

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2620
THE PERE MARQUETTE RAILWAY COMPANY
REPORT IN RE ACCIDENT
AT GREEN OAK, MICH., CN
AUGUST 23, 1942

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SUMMARY

Railroad: Pere Marquette
Date: August 23, 1942
Location: Green Oak, Mich.
Kind of accident: Collision with automobile and
derailment of train
Equipment involved: Passenger train : Automobile
Train number: 7
Engine number: 718
Consist: 7 cars
Speed: 60-65 m. p. h. : Unknown
Operation: Timetable, train orders and an
automatic block-signal and
automatic train-stop system
Track: Single; tangent; 0.83 percent
descending grade westward
Highway: Tangent; crosses track at angle
of $72^{\circ}30'$; level at crossing
Weather: Clear
Time: 6:15 p. m.
Casualties: 3 killed; 23 injured
Cause: Accident caused by automobile being
driven upon highway grade crossing
immediately in front of approaching
train

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2620

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS
UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

THE PERE MARQUETTE RAILWAY COMPANY

October 24, 1942.

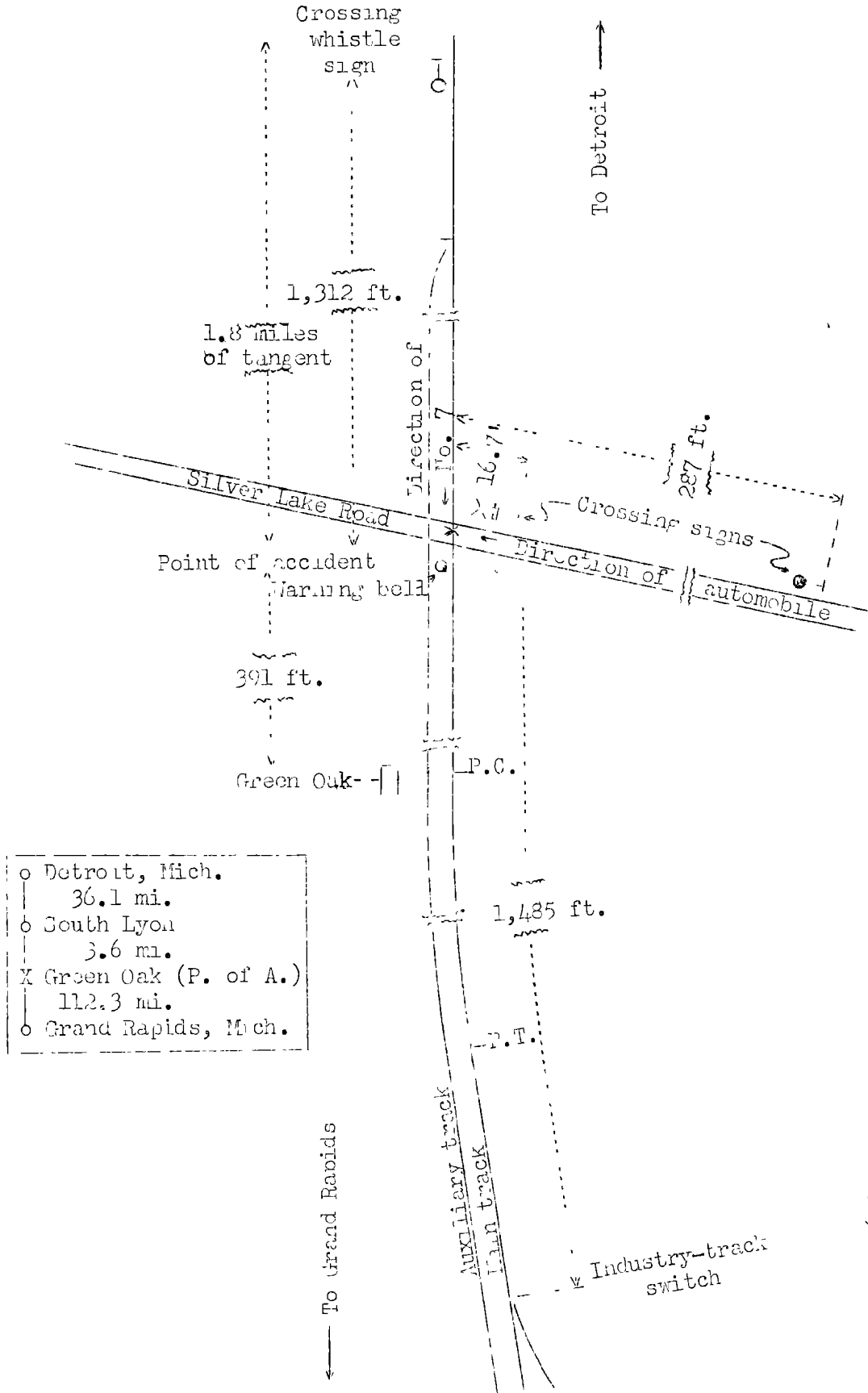
Accident at Green Oak, Mich., on August 23, 1942, caused
by an automobile being driven upon highway grade
crossing immediately in front of approaching train.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On August 23, 1942, there was a collision between a passenger train and an automobile on the Pere Marquette Railway at a highway grade crossing at Green Oak, Mich., and the train was derailed. The accident resulted in the death of the automobile driver and 2 railroad employees, and the injury of 23 passengers.

¹Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



- | | |
|---|----------------------|
| o | Detroit, Mich. |
| | 36.1 mi. |
| o | South Lyon |
| | 3.6 mi. |
| X | Green Oak (P. of A.) |
| | 112.3 mi. |
| o | Grand Rapids, Mich. |

Inv-262C
 Pere Marquette Railway
 Green Oak, Mich.
 August 23, 1942

Location of Accident and Method of Operation

This accident occurred on that part of the Detroit-Grand Rapids Division designated as Sub-Division No. 1 and extending between Detroit and Grand Rapids, Mich., a distance of 152 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by timetable, train orders and an automatic block-signal and automatic train-stop system. The accident occurred at a point 391 feet east of the station at Green Oak where the railroad is crossed at grade by Silver Lake Road. At the point of accident an auxiliary track parallels the main track on the north. At a point 1,485 feet west of the crossing a facing-point turnout for west-bound movements extends southwesterly to an industry track. As the point of accident is approached from the east on the railroad the track is tangent 1.8 miles to the crossing. At the point of accident the grade for west-bound trains is 0.83 percent descending. The highway crosses the tracks at an angle of 72°30'. As the point of accident is approached from the south on Silver Lake Road there is a tangent 1,760 feet to the crossing. The grade for north-bound vehicles on Silver Lake Road is descending, successively, 2.29 percent 300 feet, 3.4 percent 150 feet and 2.74 percent 150 feet to the crossing. Over the crossing the grade is level. Silver Lake Road is hard surfaced with bituminous material and is 18.5 feet in width.

An advance warning highway-crossing sign is located 287 feet south of the crossing and on the east side of the highway. This sign is a disk 24 inches in diameter mounted on a mast and bears the letters "R. R." in black on a white background. The overall height of this sign is 4 feet 6 inches. A reflector type cross-buck highway-crossing sign is located in the southeast angle of the crossing, 17 feet east of the center-line of the highway and 16.7 feet south of the main track. This sign bears the words "RAILROAD CROSSING" and "2 TRACKS" in yellow letters on a black background. An electrically-operated warning bell mounted on a mast 15 feet above the ground line is located 15 feet west of the center-line of the crossing, between the main track and the auxiliary track. The control circuit extends 3,211 feet east of the crossing. A crossing whistle sign for west-bound trains is located 1,312 feet east of the crossing.

Operating rules read in part as follows:

14. Engine Whistle Signals

Note--The signals prescribed are illustrated by "o" for short sounds; "___" for longer sounds. * * *

* * *

(1) — — o — Approaching public crossing at grade. To be prolonged until the crossing is reached.

* * *

The Railroad Laws of the State of Michigan read in part as follows:

SPEED OF VEHICLES ON HIGHWAY APPROACHING A RAILROAD CROSSING RESTRICTED AFTER PASSING ADVANCE WARNING SIGN.

(45) S 11405 C. L. Sec. 4. The person controlling the movement of any self-propelled vehicle or other vehicle, upon passing said sign board going toward the railroad or railway, shall reduce the speed of such vehicle so that within a distance of one hundred (100) feet from the nearest rail of such crossing, such vehicle shall be under control and shall not be proceeding at a greater speed than ten (10) miles per hour. * * *

In the vicinity of the point of accident the maximum authorized speed for passenger trains is 70 miles per hour.

Description of Accident

No. 7, a west-bound first-class passenger train, consisted of engine 718, one baggage car, four coaches and two Pullman sleeping cars, in the order named. All cars were of steel construction. At Detroit, 39.7 miles east of Green Oak, a terminal air-brake test was made and the brakes functioned properly en route. This train departed from Detroit at 5:10 p. m., according to the dispatcher's record of movement of trains, on time, passed South Lyon, 3.6 miles east of Green Oak and the last open office, at 6:10 p. m., 11 minutes late, and while moving at an estimated speed of 60 to 65 miles per hour it struck an automobile on a highway grade crossing, and was derailed.

The automobile involved was a 1941 Buick coach bearing Michigan license plates AS-90-80, and was owned and being driven by a man, sole occupant, who held operator's license B-1738395. The automobile moved northward on Silver Lake Road and was passing over the main track when it was struck by No. 7.

The driver of a vehicle moving northward on the highway has an unrestricted view of an approaching west-bound train throughout a distance of 37 feet northward from the advance warning sign, but from that point throughout a distance of 213 feet northward the view is obstructed by an embankment on the east side of the highway, then is unrestricted a distance of 37 feet to the crossing.

The automobile was demolished and the greater part of its wreckage was thrown to a point 90 feet west of the crossing and just south of the track. Part of the wreckage became lodged under the engine-truck wheels, which were derailed immediately west of the crossing. From this point westward throughout a distance of 1,485 feet to the facing-point switch of the industry track, flange marks appeared on the ties inside the gage side of the north rail and outside the south rail. The general derailment occurred at this switch. In the vicinity of the switch the track was torn up a distance of 200 feet. Engine 718 and its tender, remaining coupled, were derailed and stopped in reverse direction on their right sides, at a point 1,580 feet west of the crossing, south of the main track and parallel to it, and were badly damaged. The first car was derailed and stopped on its left side about 25 feet west of the tender, across the track and at right angles to it. The second, third and fourth cars were derailed and stopped upright and in general line with the track. The front truck of the fifth car was derailed.

The weather was clear at the time of the accident, which occurred about 6:15 p. m.

The employees killed were the engineer and the fireman.

Data

During the 30-day period preceding the day of the accident, the average daily movement of trains over the crossing involved was 21.73. During the 24-hour period beginning at 7 a. m., August 28, 1942, 158 vehicles, 6 passenger trains and 30 freight trains passed over this crossing.

In tests made immediately after the accident, the warning bell at the crossing functioned properly.

Discussion

No. 7 was approaching the crossing involved at a speed of 60 to 65 miles per hour in territory where the maximum authorized speed for passenger trains was 70 miles per hour. The whistle signal was sounded for the crossing in compliance with the rules. The automobile approached from the left and because of the embankment east of the highway and south of the tracks, the automobile could not be seen by the enginemen until it was practically on the crossing. It is not known when the driver of the automobile first saw the approaching train or when the enginemen first saw the approaching automobile, as all three of these men were killed in the accident. The evidence indicates that the train brakes were not applied until after the collision occurred. The train struck the automobile about midway and the greater part of the wreckage was thrown to the

left a short distance west of the crossing. Part of the wreckage became lodged under the front of the engine and the engine-truck wheels were derailed.

The driver of the automobile was a resident of the community in which the accident occurred and the investigation disclosed that he drove his automobile over the crossing involved at least twice daily in traveling between his home and place of business. Immediately south of the crossing there are two warning signs for north-bound traffic on the highway. These signs could be seen a considerable distance. The warning bell at the crossing was tested immediately after the accident occurred and it functioned properly. Had the driver properly controlled the speed of his automobile in the vicinity of the crossing and looked toward the east at a point 37 feet south of the crossing he could have seen the approaching train, and undoubtedly this accident would have been averted.

Cause

It is found that this accident was caused by an automobile being driven upon a highway grade crossing immediately in front of an approaching train.

Dated at Washington, D. C., this twenty-fourth day of October, 1942.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.