

LIBRARY SQUARE RINGSEND – PUBLIC REALM IMPROVEMENT AND LIBRARY
REFURBISHMENT AND EXTENSION

BUILDING SURVEY CONDITION & CONSERVATION REPORT

ON

RINGSEND LIBRARY, BRIDGE STREET, RINGSEND, DUBLIN 4



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<i>Issue</i>	<i>Date</i>	<i>Comments</i>
	9.3.22	Draft issue
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1.0 INTRODUCTION

1.1 Instruction & Brief

- 1.1.1 Further to instructions received from **Mr. Thomas Russell** of **DMOD Architects**, we undertook an inspection of the property at Ringsend Library, Fitzwilliam Street, Ringsend, Dublin 4.
- 1.1.2 In summary, our brief was to undertake a visual inspection of the property and to provide a conservation report/building survey outlining its general construction and state of repair and recommendations for conservation works to be carried out ahead of the planned extension and refurbishment of the property.
- 1.1.3 A photographic record of our inspection is contained in Appendix 1.
- 1.1.4 Our typical conditions and scope of inspection is outlined in Appendix 2.

1.2 Details & Scope of Site Inspection

- 1.2.1 The inspection was undertaken on Monday 17th January 2022. The weather was mild and reasonably bright during our inspection.
- 1.2.2 The building was occupied and in public use during our survey. Access arrangements and our internal inspections were facilitated by Alison Lyons, Divisional Librarian and the Ringsend Library staff. All fixtures, fittings, furniture, shelving, carpets and the like remained in position. As per the use of the building, a large amount of book shelving and storage exists which restricted our inspection and views in most rooms.
- 1.2.3 There is no access available to the external roof surfaces. All roof surfaces and parapet gutters were viewed from ground level and / or from an unmanned aerial vehicle (drone) only.
- 1.2.4 There was no access to the main roof void on the day of inspection which was carried out during a follow-up visit on Thursday 3rd March 2022.
- 1.2.5 We understand the proposed extension and refurbishment project includes the full removal of the existing rear lean-to. As such, we did not inspect, nor will we report in detail on this part of the property apart from where relevant observations could be made in relation to the construction and detail of the building generally.
- 1.2.6 Our scope did not include a detailed survey, review or report on the mechanical and electrical installations. Our inspection was of a brief visual nature only. We anticipate that based on the age of the existing installations together with the extent of proposed extension and refurbishment that full overhaul and / or replacement of the building services is already envisaged.

1.3 Use of Report

- 1.3.1 This report is for the sole use of Mitchell Landscape Architecture Limited, and their professional advisors in relation to the 2022 Ringsend Library Masterplan Project.
- 1.3.2 No responsibility is accepted to any third party or in the event that this report is used for any other purpose.

1.4 Orientation & Definition for Purposes of Report

- 1.4.1 The front of the building faces onto Bridge Street with the rear elevation facing Fitzwilliam Street. The terms front, rear, left and right are given as if facing the front elevation.

1.4.2 The building is configured with a large single-cell open plan layout to the main public library space with a rear lean-to extension accommodating the staff office, kitchen, toilets and access to the small basement below.

1.4.3 Where expressions are used to describe timeframes for implementation or life expectancies they shall generally have the following meanings;

<i>Timeframe</i>	<i>Meaning</i>
Urgent	Immediate
Short term	Within one year
Medium term	Two – five years
Long term	Five – ten years
Very long term	Exceeding ten years

2.0 HISTORIC BACKGROUND, SIGNIFICANCE & GENERAL DESCRIPTION OF PROPERTY

2.1 Outline History:

The property comprises a detached seven-bay, single-storey Art Deco public library, built c.1937 following public outcry at the time for the provision of community services following the expansion of the Dublin suburbs in the 1920s-1930s. The library was one of three new public branch libraries including similar buildings at Inchicore and Drumcondra opened by Dublin Corporation in 1937 as part of a library building program prompted by the Great Dublin Act 1931. The three libraries are noted to be modest and finely detailed brick buildings designed in the art deco style. Though the site context and topography differ in each location the building composition remains constant with the defining single volume library room prevailing in each case. Phibsborough library (an earlier variant style based on similar plan form) was completed two years earlier in 1935.¹

The building was designed by Robert Sorley Lawrie, a Scottish architect in the department of the Dublin City Architect, Horace O'Rourke during the 1930s. He designed the Inchicore public library on Emmet Road in 1937 and was probably also responsible for the other very similar libraries at Ringsend, and Drumcondra which were erected the same year.

According to the street directories, he was still living in Dublin in 1945 but had left by 1947. He returned to Scotland to take up the appointment of County Architect for Fife. He was still in this post in 1965 but retired soon afterwards. He died in 1977, survived by his wife, Annie Dempster McDowall, whom he had married in Aberdeen in 1933.²

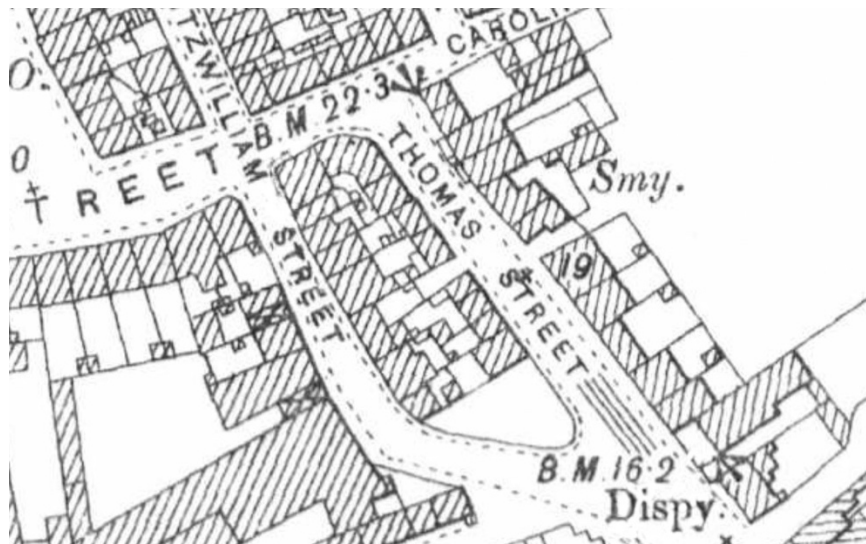


Fig. 1: Ordnance Survey map c1913 of site prior to site clearance

From the c1900 Ordnance Survey of the site, it appears that the site was created following the clearance of earlier terraced buildings on the site similar to the surviving historic grain of the area. A proposal was developed to extend the library in 1949 (Fig. 4 below) which was not implemented. The building's original railings and soft-landscaping (illustrated in Fig. 2 below) were removed c2003 to accommodate the current hard landscaping scheme to a design carried out by McCullough Mulvin Architects.

¹ *More than concrete blocks* – Ellen Rowley (editor)

² *Dictionary of Irish Architects* – www.dia.ie



Phibsborough Library



Inchicore Library



Drumcondra Library



Ringsend Library (prior to 2003 works)

Fig. 3: Library buildings from the 1930s public library scheme

2.2

Statement of Significance:

Understated and elegantly detailed, Ringsend Library is one of a remarkably complete set of four Dublin Corporation Libraries built c1937 and still in use. The Art Deco-inspired doorcase and steel grilles and metal Crittall pivot-windows are of particular note and add aesthetic appeal. While Art Deco was a popular style internationally in the 1930s, surviving buildings of the style are relatively rare in Dublin and throughout Ireland. The quality of materials, and composition and scale of the buildings in their varying setting and landscaping create a pleasing sense of uniformity of design, making a positive architectural contribution to the street. This library remains in active use and is of great social importance to the local community.

The libraries are described by Susan Roundtree as “*modest but important examples of public buildings in art deco style that marked the transition between classicism and the modern movement*” (Roundtree 2004). The remarkable library entrances with their stepped surrounds and geometric patterning and the horizontal emphasis created by the rendered bands and steel windows contribute to create this Art Deco composition. Art Deco was a popular style internationally in the 1930s - surviving buildings of the style are relatively uncommon in Dublin and for that reason these libraries are treasured. Brendan Grimes draws comparison with the Carnegie libraries in America and the emphasis on associated landscaping like many of the Carnegie libraries, they had Gardens attached which resonates with Cicero’s idea, that gardens and libraries are all does anyone needs (Grimes 2014). Indeed, the Dublin libraries share some of the criteria associated with the Carnegie libraries and may have been influenced by them including a centrally located librarian’s desk, twelve-to-fifteen-foot ceilings and large windows six to seven feet above the floor, with the buildings often situated in landscaped settings within urban area.

Although unusually, the Ringsend Library does not feature on the recently-published National Inventory of Architectural Heritage (NIAH) for Dublin, the Inchicore & Drumcondra Libraries do with a regional rating and Architectural, Historical & Social categories of special interest. It is our view that the buildings are also of technical interest as they illustrate the transition at the time from traditional to modern construction with traditional construction features such as large suspended floors and pointing mortars being used in tandem with concrete bricks in a modern design at the time.

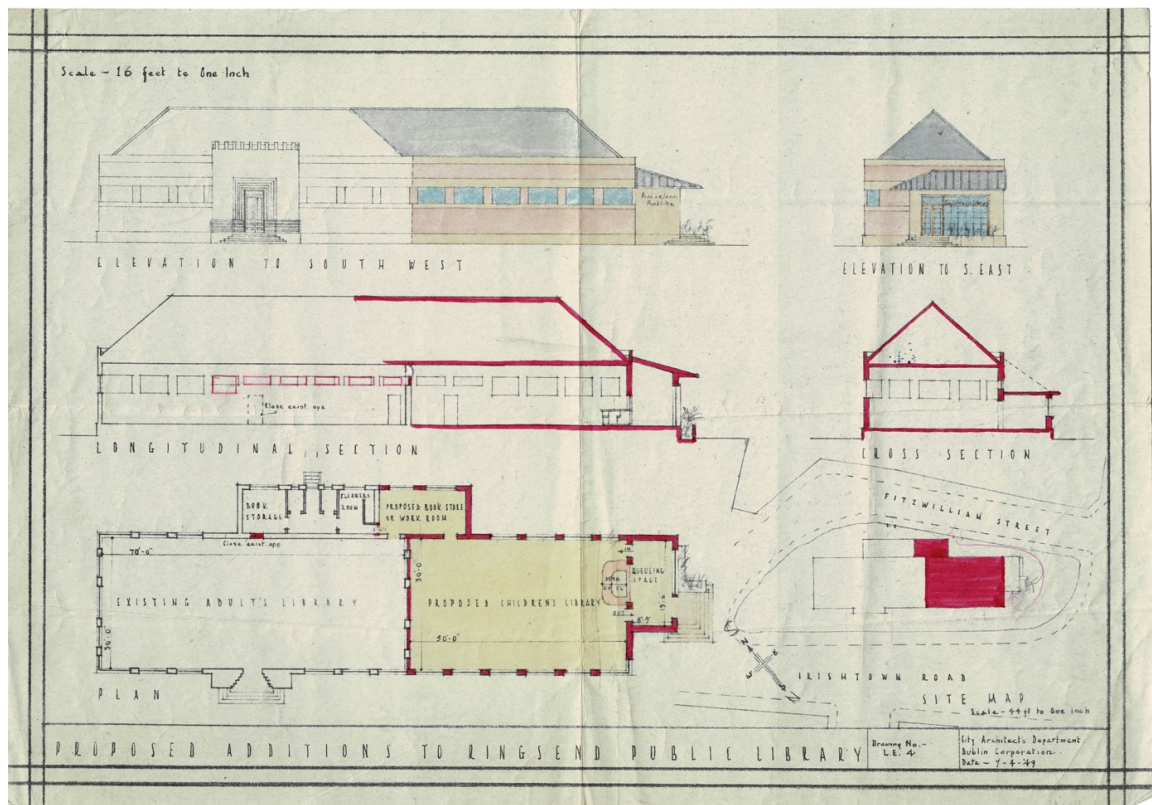


Fig. 4: 1949 proposal to extend the library building

- Description (to be read in conjunction with Appendix A photos):
- 2.3 The external walls comprise of traditional solid wall construction with concrete red facing brick laid in English garden wall bond arranged in recessed stringcourses and painted concrete plinth, cill, head and decorative parapet courses topped with a possibly later addition modern precast concrete coping. The rear lean-to elevations are provided with a painted (and suspected) cement render and plain plinth. Two wall vents are provided to the base of the external wall on the south elevation and provide limited ventilation to the subfloor void.
 - 2.4 The external windows comprise a combination of original and replacement single glazed, *Crittall* style steel windows with centre pivot lights and wrap around corner windows resting on chamfered cills with square-headed openings above, each forming part of the respective continuous painted concrete cill and head courses.
 - 2.5 Windows in the rear lean-to comprise similar single glazed steel windows with side hung opening casements set on painted precast concrete cills. A number of the rear windows are fitted with fixed exterior grilles, vertical roller shutters or internal retractable (sideways folding) interior grilles for security purposes.
 - 2.6 The main front entrance comprises a large projecting painted concrete breakfront with square-headed door opening set within a repeatedly stepped and recessed surround displaying a saw tooth motif nearest the door case. The entrance door comprises of a set of single glazed timber panelled double-leaf doors with plain rectangular over light and protective circular-motif decorative security grilles which were original to the three libraries. The rear exit door comprises a single leaf, single glazed timber panelled door with internal emergency exit push bar.
 - 2.7 The main roof comprises a pitched and hipped roof structure surrounded by a painted concrete parapet wall with decorative channelled pattern, modern precast feather-edged concrete coping and mineral felt-lined parapet gutters behind. Solar reflective paint is provided in localised area only, where past repairs are anticipated to have occurred. Roof coverings comprise of single-lap, single Roman interlocking concrete pan tiles on bitumen type roof underlay on timber battens or sarking

board with concrete ridge and hipped tiles secured at the base with hip irons and laid in coloured sand cement mortar.

- 2.8 Surface water from the roof is collected in the parapet gutters and discharges through the base of the parapet walls via scupper details to four original cast iron rainwater hopper heads and downpipes mounted to the external elevations. Two downpipes are positioned on the front elevation, on either flank of the breakfront entrance with another two downpipes on the rear elevation, either side of the rear lean-to.
- 2.9 The property is served by one redundant chimneystack, which passes through the rear parapet. The stack is of a different red clay brick construction with weather struck cement pointing, one chimney flue and clay pot. A painted cement fillet and / or mastic seal appears to weather the junction of the parapet wall and chimneystack base.
- 2.10 The roof structure comprises of a series of painted steel trusses with bolted gusset plate connections, timber purlins (bolted onto L shaped purlin brackets) and common rafters supporting the external roof coverings (Appendix A, photos 51-54). The underside of the roof covering is provided with a non-breathable bituminous type roofing felt which terminates approximately one metre from the parapet gutter exposing the underside of the tongued and grooved timber boards forming the parapet decking.
- 2.11 Triangulation of the roof structure is assumedly provided by the hip trusses which are connected to the main roof trusses. Timber ceiling joists span between the T-section bottom flanges of the steel trusses. A thin c100mm layer of quilt insulation appears to be provided to the attic floor which obscured our views of the ceiling linings generally. The truss connection at the parapet location is embedded within the thickness of the external wall and is therefore concealed from view.
- 2.12 The small flat roof over the breakfront entrance is anticipated to be of lightweight timber construction and is covered with a continuation of the same felt lining on the adjoining parapet gutters.
- 2.13 The roof over the rear extension is of lean-to construction with the same single lap, single Roman interlocking concrete pan tiles with exposed overhanging verges, projecting timber eaves, replacement modern uPVC rainwater gutter and one original cast iron downpipe. The interface between the main building and rear lean-to is weathered with a lead abutment flashing detail.
- 2.14 The roof over the later rear plant room comprises an in-situ concrete flat roof with sand cement fillet along the abutment with the adjoining main building and rear lean-to. The edge of the concrete roof is finished with an anti-climb security paint.
- 2.15 The building occupies an island site comprising an open paved public space with allowance for seating, bicycle parking and planted trees. The interface between the public space and the surrounding Bridge Street and Fitzwilliam Street is identified by a set of continuous perimeter steps and / or ramps, low level feature walls and / stainless steel bollards. The most recent renovation of this public space is estimated to have occurred approximately 20 years ago, at which point the external ground level has been raised to create a level threshold at the main front entrance.
- 2.16 Nine stainless steel grilles (Appendix A, photo 13) are located in the paving against the base of the external walls on three sides of the building (North, East and West). These seem to coincide with the location of the original underfloor vents on these elevations, which were encroached upon and therefore required alteration when raising the external ground levels. It appears these grilles were purposely designed to try to limit the unrestricted entry of surface water from the adjacent paved surfaces whilst still providing some degree of ventilation to the subfloor, albeit at a much reduced surface area.
- 2.17 Internally, the front entrance is provided with a glazed draught lobby / porch, although the inner set of doors are removed and stored in the rear storeroom. The main library floor is presented with a fixed timber reception desk, fitted perimeter timber book shelving with a canted base and modern free standing shelving units.

- 2.18 The inside face of external walls is lined with painted wood fibre type insulating board fixed to the solid brick walls. To the lower half of wall, the surfaces are concealed behind the bookshelves. The woodfibre insulation features in Drumcondra library also and appears to be original to the building.
- 2.19 The main library floor comprises of suspended timber construction with carpet covering over tongued and grooved timber floorboards. The floor joists (visible from a subfloor void access panel in the basement) span left to right (gable to gable) and comprise 170 x 50 mm softwood timber joists @ 350mm centres with herringbone bridging. The size and spacing of the two floor joists nearest the front and rear walls are increased (170 x 75 mm @ 295 mm c/c), assumedly to account for the anticipated storage load (book shelving) along these walls at the time of original construction. No insulation is contained within the sub-floor structure (Appendix A, photos 36-40).
- 2.20 The floor joists are carried by a series of painted steel I-beams measuring c. 256 x 128 mm @ 3 m cc, spanning front to rear, jointed and supported at mid span with a bolted plate connection over a 470 mm square masonry brickwork and granite padstone capped tassel pier. The bearing ends of the beams are likewise supported by granite padstones built into the face of the external walls.
- 2.21 The subfloor construction comprises a layer of oversite concrete with a residual c. 815 mm crawl space void between the underside of the timber joists and the surface of the subfloor concrete layer. This crawlspace height reduces to c. 560 mm beneath the steel beams.
- 2.22 A series of through wall vents are provided around the perimeter of the subfloor. These appear to coincide with the grilles in the paving around the perimeter of the building (as noted previously).
- 2.23 A bitumen damp proof course (DPC) is visible (from within the crawlspace void) near the bottom of the external walls (Appendix A, photo 42). Based on the approximate height of the external ground levels surrounding the building, we anticipate that the DPC is bridged on three sides of the building, whilst it is approximately flush with external ground level on the remaining (South) elevation.
- 2.24 The floor in the rear lean-to comprises in-situ concrete slab construction whilst the stairs descending to the basement store are also of concrete construction.
- 2.25 Ceilings appear to comprise painted / papered wood fibreboard throughout.
- 2.26 Internal joinery is generally of painted timber construction and includes skirting boards, profiled architraves, fitted wall bookshelves and reception desk.
- 2.27 The cold water storage tank is of uPVC construction and is located in the plant room resting on a timber base mounted on mild steel wall brackets. The water tank is uninsulated and is not provided with a lid. Service pipework associated with the water tank is mostly insulated with sleeved cellular insulation and taped joints, but bends and connection are generally poorly insulated or exposed.
- 2.28 The electrical meter and consumer board are located inside a proprietary service box in the rear lean-to (Appendix A, photo 47). The distribution board comprises modern miniature circuit breakers (MCB's). Electrical sockets and switches comprise a combination of older *Bakelite* and modern wall mounted fittings and wiring / conduits.
- 2.29 The property is served by relatively modern smoke detection, emergency lighting and security alarm systems (Appendix A, photo 48). The majority of the control panels for these systems are located in the rear lean-to.
- 2.30 The heating system comprises floor mounted cast iron columnar radiators served by distribution pipework of gun barrel construction to and from a modern *Remeha Gas 350* boiler located in the plant room. The boiler vents through the rear external wall whilst the supply gas meter is housed externally on the opposing side of the plant room wall within a proprietary meter box, protected by a steel cage.

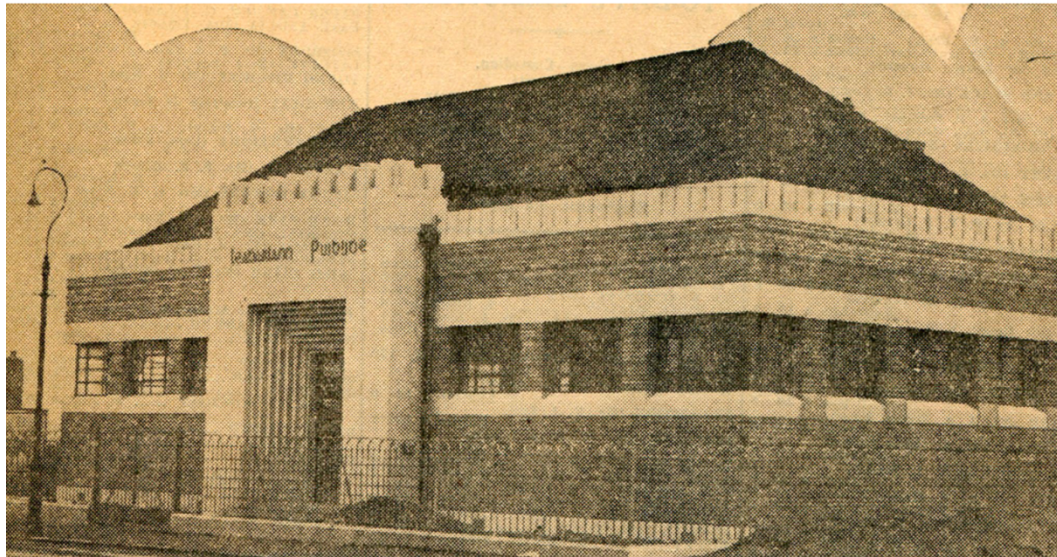
The heating controls are located in the rear lean-to. A *Monicon* gas detection installation accompanies the boiler installation in the plant room.

- 2.31 The original internal fireplace / boiler location is closed off and concealed. No through ventilation remains to the sealed chimney flue, whilst the chimney pot remains exposed externally.
- 2.32 An electric sump pump is located at the bottom of the basement stairs (Appendix A, photo 45). The sump is located at the lowest point in the building with the intention of serving as an emergency pump in the event of a flood at the property.
- 2.33 The underground drains were not inspected as part of our survey. However, we lifted one of the small inspection chamber lids serving the foul water drainage system to the rear of the building. The underground pipework is of clay ware construction as would be normal for buildings of this era.

3.0 ROOFS

- 3.1 The roof coverings are generally aged, but nevertheless in good condition. Localised damage and piecemeal repairs (glued broken tiles) were evident in a few isolated locations but overall the roof coverings remain intact with no evidence of significant damage, failure or water ingress (Appendix A, done photo 15-26).
- 3.2 Localised minor damage is evident to the ridge tiles, hip tiles and quarter infill tiles along the hip corners. Localised repairs should be undertaken to prevent / limit further deterioration.
- 3.3 Given the estimated age of the tile roof coverings, we would expect a certain degree of brittleness. The tiles are quite likely to experience breakages with any foot traffic across the roof surfaces (during other repairs and the like). Suitable precautions should be taken when repairing and maintaining the roof coverings into the future, for example, always using a ridge mounted roofing ladder.
- 3.4 It is suggested that some of the existing roof coverings on the rear lean-to be salvaged, stored and reused for any current and future repair works to the main roof.
- 3.5 It is not possible to adequately determine the condition of a felt membrane lining in the parapet gutter based on an external visual (i.e. drone) inspection alone. Nevertheless, the projected life span for a typical felt covering such as this would be in the order of 20 – 25 years (although some roofs may reach far in excess of this time frame depending on exposure and maintenance etc.). On this basis, it is expected the current felt membrane is already well advanced through its functional life.
- 3.6 Taking into consideration the remaining estimated lifespan together with the extent of planned refurbishment and the occurrence of some localised internal damp staining (described later), we recommend the proactive full removal and replacement of the existing entire parapet gutter lining. We suggest the reintroduction of a more traditional parapet lining be strongly considered to reinstate both the character and long-term durability of this aspect of the roof construction. In this regard, we expect the most likely original lining material will have comprised copper sheet. All new copper sheet and required step heights should be detailed and installed in full accordance with guidance from the Copper Development Association.
- 3.7 Furthermore, it is suggested that appropriate balloon grates or similar be installed at the scupper outlets to prevent accidental blockages which can commonly occur (e.g. dead birds, drink bottles, footballs, etc.). In a similar vein, we suggest it is prudent to consider incorporating an emergency overflow pipe through the thickness of the parapet wall. The overflow should be sited in a conspicuous but not unsightly location, which will be immediately noticeable in the event of an overflow but otherwise not attract attention in the principal views of the building. The layout of the proposed extension should inform this decision.
- 3.8 It is unknown, but suspected that a damp proof course is incorporated into the top of the parapet wall beneath the modern precast concrete coping. It is noted from earlier photographs (Fig. 4 below) that

the coping may not have existed originally suggesting that it may have been installed to rectify a defect/damp ingress issue. This coping detail exists at the two other similar library buildings (Fig. 2 above). Nonetheless, we suggest it would be prudent to investigate the presence of a DPC in this location as part of the planned refurbishment. Although, we see no current evidence to suggest the existence of any issues with water penetration (which can occur through the joints in the concrete coping) into the top of the parapet and external wall fabric, we do however highlight the net effect of the planned wrap around extension, which abuts three sides of the existing building. From this perspective, it is noted that these three external walls will transition to an internal wall at lower level within the new extension below. As such, their weather tightness will take on a greater significance and importance in the extended property.



*Fig. 5: Photo taken at the opening of the library in 1937.
Note the absence of the in-situ coping to the roof parapet*

- 3.9 The chimneystack appears in generally good condition with no evidence of significant cracking, deflection or instability. However, a vertical hairline crack (Appendix A, photo 43) is evident on the centre of the front face (facing the main roof slope). The exact cause of cracking could not be determined on the day of inspection. However, we are of the opinion that the likely cause is due to inadequate allowance for expansion of the assumed flue liner during initial construction of the stack. Flue liners tend to expand and contract very slightly during periods of use and intervening non-use. These movements exert forces on the surrounding masonry resulting in vertical cracking in order to release the pressure. We recommend that this cracking be fully raked out, repaired with stainless-steel tie-bars and filled to prevent ingress.
- 3.10 There are approximately three cases of localised damp staining on the library ceiling, the most noticeable of these being in the extreme rear right corner and the immediate right of the front entrance where the damp staining continues down the inside face of the front external wall. Localised repairs and renewal are required to internal finishes whilst further investigations should be conducted at ceiling and roof level to determine the condition of the timber joists and rafters in these areas. Until this can be confirmed, a budget should be retained for the localised careful spliced repair and replacement of the bearing ends of these structural timber components and the associated wall plate (say maybe 8 - 10 rafter and joist ends). Such an allowance should also cover the parapet decking board and bearing timbers, which support the underside of the parapet deck.
- 3.11 The chimney pot is disused and redundant. It should be fitted with weather capped cowl to stop direct rainwater entry. Alternatively, the flue could be permanently closed at the top, but in this scenario, it would be preferable to have the internal chimney flue cleaned out beforehand.

- 3.12 The arrangement of the chimneystack flashings is not ideal. Despite the absence of any existing internal damp staining in this area, we recommend the proactive improvement of the flashing to include adequately detailed abutment cover flashings.
- 3.13 The cast iron rainwater goods appear in good functional condition with no sign of significant damage, corrosion or leakage. The provision of the wrap around extension will likely prompt the alteration of the existing outlets and downpipes, in which case, the existing assemblies should be carefully dismantled, salvaged, overhauled and re-used, where possible. The retention and reuse of these original features contributes to the preservation of the historic character of the building.
- 3.14 The roof coverings on the rear lean-to are in generally similar condition to those of the main roof. The abutment lead cover flashing is loose and has come undone. Ideally, this should be repaired in the short term to prevent possible water ingress into the roof void. In addition, cross ventilation should be introduced to this lean-to timber roof structure. However, from the perspective of the proposed refurbishment project, these matters are of little concern, as the rear lean-to is proposed for demolition.

4.0 ROOF VOIDS

- 4.1 Access was gained to the main roof void and rear lean-to roof void through ceiling hatches and the following was observed (Appendix A, photo 34):
- 4.2 The roof structure of the main roof appears in generally good condition. The main steel trusses appear in good order and condition with no sign of visible corrosion. Areas of previous water ingress staining around the lower purlin and rafter-ends at parapet levels is evident (Appendix A, photo 53-54).
- 4.3 The original bitumen type underlay is present below the concrete roof tiles in the main roof. The underlay is largely intact but friable damaged in a number of areas. Patch repairs to the underlay should ideally be undertaken from the exterior with localised removal of tiles (which may only be nailed every 2nd/3rd course) and battens. New sections of roofing membrane can be then inserted where required. The delicate nature of the concrete roof tiles is noted as above and will require protection measures during this work.
- 4.4 There is no ventilation to the main roof void. Adequate provision for cross ventilation should be introduced to ensure the long-term integrity of the structural roof timbers, particularly where the insulation levels are proposed to be increased at ceiling level. We suggest this be accommodated using ventilated tiles positioned near the bottom of the front and rear roof slopes, ideally out of view when standing on the footpaths on the opposing sides of Bridge Street and Fitzwilliam Street.
- 4.5 The lean-to roof timber structure appears in generally good condition with no evidence of significant distortion, movement or water ingress into the roof void. No further comment is warranted on the understanding the rear lean-to is to be demolished.
- 4.6 The roof void of the lean-to is uninsulated. Should the lean-to be retained in any revised proposals, we recommend it be provided with 300 mm of quilt insulation or equivalent to bring the property up to modern standards. This upgrade will result in a colder internal environment within the roof void above the insulation layer and an increased risk of condensation on the underside of the impervious roofing felt. It is very important that adequate cross ventilation be incorporated to counteract this probability (as already recommended).

5.0 FACADES / EXTERNAL WALLS

- 5.1 No invasive opening up works were carried out to the external walls to establish the presence or condition of cavities, cavity ties, bonding timbers, timber lintels, insulation and the like. However, due to the approximate age of the property and our observations on the day of inspection, we expect the external walls are of solid masonry (concrete brick outer facing with clay-brick inner core) construction

with no insulation apart from the woodfibre lining noted above internally. It is considered unlikely that bonding timbers and / or timber lintels are provided within the thickness of the external walls.

- 5.2 The external walls appear free from widespread or significant structural cracking and are plumb and in good order and condition. There is some hairline cracking to the elevations generally, for example in localised parts of the concrete cill and head courses, but this is not considered abnormal. Some amount of hairline cracking is expected in a property of this type and age and is usually attributable to the normal thermal movement of the building fabric. Nevertheless, we recommend all hairline cracking be raked out and filled to discourage potential water penetration into the wall fabric, which would be of concern from the longer-term perspective of any possible embedded steel reinforcement.
- 5.3 The external brick are a pink/red coloured concrete brick with a c. 5mm down exposed aggregate. Some of the brickwork displays evidence of weathering and deterioration in localised areas (Appendix A, photos 10-11). This is more prevalent on the more exposed corners and upper ledges of the brick string-courses and on the southern façades. This damage is most likely due to the repetitive and cumulative freeze-thaw action of moisture naturally absorbed by the brick and corresponds with the areas of brickwork prone to retaining moisture for more prolonged periods due to either to the detailing of the projecting stringcourse ledges or the increased exposure of the southern façade, which faces the prevailing wind and rain. In these locations, the brickwork is exposed to increased moisture levels for longer periods, thereby elevating the risk of freeze-thaw damage. Rainwater naturally absorbed by the brick may not have sufficient time to evaporate prior to a cold snap when the entrapped moisture then freezes and expands, thus exerting pressure within the saturated face of the brick and causing it to spall. It is however noted that the majority of the worst affected areas are to be enveloped by the proposed wrap around extension and as such, exposure to excessive and consequent freeze thaw risk would no longer apply.
- 5.4 Nevertheless, the aesthetic appearance of the existing weathered bricks may prompt a discussion on the merits of potential repair or replacement. Options for repair include 'plastic' repairs using a coloured repair mortar blended to replicate the existing brick matrix (aggregate and binder content) and appearance in terms of colour, texture, shape, removing and reversing bricks or sourcing new replacement bricks. The wrap-around extension will internalise a number of walls but it is understood that the brick facing may be retained exposed within the building. The break-outs for new openings into the main library space will provide an opportunity for salvage of bricks for external façade repairs which may be the preferred option. The bricks are pointed with a white mortar with a fine quartz-type aggregate to a depth of 8-10mm over an apparently softer & darker bedding mortar. This is an unusual & interesting use of a traditional pointing technique used on a 20th century concrete-brick finished building. Efforts should be made to replicate the pointing mortar insofar as possible based on a number of trials as part of any brick repair proposals.
- 5.5 There would be no insulation to the external walls given the age of the building, with the exception of the wood fibreboard layer installed on the interior face of the walls. The small storage spaces either side of the entrance are uninsulated. The fibreboard layer has been papered over in areas which should be investigated further to establish why this was carried out. The internal wall lining retains shallow Art-Deco recessed banding and panels which should be retained or re-instated (should a dry-lining system be proposed). Localised areas of the internal walls to six no. radiator recesses are finished with Chrysotile asbestos boarding which has been identified on the previous asbestos report to the building by MDK Analytical Ltd.
- 5.6 The fire rating and performance in terms of surface spread of flame of the wood fibreboard layer on inside of the external walls is unknown. Further advice should be obtained if this layer is proposed to be retained in the refurbished building.
- 5.7 The base of the external walls are provided with a bitumen damp proof course (Appendix A, photo 42). This DPC was bridged / by-passed on three sides of the building when the external grounds were raised as part of the past re-landscaping works. It is estimated that the DPC is flush with external ground level on the remaining south wall. None of this is ideal in that standard practice would be

provide a 150 mm separation between external ground level and internal finished floor level to prevent the possibility of lateral damp penetration and rising damp.

- 5.8 The entire inside face of the external walls were inaccessible at low level throughout the library (due to the bookshelves) apart from localised areas in floor-level storage spaces at the base of the shelving units and as such, it was impossible to determine whether these surfaces are subject to any elevated dampness as a result of the bridged DPC. We did however conduct a localised inspection of the timber floor joists and wall plate at the base of the north wall in the subfloor crawlspace and found no evidence of any significant dampness or potential timber decay in this area. It would be prudent to carry out a more wide ranging inspection as a matter of caution.

6.0 EXTERNAL WINDOWS AND DOORS

- 6.1 The main front entrance door appears to be an early or original unit and is in largely good condition. However, general easing and adjustment (i.e. gentle refurbishment) should be expected. This work should be undertaken by a skilled conservator / joiner.
- 6.2 The inner doors have been removed from the entrance porch and are stored in the rear storage room of the lean-to. Consideration should be given to reinstating the doors so that they are conserved in-situ in the event of the re-location of the principal entrance.
- 6.3 The metal *Crittall* style windows appear to be in working order for the most part. The opening sections were not tested, but a large number of the pivot lights were in the open position on the day of inspection.
- 6.4 Paintwork to the windows appears to be in generally good condition with the exception of localised deterioration, bubbling finishes and corrosion staining which was evident to the bottom of the corner post, base plate and wrap around window frame units. Careful paint removal and localised cleaning of the steel frames is required in these areas to inspect and confirm the condition of the steel windows.
- 6.5 A number of the windows comprise later replacement metal units. These replacements are not an exact match for the original units in terms of their detailing (i.e. the dimensions and interface of the mullions, transoms and opening light frames) or ironmongery and exhibit a less refined and more chunky appearance as a result. It is recommended that consideration be given to providing new accurate replica metal windows for the purposes of faithful reinstatement of character in the building. Single glazed windows provide an inherently lower thermal and sound performance compared to modern alternatives. However, these windows, particularly the original units form a significant part of the historic character of the building and should be protected, conserved and repaired where necessary.
- 6.6 In terms of potential thermal improvement for the windows, it is envisaged that this will be difficult given the absence of a deep internal reveal to accommodate the possibility of secondary glazing. The inward opening arc of the pivot lights further complicates matters in this regard. The replacement of glass with modern slim vacuum panes could be investigated subject to adequate depth of rebates being available in the steel framing to accommodate the glass and what appears to be a putty seal to the glass. Further detailed consideration will be required to examine any possible thermal or sound upgrades to the windows without affecting their special interest, but at the least, it should be possible to incorporate a draught proofing system to all windows.

7.0 INTERNALLY

7.1 FLOORS

- 7.1.1 The floors appear in good condition with no noticeable unevenness, falls or spring which might suggest any underlying problems.

- 7.1.2 As noted above, the c2003 external landscaping works appear to have reduced subfloor ventilation when the ventilation grilles were re-set horizontally at ground level. There is evidence of cobwebs around ventilation openings in the subfloor indicated that there is inadequate airflow through the subfloor area (Appendix A, photo 40).

It is expected that thermal improvement of the floor structure will be examined in the planned refurbishment. In this regard, it should be noted that any improvement in the thermal performance of the floor structure will lower the relative temperature in the subfloor crawlspace below (as heat transfer from the library will then be limited). This will increase the potential for condensation in the subfloor zone. It is important that the subfloor is provided with an adequate flow of cross ventilation to protect against the increased risk of elevated humidity and condensation in this scenario.

7.2 INTERNAL WALLS AND PARTITIONS

- 7.2.1 Internal walls and partitions are restricted to the rear lean-to only. No specific comment is made given the planned demolition of this part of the building.

7.3 CEILINGS

- 7.4 The ceilings to the main library space and lean-to comprise of painted / papered wood fibreboard throughout. The ceiling to the main library appears from ground-level inspection to be painted over a lining paper with timber laths covering the joints of the boards. The ceiling is not considered to be a significant feature of the building should the thermal and fire resisting characteristics of it require to be improved.

- 7.4.1 Due to the age of the building, the possibility that some part of the ceiling (and / or wall) linings might contain some degree of asbestos content materials (ACM's) cannot be discounted (see later related note under 'Building Services').

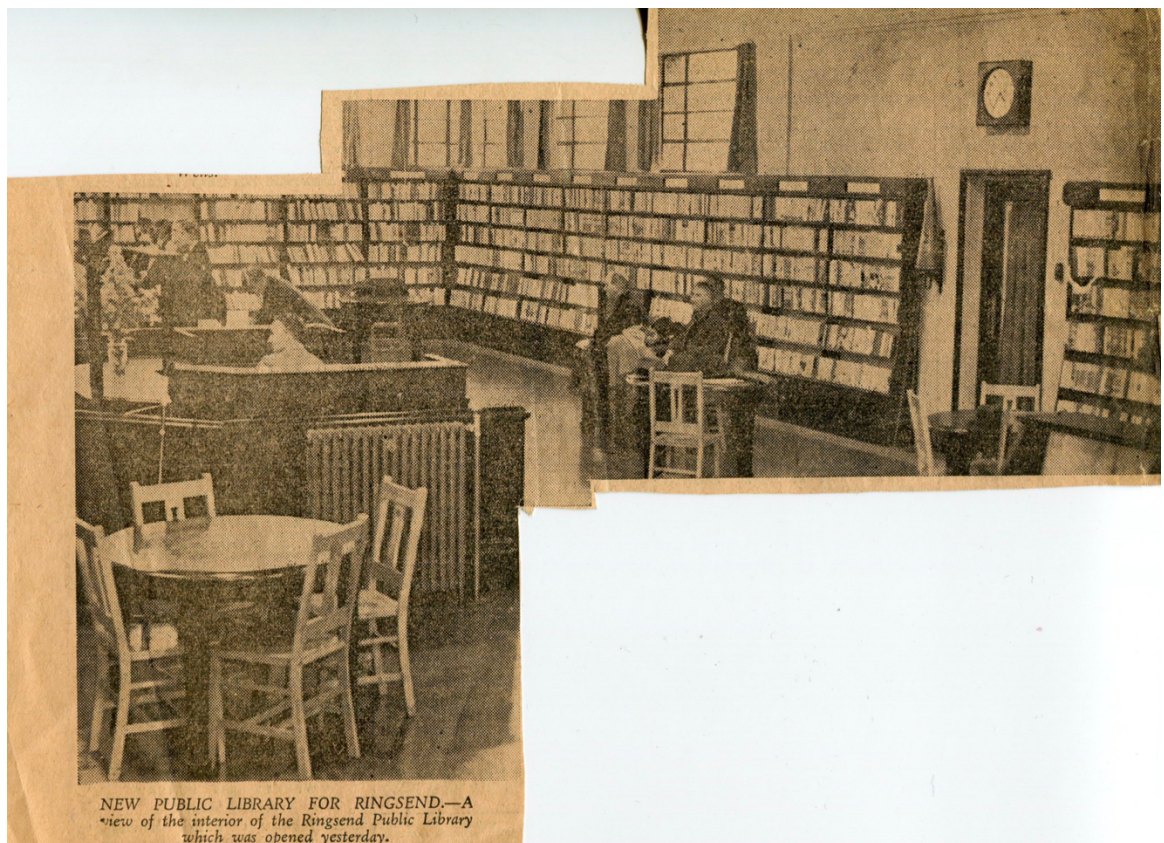


Fig. 6: Interior of the library taken around the time of its opening in 1937. Note colour scheme of fitted shelving and original location of reception counter

8.0 ACCESSIBILITY

- 8.1 We did not undertake an accessibility audit of the property. It appears that one motivation for the c2000 external landscaping works was to provide an accessible level main entrance which is hampered by the single-opening leaf width of the original double doors.

9.0 BUILDING SERVICES & ASBESTOS

- 9.1 As stated in our limitations of inspection, our inspection of the building services was of a brief visual nature only. We anticipate that full replacement of the building services is envisaged in the proposed extension and refurbishment.
- 9.2 We have been provided with a copy of an asbestos management survey carried out at the property in June 2017. This survey indicates the presence of ACM's in the panelling behind the cast iron radiators. This information should be incorporated in to the preliminary safety and health plan furnished to any tendering building contractor.
- 9.3 Asbestos surveys are not exhaustive and rely on representative samples of certain building materials taken from freely accessible areas only. As such, although the risk of encountering ACM's during refurbishment is minimised, it must be appreciated it is not completely eliminated. Indeed, we have slight concerns the existing quilt insulation around the central heating distribution pipework noted in the subfloor void and the black water closet in the toilet may contain further ACM's and should be therefore further advice should be sought from an asbestos surveyor to confirm any potential additional presence. In any case, contractors working on buildings of this age must always be advised to proceed with caution, particularly during the strip out and demolition phase of any new works.
- 9.4 The floor mounted cast iron columnar radiators would be considered to contribute to the historic character of the building and should be protected and conserved where possible. However, the associated gun barrel piping is known to be problematic, particularly when recessed in concrete floors (such as the rear lean-to) where it is prone to sudden failure (it rusts from the inside out causing gradual deterioration which does not become evident until the entire system has failed). Visible corrosion was noted to the pipework at the radiator connections generally. We recommend that complete replacement of the central heating distribution pipework be included in the planned refurbishment works.
- 9.5 There was no evidence of blockage and the underground drainage pipe appeared to be free flowing in the sample drain opened on the day of inspection (i.e. the foul drain into which the toilet discharges).
- 9.6 We confirm the underground drains comprise of clayware construction, as would be expected for a property of this era. Clayware drains are susceptible to differential settlement, tree root ingress and leakage throughout the life of a building. We recommend a full CCTV survey be commissioned and a contingency sum retained for clearing and potential repairs and improvement to the underground drains (foul and surface water).

10.0 PLANNING HISTORY

- 10.1 We have not been instructed to investigate or outline the planning history of this property. Therefore, no planning search has been undertaken.
- 10.2 We have however made a brief search of the Dublin City Council Development Plan and the property is not protected, nor is it currently identified in the National Inventory for Architectural Heritage (NIAH). That said, the contemporary libraries at Inchicore and Phibsborough are listed in the NIAH and on the basis that the Inchicore branch was deemed to be of sufficient merit as to warrant inclusion with a regional rating of importance, we suggest the Ringsend branch should be treated with similar care and sensitivity in respect of the planned extension and refurbishment. The DCC conservation has

noted that historic buildings in public ownership are often not protected given that they are in state care and not private ownership.

11.0 BUILDING REGULATIONS

11.1 The statute under which the Building Regulations are made in Ireland is the Building Control Act 1990 introduced in 1992. The property therefore predates this legislation and neither this Act, nor the Regulations themselves are applicable retrospectively. That said, any alterations or fit out works, etc. conducted since the implementation of the Building Regulations would have been required to comply with the requirements in place at that time.

11.2 Whilst we have raised one potential query regarding fire safety in the building (the surface spread of flame rating for the wood fibreboard layer), we reiterate the fact that modern Building Regulations and compliance with these standards are designed with new buildings in mind and those after the introduction of the regulations in 1992. However, in addition, and in the case of public buildings, the primary piece of legislation concerned is the Fire Services Act 1981 which sets out the basic principles of fire safety expected in such buildings.

12.0 HEALTH & SAFETY

12.1 We have not been instructed to source, review or compile any health and safety files. We do not know if any health and safety file is in existence.

12.2 Where not currently in existence, we recommend that a formal safety file be initiated. This document should include all available building specifications, drawings, building services as well as risk assessments, method statements and safe systems of work for all cyclical and recurring elements of building maintenance.

12.3 Some of the external hard landscaping includes elevated features with unprotected edges which are easily climbable by children. This might pose a public liability insurance risk.

13.0 LEASE & TENURE

13.1 We have not been instructed to review the content of the any lease agreements.

13.2 We assume that the property is held in freehold title, however we have not reviewed any folio or filed plan associated with the property.

14.0 BOUNDARIES & EXTERNAL GROUNDS

14.1 Our instruction did not include the undertaking of a boundary / folio check. It would be prudent to have a comparison made between any folio / deed for the existing property and boundaries on the ground.

14.2 Our instruction did not include the inspection, assessment or reporting upon any part of the external grounds, anticipated boundaries or public realm which surrounds the building.

15.0 PROBLEMATIC & DELETERIOUS MATERIALS

15.1 The Irish Property and Construction Industry regard some materials used in the construction of buildings as "Deleterious ", meaning that in some way the materials are considered problematic. We had regard to the presence of these materials during our inspection;

Material	Occurrence	Recommendation
High Alumina Cement	Not suspected to occur	N/A
Calcium Chloride Concrete additive or contamination	Unknown. Possible, but considered unlikely. Construction predates the use of calcium chloride as an accelerator in concrete mixes. No evidence of significant exterior deterioration which would be suggestive of chloride induced damage due unwashed aggregate inclusion or later contamination. Location is close to the marine environment (c. 500 metres) but is not considered close enough to experience direct sea spray wetting.	Under review
Woodwool slab	None evident	N/A
Calcium Silicate brickwork	Not suspected to occur	N/A
Asbestos	Based on the age of the property, it is possible / likely that asbestos is presented in isolated elements and is perhaps concealed behind more modern linings. Some elements are already confirmed, whilst others have been identified as a potential concern.	Undertake more invasive asbestos management survey, in advance of planned refurbishment.
Machine made mineral fibre	None evident	N/A
Nickel Sulphide Inclusions in toughened glass	Not suspected to occur	N/A
Composite panels	Not suspected to occur	N/A
Urea Formaldehyde Foam	Not suspected to occur.	N/A
Lead paint and Plumbing	Not likely	N/A
Mundic concrete / Materials containing pyrite.	Not suspected to occur.	N/A

16.0 ENVIRONMENTAL CONSIDERATIONS

16.1 Contaminated Land and Land Use

No investigation was undertaken to establish the history of use on the site. Nothing was seen during our site inspection which leads us to suspect that the land on which the property is located is subject to contamination.

16.2 Flood Risk

We have not undertaken any detailed investigations into the potential for flooding in the area in which the property is presented which it is assumed will be investigated as part of the civil & drainage works proposed as part of the project. The presence of a sump pump in the basement of the building is noted (Appendix A photo 45). The office of public works maintains a database outlining areas prone to flooding and also gives detailed guidance regarding flood risk assessments and actions in the event that your property is flooded. Maps available from the OPW flood hazard map suggest that there is no history of flooding on the site. For more information, refer to www.floodmaps.ie.

16.3 Mining and Associated Subsidence Risk

We did not undertake any assessment to establish if there is a history of mining in the area.

16.4 Radon Gas

Radon gas is a naturally occurring radioactive gas, which occurs during the decay of uranium. Entry of this gas into buildings is undesirable as levels can accumulate and reach levels considered dangerous to humans. It is suspected that this gas is responsible for 5 – 10 % of all lung cancer related fatalities in this country.

Mapping produced by the Radiological Protection Institute of Ireland identifies areas of the country where there is predicted to be a particular risk from radon. A high radon area is any area where it is predicted that 10% or more of properties will exceed the reference level of 200 Bq/m³. The RPII mapping indicates that the subject property is located in an area where it is predicted that high radon levels will be present in between 1% – 5% of properties.

Ideally testing should be carried out to establish the exposure to high levels of naturally occurring radon gas (if this has not been conducted in the past). As this property is a workplace, the reference threshold level is 400 Bq/m³. If radon concentrations above this threshold are found, then remedial action to reduce the concentrations is likely to be needed.

16.5 Vermin and Wildlife

There are up to 200 animals and up to 400 plant species which are considered to be threatened or endangered under the Conservation and Natural Habitats and Wild Flora and Fauna Directive. We did not undertake any specific investigation to establish the presence of these flora or fauna on the site including bats.

There was no evidence of any significant gathering of birds at the time of inspection.

16.6 Electromagnetic Fields

There has been concern that electromagnetic fields from natural and artificial sources cause various serious illnesses. Typical artificial sources of electromagnetic fields include high voltage overhead and underground cables and power lines.

Controversy and uncertainty prevail with regard to this matter and as far as we are aware there is no study, which either conclusively proves or disproves the concerns. As a result, you should be aware that the presence of high voltage power lines either above or below ground could affect its value into the future.

There are no high voltage overhead power lines in the vicinity of the property but underground and buried cables are more difficult to identify. We have not undertaken any enquiries with the statutory authority to confirm establish the presence or future provision of any such cables.

17.0 CONCLUSIONS & RECOMMENDATIONS

The property is in substantially good structural order and condition. The most important elements of works which are anticipated to be required in conjunction with the planned extension and refurbishment project are listed as follows:

1. Minor repairs are required to the main roof concrete tile coverings and underlay. Tiles may be salvageable from the lean-to roof which is planned for demolition as part of the proposed extension works. Although the majority of the lean-to section formed part of the original building, it does not form a significant architectural expression by comparison to the main block and its removal is considered acceptable in the context of the coherent substantial extension of the building.
2. Additional ventilation should be provided to the main roof void, while the attic floor will be insulated to modern standards with fibre quilt insulation. The detail of the means of ventilation should be agreed.
3. The proposals include the provision of a linear rooflight to the rear slope of the existing building to achieve a natural ventilation strategy and improve daylighting within the space, given that a number of the windows will become internalised. Existing original ceiling finishes will otherwise be retained internally. Roof finishes around the rooflight opening externally will be protected from damage during the works by means of temporary boarding & underlay, etc.
4. The parapet gutter lining is well advanced through its functional life expectancy and is leaking in a few locations. It should be completely replaced, ideally using traditional sheet metal linings including the small flat roof over the front breakfront entrance.
5. Balloon grates should be installed to all scupper outlets to prevent future accidental blockages. Consideration should be given to also installing an emergency overflow through the parapet wall.
6. It would be prudent to investigate the presence of a DPC beneath the precast concrete parapet coping.
7. The vertical hairline crack in the front face of the chimney should be repaired and the chimney top capped and ventilated, or alternatively the flue should be cleaned and sealed.
8. Localised repairs can be expected to be necessary to the few localised areas where water ingress appears to have occurred through the parapet gutter. These should include for the timber parapet decking, wallplate, timber rafters and attic joists etc.
9. The chimneystack flashings need to be upgraded to prevent future water ingress. The chimney however is proposed to be removed as part of the extension work. The removal of the chimney is considered to be acceptable given the related boiler will not form part of the future servicing of the building and in terms of the coherence of the architectural design of the extended building.
10. The localised vertical hairline cracking in the concrete band courses should be repaired to discourage the possibility of water penetration into the wall fabric to any façade sections that remain exposed.
11. The external concrete facing brickwork is eroding externally in a number of areas – see Appendix 1 sample photographs 10 & 11. Where these eroded areas are becoming internalised, they shall be retained as existing. Where areas of brickwork repair to external facades are to be carried out, replacement brick will be carefully salvaged from the proposed break-outs below the windows in the gable ends of the building (These break outs are considered acceptable insofar as they have been kept to a minimum and relate to the original window openings overhead and an axial route through the extended building). The eroded bricks requiring replacement shall be carefully removed with minimum disturbance of the adjoining sound brick units. The replacement brickwork shall be reinstated to a matching bond pattern and finished with a flush joint and while pointing mortar to match existing. The particular aggregate sparkle & characteristics of the existing pointing mortar is noted. Sample areas of pointing shall be arranged to achieve a close match of the existing as possible in terms of finish and binder composition.

12. It is understood that it is not proposed to thermally upgrade the existing walls of the building given that they will be internalised on three sides and the walls retain a basic amount of wood fibreboard insulation internally. Further advice / confirmation on the potential implication of the unconfirmed surface spread of flame fire rating for the wood fibreboard insulation layer on the inside of the external walls may be required.
13. It would be prudent to carry out a wider inspection of the condition of the timber floor (joists ends and wall plate) to fully confirm the integrity of the timber floor structure, especially along the external walls where the DPC has been bridged by the past external re-landscaping works.
14. Cross ventilation should be improved to the subfloor. This is even more important if the thermal performance of the floor is upgraded with potential for increased dewpoints in the floor construction. The detail of the replacement cross-floor vents in relation to the new extension should be confirmed.
15. It is understood that it is not proposed to thermally upgrade the existing metal windows of the building given that they will be internalised on three sides. The windows require localised cleaning and redecoration to tackle some localised corrosion.
16. ACM's have been identified in the panelling behind the cast iron radiators. However, further materials / components have been identified during our inspection as also containing possible ACM's. Further asbestos surveys / confirmations are therefore recommended.
17. A CCTV survey should be conducted of the underground clay ware drains with a budget retaining for localised repairs.
18. Ideally, the property should be tested for radon level (if it has not been tested in the past).

There are other general items raised within the body of our report, which are not listed here. This report should be read in full.

Signed:



Fergal McGirl Dip. Arch B.Arch Sc Dip. App. Bldg Cons. MRIAI
RIAI Conservation Architect Grade II

5 April 2023

Appendix 1

Photographs Recorded During Inspections

(photograph dates 7.12.22 & 3.3.22)



1. - Front Elevation to Bridge Street



2. - Oblique view taken from the South East



3. - Oblique view taken from the North East



4. - Oblique view taken from the North West



5. – Front entrance door detail



6. – front entrance porch detail and half-unicial lettering to signage



7. - Rear Elevation to Fitzwilliam Street



8. - View of rear plant roof and concrete flat roof over



9. - View of South West corner of building.



10. - Detail to corner of above location, evidencing deteriorated brick condition



11. – Detail to above location, evidencing deteriorated brick condition



12. View of subfloor wall vents (South wall).

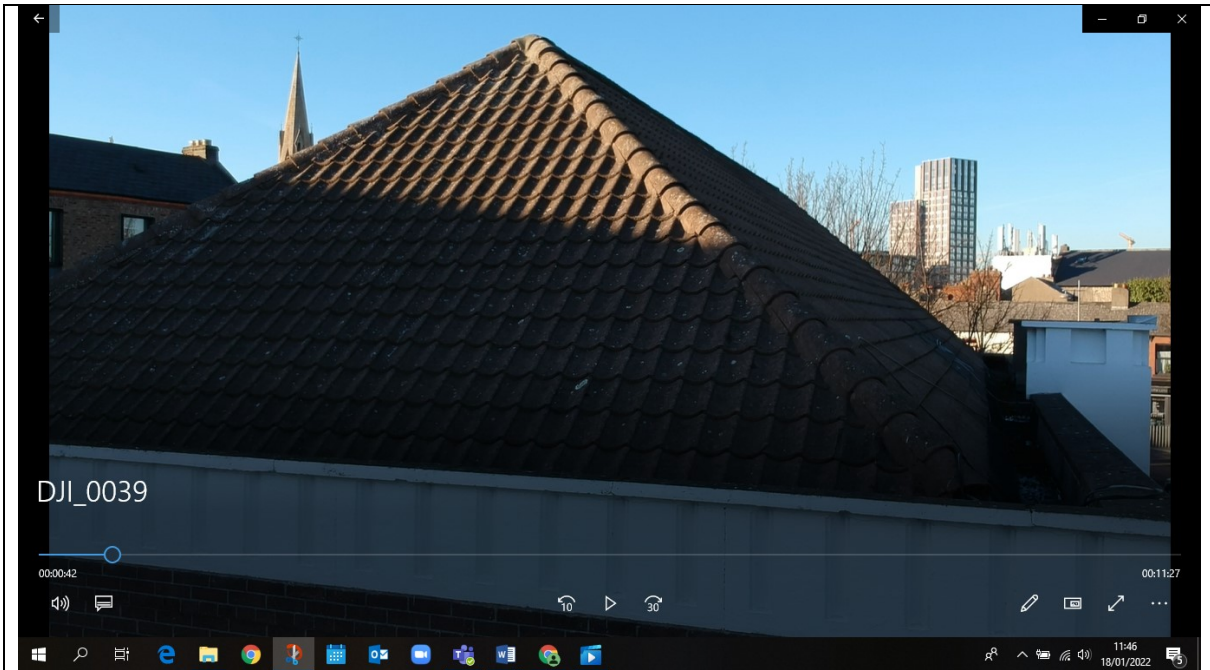
Note: Estimated DPC level is flush with external ground level



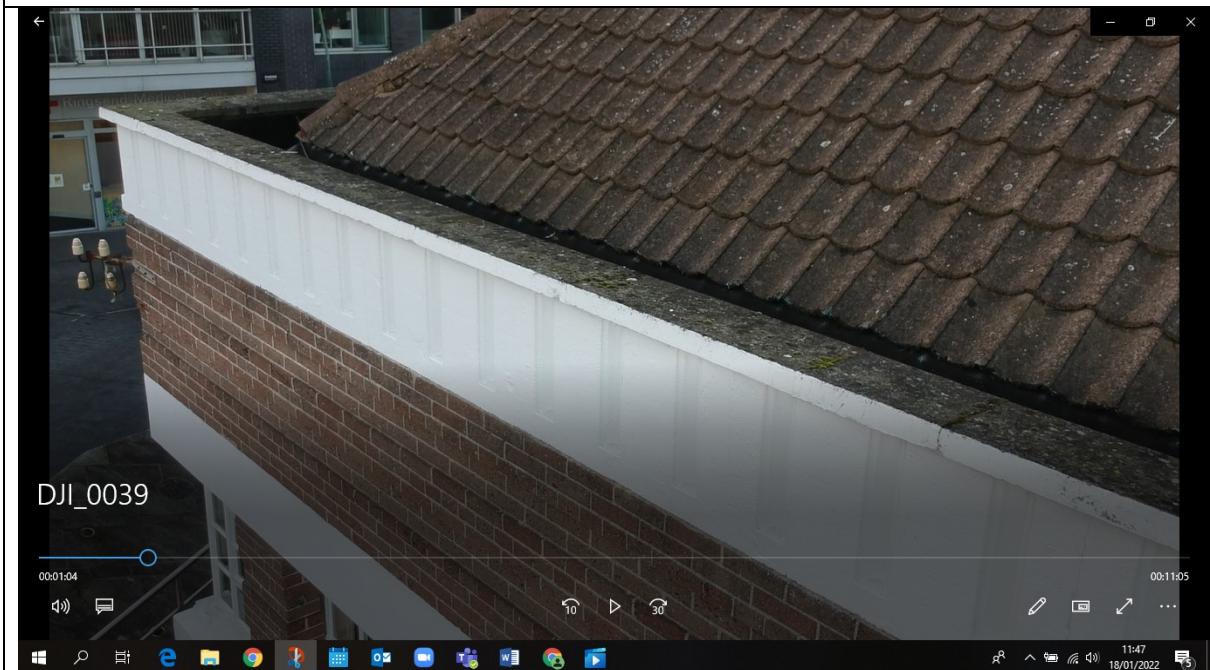
13. - View of bespoke surface vent to altered original subfloor vent locations



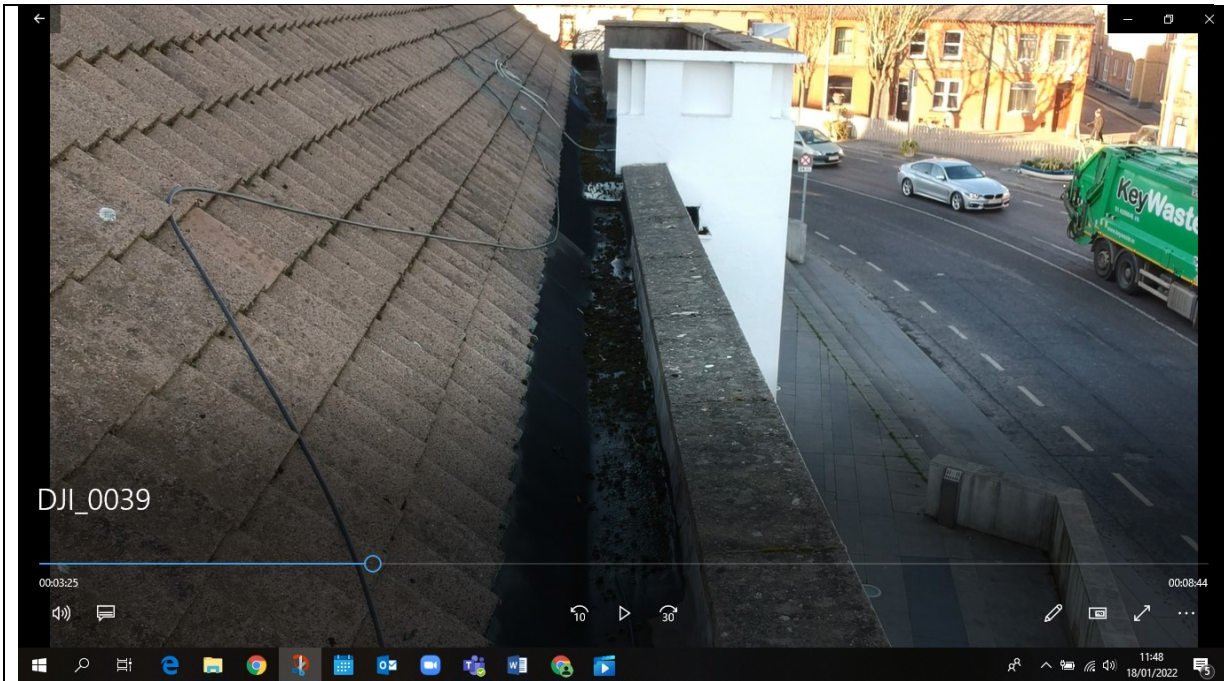
14. View of original metal *Crittal* window to corner



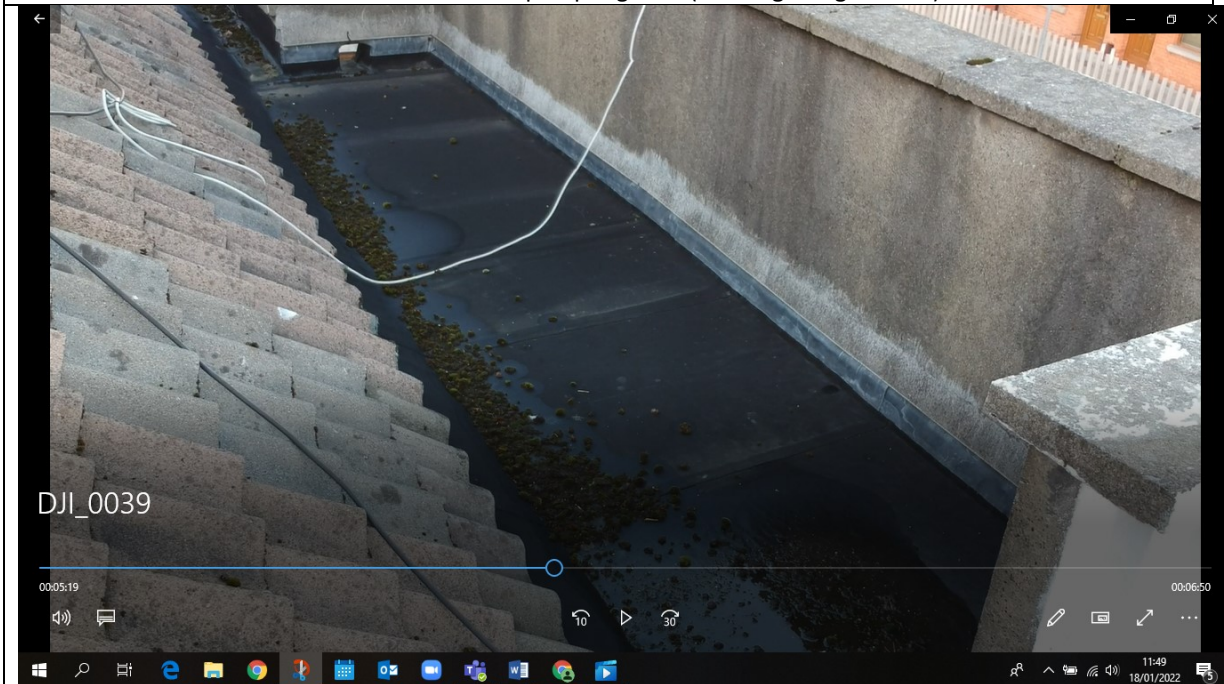
15. – Drone view of roof surface from South side



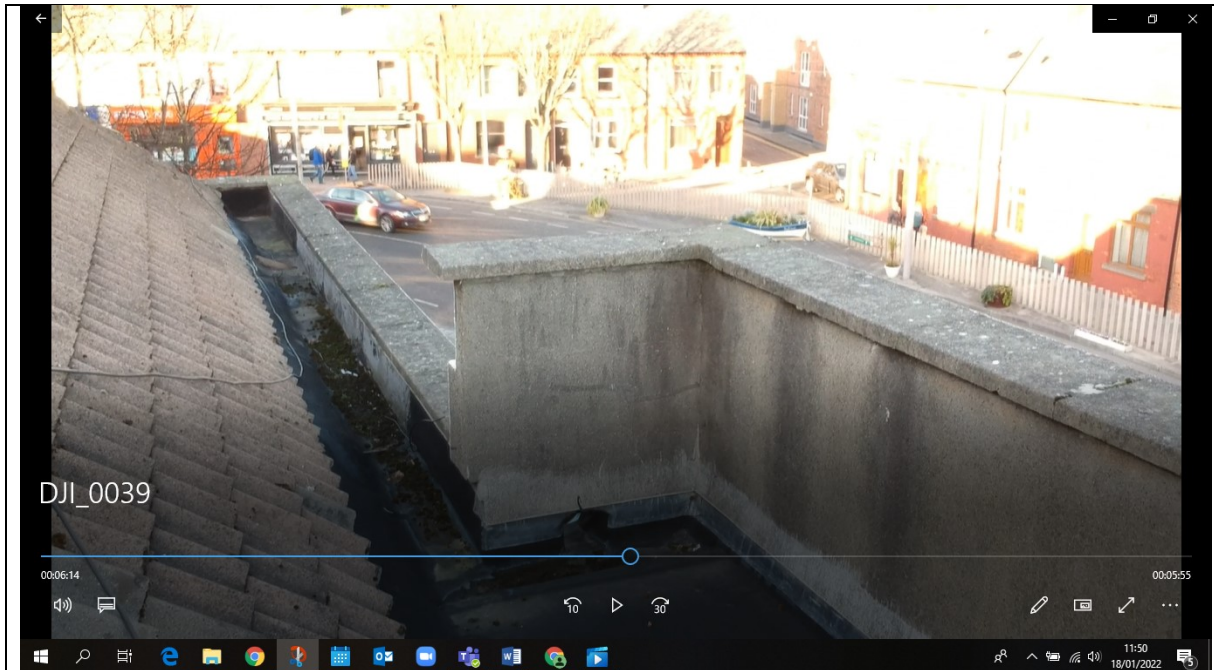
16. – Drone view of feather edged modern precast concrete coping to South parapet



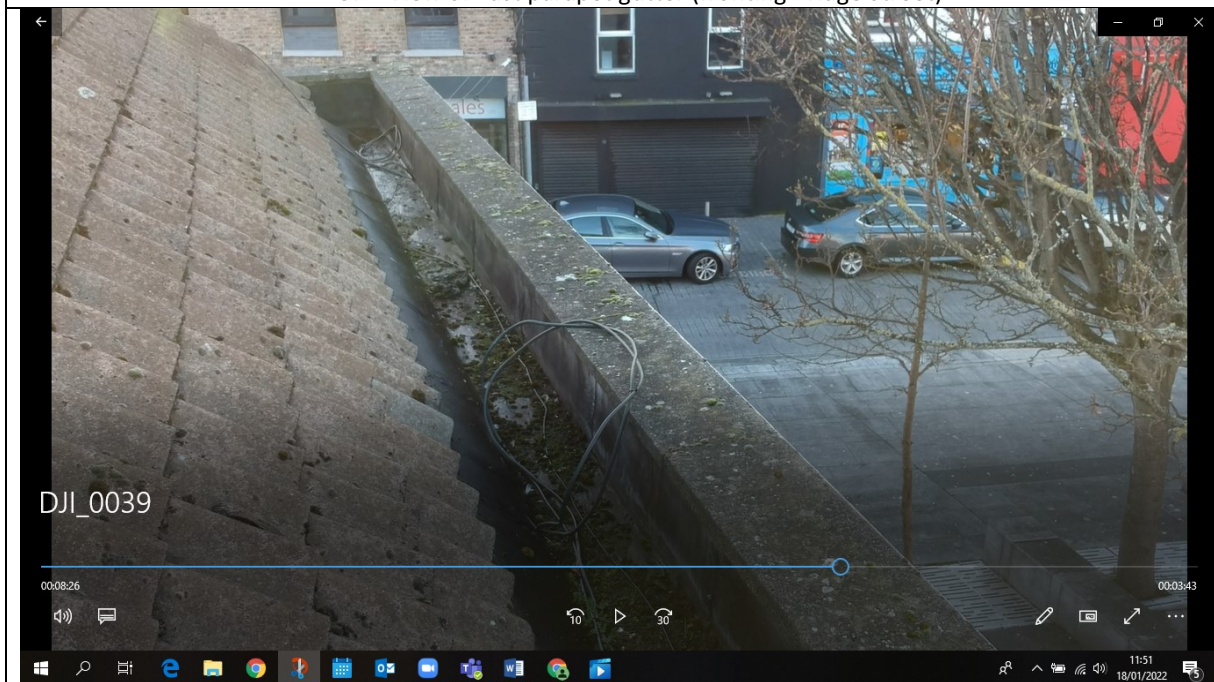
17. - View of East parapet gutter (fronting Bridge Street)



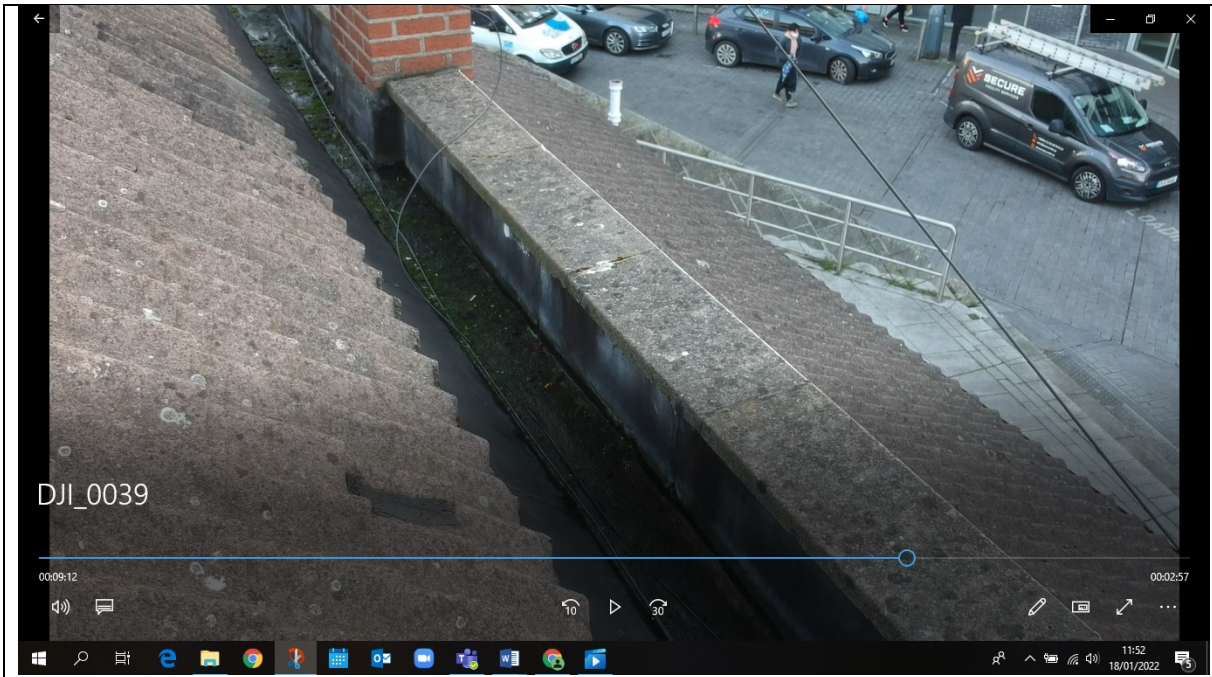
18. - View of small flat roof over breakfront entrance



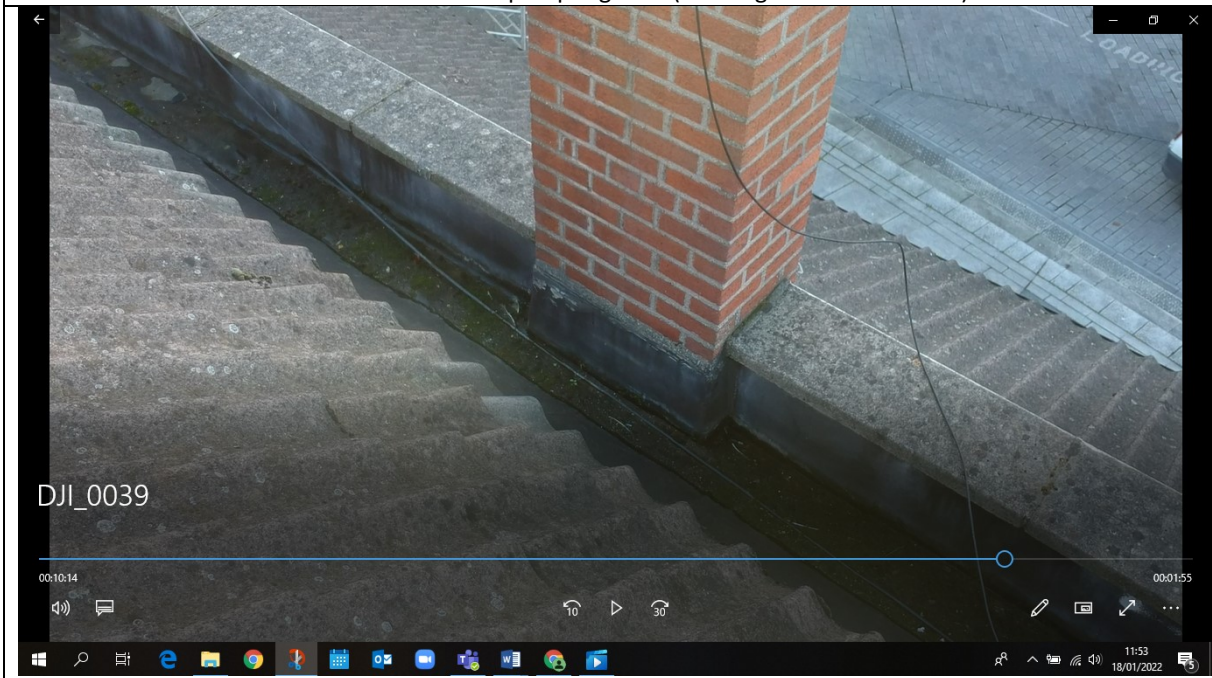
19. - View of East parapet gutter (fronting Bridge Street)



20. - View of North parapet gutter



21. - View of West parapet gutter (fronting Fitzwilliam Street)



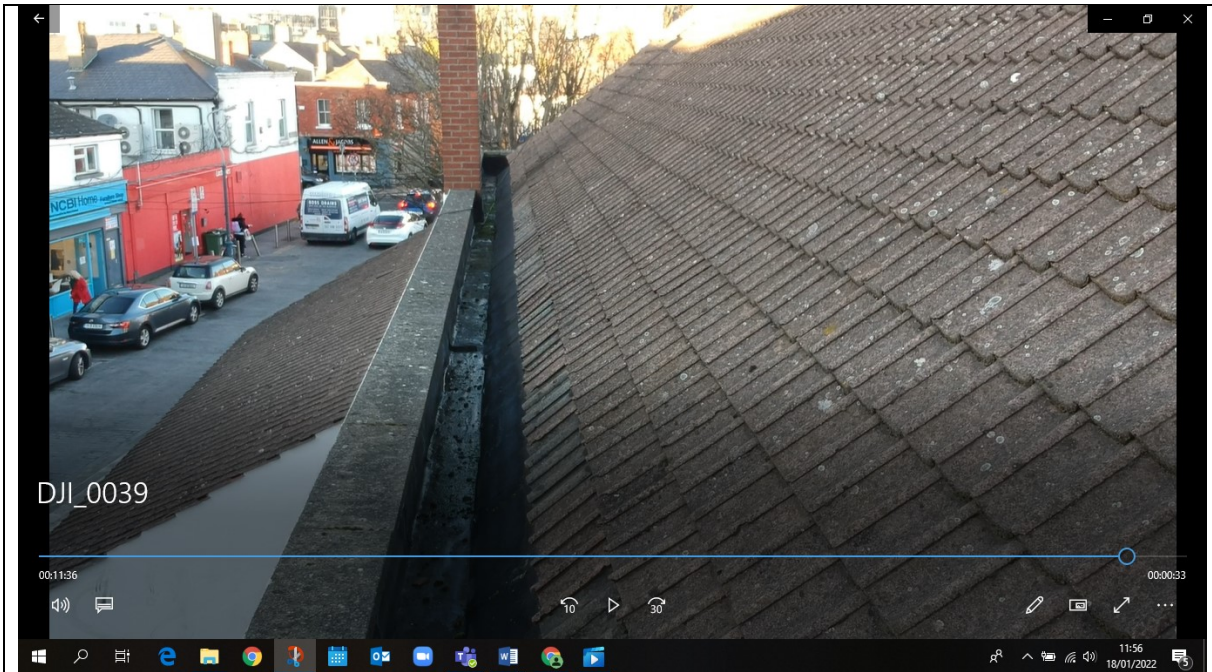
22. - View of abutment detailing at chimneystack penetration



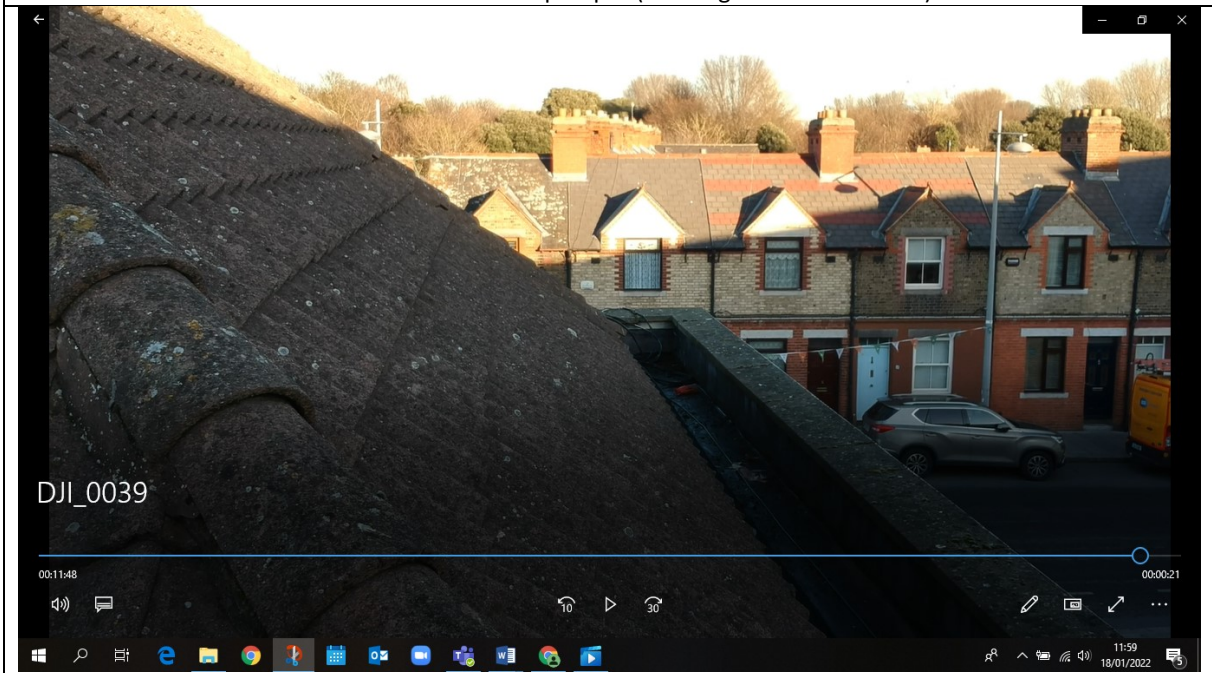
23. - View of vertical hairline cracking to front side of chimneystack



24. - View of rear side of chimneystack (fronting Fitzwilliam Street)



25. - View of West parapet (fronting Fitzwilliam Street)



26. - View of South parapet



27 - View of floor layout to main library



28 - View of internal entrance porch



29 - View of floor layout to main library



30 - View of internal entrance porch



31 – Detail of radiator recessed to shelving walls



32 – Detail of original profiled architrave door joinery



33 - View of water ingress in extreme rear right corner



34- View of roof void over rear lean-to



35 – Detail of services opening in rear wall between main attic and lean-to attic illustrating solid concrete brick construction of external walls



36 - View of subfloor crawlspace void beneath main library



37 - View of 470 mm square brickwork tassel pier and granite padstone



38 - View of granite padstone built into external wall base and supporting bearing end of steel beam



39 - View of herringbone bridging / strutting



40 - View of original opening to accommodate subfloor vent at base of external wall



41 - Ditto. Note proliferation of cobwebs evidencing the absence of sufficient ventilation



42 - View of bitumen damp proof course, viewed from within subfloor crawlspace



43- View of concrete ceiling / floor above small basement store



44- View of access to subfloor crawlspace from small basement store



45 - View of sump pump at bottom of basement stairs



46 - View of typical columnar radiator (in rear lean-to)



47 - View of electrical distribution board (in rear lean-to)



48 - View of addressable fire alarm control panel (in rear lean-to)



49 - View of gas boiler and cold water storage tank in rear plant room



50 - View of gas detection equipment in rear plant room



51 – View of main attic



52 – View of main attic, triangulation of roof at hip trusses



53 – Typical damage to roof underlay above parapet level &



54 – Detail at corner & water ingress staining to lower purlin

Appendix 2
Standard Scope of Inspection

Scope of Inspection

1.0 SCOPE OF INSPECTION

The scope of limitations of commercial surveys carried out by this practice are listed below.

1.1 Extent of Survey

- 1.1.1 The survey will take the form of an appraisal of the main structure including roofs, walls, floors, and finishes, both internal and external where accessible.
- 1.1.2 The buildings will be inspected insofar as conditions of occupancy, fittings and furnishings allow and a report submitted expressing an opinion on the conditions and standard of construction and recommending the extent of any repairs found necessary and giving an estimate of future maintenance required.

1.2 Restrictions

- 1.2.1 Where parts of the structure are covered, unexposed or inaccessible, or close inspection was not possible, no opinion can be given.
- 1.2.2 It must be appreciated, therefore, that damage caused by woodworm, dry rot, settlement or other defects, may be present without our knowledge and no opinion can be given that these defects are not present in parts of the building which could not be inspected.
- 1.2.3 Minor items of routine repair and maintenance will not be commented upon.
- 1.2.4 While all normal care will be taken, it is possible that the property may contain certain detrimental materials such as H.A.C. concrete, calcium chloride in concrete construction and wood wool permanent formwork, which it will not be possible to ascertain without opening up the structure and, in certain cases, laboratory testing. Unless specifically requested and agreed by all parties, including the owner or occupier of the property under survey, we shall be unable to guarantee that the property may not eventually become adversely affected from the use of these materials.
- 1.2.2 Unless we are instructed separately we do not make any enquiries to determine if any insurance claims have been made with regard to any structural defects, which may have arisen at the property in the past.
- 1.2.3 No environmental testing will be carried out of materials or the property generally, for contaminants such as asbestos, lead or radon gas.
- 1.2.5 No investigation or enquiries will be made with regard to the nature and quality of materials used where these are now concealed. In particular, no enquiries were made with regard to the presence of materials containing reactive pyrites, which can lead to expansion of ground-supported floors.
- 1.2.5 No investigations or enquiries were made locally regarding the occurrence of mining or flooding in the locality.
- 1.2.6 We will not comment on any Building Energy Rating report or matters affecting energy performance.

1.3 Services

- 1.3.1 Services installations will not be inspected in detail. We will however provide an outline commentary based on a brief visual inspection.
- 1.3.2 We recommend that all drainage systems, electrical, central heating, lift and other installations and services be tested. We can, if you wish, arrange that these shall be done by specialists or contractors. Where this occurs, the responsibility for the accuracy

of the information supplied, whether within the body of our report or by separate report, will remain with the specialist / contractor carrying out the test.

1.4 Disturbance

1.4.1 Every effort will be made to inspect as much of the building as possible. If, however, the vendor or occupier, or we ourselves, consider that damage may result to fittings, finishes, furnishings, floor coverings etc., these will not be disturbed; nor will they be moved if it is impractical to do so.

1.5 Leasehold Property

1.5.1 We have not included for the detailed review of leases.

1.6 Insurance and Liabilities

1.7.1 We shall maintain professional indemnity insurance provided always that such insurance remains available on the market on commercially reasonable terms and rates.

1.7.2 Where other consultants are reporting on specific issues such as services etc, we accept no responsibility for loss or damage suffered as a result of their service to you.