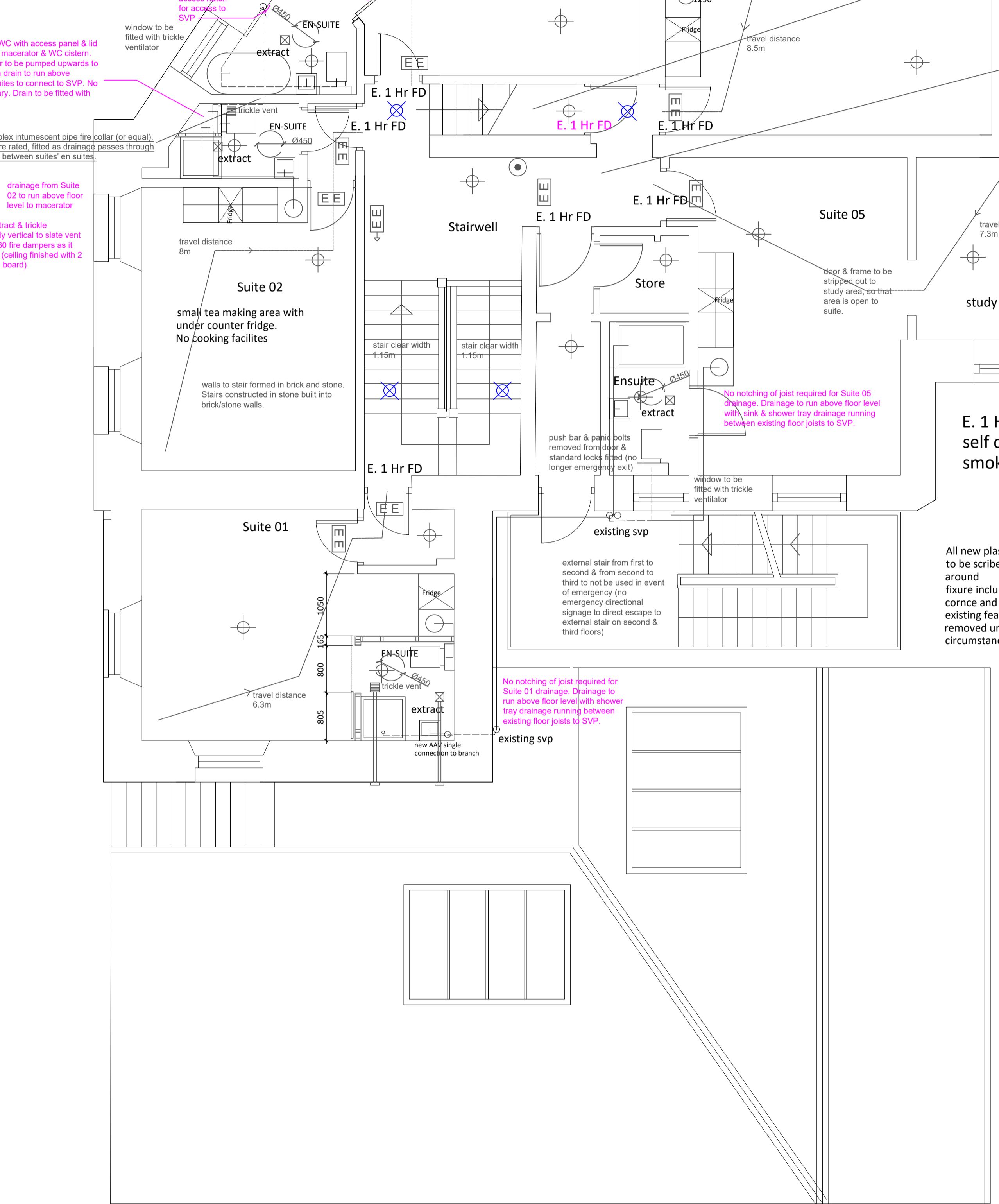


- LEGEND**
- Emergency Light Fitting
 - Emergency Exit Light Fitting
 - Call Point / Break Glass
 - Smoke Detection
 - Smoke Detection in attic voids
 - Fire Alarm



second floor as proposed

Specifications (update 18 December 23)

Proposals
 Proposed change of use of existing vacant offices to form non-domestic residential suites with alterations to existing 3rd floor flat. Proposed residential suites & restaurant on ground & first floors under single management (whole building under single management & ownership)

Existing Building
 Existing 4 storey B listed building with restaurant on ground floor with associated spaces (toilets, offices & stores) on first floor, vacant offices on second floor with flat on third floor. Existing external emergency escape stair to rear of building with emergency escape doors from second floor for residential suites & an emergency escape door from third floor flat. Internal stairs rise in 3 sections from ground floor level access. Stairs from ground floor rise to first floor access corridor with doorway to dogleg stair providing access to residential suites. Straight stairs from second floor hall rises to 3rd floor flat. Floor levels above ground level (ground floor level same as street level at southern most entrance to ground floor restaurant) - ground to first 5.53m, ground to second (short stay level) 9.83m, ground to third (flat level) 13.65m.

Downtakings
 Existing office toilet to be stripped out with branched from sanitary fittings & sinks to be plugged. Existing third floor kitchen to be stripped out. All downtakings to be carried out to B.S.C.P. 6187 - 2011 & the Health & Safety at Work Act 2008. All floors, walls & ceilings to be made good after downtakings. No structural downtakings.

Electrics
 All electrical works to be carried out to current IEE Codes of Practice (18th edition), BS7671: 2018 & current Building Regulations. Light switches at height between 900mm & 1.1m. Sockets to be at least 350mm from internal corner, projecting surface or similar obstruction & not more than 1.2m from FFL. Sockets minimum 400mm above FFL & 150mm above a projecting surface. All electrical sockets, switches & fittings located on boundary walls or fire rated walls to be fitted with Firecap intumescent gaskets to BS476 Part 20 & part 22 or have a service zone formed by 38 x 38mm s/w battens with 12.5mm plasterboard (general wall make up unaffected). All electrical work to be carried out by an electrician with membership to SELECT, NICEIC or an equivalent UKAS body.

Ventilation
 All mechanical ventilation to comply fully with the CIBSE guide. Proposed extract to kitchen to have an intermittent extraction rate of 60 litres per second. Proposed extracts to shower rooms & bathrooms to have an intermittent extraction rate of 15 litres per second. Extracts to be ducted through roof voids to slate vent terminals or to be wall/ceiling mounted with duct through wall to vermin proof terminal. Extract ducts to be fitted with Rf-1 CR60 optimised circular smoke activated fire & smoke dampers when ducts pass through ceiling & passing into roof voids over. Ducts to be insulated when passing through roof void beyond insulation envelope. Suites to be ventilated by existing windows.

Fire Alarm / Detection
 Smoke detectors fitted in hallways & in rooms of residential suites. Detectors to be interconnected with on mains wired protected circuit. Fire alarm system to be category L1 to give occupants earliest possible warning of a fire. Third floor flat to have heat detector in kitchen with smoke detectors fitted elsewhere including in attic voids behind attic walls. Smoke alarms to conform to BS EN 14604: 2005. Heat alarm conform to BS5446: Part 2: 2003. System to be installed in accordance with BS5939: Part 1: 2017. Break glass, manual call points at upper floor & ground floor (street) exits. Manual call points as specified in BS EN 54: Part 11: 2001 (Type A) to be installed in and sited in accordance with BS 5839: Part 1: 2017. The fire warning signal should be distinctive in sound from other sounds which may be in general use. Fire alarm to be interconnected throughout whole building including with ground & first floor restaurant use (whole building under single management & ownership). All detectors to have sounder bases. Fire alarm layouts to be provided by an M&E consultant.

Lighting
 Min. 75% of all light fittings to be low energy type with low energy bulbs. Low energy light fittings to have lamps with a luminous efficacy greater than 45 lamp lumens per circuit-watt and a total output greater than 400 lamp lumens. A single switch to operate no more than six light fittings with a maximum total load of 100 circuit-watts.

Trickle Ventilation
 Trickle ventilators to windows to residential suites including 3rd floor kitchen to provide minimum 12,000sq.m. clear ventilation. Trickle ventilators fitted to windows of en suites & 3rd floor bathroom to provide 10,000sq.m. clear ventilation. Trickle ventilators to en suites without windows to be ducted (with insulated ducts) to external wall terminals or slate vent terminals in roof providing 20,000sq.m. clear ventilation.

Surface linings
 Surface material of wall & ceiling when tested to BS 476: Part 7: 1987 (1993), attains a Class 1 surface spread of flame.

Emergency Lighting
 Emergency lighting to be installed in accordance with BS 5266: Part 1: 2016 as read in association with BS EN 1838: 2013. Emergency exit light above exit to outside to be maintained 24 hours. All emergency exit signage to be to European standard. All emergency luminaires shall have a standby operation of 3 hours, with their associated charger units able to suitably recharge within 24 hours. Emergency lighting shall be designed to a minimum of 1 Lux on all escape routes (on the centre line of escape routes) with 10% of the general illumination level over all distribution boards, switchboards and plant items.

Fire Collars
 Pyroplex intumescent pipe fire collar (or equal), 1hr fire rated, fitted as ducts passes through floor & through walls dividing residential suites. Collar to be fitted as per manufacturer's instructions with collar secured to partition/floor structure through fixing lugs by Fischer HM 6 x 65s or CE marked alternative anchors. When collar is securely fitted any residual gaps to be filled with intumescent acrylic sealant.

Drainage
 Kitchen / kitchenette sinks to be complete with 75mm dia. anti-siphon traps & 40mm dia. PVC waste connections to SVPs. (small circular sinks fitted within residential suites kitchenettes)(no cooking facilities to residential suites). Shower trays & baths to be complete with 75mm dia. anti-siphon traps & 40mm dia. PVC waste connections to existing SVPs. WCs to be complete with cisterns & 100mm dia. waste pipe connections to SVPs. Drainage runs extended with air admittance valves to be fitted at the end of drainage runs, connected to SVP by 100mm dia. PVC waste connection. Where existing SVPs pass through floor to be fitted with fire collars where passing through floors. Fire collar to be fitted where passing through wall dividing residential suites. Rodding access at AAVs & at changes in direction of drainage. All drainage to have min. gradient of 1:40. Macerator fitted to shower room fittings & kitchenette sink to suite 2 to allow passage to nearest SVP without affecting structural integrity of floor. All drainage to be to the entire satisfaction of the local authority. All drainage to be to BSEN 12056-2:2000. No joists to be notched for drainage to pass. Drainage to run above floor level. Where drainage is concealed access hatches to be fitted into walls to allow access to pipework, cisterns & macerator to allow for maintenance.

Stairs
 Existing stair structure retained. Handrail 900mm above pitchline of stair, balustrades 1100mm above FFL. 2m clear headroom over all parts of the stair including landings top & bottom. Stairs to have contrasting nosings, internal stair has no open risers. No opening in stair & balustrade is large enough for 100mm dia. sphere to pass. Existing external emergency escape stair to have balustrade upgraded to meet requirement. Existing stair construction, internal stair from ground to first - stone, internal stair first to second - timber, internal stair second to third - timber, external emergency escape stair ground to third - steel (escape stair to only be used from first floor). Stairs to first floor are stone. Stairs to second & third floors are timber. Underside of timber stairs to have 1hour fire protection, lined with 2 layers 12.5mm Fireline board with staggered joints. Stairs to be ventilated at each storey by ventilators to release smoke & heat from a fire aiding fire fighting & rescue operations. Windows on first & second floor level with rooflight smoke vent on flat roof for third, all with opening sections greater than 0.5sq.m.. Window & rooflights to be openable by simple handle/lock or by mechanism positioned within the building at the fire and rescue service access point that can be operated by fire-fighters. Flat roof rooflight to have 150mm min upstand from flat roof finish with code 5 lead flashings. Window opening directly in front of final step from ground to first & windows to first floor stores at rear to be infilled with metal stud partition finished both side with 15mm Fireline board providing 1 hour fire protection to external escape route.

External stair to no longer be emergency escape from second & third floors. Locked access gate to stairs from first to upper floors (stairs to only be utilised for maintenance purposes only). Where external stair runs over roof below, existing lath & plaster ceiling to have Envirograf 105 EP/CP/P water based primer applied finished with 2 coats of Envirograf 105 EP/CP intumescent paint to give ceiling 1 Hour fire protection. Temporary waiting spaces 1.2m x 0.7m to be provided at stair landings on first & second floors.

Stud partitions
 75 x 45mm studs at 600mm ctrs with sole & head plates & 2 rows of dwangs finished both sides 1 layer 12.5mm Gyproc plasterboard, minimum mass per unit area 10kg/m² (British Gypsum Sound Bloc board 10.6kg/m²), with taped & filled joints. 100mm mineral wool between studs, minimum density 10kg/m³. Partitions to meet sound resistance requirements.

Sound Testing
 Sound testing to be carried out to BS EN ISO 140-4: 1998 & BS EN ISO 717-1: 1997 for airborne sound transmission & to BS EN ISO 140-7: 1998 & BS EN 717_2: 1997 for impact sound transmission. Sound test to be carried out at completion of works between suites & floor levels.

Water Efficiency
 All wcs & whbs to be water efficient. Dual flush wcs to have an average flush volume of not more than 4.5 litres. Taps serving whbs to have a flow rate not more than 6 litres per minute. Whbs, showers & baths to be fitted with thermostatic control valve to prevent scalding.

Doors
 All doors to have a min. clear opening of 800mm. Doors off hall & stairwell to be 1 hour self-closing doors with intumescent strips & smoke seals (including to stores & areas under stairs). Doors to short term stay rooms to have locks that are in accordance with BS EN 179 and to be of a single lever action in the event of an emergency.

Air Infiltration
 All junctions to be sealed around openings & at junction of wall & floor with suitable sealant & all corners at ceilings & walls to be filled all to minimise air infiltration.

Shower rooms
 Shower room to have an unobstructed space of at least 450mm in diameter between the sanitary facilities and the door swing. Shower room doors to open outwards or be sliding doors to be fitted with a privacy lock to have an emergency release, operable from the outside to permit access in an emergency.

Occupancy
 Design capacity of residential suites maximum 2 persons per room. Occupancy for second floor, 10. Occupancy for third floor, 4.

Emergency Escape
 Existing protected zones to be retained & upgraded by changing all doors off to be 1hr self-closing fire doors. Existing stair construction is timber (including landings). Hall floors to upper floors timber with lower ground floor concrete. Rear emergency escape stair steel stairs & landing from first floor to ground level exit to Corn Exchange Road (rear escape from first floor only & not used for escape purposes from second & third floors).

Insulation Envelope
 No alteration to floor & walls as this would be detrimental to features of listed building (cornice, etc., cornice to be repaired & reinstated throughout). Roof insulation to roof void to be upgraded with 100mm Kingspan Kooltherm K7 insulation board between ceiling ties held in place by battens against underside of 100mm Kingspan Kooltherm K7 insulation board over ceiling ties, U value 0.11.

Doors to Outside
 Entrance door & emergency escape doors to rear emergency escape stair on first floor to be fitted with a lock which is readily operated, without a key, from the side approached by occupants making their escape. Locking device to meet guidance from the Code of Practice, "Hardware for Fire and Escape Doors" Issue 4, November 2012, published by the Door and Hardware Federation and the Guild of Architectural Ironmongers. Door locking device to meet BS EN 179 is to give safe and effective escape through a doorway with one single manual operation to release the emergency exit device.

Protected Zone Floors
 Existing protected zones to offices to be retained, protected zones to remain same size, no additional floor sections within protected areas. Existing floors within protected zone to be checked & repaired as necessary. Existing plaster provides equivalent of 2 layers plasterboard to have Envirograf 105 EP/CP/P water based primer applied finished with 2 coats of Envirograf 105 EP/CP intumescent paint to give ceiling 1 Hour fire protection. Where plasterwork removed due to necessary repair to be replaced where possible without damage to existing cornice with 2 layers fireline board with plaster skim finish.

Single Management
 Whole building under same ownership & a single management regime. Whole building to have common fire alarm & evacuation strategy.

Listed Building
 As building is listed no proposals to affect the existing features of the building including cornice, skirting & stair balustrades. Existing rooms to be easily identifiable with rooms formed for en suites to be capped with ceiling wall below existing cornice (ceiling formed with 12mm plywood on 145 x 45mm s/w joists carried on new partitions & on bearer with hangers at existing with u/s finished with 12.5mm plasterboard). Upper floors not fully accessible as introduction of lift would be detrimental to the integrity of the listed building.

Existing walls
 Walls extend up to underside of floor above within short term stay units except in en suites to suites 01 & 04 where walls finish at height of 2.4m with ceiling over forme with 145 X 45 mm joists finished with 12.5mm plasterboard to underside & 18 plywood to upside (no ceiling voids on second floor). No voids above sleeping spaces. No alteration to existing walls on third floor to existing flat.

Sound Testing
 Sound testing to be carried out to BS EN ISO 140-4: 1998 & BS EN ISO 717-1: 1997 for airborne sound transmission & to BS EN ISO 140-7: 1998 & BS EN 717_2: 1997 for impact sound transmission. Sound test to be carried out at completion of works between suites & floor levels.

Compartmentation
 Existing second & third floors to be upgraded to improve fire performance. Ceilings below to have intumescent paint applied to improve fire rating to 60 minutes (ceilings have decorative cornice & plasterwork that is required to be retained due to building's listing). Existing plastered ceilings to be checked to be sound. Plasterwork to be made good where necessary before application of paint. First & second floor ceilings (lath & plaster) to have Envirograf 105 EP/CP/P water based primer applied finished with 2 coats of Envirograf 105 EP/CP intumescent paint to give ceiling 1 Hour fire protection.

Internal Linings
 No timber linings or panels within emergency escapes (mouldings fixed to plasterboard to give impression of timber panels). Mouldings to have Envirograf 42 (HW system) intumescent paint to be applied achieving 1hr fire resistance within protected corridors & stair enclosures.

Suppression System
 Watermist suppression system designed & installed to second & third floors in accordance with BS 8458: 2015 (fixed fire protection systems Residential and Domestic water mist systems code of practice for design & installation). System designed & fitted by Imist, refer to Imist drawing no. Q22-13028. Where sprinkler pipework passes through walls to suites & walls to hallways (protected areas) Quelfire QIF sleeve to be fitted around pipework with junction with plasterboard/plaster sealed with Quelpost HPE sealant. Where sprinkler pipework passes through floor Quelpost Fire Ball to be fitted around pipework as it passes through ceiling with Quelpost HPE Sealant to pipework. Notching of floor joists to be kept to minimum with sprinkler pipework running within ceiling voids & between joists. Where joists required to be notched, no joist to be notched within 1m of joist ends/support with notch depth to be no greater than 1/8 of full depth of floor joist. Where hole is created for sprinkler pipework, hole to be in centre of joist, with diameter no greater than 1/4 of depth of floor joists.

Ceilings
 No suspended ceilings/ ceiling grids within property. No suspended ceilings/ ceiling grids within property.

Protective Barriers
 Where an opening section of a window is below 800mm in height protective barriers to be fitted internally to a height of 800mm. No opening in the barrier or between the barrier & the wall, window & cill to be large enough to allow a 100mm dia. sphere to pass.

Escape Route Lighting
 Every point of the escape routes to be served by artificial lighting supplied by a protected circuit that provides a level of illumination not less than that recommended for emergency lighting.

Emergency Lighting
 Emergency lighting will be provided in accordance with BS 5266: Part 1: 2016 as read in association with BS EN 1838: 2013. All emergency luminaires shall have a standby operation of 3 hours, with their associated charger units able to suitably recharge within 24 hours. Emergency lighting shall be designed to a minimum of 1 Lux on all escape routes (on the centre line of escape routes) with 10% of the general illumination level over all distribution boards, switchboards and plant items.

Exit Signage
 Escape lighting would be designed and installed to BS 5266 Part 1.

Protected Power Circuits
 Protected circuits are required for equipment which is essential to life safety during an emergency. A protected circuit for operation of equipment in the event of fire shall consist of cable meeting the requirements for classification as CWZ in accordance with BS 6397.

Emergency Power
 The fire protection system such as automatic fire detectors and alarms and emergency lighting, will be required to comply with their perspective British Standards which require back-up power supplies, although emergency lighting can be provided with battery back-up within the units themselves.

Voids
 No voids large enough to require cavity barriers. Only voids in roof at eaves as majority of roof is flat. Lowered ceilings creating voids exist within escape stair & corridor enclosures & to be finished with 2 x 12.5mm Fireline board. Voids over not large enough to require barriers.

Macerator
 Macerator to ensuite of Suite 02. With 1100mm dia inlet & 240mm dia inlets with 28mm outlet complete with integrated carbon filter, sanitary Macerator Waste Pump System ME90101 by Victoria Plumbing or equal. Dimensions 409mm wide, 190 deep, 300mm high. Macerator to be enclosed with lid that lifts off & removal panel.

Manoeuvring Spaces
 All shower rooms & toilets have a clear manoeuvring space of at least 450mm dia..

Proposals at Corn Exchange Road Stirling

scale 1:50 (A1)
 dwg no. 29160/SA/5e