

The Hope Project – Listed Building Consent Construction Statement

Introduction

This statement describes the structural amendments to the KOKO fly tower since submitting the planning application, in accordance with the Archer Humphryes Architects Justification for Works. The items requiring structural intervention are:

- The purpose built 4-post rigging structure. Support of the rigging structure is proposed to be provided by 4no. brick piers constructed above new footings at sub-basement level.
- The auditorium ventilation system. The location of the ventilation is such that 3no. steel beams in the fly tower roof are proposed to be relocated to support the ductwork and attenuator fixed to purpose built trusses.

Further details and construction methodologies for each of these interventions are provided below. The proposed alterations are also shown on the HTS structural drawings attached to this statement.

Rigging Structure Support

The 4-post rigging truss is proposed to be supported at stage level and permanently back-propped to sub-basement level by new brick piers on mass concrete footings. To facilitate casting of the new 1000x1000x300 footing the existing sub-basement slab will need to be cut out and the ground beneath excavated. If corbeled brick footings are exposed beneath the existing walls these should be retained and concrete cast adjacent. The new 20 N/mm² brick piers will then be constructed to the underside of the concrete stage slab and dry-packed. The rigging truss posts are assumed to be fixed to the stage slab directly above the new brick piers using resin anchors (connection design by Extreme Rigging).

Auditorium Ventilation Support

The 3no. steel beams currently supporting the stage rigging are proposed to be moved to re-support the new purposed built trusses to which the auditorium ductwork and attenuator will be fixed. In the current condition, the beams are fixed to the timber trusses using ratchet strops. Once the existing fly tower ceilings and the existing rigging is removed, the strops will be loosened, and the beams relocated. Once in position the beams are to be fixed to the timber trusses using angle cleats bolted over the timber such that they could be removed at a later date.

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