CONSERVATION REPORT ON PROPOSED WORKS TO BALLYROAN HOUSE, RATHFARNHAM, DUBLIN 16

View of Ballyroan House

This report has been carried out Robin Mandal Architects on behalf of Homeland Investments Limited, the owner of the building, at the request of Ferreira Architects, the architects of the proposed works.

Its aim is to make a conservation assessment of the impact of the proposals on the building, which is a protected structure, as part of a Planning Application, and to record the building in its present condition.

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APPENDIX 1: CONSERVATION METHODOLOGY FOR THE HOUSE REPAIRS

PROJECT DESCRIPTION
The project consists of works to Ballyroan House, Rathfarnham, Dublin 16.

CONSERVATION PHILOSOPHY:
The proposed conservation work will be carried out in accordance with the principles of the Venice and Burra Charters produced by ICOMOS Australia in 1979 and amended in 1981, 1988 and 1999. This document defines current conservation terminology and makes sensible recommendations for its practice. These include Principles, Processes Preservation, Restoration, Reconstruction, Adaptation and Practice, all of which will be followed.

GENERAL PRINCIPLES:
All features and materials of importance to maintain the structure's character will be retained including relevant features of all ages. It should always be the intent to restrict all interventions to the minimum that is consistent with the established philosophy and the appropriate use, reuse, and continued survival of the building. The philosophy of doing 'as little as possible and as much as necessary' applies here. It is the objective to carry out works limited to that essential for the survival of the property and its conversion. It is intended in all cases where possible to carry out repairs rather than replace materials. In relation to any new work required to the structure the use of processes that are reversible will be used. Repairs are to be carried out without an attempt to disguise or artificial ageing and new repairs should be discernible without detracting from the structure. It is intended that unsatisfactory alterations that disfigure earlier work of greater merit should be reversed, where feasible. This especially applies to the removal of exposed services. It is an objective that the highest conservation standards will apply to the project. As a general principle as much of the original material as possible is to be retained and reused in its present location. Only appropriate materials and methods of construction and contemporary methods or materials will be used where alternatives do not exist. Where decay occurs, before any restoration is undertaken, a thorough analysis should be made of the defects and the nature of the decay of these materials.
A copy of the record photographs and final report referred to below will be submitted to the Irish Architectural Archive.

GENERAL DIRECTION TO CONTRACTOR
The building is an historic building and great care must be taken at all times to protect any artefacts and any part of the historic building fabric, fittings etc. that could be damaged due to the works. All works will be periodically inspected by the Conservation Architect. Robin Mandal who has an RIAI Grade I accreditation as a conservation architect. All contractors/site personnel and their staff will be required to have read this method statement. Detailed records including photographs are to be kept of the works at all stages and a report will be prepared and submitted to the Conservation Officer on completion of the works. Provide such protection as is necessary to prevent the further ingress of rainwater and or ground/surface water to the building or staining, splashing etc. Confirm items and elements that are to be protected by contractor before commencement of work. Prepare softwood or other supports protection as required. Install bubble wrap protection to all door frames, other carved elements and elsewhere in work zones and approach routes. Scaffolding will be erected as required and dismantled by competent scaffolders. Extreme care will be taken to avoid any damage to the fabric by the scaffolding during erection, while in place and when being dismantled.
All necessary precautions will be taken to ensure no damage occurs to the building fabric. All services such as drains, water supply etc will be properly blanked off or sealed to prevent damage directly or indirectly to the building fabric. Exposed openings such as doors and or windows will be securely sealed to prevent unauthorised access. The use of pneumatic drills, hammers etc is to be carefully monitored and are to be used only if no damage through vibration or otherwise is being caused to the masonry walls and only with the prior approval of the Conservation Architect. The contractor is to take all necessary precautions to protect the building fabric from collapse/damage during the works. The contractor will be required to prepare a program of work for the approval of the Conservation Architect prior to the commencement of the works, to ensure the sequencing of work is compatible with the fabric.
The contractor must be tax compliant i.e. have current Tax Clearance Certificate, and hold appropriate insurances and be in compliance with all current Health & Safety Legislation.

PROPOSED USE:
The proposed use is for residential, multi unit use, a change from the existing single unit residential use.

PROPOSED WORKS:
The works proposed to the protected structure are indicated in detail on the drawings lodged with this planning application. This conservation methodology incorporates specifications that will be used in contract documents.

INVESTIGATIONS:
Some investigations have been carried out to determine the condition of concealed fabric. The walls have been examined to determine the extent of any structural failure. All works, repairs, alterations and making good to the original fabric are to be in accordance with the conservation methodology. No opening up or chasing of the original fabric is to be carried out without the approval of the conservation architect.

GENERAL DESCRIPTION AND CONDITION.
The buildings are generally in reasonable condition, with much of them being of recent reconstruction. The buildings are currently vacant. Works had been carried out to it in the late 20th Century.

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PROTECTION OF THE PROPERTY DURING CONSTRUCTION:
During the course of construction the property and its elements shall be protected from damage. Retention of existing fabric shall include protection during construction and repair. This will include the protection of joinery materials being wrapped with bubble wrap, the protection of staircases with hardboard and covering of floors with cloth etc. Fire prevention and prevention of water ingress will be determined at the tender stage and agreed at the commencement of work. Window casings, windows, door surrounds, doors, cornices, lath and plaster ceilings balusters and fire surrounds etc. should be protected by plywood screens and floors shall be covered with cloth etc.

EXPERIENCED CONTRACTOR
Only contractors with proven experience in the repair of historic buildings are to be engaged on the work. All contractors are to be tax compliant and appropriate tax certificates are required for grant applications.

SUPERVISION
All works to the historic fabric of the buildings shall be carried out under the supervision of the contractor with advice and inspections by the consultant historic Conservation Architect and no taking down, opening up nor removal of any feature or fitting without his/her approval.
The contractor is to inform the workforce, other parties, sub-contractors and suppliers, of what is expected of them and to enforce good practice in relation to standards, Health and safety and waste management.

HEALTH AND SAFETY:
Address all health and safety issues in connection with contaminating materials. Construction work on protected structures must comply fully with the Safety, Health and Welfare at Work (Construction) Regulations 5.1 504 of 2006. The contractor should be aware of the particular challenges of retaining as much as possible of the fabric of a protected structure and providing a safe working environment during construction. Particular care should be taken in relation to propping and temporary works so as to minimise damage and intervention on the fabric of the building. This requires a co-ordinated approach by the Conservation Architect, the Project Supervisor Construction Stage, Structural Engineer and the Contractor. The contractor is to ensure that the site is secure at all times and that every effort is made to protect works staff, site visitors, public etc. from injury from the works. The contractor will prepare a H&S assessment, a Safety Statement and a Safe System of Work Plan and undertake the duties of Project Supervisor Construction Stage for the duration of the works. The contractor is responsible for the disposal of all waste material through a licensed waste disposal company.

WASTE MANAGEMENT
During the course of the works minimise the waste generated from the site and make efficient use of materials. Ensure that waste is disposed of according to statutory regulations and prevent pollution occurring.

DEMOLITION AND REMOVALS:
Parts of buildings to be removed are to be carefully taken down, with particular care to be taken where material to be removed is in contact with historic fabric. Old materials, if considered suitable by the architect may subsequently be re-used always to the architect's approval. Remove all defective timbers, bag and remove from site. Remove all debris from site.

WORKS:
The works are fully described in the documents accompanying this application. An outline of the general works is as follows:

1. Demolitions:
2. Upgrades to the fabric for fire safety and servicing;
3. Insertion of new elements:
4. Repairs: and, not to the protected structure itself, but in its attendant grounds,
5. 20 new houses (the construction of which is not referred to herein).

STRUCTURE GENERALLY:
The buildings are generally structurally sound. There is evidence of some structural cracking in the building, but it is relatively easily reparable. The consultant engineer shall deal with structural aspects including the repair of decayed lintels and weakened floors and joists generally.

TIMBER DECAY:
There is some evidence of decay internally. Where decay is found the timbers will be replaced where necessary with like for like basis, treated with a vac vac treatment Structural members will be spliced where necessary. Beams showing decay will be repaired and spliced with engineer's approval with timber similar to the existing. Roof timbers will be thoroughly inspected as the work proceeds. Any discovery of dry rot will be reported immediately to the Conservation Architect.

OUTLINE SPECIFICATION FOR TIMBERS:
Any rotten structural timbers will be replaced with new spliced members retaining as much of other original timber as is sound. All new timber used throughout the work shall be well seasoned and dry, free from sap shakes, large or loose

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knots, and waney edges of other imperfections. All timbers found defective in these respects shall be removed from the site. The moisture content of all timber shall not exceed the permitted maxima set out in IS 96. All timber shall be free from surface moisture at time of treatment with preservative. The moisture content of all timber shall not exceed the permitted maxima set out in IS 96. All new structural timbers including joists, rafters, bridging, studding etc shall comply with Irish Standard Recommendation SR II:1988: timber shall be Strength class B stress graded and marked SCB.

SCAFFOLDING:
All scaffolding is to be supplied and erected by the contractor for the duration of the works. This would require erection of scaffolding for both support and access to work throughout, complete with ladders, loading platforms, hoist mounts, safety rails, debris nets and shelter as required. All scaffolding must be erected in such away that all door ways to the building are left accessible and safe for use.

ROOF GENERAL:
Roof works are generally of repair. Where replacement works are required, they will be undertaken on a 'like-for-like' basis. A full assessment will be made of the repairs required to the roof as part of any works approved on foot of this planning application.

WALLS GENERAL:
Only minor repairs to the masonry and render are being considered internally. The external walls are in reasonable condition but the render is in very poor condition. The walls will be inspected in detail during the works.

SERVICES, WEED GROWTH:
Remove obsolete service wires and pipes and tidy up all retained wiring. Remove any ivy growth from all elevations. Allow for treatment of all walls from with fungicide where instructed.

INTERNAL PLASTERWORK GENERALLY:
Generally the extant original plasterwork, cornices, decorative plaster features are all in reasonable condition. These original elements are in a restricted area to the fronts of the buildings at ground and first floor levels. The existing plasters and renders are to be tested and historic plaster and renders matching the existing are to be used for repairs. No sound plaster or render is to be removed.

WALLS:
Sections of loose or debonded plasterwork will be repaired with plaster of a similar mix and similar ingredients. All new services are to be concealed behind the plasterwork but chasing of walls is to be kept to a minimum and is to be repaired with a lime based plaster by a specialist plasterer.

INTERNAL PLASTERING:
Carefully remove loose plaster only where directed. Where the surface is too poor for repair the finish will be plastered with a lime render. Ensure that all metal items to be embedded in plaster and cement rendering are non-corrosive. Clean backgrounds by scrubbing with water containing detergent to remove oil and other materials detrimental to the work.

Dry brush surfaces to remove surface staining and loose material. Sprinkle very dry surfaces with water and allow to soak in before setting. Dub out, where necessary, in separate coats each of not more than 10mm in thickness and in the same mix as the first specified coat. Scratch surface of coat immediately after it has set.

First coat: The first coat has to provide sufficient bonding. A scud coat is to be used on a strong and smooth background. The thickness of the first coat depends on the nature of the background, the overall thickness of the render and the keying function. The background should be dampened and the mix dashed on with a trowel or scoop to give a coating of between 3 and 5 mm in thickness. The scudding should be dampened periodically and permitted to dry out slowly before the application of the undercoats. A trowelled scratch coat is preferable on old bricks or soft surfaces. Use a strong mix (1:1.5 sand:NHL2). On soft or weak background use 1:2 or 2:5. Successive coats must be weaker than this coat. Scour back and key (criss-cross keying) once initial setting has taken place.

Two undercoats: to be applied 2 days or more, after completion of each coat. The strength should be marginally less than the first coat (2:1 sand:NHL2).. Thickness can vary according to the overall thickness required but it is normally between 10 and 15 mm. They must not be applied over 20 mm thick. The thicker the intermediate coats the longer the waiting time before each application.
Finishing coat: The finishing coat is a thin coat 5mm minimum of grade B Silica sand and NHL (1.5:1).

CORNICES:
No historic cornice work is to be removed or damaged. No services are to be carried through them. The cornices are to be protected while working close to them or where work is being carried out that could cause damage, by narrow strips of hardboard fixed to timber battens.

DAMAGING OR MISSING CORNICES OR ENRICHMENTS.
Remove paint from undamaged sections to expose detail. Make a mould, using silicon or vinamoulds from the existing to form new section.

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PAINT REMOVAL CORNICES:
Cornice and decorative plasterwork details to be exposed by the removal of paint with an alkali based paint remover supplied in paste or poltice form ensuring no damage to the original plaster. Paste is to be applied directly with brush or trowel. Apply plastic backed paper and after required period remove taking the disolved paint. All work to be carried out with great care. Carefully pick out remaining paint with a small tool. Surface is to be finally washed down. Any resulting efflorescence to the brushed down when cornice is dry. Finally neutralise the stripped surface with an application of acetic acid.

EXTERNAL PLASTERWORK;
The existing external plaster is in very poor condition. It will, subject to further inspection be removed and replaced with a lime render as follows:
Remove all perished plaster render, make secure to the backing material and clean.
Analyse the make up of the existing render and prepare a match for its constituent parts.
Prepare exposed surfaces and apply three coats of lime render.
Ensure that the works are carried out by a specialist in the use of lime and allow for protection against weather conditions

FLOOR REPAIRS:
Existing floor boards are to be carefully taken up, where required for repair or strengthening works, but retained in-situ. The joists are to be carefully examined and repaired as per structural engineers requirements. Previous installation of services may have caused weakening of the joists and these will need to be repaired.

JOINERY:
Generally there are some original joinery features remaining, in particular the staircase and decorative elements in the hallway area., In principal, where original joinery is found, it will be repaired rather than replaced with any new elements being purposely designed and made. All matching detail will be accurately replicated, where appropriate. New elements should reflect their contemporary nature.

WINDOWS:
Modern windows are generally to be replaced by timber up and down sashes, all others to be repaired on a case by case basis. Prior to works to the windows being undertaken a report on their condition is to be prepared by a specialist. The author could not identify with certainty original windows during the inspections.

SKIRTING BOARDS:
Any original skirting boards are to be retained, any to be removed for the repair of floors are to be labelled, carefully stored and replaced. Perished sections are to match the existing in all respects.

DOORS
Historic doors are to be retained. Their construction usually provides reasonable insulating properties. Cracks may be filled with a flexible filler when redecorating. Draught-proofing similar to windows can be accommodated.

EXTERNAL DOOR:
Repair as required and make good.

FIREPLACES:
Protect during the works, repair as required and make good.

PAINTING
Joinery for painting shall be treated with a primer, undercoat and finishing coat using heritage approved paint specification. Where joinery paintwork exists in good condition paintwork will be lightly sanded down for finishing coat in heritage paint selection.

DRAINAGE:
The drainage above ground is in working order but in need of repair. Generally the below ground drainage, combined system is in working order. Allow for checking current condition of surface water drains. New downpipes to discharge into original system. Allow for repairs to gulleys and gratings.

MECHANICAL AND ELECTRICAL INSTALLATION.
The mechanical and electrical installation shall be in accordance with best conservation practice. Use existing pipe and wiring runs where available.

FIRE SAFETY:
Alternative fire safety solutions appropriate to the building may be considered in relation to the works. Early warning fire detection and alarm systems are to be installed in accordance with the regulations.

RECORD OF EXISTING BUILDING:
The drawings, photographs and this report will form part of the record of the building. It is proposed to photograph the building again, all elevations and external details, roof, all internal wall faces, ceilings floors and details prior to the commencement, during and at the end of a contract. The record will be lodged in the Irish Architectural Archive.

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APPENDIX 2: SURVEY DRAWINGS

site survey (north is to the bottom of the page)

site section, showing north elevation of Ballyroan House

site section, north to south (left to right)

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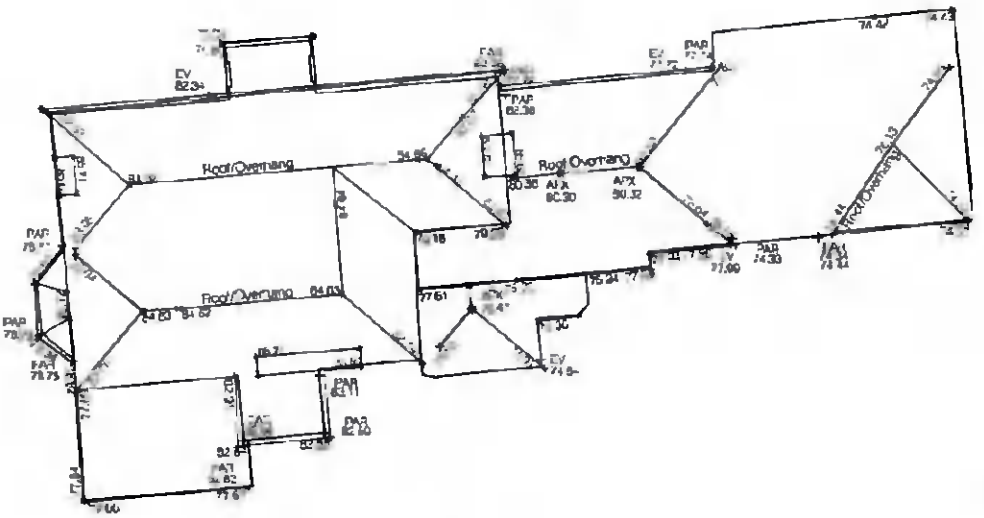
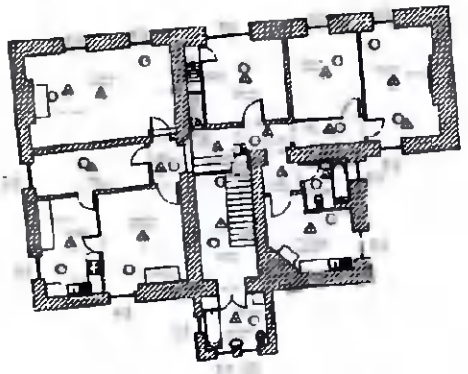
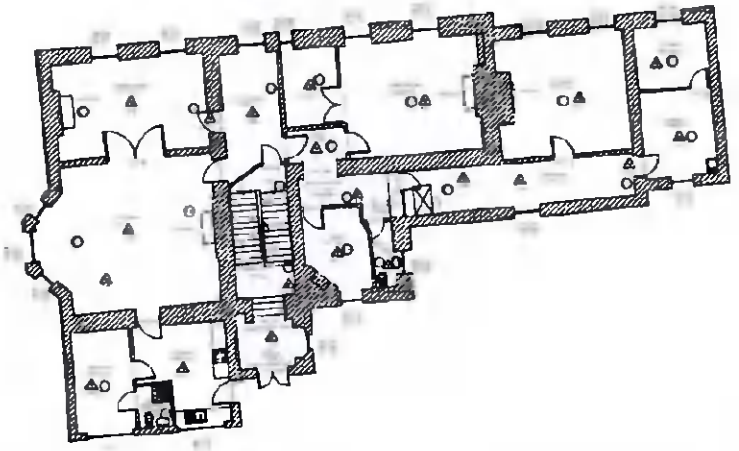


roof plan (top)

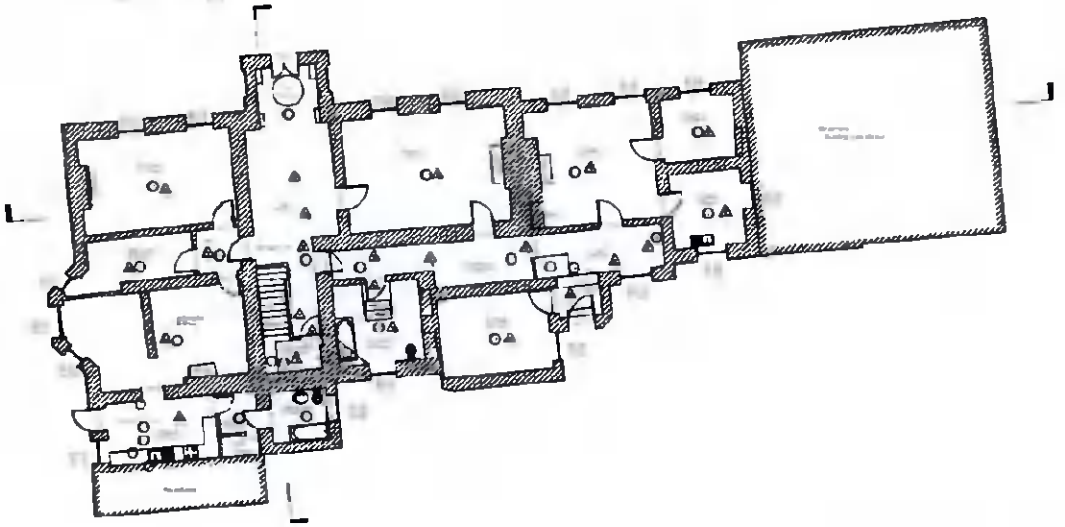


second floor plan



first floor plan

ground floor plan (below)



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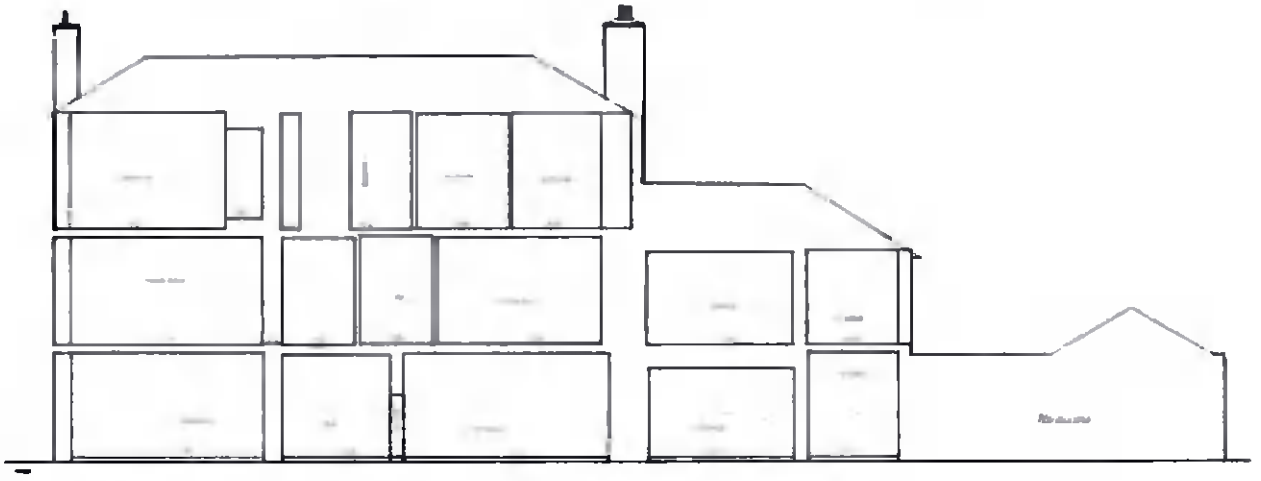
NORTH ELEVATION 1:250 @ A3

SOUTH ELEVATION 1:250 @ A3



LONG SECTION 1:250 @ A3

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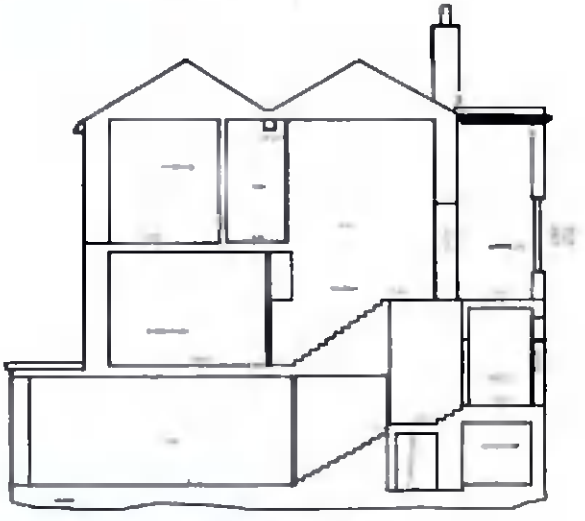
EAST ELEVATION 1:250 @ A3

WEST ELEVATION 1:250 @ A3



CROSS SECTION 1:250 @ A3

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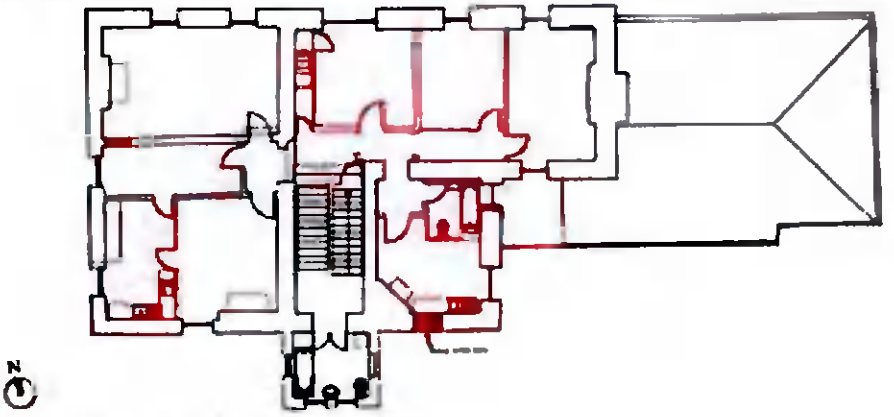
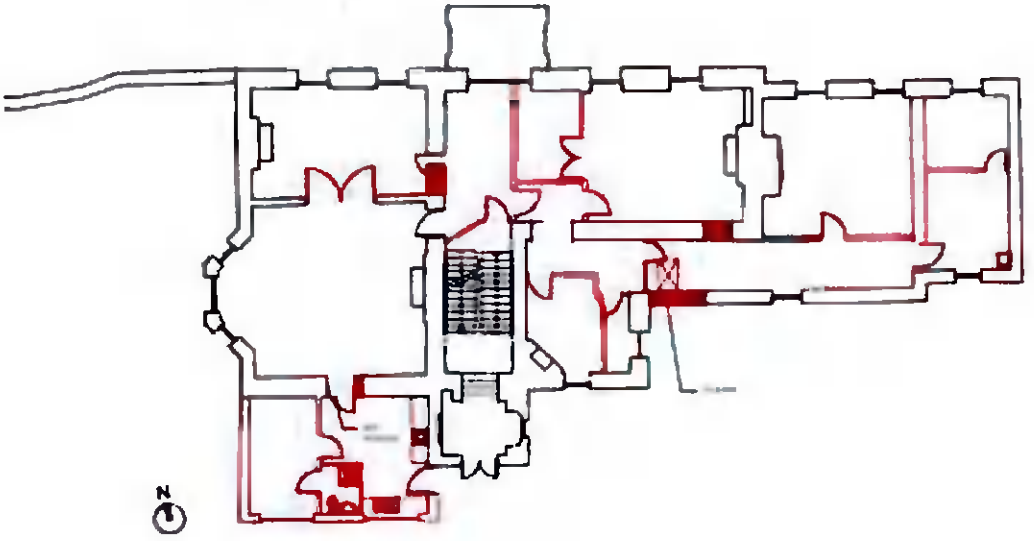
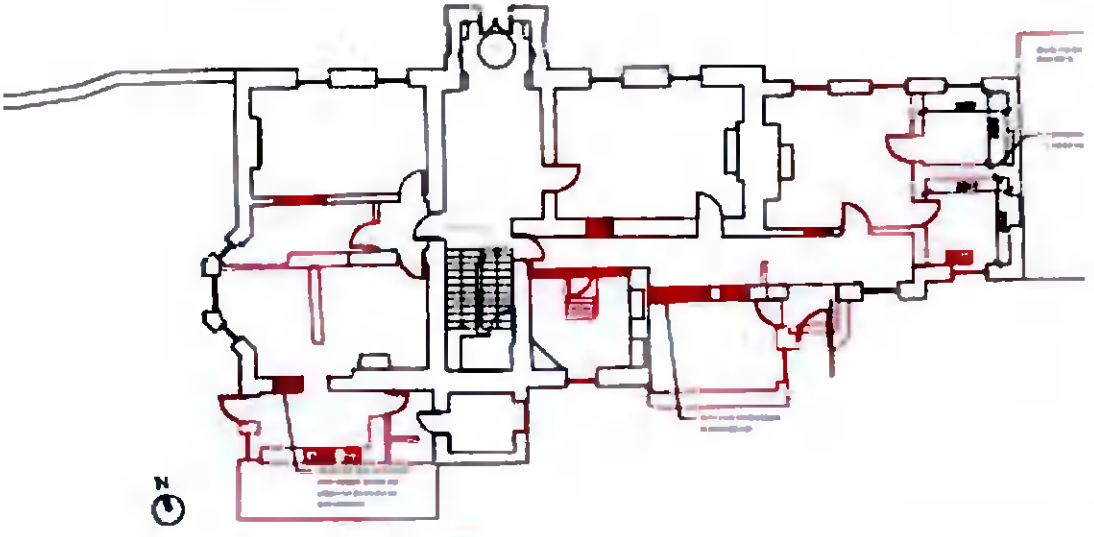
APPENDIX 3: DEMOLITION DRAWINGS



DEMOLITION PLAN
SECOND FLOOR LAYOUT
1:200 @ A3



DEMOLITION PLAN
FIRST FLOOR LAYOUT
1:200 @ A3



DEMOLITION PLAN
GROUND FLOOR LAYOUT
1:200 @ A3

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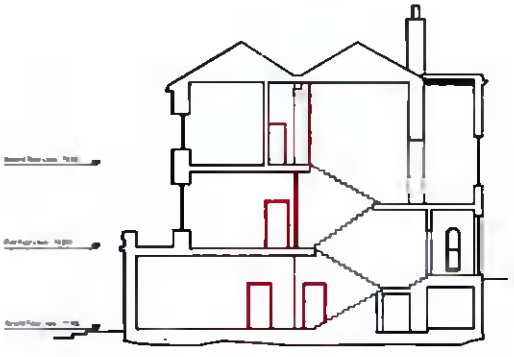
DEMOLITION SOUTH ELEVATION
1:200 @ A3

DEMOLITION WEST ELEVATION
1:200 @ A3

DEMOLITION EAST ELEVATION
1:200 @ A3



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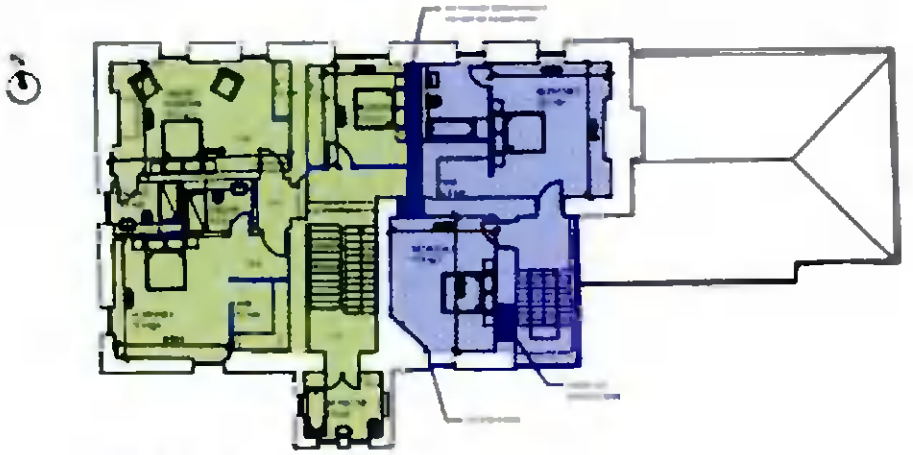
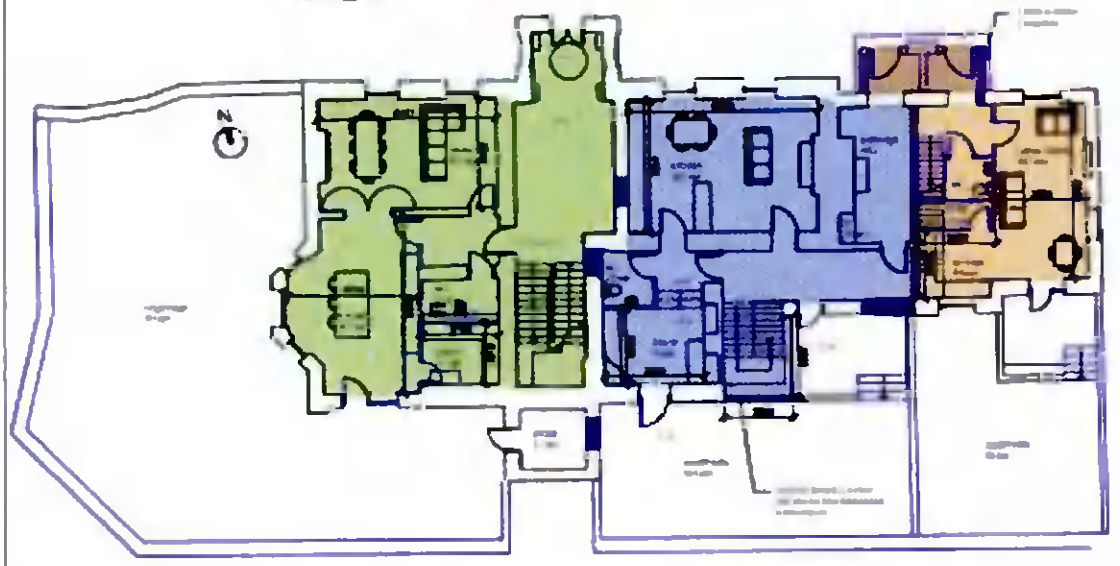
APPENDIX 4: PROPOSED LAYOUT



PROPOSED PLAN
SECOND FLOOR LAYOUT
1:200 @ A3

PROPOSED PLAN
FIRST FLOOR LAYOUT
1:200 @ A3



PROPOSED PLAN
GROUND FLOOR LAYOUT
1:200 @ A3

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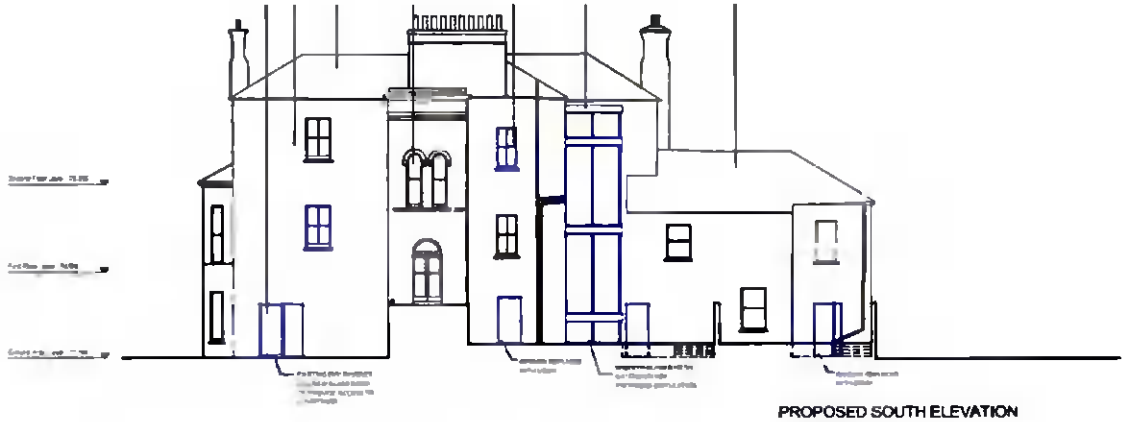
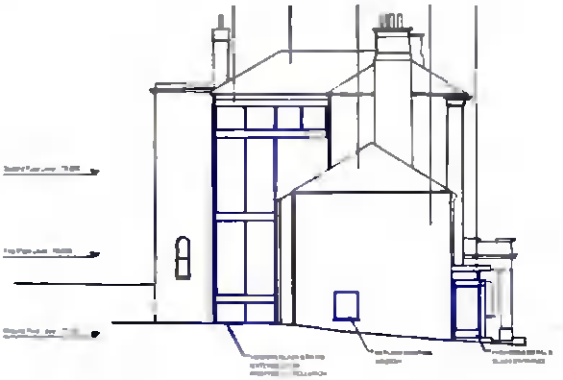


PROPOSED SOUTH ELEVATION
1:200 @ A3

PROPOSED WEST ELEVATION
1 200 @ A3



PROPOSED EAST ELEVATION
1 200 @ A3

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