



**THEIS
+ KHAN**



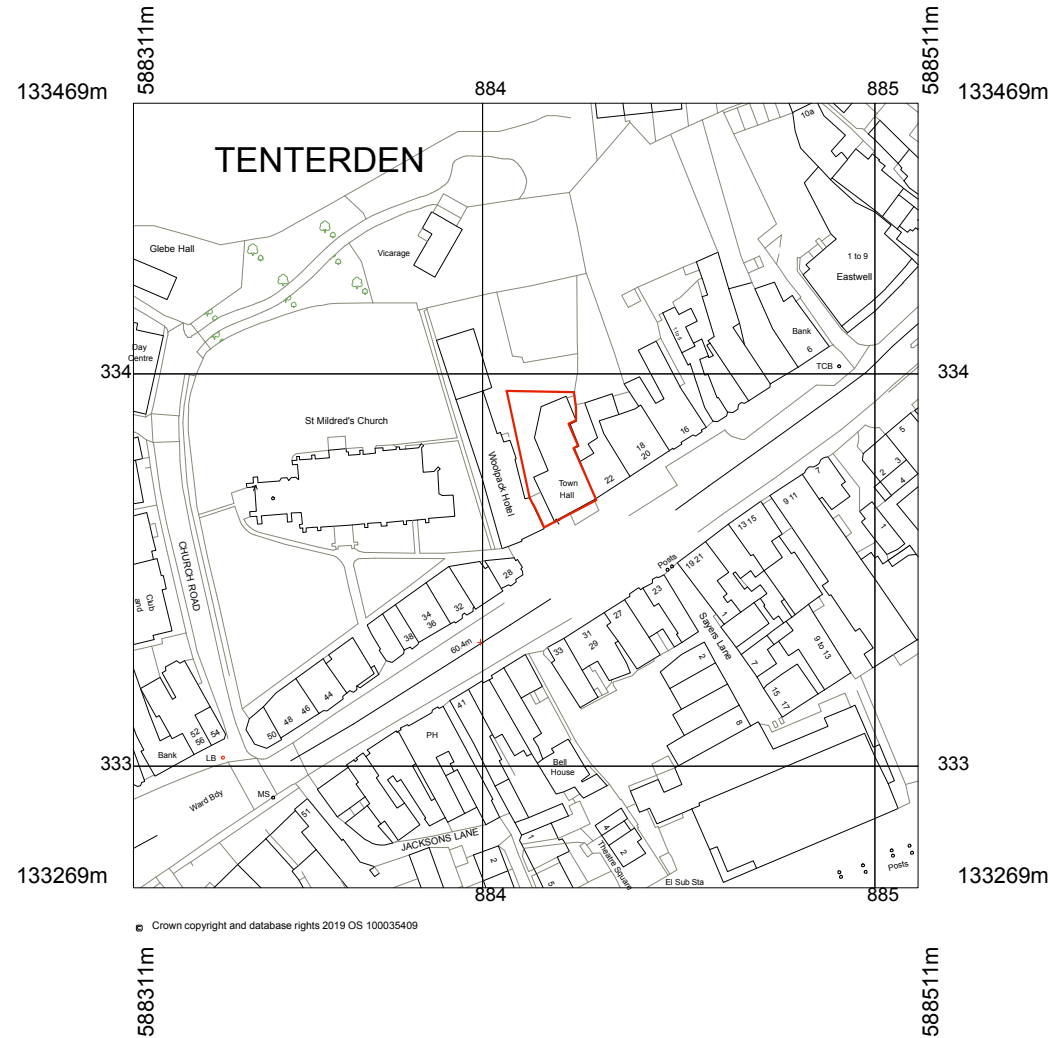
**TENTERDEN
TOWN COUNCIL**

Design and Access Statement

Tenterden Town Hall, High Street, Tenterden, TN30 6AN
August 2022

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1.0 Introduction

This Design and Access statement has been prepared by Theis + Khan architects on behalf of Tenterden Town Council to accompany an application for alterations and refurbishment works to Tenterden Town Hall. This report is to be read in conjunction with the Heritage Statement prepared by the Heritage Collective and Heritage Impact Assessment prepared by Michael Copeman.

Tenterden Town Hall is a Grade II listed building located on Tenterden High Street and is currently used for offices, a licensed marriage venue, community activities, events, shows, Citizens Advice Bureau, meetings and as an advice centre for Tenterden Town Council.

Although the building has special architectural and historical interest, the existing layout - particularly on the ground floor - is confusing and poorly utilised, which adversely affects the usability of the building. This statement will explain how the proposals will improve the accessibility and usability of the building.

Theis + Khan are award-winning architects based in Tunbridge Wells, Kent, who design buildings that express a sense of place, are meaningful and joyful to their users and have architectural integrity. They have extensive experience of working on Listed buildings and buildings on sensitive sites and always take a contextual approach to these schemes. Theis + Khan have won many awards including a nomination for the RIBA Stirling Prize in 2010 for Bateman's Row.

1.1 The Site

The building is a Grade II listed Town Hall on Tenterden High Street. It is within the Conservation area and an area of archaeological importance.

The site address is:

Tenterden Town Hall
24 High Street
Tenterden
Kent
TN30 6AN



existing external photographs



existing external photographs

1.2 Listing Description

Tenterden Town Hall was listed in 1970, please see below listing description:

Dated 1790. Now refronted in rough plaster. 2 storeys. Bracket eaves cornice. Built in 2 sections. The east section has a slate roof, one large modern window and an iron balcony on the 1st floor supported on columns below forming a portico right across the pavement. The west section has a tiled roof. 2 sashes with glazing bars intact, and an archway through the building beneath the westernmost window.

All the listed buildings on the north side from Nos 10 to 44, including Church of St Mildred, form a group.

Listing NGR: TQ8841733382

1.3 Brief

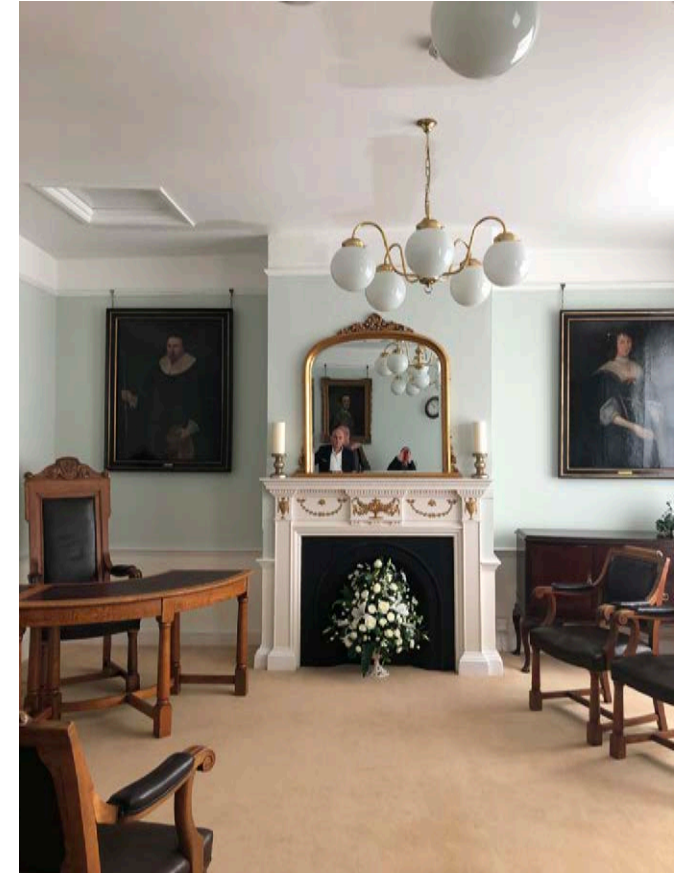
The refurbishment of Tenterden Town hall began as an invited architectural competition in December 2018. Tenterden Town Hall established the following principles to guide the development:

- Make the spaces more efficient for the users
- 'Future proof' it for future generations
- Restore the building to its former glory
- Re-establish it as the civic and heritage focal point of Tenterden
- Create economic sustainability through rentable office / meeting spaces
- Improve sustainability of existing building

1.4 Planning History

Previous Planning applications - These are the most significant planning applications concerning the Town Hall to date:

01/00199/AS	11 Apr 2001	Internal alterations to Tenterden Town Hall.
01/00768/AS	11 Apr 2001	Internal alterations to Tenterden Town Hall.
03/00732/AS	24 Mar 2003	Installation of stair lift on main staircase.
04/00945/AS	9 Jul 2004	Alterations to existing ground floor offices to enable wheelchair access.



existing mayor's parlour

20/00067/AS 23 Apr 2020 Repair and minor alterations to existing roof to prevent water ingress to include raising height of flashing/valley gutter and installation of new external and internal rainwater pipes submitted by Theis + Khan.

Historic developments and phasing are described in detail within the Heritage reports.

1.5 Pre-Application Advice and Dialogue

A pre-application advice request was submitted in December 2019 and feedback was received from Sarah Dee in February 2020. A site visit was not carried out at the time. Notes on the feedback and our responses are detailed below:

1.5.1 ABC comment:

"I note that you did not submit any proposed elevations to support your proposal, which obviously will prevent me being able to comment on this aspect. However, in principle, I would agree that the rear addition is "of its time" and contributes little to the special interest of the Listed building. Whilst this means that there is scope to alter it, any new addition will need to be a positive alteration to the Listed building, or at the very least have a neutral impact. As well as the impact on the setting of the Town Hall, we will also need to consider the potential impact on the setting of the adjacent Woolpack Inn."

TKA Response

We have carefully composed the form of the new extension to respond to the scale of the surrounding buildings. The materials selected follow those of the original building albeit with modern detailing where appropriate.

We have prepared visualisations to show the proposals within their immediate context.

1.5.2 ABC comment:

"The rear extension will result in both the loss of parking provision and alterations to the vehicular wider parking area and access to the neighbouring properties. This is not a Listed building consideration and so I am not able to advise you further at this time, but it will need to be addressed in the accompanying planning application."

TKA Response

There are currently no formal parking spaces on the site available for the Town Hall, however some staff have been parking on site at the rear of the building. The Town Hall is willing to sacrifice the use of this area in order to provide the additional community accommodation. The current parking area is not used by members of the public who typically arrive either by public transport, walk or park in one of the nearby car parks.



historic photo

A single wheelchair accessible space will be created at the rear to allow wheelchair users to access the citizens advice facilities. It will also allow for deliveries to the town hall.

The proposals do not extend the building to the North, so the access to the neighbouring houses remain unaffected by the proposed works.

The area outside of the site ownership boundary is unregistered land and efforts have been made to locate the owner. It is hoped that this area could be re-landscaped as part of a future phase of works and Tenterden Town Hall has entered into early discussion with the Woolpack Inn to pursue this.

1.5.3 ABC comment:

"The loss of the external fire escape would be positive in principle, but it is not clear how much physical bulk the replacement ramp will have. Given its size, it may potentially have an impact on the setting of the Listed buildings."

TKA Response

The existing fire escape has no historic value. We believe that we have designed the new extensions and ramp in a way that minimises the massing and contributes to the setting of the listed building.

1.5.4 ABC comment:

"It appears that the existing side addition is to be altered to provide a lift and WC. Presumably, given its tile cladding, this is light-weight timber framed construction and it is not clear how this is can be adapted. There is also a sash window on this side elevation, which is not shown on the first floor existing and proposed plans."

TKA Response

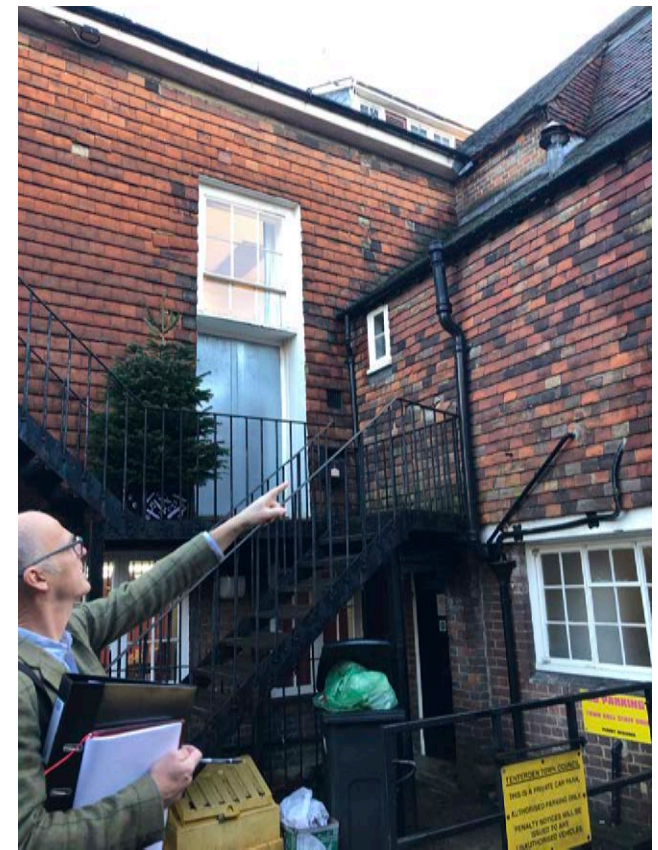
Since our pre-application submission we have worked to reduce the structural impact of the new extension on the existing building fabric. The new revised design retains more of the original building in that area.

The ground floor construction in this area is solid brickwork. We are retaining the primary structural piers but the infill brick panels are to be removed, to create room for the extended ground floor.

At first floor we have retained the existing timber frame external walls but have formed an opening to allow access to the new extension. The existing roof will now also be retained apart from the new opening required for the lift.

1.5.5 ABC comment:

"The proposal involves the removal of many walls at ground floor level. Whilst some of these are clearly modern additions, some appear to be of more structural and historic significance. Based on this informal submission, I am not convinced that the loss of so much historic fabric and the alteration to the plan form would be a positive enhancement and I would suggest that this aspect is more thoroughly explored as part of any formal application."



metal escape stair (to be removed)

The loss of structural walls will also have implications for the support of the first floor and any formal application will need to include details of any structural alterations that may be necessary.”

TKA Response

The existing ground floor layout creates a significant barrier to the use of the building as a public venue. The existing layout is confusing and it is difficult for the public to navigate through the building.

When the building is used for performances or events there isn't sufficient breakout space for the number of visitors. This limits the number of times it can be used throughout the year.

The current layout therefore limits the ability for members of the public to enjoy the building and for that reason, we consider the removal of the walls at ground floor to be of sufficient public benefit to justify the harm to the listed building. The detail of the alterations is covered in more detail within the Heritage Statement and impact assessment prepared by Michael Copeman.

1.5.6 ABC comment:

“The plans indicate that some of the ground floor is to be lowered. Although I can appreciate the benefits, I would suggest that any formal application will need to include details of the existing and proposed floor levels and construction, in relation to the historic fabric, so that we can understand the full implications.”

TKA response

The ground floor construction is typically suspended timber flooring although some areas appear to have been replaced with concrete. The flooring within the existing boiler room and store has been replaced with concrete (area indicated in green on adjacent image). Lowering this area of flooring will not affect any of the original timber flooring.

The rest of the ground floor appears to be a suspended timber floor, which we propose to adapt to provide level access as shown in the plans. The raised area which is currently used for offices has been previously changed, This is evident from the original door cills in that area.

1.5.7 ABC comment:

“The main staircase is an intrinsic part of the special interest of the building and any alterations to the lower section will need to be sensitively designed.”

TKA response

The lower section of the main staircase will be retained but we propose to remove the upper section to the second floor. We have prepared detailed section drawings to show the removal and making good in support of this application.



plan extract showing area of concrete floor



floor board removed showing floor construction

1.5.8 ABC comment:

"the submitted details are not entirely clear about alterations to the gallery: it appear that the shutters are being replaced with new doors."

TKA response

The existing doors are partially fixed shut in order to create a cupboard. We propose to remove the cupboard and restore the original doors to the minstrels' gallery. Additional details have been submitted for the full application.

1.5.9 ABC comment:

"Re-opening of the lantern. Apologies if I have overlooked the explanation in the accompanying text, but it is not clear of the age of the lantern in relation to the (refurbished) interior of the hall. Would the opening up of the lantern complete the refurbishment of the hall, or would it actually involve the merging of the earlier interior with a later addition? If the former, I would suggest that any formal application should include details of the architectural evidence. If the latter, I am not convinced how sensitively or successfully this could be achieved, in what is one of the most significant "public" rooms of the building."

Since our pre-application advice submission we have carried out additional investigations of the loft space and the roof structure was not of the same architectural quality as the main hall. We have therefore concluded that the roof lantern was not worth pursuing further.

1.5.10 ABC comment:

One last point, the scheme appears to suggest that there needs to be a change to the existing first floor levels in the 1930's addition, as currently you need to use stairs to access the stage form the green room, but no stairs are shown on the proposed plan.

A central aim of the scheme is to provide level access throughout as much of the building as possible. As the 1930s extension has limited heritage value compared to the main building, we propose to lower the floor level to match that of the main Assembly Hall. This puts the stage level approximately 1m higher than the rest of the first floor, so we propose to install two small stage access stairs at the rear of the stage. A platform lift was considered for stage access but ruled out for this phase of work.

1.6 Public Consultation

Local residents have been involved in the project since Theis + Khan were first appointed. Our client design meetings have been attended by a Town Hall Focus Group who gave input into the scheme to ensure the needs of the end users and community are met.



public exhibition - February 2020

Plans for the regeneration of the Town Hall were also presented to the public as part of an exhibition in February 2020. The plans at the time had a 74% public approval rating and developed them further. In addition to the public consultation Tenterden Town Council has displayed our proposals on their website.

Information on public consultation as well as meeting minutes can be found at the link below:

<https://www.tenterdentowncouncil.gov.uk/en/page/tenterden-regeneration-project>

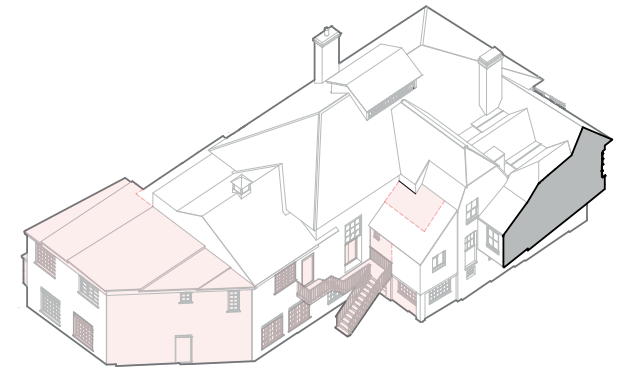
1.7 2020 Application and Subsequent Design Development

A Full Planning and Listed Building application was submitted in December 2020 however it was subsequently withdrawn as Ashford were not undertaking site visits at the time due to covid and the complexity of the building made it difficult to review remotely.

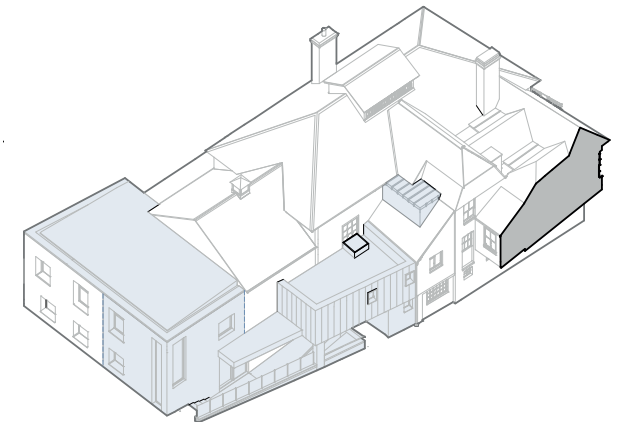
A site visit was undertaken in August 2021 following which Sarah Dee provided some notes on the design and suggested amending the extensions to make them more distinct from the original fabric.

Sarah Dee also requested some additional information on the phasing and heritage impact be supplied to supplement that already submitted by the heritage collection in their report. Additional exploration and a new impact assessment has been undertaken by Michael Copeman and this report is included within this application.

Following this feedback from the conservation officer, Theis + Khan redesigned the exterior to more strongly articulate the new phases of development. A flat roof has been chosen for both the rear and side extension to ensure the original town hall is apparent and not subsumed by the proposals.



existing



proposed

key
demolition
proposed addition

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proposed south elevation showing new side and rear extensions

2.0 Brief description of development

The proposed scheme aims to extend and refurbish the existing building to create fully accessible and flexible modern community facilities.

2.1 Use

The Town Hall is and will continue to be used as the administrative headquarters for Tenterden Town Council and the offices of the Town Clerk. It will also continue to be used for community events, citizens advice and meetings together with weddings, shows and community workshops and classes. The proposed refurbishment and extension will create additional space for these community activities and exhibition space for local businesses, as well as giving full accessibility to the whole building as the first floor is inaccessible to wheelchair users at present. The existing building does not have adequate toilet provision and this will be upgraded and enhanced in the proposed scheme.

2.2 Amount

The town hall ground floor footprints are as follows:

Existing ground floor footprint	= 290 sq m
Proposed ground floor footprint	= 316 sq m

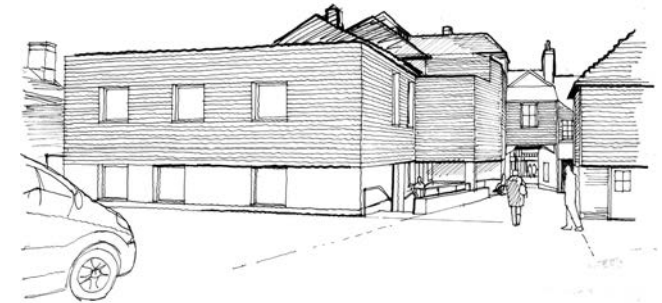
The gross internal floor areas for the town hall are as follows:

Existing ground floor	= 256m ²
Existing first floor	= 289m ²
Existing second floor	= 19m ²
Total existing GIA	= 564m²
Proposed ground floor	= 275m ²
Proposed first floor	= 325m ²
Proposed second floor	= 20m ²
Total proposed GIA	= 620m²

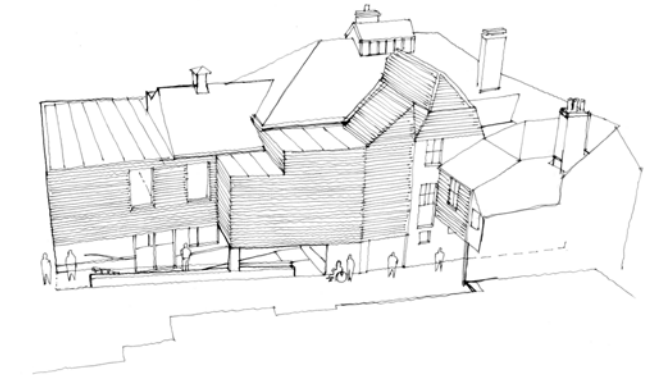
2.3 Layout

2.3.1 The layout of the new proposals at ground floor aim to rationalise the space. The existing ground floor is a warren of rooms which is hard for visitors and users to navigate. The proposed design will open up the centre of the plan to create a new exhibition area. Wall nibs and downstands will be retained to provide a visual clue to the historic layout.

The creation of the new exhibition space in the centre will allow for full appreciation of the original staircase, fireplaces



early concept sketch showing extensions



early concept sketch showing extensions

and other original detailing to give a flavour of the original space as it might have been as the Grand Jury room.

The existing offices at the front will be repurposed for the Town Clerk and Administration offices, while the side extension will house the new lift and WC facilities for all floors.

The new rear extension will provide flexible office space, a staff room and waiting and interview rooms for the Council's CAB services. It will have its own discreet accessible entrance to ensure privacy for those using the advice services, as at present everyone must wait together in the cramped entrance hall at the front of the building. A relocated staircase will provide an alternative fire escape and direct access to the kitchen, green room and back of stage area for easier logistical use of the main Assembly room at first floor.

2.3.2 The layout of first floor will be as existing for the Mayor's parlour and Assembly room, however the new side extension will provide larger and enhanced female WCs as well as a lift and new discreet access to second floor.

The stage area will remain the same but the relocation of the existing side staircase will allow essential level access between the Assembly room and the catering kitchen at the rear of the building. This will make servicing functions much easier and safer. A green room that could be used as a further meeting room and alternative fire escape stair will replace the unsightly outside metal staircase and landing.



existing office corridor



existing office corridor



existing entrance hall opened up to new exhibition / community space

existing floor level to main catering kitchen and corridor reduced to same floor level as assembly room to allow level access

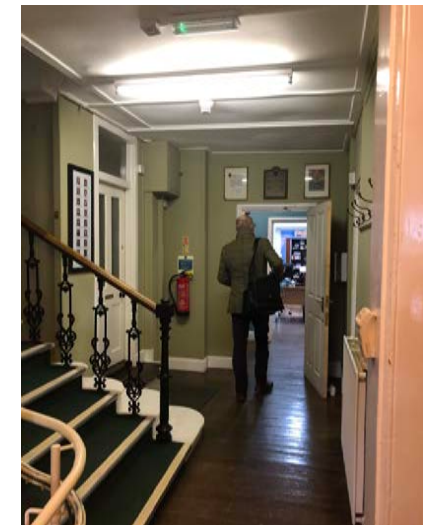
proposed concept sketch



proposed view of new exhibition space



alternative exhibition configuration



existing corridor to reception



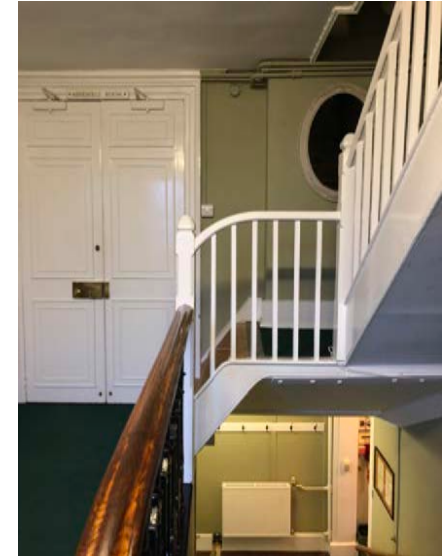
proposed view of new exhibition space



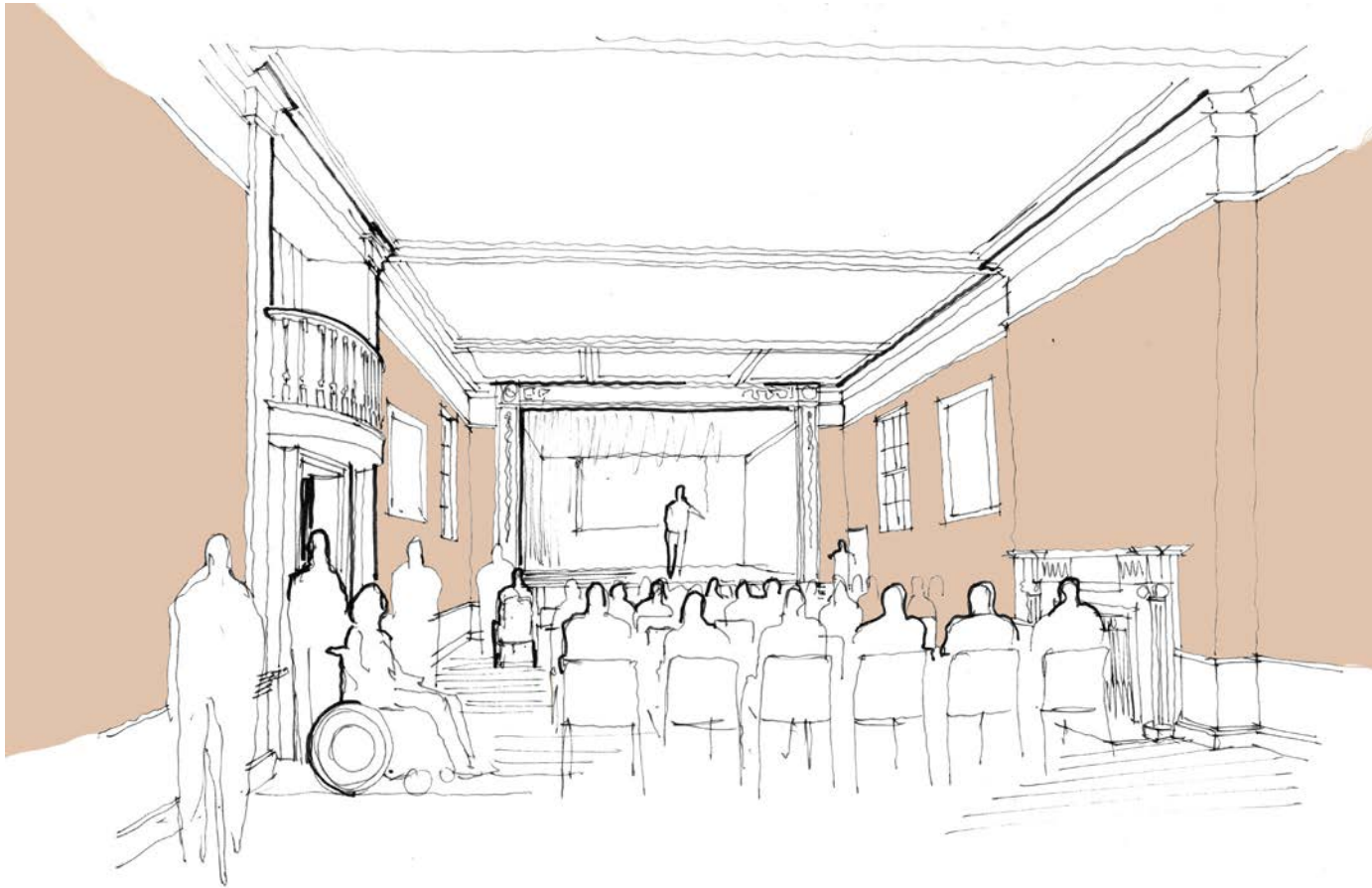
existing corridor from entrance



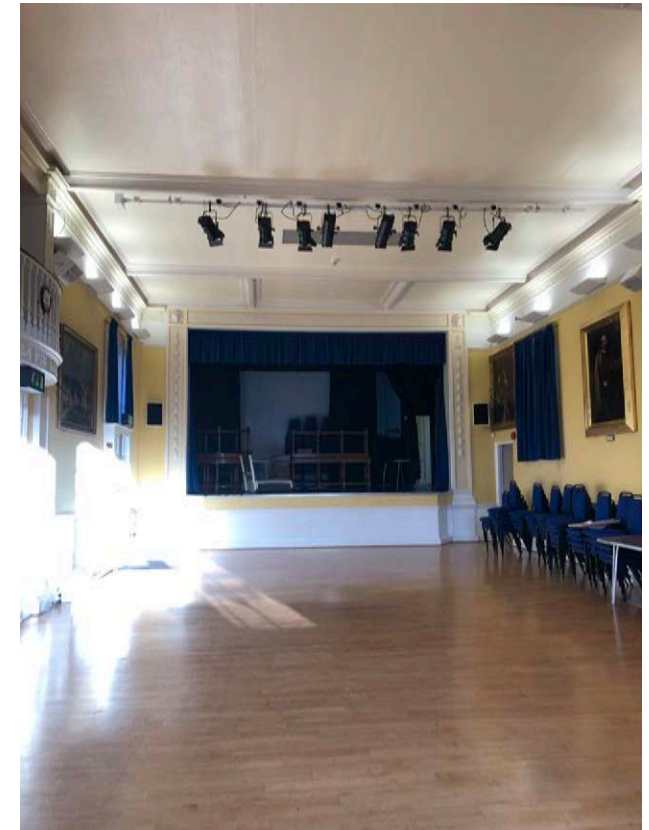
proposed view of main stair following the removal of existing stair to second floor.



existing stair



proposed Assembly Hall



existing Assembly Hall

2.4 Scale and Appearance

The existing town hall has developed over the centuries into the elegant building it is now. It is however a complex composition in terms of form and roof scape, especially at the side. Great care has been taken to propose extensions that sit comfortably within this composition without destroying the charm of the amalgamation of historical additions.

The scale has been kept as modest as possible in keeping with the existing spaces and ceiling heights. The proposed materials will all match existing but with some contemporary detailing. The rear extension will be brick to match existing. The red/brown zinc has been chosen as a modern reflection of the hung tiles found on the surrounding buildings.



proposed rear view



existing rear view



existing rear view



proposed view from St Mildred's Church showing new extensions in context



existing view from St Mildred's Church

2.5 Access and Landscaping

There is existing level access through the main front entrance door. As part of the proposed works, new rear entrance doors approached via a ramp will provide new level access to the rear of the building. A new passenger lift connecting ground and first floors will allow wheelchair accessibility to the whole building for the first time in its history.

There is little scope for landscaping the surrounding area within the site boundary but a new planter will be incorporated as part of the ramp design to the new rear entrance.

An improvement to the wider landscape between the Town Hall and the Woolpack Inn is planned for a future phase. Preliminary discussions have begun and will continue if the main refurbishment works are agreed in principle.



existing rear access



proposed rear entrance

3.0 Sustainability

The existing building currently has an outdated heating system and the insulation does not meet any current standards. The listed building status and heritage significance limits the opportunity to improve some areas however we are targeting the following improvements:

- Improve insulation where possible
- Reduced dependency on grid electricity
- Improvement in the energy efficiency of the existing building;
- Improved thermal comfort
- Investigation into appropriate Low to Zero Carbon Technologies.
- Create thermally efficient new build extensions

The sustainable approach to the Mechanical and Electrical Strategy is described in further detail in Appendix A below.

Appendix A - Energy Assessment

John W Bathurst Ltd Environmental Consultant

Tenterden Town Hall - Energy Assessment

Introduction

The first step in carrying out any energy assessment require that buildings be designed to use improved energy efficiency measures. This will reduce demand for heating, cooling, and lighting, and therefore reduce operational costs while also minimizing associated carbon dioxide emissions.

This section sets out the measures included within the design of the development, to reduce the demand for energy, both gas and electricity. Energy from renewable sources is covered later hereinafter.

1.1 Passive Design

The National Planning Policy Framework emphasises the need to take account of climate change over the longer term and plan new developments to avoid increased vulnerability to the range of impacts arising from climate change. The UK Climate Impacts Programme 2009 projections suggest that by the 2080's the UK is likely to experience summer temperatures that are up to 4.2°C higher than they are today. Accordingly, designers are to ensure buildings are designed and constructed to be comfortable in higher temperatures, without resorting to energy intensive air conditioning.

Unfortunately there are only minimal opportunities to improve the external fabric to minimise heat gains and losses. The proposed refurbishment will improve the thermal insulation levels wherever practicably possible but the options are minimal. Secondary glazing will be added to all windows and the roof insulation thickness increased to 300mm.

Not only does good insulation assist in reducing heat losses in the winter, it has a significant impact on preventing heat travelling through the build fabric during the summer.

1.2 Reduce the amount of heat entering a building in summer

The property has a good floor plate to glazing ratio (less than 25%); thus avoiding excessive solar gain, but with glazing more than adequate to ensure sufficient natural daylight.

Glazing specification has been considered as part of the overheating risk and the secondary glazing, where blinds could be installed, will assist in reducing any potential – all but limited - overheating risk from excessive solar gain. The large expanse of roof void above the Assembly Hall is also an area which will benefit from the improved insulation,; delaying the time the solar energy takes to heat up the space.

1.3 Heating system

The first option would be to replace the existing inefficient gas fired boiler and replace with an energy efficient model plus renewing the gravity assisted single pipe heating distribution system with a new pumped pressurised radiator system.

A-Rated gas condensing boiler (89% + SEDBUK seasonal efficiency) would have to be used. The installation of condensing boiler would involve relining the existing chimney if it were to remain in its current location. To achieve the proposed exhibition space, the current boiler room will be removed, along with the incoming gas supply and meter. If the gas boiler installation was the chosen heating strategy then a new plant room space would be required along with a new incoming gas supply and meter.

To increase the efficiency in the use of the heating system, the following controls would have to be used in a 'boiler interlock' system to eliminate needless firing of the boiler.

- Time and temperature zone control
- Boiler fitted with a weather compensation system

It should be mentioned that the latest Government direction is to reduce or eliminate combustion, which contributes to local air pollution. This includes burning mains gas.

1.4 Lighting

A 100% of internal light fittings throughout the development will be dedicated low-energy LED light fittings. To further reduce energy consumption, all lighting systems should be high efficacy with appropriate daylight controls with smart metering to enable occupants to measure and manage their energy consumption.

The second stage in the energy assessment is to ensure efficient and low carbon energy supply.

2.0 Renewable Energy

The proposals should provide a reduction in expected carbon dioxide emissions through the use of on-site renewable energy generation, where feasible. Being Green.

Renewable energy can be defined as energy taken from naturally occurring renewable sources, such as sunlight, wind, wave's tides, geothermal etc. Harnessing these energy sources can involve a direct use of natural energy, such as solar water heating panels, or it can be a more indirect process, such as the use of Biofuels produced from plants, which have harnessed and embodied the suns energy through photosynthesis.

The energy efficiency measures and the sourcing the energy efficiently outlined above have the most significant impact on the heating energy requirements for this building, and the associated reduction in gas consumption

This section then sets out the feasibility of implementing different energy technologies in consideration of: -

- Potential for Carbon savings
- Capital costs
- Running costs
- Payback period as a result of energy saved/Government incentives
- Maturity/availability of technology
- Reliability of the technology and need for back up or alternative systems

2.1 Government incentives

2.1.1 Feed in Tariff

The Feed in Tariffs (FITs) that related to electricity generation from solar energy using photovoltaic technology were withdrawn in April 2019.

2.1.2 Renewable Heat Incentive

The Renewable Heat Incentive (RHI) was formally launched by the UK Government on 10th March 2011. The RHI will pay a tariff payment to renewable technologies that provide heat energy from a renewable source, with the payment relating to the kWh of heat energy provided e.g. if a property has a heat load of 20,000 kWh per annum, and it is 100% provided from a renewable source, then the tariff is paid against the 20,000kWh.

The Government decided on a two stage delivery - the first stage being for non-domestic schemes, commencing in July 2011, with domestic schemes introduced in April 2014.

The Non-Domestic Renewable Heat Incentive (RHI) is a government environmental programme that provides financial incentives to increase the uptake of renewable heat by businesses, the public sector and non-profit organisations.

Eligible installations receive quarterly payments over 20 years based on the amount of heat generated. The scheme covers England, Scotland, and Wales.

Ground source, water source and air source heat pumps are eligible for Non-Domestic Renewable Heat Incentive (RHI) support. Air to water heat pumps that provide cooling are not eligible for RHI.

Appendix A - Energy Assessment cont.

All heat pump technologies utilise electricity as the primary fuel source, displacing gas, as such, the overall reduction in emissions when using this technology can be less effective when opposed to a technology that is actually displacing electricity.

The National Grid is on a trajectory to decarbonise between now and 2050. Huge gains have already been made and a heat pump system will have approximately half to quarter the carbon emissions of the equivalent gas fired system and as the Grid continues to decarbonise, so too will the heating to the Town Hall without any further investment.

2.2 Ground Source Heat Pump

Ground source heating or cooling requires a source of consistent ground temperature, which could be a vertical borehole or a spread of pipework loops connected to a 'heat pump'. The system uses a loop of fluid to collect the more constant temperature in the ground and transport it to a heat pump. In a cooling system this principle works in reverse and the heat is distributed into the ground. The heat pump then generates increased temperatures by 'condensing' the heat taken from the ground, producing hot water temperatures in the region of 55C. This water can then be used as pre-heated water for a conventional boiler or to provide space heating with an under floor heating system.

The use of a ground source heating/cooling system will therefore require

- Vertical boreholes or ground collector loops
- Use of under floor heating
- Space for heat pump unit inside the building

However, ground source heating has always had a low take-up due to the cost of installation of the bore holes, plant space requirements and general concerns about heat sources located underground. As a result, product development has not kept pace with that of air source heating, a much more common technology in both the domestic and commercial sectors.

Clearly, with no land available for the installation of ground collector loops or bore holes and a very limited budget, which could not stretch to the costs of the boreholes, ground source heating is not be considered as a viable option.

2.3 Air Source Heat Pump

Air source heating or cooling also employs the principle of a heat pump, either, upgrading the ambient external air temperature to provide higher temperatures for water and space heating, or taking warmth from within the building and dissipating it to the outdoor air.

It must be remembered that heat pumps utilise grid based electricity and the associated emissions, so that the actual reduction in emissions can be limited. Assuming a seasonal system efficiency of 320% (Coefficient of Performance of 3.2) and that the air source heat pump will replace 100% of the space heating demand, then the system could reduce the overall CO2 emissions by approximately 15%.

Accordingly, the design team are proposing air source heating to deliver heat to the property via air to water heat pumps, delivering low grade hot water, 55C for use with an underfloor heating or fan assisted radiators, suitable for use with low temperature heating systems, replacing the gas boiler as identified as the heating under clause 1.3 herein before.

Given the requirement to future proof the development against future overheating potential, the design team are also proposing the use of an air-to-air comfort cooling system to heat and cool the Assembly Hall replacing the inefficient radiator heating in this large space. This heat pump would not qualify for the RHI unfortunately.

2.4 Photovoltaics (PV)

This development does not have large areas of roof that could accommodate solar PV panels. The flat roof over the new extension faces north, although the panels could be orientated to the north-west and north-east but the limited amount of sun on these panels would make the very inefficient.

The only roof space that faces south is the pitch roof at front of the building above the Assembly Hall and mayors parlour. It is considered that the planning authority would not look favourably on a panel installation in that very prominent location on this listed building.

1kWp (1 kilowatt peak) system in the UK could be expected to produce between 790-800kWh of electricity per year based upon a south east orientation according to SAP2005 methodology used by the Microgeneration Certification Scheme (MCS) but there is no large roof space available on the south-east elevation and that available would suffer from external shading from the adjacent property's chimneys.

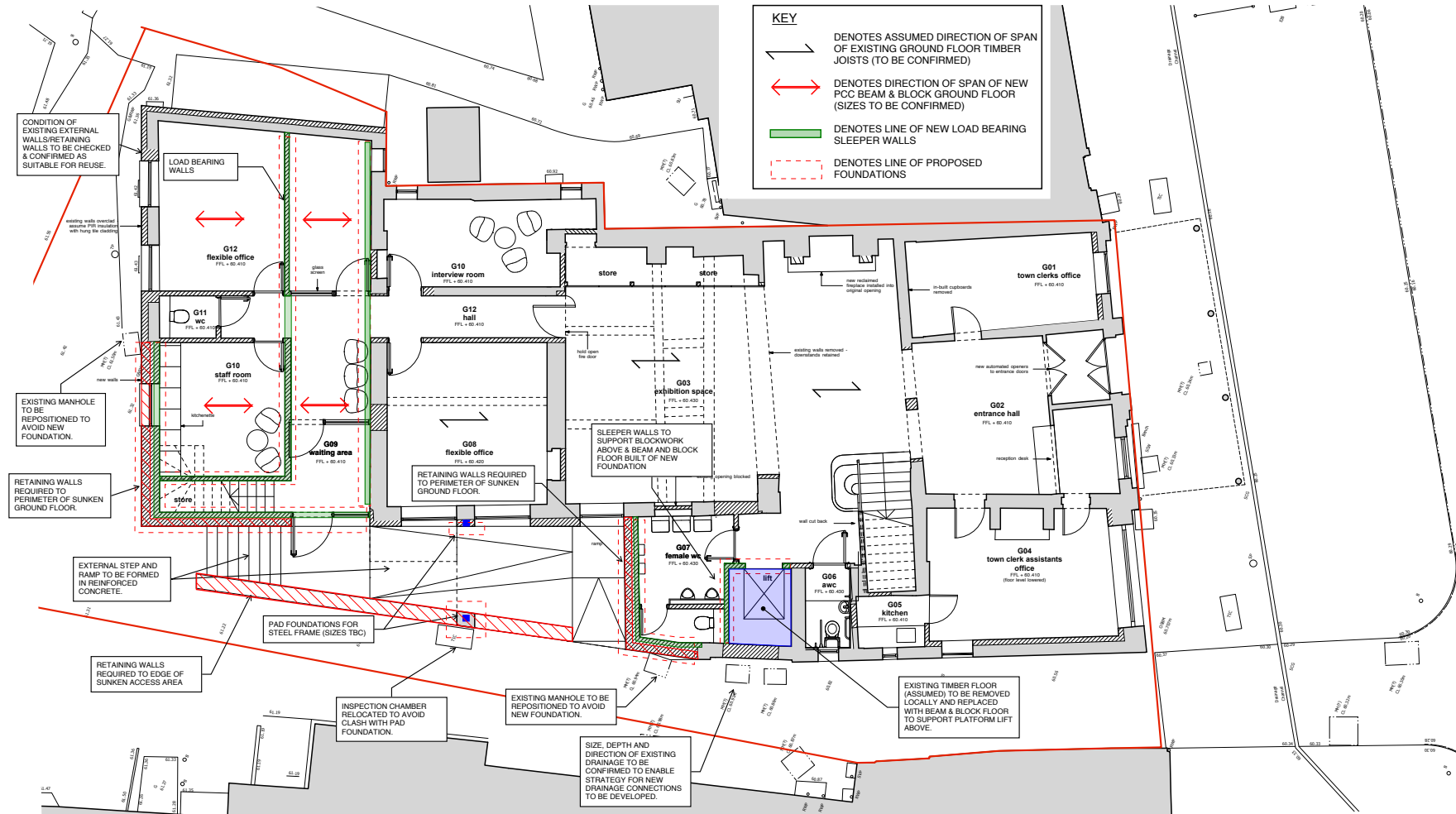
The withdrawal of the Feed in Tariff has now rendered such investments less attractive, however, there is still the benefit and carbon savings derived from the electricity produced. Accordingly, the installation of a PV array is not recommended for this project.



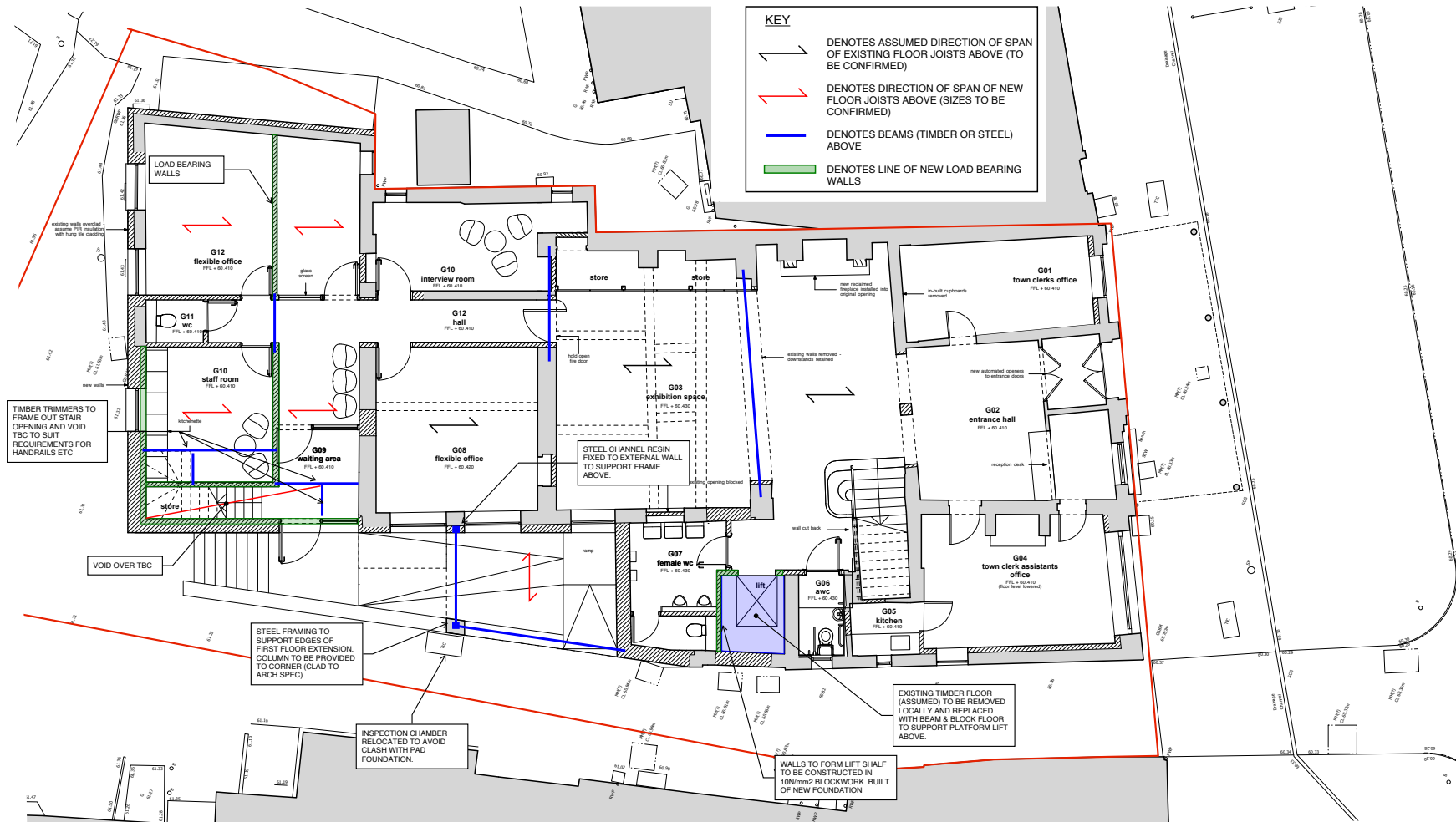
John Bathurst CEng FICBSE FRSH
John W Bathurst Ltd

16th September 2020

Appendix B - Substructural Scheme



Appendix B - Ground Floor Structural Scheme cont.



GROUND FLOOR PLAN
(Showing Structure over)