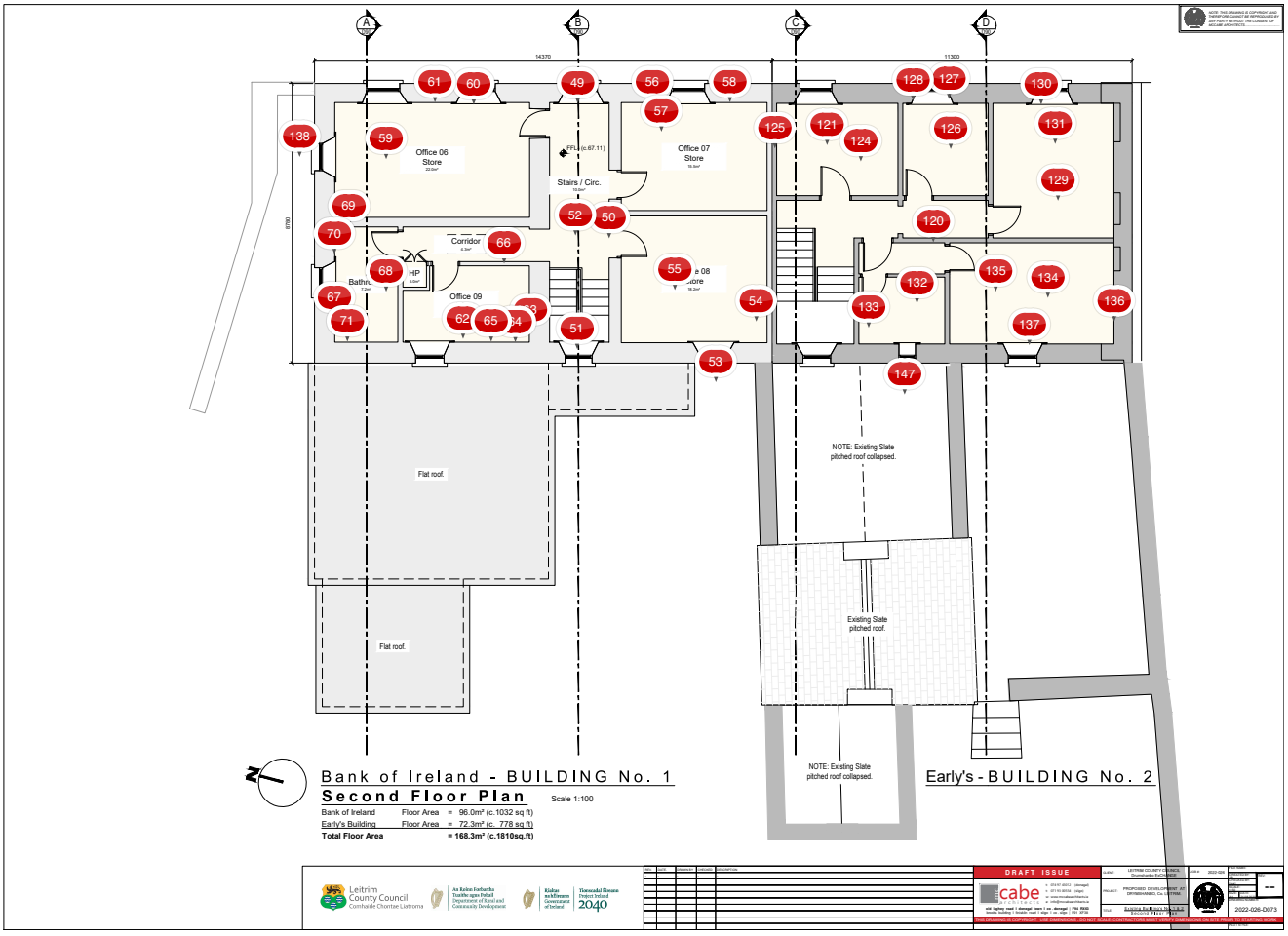
140

Vertical / diagonal cracking to top of window openings (2 no. end windows).

149

Vertical crack from 1st floor to roof




Office 06 Store
Office 07 Store
Stairs / Circ.
Corridor
Office 09
Flat roof.
Flat roof.
NOTE: Existing Slate pitched roof collapsed.
Existing Slate pitched roof.
NOTE: Existing Slate pitched roof collapsed.
Bank of Ireland - BUILDING No. 1
Second Floor Plan
Scale 1:100
Early's - BUILDING No. 2
Bank of Ireland Floor Area = 96.0m² (c.1032 sq ft)
Early's Building Floor Area = 72.3m² (c. 778 sq ft)
Total Floor Area = 168.3m² (c.1810sq.ft)
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Shell

49

Significant damp ingress over window

50

Evidence of cracking to the head of door. Opening up will be required to confirm the condition of the existing lintels.

51

Vegetation growing through window in this level and level below.

52

Apart from dampness, ceiling in satisfactory condition.

53

Evidence of cracking to the head of window. Opening up will be required to confirm the condition of the existing lintels.

54

Localised damage to ceiling, likely from damp ingress through chimney breast.

55

Joist span perpendicular to the rear external wall

56

Damp ingress at the interface between front wall and ceiling

57

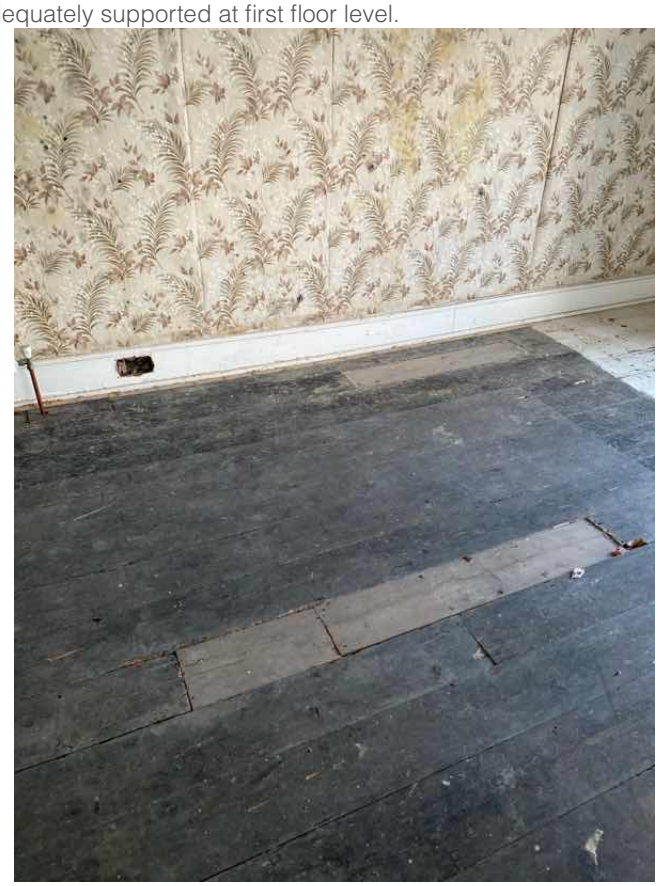
Joist spaning perpendicular to the front external wall

58

Walls fully papered, no sign of any significant structural distress

59

Joist spanning perpendicular to the front external wall. Notable sag in floor towards supporting internal wall so need to investigate by further opening up to ensure internal wall is adequately supported at first floor level.



60

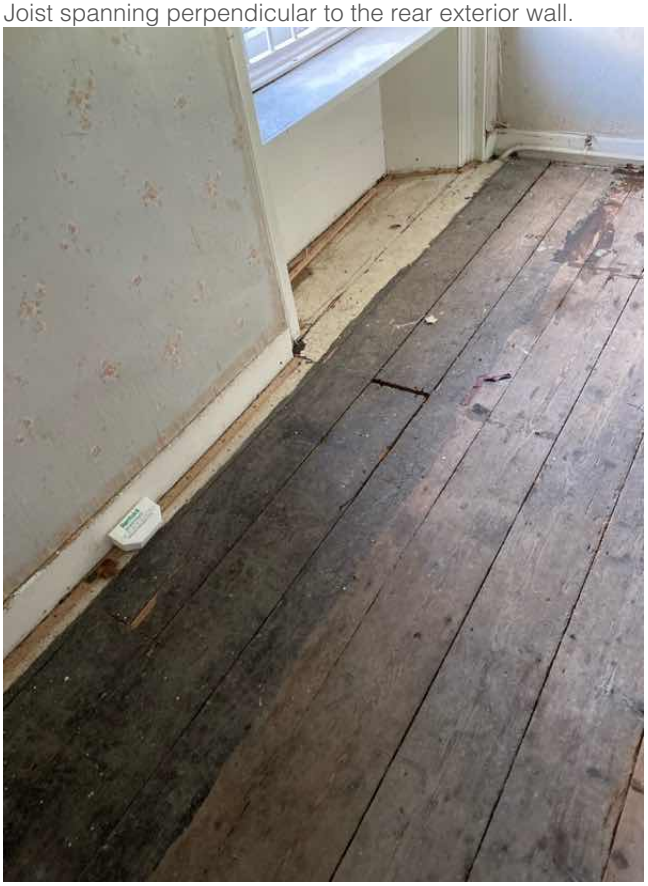
Damp ingress at the interface of front wall and ceiling

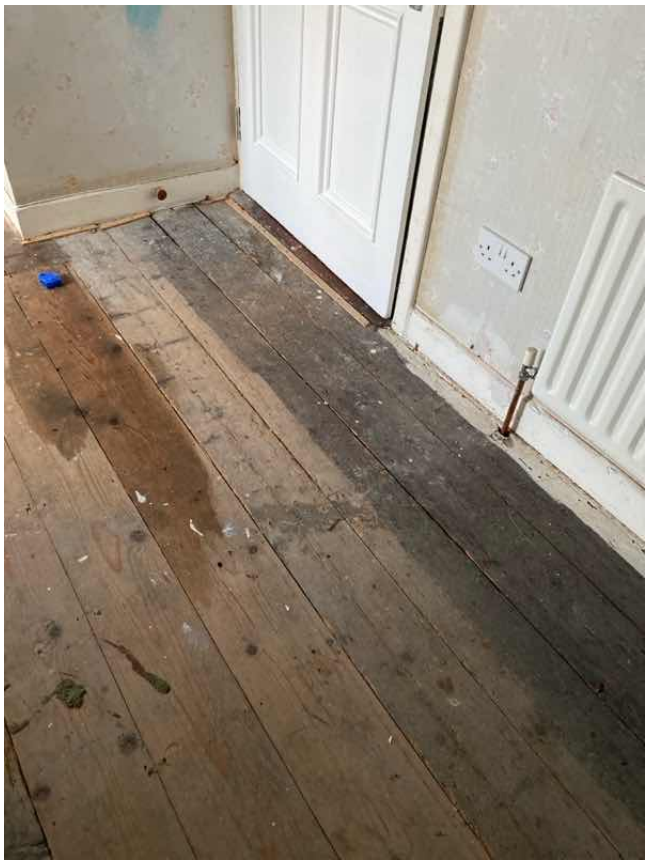
61

All external walls dry lined

62

Joist spanning perpendicular to the rear exterior wall.





63

Damp ingress from roof, it coincides with the dampness at the first floor level

64

Plumping pipes coincides with leaking at first floor, further investigation is needed to identify the source of leaking

65

Rear wall drylined

66

Internal partition wall supported off the floor joist

67

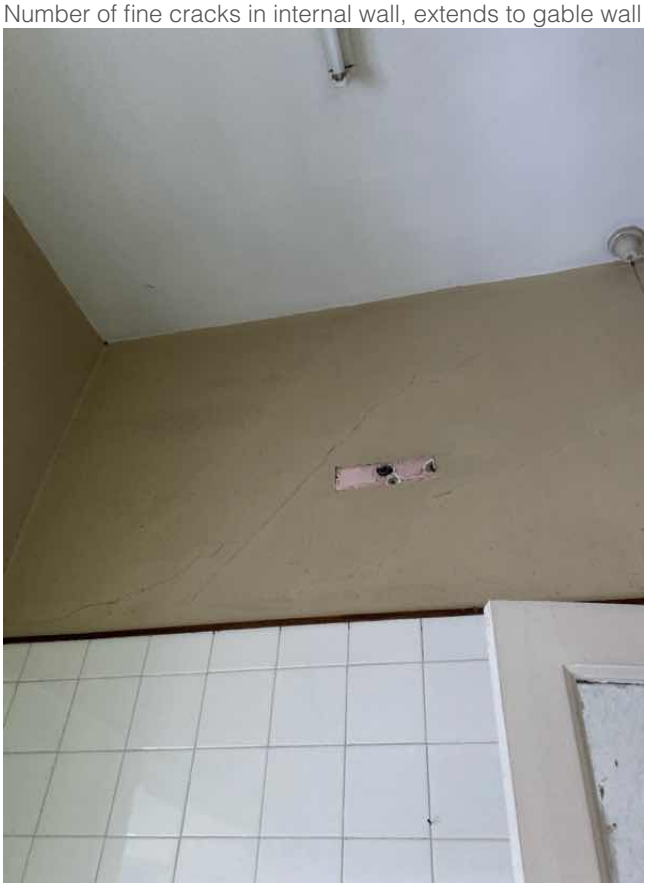
Mould growth on gable wall

68

Fine cracks in the ceiling

69

Number of fine cracks in internal wall, extends to gable wall



70

Fine cracks in gable wall

71

Floor boards exposed under the bath tub indicates floor joist spanning parallel to the gable wall

120

Load bearing masonry spine wall continues from first floor to roof ceiling but does not provide any support to roof rafters. Location of this wall coincides with location of cast iron columns and heavier timber joist that will be observed on the ground floor.

121

Floor joist spanning onto front external wall.

124

Evidence of cracking and paint flaking of plaster in ceiling.

125

Crack in wall above fire place.

126

Plaster has come away, one rafter is exposed and has signs of deterioration.

127

Plaster around the window is loose and coming away ,mostly due to damp ingress

128

Crack in external masonry above window , could be an indication that timber lintel has failed causing masonry to move.

129

Lath and plaster has come away for large area of ceiling. Exposed ceiling joist and rafters appear to be in reasonable condition.

130

Lintel above window is missing

131

Large hole in floor, in dangerous condition.

132

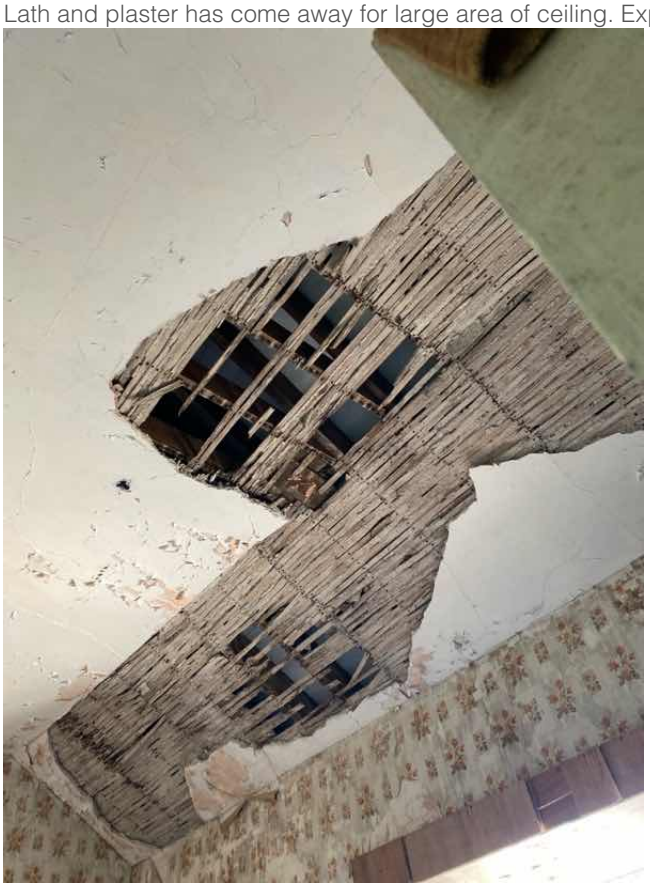
Lath and plaster has come away in ceiling.

133

Rubble piled on floor.

134

Lath and plaster has come away for large area of ceiling. Exposed ceiling joist and rafters appear to be in reasonable condition.



135

Rubble strewn across floor, but floor boards indicate that joists are spanning on to back wall of the building.

136

Rear wall and gable wall fully papered. No obvious signs of structural distress.

137

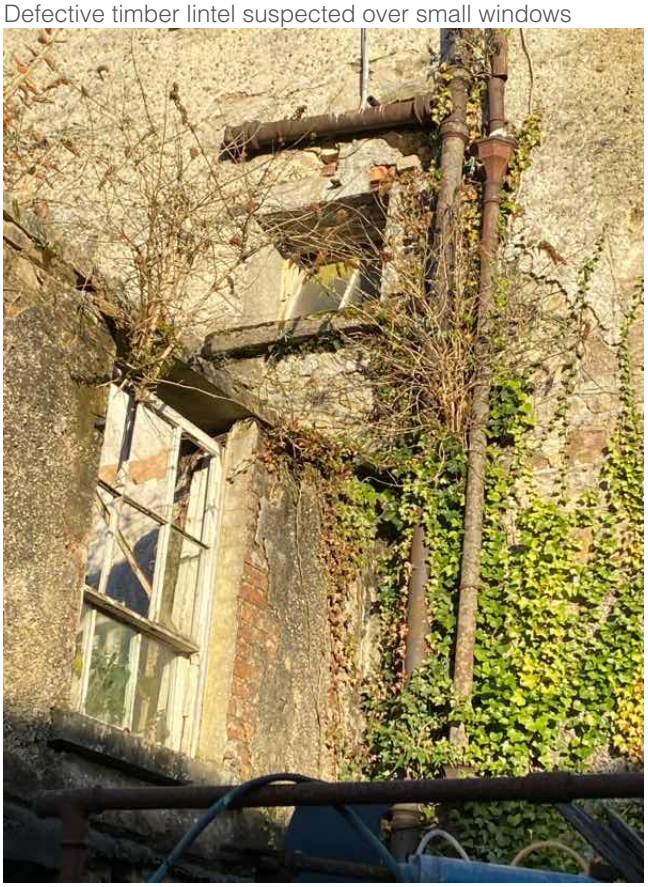
Suspect ends of joist (179x45@ 300 c/c) embedded in external walls have deteriorated.

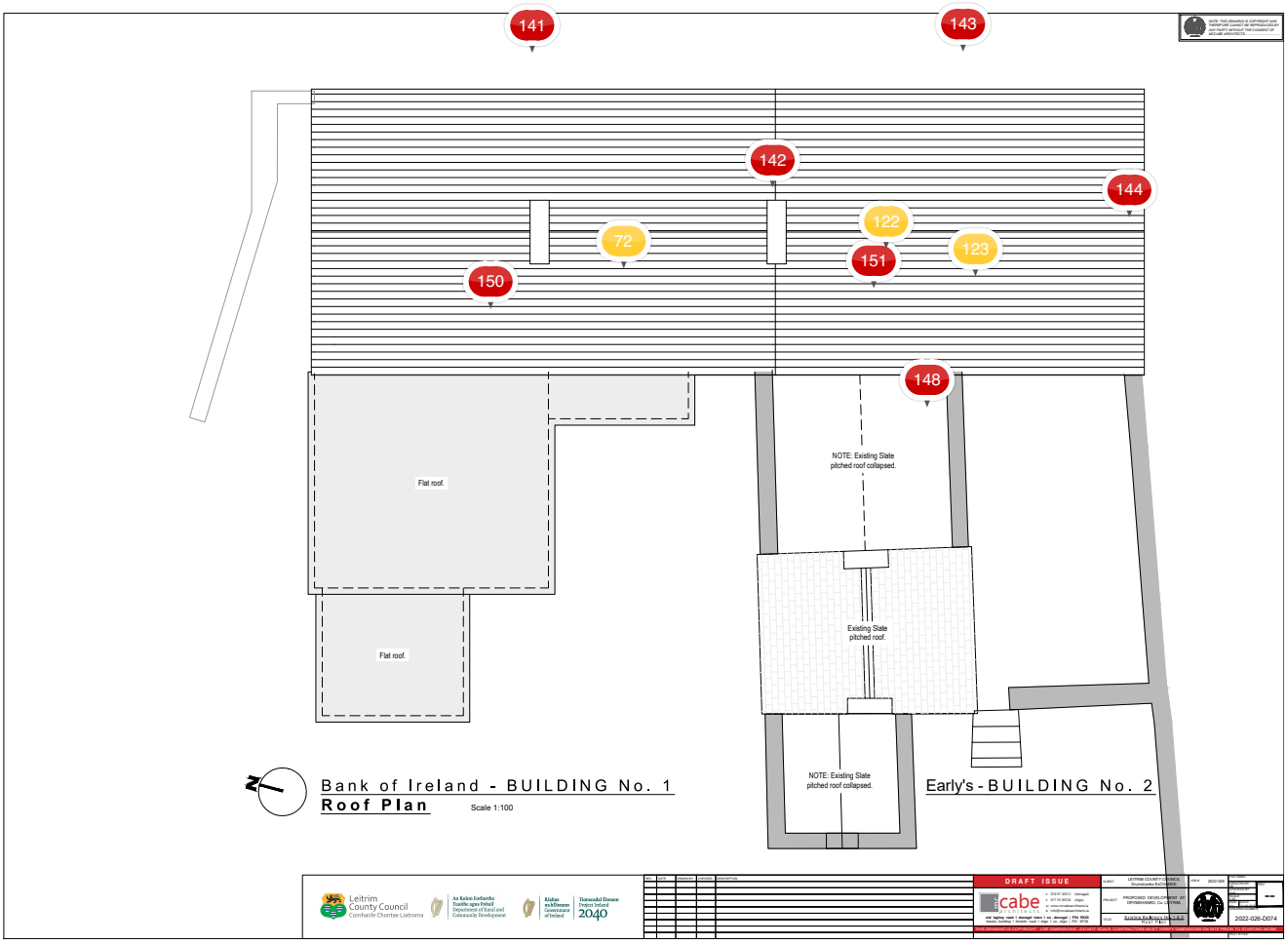
138

Fine crack above window on external face of wall otherwise no signs of any significant structural distress

147

Defective timber lintel suspected over small windows




141
143
142
144
122
72
123
151
150
148
Flat roof.
Flat roof.
NOTE: Existing Slate pitched roof collapsed.
Existing Slate pitched roof.
NOTE: Existing Slate pitched roof collapsed.
Bank of Ireland - BUILDING No. 1
Roof Plan
Scale 1:100
Early's - BUILDING No. 2
DRAFT ISSUE
cabe
2022-026-D074

Shell

141

Roof appears in satisfactory condition . Vegetation growing on surface would need to be cleaned.

142

Vegetation growing out of chimney

143

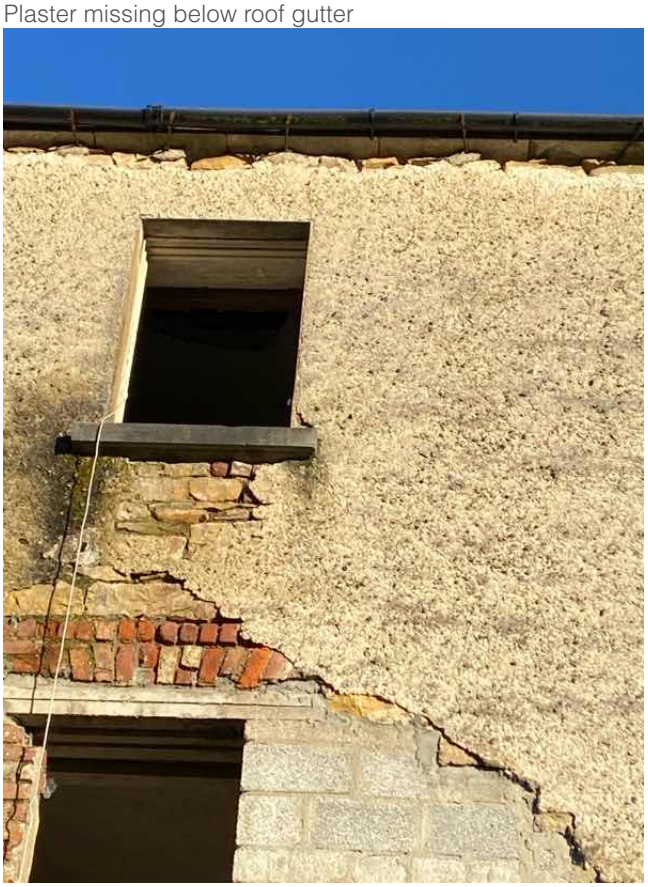
Roof finish in good condition

144

Cracking to shared chimney will require remedial works

148

Plaster missing below roof gutter



150

Roof appears in reasonably condition

151

Roof finish (slate) appears in reasonable condition

Structural Timber

72

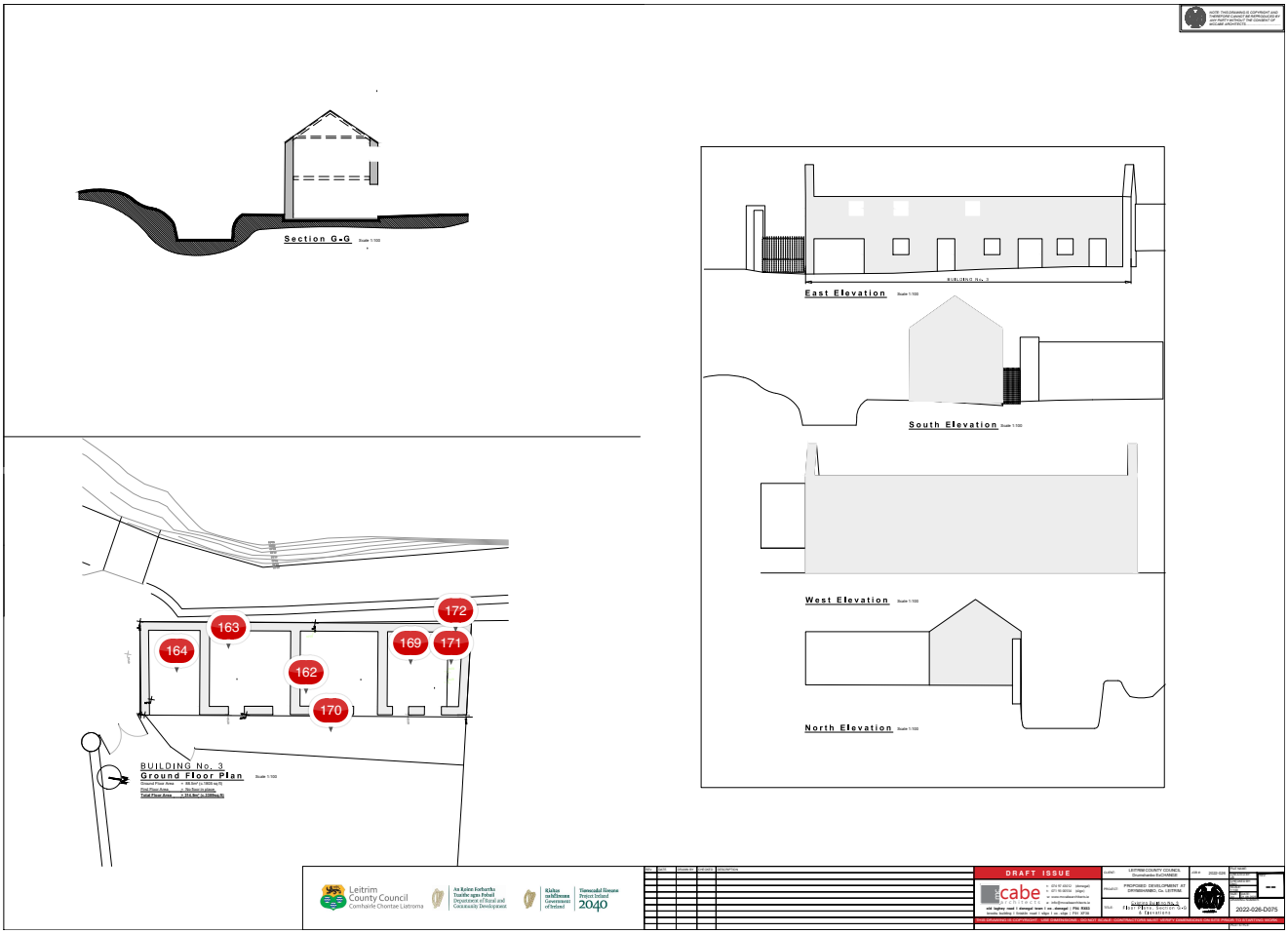
Rafters spanning from front wall to back wall with ceiling joists and collars preventing rafters from spreading . CST to carry out back design check on roof timbers.

122

140 x 50mm rafters at 300mm centres. Ceiling joists 115 x 40 at 300mm centres.
Modern, presumed breathable felt, observed on rafters indicating that roof reslated recently .
Woodworm infestation noted in roof timbers - to be reviewed by Specialist .

123

Rafters appear to be mixture of new and old which indicates rotten rafters were replaced when reslating carried out .


Section G-G
East Elevation
South Elevation
West Elevation
North Elevation
163
164
162
170
172
169
171
BUILDING No. 3
Ground Floor Plan
DRAFT ISSUE
2022-026-D075

Shell

162

Large tree growing beside external wall with roots extending under foundations

163

Small tree growing in centre of floor

164

Heavy vegetation in floor of room

169

Small trees growing on floor

170

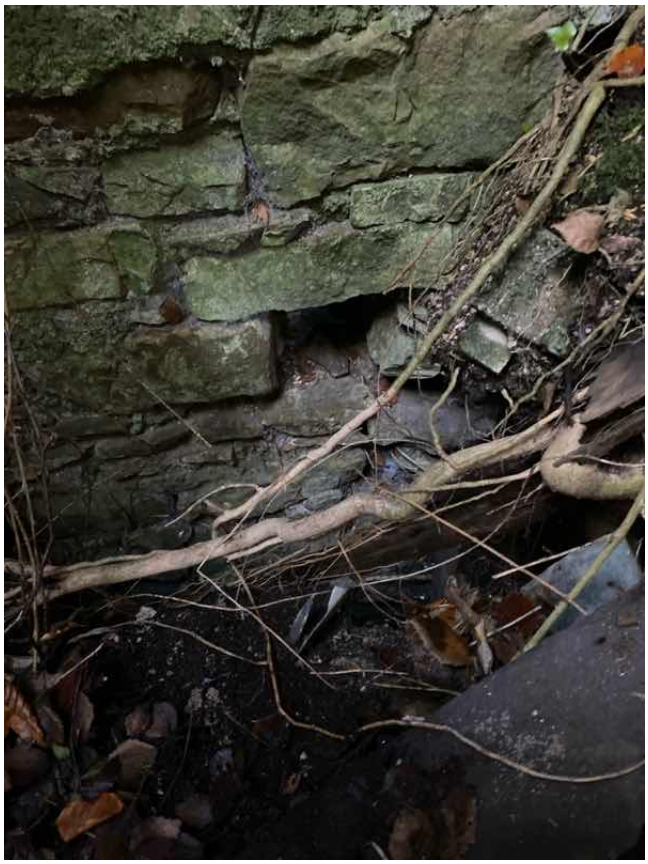
Front elevation of masonry appears to lean or bulge outwards

171

Narrow room at end of building

172

Deep pit and drainage hole in wall at back wall

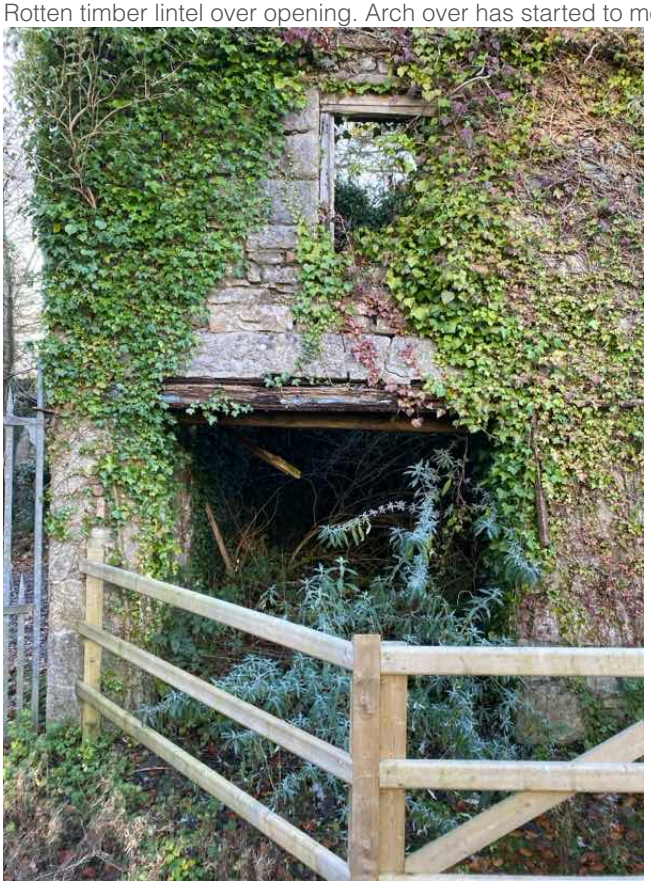



153
155
158
167
156
152
154
157
159
160
161
165
166
168
BUILDING No. 3
East Elevation
Scale 1:100
173
South Elevation
Scale 1:100
174
175
176
177
West Elevation
Scale 1:100
178
Line of boundary stone wall.
EL- 62.07
North Elevation
Scale 1:100
DRAFT ISSUE
LEITRIM COUNTY COUNCIL
Drumshanbo ExCHANGE
PROPOSED DEVELOPMENT AT DRYMSHANBO, Co. LEITRIM.
Existing Building's No. 3
Elevations
2022-026
2022-026-D085
THIS DRAWING IS COPYRIGHT . USE DIMENSIONS - DO NOT SCALE. CONTRACTORS MUST VERIFY DIMENSIONS ON SITE PRIOR TO STARTING WORK

Shell

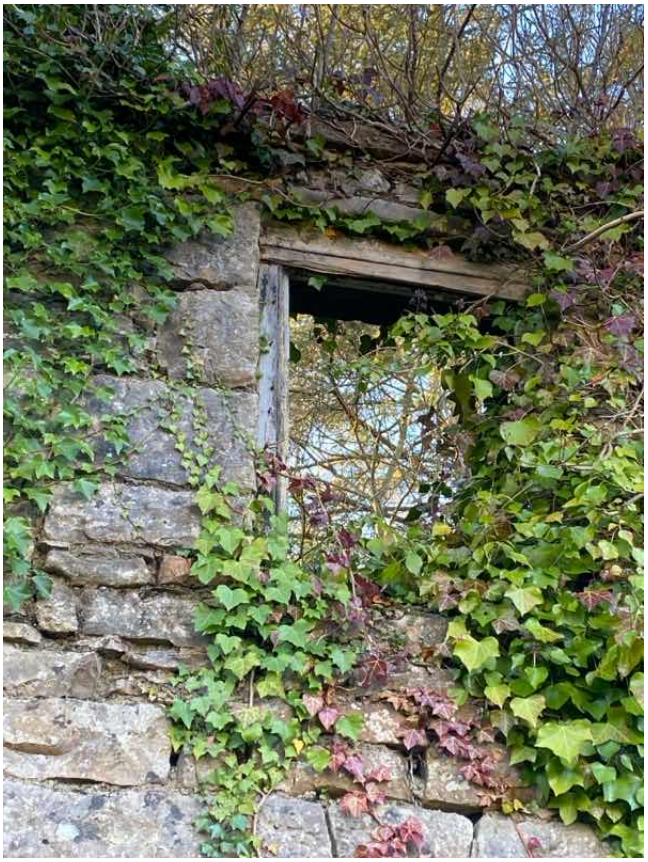
152

Rotten timber lintel over opening. Arch over has started to move.



153

Stone lintel over



154

Stone lintel intact on outside but defective timber lintel on inside

155

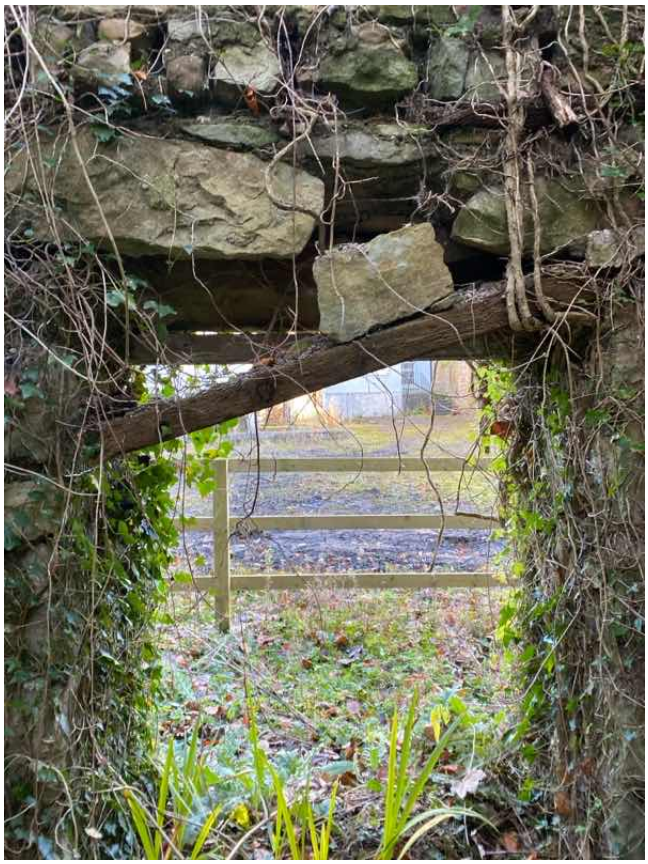
Flat stone lintel over opening

156

Significant amount of Ivy growth on walls

157

Stone lintel in tact on outside but timber lintel collapsed on inside face



158

Timber lintel collapsed on inside . Stone lintel intact on outside

159

Stone lintel intact on outside but defective timber lintel on inside

160

Rotten timber embedded in wall on inside face

161

Defective timber lintel on inside face . Stone lintel intact on outside

165

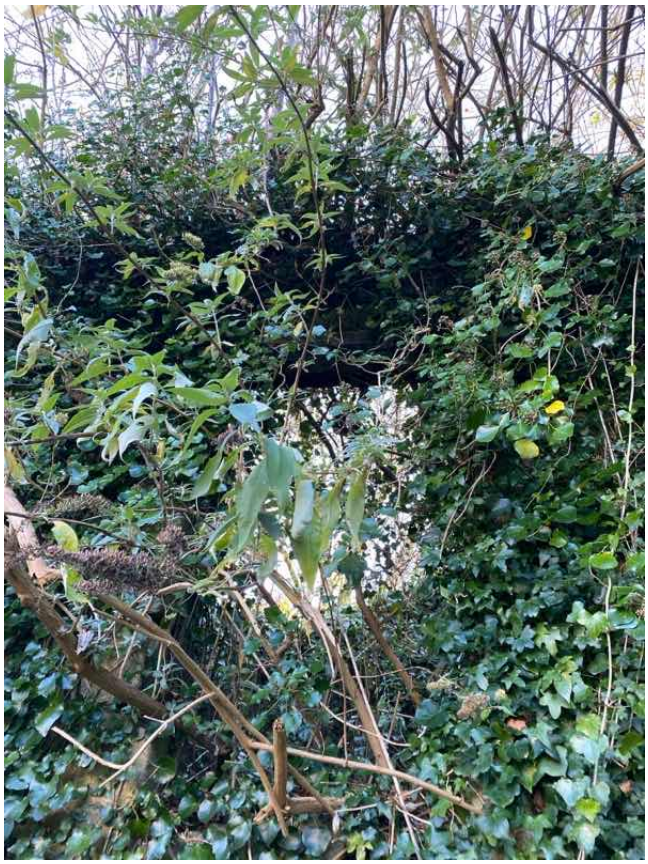
Stone lintel intact but defective timber lintel on inside

166

Stone lintel intact on outside but no lintel on inside

167

Lintel missing on inside face . Stone lintel in outside

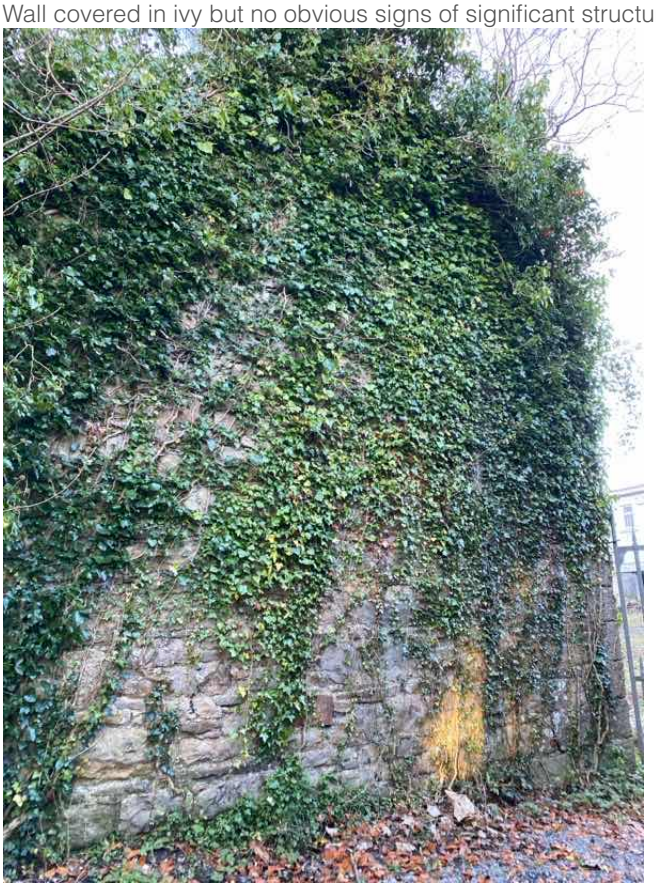


168

Stone lintel on outside. Defective timber lintel on inside

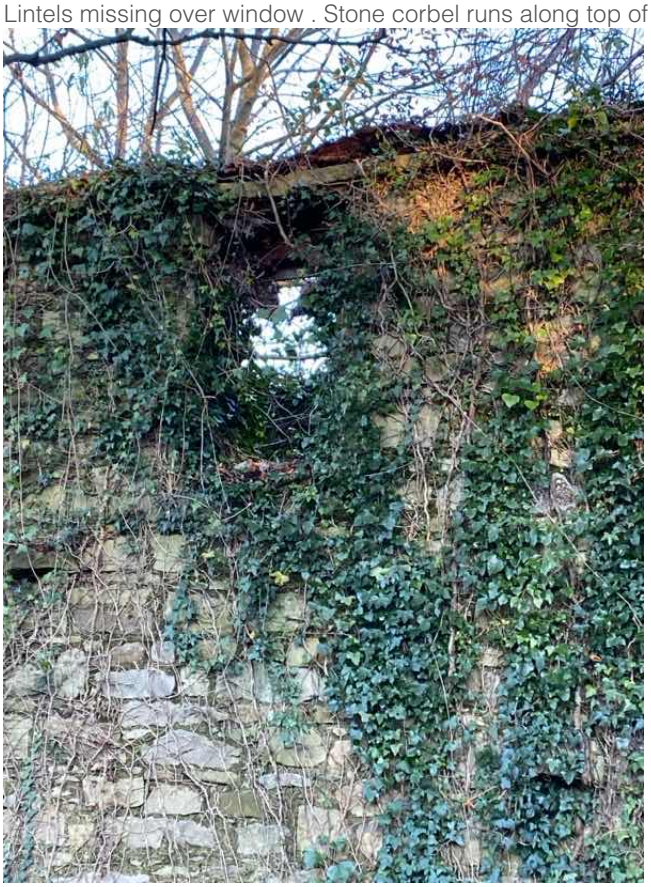
173

Wall covered in ivy but no obvious signs of significant structural damage



174

Lintels missing over window . Stone corbel runs along top of wall



175

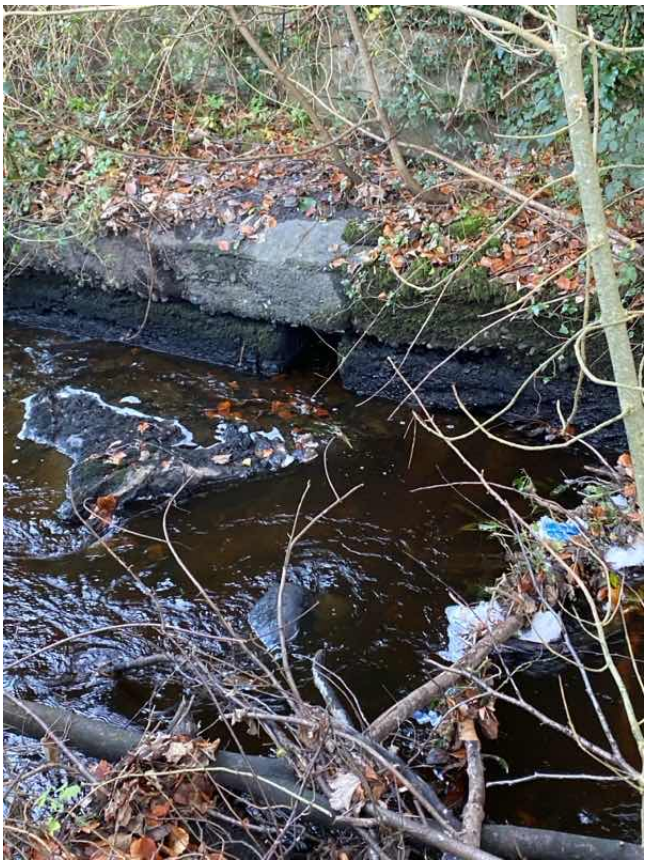
Wall covered in ivy but no obvious signs of significant structural damage

176

Wall covered in Ivy but no obvious signs of significant structural damage

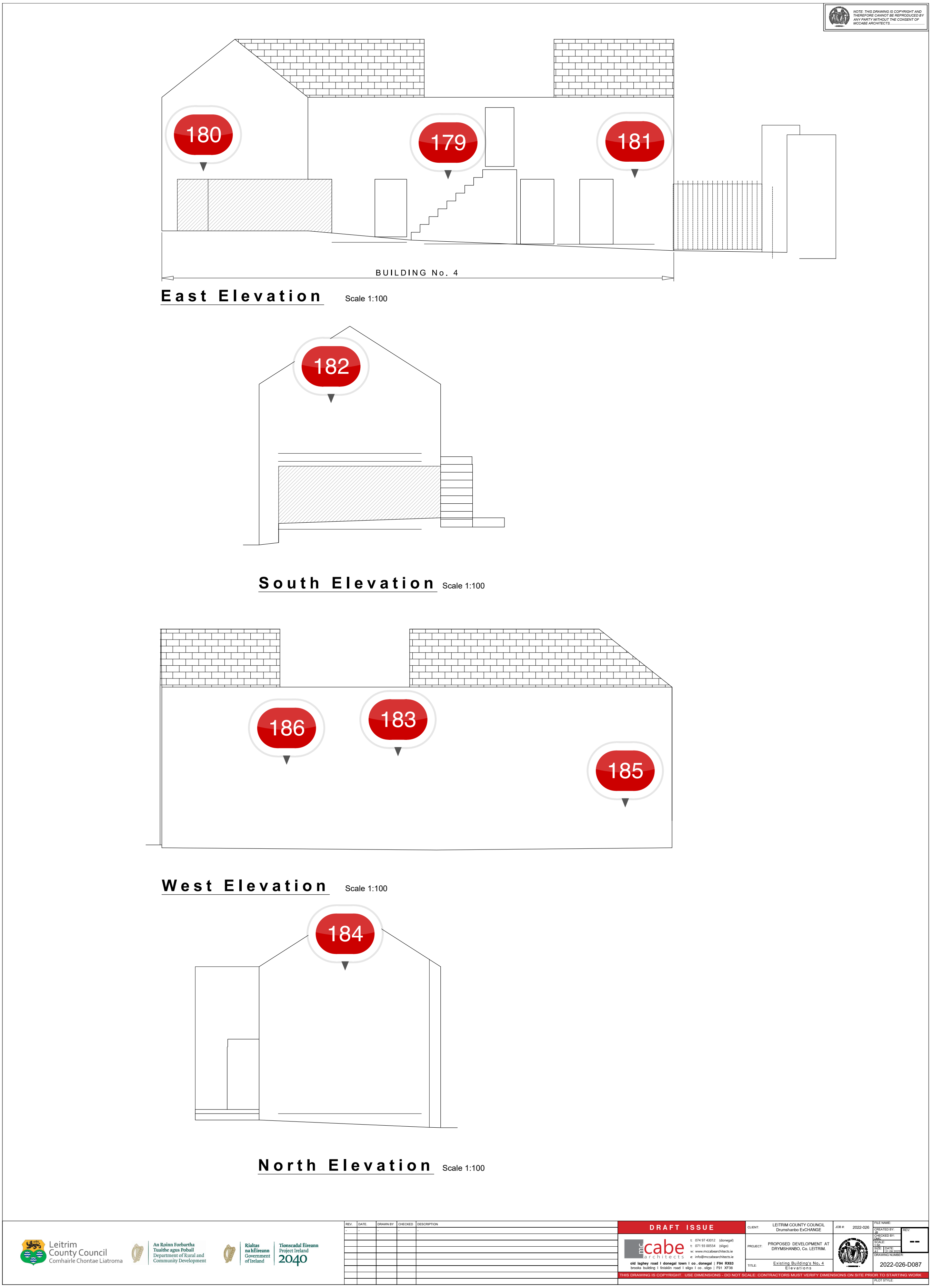
177

Possible outlet from drain observed in house



178

Gable wall covered in ivy to top of wall . Exposed masonry at bottom of wall appears in feasible condition. Some raking out and pointing required.


180
179
181
BUILDING No. 4
East Elevation
Scale 1:100
182
South Elevation
Scale 1:100
186
183
185
West Elevation
Scale 1:100
184
North Elevation
Scale 1:100
Leitrim County Council
Comhairle Chontae Liatroma
DRAFT ISSUE
LEITRIM COUNTY COUNCIL
Drumshanbo ExCHANGE
PROPOSED DEVELOPMENT AT DRYMSHANBO, Co. LEITRIM.
Existing Building No. 4
Elevations
2022-026
2022-026-D087
THIS DRAWING IS COPYRIGHT . USE DIMENSIONS - DO NOT SCALE. CONTRACTORS MUST VERIFY DIMENSIONS ON SITE PRIOR TO STARTING WORK

Shell

179

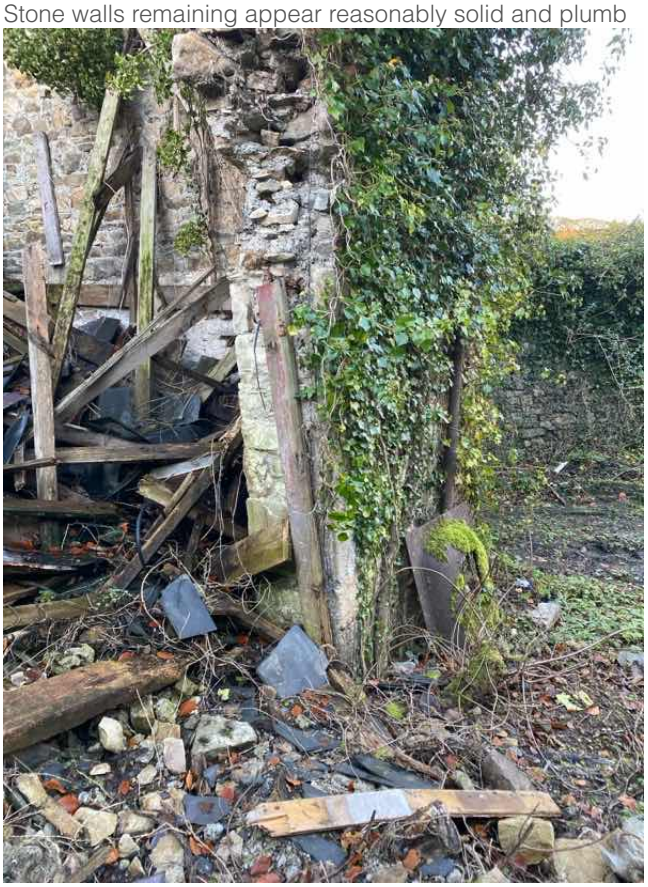
Front walls and steps and roof have been demolished

180

Stone lintel over door intact

181

Stone walls remaining appear reasonably solid and plumb

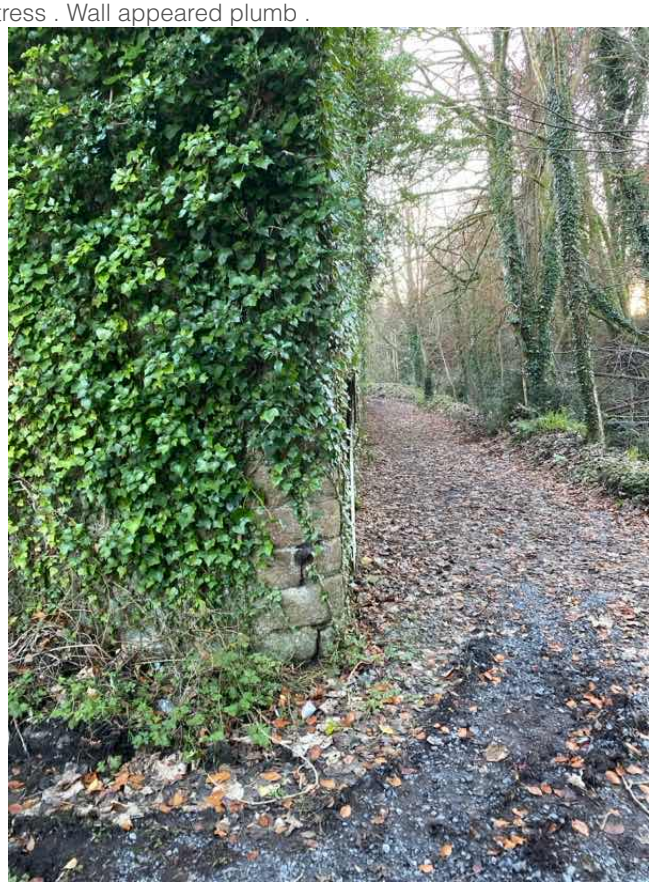


182

Elevation covered in ivy . No obvious signs of structural distress.

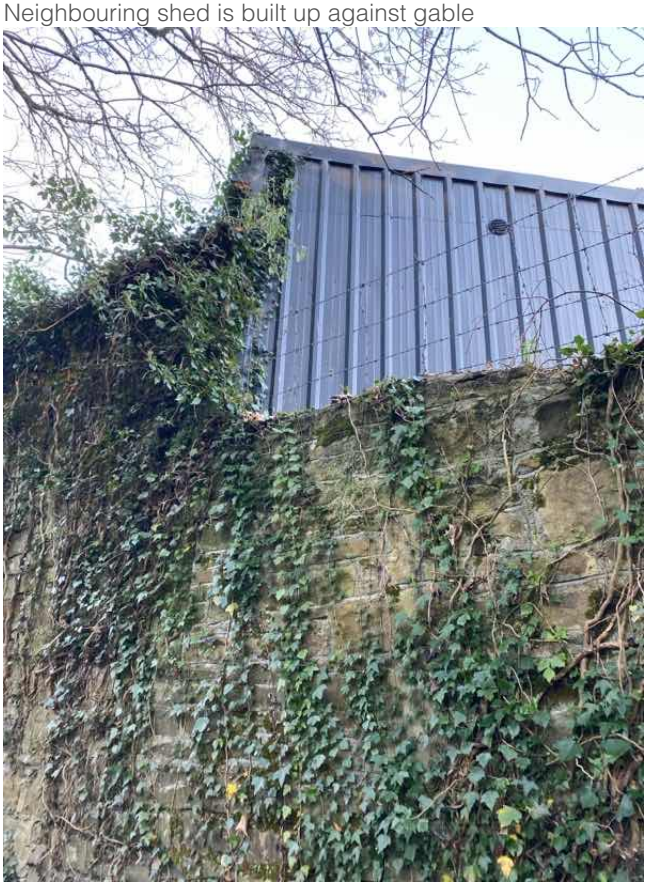
183

Elevation covered in ivy but no obvious signs of structural distress . Wall appeared plumb .



184

Neighbouring shed is built up against gable



185

Small opening in wall

186

Small opening in wall

4. Site Investigations

A number of trial holes were opened up on the grounds of the properties that form part of this project. The trial holes logs and site plan showing locations are included in **Appendix A**.

The general ground profile was found to be fill material over firm / stiff Black clay down to presumed bedrock. The firm / stiff clay is a suitable bearing stratum to use for both carparking and for standard foundations for proposed 2 storey new build extension. The largest depth of poor quality fill material than will need to be removed where it is under new build extension or proposed carparking is 900mm.

5. Conclusions and Recommendations

5.1 Buildings No 1 and No 2

It appears that both buildings were re-roofed in the last 20 years approximately. Felt has been laid under slates providing an additional barrier against water penetration on both roofs. Original timbers have been retained in both roofs however we noted that modern timber was used where defective rafters had to be replaced or where the rafters had to be packed up to create a level plane for slating. Evidence of woodworm attack was observed in a number of rafters. We would recommend that a wood preservation specialist contractor be engaged to inspect the entire building and make recommendations in relation to the feasibility of retaining and treatment of the damaged timbers.

We observed cracking in chimney and vegetation growing on same. Remedial works will be required to repair and re-render chimneys and cap off to prevent moisture ingress if fireplaces are not be re-used as part of the proposed works.

Slates vents were installed in Building 1 but we could see no evidence that roof ventilation has been provided for in building 2. This lack of ventilation encourages woodworm infestation. Ventilation ensures that moisture levels in roof timbers are maintained at low safe levels. Provision of adequate roof ventilation will need to be considered at detailed design stage.

From our observations of the walls of the building we believe that dampness is penetrating into the building through the masonry in localized areas most likely by rising dampness and through cracks in external render. To minimize risk of damp ingress, consideration may need to be given at detailed design stage to remove existing sand cement plaster and re-render walls. Best practice would be to use a lime render (eg. Harling) which would allow the walls to breathe and dry out when damp.

1st and 2nd floors are formed with timber joists supported on external and internal load bearing walls. Where joists span on to external walls, we recommend that the ends of these joists are opened up to inspect the condition of same. The existing timber joist observed are undersized when compared against current design standards. We noticed a spring in a number of the upper floors and a significant sag in floors. Consideration will need to be given at detailed stage as to the feasibility of retaining the existing floor joists. It is highly likely that significant strengthening of floors would need to be carried out to retain existing joists.

The external walls of both properties appear to be in reasonable condition. We observed a number of fine cracks both on the internal and external walls of the property. None of the cracks observed could be classed as major structural cracks. The external walls appear reasonably plumb and we see no obvious bulging of masonry. We suspect that there are few if any wall restraint ties installed to provide lateral support for the external walls. This will need to be considered at design stage to ensure the lateral stability of the walls are not compromised during the lifetime of the property.

We would also recommend that ends to timber beams and lintels embedded in external walls are also opened up to check the condition of their bearing ends. We observed a number of timber lintels badly

deteriorated due to moisture ingress so we would anticipate that a significant number of timber lintels will need to be replaced.

We observed bonding timbers embedded in the external walls that are badly deteriorated, some of which can be removed and broken by hand. All defective bonding timbers will need to be removed and gaps (which weaken wall) should be filled in with new masonry.

We observed a ground bearing concrete floor in Building 2 and in part of Building 1 all of which appeared to be in reasonable condition. It is likely that no insulation or DPM / radon barrier was placed under these concrete floors. Opening-up a section of the floor would verify this. After opening-up consideration will need to be given to determine if the floor can be retained. A suspended ground floor slab is located over the basement / ground floor undercroft in Building 1 and is supported on steel beams. We see no evidence of cracking in the slab, which would suggest that it has been adequately reinforced. We recommend that a section of the slab is opened-up to verify size and spacing of reinforcement which will allow a check to be carried out of the safe working load that can be carried on the slab.

5.2 Buildings No 3 and 4

The walls of both buildings are covered with heavy ivy growth which hinders our ability to carry out comprehensive visual structural assessment.

For both buildings the door and window openings have generally been formed with stone lintels on the outside face and timber lintels on the inside. The stone lintels were generally found to be intact but as both buildings are fully open to the weather (no roofs) the internal timber lintels are either completely rotten or collapsed (which in turn has caused masonry to partially collapse). It is likely that all stone lintels can be retained and reused, and all timber lintels will need to be replaced.

The walls existing walls appeared to be reasonably straight and plumb although some bulging may become evident when all ivy growth has been removed. The masonry joints will need to be raked out and repointed throughout with line mortar as large areas of existing mortar has perished or is missing.

The floor of Building 3 is covered in earth and heavy vegetation is growing in same including a large tree which is located beside the external wall. The roots of the tree have grown under the existing wall and the continuing root growth is exerting pressure on the wall. This tree along with other vegetation will need to be removed prior to any remedial works being carried out. A section of the wall may need to be taken down to get access to facilitate complete removal of roots.

6. Disclaimer

- This report is based on a visual inspection and no openings up works were undertaken during the inspection. This report is for the sole use of Leitrim County Council and their professional advisers, and shall not be given or used by a third party without the expressed written consent of the report writer.
- This report provides a summary of the general condition of the property based on a visual inspection. As we have not inspected hidden and concealed elements of the building, we are therefore unable to report that any such part of the property is free from all defects.
- All external elements of the property were inspected from ground level only.
- No testing of drains was carried out.
- No measurements were carried out.
- The report is solely based on the condition of the property at the time of the inspection and therefore, no liability is accepted for any deterioration or otherwise, of the property thereafter.
- The condition of the electrics, heating and plumbing and other non-structural items are outside the scope of this report and any reference made to them is by way of observation and good practice.
- This report does not address asbestos or those other materials deemed to be hazardous and/or prohibited and their presence or otherwise cannot be confirmed.
- The report does not address any items whatsoever with regard to site boundary conditions, legal maps and/or rights of way and therefore, is deemed to be outside the scope of this report.
- The report does not address any past or future implications to the property with regard to flood risk due to rainfall events or the proximity of the property to natural features and therefore, is deemed to be outside the scope of this report.

7. Conditions of Engagement

This survey and report was undertaken under the conditions of engagement Agreement RA9101 for the Appointment of Consulting Engineers for Report and Advisory Work Published in agreement with Engineers Ireland.

APPENDIX A

Trial Holes Logs and Trial Holes Location Plan

MAIN STREE

TH 1
TH 2
TH 3
TH 4
TH 5
TH 6

REV.	AMENDMENT	BY	DATE

DRAWN:	ST	TECH. CHECK:	ST
SCALE @ A1:	1:100	ENG. CHECK:	C.O'C
DATE:	01/12/23	APPROVED:	C.O'C
STAGE:	PLANNING		
JOB TITLE:	DRUMSHANBO TOWN CENTRE REGENERATION PROJECT, Co LEITRIM		
DRAWING TITLE:	SITE INVESTIGATIONS-TRIAL HOLE LOCATIONS		
CLIENT:	LEITRIM COUNTY COUNCIL		
DRAWING No:	122-195-003	REV:	P0

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www.cstgroup.ie

Tekla Tedds	Project				Job no.	
CST Group Structural O'Connell Street Sligo Ireland	Drumshanbo Town Centre Regeneration				122195	
	Calcs for				Start page no./Revision	
	Leitrim County council				1 0	
	Calcs by	Calcs date	Checked by	Checked date	Approved by	Approved date
	SR	04/12/2023	COC	04/12/2023	COC	04/12/2023

TRIAL PIT LOG

Trial pit reference TH1 Sheet 1 of 1

Water	Reduced Level (m)	Legend	Depth (m)	Description
	59.27			
	59.17	xxxxxxxx	0.10	MACADAM
	58.92	% % % % % % % %	(0.25) 0.35	SUSPECTED FILL MATERIAL
	57.37	~~~~~~~~ ~~~~~~~~ ~~~~~~~~ ~~~~~~~~ ~~~~~~~~ ~~~~~~~~ ~~~~~~~~ ~~~~~~~~	(1.55) 1.90	FIRM DARK CLAY WITH GRAVLES , COBBLES AND SMALL BOULDERS GETTING STIFFER WITH DEPTH
	57.27	XXXXXXX	2.00	PRESUMED BEDROCK
				Trial pit ends

Not shown to scale

Additional notes:

TRIAL PIT LOG

Trial pit reference TH2 Sheet 1 of 1

Water	Reduced Level (m)	Legend	Depth (m)	Description
	57.98			
	57.08	~ ~	(0.90) 0.90	VERY SOFT CLAY FILL
	56.58	X X X X X X X X	(0.50) 1.40	DARK STIFF CLAY
	56.48	XXXXXXX	1.50	PRESUMED BEDROCK
				Trial pit ends

Not shown to scale

Additional notes: WATER SEEPING IN ABOVE ROCK

Tekla Tedds	Project				Job no.	
CST Group Structural O'Connell Street Sligo Ireland	Drumshanbo Town Centre Regeneration				122195	
	Calcs for				Start page no./Revision	
	Leitrim County council				3 0	
	Calcs by	Calcs date	Checked by	Checked date	Approved by	Approved date
	SR	04/12/2023	COC	04/12/2023	COC	04/12/2023

TRIAL PIT LOG

Trial pit reference TH3 Sheet 1 of 1

Water	Reduced Level (m)	Legend	Depth (m)	Description
	59.05			
	58.25	% % % % % % % % % % % % % % % %	(0.80) 0.80	SOFT FILL MATERIAL
	56.95	~~~~~~~~ ~~~~~~~~ ~~~~~~~~ ~~~~~~~~ ~~~~~~~~ ~~~~~~~~ ~~~~~~~~	(1.30) 2.10	FIRM STIFF BLACK CLAY WITH COBBLES AND SMALL BOULDERS
	56.85	XXXXXXX	2.20	PRESUMED BEDROCK
				Trial pit ends

Not shown to scale

Additional notes:

TRIAL PIT LOG

Trial pit reference TH4 Sheet 1 of 1

Water	Reduced Level (m)	Legend	Depth (m)	Description
	57.50			
	56.70	++++++++ ++++++++ ++++++++ ++++++++	(0.80) 0.80	RED BROWN SOFT CLAY
	56.20	~~~~~~~~ ~~~~~~~~ ~~~~~~~~	(0.50) 1.30	GREY FIRM STIFF CLAY COBBLES AND SMALL BOULDERS WATER SEEPING IN ABOVE ROCK
	56.10	XXXXXXX	1.40	PRESUMED BEDROCK
				Trial pit ends

Not shown to scale

Additional notes: WATER SEEPING IN ABOVE ROCK

Tekla Tedds	Project				Job no.	
CST Group Structural O'Connell Street Sligo Ireland	Proposed developement at Drumshanbo . Co, Leitrim				122195	
	Calcs for				Start page no./Revision	
	Leitrim County council				5 0	
	Calcs by	Calcs date	Checked by	Checked date	Approved by	Approved date
	SR	04/12/2023	COC	04/12/2023	COC	04/12/2023

TRIAL PIT LOG

Trial pit reference TH 4 Sheet 1 of 1

Water	Reduced Level (m)	Legend	Depth (m)	Description
	57.70			
	56.90	X X X X X X X X X X	(0.80) 0.80	RED BROWN SOFT CLAY
	56.40	X X X X X X X X X X	(0.50) 1.30	GREY FIRM STIFF CLAY COBBLES AND SMALL BOULDERS WATER SEEPING IN ABOVE ROCK
				Trial pit ends

Not shown to scale

Additional notes:

Tekla Tedds CST Group Structural O'Connell Street Sligo Ireland	Project Drumshanbo Town Centre Regeneration				Job no. 122195	
	Calcs for Leitrim County council				Start page no./Revision 6 0	
	Calcs by SR	Calcs date 04/12/2023	Checked by COC	Checked date 04/12/2023	Approved by COC	Approved date 04/12/2023

TRIAL PIT LOG

Trial pit reference TH6				Sheet 1 of 1
Water	Reduced Level (m)	Legend	Depth (m)	Description
	58.74			
	56.64	X X X X X X X X X X X X X X X X X X X X X X X X X X X X	(2.10) 2.10	FIRM DARK STIFF CLAY
	56.54	xxxxxxxxx	2.20	PRESUMED BEDROCK
				Trial pit ends

Not shown to scale

Additional notes: