

| CROSSING SURFACES |                |
|-------------------|----------------|
| Type              | Definition     |
| C                 | Concrete       |
| R                 | Rubber         |
| RA                | Rubber/Asphalt |
| TA                | Timber/Asphalt |

| STOP ZONE FOR RUBBER CROSSING |                                     |
|-------------------------------|-------------------------------------|
| Design Speed<br>(mph)         | Zone Length<br>(Distance From Stop) |
| 45 Or Less                    | 250'                                |
| 50 - 55                       | 350'                                |
| 60 - 65                       | 500'                                |
| 70                            | 600'                                |


Notes:

1. Type R Crossings are NOT to be used for multiple track crossings within zones for an existing or scheduled future vehicular stop. Zone lengths are charted above.
2. Single track Type R Crossings within the zones on the chart may be used unless engineering or safety considerations dictate otherwise.

### GENERAL NOTES

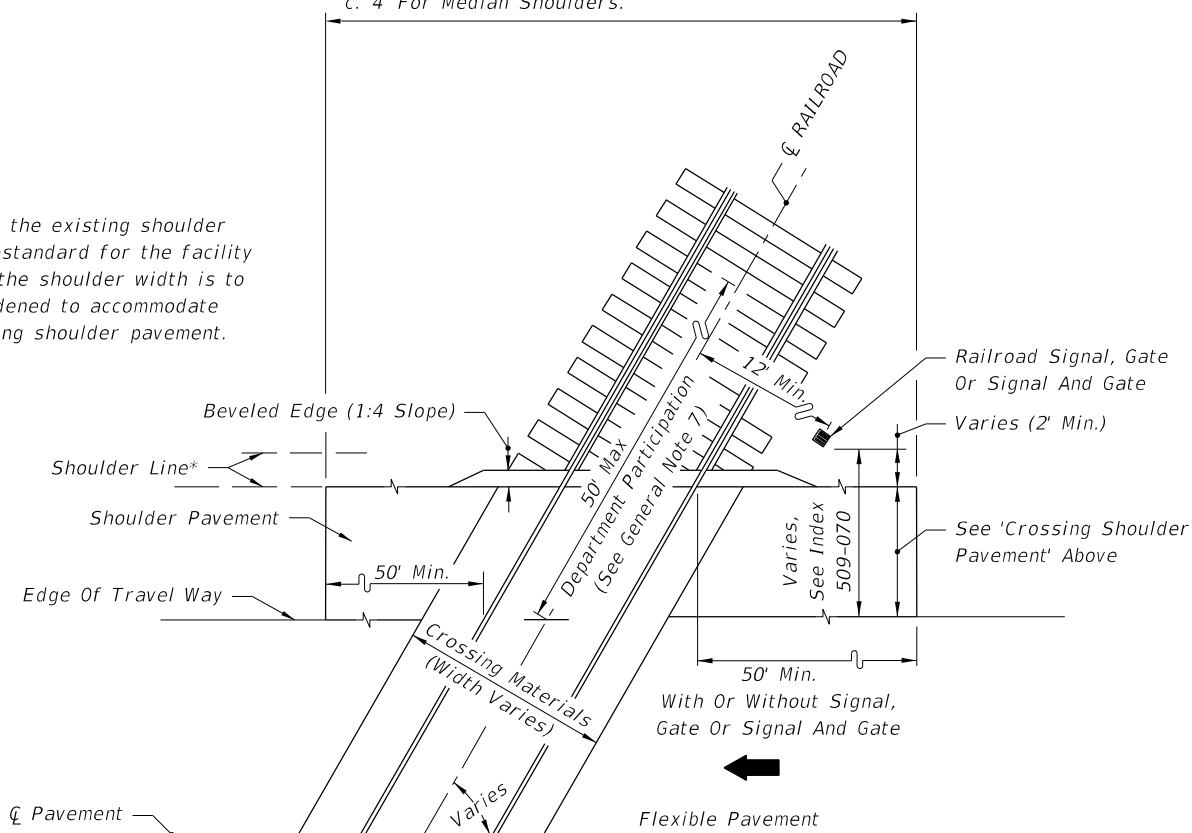
1. The Railroad Company will furnish and install all track bed (ballast), crossties, rails, crossing surface panels and accessory components. All pavement material, including that through the crossing, will be furnished and installed by the Department or its Contractor, unless negotiated otherwise.
2. When a railroad grade crossing is located within the limits of a highway construction project, a transition pavement will be maintained at the approaches of the crossing to reduce vehicular impacts to the crossing. The transition pavement will be maintained as appropriate to protect the crossing from low clearance vehicles and vehicular impacts until the construction project is completed and the final highway surface is constructed.
3. The Central Rail Office will maintain a list of currently used Railroad Crossing Products and will periodically distribute the current list to the District Offices as the list is updated.
4. The Railroad Company shall submit engineering drawings for the proposed crossing surface type to the Construction Project Engineer and/or the District Rail Office for concurrence along with the List of Railroad Crossing Products. The approved engineering drawings of the crossing surface type shall be made a part of the installation agreement.
5. Sidewalks shall be constructed through the crossing between approach sidewalks of the crossing. Sidewalks shall be constructed with appropriate material to allow unobstructed travel through the crossing in accordance with ADA requirements.
6. Install pavement in accordance with the Specifications.
7. The Department will participate in crossing work, that requires adjustments to rail outside of the crossing, no more than 50 feet from the edge of the travel way.

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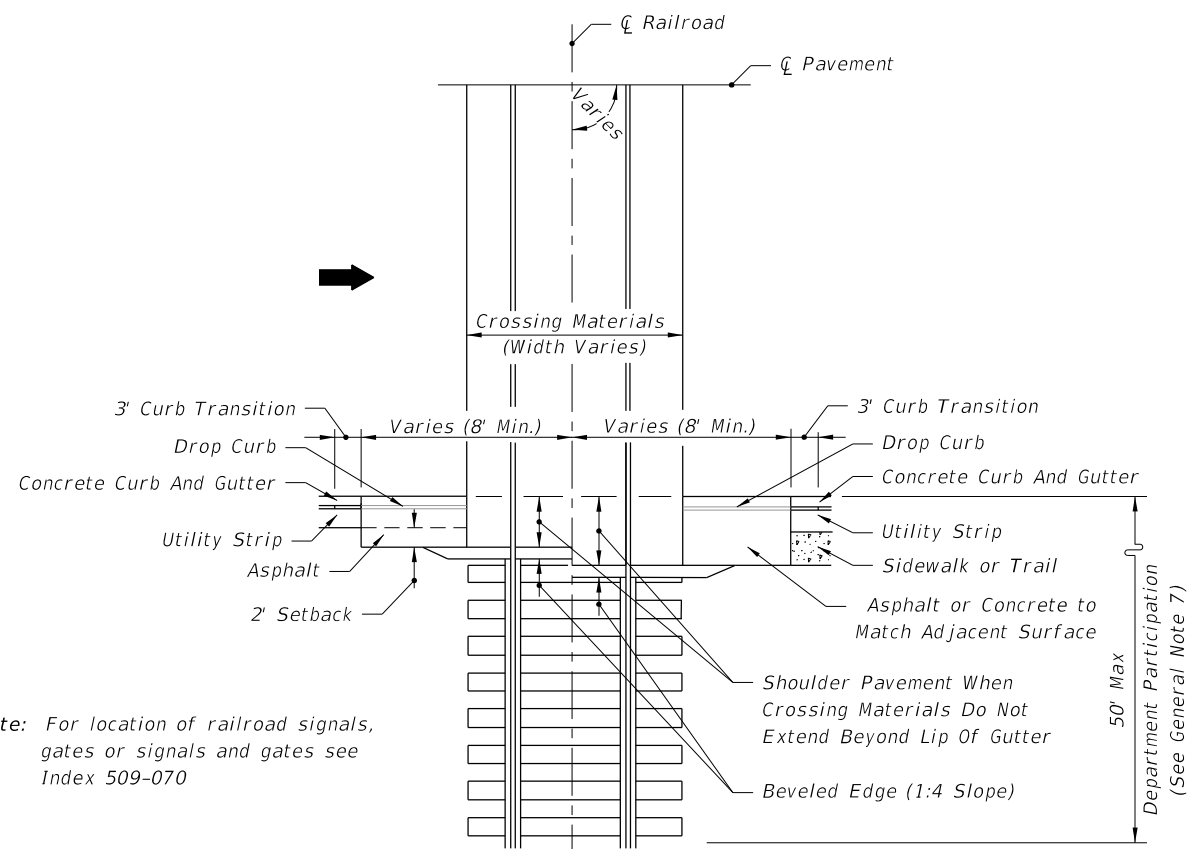
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|---------------------------|----------|--------------|---|---------------------------|------------------|-----------------|
| LAST REVISION<br>11/01/17 | REVISION | DESCRIPTION: | <br>FY 2020-21<br>STANDARD PLANS | RAILROAD (GRADE) CROSSING | INDEX<br>830-T01 | SHEET<br>1 of 2 |
|---------------------------|----------|--------------|---|---------------------------|------------------|-----------------|

Crossing Shoulder Pavement  
 (Except Area Occupied By Crossing Surfacing Material):  
 a. To Shoulder Line For Outside Shoulders Less Than 8' Wide.  
 b. To 8' Maximum Width For Outside Shoulders 8' Or Wider  
 (Regardless Of Approach Shoulder Pavement Width).  
 c. 4' For Median Shoulders.

\* Where the existing shoulder is substandard for the facility type, the shoulder width is to be widened to accommodate crossing shoulder pavement.

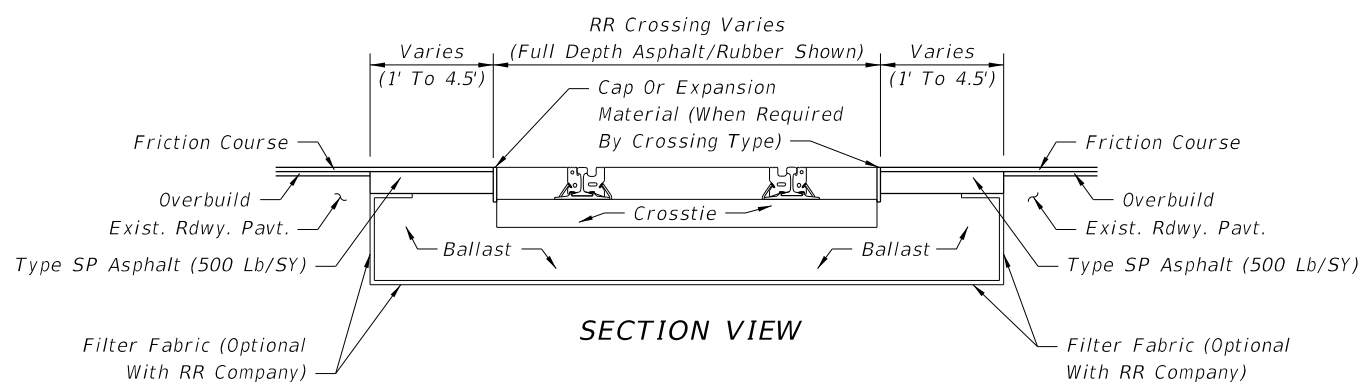


HALF PLAN  
 ROADWAYS WITH FLUSH SHOULDERS

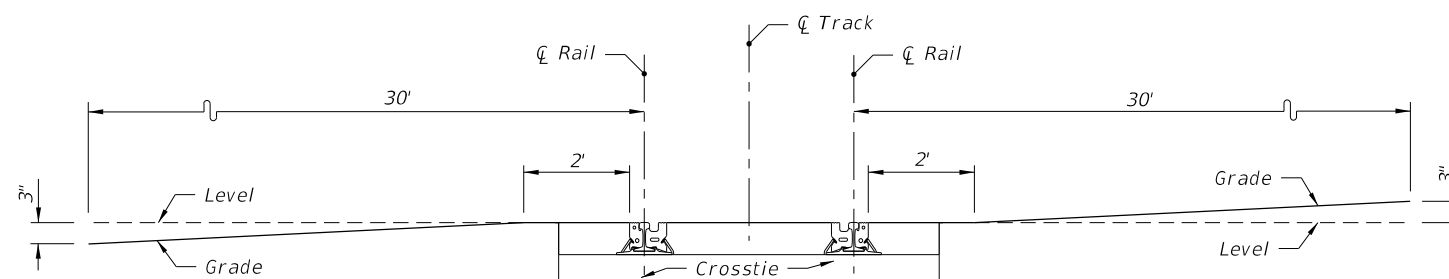


HALF PLAN  
 CURBED ROADWAYS

Note: For location of railroad signals, gates or signals and gates see Index 509-070



TYPICAL CROSSING MATERIAL REPLACEMENT AT RR CROSSINGS



To prevent low-clearance vehicles from becoming caught on the tracks, the crossing surface should be at the same plane as the top of the rails for a distance of 2 feet outside the rails. The surface of the highway should also not be more than 3 inches higher or lower than the top of the nearest rail at a point 30 feet from the rail unless track superelevation makes a different level appropriate. Vertical curves should be used to traverse from the highway grade to a level plane at the elevation of the rails. Rails that are superelevated, or a roadway approach section that is not level, will necessitate a site specific analysis for rail clearances.

VERTICAL ROADWAY ALIGNMENT THROUGH A RAILROAD CROSSING

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|                           |              |  |                              |                           |        |       |
|---------------------------|--------------|--|------------------------------|---------------------------|--------|-------|
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