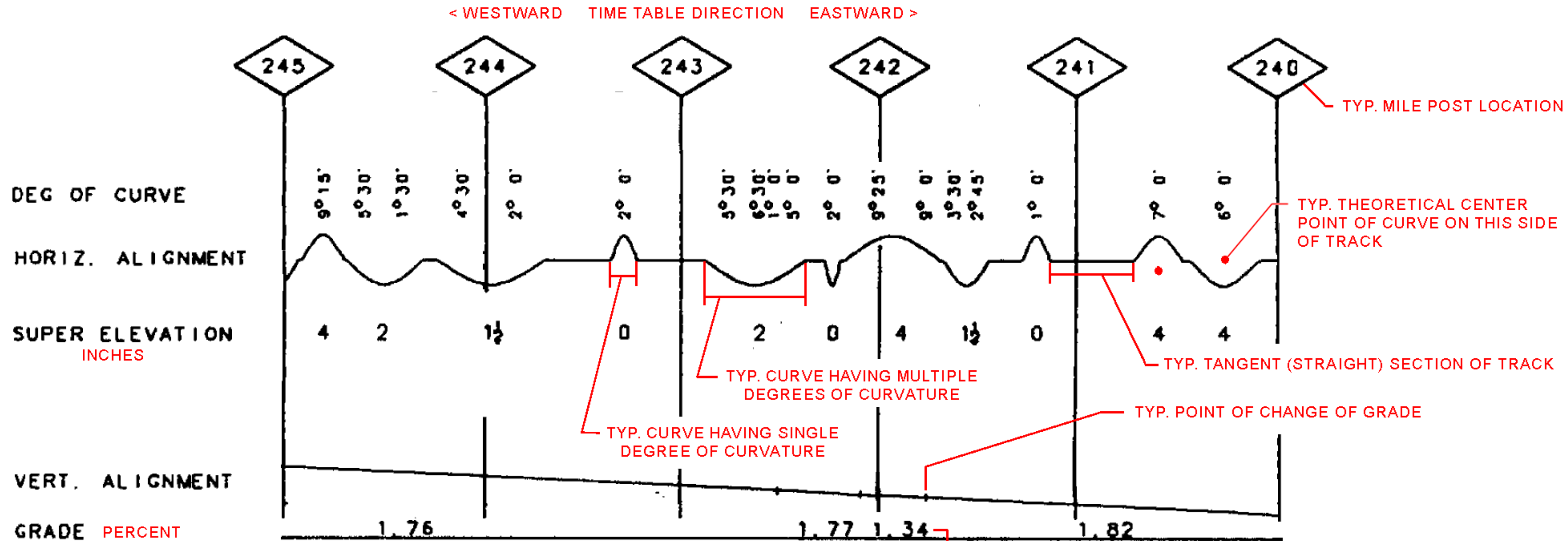


EXPLANATION OF SELECTED TRACK GEOMETRY ELEMENTS OF A CONRAIL TRACK CHART, CIRCA 1995

MILE POST 242 IS HORSESHOE CURVE WEST OF ALTOONA PENNSYLVANIA

TRACK CHART ELEMENTS IN BLACK ORIGINAL CONRAIL 1995
 TRACK CHART ELEMENTS IN RED ADDED BY J. G. HOOK 10-3-2010



CURVE NOTATION WHEN MOVING IN THE DIRECTION AWAY FROM MILE POST ZERO
 DOWNWARD ARC IN HORIZONTAL ALIGNMENT LINE IS RIGHT HAND CURVE
 UPWARD ARC IN HORIZONTAL ALIGNMENT LINE IS LEFT HAND CURVE

EXAMPLE OF GRADE COMPENSATED FOR CURVATURE
 THE INTENTION BEING TO REDUCE THE GRADE ON A GIVEN CURVE IN ORDER
 THAT THE COMBINED GRADE AND CURVE RESISTANCE APPROXIMATELY EQUALS
 THE GRADE RESISTANCE OF TANGENT TRACK BEFORE OR AFTER THE GIVEN
 CURVE OR EQUALS THE COMBINED GRADE AND CURVE RESISTANCE OF CURVED
 TRACK BEFORE OR AFTER THE GIVEN CURVE.