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AC Been Consulting Engineers Pty Ltd

A 44 Bank Street North Sydney NSW 2060

T 0423035060

E alexbeen@acbeen.com.au



### Hope Point Church

Attn: Trina Bossard

Email: trina@hopepointchurch.org.au

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# WORKERS COTTAGE, HOPE POINT CHURCH – STRUCTURAL ASSESSMENT

## 1.0 INTRODUCTION

This report provides an assessment of the existing condition of the worker's cottage within the Hope Point Church complex, an outline of works necessary to address observed defects, and discussion of the feasibility of repair.

### 1.1 Site inspection:

- Site Address: 42A Beale St, Georges Hall New South Wales 2198, Sydney NSW 2198
- Date of inspection: 12 August 2025
- Inspected by: Alex Been, Structural Engineer and Director of AC Been Consulting Engineers Pty Ltd
- Limitations: The roof space was inspected only from a ceiling hatch in the eastern room. The subfloor space could not be accessed.
- Site orientation: The entry doorways face approximately north.

#### 2.0 DESCRIPTION AND CONDITION

The worker's cottage is a single storey, two room (east and west) building. The east room appears to have been a kitchen and living space and the west room appears to have been a bedroom. Each room has a door to the north and a window to the south. The east room has a fireplace and chimney built into its east wall. The external walls of the cottage are cavity brickwork. The west room has a plain gable wall to its west. A single brick wall divides the two rooms.

The west end of the cottage has settled and rotated away from the building centre, causing wide cracks to open at the weak points of the north and south walls at the large openings. On the north wall the crack is up to 50mm wide adjacent to the doorway. Crack widths from previous monitoring have been marked on the wall next to the widest point of the crack, showing widths of 34-36mm in 2016, suggesting that the walls are

continuing to settle and rotate. The crack on the south wall of the west room is of similar width. There is a consequent outward lean in the west wall.

Lesser outward rotation is also occurring at the east end of the cottage. Movement is circa 10-15mm. The mass of the fireplace may be providing slightly greater restraint to the east wall.

The east and west walls are poorly restrained against outward rotation because of the large openings in north and south walls. The roof and ceiling framing provides no restraint to the walls. Based on the simple construction of the building it is likely that the walls were built on shallow brick footings that are susceptible to settlement and rotation. Settlement and rotation is likely to continue without intervention, leading to eventual collapse of the affected walls.

There are steel flat bar lintels over the door and window openings. These lintels appear to be in serviceable condition without significant corrosion.

The condition of cavity ties (if they exist) could not be determined, however there is no evidence of failure of the ties.

The cottage has a low-pitched roof gable roof. The timber rafters and ceiling joists are mix of hardwood and Oregon. No significant deterioration was observed in the roof framing over building footprint. The rafters cantilever beyond the north wall of the cottage, and have decayed ends where exposed to weather. The timber barge boards at the north and south gables have decayed. There is no sarking layer above the rafters. There are no gutters or downpipes.

Both rooms have timber board ceilings. Spot mould is common across the surface of the ceilings, and there are some localised areas of decay.

Both rooms have timber framed floors with timber floorboards. There is minimal clearance to ground under the floor, and no sub-floor ventilation through the perimeter walls. Some termite damage was observed in the west room floorboards. The east room floor appears to be generally intact (noting the framing could not be inspected).

Peeling paint is common across all internal surfaces. Spot mould is common across the joinery and cornices.

#### 3.0 RECOMMENDATIONS

Due to the advanced degree of movement at the west end of the building in-situ repair is not possible. Options to address the existing damage and deterioration of the structure and finishes are limited to partial demolition or full demolition.

As part of any works the west end of the building would need to be dismantled. The east end of the building could be retained with or without reconstruction of the west end.

If the east end is retained major works would be required to prevent further outward rotation of the east wall. The most effective method of stabilising the east end would be to underpin the external walls (with reinforced concrete strip footings) and then stitch across the existing cracks with bed-joint reinforcement. If the west end of the building is not rebuilt the central dividing wall would also need to be underpinned. If the west end is rebuilt (on deeper concrete strip footings) the east and west walls could be tied together with tension rods at or near ceiling level.



As part of any conservation works the timber roof and floor framing would be dismantled and rebuilt. Some framing may be salvaged if intact. The decayed barge boards would be replaced. It would be appropriate to install fascia boards, gutters, downpipes and inground drainage to shed rainwater away from the building perimeter. Ceiling and floorboards would be replaced with new along with the damp affected joinery and the damaged windows and doors. The existing painted finishes to all internal surfaces would be removed and replaced. The subfloor would be excavated to create higher clearance to the floor framing and enable sub-floor ventilation. Hooded perimeter vents would also need to be installed to ventilate the sub-floor space.

As outlined above the works to address the observed building defects are extensive and require the removal and replacement of a significant amount of original building fabric. The works would be extremely costly relative to the amenity provided by the building, and the level of heritage significance of the building may not warrant such expenditure.

Please contact the undersigned for any further information. Photographs showing the condition of the building at the time of inspection are provided overleaf.

Yours faithfully,

AC Been Consulting Engineers Pty Ltd

ALEX BEEN
DIRECTOR

BE, MHERITCONS, CPENG, NER, RPEQ































































































































