



GENERAL NOTES:

1. Sectional treated timber panels (conforming to A.R.E.A. specifications):
 - A. Panels shall be full depth and eight feet in length. Shims will not be allowed. The top of the panels should match the top of the rails.
 - B. Panels shall be one of the following fine-grained hardwood timbers: a) black gum, b) tupelo gum, c) sweet gum.
 - C. Panels shall have pre-bored holes 13/16" in diameter for the steel bolts and the drive spikes. Counter bore dimensions for the bolt heads and the drive spike heads shall be 2-1/2" in diameter and 1-1/2" deep. All timbers shall be drilled, countersunk and chamfered, as required, prior to creosote pressure treatment.
 - D. Two steel bolts shall be used per panel section. The steel bolts shall be 3/4" galvanized square head machine bolts and shall have a 1-1/2" flat washer under the head and a 1-1/2" flat washer and a lock washer under the nut.
 - E. Drive spikes shall have a washer-head and be 3/4" in diameter. Drive spikes shall be driven, not turned, into the cross ties and shall extend a minimum of 5" into the cross ties. Eight drive spikes shall be used per panel section.
 - F. Panel ends shall be chamfered (see detail this sheet).

2. Crossties (conforming to A.R.E.A. specifications):
 - A. New cross ties shall be used under the entire length of the crossing.
 - B. New crossties shall be 7" x 9" x 8'-6" and shall be made of oak or similar hardwood with creosote pressure treatment.
 - C. New crossties shall be accurately spaced at 19-3/16" centers throughout the crossing to accommodate the 8' panel sections.
 - D. After the panel sections have been properly located, 9/16" diameter holes shall be bored to receive the drive spikes. These holes shall be swabbed with creosote oil before the drive spikes are placed.
3. Ballast (conforming to A.R.E.A. specifications):
 - A. New clean crushed rock ballast shall be used through out the length of the crossing.
 - B. Top of ballast shall be 2" below the top of the crossties.
4. Continuous welded rail shall be used throughout the crossing and shall extend a minimum of 6' beyond the ends of the panel sections. Rails shall be spiked to perfect line.
5. After the crossing is in place, the specified asphaltic pastic shall be used to fill the countersunk drive spike holes, the open area between the rails and the panel sections, and the open area between the existing pavement and the panel sections.
6. If the crossing has an existing pipe system for drainage, the installation of new perforated pipes of equal size will be required at the locations shown in the sectional view.
7. The 1/4" rubber tie pad is required on each crosstie that supports a panel section.
8. Subgrade preparation and placement of asphaltic concrete shall conform to Section 2200 of the "Construction and Materials Specification" as adopted by the Kansas City, Missouri Public Works Department.
9. Use of this standard will only be permitted by written approval from the office of the Director of Public Works, otherwise Standard Plan RRC-2 applies.

KANSAS CITY, MISSOURI DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION	ADOPTED _____ DIRECTOR OF PUBLIC WORKS	APPROVED _____ CITY ENGINEER	REVISED 9-1-81 Filter Membrane _____ _____	RAILROAD CROSSING TIMBER	STANDARD PLAN R R C - 1
_____ DATE		_____ ENTRY NUMBER			