





The expansion of the London Ambulance Service required a new headquarters containing a complex system to control and monitor the availability of all ambulances within the Greater London area. There was no room for guyed masts and since all sites were in areas of natural beauty conventional towers were unacceptable.

The upper 130ft of each mast consists of 3 Tees cut in castellated form from 36 x 16½ x 230lb UB sections the webs tapering from 27in to 9in. The lower 20ft is a tripod made from tapered solid sections the same size at the shaft. Stiffeners were added at intervals to prevent local buckling and distortion. The brief called for a maintenance-free period of between 10 and 15 years which ruled out normal painting. The final choice was for a four-coat Anodic metal protection system.

The mast was fabricated in 4 sections each 32ft 6in long plus the tripod and welds were tested ultrasonically, which was also used on the site welds.

The masts have been found to meet the functional requirements satisfactorily and at the same time have proved to be acceptable environmentally.

### **Four London Ambulance Service Base Transmitter Masts**

At Shooters Hill, Hampstead Heath, Chelsham and Lambourne End for the Greater London Council.

#### **ARCHITECTS**

**Department of Architecture and Civic Design, GLC. (Architect to the Council Sir Roger Walters KBE, FRIBA, FI Struct E)**

#### **STRUCTURAL ENGINEERS**

**Taylor, Whalley Spyra**

#### **STEELWORK CONTRACTORS**

**Wellingborough Steel**

### **Judges Comments**

**Structural steel proved to be the most suitable material for these 150ft masts for erection in localities which precluded the use of guyed structures or free standing lattice towers. The elegant tapered shaft is supported on a tripod base.**