M.M.T.B.

June, 1955.

Statistical Information re Electric Services

1. General

1.1 Gross Cost	£11,750,000
1.2 Miles Double Track	135.7
1.3 No.of Trams (passenger)	787
1.4 Max.No. Trams at Peak	680
1.5 Tram/Miles p.a.	23,500,000
1.6 Passengers p.a.	220,000,000
1.7 Passenger Revenue	5,500,000
1.8 Av.Fare per Passenger	6.0
1.9 Av.distance for 1d.	0.473
1.10 Max.demand on S.E.C.	23,250 KW.
1.11 K.W.H. p.a.	68,300,000
1.12 Cost of Energy p.a.	£ 417,000
1.13 " " " Tram/Mile d.	4.64

2. Tramcar

2.1 Weight of Tram	17·5tons
2.2 Length of Tram	46'6"
2.3 Cost of Tram	£13,500
2.4 Seated Load	48 ~~50~~
2.5 Crush Load	150
2.6 H.P. Motors	4 x 40 H.P.
2.7 H.P. to acc.to 20 M.P.H. in 16 secs. seated load level track.	160 H.P.
2.8 Max. H.P. available	360 H.P.
2.9 Av.H.P.(free running)	50 H.P.
2.10 Max. Speed on level	30 M.P.H.
2.11 Schedule Speed	11.69 M.P.H.
2.12 (a) Pressure of Trolley Wheel/Wire	25 lbs.
(b) Pressure of Shoe/ Wire.	22 lbs.
(c) Wt.Wheel 7 lbs.Shoe	5¼ lbs.
2.13 Wt.glass per tram.	6 cwt.
" paint " "	2½ cwt.
" motors (4) "	3 tons
2.14 Period of o'haul body	4½ yrs.
mechanical	150,000 miles.

3. Wheels & Brakes

3.1 Diam. of wheel (tread) 28 ins.

3.2 Life of wheel 150,000 mls.

3.3 Cost of Standard Wheel £25.5.0

3.4 Cost of Resilient " £95 - 110

3.5 Weights	Std. Wt.	TB incr. Wt.	incr.	Maco Wt.	incr.
Wheel	360	483	(123)	521	(161)
Assembly	1132	1381	(249)	1457	(325)

Assembly = 2 wheels gear & axle.

3.6 Brakes

(a) Air Pressure 60-70 lbs.

(b) Diam.Cylinder 8 ins.

(c) Area Brake Shoes (16) 400 ins.^{2}

(d) Gross Shoe Pressure (16) 37,000 lbs.

(e) Braking dist from 20 M.P.H. Service app.seated load Level tracks (av.) 75 ft.

(f) Weight of Shoe 22.4 lbs.

(g) No.of Shoes/annum 100,000

(h) Cost of Shoes/annum £38,000.

4. Electric Supply

4.1 O.H. Network

4.1.1	No.of poles (N'cote)	700
4.1.2	No.of poles (System)	14,000
4.1.3	Wt. of steel span pole.	960 lbs.
4.1.4	" " " anchor "	2,000 lbs.
4.1.5	Ht. of pole above gnd.	26 ft.
4.1.6	" " O.H. wire	18'6"
4.1.7	Lowest point in system.	Swan St. Rich.Stn.
4.1.8	Height at ditto	12'8"
4.1.9	Size of O.H.wire (City)	0.2 ins^2
4.1.10	Size of " " (Std)	.126 ins^2
4.1.11	Tension of" " (City)	2,000lbs
4.1.12	" " " " (Std)	1,800lbs
4.1.13	Wt.of O.H.wire (N'cote)	18 tons
4.1.14	" " " " (System)	360 "

4.2 Power Supply Northcote Route

4.2.1	K.W.Plant (Substn) ~~N'cote route~~	3,800 KW
4.2.2	Cost of Plnt " "	£68,000
4.2.2	" " U.G.Cables (laid N'cote)	£27,000

Northcote Road only, incl E. Preston Depot

5. Per. Way.

5.1	Cu.yds. excavated	38,000
5.2	Cu.yds. concrete	27,000
5.3	Cost of concrete	£220,000
5.4	Tons of rails	2,100
5.5	Cost of rails	£63,000
5.6	No.of men employed	up to 300
5.7	No.of Man-Hours	550,000
5.8	Time of Construction	15 mths.
5.9	Rate of Construction	1 mle/5½ wks. 200 ft/day.

6. Buildings

6.1 East Preston Depot.

(b) Capacity (no.of trams)	63
(c) Cost of Running Shed	£109,000
(e) Staff (crews)	370
(f) Cost of Offices	£43,000
(a) Area of R/S building	55,000sqft.
(d) Area of Office "	9,000 "