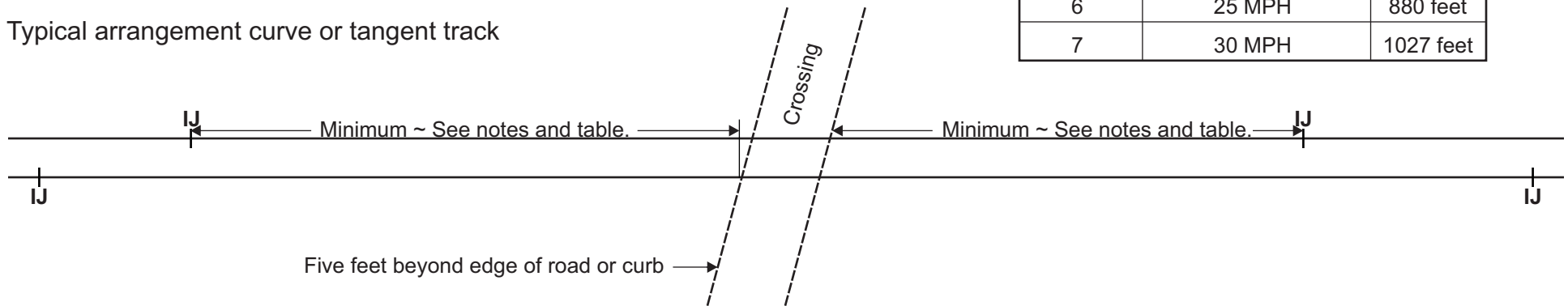


CHESAPEAKE AND DELAWARE, LLC BLACK RIVER RAILROAD SYSTEM

XJ ~ Existing Joint
CJ ~ Compromise Joint
IJ ~ Insulated Joint

Reference	SPEED	Min. Ft.
1	Stop and Proceed	45 feet
2	5 MPH	183 feet
3	10 MPH	366 feet
4	15 MPH	550 feet
5	20 MPH	733 feet
6	25 MPH	880 feet
7	30 MPH	1027 feet

Typical arrangement curve or tangent track



For guidance in new construction and upgrades:

1. Typical layout for public grade crossing island where no turnouts or other special track or structures exist.
2. Far approach Insulated Joints (IJs) shall installed at existing joints, with existing staggers, unless otherwise specified.
3. IJs shall be 6-hole encapsulated, painted yellow, and shall match the section of the existing rail.
4. The IJ closest to the crossing shall not be less than, but shall be as close to the minimum distance shown in the speed table.
5. Two new 7" x 9" grade creosoted wood ties on nominal 24" centers shall be installed at each IJ.
6. Ties at IJs shall be tamped so that joints are supported to match uniform track surface.
7. All joints between far approach IJ and road shall be double bonded.
8. Proposals shall include vertical profile and stagger plans specific to each crossing.
9. All work shall meet applicable NJDOT Commisioner's Order.
10. All materials shall be made in the USA, with providence.