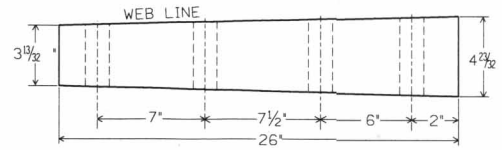
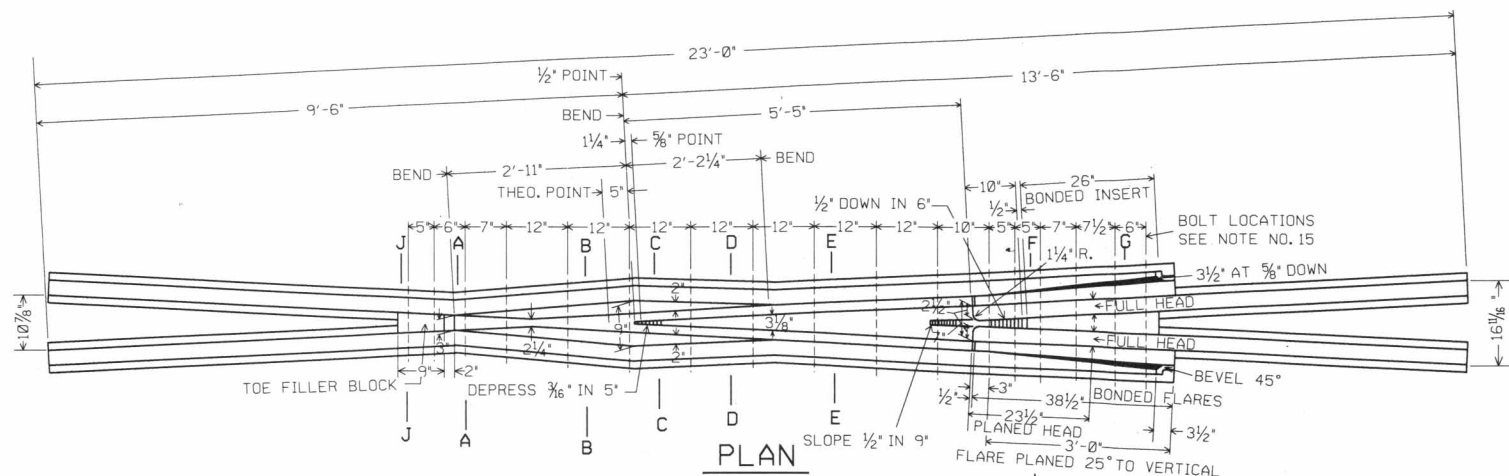
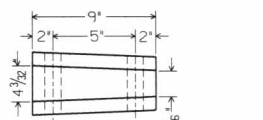


REVISIONS  
 B-June, 1978  
 C-Oct., 1980  
 D-May, 1986  
 E-May, 1987  
 F-Aug., 1991  
 G-Sept., 1994  
 (Redrawn)

FROG ANGLE = 5°-43'-29"

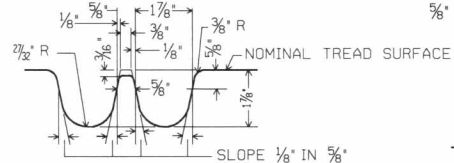


BONDED INSERT

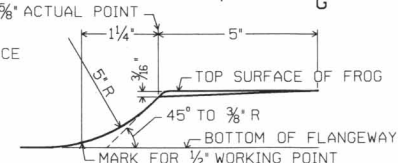


SPREADS SHOWN ARE 5/8" DOWN ON RAIL HEAD

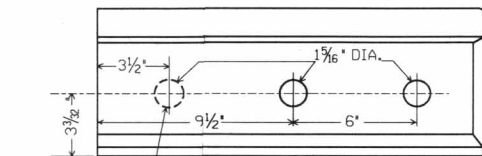
TOE FILLER BLOCK



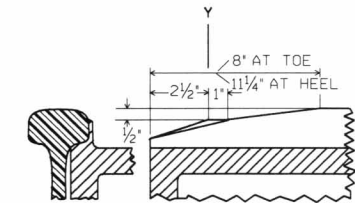
SECTION AT POINT



ELEVATION OF FROG

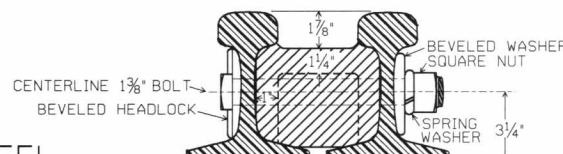


RAIL DRILLING

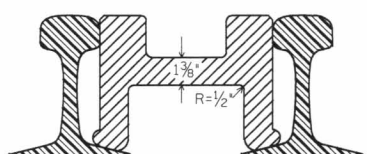


SECTION Y-Y

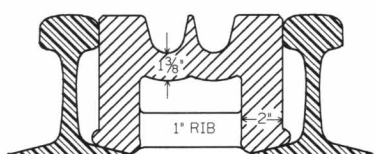
SECTION AT TOE AND HEEL  
 END OF MANGANESE



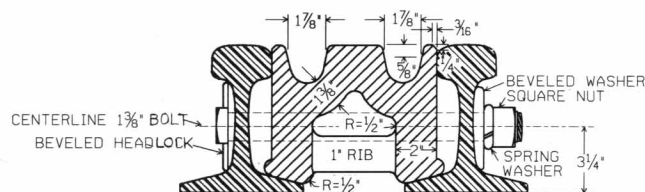
SECTION A-A



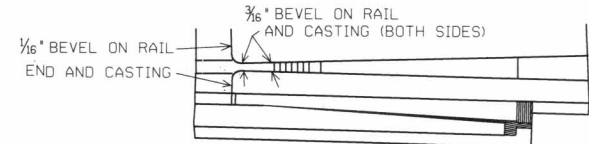
SECTION B-B



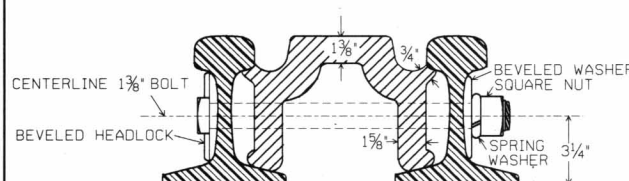
SECTION C-C



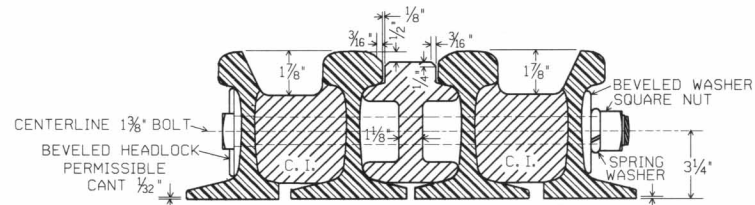
SECTION D-D



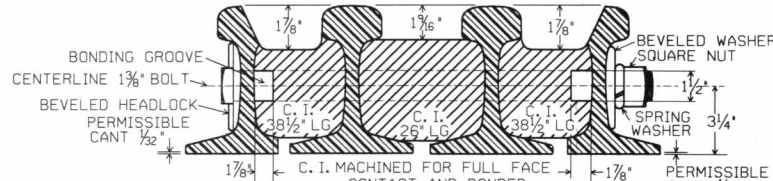
BEVEL DETAIL AT HEEL END OF CASTING



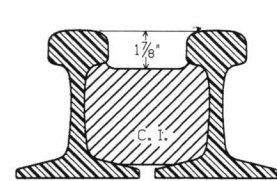
SECTION E-E



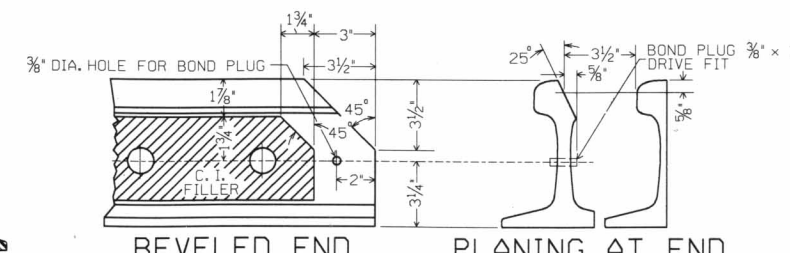
SECTION F-F



SECTION G-G



SECTION J-J



BEVELED END OF WING RAIL

PLANING AT END OF WING RAIL

NOTES

- 1-This Plan is for use with Conrail Specification MW 180 for 136RE rail.
- 2-The 136RE rail shall be per the current Conrail Plan 71016.
- 3-All rails shall be fully Heat Treated (Brinell 341-388).
- 4-Rail ends shall not be beveled, except where shown.
- 5-Workmanship and materials shall be per current AREA Specifications.
- 6-Heavy wall casting shall be per current AREA Specifications.
- 7-Frog center casting shall be Explosion Hardened and done prior to assembly.
- 8-Casting shall be Radiographed for internal soundness.
- 9-Casting shall be Hi-Quality and to the internal soundness levels on the current Conrail Plan 74165.
- 10-All bolt holes in rails shall be chamfered 1/16".
- 11-When frog is to be used in bolted track, the first bolt hole is to be drilled in the field by Conrail.
- 12-The bolt holes in the heel end of the casting for heel rails, wing rails and fillers shall be cored 1 9/16" diameter. All other holes cored in the casting can be round or elongated.
- 13-Drilling of bolt holes in the toe end of the wing rails and both ends of the heel rails shall not be permitted through the stamping on a rail.
- 14-Frog bolts shall be square head, Hi-Tensile, heat treated steel, Grade 5, 1 3/8" diameter with ASAH square nuts, headlocks, washers and AREA spring washers.
- 15-For bolt lengths see the current Conrail Plan 71501.
- 16-Frog bolts must be of proper length for each location throughout the frog. After torquing of the bolt, between 1/2"-1 1/4" of the bolt should extend beyond the face of the nut. Burning or cutting the bolt to size will not be permitted.
- 17-Frog bolt nuts shall be tightened to 1650 Ft. Lbs. +/- 50 Ft. Lbs. with dry threads.
- 18-For the location of Swivel Shoulder Frog Plates see the current Conrail Plan 73185.
- 19-The weight of the frog is 4920 Lbs.
- 20-The Item Numbers are 01-332848 for standard length and 01-332830 for maintenance length.
- 21-Heel rail section of frog shall be glued using Allegheny Temprange Epoxy.

CONRAIL 74161-G  
 STANDARD  
 NO. 10 RAILBOUND MANGANESE  
 STEEL FROG  
 136-RE  
 DECEMBER, 1977  
 W & L Heide DIR. - STANDARDS & TRACK ANALYSIS  
 B. Willbrent CHIEF ENGINEER