Structural design of the Church of St Saviour's

The Nave of St Saviour's was Dedicated on All Saints Day, 1902 and the Church was Consecrated on 6 December, 1904.

On the day of the Consecration, the Bishop heard that the design of the Church did not satisfy the architect to the Ecclesiastical Commissioners. An Extraordinary Meeting of the St Saviour's Church Building Committee was held on 16 December, 1904. Fr Burton read the architect's Report (Appendix 1) and a letter to the Bishop from the Commissioner's Secretary which stated that "the Commissioners considered that the improvements suggested in the Report should be carried out in due course. The Commissioners would however be prepared to proceed with the assignment of the proposed District Chapelry to St Saviour's Church on the understanding that the proposals contained in the Report were adopted as soon as possible".

The architect's proposals were:-

> "Having in view the lightness of the construction of the building, we are unable to certify that the Church in its present condition is likely to remain a substantial structure, or fitted to become a Parish Church. But if No. 5 iron tie rods were inserted in the Nave roof at the plate level, additional buttresses provided to the East and West Walls, and the buttresses to the North and South transepts raised, we think the Church could be passed".

Fr Burton went on to say that, with the Bishop's approval, he had undertaken that the requirements of the Ecclesiastical Commissioners should be complied with, in order that the assignment of the statutory district should not be delayed.

The Architect of the Church then confirmed that he had furnished the Commissioners' architect with the detail of the Nave columns but "he had not been approached by them upon any other matter". He went on to confirm that the dimensions of the Church exceeded the requirements of the Building Act of 1894 for London Warehouses designed for the purpose of ensuring safety in buildings intended to carry great weights. He concluded by refusing to design the proposed additions, considering them unnecessary, and read a Report (Appendix 2) that he had commissioned from a structural engineer.

The Meeting concluded with a statement of confidence that the Church designed and built by the Church's Architect was in every respect a substantial and permanent building.

(In a subsequent letter from the Bishop, he quotes the figure of £200 as the cost of the additional works required by the Ecclesiastical Commissioners. There is no evidence to suggest that the tie rods were provided).

Appendix 1

Architect's Report to the Ecclesiastical Commissioners
St. Albans, St Saviour's

"The E. end of this church was built about 7 years ago & the whole of the Building has been finished within the last 2 years. It consists of Nave 112 ft. by 26 ft. N. & S. Aisles 17 ft wide, Chancel 52 ft. by 24 ft. with Vestries and Organ Chamber on the N. & Morning Chapel on the S.

There is accommodation on Chairs on Nave, Aisles & Chapel for 779 & on Oak Seats in the Chancel for 56, making a total of 835 adult sittings.

The West Wall of the Nave is 50 ft. high & only 2ft.3in. thick.
The East Wall of the Chancel is 43 ft. high & only 2ft.3in. thick.
The N. & S. walls of the Transepts are 45 ft. high & only 2 ft. 3in. thick.

All the above should not be less than 3 ft. thick.

The N. & S. walls of the Nave are 36 ft. 6 inches high & 2 ft. 3inches thick. These should not be less than 2 ft $7^1/_2$ inches thick.

There is insufficient abutment to the transverse arches on the N. & S. sides of the Chancel arch.

The arcade piers throughout are constructed with cast iron stancheons surrounded with gauged brickwork & stone caps & bases which are constructionally merely a useless clothing.

The stringer stones to the gables of the East walls of the Chancel, the Chapel & the Clergy vestry & to the gable over the N. door of the Chancel are very large but only 1 ft. 6 in. on their bed. Those of the small gables should be not less than 2 ft. 6 in. on the bed and those of the large gables 3 ft.

Some of the lead flashings against the parapet walls to the gutters require to be wedged up & repointed in cement.

There are several broken tiles on the roofs which will have to be renewed.

Some joints & stop ends in the iron eaves gutters leak and require to be repaired.

The glazing to the windows of the Morning Chapel requires additional saddle bars. These must not be more than 13 inches apart.

Some pointing is needed to the outside walls especially in the gable end over the N. wall.

Having in view the lightness of the construction of the building, we are unable to certify that the Church in its present condition is likely to remain a substantial structure, or fitted to become a Parish Church - but if No. 5 iron tie rods were inserted in the Nave roof at the plate level, additional buttresses provided to the E. and W. walls, and the buttresses to the N. and S. transepts raised, we think the Church could be passed.

Drawings should be submitted showing the additions indicated."

Appendix 2

Structural Engineer's Report
submitted to the Church's Architect

"In accordance with your instructions I visited the above Church today and made a thorough and searching investigation as to the stability of the structure.

I found not the slightest sign of settlement in any part of the building, the walls being straight and perpendicular and the arches showing no movement.

The Roof trusses are frames with well seasoned pitch pine and the design and execution excellent but would recommend that the iron bolts be re-tightened as one or two have become loose owing to a slight shrinkage in the scantlings of the timber.

I am of the opinion that the whole of *the work* has been carried out with the best of *materials* and workmanship, and the structure *is safe in* every respect."