



Structural Site Inspection Report - Rev A



The Old Eden,
Edenbridge

Prepared by: Charles Davenport (CEng MICE)

Project No.: 21108

Date: 15th March 2021

KTA Structures site inspection report – Rev A

<u>Project</u>	The Old Eden, High Street, Edenbridge
<u>Client:</u>	Ei Group
<u>Project Number:</u>	21108
<u>Date:</u>	15/03/2021
<u>Present:</u>	Charles Davenport (CEng MICE) – KTA Structures
<u>Purpose:</u>	KTA Structures have been appointed by Brighter Homes to visit the above site to view, inspect and report on the following:

1. The damage to the front of the property following a vehicle collision.

Note: This report follows the convention of denoting left, right, front and back whilst viewing the property from the front/street.

Existing structure observations

1. The building is a historic listed timber framed building with a brick ground floor façade which appears to have been built up around the original ground floor timber frame.
2. The vehicle appears to have collided with the pier on the right side of the front entrance door moving left to right as it travelled off the roundabout. The collision has rotated the brick pier anticlockwise, and the brickwork has been punched through to the right exposing the original timber frame within the pier.
3. The exposed timber post is brittle to touch.
4. The door frame has also been shunted to the right and is now out of alignment.
5. The windowsill to the right of the front door has also cracked as a result of the shock of the collision.
6. Internally the brick pier has been punched through into the bar area and there are several cracks in the plaster finishes.
7. At first floor there appears to only be minor plaster damage in the right-side bedroom above the front entrance.

Refer to the photo table below for the observations made.

Discussion and recommended actions:

1. Due to rotation of the pier and the indication internally that the base of the brick pier has been punched through into the bar area, we believe that the entire right brick pier has been structurally compromised. The mortar joints will have sheared through and the brickwork will no longer be bonded together. We recommend the right-side brick pier be fully dismantled down to a sound base brick course, or down to foundation level and re-built-in reclaimed bricks.
2. The timber post inside the brick pier is brittle to touch and will also likely have been sheared through by the impact. The exposed timber post should be carefully exposed and inspected for any cracking.

Action: Carefully dismantle the right pier to the door over its full height, depth and thickness down to a sound undamaged base course of bricks.

Action: Allow for the removal of any cracked or rotten sections of the exposed timber post with a new section of oak to be stitched in to replace any removed sections.

Action: Internally at ground floor and first floor, the plaster finishes which have been damaged will need to be raked out and repaired.

Refer to the photo table below for the recommended actions at each location.

Signed



Charles Davenport
CEng MICE



Photo 1: Front elevation



Photo 2: The pier to the right of the front door has been hit by a car and has partially collapsed



Photo 3: The brick pier has been rotated anti clockwise and has been punched through to the right.

Action: The pier will need to be fully dismantled down to foundation level or to an undisturbed course of bricks.



Photo 4: As photo 3 – The original timber frame post inside the brick pier has been exposed. The timber is soft to touch and will also likely have been sheared through by the impact.

Action: Carefully expose the timber post so that the base of the post may be inspected for any shear cracks.

Action: Allow for the removal of any cracked or rotten sections of the exposed timber post with a new section of oak to be stitched in to replace any removed sections..



Photo 5: Minor cracks in the render around the rainwater hopper

Action: Rake out the cracks and re-point



Photo 6: Cracks below the window to the right of the front door

Action: Rake out the crack and re-point



Photo 7: The section of brickwork at the top of the pier has been pulled away from the wall and appears to have been held in place by the electrical cabling. This has now been supported on timber acrow props.

Action: The loosened brickwork will need to be removed back to undisturbed brickwork



Photo 8: The window to the right of the door is cracked and the joint between the sill and frame has cracked

Action: Remove the old cracked paint and filler and re-seal



Photo 9: As photo 7



Photo 10: As photo 8



Photo 11: The front door frame has been shunted to the right by approximately 15mm

Action: Once the brick pier has been dismantled, try to re-align the door frame or replace it with a new door frame



Photo 12: As photo 11



Photo 13: Internally the damage appears to be limited to some minor plaster cracks around the door frame

Action: Remove the cracked and loose plaster and repair with patch plasterwork



Photo 14: Minor cracks formed along the interface of the timber frame to the side of the door and the plaster finishes

Action: Rake out the joints and re seal



Photo 15: Cracking in the plaster to the side of the front door

Action: Remove the cracked and loose plaster and repair with patch plasterwork



Photo 16: As photo 15

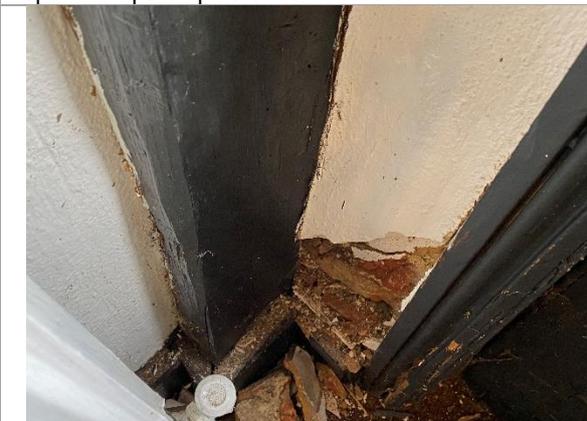


Photo 17: The brickwork at the base of the door appears to have been punched through into the pub. This suggests that the strength of the pier has been compromised as the mortar joints will have been sheared through.

Action: The full pier to the right of the door will need to be dismantled and re-built.



Photo 18: A minor crack on the wall behind the window to the right of the front door

Action: rake out the plaster crack and re-seal



Photo 19: As photo 18



Photo 20: The first floor left bedroom above the front entrance appears to be unaffected

No action required



Photo 21: The first floor right bedroom above the front entrance has some minor plaster damage

Action: Patch repair the front corner plaster damage

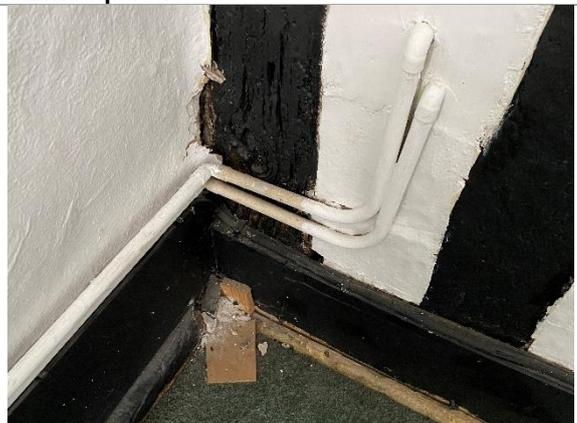


Photo 22: As photo 21