

URN: 23-203

Report Title: Haven Bridge Public House

Report to: Scrutiny

Date of meeting: 25th June 2024

Responsible Cabinet Member: Cllr Carl Smith

Responsible Director / Officer: James Wilson – Head of Environment and Sustainability



EXECUTIVE SUMMARY / INTRODUCTION

The Haven Bridge Pub has been in a derelict state since March 2022 following a major fire. Since this time the building has been supported with external scaffolding, which at present prevents the building from being considered immediately dangerous. As well as occupying a prominent position on a main thoroughfare into the Town, the building has the potential to become immediately dangerous unless appropriate supports are in place, this would result in Highways having to close the Haven Bridge which would have significant impact on traffic movements in the Town. The current appearance of the building is unsightly and causes access issues to buildings in the vicinity.

This report updates Scrutiny on the serving of the notice and Cabinet's decision at the May meeting to support any works in default should the notice not be complied with.

To note:

1. Section 79 notice under the Building Act 1984 was served on the freeholder of the property on Wednesday 5th June 2024.
2. Cabinet approved a budget of £120,000 from the general reserve (which includes a contingency) to undertake works in default should the notice not be complied with.
3. Cabinet delegated authority to Section 151 officer to approve any additional budget decision within 10% of the above figure.

1. Introduction

The Haven Bridge Public House has been a public house on and off since the mid 1800 with the current leaseholder leasing the property in 2020. The current owner had planned to convert the Pub into a guesthouse. Due to the pandemic the pub has remained closed since this purchase.

It is located on one of the main arterial routes into Great Yarmouth and is a large building in a prominent location adjacent to the Haven Bridge, the current condition of the property is that it is derelict as a result of a major fire in March 2022 and the structural integrity and

safety of the building is maintained by a significant amount of scaffolding to the building's exterior.

Whilst closed the building was illegally converted into an HMO on the upper floor with several small units built across the floor space, this was visited by Council officers and the fire service, with the result being the fire service serving a prohibition order on the premises for significant breaches of fire regulations. The building is now unoccupied as a result of its condition.

2. Structural Survey

The Council has recently instructed Technicus to undertake a structural assessment of the property this is to be used to inform the next steps in terms of which notice to serve and also a schedule of works for whichever notice is served.

An overview of the report is detailed below:

The Haven Bridge PH is currently in a severely damaged and structurally compromised condition following the damage caused by the 2022 fire, and subsequent further deterioration and weakening caused by exposure of the internal building structure to the external elements.

Following the fire and installation of emergency temporary propping and shoring, the building has received no further structural repairs or protection to prevent further damage and deterioration. We understand that internal emergency temporary supports installed immediately after the fire were subsequently removed, leaving the structurally damaged/compromised internal structural elements in a dangerous and potentially unstable condition.

To our knowledge, the fire related debris and rubble remains internally. The weight of this debris, and the impact damage caused by it falling inside the building, is likely to have overloaded the internal second and first floor joists and supporting structural beams/columns.

The emergency temporary scaffolding and shoring system erected immediately after the fire in March 2022 has now been installed for over 2 years, and to our knowledge has not been subject to regular safety inspection and checks to ensure it remains structurally effective, until recently.

Furthermore, the arrangement of the temporary scaffold system was not structurally designed in detail as there was not time available for a normal design process to be followed. Instead, the system of scaffold was developed on site with KB Scaffolding to reduce the risk of the external walls of the fire damaged building rotating outwards due to loss of internal buttressing and restraint walls and floors. Whilst the scaffold system currently remains effective, it will need to be properly designed and enhanced (or replaced) to provide a structurally robust and safe façade retention system to facilitate safe execution of the required building repair and remedial works.

The fire and subsequent external exposure of the building's internal structural elements has caused extensive structural damage and deterioration. Whilst we have not been able to access the interior of the property to allow preparation of this report, we anticipate that most of the

internal floors and structural supports (beams, and columns) are likely to require wholesale replacement. Replacement of these structural elements will require design and installation of various phases of localised temporary works.

A preliminary breakdown of the expected scope of structural repair and remedial works is provided in Section 5.0 of this report based on our expectations of the works involved.

It is possible that the cost of the structural repairs and remedial works required to restore the buildings structural integrity and watertightness may exceed the current market value of the property once the works are completed. If this is the case it may make the repair and renovation option financially uneconomic. However, the building's condition will continue to deteriorate over time if structural repairs and remedial works are not taken soon. In time, this could result in the building becoming structurally unstable due to progressive structural deterioration, at which point it will present a health and safety hazard to the adjoining owners / tenants, and people moving, working, or residing close to the building. The timescale over which this situation may rise is impossible to accurately forecast.

Based upon our recent visual structural survey of the building's exterior we do not consider the building to currently present a serious risk of structural movement, failure, or collapse, in the short-term. However, due to the compromised structural arrangement of the building it is possible that damage or instability may be caused by exposure to extreme weather events (i.e. heavy rainfall, high winds). Until the building is structurally repaired it is recommended that regular structural condition inspections are undertaken on a 3-monthly basis during the autumn to spring period each year and following any significant weather events.

If structurally repairing and renovating the building is deemed financially uneconomic, consideration will need to be given to carefully demolishing the building to remove the health and safety risks it presents, which will become higher with time.

3. Work to Date / Proposal

On 23 March 2022 there was a significant fire at the building causing large amounts of damages to the premises meaning that the building was considered imminently dangerous by building control.

Scaffolding was erected by a local company on behalf of the leaseholder after advice from his structural engineer. This fact is currently being disputed through legal channels with the scaffolding company and the leaseholder claiming the cost of the scaffolding should be met by the Council. The Council disputes this.

The property continues to be scaffolded. If the scaffolding was removed it is likely the road would have to be closed as an emergency, due to the potential risk of collapse. This would have significant impact on traffic flow in the town. Photos show the current position.

The Council receives regular complaints about the state of the property and is aware the closure of Steam Mill Land to the rear and side of the property (due to the scaffolding) which it is claimed has an impact on businesses in this location.

On 5th June 2024 the Council served a notice on the freeholder of the property under section 79 of the Building Act 1984, this gives the freeholder 2 options, to undertake works to repair the property so that it is safe and usable again or demolish and clear the site.

There has been some recent engagement with the freeholder of the property since the serving of the notice. Until now he has been reliant on the leaseholder and their insurance company, the lease is a full repairing lease. The Council continues to engage with both the freeholder and the leaseholder to ensure compliance with the notice and to bring this matter to a conclusion.

4. Financial Implications

As mentioned above there could be significant cost with progressing works in default under the section 79 power, this would involve the following actions:

- Survey work (contractor)
- Notice and schedule of work drafting.
- Enforcement of notice (likely demolition)
- Planning permission for demolition
- Party wall agreement
- Road closure
- Demolition works or reinstatement of building.

Based on the findings of the structural survey the proposed works to make the building safe and repair to a watertight condition would be in the region of £550,000.

The demolition option has been estimated at a cost of £100,000 this has been based on 2 quotes received.

If the Council ultimately progresses works in default under a Section 79 notice then based on the above costing we would be looking to progress the demolition option based on the best use of public funds to resolve the issue. This would need to be taken from the general reserve as would be classed as revenue spend.

The cleared site has had a basic valuation completed and we have an estimated value of £65,000 to £75,000.

As can be seen from the figures above, if the notice were not to be complied with and the Council decided to undertake the demolition work in default, there is the potential that the Council would not recover its full costs, with the possibility of the site being worth in the region £25,000 - £35,000 less than the value of the works required.

5. Risk Implications

This is a high-profile building on one of the main arterial routes into Great Yarmouth and does not provide a good impression of the town as people enter via this route.

The scaffolding itself has been in place for a period of time and was erected to prevent the property from collapsing. The scaffolding structure itself will deteriorate over time if it is not checked regularly. The scaffolding contractor could also remove the scaffold which would render the building immediately dangerous resulting in a closure of the bridge.

The scaffolding also will deteriorate in appearance over time with the netting etc collecting litter. Steam Mill Lane to the side of the will need to remain closed if the scaffolding is in place and as such continues to be impact on local businesses who use the road.

Planning permission would need to be granted for any demolition of the building and there is a risk this would not be granted.

There is a risk that the estimated costs of these works might increase once the works have started and therefore there could be additional burden on the public purse to resolve this issue.

6. Legal Implications

There is always a risk when serving notice that an appeal would be lodged successfully, and all future action would be prevented.

A successful legal challenge against the notice could potentially stop the works or prevent the Council from claiming back the appropriate costs, this risk will be mitigated through advice from Nplaw before any action is finalised.

There is currently a threatened legal claim against the Council for the cost of the erecting the scaffolding at the property. This is currently being defended vigorously as the Council has no contractual relationship with the scaffolding company. We are still awaiting contact from the scaffolding company's legal representatives which was proposed by the scaffolding company following the last Scrutiny meeting.

7. Conclusion

A section 79, ruinous and dilapidated notice under the Building Act 1984 has been served on the freeholder, with a timeframe of 6 months for completion of works.

Should this notice not be complied with, then the Council would look at potentially undertaking the works in default and therefore has asked for a Cabinet for budget to be allocated to this work and this has been agreed at the Cabinet in May.

If this work was completed and a charge put on the property this would potentially allow the Council to obtain possession of the building which could then be sold.

The Council will continue to liaise with the freeholder and leaseholder as part of the ongoing enforcement work to seek compliance with the notice and progress with direct action should there be non-compliance.

8. Background Papers

None

Post-fire Structural Survey Report:

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Prepared For:



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Issued by : Kevin Buttle



Revision Schedule

Rev	Date	Comments	Prepared by:	Checked by:
01	20.03.2024	First Issue	Kevin Buttle MEng (Hons) CEng MICE Director	Barrie Burgess BEng CEng MStructE Director
				
			Signed...	Signed...

Limitations

We have not inspected woodwork, metalwork or other areas of the structure which are covered unexposed or inaccessible and are therefore unable to confirm that any such areas of the building structure are free from defects.

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1.0 Brief

Great Yarmouth Borough Council (GYBC) appointed Technicus Consulting on 15th February 2024 to conduct a visual-only, non-invasive, external structural survey of the fire damaged Haven Bridge Public House (PH) on Bridge Road, Cobholm. The purpose of the survey is to report on the structural condition of the building, and the expected preliminary scope of structural repairs and remedial works needed to return the building to a wind and watertight condition. We understand this report will then be used to assess the likely remedial works costs to assist with valuing the property, following which GYBC may consider submitting a Compulsory Purchase Order (CPO) to acquire the dilapidated property.

Technicus Consulting's scope of works for this project was set out in our fee proposal email dated 26th January 2024.

Technicus Consulting visited site on 6th March 2024 to conduct a visual-only, non-invasive, structural survey of the exterior elements of the building. At the time of our survey the weather was dry and bright, with an ambient temperature around 7°C.

Access to the interior of the building was not possible at the time of our survey due to concerns over the structural stability of the internal floors and structural supports following the building fire on 23rd March 2022. The internal floors are known to be supporting collapsed construction materials and debris associated with the fire damage, particularly the collapsed roof structure and tiles. Furthermore, the interior of the building has been exposed to the external environment since March 2022. This will have caused further deterioration to the internal structural elements, particularly timber floor joists, staircases, and structural support beams / columns.

The building is privately owned. It has remained in its fire damaged condition for the last 24 months. We understand no works have been undertaken during this period to structurally repair or prevent further degradation to building. The building is currently secure to prevent unauthorised access at ground level.

2.0 Introduction

The Haven Bridge PH is three storey end of terrace building located at the junction of Bridge Road and Steam Mill Lane in Cobholm. The building is believed to have been constructed circa 1875, replacing a previous property that occupied the site.

The building construction arrangement comprises loadbearing masonry walls with internal suspended timber upper floors, timber staircases, and a tiled hipped roof supported on timber rafters, purlins, and principal roof trusses. The principal roof trusses comprise a combination of lightweight lattice steel and traditional timber king post truss types. The building is believed to have a partial basement, but the precise extent and location of the basement is unknown to Technicus Consulting.

It is understood that the building was originally built as a hotel which opened in 1875, named the Bridge Hotel. The building was later converted to a public house and has since had many landlords / owners and changes of use. These have included the building being a hotel, public house, restaurant, social club, and music venue during its history. These changes of use have involved the building being subject to a legacy of previous structural alterations, including the removal of loadbearing walls and installation of new structural supports to open-up the ground floor area at the front of the building, and possibly the upper floor levels as well.



The building has also been subject to remedial works in the form of installation of lateral restraint tie rods and pattress / restraint plates to laterally restrain the east facing flank wall panel at first and second floor levels. These remedial works are visible from Steam Mill Lane and can be seen in Figure 3 below.



Figure 1 – 2018 View of Haven Bridge PH From Bridge Road Prior to Fire Damage

[Source: Google Maps (2024) Bridge Road, Great Yarmouth (Accessed 19 March 2024)]



Figure 2 – 2018 View of Haven Bridge PH From Steam Mill Lane Prior to Fire Damage

[Source: Google Maps (2024) Steam Mill Lane, Great Yarmouth (Accessed 19 March 2024)]

The Haven Bridge PH abuts an adjacent three storey terrace property, no. 6 Bridge Road. This property comprises a small public house at ground floor level, with the first and second floor levels being residential. The ground floor commercial space of the property is currently unoccupied, but most recently traded as the East Suffolk Tavern until circa 2015. It is believed that the Haven Bridge PH and no. 6 Bridge Road do not share a common party wall but abut



one another as two structurally independent buildings. Further investigations would be required to confirm this.



Figure 3 – East Facing Flank Wall of Haven Bridge PH showing Lateral Restraint Remedial Works Tie Rods and Pattress Plates at First Floor & Second Floor Levels

[Source: Google Maps (2024) Steam Mill Lane, Great Yarmouth (Accessed 19 March 2024)]

The exact internal layout of the building at the time of the fire remains unknown. However, Appendix A contains plan drawings received from GYBC Building Control showing the ground, first and second floor plan arrangement of the building circa 2005.

In circa 2005 the front (southern) section of the building had an open plan internal layout at ground, first and second floor levels, with no internal buttressing partition wall panels. The rear section of the building, north of the main staircase, was much more cellular in arrangement, with internal partition walls forming smaller rooms at ground, first and second floor levels. At the time of the fire, it appears that the front section of the property had been sub-divided to form smaller rooms at second floor level using lightweight studwork partition walls constructed off the suspended timber floor. It is unclear whether similar internal walls had also been constructed at first floor level.

3.0 2022 Building Fire & Technician Consulting Involvement

On 23rd March 2022 Norfolk Fire & Resue Service (NFRS) were called to a fire at the Haven Bridge PH just after 8pm. The building suffered significant fire related damage, including the structural collapse of its roof structure. To our knowledge, the precise cause of the fire remains unknown. It is believed the fire started in the front right (eastern) corner of the building at second floor level and migrated through to the rear of the building.

At the time of the fire Technician Consulting was appointed by the building leaseholder, Mr Bennington, to provide emergency ad-hoc structural engineering advice, support and guidance on the building's structural stability, and temporary propping and shoring requirements. The latter being critical to allow Bridge Road (public highway, and main traffic route into Great Yarmouth) to be safely re-opened to the public as quickly as possible following the fire being extinguished.

During the period 23rd to 31st March 2022 we worked closely with Great Yarmouth Borough Council Building Control Officer, Jodie Harrison, and NFRS to inspect the extent of the damage to the building and advise on emergency temporary support and propping requirements. This



was necessary to allow NFRS and Police personnel to safely access internal areas of the building to ensure the fire was fully extinguished prior to leaving the scene. This work involved the introduction of extensive internal temporary propping to the first and second floor structures. At the time, the floors and the internal structural elements of the building were saturated with water from the fire being extinguished. The upper floors were also supporting significant additional dead load from the collapsed roof structure, and other fire related debris. The heat from the fire would have structurally compromised various structural elements necessitating the installation of temporary supports as a precautionary measure.

As well as advising on the internal emergency temporary propping locations and requirements, we also worked with KB Scaffold Services (also appointed by Mr Bennington) to erect an external temporary scaffold shoring system. This was erected to provide additional precautionary lateral restraint to the external wall panels where the fire had caused damage, or complete loss, of the internal floors and buttressing internal partition wall panels. The shoring system was intended to provide lateral restraint to reduce the risk of the external walls rotating outwards towards the adjacent roads / footpaths only. Our works also included working with NFRS to remove loose elements of eaves level brickwork and roof tiles etc. resulting from the fire damage by pushing these into the building to reduce the risk of debris falling outside the building footprint.

It is important to note that the emergency temporary supports that were installed at the time of the fire were intended to provide short-term temporary vertical and lateral restraint to the fire damaged building. These temporary works were never intended to be a long-term temporary support system for the building as the expectation was that the building structure would be structurally repaired within a reasonable timescale following the fire. However, at the time of reporting, 24 months after the fire, there is no evidence of any planning or intention for the building to be structurally repaired by the current owner or leaseholder, to our knowledge.

Working with NFRS following the fire being extinguished allowed us to view and photograph accessible areas of the interior of the fire damaged building on foot, and at height via the NFRS Snorkel lift. Refer to Figures 4 to 6 for general external images showing the fire damaged building taken on 24th March 2022. Refer to Figures 7 to 9 for general internal views of the building interior following the fire, taken on 24th March 2022.

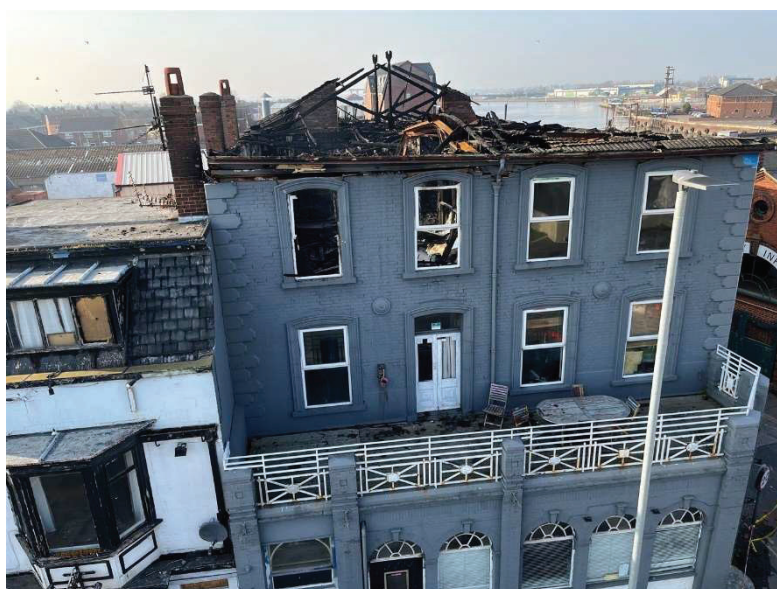


Figure 4 – Front Elevation View of Fire Damaged Building



Figure 5 – High Level View of the Fire Damaged Central Roof & Second Floor Area Looking North



Figure 6 – High Level Views of the Fire Damaged Roof & Second Floor Looking South (left) and North (right)



Figure 7 – Internal Ground Floor View from Front Entrance Door Looking North

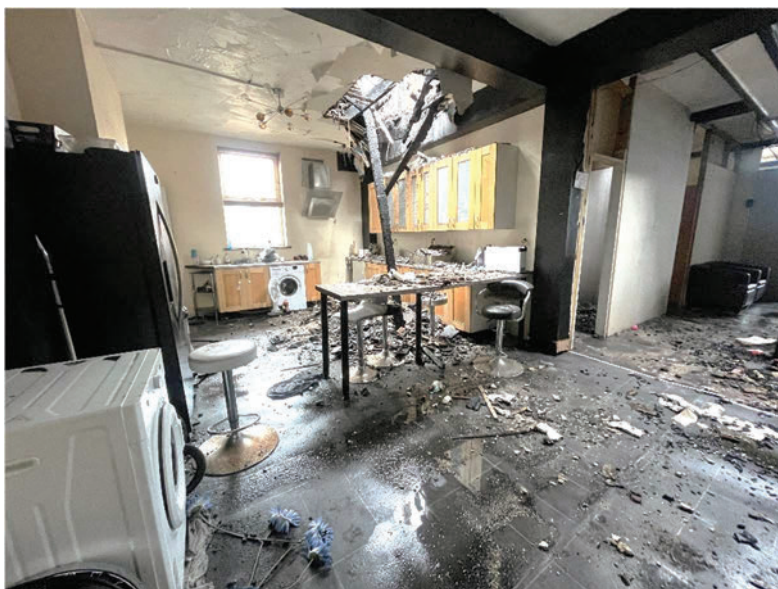


Figure 8 – Internal First Floor View Looking South-East from the Main Staircase

3.1. Temporary Internal Propping

In the days following the fire we were involved with arranging for a local builder to install a series of temporary internal props to the first and second floors. As noted previously, this was to allow short term access for investigation purposes by NFRS and the Police only. Following recent discussion with the builder we understand that the internal temporary props were subsequently removed several weeks after installation, possibly by the leaseholder, due to concerns over the hire cost for the props. We have requested further clarification from the builder, but this has yet to be received. However, we assume the internal temporary props are no longer in position inside the building.



Figure 9 – Internal Second Floor Views Looking South (left) and North (right) from the Main Staircase

3.2. Extent of Internal Fire Damage

The fire in March 2022 caused extensive structural damage to the building. This was due to a combination of combustion of building fabric and various timber structural elements of the building, fire related heat damage and associated weakening of structural elements, and water related damage from the fire being extinguished. In summary, the fire caused the following structural damage to the building:

- 1) Complete structural failure and collapse of the building roof structure, including timber and steel principal roof trusses, timber rafters and purlins.
- 2) Extensive fire damage and partial collapse of the suspended timber second floor, and second floor level partition walls.
- 3) Fire damage to the timber staircases at second and first floor levels.
- 4) Collapse / loss of integrity of internal partition walls at second floor level.
- 5) Localised structural movement and crack damage to the external walls associated with collapse of the roof and supporting principal roof trusses / structural elements.
- 6) Fire and heat related damage to various structural support elements (i.e. floors, beams, pier / columns, and loadbearing walls).
- 7) Impact related damage to various structural support elements due to falling building debris, roof tiles and brickwork (i.e. floors, beams, pier / columns, and loadbearing walls).
- 8) Water related damage to structural support elements throughout the entire of the building.



Following complete loss of the roof structure and tiled covering during the fire the interior of the building has remained exposed to the external elements for the last 24 months. This exposure has resulted in significant volumes of rainwater entering the building causing further damage and deterioration to the remaining structural support elements. Particularly timber and steel members. Furthermore, the coastal location of the building means the air tends to be salt-laden which can cause accelerated corrosion of exposed steelwork, such as structural beams and columns.

4.0 2024 External Structural Survey Observations

The findings from our visual-only, non-invasive ground level structural survey inspection of the external facades of the building on 6th March 2024 are detailed below.

4.1. Front Elevation South – Bridge Road

Several minor hairline cracks were noted in the masonry arches above the ground floor window openings onto Bridge Road. These appear to be long standing cracks, and not recent. Due to site obstructions (i.e. scaffolding, netting, and the proximity of the adjacent highway) the extent of the damage could not be fully inspected and assessed.

Four windows at second floor level have been braced horizontally in both directions by scaffold tubes internally and scaffold boards with rakers externally. The arrangement looks to remain as installed in March 2022 immediately following the fire. Crack damage to the decorative window surrounds at second floor level were evident in March 2022 following the fire.

Three circular cast iron pattress plates are visible at second floor level. Due to site obstructions (i.e. scaffolding, netting, and the proximity of the adjacent highway) it was not possible to undertake a visual assessment of any distortion, lean or 'out of plumbness' of front elevation masonry walling nor any of the side masonry walls.

Five vertical scaffold boards have been clamped against the external face. These appear to be in reasonable condition and supported at three locations with horizontal scaffold tubes and threaded scaffold jacking baseplates secured to the raking scaffold system. The scaffold shoring system on the front elevation is partially supported off the first floor level external balcony deck.

Long-term vertical tapered fracturing was observed at the junction of the brickwork piers to the single storey front projection and the main unit stone quoin courses in the eastern corner of the front elevation. Refer to Figure 10. This damage was present in March 2022, and does not appear to have worsened.

There is localised erosion of the masonry between first floor window head and second floor window sills on the most eastern of the four windows. There are no obvious signs of diagonal fracturing nor tapered vertical fracturing suggesting that the side wall onto Steam Mill Lane is separating from the front elevation.

4.2. Side Elevation East – Steam Mill Lane

There are two circular cast iron pattress plates at second floor level, and a horizontal steel tie plate with four tie rod bolted fixings. These plates have suffered surface corrosion, or may be painted brown (it is not possible to be sure without closer inspection). The soft red masonry with sand/cement pointing does show localised signs of frost related damage and spalling.



This is more pronounced at lower level between ground floor windows above the painted render low level plinth area. Two, white painted, square pattress plates are visible at first floor level. It is presumed that these are tied back to the first floor diaphragm to provide lateral restraint to the external wall panel.



Figure 10 – Vertical Cracking at Junction of Single Storey Front Projection with Front Elevation of Main Unit

There is a loss of some localised sections of the side wall panel masonry at high level. This damage was caused by a combination of the of the roof structure collapsing, and subsequent removal of loose guttering and roof structure remnants by NFRS immediately following the fire. Refer to Figure 11. There does not appear to be any obvious signs of loose masonry falling to ground within the fenced-off area at the base of the side wall.

Six vertical scaffold boards are held against the vertical face of the side wall, each by two horizontal scaffold tubes and threaded scaffold jacking baseplates secured to the raking scaffold shoring system. These were installed to reduce the risk of outward movement of the wall panel following the fire damage. There are no internal lateral restraints or ties preventing inward movement of the external side wall panel as it was not possible to install internal ties during the fire event.

When viewing the interior of the building through the first floor windows at the time of the fire charred timber floor joists, damaged areas of the floor structure, and fallen debris were clearly visible.

A clear visual inspection of the external side wall for verticality was hampered by the presence of the temporary scaffold shoring system, service pipes, etc. However, no obvious signs of lateral movement, distortion or recent cracking were observed at the time of our inspection.



The external side wall panel has a change in alignment (crank) towards the rear of the building in line with the adjacent former veterinary building. This was presumably to follow the alignment of Steam Mill Lane at the time of construction.



Figure 11 – View of Side Wall Showing Lateral Restraint Temporary Scaffold System and Localised Loss of Masonry at High Level

There is no temporary scaffolding or shoring to the rear section of the external side wall panel. Therefore, the high-level masonry, certainly above second floor level, is currently laterally unrestrained. A scaffolding fitting has been installed at the rearmost second floor level window, probably to support a refuse chute (we are not sure if this was ever used). Charred masonry to the original roof structure is visible through the centre window.

The rear section of the building has several internal partition walls which buttress and provide a degree of lateral bracing stability to the external wall panels. This area of the building at second floor level suffered less fire damage than the front of the building, and therefore the internal buttressing action of the internal partition walls is likely to remain more effective than at the front.

4.3. Rear Elevation North – Rear Roadway

There is no temporary scaffolding to this elevation.

The rainwater guttering and fascia are still present at eaves level on this elevation.

Visual examination of verticality from ground floor is hampered by vertical service pipes (i.e. rainwater downpipes, soil and vent pipe and a substantial galvanised steel flue). However, no obvious signs of lateral movement, distortion or recent cracking were observed at the time of our inspection at eaves or first/second floor levels.



The soft red masonry with sand/cement pointing does show localised signs of frost related damage and spalling, particularly at low level. Localised areas of crude masonry repairs are visible, and some openings have been infilled. Low rise masonry arches above the openings appear to have behaved reasonably well. There is stepped diagonal fracturing to the left-hand side of the ground floor door opening (probably toilet area opening) extending up towards the first floor window opening. There is further crack damage extending between first floor to second floor window opening on this same corner. However, this crack appears to be long standing.

4.4. Side Elevation West – Rear of No. 6 Bridge Road

Part of the ground, first and second floor levels of the west facing sidewall are obscured by the adjacent property. The rearmost panel has an open window with a galvanised steel lintel visible above. This appears to be a more recent structural alteration to the original arrangement as other window openings have low rise arched masonry lintels. Signs of mortar repointing repairs are visible at low level. At high level some frost related damage and mortar erosion / spalling of the masonry panel is visible. Visual inspection of the visible areas of this wall panel from ground level did not identify any obvious signs of significant lateral movement, deformation, or crack damage.

Three chimney stacks are present towards the front of the property on the party wall line with no. 6 Bridge Road. Based on their alignment (Refer to Figure's 12 & 13) it is believed that these chimneys serve no. 6 Bridge Road, not Haven Bridge PH. From our ground level visual inspection, the chimney stacks appear to be in reasonable condition, with no obvious signs of excessive distortion or structural movement.



Figure 12 – High Level View of Chimney Stacks on Party Wall Line
(Photo taken on 24th March 2022)

A recess is present in the west facing wall panel at high level set-back from the rear elevation. This area of the wall panel has a rendered and painted finish. There is evidence of some spalling of render finish onto the adjoining property. The wall panel is internally braced with internal cross walls visible. It is believed this recessed area formed an external terrace / patio accessed from the second floor level. This area is denoted 'patio area' on the second floor plan provided in Appendix A.



Figure 13 – High Level Close-up Views of Chimney Stacks on Party Wall Line
(Photos taken on 24th March 2022)

5.0 Preliminary Structural Repair & Remedial Works Requirements

The 2022 fire clearly caused significant structural damage which has left areas of the building structurally compromised. The building has subsequently sat dormant, with no roof covering, and no attempt to protect the buildings internal structural elements from further deterioration and degradation.

Based on the above, and our observations from the recent visual-only, non-invasive, structural survey of the building's external elevations, we anticipate the following scope of structural repair and remedial works to be required to return the building to a structurally sound water-tight condition:

1) Temporary Works:

- a) Commission, design and installation of façade retention temporary works system to maintain structural stability of the external wall panels to allow safe removal and replacement of the damaged internal walls and floors. This is likely to require application of permits for road and footway closures.
- b) Commission, design and installation of internal temporary works to provide temporary vertical and lateral structural support to the deteriorated and fire damaged upper floors to facilitate safe execution of site clearance, surveys, repair, and remedial works.
- c) Commission, design and installation of localised temporary works to allow removal of deteriorated structural beams / columns and replacement with new structural elements.

2) Asbestos Survey

- a) Once the interior of the building is made safe to access commission a demolition / refurbishment asbestos survey of the building to determine the presence of asbestos containing materials prior to clearance. **As a precautionary measure, the interior of the building must be considered a hazardous environment with friable asbestos containing materials present. Appropriate PPE must be worn by anyone**



entering and working inside the building until such time as the location and extent of ACM's are known, removed, or safely managed.

- b) If asbestos containing materials are found to be present inside the building commission a specialist asbestos removal company to safely remove and dispose of all ACM's in accordance with current legislation and regulations. Based on the age of the building it is highly likely that ACM's will be present. ACM's are commonly found in the following locations in older buildings:
 - (i) Wall and ceiling plaster finishes and textured coatings
 - (ii) Sanitaryware items
 - (iii) Loose insulation
 - (iv) Lagging to plumbing / boilers and flues
 - (v) Fibre cement products, such as boarding, guttering, rainwater pipes etc.
 - (vi) Electrical system components
 - (vii) Flooring tiles and adhesives

3) Site Clearance:

- a) Once made safe to access, clear the interior areas of the building of all fire related rubble, debris, and damaged fixtures, fittings, and furnishings etc.
- b) Strip all walls of plaster back to bare masonry.
- c) Strip-out all electrical cabling, switches, sockets etc.
- d) Strip out all damaged heating and hot water related elements of the buildings plumbing system.

4) Structural Survey

- a) Once the interior of the building is made safe to access appoint a structural engineer to undertake a detailed internal structural survey of the building to accurately determine the structural arrangement, extent of damage to the building, and development of a detailed schedule of structural repairs and remedial works.

5) Roof & Ceilings:

- a) Design and construct new hipped and tiled roof structure comprising timber rafters and purlins and timber / steel principal roof trusses to replicate the original structural form and ensure original load paths are maintained. The new roof construction shall incorporate modern breathable felt and pressure treated tiling battens.
- b) New rainwater guttering system and rainwater downpipes. Rainwater discharge arrangement to match the original surface water drainage system.
- c) Design and construct new timber joisted ceilings with plasterboard and skim finishes. Provide thermal insulation in accordance with the requirements of the current Building Regulations Approved Document L (Conservation of fuel and power).

6) Second Floor Level:



- a) Design and construct new timber joisted second floor in compliance with the current Building Regulations to suit the proposed building usage, internal layout, and imposed loads.
- b) Design and construct new internal partition walls to suit the proposed internal layout, and to ensure the external walls are adequately structurally buttressed and laterally restrained.
- c) Design and install new structural support beams / piers / columns as required to allow reinstatement of the new second floor.

7) First Floor Level:

- a) Design and construct new timber joisted first floor in compliance with the current Building Regulations to suit the proposed building usage, internal layout, and imposed loads.
- b) Design and construct new internal partition walls to suit the proposed internal layout, and to ensure the external walls are adequately structurally buttressed and laterally restrained.
- c) Design and install new structural support beams / piers / columns as required to allow reinstatement of the new second floor.

8) Ground Floor:

- a) Design and construct new timber joisted ground floor (where the ground floor is found to comprise suspended timber construction) in compliance with the current Building Regulations to suit the proposed building usage and internal layout.
- b) Design and construct new internal partition walls to suit the proposed internal layout, and to ensure the external walls are adequately structurally buttressed and laterally restrained.
- c) Design and install new structural support beams / piers / columns as required to allow reinstatement of the new ground floor.

9) Timber Staircases:

- a) Install new staircases to provide safe access between all floor levels, and appropriate fire escape routes in accordance with the current Building Regulations to suit the proposed building usage and internal layout.

10) External Wall Masonry Repairs

- a) Repair / locally rebuild damaged or defective areas of the external masonry wall panels to restore structural integrity and watertightness. Add tie rods, pattress plates, straps, etc. to ensure walls / floors are adequately restrained in accordance with current best practice construction guidance, structural design standards, and legislation.
- b) Undertake crack stitching repairs using stainless steel helical masonry reinforcement bars to any areas vertical or diagonal of crack damage to restore structural integrity.

11) External Fenestration



- a) Replace all damaged external door and window units with new double-glazed units.

12) Reconstruction of Chimney Stacks

- a) Repoint, repair masonry stacks to ensure structural integrity.

In addition to the above works required to make the building structurally sound and watertight, the building will also require the following to make it suitable for occupation and use:

1. New electrically wiring system throughout the building.
2. New heating and hot water boiler(s) and plumber system through the building.
3. New mains cold water plumbing system throughout building.
4. New security alarm system (optional).
5. New wall units, base units, and associated appliances to all kitchens.
6. New sanitaryware to all bathrooms and WC's.
7. Plastering and decoration to walls and ceilings.
8. Internal floor finishes.

6.0 Conclusions

The Haven Bridge PH is currently in a severely damaged and structurally compromised condition following the damage caused by the 2022 fire, and subsequent further deterioration and weakening caused by exposure of the internal building structure to the external elements.

Following the fire and installation of emergency temporary propping and shoring, the building has received no further structural repairs or protection to prevent further damage and deterioration. We understand that internal emergency temporary supports installed immediately after the fire were subsequently removed, leaving the structurally damaged / compromised internal structural elements in a dangerous and potentially unstable condition.

To our knowledge, the fire related debris and rubble remains internally. The weight of this debris, and the impact damage caused by it falling inside the building, is likely to have overloaded the internal second and first floor joists and supporting structural beams / columns.

The emergency temporary scaffolding and shoring system erected immediately after the fire in March 2022 has now been installed for 24 months, and to our knowledge has not been subject to regular safety inspection and checks to ensure it remains structurally effective. Furthermore, the arrangement of the temporary scaffold system was not structurally designed in detail as there was not time available for a normal design process to be followed. Instead, the system of scaffold was developed on site with KB Scaffolding to reduce the risk of the external walls of the fire damaged building rotating outwards due to loss of internal buttressing and restraint walls and floors. Whilst the scaffold system currently remains effective, it will need to be properly designed and enhanced (or replaced) to provide a structurally robust and safe façade retention system to facilitate safe execution of the required building repair and remedial works.

The fire and subsequent external exposure of the building's internal structural elements has caused extensive structural damage and deterioration. Whilst we have not been able to access the interior of the property to allow preparation of this report, we anticipate that most of the internal floors and structural supports (beams, and columns) are likely to require



wholesale replacement. Replacement of these structural elements will require design and installation of various phases of localised temporary works.

A preliminary breakdown of the expected scope of structural repair and remedial works is provided in Section 5.0 of this report based on our expectations of the works involved.

It is possible that the cost of the structural repairs and remedial works required to restore the buildings structural integrity and watertightness may exceed the current market value of the property once the works are completed. If this is the case it may make the repair and renovation option financially uneconomic. However, the buildings condition will continue to deteriorate over time if structural repairs and remedial works are not taken soon. In time, this could result in the building becoming structurally unstable due to progressive structural deterioration, at which point it will present a health and safety hazard to the adjoining owners / tenants, and people moving, working, or residing close to the building. The timescale over which this situation may rise is impossible to accurately forecast.

Based upon our recent visual structural survey of the building's exterior we do not consider the building to currently present a serious risk of structural movement, failure, or collapse, in the short-term. However, due to the compromised structural arrangement of the building it is possible that damage or instability may be caused by exposure to extreme weather events (i.e. heavy rainfall, high winds). Until the building is structurally repaired it is recommended that regular structural condition inspections are undertaken on a 3-monthly basis during the autumn to spring period each year and following any significant weather events.

If structurally repairing and renovating the building is deemed financially uneconomic, consideration will need to be given to carefully demolishing the building to remove the health and safety risks it presents, which will become higher with time.

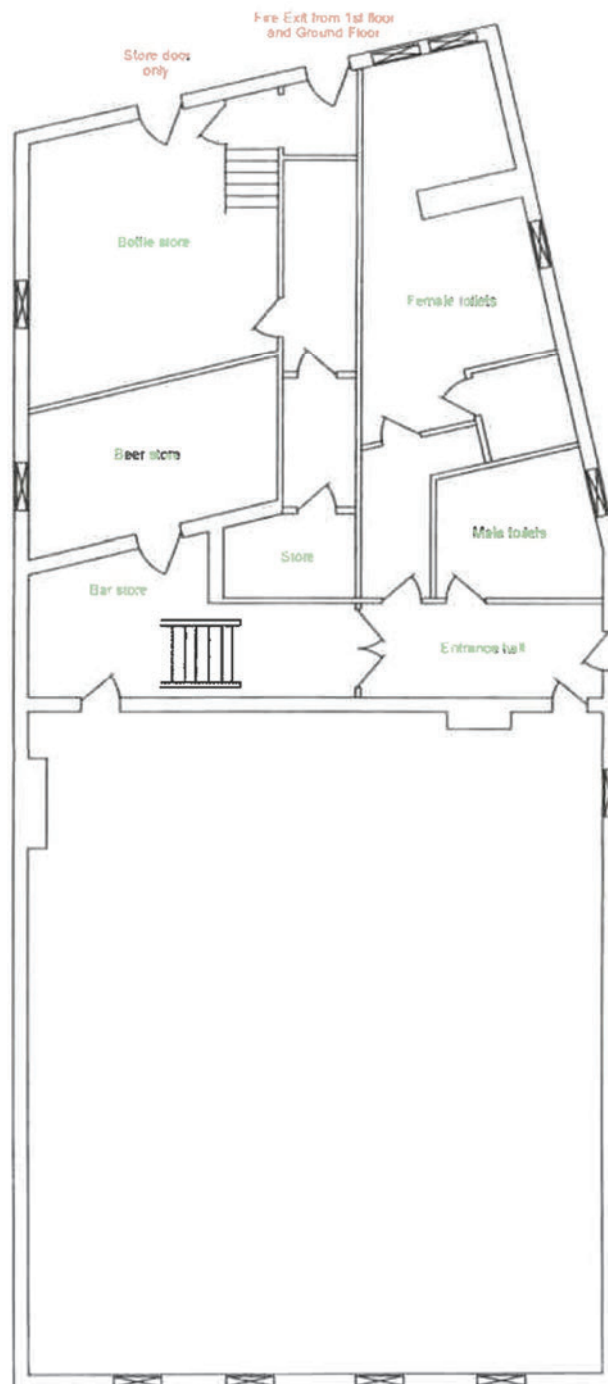
If you have any queries or questions regarding any aspect of this structural survey report, please do not hesitate to contact Technicus Consulting and we will be pleased to assist you with providing further explanation or clarification, as necessary.



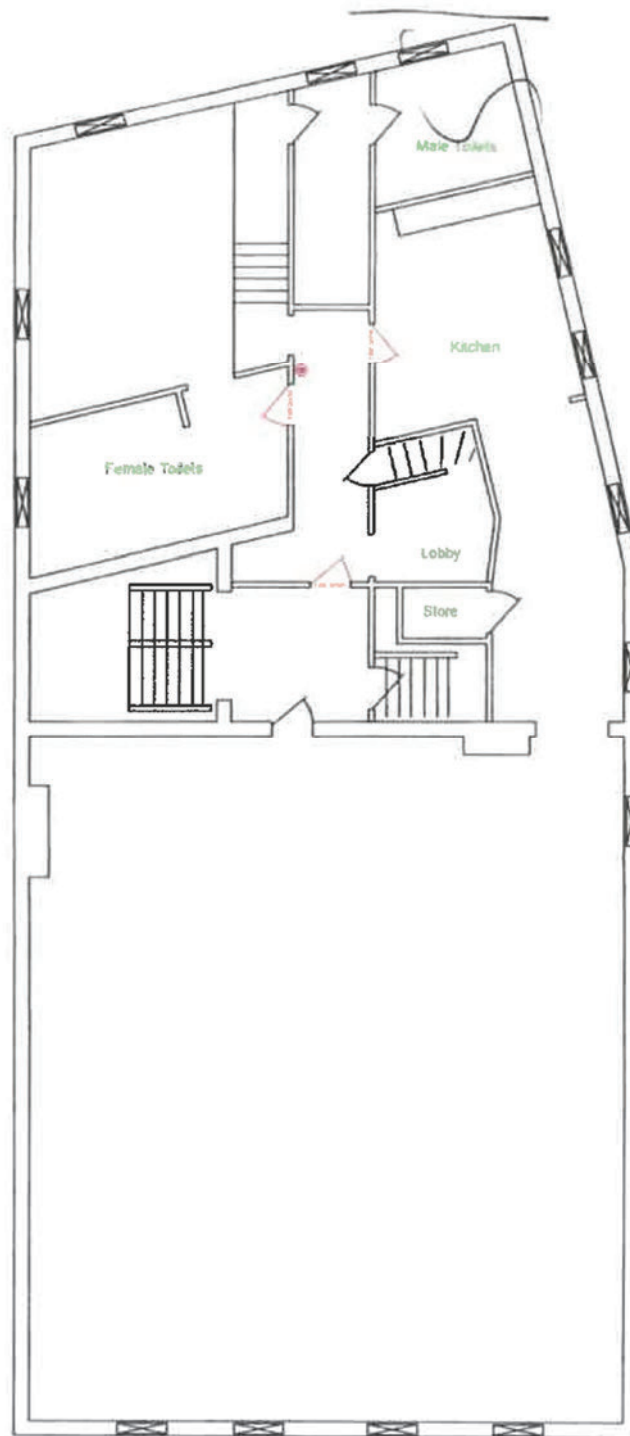
APPENDICES



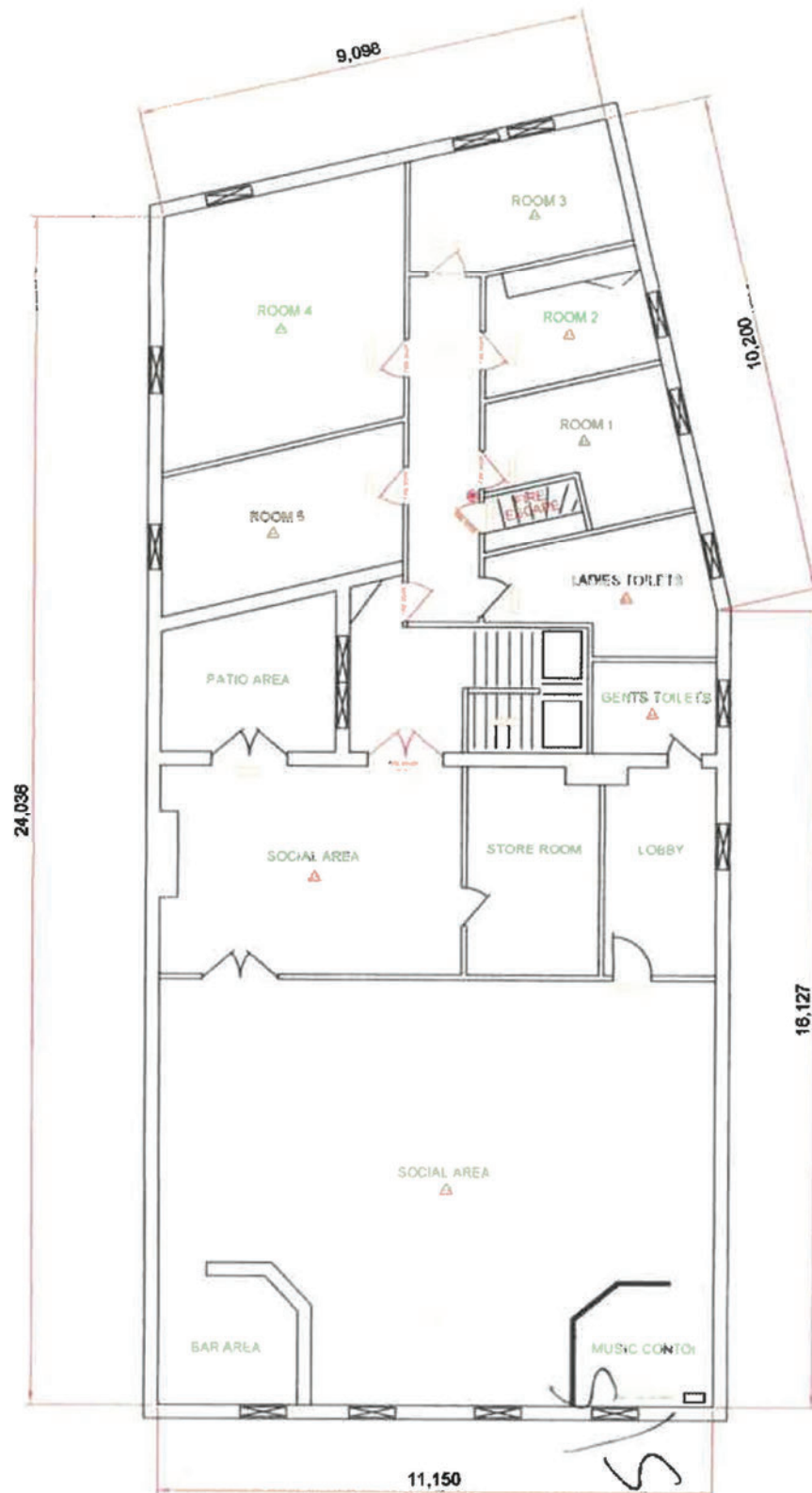
APPENDIX A – 2005 Building Floor Plans Supplied by GYBC Building Control



GROUND FLOOR



1st FLOOR



TOP FLOOR