

23rd March, 60.

DESIGNING ENGINEER, MECH. &amp; ELEC.

CHIEF ENGINEER

VISIBILITY OF TRAMCARS AT NIGHT.

Your memo of 3rd February, 1960, refers.

Four proposals to make the front of tramcars more visible at night have been considered.

PROPOSAL NO. 1 - 3" dia. clear type reflectors fitted as shown in Sketch X756. The cost of this proposal is estimated at £3.12.6 for W2 and W3 tramcars and £2.15.0 for other type tramcars. Total for full fleet = £2,616. The effectiveness of the reflectors has not been proved but a set has been obtained and a test can be made if necessary.

PROPOSAL NO. 2 - One three-lamp canopy light at each end as shown in Sketch X755. The estimated cost is £58.0.0 per tramcar, or £45,645 for the fleet.

PROPOSAL NO. 3 - Three lamps mounted on the fascia at each end as in Sketch X754. The cost is estimated at £57.10.0 per tramcar, or £45,250 for the fleet.

PROPOSAL NO. 4 - Two three-lamp canopy lights at each end as in Sketch X757. This proposal, besides giving the best visibility with six lamps shining through openings in the canopy, plus the headlamp, also illuminates the two dash advertisement panels. Having two extra circuits (instead of one as for proposals 2 and 3), the lights can be installed without opening up the troughing and this saves time and money for installation. The estimated cost of this proposal is £40 per tramcar, or £31,480 for the fleet.

This estimate is based on the basic figures of £26.8.0 per tramcar set of fittings, complete with wiring, plus £13.12.0 per tramcar for installation. Of the latter sum, the labour cost (£5.17.9) includes 16 hours of electric wiring. This means that a team of four men would do ten tramcars per week and it would take at least 79 weeks (probably two years) to equip the whole fleet.

The cost of the pre-assembled fittings may be less than the estimate which has been prepared without drawings and is only roughly approximate. It may be possible to have the fittings made by outside contract at lower cost. A closer estimate could be obtained by making a prototype set and modifying design and construction, where possible, for economy.

A prototype set, it is suggested, would give a much better idea of the value of the proposal, which could justify increased charges for dash advertisement panels, or at least make the space easier to sell.

(Sgd.) B.J. Roberts.

DESIGNING ENGINEER, MECH. & ELEC.

25th March,

60.

CHIEF ENGINEER

CHAIRMAN

VISIBILITY OF TRAMCARS AT NIGHT.

Some years ago you requested that the matter of making tramcars more visible at night was a subject in which you were interested.

doc. 102553

The matter has been under regular review and I am now able to report that the Designing Engineer, Mech. and Elec., has presented 4 proposals as outlined in his memo of 23rd March, 1960, copy of which is attached.

What further action would you like taken?

*A. E. Perkins*

CHIEF ENGINEER.

DHE: JMS.