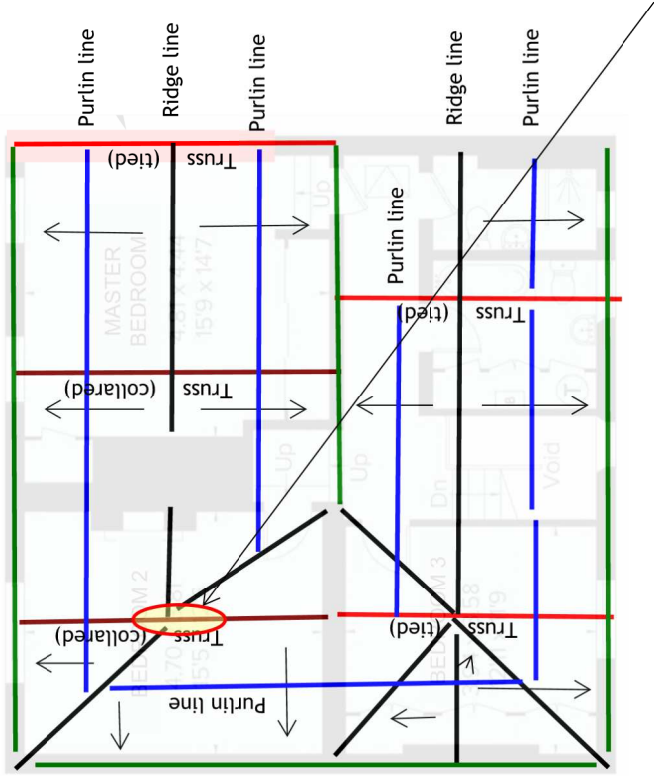




Schematic layout of roof structure
(over 2nd floor layout)



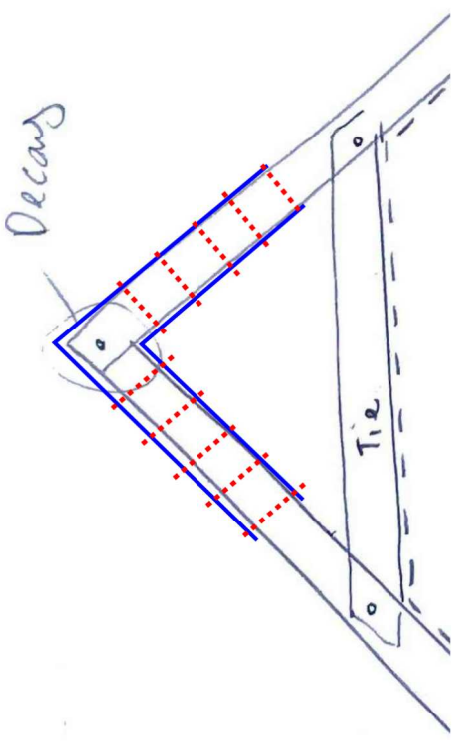
Problem

- The apex of the collared truss has decayed (water ingress through ridge intersection)
- The ability of the joint to transfer compressive force from one rafter to the other has been adversely affected.
- NOTE: THE TRUSS RAFTERS ARE HIGHLY STRESSED IN BENDING AND SHOULD NOT BE CUT (on site, see bend at the collar as the rafter foot cantilevers)

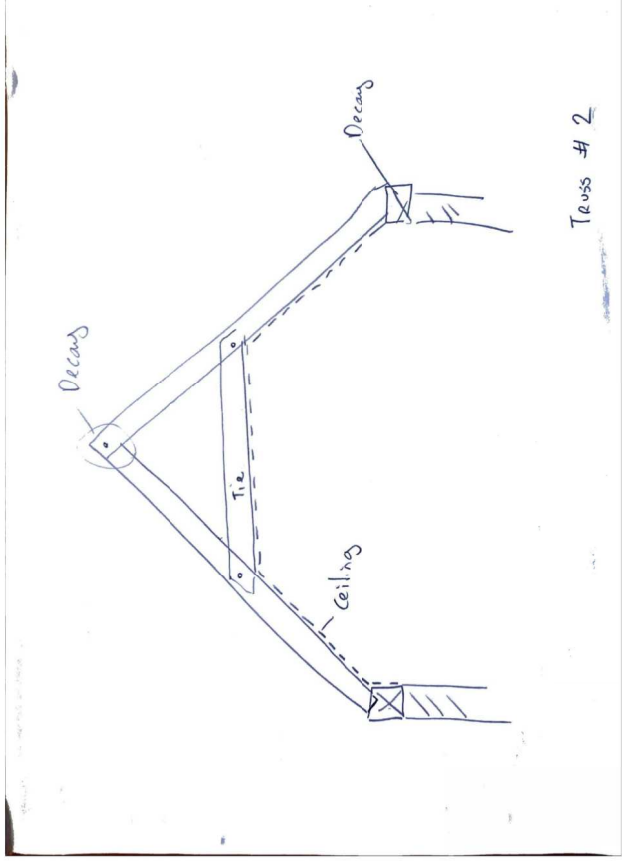
Proposed Remedial Works:

- no need to prop the truss.
- Add 100mm wide x 5mm thick steel plates to each side and bolt through. Extend plates 500mm beyond decayed timber and use 5No M16 through bolts.

Note: Use of top and bottom plates allows retention of historic ridge seatings.



Steel Plates top and Bottom.



Indicative Side Elevation of a Collared Truss.

Castleman's Cottage

Client: Ashley Bryant and Kate Carson

Job No: 225131

Roof Repair: Collared Truss Works

225131 - MNP - XX - XX - SK - S - 4004

Sheet 1 of 1 Rev: P01

Author: SME

Date: 22/05/2025

Scale: N.T.S