Thorntons CHARTERED SURVEYORS

Building Survey Report

1-47 Meile-an-Ri Drive,
Balgaddy, Lucan, Co Dublin

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DRAFT VERSION

Thorntons CHARTERED SURVEYORS

PROJECT PREFACE

DRAFT VERSION

Clients Name:	Cara Housing
Client Address:	Catherine's Foyer, Marrowbone Lane, Dublin 8.
Client Contact:	Terry Brophy
Address of property inspected:	1 - 47 Meile-an-Ri Drive, Balgaddy, Lucan, Co Dublin.
Date of inspection:	February 16th 2009 & March 12th 2009
Other Specialists involved:	None.
Prepared at:	Thorntons Chartered Surveyors 4A Techport Coolmine Business Park Blanchardstown Dublin 15
Document prepared by:	Patrick Murray BSc (Hons) Building Surveying
Job Reference	25652 VPM/HR

VIEW OF FRONT ELEVATION

TABLE OF CONTENTS

Thorntons CHARTERED SURVEYORS

EXECUTIVE SUMMARY

1.0 INTRODUCTION

1.1 Type and age

The property is a two storey apartment building, believed to have been built circa 2000 -2003.

1.2 Description of Property and Age

The property is of residential use, containing approximately 24 apartments located on ground, first and second floor levels. The ground floor apartments are served by their own entrance door which provides access directly from the exterior of the apartment block. The first and second floor apartments are served by four individual common areas/stairwells, with 2 no. apartments located and accessible off each of the first and second floor landings.

1.3 Accommodation and Occupancy

While limited access was provided to a number of the apartments, in order to access the external windows, no full or detailed inspection of the apartments was undertaken. It is our understanding that the majority of the apartments comprise of two bedroom units. However, a small number of three bedroom apartments may be present.

1.4 Outbuildings and Parking

There are no outbuildings forming part of the development.

Off-street parking is provided directly opposite the front elevation, and adjacent to the public road. The car parking spaces are non designated.

1.5 Persons Providing Information During Inspection

The on site inspection was carried out by Patrick Murray of Thorntons Chartered Surveyors. Mr Terry Brophy of Cara Housing accompanied Patrick Murray during the on site inspection. Information in relation to the development was provided by Mr Terry Brophy of Cara Housing.

1.6 Location and Orientation

The property is located adjacent to Balgaddy Road, within a residential development of similar type and aged buildings. The development is approximately 3 miles south east of Lucan Village and 10 miles west of Dublin City Centre.

The front entrance doors and front elevation of the property face north west and any reference given to front, rear, left or right hand sides are as viewing the building from the car parking area and facing the front elevation.

1.7 Tenure

We believe that the property is Freehold and owned by South Dubiln County Council. The apartment block is managed by Cara Housing, who instructed Thorntons Chartered Surveyors to undertake the inspection and survey.

2.0 CIRCUMSTANCES OF THE INSPECTION

2.1 Weather Conditions

2.2 Limitations

We have inspected the above property in accordance with our letter and Conditions of Engagement dated February 2nd 2009, in order to produce the following Building Survey Report. The report should be read in conjunction with the description and Conditions of Engagement previously sent and attached to the rear of the report. (Appendix 3.)

A signed acceptance from our client was received on February 13th 2009.

The inspection and report on the property comprise mainly of the exterior of the apartment block and the common areas, as instructed by our client and as outlined in our Letter and Terms and Conditions of February 2nd 2009.

The report covers parts of the property, which were readily visible or accessible at the time of inspection. We have, however, not inspected areas which are concealed, or which were not readily accessible, nor have we raised fitted floor coverings, or removed floor boards (unless otherwise stated). The report does not purport to express an opinion or advise upon the condition of un-inspected parts.

Internal inspections of the apartments were not carried out as our inspection was limited to the exterior of the apartment block and to the common areas. Access was obtained to a number of the apartments, mainly to operate or view the windows and doors on the exterior of the apartment block.

Services within the building and particularly within the apartments were not inspected or tested, due to the inspection being limited to the exterior of the apartment block and to the common area. Some comments may however be included within the report in relation to the services.

Inspection of services within the common areas has been limited to a superficial visual inspection. No specialist investigations have been carried out by any services consultant at this time and no tests have been carried out.

During our inspection of the internal common areas, as carried out on the 12th of March 2009, no access was obtained/provided to the internal common area stairwell of core no.3 (i.e. the third stairwell and hallway from the right hand side). As a result, we are unable to common on the condition of this area.

In view of the complexity of the building, we do not guarantee to have seen each and every defect/deficiency that may exist in the property, but we expect to have seen all the major items relating to

the brief and many/most of the lesser ones.

Various photographs taken during the course of our inspection are enclosed to the rear of this report in Appendix 2.

The Report is for the sole use of the named Client and is confidential to the Client and his professional advisers. Any other persons rely on the Report at their own risk.

3.0 THE BUILDING EXTERIOR

3.1 Roof Construction and Coverings

Main roof structure and covering.

The main roof is of pitched construction with hip ends. Artificial slates form the roof covering with angled tiles (nail fixed) forming the ridges and hips. The general line, slope and pitches of the roof and roof coverings appear to be in reasonable condition, with no significant sagging, deflection or undulation to the roof structure or the roof covering. However, a small number of slipped and broken slates were noted on both the front and rear pitches of the roof. These slates should be replaced and the new slates secured in position.

The majority of the angled hip and ridge tiles appear to be intact and in reasonable condition. However, a considerable amount of mastic material has been provided, particularly along the junction and joints between ridge and hip tiles and also along the junctions between the main roof and the rear hips/pitches. The presence and extent of the mastic material used would raise concerns with regard to whether adequate overlapping and water-tightness along the junction and joints between the tiles has been provided. We would note that the use of such mastic materials should be limited in exposed areas as these materials are prone to shrinkage, deterioration and contain a much shorter lifespan than the main roof coverings. Regular maintenance and replacement of such material shall be required.

Parapet/Valley Gutters

The building contains parapet gutters between the main roof and the external walls. The parapet walls, which comprise of brick and block construction with once weathered, twice throated, concrete cappings. The base/framework of the parapet gutters appear to be formed of timber construction. The parapet gutters appear to have originally been formed with a lead covering/lining. However, the lead covering has been over-coated with a bitumen type felt covering. A considerable number of cracked, split and partly opened joints in the felt gutter lining was noted during our inspection. We would have concerns regarding the reasons for an over-coating material being applied to the original parapet gutter lining, as well as the condition and detailing of the guttering lining materials.

A considerable amount of ponding and collection of water and debris were noted at various locations along the parapet gutters, particularly along the front and rear elevations. The ponding and collection of water and debris is the result of the gutters not draining

correctly or fully to the rainwater outlets, mainly caused by undulation and unevenness in either the construction of the gutters or the gutter lining. The ponding/collection of the debris and water within the parapet gutters will lead to increased deterioration of the gutter linings, limiting the life span of the gutter cover/lining material thus resulting in higher maintenance costs, a requirement for early replacement of the lining material and/or possible water ingress occurring to the interior of the property. Consideration should be given to carrying out repairs to the opening joints and the splits in the gutter material, as a temporary measure. Removal of the sagging and undulation within the gutters and correction of the undulation within the framework of the gutter should be considered as part of any future remedial/over-coating or replacement works. Complete relining and correct and adequate detailing of the gutters will be required in the medium term.

The main roof structure contains a number of valley gutters, along the left and right hand sides of the rear protruding roofs. The valleys are of timber construction with lead covering. Excessive sections of leadwork have been used on most of the valley gutters, which do not appear to be in accordance with the Recommendations of the Lead Sheet Association. Excessive lengths in the leadwork will result in restricted movement during expansion and contraction of the lead work, on exposure to the external elements. This can result in rippling, cracking and deterioration of the leadwork. Some of the valley gutters contain a number of splits and cracks which over a short period of time may lead to water ingress occurring to the main roof and to the interior of the property. Temporary repairs should be carried out where leadwork has split or cracked. In the medium to long term, replacement of the valley gutters will be required.

Roof lights

Roof lights have been provided within the flat roof sections of the main roof above the central common areas/stairwells. The roof lights would appear to be in fair condition although they would benefit from some maintenance and repairs, including removal of staining and discolouration from the surfaces and general cleaning. The opening mechanisms to the roof lights, which should form smoke escape hatches connected to the smoke and fire alarm and detection system should be tested. These should be left in working order.

Edge/Parapet Upstands

The majority of the parapet walls to the building appear to be in reasonable condition. The concrete cappings which comprise of once weathered twice throated precast concrete appear to be intact and in reasonable condition, with no significant cracking or spalling noted. However, the flashings and detailing between the parapet walls the underside of the concrete cappings and the parapet gutters are poorly detailed. As previously mentioned, we suspect that the parapet gutters, which may previously have been covered in lead work, have been over-coated with a bitumen type felt covering. However, the damp-proof course material, which is located underneath the concrete cappings, has been damaged

and burned/melted during the over-coating works to the parapet gutters. This has resulted in deterioration of the damp-proof course material, which may result in water ingress occurring to the brick and blockwork of the parapet walls. In addition, the overcoating felt material has not been fully turned up or sealed along the underside of the concrete cappings, resulting in open and non completed joints and junctions. Consideration may be given to cutting back damaged and defective damp-proof course material and to improving the over-lapping and water-proof detailing at the junction/joints between the parapet gutters, the parapet walls and the concrete cappings.

Other roofs

A small number of horizontal/flat roofs are provided above the rear sections of the central common stairwell areas. The flat roofs, which appear to be of timber construction, are covered with a bitumen type felt covering. The flat roofs and roof covering appear to be in reasonable condition. However, collection of debris was noted on the majority of the flat roofs. Regular maintenance should be carried out to remove all debris and to ensure that the flat roofs drain and flow freely to the rainwater outlets.

A build up of debris will result in water retention, which could cause water ingress to the roof structure and to the interior of the property below.

Balconies/Roof Terraces

The apartment block contains a number of balconies mainly to the rear, the left and right hand sides of the building. The balconies would appear to be in reasonable condition with no signs of water penetration, defects or deterioration evident.

3.2 Chimney stacks and flues

The apartment building does not contain any chimney stacks or flues.

3.3 Rainwater gutters and downpipes

As mentioned above, parapet gutters are present on the inside face of the external walls. Signs of ponding and collection of water and debris were noted throughout the parapet gutters. Deterioration of the material which covers the parapet gutters, opening of joints in the gutter covering and the poor detailing between the gutter and the parapet walls were noted. Adequate maintenance and repairs should be carried out to ensure that further deterioration and water ingress to the property does not occur.

Aluminium gutters are provided to the main roof at eaves level above the second floor balconies. The gutters appear to be in reasonable condition. However, collection of moss, debris and ponding was noted within the majority of the gutters which doe not appear to flow and drain freely to the aluminium rainwater downpipes.

We would recommend that all gutters be cleaned out. The flow and slopes of the gutters should be checked and altered to ensure that all gutters flow freely and unrestricted to the rainwater

downpipes.

Square section aluminium downpipes and aluminium hopper heads are provided to serve the parapet gutters on both front and rear elevations. The majority of the rainwater downpipes appear to be in reasonable condition and flow freely with no significant signs of blockages, backing up or leakage evident.

3.4 Structural Frame

The apartment building appears to be of block and brick construction, with an inner block leaf, possibly block on flat, an external brick finish to the majority of the building, particularly the front and sides and a cavity between the inner block leaf and outer brick leaf finish. The outer walls comprise mainly of vertical brick and block construction, extended from ground level to roof level. At roof level, the walls extend up to form parapet wall construction, with concrete cappings. The main pitched roof appears to be constructed on and supported by the inner block leaf, with a prefabricated timber frame construction placed upon the inner block leaf.

The building contains approximately 24 apartments, with the ground floor apartments containing their own door and entering directly from the exterior on ground level. The first and second floor apartments are serviced by 4 no. common stairwells/central cores, with 2 no. apartments accessible from each of the first floor landings of the common areas while each of the second floor landings also provides access to 2 no. apartment on the top floor level.

The 3 no. floors to the building appear to be of concrete construction. The ground floor is likely to comprise of a insitu concrete, while the first and second floor levels are of suspended solid concrete construction. The suspended concrete floors may possibly comprise of precast solid concrete construction, which may have been constructed off site – i.e. factory made.

Infilled block construction, which appears to comprise of block on flat (215mm thick) is provided between the individual apartments, extending from each floor to the ceiling/floor construction above. The dividing walls are accessible/visible within the attic space. We assume that similar construction is provided on ground, first and second floor levels.

All junctions and joints between the walls, ceilings and roofs should be filled with suitable fire resistant seals and material in order to prevent fire spreading to or from individual apartments, into or from the common areas, as well as into the attic spaces and roof voids. Each apartment should be compartmentised, in order to ensure that the spread of fire or smoke from one apartment to another or to the common areas do not occur.

As a detailed inspection of the individual apartments was not carried out, we are unable to determine whether all fire seals are in place or whether all gaps, joints and junctions have been fully sealed and fire rated. We would note however the lack of full and adequate fire resistant material to a number of wall and roof joints

and junctions within the attic spaces and voids. In particular, the central stairwell areas, at attic level, have not been fully sealed or fire rated. Open joints and gaps between the dividing walls of the common stairwell and the attic spaces were evident. This was particularly noticeable along the top of the left hand common stairwell (which serves apartment 45 & 47). In addition, holes and gaps were noted along the top of the left hand party wall dividing the attic spaces above apartments 45 & 47.

We would recommend that attention be given to the dividing walls, ceilings and partitions between the individual apartments, particularly within the main attic spaces and voids, in relation to the fire integrity and resistance. Improvements shall be required particularly within the attic voids and spaces.

3.5 Walls and Cladding

External Cladding

The exterior of the apartment block comprise mainly of brick construction to the front, right hand side and left hand elevations. The majority of the rear elevations comprise of render finish, to the block external wall. The brickwork is in reasonably good condition, with no significant spalled, cracked or defaced bricks. The rendered external finish to the rear elevation appears to be in reasonably good condition, with no significant blown, live or loose render evident during out inspection.

However, some movement and cracking within the mortar pointing to the brickwork on the front elevation was apparent, particularly along the centre of the building. This was most noticeable at high level, above the rainwater downpipe and hopper head along the centre of the building. A 3-10mm crack in the mortar pointing of the top two courses of brickwork was visible, where small sections of mortar pointing had fallen out. The steel lintel supporting the brickwork directly above the hopper head appears to have moved and shifted out of position. Inadequate overlap and bearing of the steel lintel above the hopper head and rainwater outlet was evident. Attention should be given to this area of brickwork which should be repaired. Adequate and suitable support should be provided and the brickwork should be rebedded and secured in position. All open joints in the brickwork and in the concrete capping directly above should be infilled, re-pointed and left completely water tight.

Construction joints are present in the external walls of the property. The construction joints have been filled with flexible mastic/sealants. However, a number of the joints have been poorly filled, while most of the mastic has shrunken or become detached from the vertical sides of the construction joints. As a result, open and non-protected joints are present. This will allow water ingress to occur, which may over a period of time penetrate the building. As the building and the mastic material/joint material ages, the joints will become more prone to water penetration, leading to water ingress occurring on the inside face of the external walls. This could result in dampness and deterioration occurring to the interior of the apartments and the common areas. Redressing and infilling of the construction joints

should be undertaken as part of the maintenance repair works to the apartment block.

A number of brickwork recesses have been incorporated in the front elevation, possibly to form aesthetic features. The majority of the recessed brick features are present along the front elevation of the central core/internal common stairwell areas. The majority of the joints between the outer brick/main brick leaf of the front elevation and the recessed brickwork have not been fully filled or sealed. While previous mortar pointing may have been applied in a number of locations, small sections have spalled and fallen out. This has resulted in open joints and gaps being present which may allow water ingress to penetrate the external brick leaf. We would recommend that all open joints and gaps in the brickwork, particularly along the recessed brick areas/features, should be repointed and fully sealed.

As previously mentioned above, the main external walls comprise of an external brick cladding/exterior and a rendered block finish. A 75-100mm internal cavity would appear to be present within the external walls, with blockwork, possible 215mm in thickness, forming the inner leaf of the main external wall. As the majority of brickwork is porous in nature, they will allow some moisture and dampness to penetrate the external brick skin/leaf of most buildings. Any penetrating water should be allowed to pass down the inside face of the brickwork, where the rainwater can weep/flow and be directed outwards at low level, through weepholes installed during construction. These weepholes should be placed at lower levels such as DPC level, lintel level and at cavity tray level. We would note a considerable lack of any weepholes within the external brick leaves of the building. As a result, water may become trapped within the external walls. This may lead to water penetration to the interior of the building as well as deterioration of the external brick or the internal finishes to the building. Some investigation works should be carried out as to determine the provisions provided to allow drainage of the external brick leaf and the internal cavities. Where no provisions are made, weepholes should then be inserted in the external brick outer leaf at correct locations to enable suitable drainage to occur.

Foundations

We assume that the property contains adequate sized foundations to carry the external and internal brick and block walls. However, as the building is complete and no excavation or trial holes were provided or present during our inspection, we could not view or determine the size of the foundations. We would however note that no significant signs of cracking or movement to the external walls of the apartment block were evident.

DPC

Damp proof course material has been incorporated in the external walls of the property at both low and high levels. At ground level, the damp proof course material was visible in a number of locations,

approximately 50-75mm above the ground. Ideally the low level damp proof courses should be located approximately 150mm above external ground level. A height of 150mm is desirable in order to prevent the damp proof course material from being bridged by the external ground and also to prevent rising damp and moisture passing up through the brickwork and penetrating the inner brick and block leaf. Where possible, the external ground level should be reduced to increase the distance between the damp proof course material and the ground level to a minimum of 150mm. Where this is not possible, improvements in drainage may be considered, particularly where areas of water penetration and moisture is present within the external walls.

Cills and Cappings

As previously mentioned above, concrete cappings are provided to the parapet walls, which enclose the top level parapet gutter. A number of the joints in the concrete cappings were open or cracked. This will allow water penetration to occur to the parapet wall. All open joints and gaps in the concrete cappings should be filled. The concrete cappings appear to be in reasonable condition and appear to be intact. No loose, detached or missing concrete cappings were noted at parapet level.

A damp proof course material was provided between the underside of the concrete capping and the top of the parapet walls, during construction stage. However, as previously mentioned above the damp proof course material has been damaged in a large number of locations, with signs of heat damage and scorching evident. The damage would appear to be the result of alteration or repair works which were carried out to the parapet gutters, possibly during the relining and the application of a bitumen felt to the gutters. Consideration may be given to removing a small number of the concrete cappings in order to view and fully assess the condition of the damp proof course material and also to carry out repairs and improvements to both the damp proof course material and the flashings and junctions between the parapet gutter and the inside face of the parapet wall.

Fascia/Soffits

The fascia and soffits to the property are relatively limited and are contained at roof level above the second floor rear balconies. The fascia and soffits appear to be in reasonable condition with no significant defects evident.

3.6 Windows, Doors and Glazing

The windows and doors to the exterior of the building comprise of double glazed powder coated aluminium construction. The windows contain trickle air vents which are located above the majority of the double glazed units and within the framework of the opening out window lights. The majority of the windows contain opening out window lights, with top hung hinges. No sign of defective or damaged window seals to the double glazed units were evident during or inspection. However, a considerable number of the window lights and openings were either out of

alignment or significantly distorted. Large open joints and gaps, ranging from 2mm to 10mm, were evident to a considerable number of the window lights, when the windows were in closed position. Significant draughts and air flow were noted around the window frames and window openings. In addition, a considerable number of opening mitre joints within the framework and particularly within the window lights were evident. The condition of the mitred joints indicate movement and separation within the framework of the window units.

Light rubber seals and rubber strips, required to form an airtight seal between the framework and the opening window light were either missing or damaged to a large number of the windows. The window frames and openings are relatively thin/slender in nature and do not appear to be robust. As a result, the durability and life span of the windows is questionable. A large number of the hinges and the ironmongery to the windows are either distorted, damaged or partly detached. Signs of attempts to carry out repairs or improvements to some of the apartment windows were evident. The attempted repairs/improvements including the provision of additional weather tight seals and additional ironmongery. Most of the repairs/improvements do not appear to have been successful.

We also noted that a large number of the vents within the window frames were either fully closed or in some cases paper and tape had been applied across the vents. Where vents are maintained in a fully closed position for a considerable period of time, condensation and moisture build up will occur within the property. Adequate and suitable ventilation is required to all habitable rooms and apartments in order to prevent condensation build up, moisture forming or mould growth occurring within the apartment. In addition, a lack of adequate ventilation will result in the build up of carbon dioxide when the apartments are occupied. This will have implications with regard to Health and Safety for the occupants.

We would note that a considerable number of the window frames have not been correctly sized for the openings in which they have been installed. Excessive use of expanding foam and sealants have been applied around the framework of a large number of the windows The windows have either been incorrectly measured up or incorrectly installed at construction stage. The infill material will result in drafts and cold bridging occurring around the structural opening and particularly on the inside face of the walls. This will and has lead to mould growth and staining occurring to the inside window reveals and internal finishes within some of the apartments, as well as discomfort to the occupiers. In addition, excessive heat loss is likely to occur where windows are undersized or incorrectly installed. There is also a danger of water penetration occurring along the incorrectly completed finish joints and junctions between the brick reveals and the window frames.

The majority of the double glazed units within the window frames appear to be in reasonable condition, with no significant signs of condensation or misting up noted during our site inspection. However, we would note that the spacing and gaps between the outer glazing and inner glazing is quite narrow/thin and there are no

signs or indications that the void or space between the outer glazing pane and inner glazing pane are gas filled. As a result, the double glazed units are likely to offer poor thermal efficiency and resistance to the individual apartments. Excessive heat loss is therefore likely to occur. This shall increase the heating costs of the individual apartments and may also result in discomfort to the occupants.

The main entrance doors to the ground floor apartments the doors to the front and rear of the internal common stairwell areas and the balcony doors are also of aluminium construction. Fixed double glazing and infilled timber panels are incorporated within most of the common area doors. We would note that the doors are quite light and will not withstand any robust or heavy use. Signs of previous impact damage, marks and deterioration are evident to the majority of the doors. A number of the infill timber panels within the doors are loose and not correctly sealed. In addition a large number of the rubber seals and strips around the double glazed fixed glazed units and timber panels of the doors are missing, loose or damaged. The rubber seals and weather strips within both the framework of the doors and along the edging of the doors are either loose, damaged or missing. The majority of the doors, particularly the front doors, are out of alignment and do not close correctly or fully. The external doors are completely unsuitable for heavy use, particularly to the main entrance doors to common stairwells or entrances areas. A considerable number of the joints and junctions within the doors and the door frames are partly opened or partly detached. In addition, the door frames appear to be poorly installed or inadequately sized, with large open joints and gaps filled with mastic or expanding foam. A number of the door frames and the door reveals are out of alignment and are not flush or plumb.

It may be possible to carry out extensive refurbishment and overhaul of the windows and doors within the apartment building. However, we would have concerns regarding the feasibility and effectiveness in undertaking such remedial works. Given the condition of both the windows and doors to the exterior of the apartment block, it is likely that complete replacement in the short to medium term will offer the most feasible, cost effective and desirable solution/results.

3.7 Substructure/ Basements

Not applicable.

3.8 External Decoration

There are few surfaces which require periodic external decorations, other than the external joinery of the doors to both the apartments, the external balconies and the internal common stairwells. In addition, the suspended timber joists, which form the aesthetic finish above the top floor balconies, also require decoration and treatment. The external joinery is in poor decorative order at present and would benefit from redecoration.

The external finish to the walls, comprising of brickwork and render do not require periodic external decorating. The finish to the external walls are in reasonable condition.

The external powder coated finish to the windows and to the doors

are all pre-coated. These will usually have a typical life expectancy of 20-25 years prior to recoating or maintenance repair works. There is nevertheless signs of dulling and fading of the painted finish, particularly to the windows and to the infill panels of the common stairwell window frames. These should ideally be cleaned as part of the maintenance to the exterior of the apartment block.

3.9 Other

Not applicable.

4.0 THE BUILDING INTERIOR

4.1 Ceilings

Plasterboard ceilings appear to be provided throughout the apartment block and within the individual apartments. As our inspection comprises mainly of the exterior of the apartment block and the common areas, very limited inspection was carried out on the individual internal ceilings. No significant defects, cracks or deflection were reported. However, a small amount of staining was noted to a number of the ceilings adjacent to the concealed soil and vent and ventilation pipes along the front elevation, within two of the top floor apartments. The staining would appear to be the result of water vapour condensation and leaking from incomplete and connected ventilation pipes, which passes up into the main attic roof voids. These pipes have not been provided with or connected to external vent outlets. See Section 5.5 below. We would recommend that all vent pipes which pass into the attics are connected to external vent outlets and remedial works be undertaken.

4.2 Floors

The ground floor is of solid concrete construction, most likely to be in situ concrete placed on hardcore. We assume that adequate floor insulation and damp proof membranes were incorporated during construction. These materials would not be noticeable or visible during inspection of an existing building.

The first and second floor levels appear to comprise of suspended solid concrete floors. These floors are likely to consist of precast slabs, constructed/prepared off site in a factory complex.

As our survey comprised mainly of the exterior of the building and the internal common areas, our inspection of the floors was limited mainly to the internal stairwells. Lino floor covering has been provided to the stairwells. No significant signs of cracks, subsidence, or movement was noted to the concrete floors during our inspection. In addition, no reports of cracks or defects to the floors within the apartments were advised during our on site inspection or attendance.

4.3 Staircases and Ramps

The building contains 4 no. internal stairs serving the first and second floor levels. The stairs are of solid concrete construction and are likely to contain reinforcement within the concrete. The stairs appear to be in reasonable condition, with no significant signs of cracking or movement evident. A considerable amount of wear and tear, impact marks, indentations and surface damage was

noted to a number of the stairwells, particularly the walls. The internal common areas would appear to suffer from a considerable amount of robust activity. A significant amount of deliberate impact damage appears to have been inflicted within a number of the stairwells, such as the right hand common stairwell, where a large number of holes, scratches and marks have been caused to the plaster and painted finishes.

Within the rear elevation, large glazed windows are provided on the half landings between the first and second floor levels of the internal common stairwells. Hand rails are provided between the left and right hand reveals of the individual windows, to form a safety barrier and provide protection against persons impacting with or falling through the large fixed glazing in the rear elevation. However, the majority of the hand rails are loose and partly detached. As a result, the level of protection provided by the hand rails is significantly reduced. We would recommend that adequate provisions be provided to secure and maintain suitably sized and located handrails and guard rails to all half landings within the stairwells for safety reasons.

The metal railings and guard rails, which run the length of the stairs, from ground to second floor level, appear to be in reasonable condition. The majority of hand rails are intact with no significant detachment evident. Regular maintenance should be carried out to ensure that the metal handrails remain secure and in position.

4.4 Internal Walls and Partitions

The internal walls to the common stairwells appear to comprise of a 215mm thick block on flat construction, passing vertically up from ground floor level to roof level. The internal walls contain plaster and painted finishes. The majority of the walls are in reasonably good condition, with no significant signs of cracking or movement evident. However, as previously mentioned above, a considerable amount of impact damage, marks and indentations are present to the internal walls of the common stairwells. While some of the impact damage and marks are a result of general wear and tear, a considerable amount appears to be the result of deliberate vandalism. Evidence of such vandalism was noted within the right hand core/common areas, where large indentations and holes have been inflicted on the plastered finish. Repair works should be carried out, which shall comprise of filling and preparing the damaged plastered finishes prior to redecoration.

Signs of water penetration and water ingress was noted within a number of the common areas. In particular, water ingress and penetration along the left and right hand reveals of the rear elevation doors were noted mainly along bottom corners of the door openings. A combination of rising damp at low level, as well as the of water ingress along the junction and joints between the external rendered reveals and the door/window frames appear to be the cause of the water penetration and the internal damage to the plaster and painted finishes. As previously mentioned above, the external ground levels should ideally be reduced to a minimum of 150mm below the damp proof course within the external walls. In

addition, all joints and gaps between the external reveals and the frames of both doors and windows should be fully sealed and left water tight. The live, loose and blown plaster, resulting from the water ingress, should be hacked off. The blockwork should be checked with regard to the location of the damp proof course and waterproof detailing. Repair/remedial works and replastering should be carried out prior to redecorating.

On the first and second floor levels within a number of the central core/common areas, signs of flaking paint and loose plaster was noted adjacent to and within the reveals of a number of the apartment doors. On testing high elevated damp readings were detected within the plaster, which would appear to indicate a water leak from the sanitary fittings, water pipework or central heating system within the adjacent apartments. This was most noticeable adjacent to the door leading to apartment no. 5 and also adjacent to the door of the apartment directly above – apartment no. 9. We would recommend that the central heating system, hot water cylinder, sanitary fittings and pipework within these apartments, particularly the top floor apartment (apartment no. 9), be checked with regard to the possibility of water leaking and penetrating through the blockwork, the solid concrete floor and the apartment directly below. The water damage and dampness is also effecting the metal corner plaster beading along the junction between the door reveals and the main plastered walls. Rubbing back and removal of all surface rust and corrosion from the metal beading shall be required prior to treatment and redecorating.

In addition to apartments mentioned above, we would recommend that the pipework and sanitary fittings within apartments 43 and 47 should also be checked, as there are signs of significant surface corrosion and rust to the plaster beading, as well as damage to the plaster finish, along the reveals and door opening of apartment no. 43 within the left hand common areas. No significant elevated damp readings were detected to the adjacent wall surfaces. The corrosion may be the result of a previous water leak which has since been repaired.

4.5 Fireplaces and Flues

The apartments do not contain and fireplaces, chimney flues or fire breasts.

Each apartment contains a metal boiler flue outlet, which passes through the external walls. A small number of the boilers are missing rubber seals and flue covers, to seal the outlet within the brickwork. We would recommend that all boiler flues be fitted with suitably sized and secured covered and seals to prevent gases or water passing through and along the junction and joint between the flue outlet and the external brick/rendered finish.

4.6 Joinery

The internal joinery within the common areas comprises mainly of timber skirtings and timber frame doors to the individual apartments. The internal joinery appears to be in reasonable condition with no significant detachment, rot or decay evident. However, the timber skirtings adjacent to the rear elevation doors, as well as the skirting

boards and timber stringers adjacent to the doors of apartment no. 5 and 9 appear to be effected by the high level of moisture within the walls. We would recommend that the skirting boards within these areas be removed and replaced as part of the remedial works required to eliminate the sources of water ingress within the walls.

As mentioned above, the guard rails to the half landings between the first and second floor levels, within the 4 no. common stairwells should be replaced with suitably sized guard rails, fit for use.

The doors leading from the stairwells to the individual apartments comprise of solid/semi solid timber construction. Intumescent fire strips and seals are provided within the door frames. We assume that the individual apartment doors are of adequate fire resistance and integrity. However, the doors have not been labelled and no signs of their fire rating were evident to enable use to comment on their suitability. We would advise that checks be made with regard to determining the fire resistance and suitability/integrity of the doors.

4.7 Internal Decoration

The internal common areas contain painted finishes to the plastered walls, timber internal joinery and metal handrails of the stairs. The internal decorations are in poor condition, with significant impact marks, wear and tear and deterioration. All internal stairwells and common areas would benefit from complete redecoration in the near future.

In addition, the floor coverings to the stairwell and to the internal common areas would benefit from being replaced in the medium term due to considerable wear and tear.

4.8 Other

Not applicable.

5.0 THE SERVICES

5.1 Electricity

Mains electricity is provided to the building. The electrical meters are located on ground floor level , within the internal common areas and adjacent to the front main entrance doors. The meters are enclosed by medium height cupboards.

Wall and ceiling mounted lights are provided to the stairwells and to the internal common areas. The common area lights were intact and appear to be in reasonable condition. It is not clear as to how the internal common area lights are activated. We assume that a timing switch/controls or sensors are provided within the electrical cupboards.

The electrical fittings within the common areas are quite sparse. However, no significant defects were evident during our inspection.

We would recommend that the electrical system within the common areas be adequately serviced, tested and maintained as part of the regular maintenance to the property/building.

5.2 Gas

Mains gas is connected to the apartment block serving the individual apartments. As our survey did not include the individual apartment, no inspection of the mains gas supply or the gas fired appliances within the individual apartments were undertaken. Therefore we are unable to make any comment in relation to the mains gas supply or the gas fired appliances within the apartment block.

We were not made aware of any issues with regard to either the gas supply or the gas fired appliances during our on site inspection or conversations with any of the occupiers.

5.3 Cold Water, Plumbing and Sanitary Fittings

Mains cold water supply is connected and provided to the apartment blocks and individual apartments. The majority of the cold water storage tanks would appear to be located within the airing cupboards or storage cupboards of the individual apartments. As our inspection comprised of the exterior and internal common areas, no detailed inspection of the cold water storage, plumbing or sanitary fittings were carried out on the individual apartments.

A small number of water tanks are present within the attic spaces/ voids of the main roof. We assume that the water tanks located in the attic space serve the (top floor) apartment directly below. The water tanks appear to be in reasonable condition, with no significant defects noted. Some insulation is provided to the pipework within the attics. However, sections of the pipework were exposed and were not fully lagged or protected. We would recommend that full insulation and lagging be provided to all exposed pipework to ensure that the pipes are protected against frost and cold weather.

5.4 Hot Water, Heating and Air Conditioning

The internal common areas do not contain any heating appliances, radiators or central heating. As a result, the internal common areas are classified as unheated spaces, adjacent to individually heated apartments.

5.5 Ventilation

We believe that mechanical extraction and ventilation systems are provided within the kitchens of the individual apartments. We assume that these are connected to vent outlets and ventilation pipes. As no detailed inspections of the individual apartments were carried out, we are unable to comment on the individual ventilation.

From within the attic spaces and voids of the main roof, we noted the presence of soil and vent pipes and ventilation extraction pipes passing up through the top floor ceilings and into the main attic spaces directly above. The majority of the pipes terminate directly above the top floor ceiling and are vented into the attic space. These vent pipes should have been connected to external roof vents which would enable smells, moisture vapour, condensation etc. passes directly to the exterior of the building. As a result of the pipes not being connected to external vents, considerable

condensation, moisture vapour and smells are building up and occurring within the main roof spaces. The water vapour from the vent pipes is condensing in the roof timbers, insulation and top floor ceilings, resulting in decay staining and deterioration of the adjacent surfaces and areas. Signs of rot and decay was noted to a number of the timbers directly above the outlets/tops of the vent pipes. We would recommend that immediate action be taken with regard to the ventilation pipes. Vent tiles should be inserted in the roof covering. The new vent tiles should then be fitted with flexible ducts, adequately supported and connected to the tops of the individual vent pipes. This will allow the existing pipes vent externally. Repair works should then be carried out to the effected and adjacent surfaces, including the removal and replacement of all decaying and rotten timber, treatment of adjacent partly effected timber, as well as repairs to any of the top floor ceilings within the apartments which have been stained, damaged or effected by condensation.

The main roof space appears to be reasonably well vented, with air vents and gaps provided at eaves level. However, considerably large and excessive open joints and vent spaces are present to the rear small pitch roofs which extends on to and pass down towards the flat roofs and roof lights. Gaps, spaces and open voids, ranging from 50-125mm are present. This will allow rodents and birds to enter the attic spaces, particularly in the Spring time where nesting may occur. In addition, bees and other insects may also enter into the roof spaces. We would recommend that suitable fascia and soffits be installed to reduce the large open joints and gaps and to protect against the entry of unwanted intruders. Adequate provisions for ventilation should however be maintained to the main pitch roof and roof spaces, as part of the remedial works.

5.6 Lifts

There are no lifts installed or provided within the apartment block.

5.7 Fire Detection and Emergency Lighting

The common areas are fitted with smoke and fire alarm and detection systems. Fire alarm panels, push glass activation switches and warning alarm bells are wall mounted within the common areas. In addition, illuminated fire exit signage is provided above the fire exit doors. We assume that the fire alarm system for the building is regularly inspected, serviced and monitored as part of the overall maintenance to the apartment block. We would advise that the most recent service records be obtained and inspected and all remedial works advised be undertaken or completed.

During our inspection, no significant defects were noted to the fire alarm and detection system or the emergency lighting. However, we would note that the system was not tested as part of our inspection. Regular testing should be carried out by a qualified electrical engineer. The occupants of the individual apartments should be advised of testing procedures prior to such tests being undertaken.

Within the top floor ceiling of each of the common areas, a horizontal roof light has been installed. The roof lights should be connected to the fire alarm system. On activation of the fire and

smoke alarm system the roof lights should open thus enabling smoke to egress, should smoke or fire enter the common areas. We would have concerns regarding whether these roof lights are in full and correct working order. We would recommend that these be inspected and tested by a Fire Alarm Engineer and all remedial works be undertaken to ensure that the roof lights are in full working order.

In conclusion, we would recommend that a full operational automatic detection system, in compliance with IS:3217 is in place and that the emergency lighting system is certified and tested under IS:3218.

5.8 Security Installations

There is no provision for a security or intrusion alarm system within the apartment block. Consideration may be given to installed such a system to either the individual apartments or to the common areas. Ideally both should be installed and should be monitored.

5.9 Phone and IT

We have not carried out any detailed inspection of the IT and phone services within the building. No phone or IT junction boxes, services or facilities were noted within the common areas during our inspection.

5.10 Other Services

Not applicable.

5.11 Drainage

Above Ground Pipes and Gulleys

The above ground drainage pipework comprises of metal hopper heads and square section rainwater metal downpipes. The external rainwater downpipes and rainwater fittings appear to be in reasonable condition, with no significant signs of blockages, backing up or other defects.

The external rainwater gullies would appear to drain and flow freely, with no significant signs of blockages or backing up evident.

The above ground soil and vent pipes appear to be boxed in and located internally within the individual apartments. As previously mentioned above, the majority of these soil and vent pipes and ventilation pipes pass up into the main roof attic spaces directly above the top floor apartments. We would recommend that alterations be carried out to ensure that all pipes vent externally through the roof covering. Remedial works should be carried out as a result of damage to the roof timbers, top floor ceilings and to the insulation within the attic spaces.

6.0 GROUNDS AND OUTBUILDINGS

6.1 The Site and Outbuildings

The majority of the site is relatively open plan, with level access parking located on ground floor level, directly opposite the front elevation of the apartment block and adjacent to the front public road.

To the rear of the apartment block, individual gardens are enclosed by medium height, concrete posts and timber panelled fencing. The majority of the fencing would appear to be in reasonable condition. However, a number of the dividing and individual timber panels have been removed or have become damaged and are in a state of disrepair. Some overhaul and replacement works are therefore required.

The apartment block is located directly close to a National School, which is located on the opposite side of the public road. During our on site inspection, we noted a considerable amount of parking associated with the school, most of which occurred between the hours of 12.30pm and 3.00pm, as parents attend the school to collect their children. As a result, the car parking area and the roadway between the car parking and the apartment block was considerably congested. There are a number of issues with regard to unauthorised use of the car parking area and the road directly adjacent to the apartment block, including Health and Safety issues, inconvenience to the occupants of the apartment block and significant congestion to the immediate surrounding area. Consideration should be given to restricting the number of cars entering into the area directly to the front of the apartment block.

6.2 Boundaries

There are few physical boundaries to the apartment complex. Metal railings enclose the front and side elevations, providing a small enclosure at ground floor level. Individual gardens to the rear of the apartment block are enclosed by concrete posts and timber panelling fencing. As previously mentioned above, repair works are required to some of the timber panelling and fencing within the rear gardens.

7.0 ENVIRONMENTAL ISSUES

7.1 Thermal Insulation

Within the main roof attic spaces and voids, directly above the top floor apartment, we noted the presence of glass fibre insulation placed above the top floor ceilings. The glass fibre insulation comprises of 1 no. layer, approximately 200mm in thickness, cut and placed between the ceiling joists. Under current Building Regulations we would normally recommend a minimum of 300mm of glass fibre insulation to ensure that excessive heat loss does not occur from the apartments directly below. While we would note that the thickness of the insulation is somewhat undersized, we would also advise that the insulation has been poorly cut and poorly installed. Large gaps and spaces ranging from 25mm to 75mm are present where the insulation does not sit “snug” or tight within the ceiling joists. As a result, sections of the ceiling ranging from 25mm to 75mm does not contain any insulation. The reduced thickness of the insulation and the inadequately sized/cut (large open gaps)

insulation will result in excessive heat loss from the top floor apartments and from the apartment block.

During our inspection of the external walls, we noted the presence of what appears to be a 50mm polystyrene insulation placed between the outer brick leaf and inner block leaf, located within the internal cavity. We would assume given the age of the property, that the wall insulation would be much more substantial than a 50mm polystyrene type insulation. Should this type and thickness of insulation be provided throughout the external walls, excessive and significant heat loss to the individual apartments and to the building is likely to occur. We would note however that our inspection of the insulation was very much restricted and we cannot determine if polystyrene insulation of approximately 50mm in thickness has been used extensively or throughout the external walls. Some opening up works will be required in order to determine the full extent, type and condition of the insulation.

As previously mentioned above, a large number of the windows and doors are not correctly sized and do not fully fit within the external openings. The use of expanding foam and infilled metal strips is likely to result in draughts, non insulated openings and gaps around the window frames. This will increase the heat loss to the external walls.

As also mentioned above, the external windows contain quite thin double glazed units. In addition, a considerable number of the window lights and door openings do not close fully and correctly, while weather strips and seals are missing, damaged or partly detached. Draughts and cold bridging along the external window reveals were also evident.

We would have concerns regarding the thermal efficiency and resistance provided within the envelope/exterior of the apartment block. Consideration should be given to a full and complete overhaul of the thermal efficiency and resistance of the building including attic insulation, wall insulation, window and door improvements.

As part of the Energy Performance of Buildings Directive, EPBD a Building Energy Rating (BER) certificate, which is effectively an energy label, will be required at the point of sale or rental of a building, or on completion of a new building. The BER will be accompanied by an "Advisory Report" setting out recommendations for cost-effective improvements to the energy performance of the building.

This will affect both new and second hand commercial buildings. This is likely to effect second hand commercial buildings in 2009. As such after this date all sales and leases of commercial buildings will require a Building Energy Rating (BER) Certificate along with an ''Advisory Report'' setting out the options for improving the energy performance of the building and its services. Each building depending on its energy efficiency, insulation, heating systems, control will be given an energy rating probably from A – G.

This may have an impact on the future desirability and value of

commercial buildings in terms of sales and lettings.

Such BER certificates and Advisory Reports will be prepared and presented with legal documentation when a commercial or residential premises is either leased or sold in the future.

We have not carried out a Building Energy Rating assessment on the building although its performance is likely to be poor, possibly C2 – E.

Consideration should be given to carrying out a thermal imaging survey and air tightness test on a number of the apartments. The results are likely to indicate significant improvements are required in order to meet current Building Regulations and to increase the comfort of occupiers.

7.2 Trees and Other Vegetation

The proximity of trees to buildings can give rise to concern because structural damage can be caused by root systems growing around, under and sometimes through foundations and subterranean walls. The risk of damage caused by tree roots depends on;

- the proximity of the tree to the building concerned
- the height, age and species of tree
- the design and depth of a building's foundations
- the type of sub-soil

There are no trees in close proximity to the building of sufficient size to merit concern at present.

7.3 Flooding

We have not undertaken detailed investigations into the potential for flooding of the land on which the property lies. However you may wish to consult the Maintenance and Waterworks Department of the Local Authority and their information regarding the potential or risk of flooding to this property.

Further information may be sought on the following website: www.floodmaps.ie

7.4 Radon

Radon is a radioactive gas that occurs naturally in the ground. It occurs when uranium decays. Uranium is found in small quantities in all soil and rocks. Decaying uranium turns into radium and when radium, in turn, decays, it becomes radon. Uranium can also be found in building materials derived from the rocks.

Radon rises through cracks and fissures in the ground into the air. Outdoors, radon is diluted and the risk it poses is negligible. Problems occur when it enters enclosed spaces, such as a building, where concentration levels can build up. When this happens, it can cause a significant health hazard to the occupants of a building by increasing the risk of lung cancer.

Data concerning levels of Radon in Ireland has been available from the Radiological Protection Institute of Ireland (RPII) since the late 1990's. Their website address is www.rpii.ie.

We have not measured the levels of Radon inside the property, as

this can take several months to undertake. Whilst the property is NOT located in an area identified by the RPII as generally susceptible to higher radon levels, detailed local information is not available.

Local information is not available but it is possible to have the building tested by contacting:-

Radiological Protection Institute of Ireland,
3, Clonskeagh Square,
Clonskeagh Road,
Dublin 14.

Telephone 01 2697766

There is a modest charge for this service. Measurements may take some months.

If high levels are found, there are remedial works which may be undertaken. The cost of such works would be subject to a Specialist Survey and Report.

7.5 Electromagnetic Fields

Electromagnetic Fields (Overhead and Buried Cables)

There has been concern that electromagnetic fields from both natural and artificial sources can cause a wide range of illnesses such as blackouts, insomnia and headaches to depression, allergies and cancer. Artificial sources commonly comprise overhead or subterranean high voltage electrical power cables.

It is suggested that the electrical discharges from these high voltage cables upset the balance of minute electrical impulses employed by the human body to regulate itself in much the same way as television and radio signals can be disrupted.

Controversy and uncertainty prevail with regard to this matter; no strong evidence that is generally accepted to be conclusive has been developed to prove or disprove this alleged hazard. More information is available from the National Radiological Protection Board's website. You should be aware that the presence of power cabling in the vicinity of a building could affect its value and liquidity in addition to the health of those occupying the property.

For this reason, during our inspection we looked for any visual indications that electrical power cables are located under, on or over the property or adjacent to it. We have not undertaken any separate inquiries with the relevant statutory authority however.

We did not note any high voltage cabling in the vicinity of the property, but such cabling might exist below ground out of sight.

Microwave Exposure

Health concerns exist with regard to microwave emissions from transmissions masts forming mobile phone networks. Conclusive guidance is not available at present regarding the health risks.

During our inspection we did not note the presence of any mobile phone transmission masts affixed to either the land or buildings comprising the property.

7.6 Asbestos — None noted.

7.7 Contamination — None noted or aware.

8.0 LEGISLATION AND LEGAL ISSUES

8.1 Statutory

We understand our client manages the building, which we believe is a freehold property. All details should be clarified by your legal advisor.

A folio map identifying all boundaries including car parking spaces should be forthcoming and reviewed/clarified.

8.2 Rights of Way/ Shared Services

Rights of way are likely over the front of the building. Similar may also be in place to the front, sides and rear to the roof construction. Again we cannot comment on the configuration of the roof structure as no access was permissible.

8.3 Guarantees/ Warranties

<u>Building</u>

We are not aware of any guarantees or warranties relating to the building or services and all should be checked by your legal advisor.

We recommend that guarantees and warranties for a number of items/elements of the structure should be forthcoming including window and door units should be obtained from the property owner.

9.0 CONCLUSION AND RECOMMENDATIONS

9.1 Conclusions and Recommendations

1. Carry out repairs to the main roof, including replacement of broken and damaged slates.
2. Carry out regular inspections of the lead valleys and replace/repair when and where cracks and splits occur.
3. Replace/repair the current crack and damaged lead work to the valley gutters, particularly those above core no. 1 – right hand core.
4. Repair parapet gutters to prevent water ingress occurring. Replace and improve parapet lining in the medium to long term future.
5. Repair all cracked and spalled mortar pointing to the concrete cappings of the parapet walls.
6. Carry out repairs to the brickwork above the central rainwater downpipe and hopper head on the front elevation.
7. Reduce large opening and non restricted/protected gaps in to the attic spaces and voids at eaves level.
8. Infill and point all open joints in the brickwork, particularly along the recessed brick features in the front elevation – above central common stairwell entrance doors and glazing.
9. Infill all opening construction joints within the brickwork and at junction between brickwork and rendered finish.
10. Replace the external windows and doors to the apartment block throughout. At minimum complete an extensive overhaul of existing windows and doors if feasible.
11. Carry out external decorations to the external joinery, including main entrance door, balcony doors and timber joists above the top floor balcony.
12. Repair all staining and marks to the top floor ceiling as a result of dampness from the vent pipes which pass up into the attic spaces above.
13. It all vents pipes located in the attic spaces, provide vent outlets and connect all vent pipes to vent externally.
14. Complete refurbishment from the internal common stairwells and common areas is required.
15. Provide suitable guard rails and protection to the rear windows on the first floor – second floor half landings of the stairwell.
16. Investigate the water leaks and water damage to the interior of the common areas, particularly adjacent to apartments 5 and 9 and also apartments 43 and 45. Carry out remedial repair works.
17. Eliminate source of dampness along the rear elevation walls and rear doors of the common areas. Carry out repairs.

18. Carry out repairs and improvements at junctions between the parapet walls and the parapet gutters.
19. Test the electrical system within the common areas.
20. Test and improve where necessary the smoke and fire alarm and detection system within the common areas.
21. Test the roof lights within the top floor level of the common areas and leave in full working order.
22. Carry out improvements and replace damaged or defective timber panelling fencing to the rear gardens.
23. Restrict, limit and reduce car movements within the car park and road areas, particularly during school hours, to improve safety.
24. Reduce the external ground level to a minimum of 150mm below the damp proof course located in the external walls.
25. Provide adequate weepholes and drainage to serve the external brick leaf of the walls and the internal cavities.
26. Remove all staining and surface corrosion from the internal walls of the common areas prior to redecoration.
27. Obtain certificates and test records for the fire alarm system, the intercom system and the internal emergency lighting within the common areas.

Signed

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March 2009

Thorntons CHARTERED SURVEYORS

APPENDIX 1

Specialist Reports

APPENDIX 2

Photographs

Photograph 1 – Cracked roof tile

Photograph 2 – Open joints and gaps and mastic material to ridge tiles

Photograph 3 – Front parapet gutter, open joints and poor detailing

Photograph 4 – Front parapet gutter – ponding and collection of debris and water

Photograph 5 – Lead valley gutter – splits in the leadwork

Photograph 6 – Front left hand corner of parapet gutter – poor detailing

Photograph 7 – Damaged damp proof course material underneath parapet capping and poor detailing

Photograph 8 – Bitumen felt covering to lead valley gutter construction joint – shrunken mastic material

Photograph 9 – Expansion joint in brickwork with mastic infill material

Photograph 10 - Expansion joint in brickwork with mastic infill material

Photograph 11 – Movement and cracking to brickwork above rainwater outlet

Photograph 12 – Open joint between main external brick wall and recessed brickwork on front elevation

Photograph 13 – Open joints and gaps along junction of window frame and brick reveals

Photograph 14 – Open joints between brickwork and external render finish

Photograph 15 – Open joint and gap between window light and window frame

Photograph 16 – Holes and gaps between brick reveal and window frame

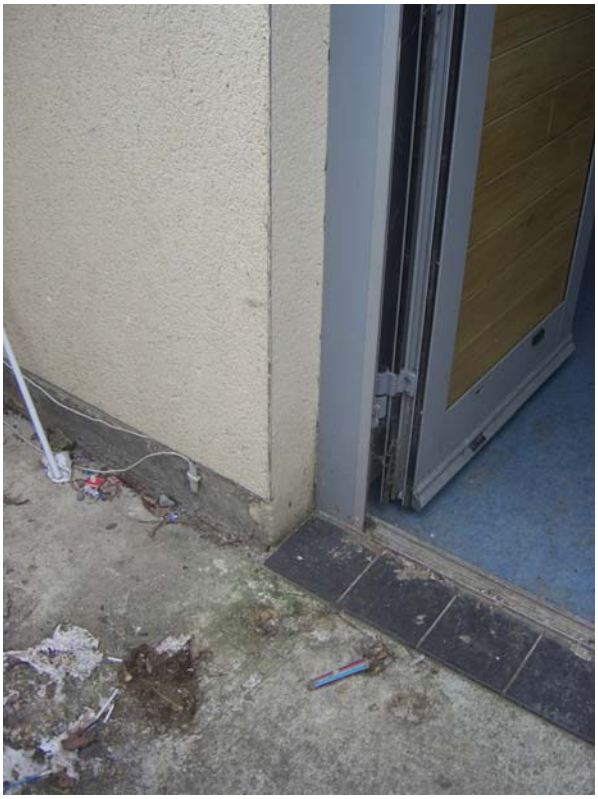
Photograph 17 – Open joint and gap between window light and window frame

Photograph 18 - Holes and gaps between brick reveal and window frame

Photograph 19 – Missing rubber and weather seals and strips within the framework and edging of the front entrance doors

Photograph 20 – Missing rubber and weather seals and strips within the framework and edging of the front entrance doors

Photograph 21 – Gap and space along bottom of balcony door



Photograph 22 – Open joints and gaps between rendered reveals and door frame – on rear elevation

Photograph 23 – Open joints and gaps between rendered reveals and door frame – on rear elevation

Photograph 24 – Open joints and gaps between rendered reveals and door frame – on rear elevation

Photograph 25 – Open joints and gaps between rendered reveals and door frame – on rear elevation

Photograph 26 – Water ingress along bottom corners of rear elevation and rear door

Photograph 27 – Loose and partly detached guard rail to rear window within common areas

Photograph 28 – Staining and surface corrosion to internal walls adjacent to apartment door

Photograph 29 – Vent pipes terminating within the main attic spaces and voids

Photograph 30 – Vent pipes terminating within the main attic spaces and voids

Photograph 31 – Gap and spacing between insulation layers within the main attic

Photograph 32 – Non sealed gaps and spaces and missing fire resistant material along wall between attic and common areas

Photograph 33 – Non insulated and exposed copper pipework within main attic areas and spaces

Thorntons CHARTERED SURVEYORS

APPENDIX 3

Signed Letter of Engagement and Limitations

A3 Limitations

A3.1 *Content of report.*

In accordance with these terms a surveyor will use his or her best endeavours to report upon:

(a) the main aspects of the Property including assessing the site/location, the design, structural framework, fabric and services;
(b) the grounds, boundaries and environmental aspects considered to affect the Property;
(c) any requirements for further investigation arising from the inspection.

A3.2 *Assumptions*

Unless otherwise expressly agreed the Surveyor while preparing the report will reasonably assume that:

(a) the building (if for sale) is offered with vacant possession;
(b) the building is connected to mains services with appropriate rights on a basis that is known and acceptable to the Client; and
(c) access to the building is as of right upon terms known and acceptable to the Client.

A3.3 *Scope of inspection*

(a) **Generally**

(i) The Surveyor will consider his/her advice carefully but is not required to advise on any matter the significance of which in relation to the Building is not apparent at the time of inspection from the inspection itself.

(ii) The Surveyor will inspect diligently but is not required to undertake any action that would risk damage to the Building or injury to himself/herself or any third party.

(iii) The Surveyor will not undertake any structural or other calculations.

(iv) The Surveyor will not produce a repair schedule, planned maintenance report, feasibility report or advise on design, procurement or project management unless expressly agreed with the client.

(b) **Accessibility**

(i) The Surveyor will inspect as much of the internal and external surface area of the building as is practical but will not inspect those areas which are covered,

unexposed or not reasonably accessible from within the site, or adjacent public areas.

(ii) The Surveyor is not required to move any obstructions to inspection including, but not limited to, fixtures, fittings and floor coverings.

(iii) The Surveyor will not open up or cut into the building fabric without specific directions from the client. Such intrusive investigations, if instructed by the client, will be at the risk and liability of the client and will be assumed to be with agreement between the client and the building owner.

(c) Floors

The Surveyor will lift accessible sample loose floorboards and trap doors, if any, which are not covered by heavy furniture, ply or hardboard, fitted carpets or other fixed floor coverings. The Surveyor will not attempt to cut or lift fixed floor boards or other floor fabrics without the express permission of the owner.

(d) Fixed Covers or Housings

The Surveyor will not attempt to remove securely fixed covers or housings without the expressed permission of the owner.

(e) Roofs

The Surveyor will inspect the roof spaces if there is a safe working platform available to work from. Where no safe working platform or access is available, the roof spaces will not be inspected. Similarly, outer surfaces of the roof or adjacent areas will be inspected using binoculars, but will be excluded if they cannot be seen.

(f) Boundaries, Grounds and Outbuildings

Where reasonable access is available the inspection will include boundaries, grounds and permanent outbuildings but will not include temporary buildings or structures.

(g) Services

The Surveyor will carry out a visual inspection of the service installations where reasonably accessible. Drainage inspection covers will be lifted where they are reasonably accessible and it is safe and practical to do so. No test of the service installations will be carried out unless previously agreed, although general overall comments will be made where reasonably possible and practical. The Surveyor will report if it is

considered that tests are advisable. Specialist inspection of electrical installations or gas mains will not be undertaken.

(h) **Areas Not Inspected**

The surveyor will identify any areas which would normally be inspected but he/she was unable to reasonably inspect.

(i) **Environmental and Other Issues**

(i) Particular noise, dust, flooding or contaminated land and disturbance affecting the Property will only be noted if it is reasonably significant at the time of the inspection or if specific investigation has been agreed between the Surveyor and the Client and confirmed in writing

(ii) The Surveyor will report on any reasonably obvious health and safety hazards to the extent that they are apparent from elements of the property considered as part of the inspection.

(iii) The Surveyor will not undertake a fire risk assessment or consider fire safety risks to the extent that they are apparent from elements of the property considered as part of the inspection.

A3.4 *Hazardous Material*

(a) Unless otherwise expressly stated in the report, the Surveyor will assume that no deleterious or hazardous materials or techniques have been used in the construction of the property. However, the Surveyor will advise in the report if, in his or her view, there is a likelihood that deleterious material has been used in the construction and specific enquiries should be made or tests carried out by a specialist.

(b) Subject to Clause A3.3 (b) the Surveyor, based upon a limited visual inspection, will note and advise upon the presence of lead water supply pipes and asbestos.

(c) The Surveyor will advise in the report if, to the best of his or her knowledge, the property is in an area where, based on information published by Radiological Protection Board of Ireland, there is a risk of radon. In such cases the surveyor will advise that tests should be carried out to establish the radon level.

(d) The Surveyor will endeavour to advise if there are transformer stations or overhead power lines which might give rise to an electromagnetic field, either over the property or visible immediately adjacent to the

property. The surveyor is not required to assess any possible effect on health or to report on any underground cables.

A3.5 *Ground Conditions*

The Surveyor will not be required to comment on the possible existence of noxious substances, landfill or mineral extraction implications, or other forms of contamination, nor will the Surveyor advise on the adequacy or the substratum for any particular purpose unless geotechnical tests or specialists advice are commissioned by the client.

A3.6 *Consent, Approvals and Searches*

(a) The Surveyor will be entitled to assume that the Building or site is not subject to any unusual or onerous restrictions, obligations or covenants which apply to the property or effect the reasonable enjoyment of the Property.

(b) The Surveyor will be entitled to assume that all Planning, Building Regulations and other consents required in relation to the property have been obtained. The Surveyor will not verify whether such consents have been obtained. Any enquiries should be made by the Client or the Clients legal advisors. Drawings and specifications will not be inspected by the Surveyor unless otherwise previously agreed.

(c) The Surveyor will be entitled to assume that the property is unaffected by any matters which would be revealed by a Local Search and replies to the usual enquiries or by a Statutory Notice, and that neither the Property, nor its condition, its use or its intended use, is or will be unlawful.

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APPENDIX 4

Deleterious Materials

Since the early 1980s the property and construction industry has evolved and adopted a list of materials, which, for one reason or another, have been labelled deleterious and/or hazardous to health and safety. Some of these materials only become deleterious and hazardous due to the particular circumstances of their use and are not inherently deleterious or hazardous in themselves.

Materials that have been branded "deleterious" have usually been so classed because they either:

(a) pose a direct risk to the health and safety of persons occupying or visiting a particular property (e.g. asbestos) or

(b) can be detrimental to the structural performance of a building (e.g. High Alumina Cement in concrete) or

(c) are generally perceived by the property investment market as undesirable features of a building, which can affect the liquidity of the property concerned (e.g. calcium silicate bricks) or, in the case of composite panels, its insurability.

Some deleterious materials might fall into more than one of the forgoing three categories above.

Few of the deleterious materials given below can be detected with the naked eye alone. Often sampling and testing of a component or element is required to confirm the presence, or absence of a material. The materials marked with an asterisk below are, in general, those materials that require sampling and testing to establish their existence with certainty.

At present, the list of deleterious and problematic materials comprises the following:

- Composite Cladding Panels to roofs and walls.
- Nickel Sulphide inclusions in toughened glazing
- High Alumina Cement (HAC) when used in load-bearing concrete components and elements.*
- Chloride additives when used in pre-cast or in situ cast concrete.*
- Calcium Silicate Bricks or Tiles (also known as sand/lime or flint/lime bricks).
- Mundic Blocks and Mundic Concrete.
- Woodwool slabs when used as permanent shuttering to in situ cast structural concrete.
- Lead based in paint when the paint concerned could be used in locations that could result in the ingestion, inhalation or absorption of the material.*
- Lead used for drinking water pipework except when used as solder to pipe fittings.
- Sea dredged aggregates or other aggregates for use in reinforced concrete which do not comply with British Standard 882: 1992 and aggregates for use in concrete which do not comply with the provisions of British Standard Specification 8110: 1985.*
- Asbestos in any raw form or asbestos based products.*
- Manmade mineral fibres in materials when these fibres are loose and have a diameter of 3 microns or less and a length of between 5 and 100 microns.*
- Urea Formaldehyde Foam in large quantities used, in particular, as cavity insulation (due to vapours released from the foam.

- Commercial and Residential Valuations
- Commercial and Residential pre-acquisition surveys
- Insurance Reinstatement Valuations
- Schedules of Condition
- Rent Reviews
- Dilapidations
- Planning, Design and Contract Administration
- Development Monitoring
- Measured Building Surveys
- Conservation
- Building Energy
- Fire Safety Certificate Applications

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