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# Carnegie Library – Outline Scope of works to existing building fabric.

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| **0.0** | **CARNEGIE LIBRARY – GROUND FLOOR** | |
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| | **Brief Description of existing Historic Fabric- refer to surveys** | **Outline scope of works** |
| **0.1** | **External Walls (inside of)** | |
| | Solid walls throughout, painted plaster finish. Wainscoting & ventilation opes to walls as noted in condition survey, | **Essential repairs as follows:**<br>• Remove existing lime plaster only where boasted or spawled - locations as noted in condition survey plus an allowance for additional unforeseen.<br>• Note there is extensive boasting of plaster to the following areas:<br>o South and South West Walls of G-01 at ground floor and F-01 on the first floor above. At either side of the chimney breast.<br>o North & East Walls AND South West Walls of the Former Reading Room at G-04.<br>o All external walls of G-06 W.C. and G-05 Tea Station.<br>• Remove plaster at all window lintels to G-01, G-02, G-03 and G-04.<br>• Remove all embedded timbers observed within plasterwork<br>• Issues with damp & rot at all external walls to G-01, G-02, G-03 and G-04. Works to address timber decay subject to be as per recommendations by Timber Specialist.<br>*Gordon Knaggs report (received 5/2/21) recommends removal and replacement of all existing timbers at ground floor level.*<br>• Retain through wall ventilation grilles where present, these may nee to be augmented with additional vents - subject to confirmation of ventilation strategy.<br>• Retain chimney ventilation hatches in place where present.<br>• Review ventilation strategy for chimney / fireplace at G-01 at built in safe.<br>• Infill holes to masonry as noted in condition survey and where embedded timbers removed in masonry to match surrounding wall.<br>• Carefully number & record existing T&G wainscotting and store for reuse in agreed locations to G-01, G-02, G-03 and G-04. Throughout ground floor. Subject to recommendations from Timber Specialist.<br>*Gordon Knaggs report (received 5/2/21) recommends removal and replacement of all existing timbers at ground floor level.*<br>• Carefully number & record existing timber surround to book hoist at South/East corner of G-01. and store for re-instatement in original location. Subject to recommendations from Timber Specialist.<br>*Gordon Knaggs report (received 5/2/21) recommends removal and replacement of all existing timbers at ground floor level. Insecticidal treatment to all retained timbers within building also recommended.*<br>• Replace damaged or rejected wainscotting and joinery as noted by the timber specialist, matching new with existing, where fabric has been damaged beyond reuse in removal. Replace on a like for like basis, to match historical detail and form.<br>• Remove all built-in furniture, sanitary ware, plumbing fittings including removal of associated embed metal and timber and make good walls.<br>• Clean down existing wall surface to remove existing mould, Product & methodology subject to testing on site.<br>• Make good lime plaster finish in preparation for insulation.<br>• Install new Calcitherm lime board insulation system as follows:<br>o Apply lime plaster levelling coat to all walls, then 6mm Calsitherm adhesive mortar (KP-Kleber) to wall.<br>o Fix 80mm thick Calsitherm Climate board to adhesive.<br>o Use thermally broken fixings and insulation strips at all junctions with new internal walls.<br>o Apply insulation, plaster finish and movement strips as above between each floor joist at including plaster finish as below.<br>o To be applied from above to minimise disruption to ceilings.<br>o Calsitherm KP Kalkglätte KP lime plaster applied to internal face of climate board, thickness max 4mm – applied in 2 layers with reinforcement mesh between, with corner beads etc. |

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| | | ○ To manufacturers specification, using Calsitherm products only.<br>• Carefully number, record and remove timber surrounds to windows and retain for replacement. Fit 15mm Calsitherm climate soffit board, applied as above, to wall to head of windows and to wall side of window liners. Fit Calsitherm airtight movement joint strip to all sides, Calsitherm KP-Kalkglätte KP lime plaster applied to internal face of climate board and panels refitted to all reveals. To manufacturers specification, using Calsitherm products only. Main Contractor is free to put forward an alternative, equal and approved product which will be assessed against the performance of the above product.<br>• Refit all existing window joinery matching in new where fabric has been damaged beyond reuse in removal. Otherwise replace on a like for like basis, to match historical detail and form.<br>• Prepare new lime plaster finishes for painted finish.<br>• Apply two coats of breathable paint finish – "Keim Mineral Paint" to selected colour. Main Contractor is free to put forward an alternative, equal, and approved product which will be assessed against the performance of the above product.<br>• Apply paint work to new and refurbished wainscotting to consist of a primer coat, undercoat, and topcoat satin wood finish. |
| | | **Works in relation to new layout:**<br>• Form two opening in north gable wall at GO4 Reading Room no 2 to connect to new two storey extension, as per architects drawing.<br>• Remove single storey lean-to structures forming G-05 (Tea Station); G-06 (W.C.); G-07 (Outside Toilet) and G-08 (Outside Store).<br>• Form New openings at north gable end of building and either side of chimney breast at G-04 (Former Reading Room 2) and F-02 (Museum) and F-06 (Office).<br>• New two storey Extension at north gable to provide a new Lift Lobby; Platform lift, 2 Accessible W.C.s and 2 stores. As per accompanying design proposal. |
| **0.2** | **Internal Walls** | |
| | Solid walls between rooms G-01/G-02 and G-02 / G-04<br><br>Timber glazed screen and desk at G-02 / G-03 to entrance hall.<br>Wainscoting to walls as noted in condition survey, | **Essential repairs as follows:**<br>• Main partitions on the ground floor consist of masonry support walls of with lime plaster "on the hard" on brick work.<br>• Required where lath and plaster studs at door between G02 from G01 are to be retained: Remove existing lime plaster only where boasted or spawled.<br>• Boasted plaster to either side of masonry walls as noted in condition survey.<br>• Issues with Damp & rot at masonry partition walls between G-01/G-02 and that at G-02 / G-04. Works to address timber decay /rot/woodworm subject to recommendation by specialist.<br>*Gordon Knaggs report (received 5/2/21) recommends removal and replacement of all existing timbers at ground floor level. Insecticidal treatment to all retained timbers within building also recommended.*<br>• Carefully number & record existing T&G wainscotting to G-01/G-02 and G-02/ G-04, throughout ground floor, and store for reuse in agreed locations. Reuse subject to recommendations from Timber Specialist.<br>*Gordon Knaggs report (received 5/2/21) recommends removal and replacement of all existing timbers at ground floor level. Insecticidal treatment to all retained timbers within building also recommended.*<br>• Replace damaged or rejected wainscotting and joinery as noted by the timber specialist, matching new with existing, where fabric has been damaged beyond reuse. Replace on a like for like basis, to match historical detail and form.<br>• Retain existing timber reception desk and screen to G-03/G-02<br>• Remove all embedded timbers observed within plasterwork as directed by timber Specialist.<br>• Infill holes to masonry as noted in condition survey and where embedded timbers removed in masonry to match surrounding wall. |

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| | | • Remove all modem boarded finishes to north wall of G-01.<br>• Remove all built-in furniture, sanitary ware, plumbing fittings including removal of associated embed metal and timber and make good walls.<br>• Clean down existing wall surface to remove existing mould, Product & methodology subject to testing on site<br>• New lime plaster finish, type and mix TBC on analysis of existing to areas noted above, and to areas where plaster had been previously removed.<br>• Prepare existing and new lime plaster finishes for new paint finish.<br>• Apply two coats of paint breathable paint finish to Lime plaster walls – "Keim Mineral Paint" Main Contractor is free to put forward an alternative, equal, and approved product which will be assessed against the performance of the above product.<br>• Apply paint work to new and refurbished wainscotting to consist of a primer coat, undercoat, and topcoat satin wood finish. |
| | | **Works in relation to new layout:**<br>• Provide fire rated roller shutter or screen to be activated in line with Fire alarm and Detection System, to inner face of reception desk. |
| **0.3** | **Ceilings** | |
| | **Ground floor:** Flat Lath and plaster. ceiling throughout**,** | • Works to flat ceilings to G-01, G-02, G-03 and G-04 to be considered as part of options to upgrade floor type 1 or type 2 under section "0.4 Floors", to achieve 60 min fire compartment.<br>• In addition, provide a 50mm void to ceiling area to facilitate electrical services below the fire rated ceiling, with 50mmm timber battens to the underside and finished in 1 no layer of 12.5mm gypsum plaster board and recessed proprietary access panels where required.<br>• Apply two coats of breathable paint finish – "Keim Mineral Paint". Main Contractor is free to put forward an alternative, equal, and approved product which will be assessed against the performance of the above product. |
| **0.4** | **Floors** | |
| | **Ground floor:**<br>Raised timber floor to G-01; G-03 & G-04. With a mixture of carpet and painted MDF or particle bord flooring.<br>Solid floor substrate with terrazzo finish to G-02;<br>Solid floor substrate with vinyl finish to G-05; G-06; G-07 & G-08. | **<u>Description;</u>**<br>• There are serious issues with damp, timber decay and woodworm at the raised timber floor to the ground floor. This appears to be caused by the raised planter to the East Boundary, which is about 900mm above the finished ground floor level, and the poor ventilation detail on the West boundary coupled with the concrete slab at the perimeter. As highlighted in the Gordon Knaggs report, it is not apparent how the original sub-floor ventilation system was intended to work, but the location of vents at cill level on the rear façade is not providing adequate cross-flow to manage moisture levels within the floor void. It is, therefore, our recommendation that the existing timber floor be replaced with a solid concrete floor (Option 2 or 3 below)<br>• **Works to address rot subject to recommendation by Timber Specialist to be taken into account.**<br><br>**<u>Proposal:</u>**<br>• Remove source of water i.e. remove planting and soil and drop ground level to East boundary to original level. At the East Elevation, remove a section of concrete abutting external walls.<br>Install new perforated pipe or "French drain" at external perimeter to East and West, connected to the drainage system to lower the water table in this area. Fit area with pea gravel to match the appropriate internal level.<br><br>**Option 1 – replace on a like for like basis –** *normal conservation approach may not be appropriate in this instance*<br>• Remove all timber floor coverings, timber boarding, joists and tassel walls below.<br>• Rebuild new Raised timber floor with new brick tassel walls on foundations to engineers' details, with dpc and adequate cross ventilation to external |

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| | | walls, fit new timber joists to engineers' details, with insulation fitted between joists.<br>• Fit new T&G hardwood flooring with varnish finish to architect's detail.<br><br>**Option 2 – replace with Concrete floor with underfloor heating**<br>*Although not ideal from a conservation perspective it may be appropriate in this instance*<br>• Remove all timber floor coverings, timber boarding, joists and tassel walls below.<br>• Excavate down to appropriate level to provide 150mm hardcore. 50 mm sand blinding, DPM/ radon barrier and radon sump. Fit 150mm insulation with 150mm concrete slab, with reinforcement, above fit 75 mm screed with underfloor heating within screed.<br><br>**Option 3– replace with Concrete floor no underfloor heating**<br>*Although not ideal from a conservation perspective it may be appropriate in this instance*. **This is the recommended option.**<br>• As per option 2 above , but with power floated slab and out with 75mm screed and without underfloor heating.<br>• Result will be 75 mm less excavation |
| | **Terrazzo Floor at Entrance** | Existing terrazzo finish to G-02 to be retained and polished and repaired by specialist sub-contractor. There are no crack and the terrazzo is in good condition apart from some ware adjacent the entrance door. |
| **0.5** | **Windows** | |
| | **Existing:** Historic timber sliding sash windows throughout<br><br>Secondary Glazing<br><br>**Existing:** Historic timber Entrance Door.<br><br>**Entrance Screen to New build section:** | • **Refer to window schedule – In summary works are:** Repair all existing 25 number timber sliding sash windows as per attached repair schedule.<br>• Install new single glazed, powder coated aluminium secondary glazing units to align with opening sections of existing sash widows, thoughout.<br>• Carry out repairs to timber sheeted external door and upgrade hinges and required. Allow for all painting and decorating.<br>• **New Entrance Screen and door.** install new double glazed, powder coated, thermally broken and full drained, aluminium curtain walling glazed screen system and entrance door to two storey new build extension approx. 6500mm high and 2900mm. Performance specification to follow. |
| **0.6** | **Window surrounds** | |
| | Profiled timber liners and window surrounds | • **Airtightness detailing:** Remove section of liner at windows, retaining remainder in place. Remove softwood window boards and retain for reuse. New airtightness tape to junction of windows and wall all sides. Refit softwood lining or patch in new to match original where damaged on removal. Fit new cover bead at rendered reveals. Refit window boards where applicable, new window boards to remainder to architect's specification<br>• **Repairs to surrounds:** Ground floor window cills and surrounds may be affected by dry rot/ timber decay and some may need to be replaced. Where necessary, remove only fabric, which is decayed or damaged beyond reuse, otherwise remove to accommodate airtightness / insulation detail and replace existing in original locations throughout. Allow for modifications required and carry out repairs in situ to damaged sections. Where timber is beyond salvage allow for installation of new to match original size and profile. |
| **0.7** | **Internal Doors** | |
| | 5 no panel doors GD01, GD03, GD04, GD05 & FD02 otherwise modern | • **Salvage Doors:** Take down Doors GD01, GD03, GD04, GD05 for, record, number, repair, and store for future use at suitable location within Building where non-fire rated doors are required. i.e., Wc areas.<br>It may be possible to upgrade theses to a modified half hour fire door. |

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| | | • **New Doors:** Take for new timber panelled doors match original to all locations indicated on architect's plan, new frames, and architraves all to Architects specification.<br>• **Ironmongery:** Remove existing ironmongery on salvaged doors and replace with ironmongery to architect's specification to include Stainless steel hinges, in-line door closers, euro-cylinder locks (with master key) escutcheon, with thumb turn on inner face, lever handle and allow for Clients access control system. |
| **0.8** | **Other Joinery** | |
| | Timber Book Hoist: as noted in condition survey.<br><br>Glazed screen at G02- Screen to Reception. | • **Existing Book Hoist:** Removal and repair of existing floor will likely necessitate removal of timber surround and structure to book hoist located at G01 and F01.<br>• Carefully remove record, label, and dismantle existing timber surround and structure and put a side for reuse in existing location following treatment for timber decay and the fitting of insulation to the inner face of external walls.<br>*Gordon Knaggs report (received 5/2/21) recommends removal and replacement of all existing timbers at ground floor level. Insecticidal treatment to all retained timbers within building also recommended.*<br><br>• Allow for minor modifications to allow for insulation and lime plaster finish.<br>• **Glazed Reception desk and screen.**<br>Existing consists of three elements as follows:<br>1. Lower section; Timber reception desk with decorative supports and skirtings and recessed timber panels to the entrance area with open shelving to inner face. Countertop is a painted hard wood finish.<br>2. Mid-section glazing: 5 number sections of glazing -sub-divided in to 4 panes. 2 number sections at walls have side hung hatches with solid doors, the central section has a timber arch way surround and a sliding access hatch behind. all lower section glazing has been obscured with paint on internal face.<br>3. Upper section glazing: 5 number sections of glazing -sub-divided in to 4 panes. All glass is clear and appears to be original and in good condition.<br>4. The fixture is original to the building and is of historic interest, however it is not fire rated and does not provide adequate fire rating to the entrance area escape route in its present form. It will require a detailed review to adapt it to meet Building Regulations Part B -Fire -options are.<br>a. Replace existing glass with Pyro-Glazing: remove all paint from timber and apply an intumescent paint finish, fit fire rated panels to inner face of solid counter desk section, place door closers on all opening sections. This requires modification to the historic fabric.<br>b. Fit Fire Rated Roller Shutter to inner face at ceiling level, activated by the Fire alarm system. This allows the retention of the historic fabric in full.<br>• **Scope of Repairs:**<br>1. Strip back and repaint existing timber to lower section and countertop.<br>2. Remove paint to glazing on mid-section. Rehang and fit new roller system to central sliding door and new ironmongery to two number hatches next to walls. Paint all timber joinery to doors and glazing.<br>3. Paint all timber joinery to glazing. |
| **0.9** | **Plasterwork** | |
| | To Ground Floor Only | • Lath and plaster ceilings to ground floor and stairs/landing at first floor.<br>• Decorative plaster coving to ceiling of stairs/landing at first floor only.<br>• Prepare existing and new lime plaster finishes, new paint finish |
| **0.10** | **Stairs** | |
| | Hardwood open string stair with turned balusters & newel post, curved metal support to | • Varnished hardwood stairs with timber goings and risers, nosing to goings, decorative stringers, and balusters. "pig ear" type handrail to one side, meeting decorative newel post on 1st step. |

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| | balustrades, hardwood handrail 950mm high. Treads typically 270m, risers 180mm, width 1130mm | • Winders on half landing are not to building regulations Part K or Part M.<br>• Requirement to seek derogation in fire safety cert and disability access cert to retain existing arrangement with winder on the basis that it is a protected structure.<br>• Goings= 270mm Risers=180mm Width=1130mm Handrail= 950mm Space between balusters <90mm<br>• Handrail at top of landing is 950mm and is lower than 1100mm in building regulations.<br>• Remove existing finish to floor and fit 6mm plywood to goings and risers to accommodate new floor finish to stairs.<br>• Remove existing vinyl nosing throughout to allow for new nosing.<br>• New guarding to extend height of rail at landing to 1100mm. Fit structural glazing to outer face of landing extending to 1100m height. Fixed at bottom with stainless steel fixings.<br>• New 50mm diameter stainless steel Handrail to be placed on inner wall to form continuous handrail with 300mm over run at top and bottom.<br>• Additional handrail consisting of 50mm diameter stainless steel, to be placed at existing balustrade to form continuous handrail with 300mm over run at top and bottom. Required where stairs are over 1000mm in width. |
| **0.11** | **Other features** | |
| | F**our Number Fireplaces:** | • Install new ventilation grilles at low level to all fireplaces.<br>• Remove existing safe in Fireplace at GO1.<br>• Sweep existing chimney flues to remove all debris.<br>• Clean down existing marble/stone fireplace surrounds.<br>• Fireplace surrounds at G01 and G04: Remove all paint to and apply new appropriate paint system to architect's specification.<br>• Fireplace surrounds at F01 and F02: Carry out minor repairs to stone detail. Clean all stone with appropriate stone poultice strip/paste cleaning system. Clean down and paint metal fireplace insert. |

| **1.0** | **CARNEGIE LIBRARY –FIRST FLOOR** | |
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| | **Brief Description of existing Historic Fabric- refer to surveys** | **Outline scope of works** |
| **1.1** | **External Walls** | |
| | Solid walls throughout ground floor, painted plaster finish. Wainscoting & ventilation opes to walls as noted in condition survey, Light weigh partitions at first floor | **Essential repairs as follows:**<br>• Remove existing lime plaster only where boasted or spawled - locations as noted in condition survey plus an allowance for additional unforeseen.<br>• There is extensive boasting / loss of plaster to entirety South & West end of F01 Genealogy Office, F03 Lobby west wall and F02 Museum North Wall.<br>• Remove sections of plaster at all window lintels to inspect timber lintel for evidence of timber decay.<br>• Carefully number & record then remove to storage t&g wainscotting dado rails, window cill and surrounds skirtings and architraves at stairs and First floor areas, F-01, F-02, F-03, F-04, F-05, and F-06. Inspect for timber decay/wet rot/ woodworm. Retain for reuse where possible, if timber decay or woodworm present remove to approved location to prevent contamination. Put aside for future reinstatement in agreed locations to throughout First floor.<br>• Carefully number & record existing timber surround to book hoist at South/East corner of F-01. and store for re-instatement in original location. Subject to recommendations from Timber Specialist.<br>• Remove all embedded timbers observed within plasterwork.<br>• Issues with Damp, timber decay and woodworm noted- Works to address timber decay/rot/woodworm subject to recommendation by specialist. *Gordon Knaggs report (received 5/2/21) notes condition of first floor timberwork appears to be good, with no or negligible decay or insect attack evident. Insecticidal treatment to all retained timbers within building recommended.*<br>• Retain any through wall ventilation grilles - subject to confirmation of ventilation strategy.<br>• Retain chimney Fireplace surrounds in place.<br>• Infill holes to masonry as noted in condition survey and where embedded timbers removed in masonry to match surrounding wall<br>• Clean down existing wall surface to remove existing mould, Product & methodology subject to testing on site<br>• New lime plaster finish, type and mix TBC on analysis of existing to areas noted above, and to areas where plaster had been previously removed, including locations of previously removed partitions<br>• Make good lime plaster finish in preparation for insulation.<br>• Install new Calcitherm lime board insulation system as follows:<br>o Apply lime plaster levelling coat to all walls, then 6mm Calsitherm adhesive mortar (KP-Kleber) to wall.<br>o Fix 80mm thick Calsitherm Climate board to adhesive.<br>o Use thermally broken fixings and insulation strips at all junctions with new internal walls.<br>o Apply insulation, plaster finish and movement strips as above between each floor joist at including plaster finish as below.<br>o To be applied from above to minimise disruption to ceilings.<br>o Calsitherm KP Kalkglätte KP lime plaster applied to internal face of climate board, thickness max 4mm – applied in 2 layers with reinforcement mesh between, with corner beads etc.<br>o To manufacturers specification, using Calsitherm products only.<br>• Carefully number, record and remove timber surrounds to windows and retain for replacement. 15mm Calsitherm climate soffit board applied as above to wall below window and to wall within window liners. Fit Calsitherm airtight movement joint strip to all sides, Calsitherm KP-Kalkglätte KP lime plaster applied to internal face of climate board and panels refitted to all reveals. To manufacturers specification, using Calsitherm products only. |

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| | | Main Contractor is free to put forward an alternative, equal, and approved product which will be assessed against the performance of the above.<br>• Refit all existing window joinery matching in new where fabric has been damaged beyond reuse in removal. Otherwise replace on a like for like basis, to match historical detail and form.<br>• Prepare new lime plaster finishes for painted finish.<br>• Apply two coats of breathable paint finish – "Keim Mineral Paint" to selected colour. Main Contractor is free to put forward an alternative, equal, and approved product which will be assessed against the performance of the above product.<br>• Apply paint work to new and refurbished wainscotting to consist of a primer coat, undercoat, and topcoat satin wood finish. |
| | | **Works in relation to new layout:**<br>• Form two new openings in north gable wall at F06 Office and F02 Museum as per architects drawing. Lintels to Structural Engineers details.<br>• Make good plaster work with appropriate lime plaster and finish off surrounding walls to match adjacent surfaces.<br>• Fit new doors to Architects specification and detail. |
| **1.2** | **Internal Walls** | |
| | Wall between F01 & F02 is TG&V timber sheeting at lower level and PLY wood sheeting between roof trusses. **opening up required to establish build up.** | **Essential repairs as follows:**<br>• First floor partitions are non-load bearing and consist primarily of timber stud work with gypsum plaster board finish. the walls to Lobby F03 and Wall between F01 & F02 are TG&V timber sheeting at lower level and plywood sheeting between roof trusses.<br>• All first-floor partitions to be removed to facilitate new building layout. Clean down existing wall surface to remove existing mould, Product & methodology subject to testing on site.<br>• New lime plaster finish, type and mix TBC on analysis of existing to areas noted above, and to areas where plaster had been previously removed.<br>• Prepare existing and new lime plaster finishes, new paint finish |
| | New Openings in Gable wall | **Works in relation to new layout:**<br>• All first-floor partitions to be removed to facilitate new building layout.<br>• Existing First floor partitions consist primarily of timber stud work with gypsum plaster board finish. the walls to Lobby F03 and Wall between F01 & F02 are TG&V timber sheeting at lower level and plywood sheeting between roof trusses.<br>• Carefully remove Double Door between F-03 and F-05 for possible re-use elsewhere. subject to fire certification. |
| | Amendments to Existing Ope at Stairwell Landing | **Works in relation to new layout:**<br>• Carefully remove existing timber architrave and retain for re-use<br>• Amend ope with propping and lintel as specified by structural engineer<br>• Reinstate existing architrave with spliced in new timber moulded sections to match profile of existing |
| **1.3** | **Ceilings** | |
| | **First Floor:** TG+V timber sheeting to Underside of rafters in line with exposed decorative timber trusses and purlins. | • Works to ceilings to and First floor area s, F-01, F-02, F-03, F-04, F-05, and F-06. Depending on approach to achieving insulation to roof as follows:<br>• **Option1 – place insulation between rafters from below**- Carefully number remove and put aside T&G Sheeting to ceiling throughout and retain for reuse. Fit 100mm rigid insulation to agreed specification between rafters, maintaining 50mm ventilation gap. Refit existing T&G sheeting / fit new sheeting to match where insufficient salvage remains.<br>• **Option2- place insulation between rafters from above- This is the recommended option.**<br>Carefully Remove existing natural slate and clay ridge and hip pieces. Fit 100mm rigid insulation to agreed specification between rafters, maintaining 50mm ventilation gap, with proprietary eaves and ridge ventilation and re-slate with existing slates with new Penrhyn slate of appropriate size and thickness where insufficient salvage remains. Allow for new breathable |

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| | Flat Lath and plaster ceiling with paster coving to perimeter to room F-04 above stairs. | membrane, treated timber battens and proprietary eaves and ridge ventilation, "Glidevale" or equal approved. Timber TG+V sheeting unlikely to be affected in option 2.<br>• Apply surface treatment to existing timber sheeted first floor ceiling & exposed timber trusses to upgrade surface fire spread performance to class 0 / class B-s3, d2 fire classification.<br>• **Ceiling above stairs,** F-04, remove damaged section of ceiling and coving due to water ingress from roof above, repair ceiling with lime plaster and riven laths to match existing. Run new section of coving in lime to match existing.<br>• Apply two coats of paint breathable paint finish – "Keim Mineral Paint" Main Contractor is free to put forward an alternative, equal, and approved product which will be assessed against the performance of the above. |
| **1.4** | **Floors** | |
| | **Fire Compartment:**<br>**First floor:**<br>Timber boards to F-01, F-02, F-03, F-04, F-05, and F-06. With a mixture of carpet and exposed timber flooring. | **Description;**<br>• Existing first floor structure consists of timber joist spanning north /south , with embedded timbers at gable wall and intermediate support to be determined.<br>• Joists are in excess of 225mm deep and approximately 450mm centres (tbc) and fitted with herring bone bracing. It is fitted above with 25mm thick timber boarding and in some rooms with a further 18mm particle board. The under side is a lime based lath and plaster ceiling, with no cornice or central features.<br>The ceiling has no fire rating to form a fire compartment as required in the Building Regulations. It needs to be upgraded to achieve 60 minute separation as part of the works ,the following are some options.<br><br>**60min Fire Compartment:**<br>• There are two main options to provide 60min Fire Compartment between ground and first floor at ceiling level. Filling the voids between the existing floor surface and ceiling below, or between the floor joists, with a suitable material. There are several proprietary systems available which are based on this method one of which is described in option 2 below.<br><br>• **Option1**- **This is the recommended option.** Carefully lift existing timber floor and put aside for re-use. fit 22mm t&g1 (softwood or plywood) floor boarding over existing timber joists. (minimum 195mm x 38mm timber joists at 600mm centres) allow for alterations to existing joists ad recommended by structural engineer. Fit two layers of Gypsum board "Gyproc Wall Board" (inner layer) + "Gyproc Fireline" (outer layer) 1 x 12.5 + 1 x 15 or equal approved to underside of existing lath and plaster ceiling.<br>• Provide a 50mm void to facilitate electrical services below the fire rated ceiling, with timber battens to the underside and finished in 1 no layer of 12.5mm gypsum plaster board.<br><br>• **Option 2**- To increase the fire resistance of existing timber floors to 60min Carefully lift existing timber floor and put aside for re-use. Fit "Siderise" (previously called Lamatherm) Firefloor Systems . 90mm thick FF-NPC60 and laid between the joists, as there is no fire resistance contribution from the lath and plaster ceiling layer below which are considered as a sacrificial ceiling in terms of fire protection.<br>• 90mm thickness provides 60 minutes fire resistance for joist centres up to 450mm. 120mm thick FF-NPC60WJ is required to provide 60 minutes fire resistance for joist centres 451 - 610mm. as there is herringbone cross braces fitted to the timber floor, sections of "Siderise" fire floor are to be cut to fit above and below the struts. These are held in place with high temperature adhesive to the mineral fibre surfaces. Opening up is required to confirm the joist centres and type of bridging.<br>• Replace existing timber boarding above the joists. |

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| | | • Void below ceiling for electrical services: Similar to Option 1- Provide a 50-75mm void to facilitate electrical services below the fire rated ceiling, with timber battens to the underside and finished in 1 no layer of 12.5mm gypsum plaster board. The depth of the void is dependent on the type of services required to be accommodated and whether recessed down lights are required.<br><br>• Install Acoustic / Fire barriers to full height of voids between floor joists under & above line of new / retained stud walls to rooms above and below.<br>• Apply primer coat and two coats of paint finish to gypsum plaster to ceiling. |
| | Narrow plank T&G timber floor. | • **F-01, F-02, F-03, F-04, F-05, and F-06.** Upgrade floor type 1 or 2<br>• **Remove carpet finish and plywood layer to F-01, F-03, F-04, F-05, F-06.**<br>• Carefully Lift original timber floorboards throughout all rooms and remove to storage for reuse. Inspect for timber decay/wet rot/ woodworm.<br>• Re-instate timber floor upon completion. Sand and apply a commercial grade matt finish two pack waterborne polyurethane coating. |
| **1.5** | **Windows** | |
| | Historic timber sliding sash windows throughout.<br><br>Secondary Glazing | • **Refer to window schedule – In summary works are:**<br>• Repair all existing 25 number timber sliding sash windows & install new secondary glazing though out.<br>• Install new single glazed, powder coated aluminium secondary glazing units to align with opening sections of existing sash widows, though out. |
| **1.6** | **Window surrounds** | |
| | Painted timber surround to all of windows. | • **Airtightness detailing:** Remove section of timber liner at windows, remove hardwood window boards and retain for reuse. New airtightness tape to junction of windows and wall all sides. Refit lining or patch in new to match original where damaged on removal. Fit new cover bead at rendered reveals. Refit hardwood window boards where applicable, new window boards to reminder to architect's specification<br>• **Repairs to surrounds:** First floor window cills and surrounds may be affected by woodworm/ timber decay and some may need to be replaced. Where necessary, remove only fabric which is decayed or damaged beyond reuse, otherwise remove to accommodate airtightness / insulation detail and replace existing in original locations throughout. Allow for modifications required and carry out repairs in situ to damaged sections. Where timber is beyond salvage allow for installation of new to match original size and profile. |
| **1.7** | **Internal Doors** | |
| | Existing panel door FD02 otherwise modern | • Majority of door at first floor level are non-historic doors and are to be removed with removal of partitions.<br>• Salvage Door FD02 for at suitable location within Building where non fire rated doors are required.<br>It may be possible to upgrade this to a modified half hour fire door.<br>• Take for new doors indicated on new plan, new frames, and architraves all to Architects specification |
| **1.8** | **Other Joinery** | |
| | Timber Book Hoist: as noted in condition survey | • **Existing Book Hoist:** Removal and repair of existing floor and work to insulate external walls will likely necessitate removal of timber surround and structure to book hoist located at G01 and F01. |
| **1.9** | **Plasterwork** | |
| | To stairs area at first Floor Only | • Lath and plaster ceilings to stairs/landing at first floor.<br>• Decorative plaster coving to ceiling of stairs/landing at first floor only.<br>• Prepare existing and new lime plaster finishes, new paint finish.<br>• Apply two coats of paint breathable paint finish to lath and plaster ceiling– "Keim Mineral Paint" Main Contractor is free to put forward an alternative, |

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| | | equal, and approved product which will be assessed against the performance of the above product. |
| **1.10** | **Stairs** | |
| | Hardwood open string stair with turned balusters & newel post, hardwood handrail | • See section 0.10 on stairs |
| **1.11** | **Other features** | |
| | **Fireplaces** | • Install new ventilation grilles at low level to all fireplaces.<br>• Fireplace surrounds to be carefully refurbished and paint removed where possible.<br>• Minor damage to stone detail at F01 and F02 to be repaired |
| | Internal Doors | **Description:**<br>Existing doors on ground floor a mixture of original timber panel doors and some modern more recent doors.<br>Potential Salvaged Doors are at GD01, GD03, GD04, GD05 these should be taken down and put aside for repair and store for future use at suitable location within building where non-fire rated doors are required. i.e. Wc areas.<br>It may be possible to upgrade theses to modified half hour fire doors. This requires further research.<br><br>**Proposal:**<br>• Salvaged Doors to be repaired, new ironmonger fitted and used at WC areas. Refer to appended scope for upgrading works.<br>• New Doors: Take for new timber panelled doors match original to all locations indicated on architects plan, new frames and architraves all to Architects specification.<br>Ironmongery: Remove existing ironmongery on salvaged doors and replace with ironmongery to architects specification to include Stainless steel hinges, in-line door closers, euro-cylinder locks (with master key) escutcheon, with thumb turn on inner face, lever handle and allow for Clients access control system. |

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| **2.0** | **SUMMARY OF SCOPE** | **SCOPE OF WORKS FOR INTERNAL AND EXTERNAL** |
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| **2.1** | **ROOF COVERING** | |
| | Description | **Roof finish Description:**<br>• Natural slate finish with evidence of slipped and previously repaired slate. The replaced slates appear original and have been fitted using lead strap hangers, these repairs appear to be holding, however lead straps are not considered best practice and are prone to fail in the medium to long term.<br>• Areas of further slipped, cracked or broken slate which need attention. The number of slipped slates suggests nail rot due to the use of ferrous metal fixings rather than copper. From the visual inspection it appears that about 25% of the roof has either been repaired or requires further attention. |
| | Roof Covering Options: | **Proposal:** The two options for repairs to be considered are as follows:<br>1. **Re Slate - This is the recommended option.** Carefully Remove existing natural slate and clay ridge and hip pieces. Re-slate all roofs using existing / new slates on a like for like basis / replace all metalwork: Remove slate finish, grade, and set aside for reuse, remove all leadwork to flashings & soakers for new, remove battens and parging throughout. Assess condition of existing structure timber and carry out repairs as required. Re-slate using existing slate to selected pitches and new to match on remaining, all on new battens & new breather membrane, new flashings throughout.<br>2. **Repair Slates :** Carefully Remove existing natural slate and clay ridge and hip pieces. Repair existing slates and ridge/ hip pieces where necessary. All repairs to be carried out using existing slates and matching salvaged slated where required. take up ridges and hips and re-bed in new lime mortar. Remove only damaged sections of flashing & metal work and replace with new to match existing. |
| | Roof Insulation Options | **Proposal:**<br>The three options for insulation to the roof to be considered are as follows:<br>1. **Warm Roof (insulation above rafters)- This is the recommended option.** Carefully Remove existing natural slate and clay ridge and hip pieces. Strip off existing slates, battens back to the timber decking. Put aside the salvaged slate and ridge/ hip pieces for re-use. Fit a vapour barrier above the joists followed by 100mm rigid roof insulation, with a breathable membrane above, followed by 35mm battens running the length of the roof from apex to eaves with 50mm cross battens for the refixing of the salvaged slate. Allow for proprietary eaves and ridge ventilation, "Glidevale" or equal approved. Re-slate with existing slates or with new Penrhyn slate of appropriate size and thickness where insufficient salvage remains. Reinstate original decorative ridge and hip pieces. Remove any rust and repaint original hip Irons allow for reinstatement.<br>This option will slightly raise the height of the roof by the height of the insulation and will therefore affect all parapet gutters, chimney flashings, gusset roofs and eaves detail. It will influence appearance, but this will not be significant, and this will have to be considered with respect to the gain in energy efficiency.<br>2. **Option 1 – place insulation between rafters from below- This does not affect the roof finish** - Carefully number remove and put aside T&G Sheeting to ceiling throughout and retain for reuse. Fit 100mm rigid insulation to agreed specification between rafters, maintaining 50mm ventilation gap. Refit existing T&G sheeting / fit new sheeting to match where insufficient salvage remains.<br>**3.** **Option 2- place insulation between rafters from above- Timber TG+V sheeting unlikely to be affected-** Carefully Remove existing natural slate and clay ridge and hip pieces. Fit 100mm rigid insulation to agreed specification between rafters, maintaining 50mm ventilation gap, with proprietary eaves and ridge ventilation and re-slate with existing slates or with new Penrhyn slate of appropriate size and thickness where insufficient |

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| | | salvage remains. Allow for new breathable membrane, treated timber battens and proprietary eaves and ridge ventilation, "Glidevale" or equal approved. Reinstate original decorative ridge and hip pieces. Remove any rust and repaint original hip Irons allow for reinstatement. |
| **2.2** | **LEAD** | |
| | | **Description;**<br>**Flashings** are in lead with lead flashings at abutments to chimneys, lead valleys at interface with stairs roof and gusset roofs to side of chimneys.<br>**Parapet gutter** to the roof above stairs<br>**Valley gutters** at the roof above the stairs and at the gusset roof connections to the chimneys Appear to be in good condition with no obvious loose sections or tears or cracks to the lead sheets.<br>**Proposal:**<br>**Option 1- localised repairs to roof:**<br>If the roof is being repaired locally these can be retained in position with allowances made for some repairs / replacement discovered on closer inspection.<br>**Option 2- Re-slating of roof:**<br>If the roof is being re-slated, allow for replacement of all lead work with code 5 lead and 150mm upstand and cover flashings to comply with new codes. |
| **2.3** | **CHIMNEYS** | |
| | | Description:<br>Two chimneys built in two sections with brick. The transition consists of a concrete section and there are in-situ concrete cappings. There are metal vent covers in the side of the chimney stacks. The original mortar to brick work has been affected by weathering and is allowing buddleia to take hold and damaging brick work.<br>Proposal:<br>**Remedial works to include:**<br>Repairs to cracked concrete capping, raking out of existing pointing.<br>Repoint in new lime mortar, mix and proportions subject to testing of existing and assessment of degree of expose of the chimneys.<br>Install new soakers at base, with slate counterflashing over.<br>Fit wire covers to existing chimney caps – 4 number |
| **2.4** | **RAINWATER GOODS** | |
| | | **Description:**<br>Profiled cast iron gutters and circular section rainwater pipes with 2 number rainwater pipes located on north and south elevations. These take rainwater from the stairs out-crop and the rear elevation. The rainwater pipe to the south wall is broken. The gutter to the rear is damaged and leaking, the gutters have a 90-degree bend at the corners.<br>There are sections of the gutters showing signs of displacement at the junctions. The rainwater pipes near to the gable end will need to be relocated as the one to the north will be affected by the new extension and the one to the south is located on property outside the site.<br>**Proposal:**<br>**Option 1- Retain in situ and carry out repairs.**<br>Retain all sound cast iron fabric in place and replace only where required with new or salvaged cast iron to match. Repairs are to consist of a thorough cleaning with wire brush and re-painting with an appropriate primer and finish coat with allowances for re-sealing all joints. Note: The gutters are square to the back and it is not possible to pain the rear in situ.<br>**Option 2- Remove off site for full repair and repainting. This is the recommended option.**<br>Remove all rainwater goods from site, carry out repairs in a workshop environment including removal of all rust for all surfaces, cleaning, and new paint finish throughout. Assess lengths & falls to current gutters, consider installation of new downpipes & gullies at agreed locations to limit risk of overflow and failure of gutters. |
| **2.5** | **WINDOWS** | |

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| | | **Description:**<br>25 number sliding sash timber windows, single glazed, of various proportions and fenestration. The windows are original historic fabric. However, the lower panes of the windows to the ground floor front section have been replace with "Macrolon". Bars to the lower floor rear windows.<br><br>**Proposal:**<br>**Repair Strategy:**<br>All windows, to be carefully removed and the opes to be temporarily weathered. Repairs to be carried out as per recommendations from windows conservation specialist as follows; (see attached TIMELESS WINDOWS). All rot is to be carefully cut away from glazing bars, top/bottom/meeting rails, and stiles, retaining the maximum amount of historic fabric, particularly historic glass where found to be present. New timber should be spliced in to match the dimensions and profile of the existing. All new timber should be of sapele hardwood, red deal or similar. The remaining timber should be sanded and treated with a waterborne timber preservative. Sash cords should be replaced with new braided nylon cords where required, and new sash weights fixed. Install new draught-stopping brushes at parting bead, stop beads and meeting rails. Apply oil-based primer to bare timber. Repaint with 3 no. coats of external enamel paint. The existing ironmongery is a combination repair or replaced only were damaged beyond reuse. All internal shutters to be repaired to operate correctly.<br>**Secondary Glazing:**<br>Install new single glazed, powder coated aluminium secondary glazing units to align with opening sections of existing sash widows, though out. (see attached quotation). Client to confirm if these are to be to the front only or throughout. |
| **2.6** | **EXTERNAL WALLS** | |
| | | **Description:**<br>The external walls throughout are generally on good condition. Typical defects throughout include water and ferric staining at gutters and downpipes, corrosion to rainwater goods, minor damage to stone elements. Some limited cracking exists to the rear or east façade.<br>Several areas of spawled and damaged brickwork exist, also areas where the lime mortar to brickwork is lost.<br>**Front** and gable end façades are generally brickwork, two contrasting colours with decorative brick string course and window hoods and stone string course at entrance. Coping stone to stairs breakout is concrete and there is cement based haunching to the top of the brick string courses. There is a limes tone plinth and decorative door surround and name plate with string course above the entrance. The window cills to the front and rear are limestone. There are several horizontal fissures in the limestone which should be repaired with a "Remmers repair mortar" or equal approved repair mortar.<br><br>**Rear façade** is generally a lime harling or rough cast coat, with some spalled sections below windows cills and other localised areas due to weathering There are horizontal metal bars to the ground floor windows at the rear which are rusting.<br>There are galvanised wire mesh sheets to the outer face of the first-floor windows at the rear.<br><br>**Proposal:**<br>**Front:** allow for removal of all redundant cables to the front façade, localised repairs to brick pointing in lime to match existing. Localised repair mortar to lime sone, with a light cleaning of the lime sone to remove localised staining. Allow for localised repairs of cement-based flaunching to brick string course to upper levels of stairs out break below parapet.<br>**Rear:** Allow for localised repairs to lime harling or rough cast render (*Note: it may not be possible to achieve a colour or texture match*) Allow for either a repainting of the horizontal bars to the lower-level windows or their removal with corresponding |

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| | | repairs to the window reveals. Allow for the removal of the wire mesh on first floor windows to facilitate window repairs and their reinstatement if required by the client. |
| **2.7** | **EXTERNAL STEPS /RAMPS** | |
| | | **Description:**<br>The main entrance door has two steps, consisting of a lower-level step in two pieces of limestone approximately 900mm deep, 150mm high and with splayed corners. The upper step is at the door threshold and is approximately 150mm high. the door is fitted with an overhanging door flap.<br>**Proposal:**<br>The proposal is to provide a new Part M compliance gently sloping access route (1:21) to extension entrance; and Part M compliant stepped access at entrance to existing building. See Attached Architects details for layout, materials and finishes. |
| **2.8** | **EXTERNAL PAVING** | |
| | | **Description:**<br>**Front:**<br>The area to the front of the building consists of sections of insitu concrete laid in regular bays. The concrete is cracked and uneven with areas of moss and vegetation suggesting the surface is not laid to falls and water is ponding.<br>**Rear:**<br>The area to the rear of the building consists of a raised section of soil which abuts the rear wall of the building and compromises the raised timber floor and lower walls. The extent of wet rot to the timbers in the raised timber floor and lower level is likely to be as a consequence to this ground level.<br>**Proposal:**<br>**Front:**<br>The proposal is to remove the concrete paving, relocate drainage to accommodate the new extension and resurface the area with new permeable paving and soft planting. Remove section of concrete abutting external walls at West Elevation, Install new perforated pipe or "French drain" at external perimeter, connected to the drainage system to lower the water table in this area. Fit area with pea gravel to match the appropriate internal level. See Attached Architects details for layout, materials and finishes.<br>**Rear:**<br>The soil and planting at the rear of the building needs to be removed and the ground level reinstated below the floor level. A new perforated pipe or "French drain" is to be incorporated in this area and connected to the drainage system to lower the water table in this area. The are can be fitted with soil for localised zones of planting and the remainder section filled with pea gravel to match the appropriate internal level, depending on whether a raised timber floor is reinstated or a concrete floor. |
| **2.9** | **RAILNGS** | |
| | | **Description:**<br>The railings to the front of the building consist of wrought iron bars fixed to a bottom horizontal flat plate and with a horizontal top rail with a semi-circular "horseshoe" style detail and vertical bars extruded above. These are fitted to a 400mm high limestone plinth with a chamfered top. The footpath to the north section falls below the plinth level leaving small sections of rubble masonry with a cementitious render, which is damaged in sections There are additional metal back stays to the railings. There are a set of double pedestrian gates to the centre of the main entrance.<br>**Proposal:**<br>The Architectural Proposal is to relocate the existing gates to the south of the entrance to the main building. A new and additional entrance gate is to be installed in front of the new two storey extension. See Architects drawings and details. Repairs are to consist of a thorough cleaning with wire brush and re-painting with an appropriate primer and finish coat with allowances for re-sealing all joints. Check all fixings and repair where necessary, in particular at gate supports. |

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| | | The limestone plinths require repointing of the joints with an appropriate lime mortar, the gap between the stone plinth and the pavement should be raked out and sealed with a lime render coat. |
| **2.10** | **BOUNDARY** | |
| | | **Description:**<br>There are two masonry flanking walls, one to the south and one to the north of the west elevation. The wall to the south is approximately 1700mm high and is a cementitious rendered wall on a brick structure, with an integral curved capping and terminated at the junction with the railing with a square pier. The pier is approximately 2000mm high and is finished with a projecting concrete capping.<br>The wall to the north is approximately 1600mm high. It appears to be a rubble masonry wall rendered in a rough cast render and finished with a precast concrete capping. At the building line it extends to a two-storey height and forms part of the external wall of the out-house buildings. The section at the change in height is constructed with in-situ concrete. There is a square pier at the junction with the railing.<br><br>**Proposal:**<br>There are hairline cracks to the cementitious render to the south wall. This is to be repair with a two-part epoxy repair to prevent water ingress and further deterioration.<br>The wall to the North which extends to the East boundary is to be taken down and replaced as part of the Architectural Proposal. |
| **2.4** | **NEW EXTENSION** | |
| | | **Description:**<br>The existing single storey structures to the north gable are original to the building but are in poor condition. They consist of a toilet and tea station with direct access to the north reading room and two outdoor toilets in very poor condition.<br><br>**Proposal:**<br>These structures are to be removed as part of the Architectural Proposal and replaced with a two-storey structure with flat roof, stone cladding the north and east and curtain walling to the west.<br>It is to accommodate a new entrance, lift, toilets in two floor and service / storage areas. See Architectural Proposal drawings for details. |
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