Railway accident investigation report

Railway operator : East Japan Railway Company.
Accident type : Train derailment, accompanied by level crossing accident.
ate and time : About 20:37, April 7, 2013.
Location : Jukkenzaka level crossing, class one level crossing, located at around 59,405 m from the origin at Tokyo station, in the premises of Chigasaki station, Tokaido Line, quadruple track, Chigasaki City, Kanagawa Prefecture.

SUMMARY
On April 7, 2013, the inbound Local 336M train, composed of 10 vehicles, starting from Ito station, Ito Line, bound for Tokyo station, Tokaido Line, of East Japan Railway Company, departed from Hiratsuka station at 20:34, 18 minutes behind schedule.
The driver of the train, running in coasting operation at the velocity of about 103 km/h, found the obstacle in Jukkenzaka level crossing road about 200 m ahead, and immediately applied an emergency brake but it was too late. The train collided with the light motor vehicle, which was the obstacle, and ran with pushing the light motor vehicle about 270 m, and stopped.
It was found that all 2 axles in the front bogie of the first vehicle of the train derailed to right side of the track.
There were about 300 passengers and 4 train crews, i.e., driver in charge, conductor in charge, driver in crew riding and conductor in crew riding, were onboard the train, one passenger was injured. There were driver and 2 fellow passengers in the light motor vehicle when the light motor vehicle entered into the level crossing, but no one was injured because they already evacuated out of the light motor vehicle.

PROBABLE CAUSES
It is probable that the accident occurred as the train collided with the light motor vehicle which stopped in the level crossing road with its tires went off the shoulder of the crossing road, and continued running with the light motor vehicle caught under the coupler in the front face of the train, and derailed because a part of the light motor vehicle bumped with the guardrail.
It is probable that the light motor vehicle went off the shoulder of the level crossing road because the driver of the light motor vehicle mistook handling operation in the situation such that the width of the level crossing road was narrow compared to the light motor vehicle, in addition, it was dark after the sunset, furthermore, there was an possibility that the driver of the light motor vehicle was wavered, as the driver moved the light motor vehicle into the level crossing considering that he could pass through but he was obliged to go back the way after noticed it was impossible to pass through.
It is probable that the driver moved the light motor vehicle into the level crossing considering that he could pass through because the space between the post and fence at the entry side of the level crossing, which were installed by the railway company formerly to secure the effectiveness of
regulation for prohibition of automobile traffic, was wide enough to pass through for the light motor vehicle, and there was no signpost etc., for prohibition of automobile traffic at the entry side of the level crossing after the traffic regulations was cancelled, furthermore, the driver of the light motor vehicle could not notice that there is no space to pass through the posts at the exit side of the level crossing.