



Superstructures

SS25299

Structural Inspection Report

Historic Boundary wall

Ickleford Mill, Arlesey Road





<u>CONTENTS</u>	<u>PAGE</u>
<u>1.0 Brief and Introduction</u>	3
<u>2.0 General Description</u>	3
<u>3.0 Inspection</u>	5
<u>4.0 Main boundary wall Inspection</u>	5
<u>5.0 Entrance gate wall Inspection</u>	5
<u>6.0 Conclusions</u>	6
<u>7.0 Exclusions and Limitations</u>	6

Appendices

Appendix A. Inspection Photographs

Appendix B. General arrangement drawings

Issue Record

Revision	Date	Author	Approved	Status
/	22.10.2025	M Hayward	D Noller	1 st Issue



1.0 Brief and Introduction

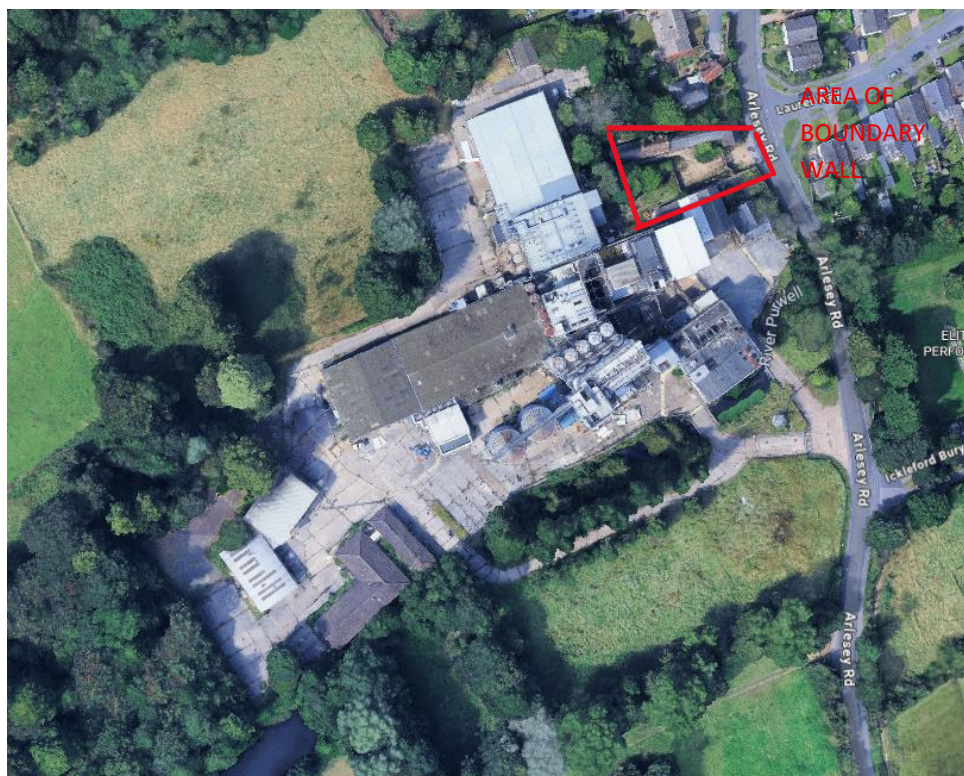
Superstructures were commissioned by The Hill Group to conduct a structural inspection of a historical boundary wall on the site of Ickleford Mill and report its condition, produce a schedule of repair and advise any protection measures required, in response to planning condition 24.

2.0 General Description

The wall is located on the site of the derelict Ickleford Flour Mill, Arlesley Road, Ickleford (OS grid reference TL 18245 31302).

The site is located on the Southern edge of Ickleford Village and is bounded by a fence line to the West, North and South, with Arlesley road to the East. On the North Eastern corner of the site the boundary steps around East Lodge with a masonry boundary wall and wooden fence to the South and East of East Lodge. See figure 1 below for the location of wall. The River Oughton flows from the West through the centre of the site and joins the River Purlwell. The River passes through a bridge beneath Arlesley Road to the East

A Watermill was constructed in the early 19th century. In 1892 a roller mill plant was installed, and in 1914 the mill was acquired by Bowman and Sons. In 1969 the water mill was demolished and a new mill constructed. An additional mill was added on the site in 1980. Milling operations ceased in 2016, and the site is now derelict.



(Figure 1) Source: Google Earth

The wall is not listed but is mentioned in the heritage assessment by Prospects archaeology dated Feb 2017.



- 4.4.9 The brick entrance to the Lodge, and attached southern boundary wall between the mill complex and the Lodge may be contemporary with the barn and certainly older than the Mill House and the old mill (Pl. 23-24). The decorative coping is especially distinctive and attractive.

Outline planning permission (17/01955/1) was granted by North Hertfordshire District council in 2017, for the demolition of all existing structures and the construction of 71no. Dwellings. Subject to the approval of reserved matters.



Extract from Illustrative Master plan drawings by Spawforths

It appears that it is intended to demolish the mill buildings and retain the wall and construct a parking area and estate road adjacent to the walls.

The outline planning permission contains a condition concerning the wall, which this report forms a response to;

24. No demolition work shall commence until details of protection measures and where necessary the repair of the existing brick walls, piers and coping stones forming the boundaries of the site immediately south and east of East Lodge have been submitted to and approved in writing by the Local Planning Authority. Thereafter, the wall shall be retained and repaired as agreed in accordance with the approved details.

Reason: In the interests of visual amenity and to retain important details associated with the historic mill use of the site.



3.0 Inspection

The inspection was carried out on September 18, 2025, under sunny and warm weather conditions. The wall was assessed from ground levels. All accessible and visible parts of the structures were inspected. No destructive investigations were undertaken. Buried foundations were not inspected.

A photographic record of the inspection is appended to this report and should be reviewed in conjunction with the text.

4.0. Main Boundary Wall

The first observation is that there is not a wall to the East of East lodge which forms a boundary to this site.

There is a brick entrance and gate to the south of East lodge which adjoins perpendicular to the freestanding wall forming the boundary to the South of East Lodge and the mill buildings.

The main boundary wall is approximately 30m long 2.6m tall. Above ground It is constructed from traditional red clay bricks in a lime mortar. The lower courses at ground level are constructed from buff brickwork. The wall retains the ground level on the mill side between 200mm to 400mm height. The lower 1.3m height of wall is 215mm thick above which it transitions via a plinth brick to 100mm thick. The top of the wall has a decorative corbel coping with plain clay tile cap detail, and mortared ridge. The wall has 330x215mm full height piers at approximately 3m spacings, at which the wall steps down in level by 2 brick courses towards the road. The piers also have the enlarged ornate coping detail. There is a pedestrian access gate 2/3 of the way along the wall, with the coping detail continuous above the opening. Halfway along the wall the tops of two arches are visible in the plinth brickwork, just above ground level. The arches are infilled with masonry. It is assumed these served a historic purpose such as drainage or an opening.

Half of the wall is not visible from the mill complex side, as a mill building is immediate adjacent (within 300mm) to the wall. The boundary wall predates the construction of the mill building.

Vegetation is starting to grow in-front of the wall and climb up the wall on both sides particularly towards the road.

The wall is structurally stable and in a very good condition. The wall is generally plumb and level with only one area of very minor crack damage. The mortar is strong and providing a good bond to the brickwork. The coping tiles are all intact and provide the wall with good weather resistance. On the Western end of the wall there is some moss growth and ivy taking hold on the wall, and the rain water pipe from the mill building is missing, discharging rainwater directly onto the wall. Other than the removal of vegetation, we consider that the wall does not currently require any structural repair.

5.0 Entrance Gate wall

There is an entrance gate to the East of East Lodge, adjoining the main boundary wall. This includes some large feature masonry gate posts piers support 2 large wooden vehicular gates, with a short section of boundary wall and pedestrian gate access. The Gate piers are 3m tall and 700x700mm square. They appear to be of solid masonry construction, but this is not proven. The tops of the piers have a gabled coping arrangement with plain clay tile capping. The Northern Pier is heavily overgrown with Ivy, limiting the inspection. Each side of the main piers are small sections of 215mm thick walls with the upper section constructed from small half brick piers creating vertical openings. Above this wall there is the same



masonry and tiled coping detail as the main boundary wall. On the Southern end of this wall there is a wooden pedestrian gate with masonry gate post piers. These piers are 3m tall and 350x350mm square. There is a horizontal crack in the brickwork on each of these piers.

To the North of East lodge there is another short section of wall of the same construction as the Entrance gate wall, featuring the open half brick pier detail to the top section of wall and coping. This forms the boundary to the garden of neighbouring property.

The walls and piers are structurally stable and in a very good condition. The wall and piers are generally plumb and level with only some minor crack damage to the pedestrian gate piers. The mortar is strong and providing a good bond to the brickwork. The coping tiles are all intact and provide the wall with good weather resistance. Other than the removal of vegetation, and some localised repointing of the cracked brick piers, we consider that the wall does not currently require any structural repair.

6.0 Conclusions

The boundary wall, entrance gate wall and piers are all generally in a good condition and structurally stable, requiring minimal repair/restoration. The vegetation growth should be removed and cleaned from the wall and piers, and surrounding shrub and sapling vegetation removed as part of the wider works to the site. Deep rooted Ivy and vegetation should be removed using non destructive measures (e.g. cutting the vines at the base and allowing the growth to die and naturally loosen). A schedule of repair can be found in Appendix B. Any repointing to crack damage should match the original lime mortar composition, texture and colour to meet best practice for historic structures

Due to the very close proximity of the wall to an existing mill building proposed to be demolished, the wall will require protection during the demolition works. A protective scaffold frame should be erected over the wall which is near to the mill building prior to any demolition works designed to withstand any falling demolition debris. The gable wall of the Mill structure will require careful dismantling by hand down to ground level, accessed from the inside of the building. We recommend that existing foundations to the mill building are left in place below ground level to avoid destabilising the boundary wall. The proposed site plans indicate new parking spaces immediately in-front of the wall. To avoid the possibility of damaging the wall during works to excavate and construct new hardstanding, we recommend that a small soft landscaping strip is provided in front of the wall, which includes an upstand kerb edge to prevent vehicles parking close to the wall, surcharging the wall and also prevent impact. This will also prevent the undermining of the boundary wall foundations during any excavation works for new surfacing. Details of the demolition and construction phase works can be found in Appendix B.

There is a discrepancy in the planning condition wording regarding a boundary wall to the East of East lodge, which we have assumed to be the entrance gate wall and has been inspected instead of the non-existent boundary to the East.

7.0 Exclusions and Limitations

During the inspection the Engineer inspected as much of the wall as is practical. Unless stated otherwise in the report fixtures, fittings and finishes were not disturbed and therefore we are unable to confirm that concealed elements are free from defect.

No ground investigations were undertaken during the inspection and therefore any recommendations relating to substructure works will need to be confirmed following the undertaking of an appropriate investigation.

Project Ref: SS25299
Project Title: Ickleford Mill, Boundary wall
Date: 22.10.2025



Report produced by: Mark Hayward BEng CEng MStructE MICE
Chartered Structural Engineer

Signed:



Report Checked by: Darren Noller IEng AMStructE
Incorporated Structural Engineer

Signed:



Date: 20.10.2025



APPENDIX A

Photographic Record of the Boundary wall



Boundary wall viewed from East Lodge side, Mill building behind



Boundary wall viewed from East Lodge side, Mill building behind



Pedestrian gate through boundary wall



Boundary wall viewed from roadside. Significant ivy growth on the wall



Ivy and moss growth with water staining to the wall from missing rainwater pipe to mill building



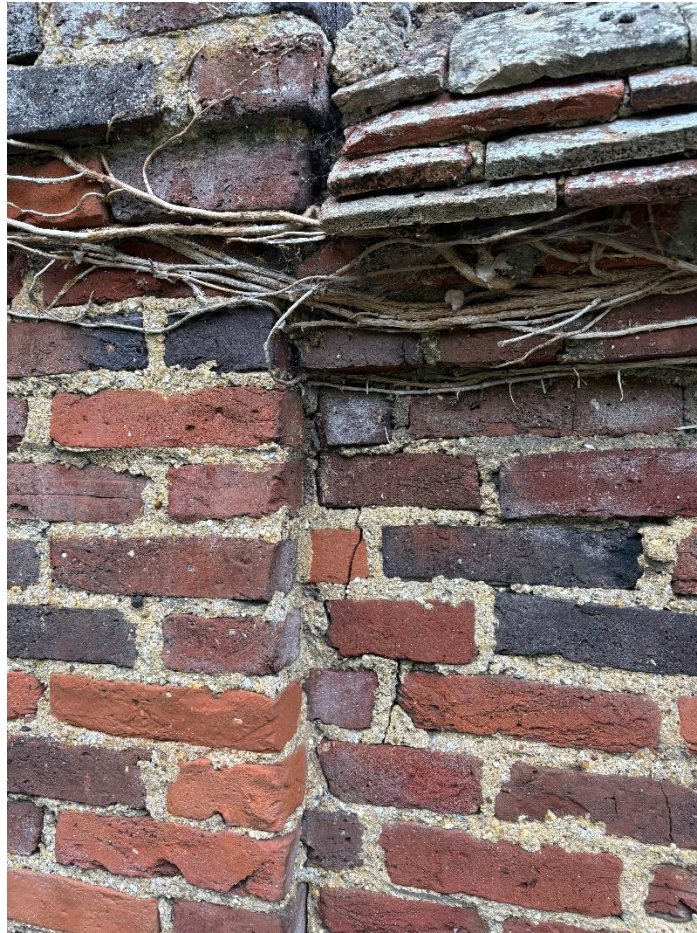
Wall viewed from Mill side



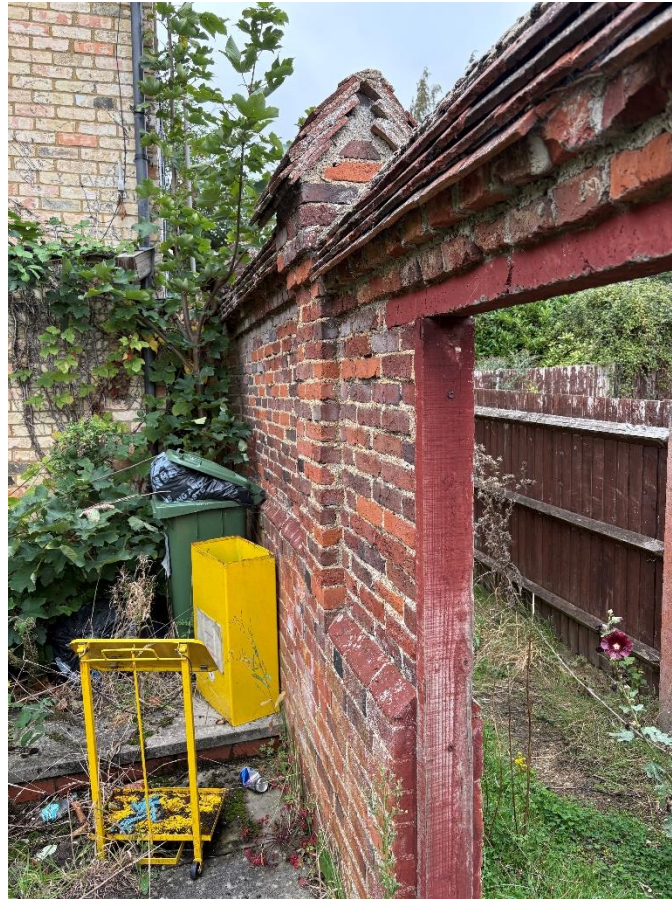
Pier and coping detail to boundary wall



Arch detail to lower wall section



Minor cracking to boundary wall



View through pedestrian gate showing section through wall and retained ground on the mill side



Entrance gate, Piers and wall. Ivy growth on Northern gate pier



Entrance gate pier with gable coping detail



Side wall panel with open vertical detailing to upper section and tiled coping



Horizontal crack in pier to pedestrian gate pier

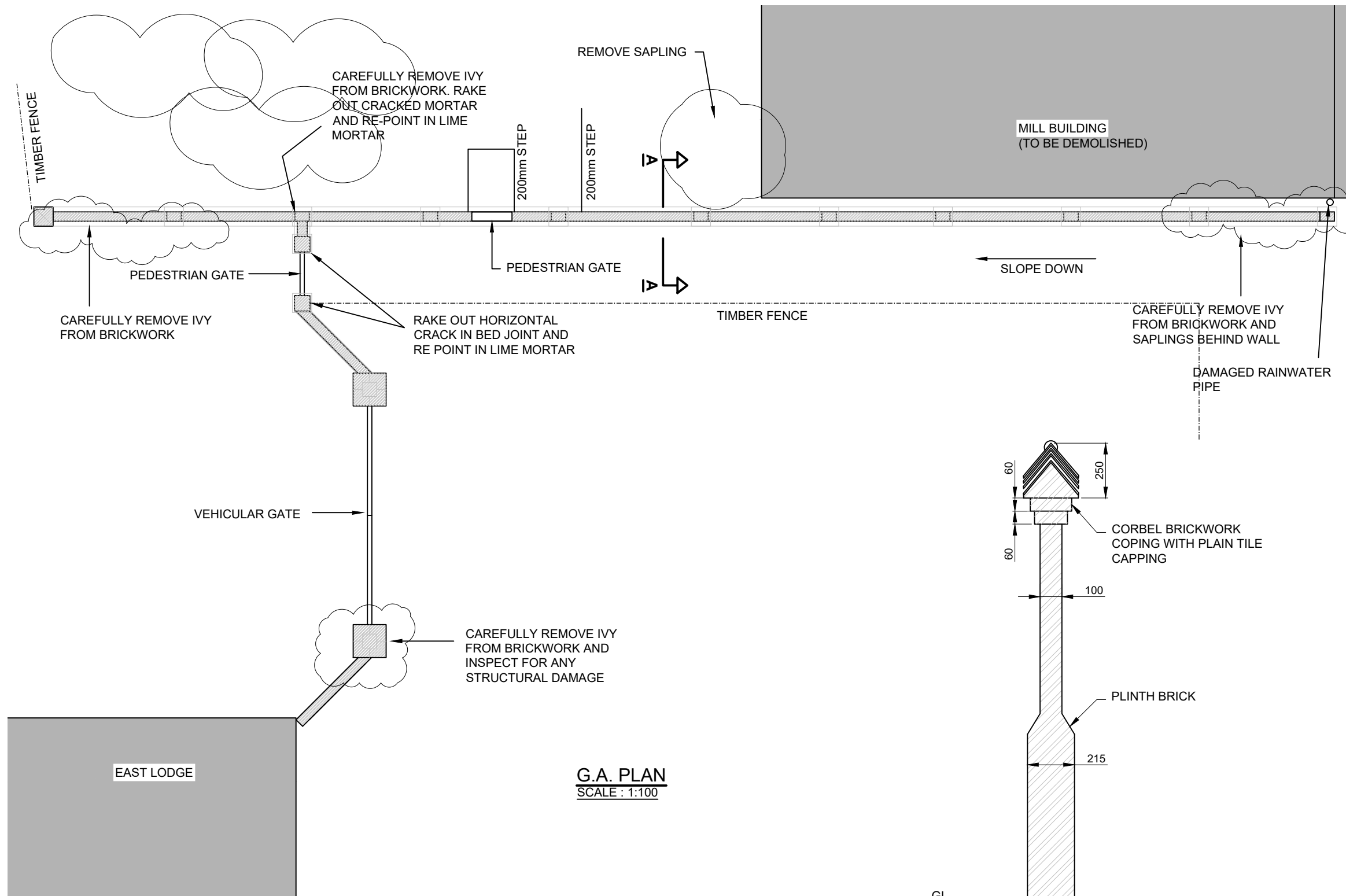


Small section of boundary wall to the North of East Lodge



APPENDIX B

Schedule of repair and protection measure drawings



GENERAL

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH OTHER ENGINEERS, ARCHITECTS AND SPECIALISTS DRAWINGS AND ANY ASSOCIATED SPECIFICATION. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORKS.
2. ALL WORKMANSHIP AND MATERIALS ARE TO BE CARRIED OUT IN ACCORDANCE WITH CURRENT BRITISH STANDARDS, CODES OF PRACTICE AND GOOD BUILDING PRACTICE.
3. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER AND THE LOCAL CHECKING AUTHORITY.
4. DO NOT SCALE THIS DRAWING. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THE CONTRACTOR IS TO CHECK ALL DIMENSIONS ON SITE BEFORE CARRYING OUT ANY WORKS.
5. WHERE CONFIGURATIONS OF EXISTING STRUCTURES HAVE BEEN INDICATED THESE ARE TO BE CONFIRMED BY THE CONTRACTOR ON SITE AND ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER IMMEDIATELY.

REVISION NOTES

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CLIENT

HILL GROUP

PROJECT

ICKLEFORD MILL

DRAWING TITLE

REPAIR SCHEDULE
BOUNDARY WALL

DRAWING NUMBER

SS25299-400

REV

P1

CHECKED BY

DATE CHECKED

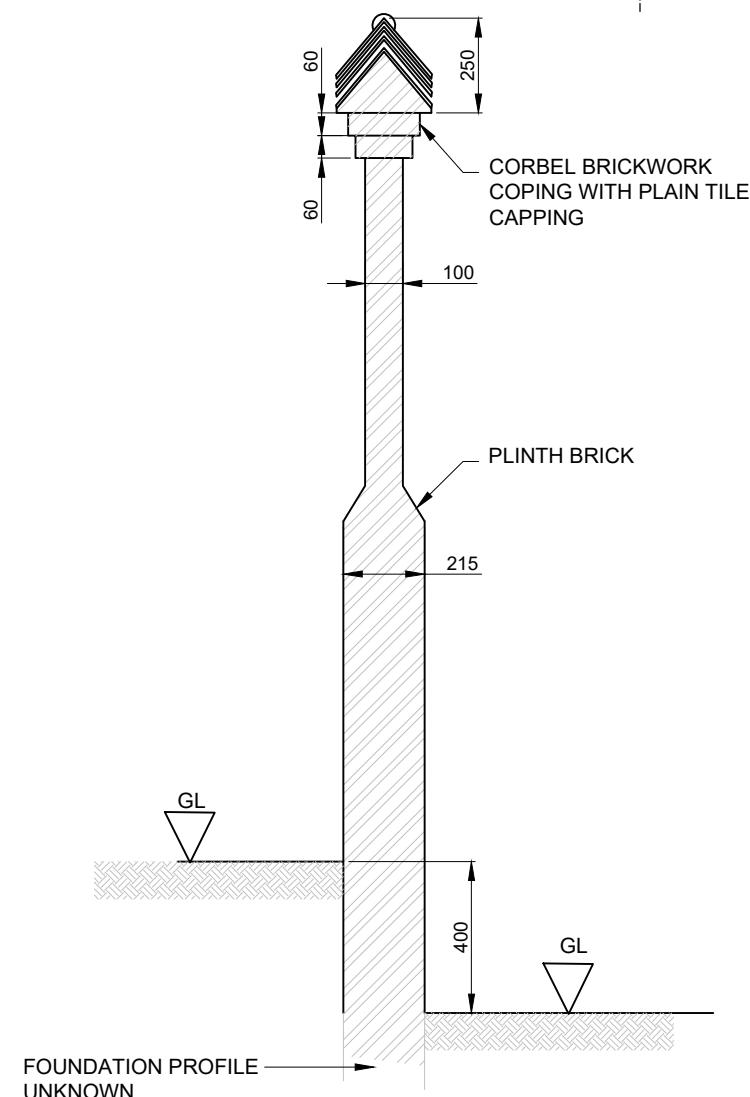
OCT 25

PRELIMINARY

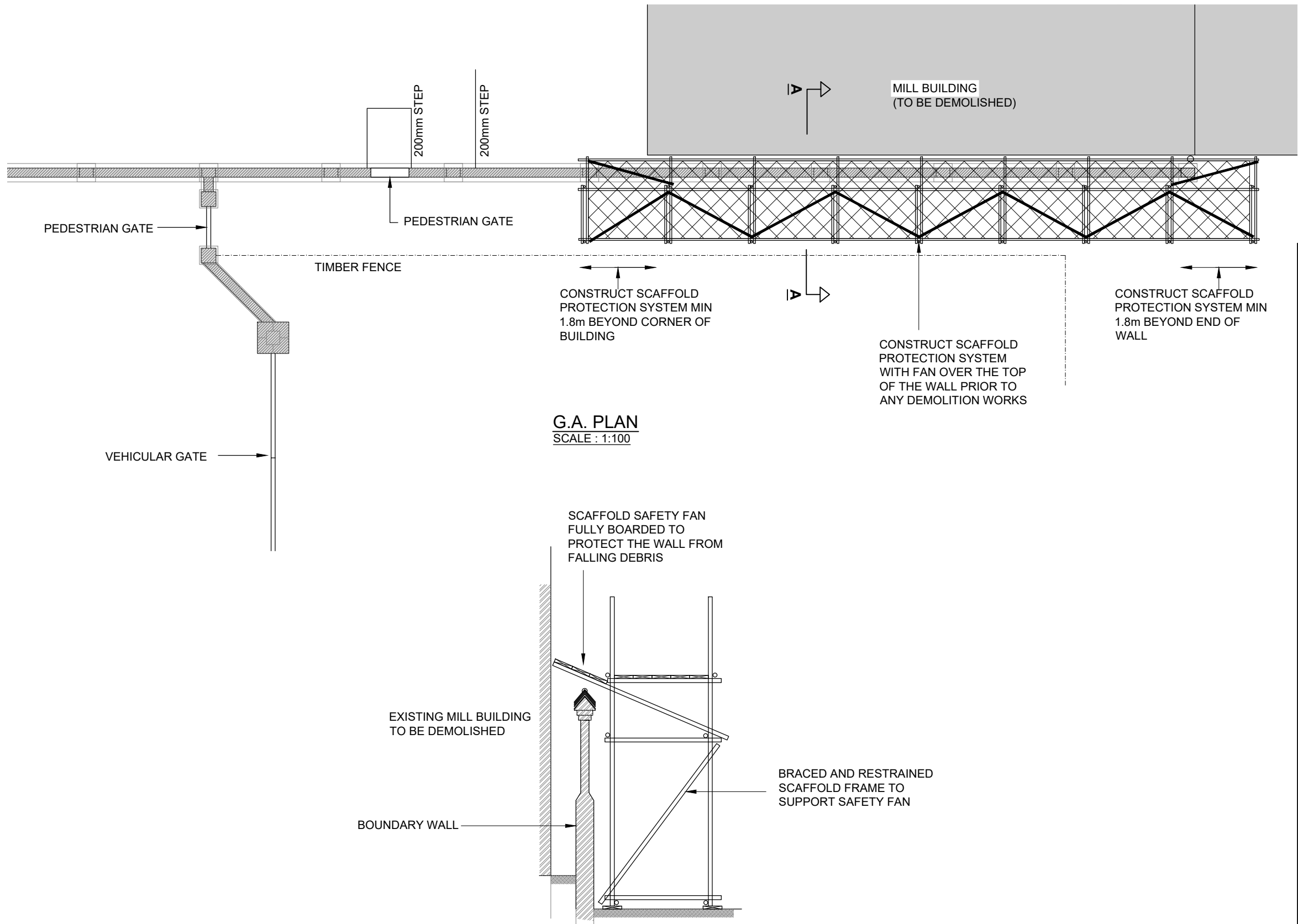
BOUNDARY WALL REPAIR SCHEDULE

1. CAREFULLY REMOVE ALL IVY GROWTH FROM THE WALL INCLUDING ANY DEAD VINES
2. RE-INSPECT WALL TO CHECK FOR ANY DAMAGE PREVIOUSLY CONCEALED BY VEGETATION
3. RAKE OUT BED JOINTS AROUND CRACKS AS INDICATED ON PLAN TO 40mm IN DEPTH AND RE-POINT IN LIME MORTAR(1:3).
4. REPLACE ANY MISSING COPING PLAIN TILES AND BED ON NEW LIME MORTAR
5. INSTALL PROTECTION MEASURES DURING DEMOLITION WORKS - REFER TO SEPARATE PLAN
6. RE-INSPECT WALL TO CHECK FOR ANY DAMAGE PREVIOUSLY CONCEALED BY THE MILL BUILDING

G.A. PLAN
SCALE: 1:100



SECTION A-A
SCALE: 1:20



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CLIENT

HILL GROUP

PROJECT

ICKLEFORD MILL

DRAWING TITLE

DEMOLITION PHASE
PROTECTION MEASURES

DRAWING NUMBER

SS25299-500

REV

P1

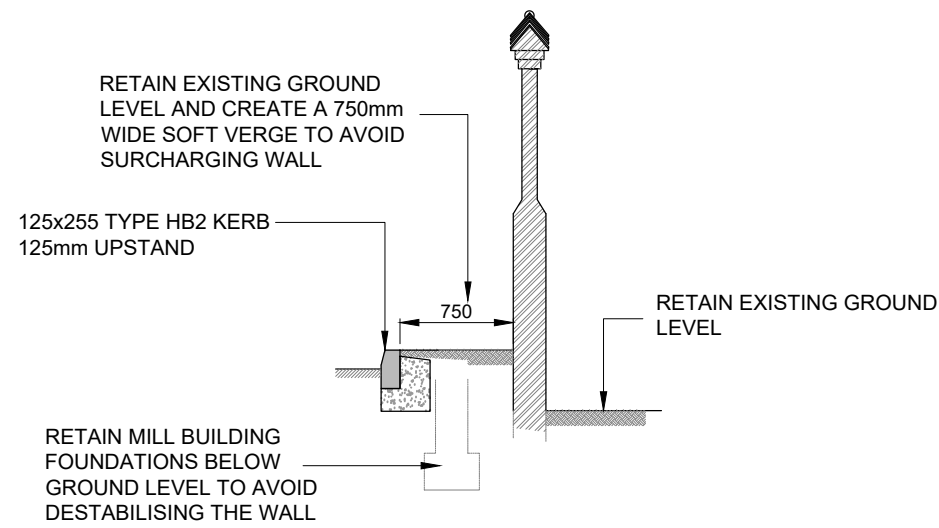
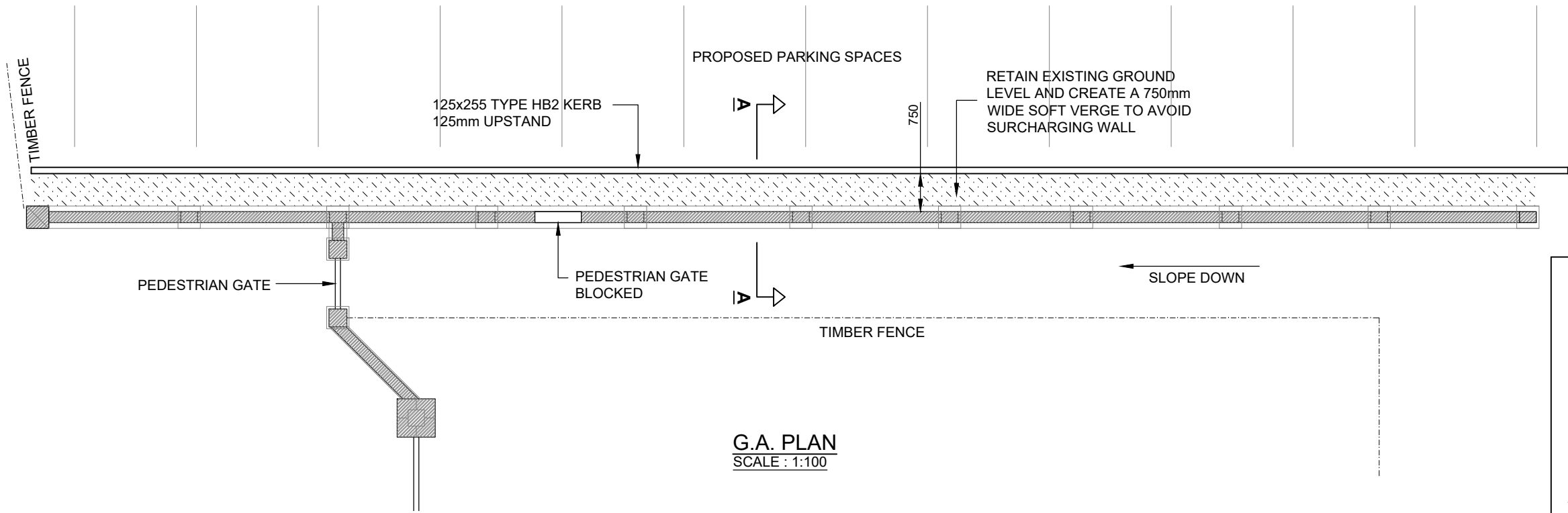
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PROJECT
ICKLEFORD MILL

DRAWING TITLE
**COMPLETED WORKS
PROTECTION MEASURES**

DRAWING NUMBER
SS25299-501

REV
P1

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DATE CHECKED

OCT 25

PRELIMINARY