

ORIGINALDecision No. 50113

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation into grade crossings)
of The Atchison, Topeka and Santa Fe)
Railway Company with Andrew Avenue,)
Hillcrest Drive, Fulvia Street,)
Orpheus Avenue, D Street and E Street,)
all in San Diego County.)

Case No. 5511

John H. Martin and Joseph F. Grady for Cardiff-Encinitas-Leucadia Chamber of Commerce, A. J. Blecha for the American Legion, Curtis D. Havens for the Encinitas Fire Protection District, and Capt. J. K. Scott and Roy Calderone for Hillcrest Drive property owners, protestants. Albert J. Day and R. B. Pegram for the Department of Public Works, Division of Highways, Robert W. Walker and Richard K. Knowlton for The Atchison, Topeka and Santa Fe Railway Company, J. H. Mack for the San Diego County Road Department, Graham R. Mitchell for the Brotherhood of Railroad Locomotive Engineers, interested parties. H. F. Wiggins for the Public Utilities Commission.

O P I N I O N

The Commission having on its own motion instituted an investigation into the safety, maintenance, operation, use and protection of six public highway grade crossings with The Atchison, Topeka and Santa Fe Railway Company (hereinafter referred to as Santa Fe), in the County of San Diego, designated as:

<u>Crossing Number</u>	<u>Public Highway</u>
2-235.5	Andrew Avenue
2-235.7	Hillcrest Drive
2-236.5	Fulvia Street
2-237.3	Orpheus Avenue
2-237.9	D Street
2-237.95	E Street

public hearings having been held at Encinitas before Commissioner Scoggins and Examiner Chiesa, oral and documentary evidence having been adduced and the matter having been submitted for decision, the Commission makes its findings and concludes as follows:

That the said crossings are situated between the northerly end of the community of Leucadia and the central business district of the community of Encinitas, in the County of San Diego, in an area where passenger trains of the Santa Fe are permitted a speed of 90 miles per hour and freight trains are permitted a speed of 50 miles per hour; that U. S. Highway 101 is westerly of and parallel to the railroad, the easterly edge of the pavement being from 55 to 65 feet west of the tracks through Leucadia and approximately 212 feet west of the tracks in Encinitas; that the highway has a dividing strip in Leucadia; that motor vehicle speed through Leucadia is 45 ← miles per hour and 35 miles per hour through Encinitas; that Vulcan Avenue, an improved county road, runs parallel to the railroad on the east side of the tracks, with the west edge of the pavement from 55 to 65 feet east of the tracks through Leucadia and approximately 112 feet east of the tracks through Encinitas; that the paved portion of Vulcan Avenue varies in width from 20 to 24 feet; that it is possible for a motor vehicle to travel between Leucadia and Encinitas (i.e., between the Andrew Avenue crossing and the E Street crossing, a distance of 2-1/2 miles) on either side of the said tracks along either Highway 101 or Vulcan Avenue.

C.E.M.

That the area east of Vulcan Avenue is residential; that along the west side of Highway 101 in Leucadia there are located numerous stores, trailer camps, auto courts, cafes and service stations; that along Highway 101 in Encinitas, at and near the intersections of D Street and E Street, there is a more highly developed business section.

That all of the said crossings are situated in unincorporated territory of the County of San Diego and are crossings of County roads or streets with the rail lines of the Santa Fe, and that the Public Utilities Commission has jurisdiction over the construction, maintenance, improvement and closing of said crossings and the

apportionment of expense pertaining thereto. (P.U.C. Sections 1201, 1202 and 1203).

That there is a need for the retention and maintenance of some of the crossings involved in this proceeding there is no question. *GH*
The travel and safety conditions at each of the crossings will be considered separately.

Andrew Avenue Crossing No. 2-235.5 -

This crossing has a width of 29.7 feet. The grade of approach from the west is minus 3.3% and from the east minus 3.0%. The crossing is protected by two No. 8 flashing lights and two reflectorized advance warning signs. Recently the crossing and approaches were widened and some trees were removed for better visibility. The evidence shows that this crossing, with its present automatic protection, is considered safe and its retention appears to be justified as it is the most frequently used and the safest in the northerly area herein being considered. One accident has occurred at this location during the past twenty-six years with no resulting death or injury.

Hillcrest Drive Crossing No. 2-235.7 -

The evidence shows that this crossing has no automatic protection; that there is a steep approach of minus 17.7% from the west; that some vehicles with low clearance drag across and sometimes are held up due to the high crest; that the visibility approaching the crossing is unsatisfactory; that three accidents have occurred at this location, resulting in one death and one injury; that the crossing is located a distance of only two-tenths of a mile south of the Andrew Avenue crossing which affords safe and convenient access to the same points and places served by the Hillcrest Avenue crossing.

Approximately eighteen families all living on Hillcrest Drive have petitioned that this crossing be improved and permitted to remain open. The record clearly shows that the crossing is hazardous and that, due to the steep grade of approach from the nearby easterly edge of Highway 101, grade improvement is not practical without changing the grade of U. S. Highway 101 (see Fulvia Street crossing comment); that costs would not be justified in view of the proximity and safer condition of the Andrew crossing. It is the opinion of this Commission that this crossing is dangerous and, if closed, will not cause any material inconvenience to the general public.

Fulvia Street Crossing No. 2-236.5 -

This crossing is 1.03 miles southerly of the Andrew Avenue crossing and 0.82 miles southerly of Hillcrest Drive crossing, its width is 25 feet, the grade of approach from the west is minus 14.4% and from the east is plus 5.2%. Visibility is fair to good and the accident record is good, with three accidents resulting in one injury in twenty-seven years. The record shows that present automatic protection should be improved, that the west approach is steep, and the crossing too narrow.

Originally the recommended change for the crossing was to raise the west approach from a minus 14.4% grade to a minus 8.7% grade. Evidence adduced at the hearing shows that such a grade alteration, due to the proximity of Highway 101, would require a change of grade for both lanes of said highway for a distance of approximately 500 feet northerly and southerly from the intersection of Fulvia Street; and that the cost of reconstructing said highway alone would be approximately \$58,600. The lowering of the railroad grade at this intersection would also entail expenses which are not justified considering present vehicular traffic. The recommendation to raise the

west approach and install improved automatic protection was conditioned upon the closing of the D Street crossing in Encinitas. The record also shows that in the event the D Street crossing is not closed, the Fulvia Street crossing would require the widening of the street, flaring out the connections with the highway, installation of one additional wigwag signal and one reflectorized advance warning sign, at a cost of approximately \$2,541. A twenty-four hour traffic check showed that approximately 800 vehicles crossed at Fulvia Street. Considering the light traffic volume and the past accident record, the latter recommendations for improving this crossing appear to be adequate. Hereinafter we shall consider the evidence pertinent to the crossing at D Street.

Orpheus Avenue Crossing No. 2-237.3 -

Situated 0.76 miles southerly of Fulvia Street, this crossing has a width of 29.1 feet and maximum west and east grade approaches of minus 8.5% and minus 5.8% respectively. Of the six crossings under consideration, this is the second most traveled, 1,531 vehicles having crossed the track during a recent twenty-four-hour period. This crossing has been improved by the widening and flaring of approaches and removal of numerous trees. Except for a very short distance near the tracks on the west, where the grade is 8.5%, the approaches at this location are satisfactory. Present protection at the crossing consists of one wigwag signal, one reflectorized advance warning sign, and one boulevard stop sign. Based upon the retention of the D Street crossing, it is recommended that approximately \$2,556 be expended for the installation of an additional No. 3 wigwag, one more reflectorized advance warning sign, and that the west approach be raised to a grade of not more than 6%.

D Street Crossing No. 2-237.9 -

This crossing is in the business district of Encinitas one block north of the E Street crossing and 0.62 miles southerly of Orpheus Drive. It is 22.4 feet in width and has a west and east grade of approach of minus 5.2% and plus 9.8% respectively. The visibility at the crossing is poor and protection is now afforded by one No. 3 wigwag, two boulevard stop signs, and one reflectorized advance warning sign. A traffic check showed 1,233 vehicles use the crossing in a twenty-four hour period. The crossing is used less than the E Street crossing due to poor visibility and the existence of traffic signals at the intersection of E Street and Highway 101. A staff engineer originally recommended the closing of the D Street crossing (Exhibit No. 1). However, many witnesses representing civic and business groups, the local fire district, and the county road department, opposed the closing principally because of the resulting increase in traffic over the E Street crossing, the only other cross street in the business area. There is substantial evidence in the record supporting the position taken by the community against the closing of D Street at this time. Although the crossing is not now considered safe, an alternate recommendation for its improvement was also presented by the Commission engineer which would eliminate present dangers. The recommendation entails the installation of two No. 8 flashing light signals, one reflectorized advance warning sign, widening of the street to 52 feet, widening the east approach between Vulcan Avenue and the railroad tracks to 52 feet, and re-arrangement of boulevard stop signs (see Exhibit No. 3, page 2). The cost would be approximately \$8,167.

E Street Crossing No. 2-237.95 -

This is the principal crossing in Encinitas. The intersection of E Street and Highway 101 is protected by traffic lights. The railway crossing is protected by two No. 3 wigwag signals, two boulevard stop signs and a reflectorized sign. The west approach has a grade of minus 7.1% to minus 14.5%, the east approach plus 2% to plus 7.7%. The evidence shows that said crossing is not adequately protected. There was testimony that during peak traffic E Street between the tracks and Highway 101 becomes congested, and that the closing of D Street would aggravate this condition.

As the Commission is of the opinion that the D Street crossing should be improved rather than closed, the alternate recommended improvements for the E Street crossing (Exhibit No.3) are installation of two No. 8 flashing light signals, one reflectorized warning sign, widening of street and east approach, raising west approach to a grade of not more than 6% and rearrangement of boulevard stop signs. The cost is estimated at \$6,927.

Alternate Suggested Improvement -

There is testimony in the record indicating that crossing travel in the two communities could be considerably improved by the construction of an underpass at San Marcos Road and a grade crossing at a location in the vicinity of Cadmus Street; that such improvements would safely and conveniently take care of the east-west traffic now moving across the Fulvia, Orpheus and D Street crossings and eliminate the undesirable conditions existing at the latter locations. The Andrew Avenue and E Street crossings would be retained.

Cadmus Street is a desirable location for a grade crossing as it is approximately equidistant between Andrew Avenue on the north and E Street on the south. The terrain there is level, permitting a clear view from all approaches. The cost of construction was estimated at approximately \$8,000.

San Marcos Road intersects Vulcan Avenue at M.P. 237.6, or approximately 1,000 feet north of the D Street crossing and about 125 feet east of the railroad track. At this location the railroad track is on a fill 40 feet in height. The drainage in this ravine is carried through the fill in a concrete arch. The top of the headwall of this arch is roughly 25 feet below the top of the fill.

The topography at this location would readily adapt itself to the construction of an underpass below the railroad track and there would be sufficient distance between the top of the concrete arch culvert and the railroad track so that it would not be necessary to interfere with the drainage situation. No cost estimate for a grade separation at San Marcos Road was presented, but engineering testimony regarding topography at this location indicates that a trestle could be constructed at a reasonable cost.

The Commission having fully considered the evidence of record and having found as hereinabove set forth is of the opinion that the public interest will best be served by requiring the crossing changes and improvements as prescribed in the following order.

O R D E R

A public hearing having been held, the Commission being fully advised in the premises and good cause appearing,

IT IS ORDERED:

(1) That the Hillcrest Drive crossing No. 2-235.7 be closed.

(2) That the Fulvia Street crossing No. 2-236.5 be improved as follows:

Install one additional No. 3 wigwag signal.

Widen crossing to 30 feet.

Widen approaches to 30 feet and flare out connections with highway.

It is recommended that one reflectorized advance warning sign be placed approximately 300 feet east of crossing.

(3) That the Orpheus Avenue crossing No. 2-237.3 be improved as follows:

Install one additional No. 3 wigwag signal.

Raise west approaches to a grade of not to exceed 6%.

It is recommended that one reflectorized advance warning sign be placed approximately 300 feet east of the crossing.

(4) That the D Street crossing No. 2-237.9 be improved as follows:

Install two No. 8 flashing light signals.

Widen crossing to 52 feet.

Widen east approach between track and Vulcan Avenue to 52 feet.

It is recommended that one reflectorized advance warning sign be placed approximately 300 feet east of crossing.

It is also recommended that the boulevard stop signs at the intersection of D Street and Vulcan Avenue be changed so that a vehicle headed east on D Street would be given right of way over vehicles headed north or south on Vulcan Avenue.

(5) That the E Street crossing No. 2-237.95 be improved as follows:

Install two No. 8 flashing light signals.

Widen crossing to 52 feet.

Widen east approach between track and Vulcan Avenue to 52 feet.

It is recommended that one reflectorized advance warning sign be placed approximately 300 feet east of crossing.

It is also recommended that the boulevard stop signs at the intersection of E Street and Vulcan Avenue be changed so that a vehicle headed east on E Street would be given right of way over vehicles headed north or south on Vulcan Avenue.

(6) That the expenses for the construction, improvements and changes hereinabove ordered shall be borne by the County of San Diego and The Atchison, Topeka and Santa Fe Railway Company as follows:

By the County of San Diego:

One-half the cost of additional automatic protection.
Full cost of street improvements outside track area.
Full cost of street maintenance outside track area.
Full cost of advance warning signs.
Full cost of pavement markings, if any.

By The Atchison, Topeka and Santa Fe Railway Company:

One-half the cost of additional automatic protection.
Full cost of maintenance of automatic protection.
Full cost of street improvement within track area and two feet outside thereof.
Full cost of maintenance of said street area.

(7) That the County of San Diego and The Atchison, Topeka and Santa Fe Railway Company shall make the improvements and changes as hereinabove required within 180 days from and after the effective date of this order.

(8) That the County of San Diego and The Atchison, Topeka and Santa Fe Railway Company may, within 90 days from and after the effective date of this order, file with this Commission an alternate proposal in lieu of the improvements and changes ordered in paragraphs (2) to (4) hereinabove. Said alternate proposal may provide for a grade separation at San Marcos Road, a grade crossing at or in the immediate vicinity of Cadmus Street, and the closing of the present grade crossings at Fulvia Street, Orpheus Avenue and D Street. Upon the filing of an alternate proposal satisfactory to this Commission, said parties may petition this Commission for modification of such portions of said paragraphs (2), (3) and (4) as would no longer be required under the changed circumstances.

The hereinabove outlined permissive alternate proposal shall not be construed to relieve said parties of any of the requirements of paragraphs (1) to (7) inclusive, unless authority to deviate therefrom shall have first been obtained from this Commission.

The effective date of this order shall be twenty days after the date hereof.

Dated at San Francisco, California, this 1st day of June, 1954.

Ed. H. Mitchell
President

Justus J. Calver

Kenneth Pottel

Gene Higgins

Commissioners