Decision No. /2375

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA

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In the matter of the application of Pacific Electric Railway Company for authority to construct and maintain at grade tracks across certain public bighways in the City of Glendora and in the County of Ios Angeles, State of California, and at grade across the railroads of the Southern Pacific Railroad Company and The Atchison, Topeka and Santa Fe Railway Company, in connection with the construction of its proposed railroad from a point in its present railroad line in the City of Glendora, thence in a general easterly and southerly direction to a connection with its Los Angeles-San Bernardino line at Lone Hill, in said County of Los Angeles.

# ORIGINAL

Application No. 8369

Frank Karr, for applicant.

E. W. Camp, for The Atchison, Topeka & Santa Fe Railway Company, not a protestant.

R. B. Bidwell, City Attorney, for City of Glendore, not a protestant.

Thomas E. Minds, for the Automobile Club of Southern California, not a protestant.

BY THE COMMISSION:

## OPINION ON REHEARING

This matter is again before the Commission on petition of applicant for rehearing and for modification of Decision No. 11644. The only modifications asked are that the crossings of Minnehaha Avenue and the main line of the Atchison, Topeka and Santa Fe Railway be authorized to be constructed at grade, instead of at separated grades, as authorized in the above decision.

A rehearing was held in Glendora on April 24, 1923 before Examiner Williams.

The two crossings involved herein may be considered separately.

#### Minnehaha Avenue Crossing

Applicant contends that the bazard and inconvenience to be introduced at the Minnehaha Avenue crossing by the construction of its line of railroad does not justify the separation of grades. It suggests further that in order to improve the view of approaching trains that triangular pieces of land be acquired at each corner of the crossing, such triangles to have equal legs of from thirty to forty feet along Minnehaha Avenue and Cullen Avenue, the latter avenue being that on which applicant's track is proposed to be located. Applicant is willing either to acquire this additional land, or if not able to do so, to obligate itself to the City of Glendora to pay the cost of condemning such land in a suit to be brought for that purpose.

Traffic checks at the Minnehaha Avenue crossing were submitted and show as follows:

Date	Day of Week	Hours	Number of Vehicles Total
2-27-23 3-6-23 4-22-23 4-23-23	Tuesday Tuesday Sunday Monday	6 a.m. to 8 p.m. 6 a.m. to 8 p.m. 8:15 a.m. to 6:30 p.m. 6 a.m. to 6 p.m.	1844 4853

The first two counts were made by applicant and the second two by the Automobile Club of Southern California. The maximum per hour is not available for applicant's counts, but from the Automobile Club's exhibit it is noted that maximum hourly traffic was 720 on Sunday, April 22.

Applicant submitted plans and estimates for the separation of grades at these two crossings as shown in Table 1, these estimates and plans having been requested by the Commission subsequent to the filing of the application for rehearing and having been submitted to the Commission for the examination of its engineers prior to the rehearing.

TABLE 1

Linear	: PLAN A	<b>:</b>	PLAN B		PLAN C
		: North End	: South End	Total:	
	:	:		haha	
Crossings	:1 Minne-	:l Minnehaba	: 1 Santa Fe :		
Separated	: baba Ave	: Avenue	:2 Lemon Ave:	2 Santa	. A
	:2 Santa Fe	-	•	Fe	_
	:3 Ada Ave.			3 Lemon	
	:4 Lemon	<u>▼ .</u>		AVO	
•	: Avenue	<b>●</b> •••	•		•
	:5 Carroll	•	•		•
	: Avenue	•			•
	: Avenue	•			
-	<b>.</b>		S.		
			:On both new:	_	Same as
Pecific		:adjacent	:land and ::	·	<b>.</b> .
		:Callen Ave.	:that already	•	•
main track	chise		:acquired :	:	•
	<u> </u>	•			•
	· ·	•	T. 15		;
Change of	:Elevated	:Elevated	:Elevated :	- :	Same as
grade of		:11 ft. at	:25 ft. at :	:	A
Pacific	:feet	:Minnebaba	:Santa Fe. 17:	,	<u> </u>
Electric	-	Avenue	:ft. at		•
Track	•		Lemon Ave.		<b>-</b> .
* T. A. O. T.	<del></del>	<del></del>	· Tomon Tro		<u>*</u>
Chamas 68	· Wa abamaa	. Wanahaha	:No change		No change
Change of	TWO COUNTRA	:Minnehaba	THO CENTRA		- WO CHATE
grade of	•	:Ave. de-			•
streets	•	pressed 6			<b>.</b>
	•	:ft.Carroll		•	:
· · ·	:	:Ave_raised	<b>5</b> .	:	<b>:</b> .
	:	:5 ft.	:	<u>:</u>	<u> </u>
	;	₩ .e	<b>*</b>	:	<b>:</b>
Type of	:Concrete	:Fill	:Fill	· .	:Timber
construc-	:retain-	· · · · · · · · · · · · · · · · · · ·	<b>:</b> - ! .	: ,	structur
tion of	:ing walls	:	:	<b>:</b> ,	sin Calle
Pacific	:in Collen		:	:	:Avenue
Electric	:Avenue	<b>z</b> :	<b>3</b> .	<b>:</b>	:
Roadbed	=	:	2	:	:
		<u> </u>	:		•
Cost	- <b>₹</b> •.	•		:	<u>.</u>
<del></del>	•	•	•	•	•
Land	1-	•	-	•	
Embankment	): 41 365)	•	•	•	•
		47 526	98 839	•	188 271
Abatments		. 71 020	• 20 002	<del>-</del>	
wells and		- <b>-</b>		•	•
Bridges	): 276 357)	<b>T</b>	7 000	•	7 150
Spor track	: <u>7 150</u>	·	7 800	<b>.</b>	<u> </u>
Total ex-	:	<b>5</b> ,	•	<b>.</b>	•
cept dam-	•	-	•	•	•
ages	: 324 872	: 47 526	: 106 639	: 154 265	: 195 421
Damages	: 78 328	:No estimate	:No estimate	.No est.	: 78 328
		•	<u>.</u>	<u>*</u>	
Total	403 200	• · · · · · · · · · · · · · · · · · · ·	•	•	273 749
TA ACOUNT	, -200 200	- 3 -			
C					1 4 4

Plan B is preferable to and less expensive than either Plan A or Plan C, and, therefore, neither Plans A or C will be further considered.

Plan B may be considered in two parts; one involving primarily the crossing of Minnehaha Avenue and as a secondary matter the crossing of Carroll Avenue. Ada Avenue, which would be crossed at grade divides this first part from the second, or southern part, in which are involved primarily the crossing of the main line of the Santa Fe and as a secondary matter, the crossing of Lemon Avenue. As hereinafter referred to, then, Plan B North will refer to that portion north of Ada Avenue, and Plan B South will refer to that portion south of Ada Avenue.

The cost of grade separation at Minnebaha Avenue is estimated by applicant at \$47,526 plus consequential damages, if any. Our engineering department also made an extimate of the cost of grade separation at Minnebaha Avenue based upon Plan B North, which totals \$55,000, also without including the cost of damages, if any, to adjacent property. These figures compare with applicant's approximate estimate at the prior hearing of \$100,000.

The City of Glendora has not taken any official position on the question of a grade or overhead crossing. The Automobile Club of Southern California, being interested in grade crossing elimination, stated that there had been thirty-one fatalities in grade crossing accidents in Los Angeles County in the first three months of 1923 against thirty-six in the first nine months of 1922. This large increase in grade crossing accidents in Los Angeles County, is further substantiated by the Commission's re-

cords. Several other organizations, including the Foothill Boulevard Association, protest against the grade crossing, although the one named is the only one whose resolution appears in the record.

There are two estimates for the construction of this overhead crossing; applicant's Exhibit 2, Plan B North, and our engineer's approximate estimate of \$55,000 neither estimate including possible damages to adjacent property. For the purpose of this proceeding let us use \$50,000 for grade separation, exclusive of damages.

Applicant's Exhibit 2 shows that the right-of-way for Plan B North is estimated to cost \$8,900, exclusive of damages, this amount representing applicant's cost of acquiring a strip of land fifty feet in width east and immediately adjacent to Cullen Avenue, between Ada Avenue and a point north of Electric or Dalton Avenue. This strip of land is all through orange orchards, the approximate value of which appears to be \$5,000 per acre. Two property owners adjacent to the proposed line stated that they thought their property would be damaged if applicant's track were constructed overhead across Minnehaba Avenue, but the direct testimony only of two adjacent property holders cannot be considered of importance. Other than this the record contains no estimate of damages.

From a careful consideration of all the evidence, it is concluded that the public safety and convenience will warrant the expenditure of \$50,000 for the separation of grades of the Minne-haha Avenue crossing. If the damage to the adjacent property were finally fixed at \$25,000, or less, then the total cost, following Plan B North, would be \$75,000, or less, and it is concluded that the expenditure of this amount is justified to permanently remove all possible hazard at this important highway

crossing and for the public convenience which would result from the free flow of travel scross the route of the railroad at this street.

### Santa Fe Crossing

Referring to Table 1 applicant's estimate of the cost of grade separation at the Santa Fe main line crossing under Plan B is \$106,639, exclusive of damages to adjacent property, if any. Our engineers have estimated approximately \$92,000 also exclusive of damages, and testified as to the annual cost, using an interest rate of six and one-half per cent. Changing their estimates by using six per cent, which the record shows is a fair rate of interest for the applicant herein and, also similarly correcting the estimated annual cost of a grade crossing, the following comparative figures may be given:

## Annual Cost of Senta Fe Main Line Crossing

#### Grade Crossing

- Interlocker operated twenty-four hours,
  (a) two shifts of towermen ------ 7 136
- (b) three shifts of towermen ----- 8 205
  Overhead Crossing
  - (a) Based upon \$92,000 estimated cost ---- 5 974
  - (b) Based upon \$106,639 estimated cost ---- 6 752

The estimate of \$8205 above compares with the approximate estimate of \$4000 in the previous decision in this matter. Comparing the two types of crossings, it appears that the annual cost of \$6,752 for the higher estimate (applicant's estimate) for the separated grade (overhead) crossing is \$384 less than the annual cost, \$7,136, of a grade crossing with a two-shift first-class interlocking plant and \$1,453 less per year compared with three-shift operation. These \$384 and \$1453 differences may be considered as available for the carrying charges

of damages which is not included in the above figures and at six per cent this amount would be equivalent to interest at the rate of six per cent on an expenditure of \$6,400 and \$24,200, respectively, for two-shift and three-shift operation. Applicant's Exhibit 2 includes an item of cost of additional right-of-way of \$15,845. The record does not show any estimates of the cost of damages.

Where interested railroads can provide the funds for grade separation the question of first cost is not as important as the annual cost. The difference in annual cost as between a grade crossing and a separated grade crossing, is, excluding cost of damages, in favor of grade separation. Including the cost of possible damages to adjacent property the annual cost would still be favorable to grade separation. The Santa Fe did not offer any evidence as to the manner in which the Pacific Electric should cross its main line, nor to the division of expense of grade separation.

The original order provided that the Santa Fe should pay as its part of the cost of the overgrade crossing the sum of \$33,000, which was indicated as being equivalent to the capitalized cost of one-half of the estimated cost of operation and maintenance of an interlocking plant. This amount should be charged on the basis of the revised estimate. At this time we have before us the Commission's engineer's estimate of \$5,576 for operation and maintenance of an interlocking plant and predicated upon this amount the Santa Fe should, based upon an interest rate of six per cent, pay toward the cost of grade separation \$46,466.

It has been concluded that the construction of the crossing of the Santa Fe main line, whether at grade or overhead, should be left optional with the two carriers and the order will so provide. The carriers attention is particularly directed, however, to the fact that it is concluded that grade separation, with the cost divided so that the Santa Fe pays a proportion equal to the capitalized cost of maintenance and operation, in this case is both an equitable and less expensive arrangement, and that this Commission must consider this in rate proceedings.

Angeles County is worse than ever before. Vehicles are still more numerous and grade crossing accidents have increased. The Grand Jury of los Angeles County has appealed to the Commission for the improvement of existing conditions at the Pacific Electric Railway crossings. The Commission has also been asked to investigate the whole situation in the county. These facts, together with careful consideration of all of the evidence, lead to the conclusion that the Minnahaha Avenue crossing should not be constructed at grade, and that applicant's prayer should be denied as to this crossing. The original order, however, can now be made more specific as to the point and manner of crossing and this will be done.

# ORDER ON REHEARING AND MODIFYING PRIOR ORDER

Pacific Electric Railway Company having applied for a rehearing of the above entitled proceeding, such rehearing having been held and the Commission being apprised of the facts, the

matter having been under submission and ready for decision,

IT IS HEREBY ORDERED, that Decision No. 11644, dated February 9, 1923, be and it is hereby amended by striking out thereof the words.

"IT IS HEREBY FURTHER ORDERED, that when and if the line of railroad for which certificate of public convenience and necessity is herein granted is constructed, applicant be and it is hereby directed to construct its track at separated grades across the main track of The Atchison, Topeka and Santa Fe Railway Company according to plans and specifications which shall hereafter have been approved by this Commission. The expense of constructing said separated grade crossing shall be borne by applicant, except The Atchison, Topeka and Santa Fe Railway Company shall contribute to the cost of said separated grade crossing the sum of thirty-three thousand (33,000) dollars unless said amount is altered by subsequent order of this Commission."

and by inserting, in lieu thereof, the following:

IT IS HERREY FURTHER ORDERED, that permission be and it is hereby granted Pacific Electric Railway Company to construct its track at make across the main line track of The Atchison, Topeka and Santa Fe Railway Company, either at grade or overhead; said crossing to be constructed subject to the following conditions:

- (a) If constructed at grade:
- (1) Said crossing shall be constructed in the location shown by drawing M.W.H. 3450 attached to Exhibit D-1 filed with the application.
  - (2) The entire expense of constructing said crossing,

together with the cost of its maintenance thereafter in good and first-class condition shall be borne in accordance with the agreement marked Exhibit D-1 filed with the application.

- (3) For the protection of said crossing there shall be installed a first-class interlocking plant, the plans for which shall have been approved by the Commission; said interlocking plant to be completely installed and ready for service before the regular operation by applicant over said crossing shall have been commenced. The cost of the construction, operation and maintenance of said interlocking plant shall be borne in accordance with the agreement marked Exhibit D-1 filed with the application.
- (4) Applicant shall within thirty (30) days thereafter notify this Commission, in writing, of the completion of the installation of said crossing.
- (5) The authorization herein granted for the installation of said crossing will lapse and become void one year from the date of this order unless further time is granted by subsequent order.
  - (b) If constructed at separated grades:
- (1) Said crossing shall be constructed substantially in accordance with Plan B, south of Ada Avenue, as shown on applicant's Exhibits Nos. 5 and 7.
- (2) The cost of constructing said crossing at separated grades, together with the cost of its maintenance thereafter shall be borne in a manner as agreed upon by the applicant and The Atchison, Topeka and Santa Fe Railway Company.
- (3) Applicant shall within thirty (30) days thereafter notify this Commission, in writing, of the completion of the installation of said crossing.
- (4) The authorization herein granted for the installation of said crossing will lapse and become void one year from

the date of this order unless further time is granted by subsequent order.

IT IS HEREBY FURTHER ORDERED, that said Decision No. 11644. dated February 9, 1923, be and it is hereby further amended by striking out thereof the words.

"IT IS HEREBY FURTHER ORDERED, that when and if the line of railroad for which certificate of public conventence and necessity is herein granted is constructed, applicant be and it is hereby directed to construct, at its sole cost and expense, its track across Minnebaha at separated grades according to plans and specifications which shall hereafter have been approved by this Commission."

and by inserting, in lieu thereof, the following:

IT IS HEREBY FURTHER ORDERED, that when and if the line of railroad for which certificate of public convenience and necessity is herein granted is constructed, applicant be and it is hereby directed to construct, at its own sole cost and expense, its track across Minnehaba Avenue at separated grades substantially in accordance with Plan B as shown on applicant's Exhibits Nos. 5,7 and 10, and according to detail plans and specifications which shall hereafter have been approved by this Commission.

IT IS HEREBY FURTHER ORDERED, that the application for the modification of said Decision No. 11644 be and it is in all other respects denied.

This order shall become effective ten (10) days after the making thereof.

Dated at San Francisco, California, this 17 day of July, 1923.

Drong Matin

Commissioners.