

Decision No. 322786 .

ORIGINAL

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of Application of County of Los Angeles for authority to improve and widen crossing of Nadeau Street over right of way and tracks of the San Pedro Branch of the Southern Pacific Railroad, and the installation of automatic traffic control signals at the intersection of Alameda Street and Nadeau Street.

Application No. 23071.

J. H. O'Connor, County Counsel, by W. B. McKesson, Deputy County Counsel, for Applicant.

C. W. Cornell, for Southern Pacific Company, Protestant.

BY THE COMMISSION:

O P I N I O N

This is an application filed by the County of Los Angeles, seeking the Commission's authority to widen and improve the crossing of Nadeau Street over the San Pedro branch of Southern Pacific Company (Crossing No. 2G-486.9), to install traffic signals at the intersection of Nadeau Street and Alameda Street and to allocate the cost of the proposed improvement between applicant and Southern Pacific Company.

Public hearing on said application was conducted by Examiner Ager at Los Angeles on January 8, 1940, at which time the matter was taken under submission, and it is now ready for decision.

Nadeau Street is a secondary county highway extending in a general easterly and westerly direction from Santa Fe Avenue on the east to Compton Avenue on the west, a total distance of about one mile. The rail line involved is Southern

Pacific Company's San Pedro branch and at this particular location is a double-track line. Switches from both the westbound and eastbound main tracks located within the crossing area complicate the problem and their relocation is a necessary part of the proposed improvement. Alameda Street is parallel to and approximately fifty feet west of the westerly railroad track and carries a heavy volume of high-speed vehicular traffic to and from the Los Angeles Harbor area.

At the present time Nadeau Street traffic, prior to entering Alameda Street, is controlled by boulevard stop signs and the only protection to motorists, in so far as the railroad is concerned, consists of two Standard No. 1 crossing signs (General Order No. 75-B). Traffic has increased on Nadeau Street to a point where, in the opinion of county officials, it is necessary that automatic signals be installed at the intersection of Nadeau and Alameda Streets. A twelve-hour traffic check made on Thursday, January 4, 1940, shows a total of 3,339 vehicular movements over the crossing. During the same period there were 174 pedestrian and 11 rail movements over the crossing. No recent traffic counts along Alameda Street are available but a sixteen-hour check made in September, 1938, showed a total of 18,867 vehicles entering the intersection on Alameda Street. The same check showed that 4,806 vehicular movements were made over the crossing during this period, 22.8% of which originated on Alameda Street and turned eastward across the tracks. Due to the proximity of the intersection and the railway tracks, it is applicant's opinion that the traffic signals, if installed, should be synchronized with the rail movements; otherwise it is conceivable that a "GO" signal, indicating a clear roadway on Nadeau Street, might be received by a motorist at a time when the crossing is blocked by an approaching railroad train.

Southern Pacific Company takes the position that the traffic signals, as proposed, will not provide any increased pro-

tection, in so far as the railroad is concerned, and that, therefore, it should not be required to participate in the cost of such an installation. The company does feel, however, that two automatic wigwags should be installed and that the expense of these wigwags should be divided equally between the company and the county. It is the further contention of the company that the special track facilities should be relocated outside the crossing area, at the sole expense of applicant. As stated above, the relocation of the switches outside of the crossing area is a necessary part of the proposed improvement of the grade crossing itself and the change will result in a material improvement of operating conditions on the railroad. It therefore appears that the costs in connection therewith are the sole obligation of the railroad. If, in effecting this change, the railroad concludes that new and heavier rail, new ties and additional ballast are essential, then, in our opinion, it also should be required to bear these costs.

Applicant proposes to install traffic signals of the three-light type, similar to those now in place at the intersection of Firestone Boulevard and Alameda Street and the intersection of Florence Avenue and Alameda Street. In addition to the regular three-light signals controlling Alameda Street traffic, it is further proposed to install an auxiliary signal in the top position on the standard, which will function only at times when trains are within the circuit. This latter signal will display a red arrow when lighted and will be supplemented by a sign on the standard itself, which will carry the wording "No right/left turn on red arrow."

It is further proposed to install an auxiliary red signal immediately east of the tracks, which will function only upon the approach of a train and is intended to stop traffic prior to reaching the tracks. To summarize the installation, the signals

will function as ordinary traffic signals except while a train is in the circuit and, during that period, the signals will be set in the "GO" position for Alameda Street traffic with the red arrow attempting to prohibit eastbound turns from Alameda Street over the tracks.

Nothing particularly new is involved herein since, as stated above, similar installations have been made at two other intersections with this same line of railroad. At the Firestone Boulevard intersection the traffic signals are supplemented by automatic wigwags but at the Florence Avenue intersection the traffic signals constitute the entire protection.

There is no record of the Nadeau Street crossing ever having been dedicated but it appears to have acquired public status through many years of use. In order to be consistent with the provisions of our General Order No. 75-B, it would seem that automatic wigwags should be installed. It further appears that, if traffic signals are to be installed, these signals should be coordinated with the rail movements to eliminate the possibility of conflicting indications to motorists on Nadeau Street as, under any analysis, two simultaneous indications in conflict would cause confusion in the average motorist's mind.

Two exhibits were introduced by witness for the railroad, (Exhibits Nos. 9 and 10), in which the estimated installation cost for the ordinary wigwag circuit was compared to the synchronized control. Testimony developed that the design of the latter circuit embraced numerous directional circuits and certain time-element relays intended to minimize traffic delays which would normally result with the regular circuit. Prior to the time Firestone Boulevard (Crossing No. BG-489.5), was installed pursuant to Decision No. 29481, dated January 25, 1937, on Application No. 20792, a twelve-hour traffic count disclosed that 7,401 vehicles used the crossing during the period. A similar check over

Nadeau Street (Crossing No. 3G-488.9), included 3,339, or but 45% of the usage made at the former location. Nadeau Street, as a secondary highway extending for a relatively short distance, cannot, under present conditions, approach the arterial importance of the Firestone Boulevard crossing.

At this time the volume of vehicular traffic does not appear to justify the more elaborate directional circuits and time-element relays, provided that train crews are instructed to avoid all unnecessary operation which would cause Nadeau Street to remain unduly closed.

Exhibit No. 2 shows that during the calendar year 1939 the street intersection was the scene of five accidents, four of which involved pedestrians. Exhibit No. 3 indicates that during the same period one accident took place at the railroad crossing from which no injury resulted. It appears that the problem at this location evolves primarily about the regulation of vehicles and pedestrians at the intersection of the two streets, with the situation at the rail crossing but incidental thereto.

Witness for the railroad testified that, coincident with an installation of signals designed to regulate traffic on Alameda and Nadeau Streets, the railroad would be confronted with a more acute crossing problem which would require an installation of two wigwags to provide adequate protection.

In apportioning the expense of improving this crossing between the applicant and Southern Pacific Company, due consideration must be given to the obligation of each party, as well as the benefits to be derived. It must be recognized that the railroad has a continual obligation to participate in the matter of constructing and maintaining reasonable and adequate crossings over its tracks, both at grade and at separated grades. With vehicular traffic creating distinct problems, public bodies having jurisdiction over public highways are called upon to meet

present-day traffic requirements.

The reasoning applied in the Commission's Decision No. 29481 appears to apply equally as well in the instant case. Thorough review of the record leads to the conclusion that the most practical and effective means of providing signals to control traffic at this intersection is to install traffic signals in accordance with the proposal of the applicant, supplementing these traffic signals with two of the Commission's Standard No. 4 wigwags (side-of-street type, General Order No. 75-B), these two systems of signals to be synchronized.

It would appear that the expense of improving the crossing and providing the protection should be borne on the following basis:

Southern Pacific Company should bear:

- (1) The entire expense of preparing its tracks to receive the pavement, including the cost of relocating the turn-out in its westbound track and shortening the switch lead in the eastbound track;
- (2) One-half the cost of installation of two Standard No. 4 (side-of-street type) wigwags;
- (3) One-half the expense of synchronizing the traffic signals with train movements.

Applicant should bear:

- (1) The entire cost of installing the traffic signals, including the auxiliary signal east of the tracks and the red arrow signal at the top of the regular signal positions;
- (2) One-half the expense of installing two Standard No. 4 (side-of-street type) wigwags;
- (3) One-half the expense of synchronizing the traffic signals with train movements;
- (4) The entire expense of paving, including the track area.

#### O R D E R

A public hearing having been held, the matter having been

submitted and the Commission being fully advised;

IT IS HEREBY ORDERED that the County of Los Angeles be and it is hereby authorized to widen and improve Nadeau Street at grade across the tracks of Southern Pacific Company's San Pedro Branch, at the location more particularly described in the application and as shown by the map (Exhibit "B"), attached thereto, subject to the following conditions and not otherwise:

- (1) The above crossing shall be identified as Crossing No. BG-488.9.
- (2) The crossing shall be constructed of a width of not less than thirty-six (36) feet and at an angle of approximately eighty (80) degrees to the railroad, with grades of approach not greater than two (2) per cent, shall be constructed equal or superior to type shown as Standard No. 3, in our General Order No. 72, and shall in every way be made suitable for the passage thereon of vehicles and other road traffic.
- (3) Southern Pacific Company shall bear the entire expense of relocating the turn-out in its west-bound track, shortening the switch lead in its eastbound track and conditioning its tracks to receive the pavement. Applicant shall bear the entire paving expense, including that portion within the confines of the track area. Southern Pacific Company shall maintain that portion of the crossing between lines two (2) feet outside of the outside rails. Applicant shall maintain that portion of the crossing outside of lines two (2) feet outside of the outside rails.
- (4) Said crossing shall be protected by two Standard No. 4 (side-of-street type) wigwags, as specified in General Order No. 75-B of this Commission. Applicant is hereby authorized to install a three-light system (said system to include an auxiliary signal east of the tracks), for traffic control at the intersection of Nadeau and Alameda Streets, with a four-lens signal face for traffic on Alameda Street, which signal system is to be synchronized with Southern Pacific Company's San Pedro Branch. The installation and maintenance of these signals shall be borne on the following basis:
  - (a) The entire cost of installing the traffic signals shall be borne by applicant.
  - (b) The cost of installing the two wigwags shall be borne on a basis of fifty (50) per cent by Southern Pacific Company and fifty (50) per cent by applicant.
  - (c) The cost of installing the necessary circuits for the synchronization of these signals with

the rail movements shall be borne on a basis of fifty (50) per cent by Southern Pacific Company and fifty (50) per cent by the applicant.

- (d) The maintenance of the wigwags and the synchronization mechanism shall thereafter be borne by Southern Pacific Company.
- (e) The maintenance of the traffic signals shall be borne by applicant.
- (5) Southern Pacific Company shall, within sixty (60) days from the date of this Order, submit a plan of the proposed installation for the Commission's approval.
- (6) Southern Pacific Company shall conduct its train and switching operations in the vicinity of Crossing No. 30-488.9 in such a manner that the periods of closing Nadeau Street through train operation will be held to a minimum.
- (7) Applicant shall, within thirty (30) days thereafter, notify this Commission, in writing, of the completion of the improvement of the crossing, the installation of the protective devices authorized herein and of its compliance with the conditions hereof.
- (8) The authorization herein granted shall lapse and become void if not exercised within one year from the date hereof, unless further time is granted by subsequent order.
- (9) The Commission reserves the right to make such further orders, relative to the protection of said intersection, as to it may seem right and proper, and to revoke its permission if, in its judgment, public convenience, necessity and safety demand such action.

The authority herein granted shall become effective twenty (20) days from and after the date hereof.

Dated at San Francisco, California, this 27<sup>th</sup> day of February, 1940.

Ray S. Rice  
George D. Murphy  
Ray C. W. W. W.  
H. H. H.  
Justin J. Calver  
Commissioners.