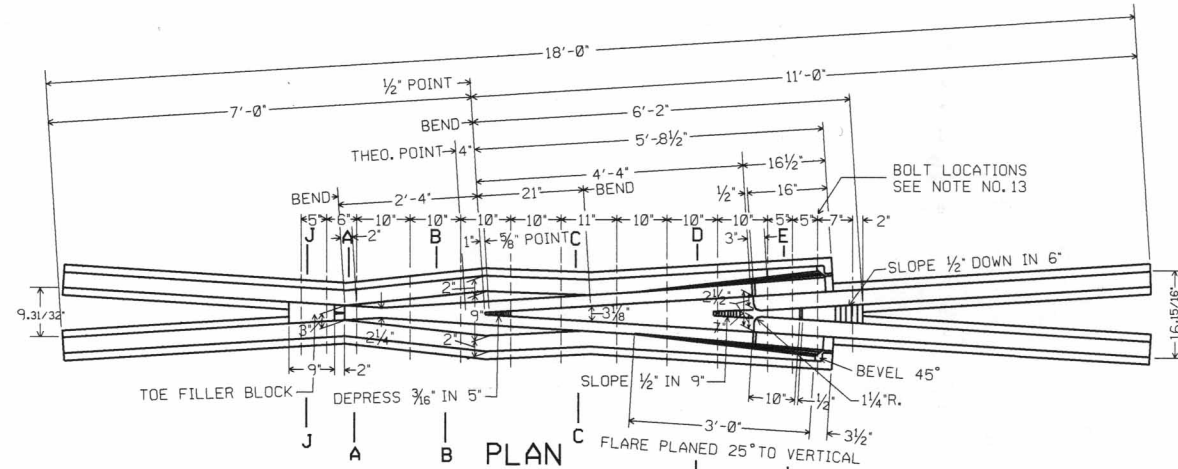


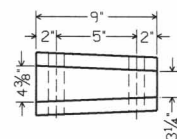
REVISIONS  
 B-June, 1978  
 C-Oct., 1980  
 D-May, 1986  
 E-May, 1987  
 F-Sept., 1994  
 (Redrawn)  
 G-Sept., 1995

FROG ANGLE = 7°-09'-10"



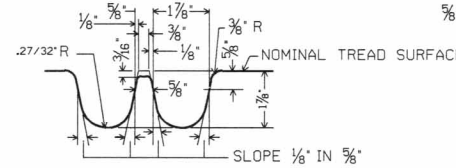
**NOTES**

- 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 or Head Hardened.
- 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 will NOT be Explosion Hardened.
- 8-All bolt holes in rails shall be chamfered 1/16".
- 9-When frog is to be used in bolted track, the first bolt hole is to be drilled in the field by Conrail.
- 10-The bolt holes in the heel end of the casting for heel rails, wing rails and fillers shall be cored 1/16" diameter. All other holes cored in the casting can be round or elongated.
- 11-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.
- 12-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.
- 13-For bolt lengths see the current Conrail Plan 71501.
- 14-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.
- 15-Frog bolt nuts shall be tightened to 1650 Ft. Lbs. +/- 50 Ft. Lbs.
- 16-For the location of Swivel Shoulder Frog Plates see the current Conrail Plan 73184.
- 17-The weight of the frog is 2852 Lbs.
- 18-The Item Numbers are 01-332715 for standard length and 01-332723 for maintenance length.

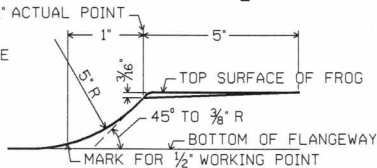


SPREADS SHOWN ARE 5/8" DOWN ON RAIL HEAD

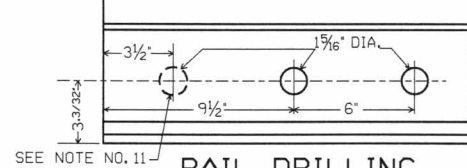
**TOE FILLER BLOCK**



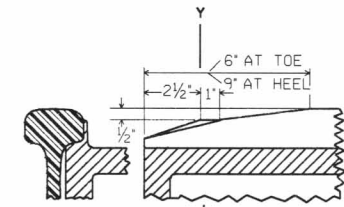
**SECTION AT POINT**



**ELEVATION OF POINT**

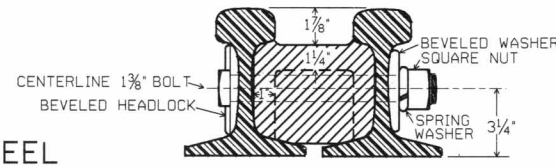


SEE NOTE NO. 11 **RAIL DRILLING**

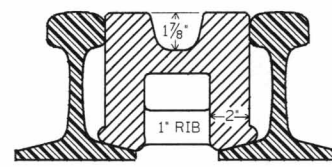


**SECTION Y-Y**

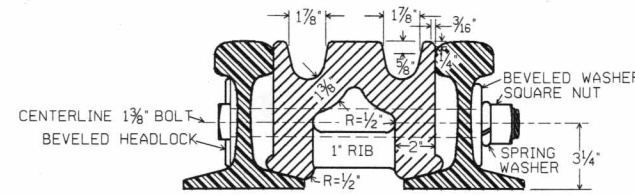
**SECTION AT TOE AND HEEL  
END OF MANGANESE**



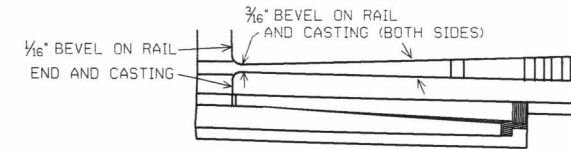
**SECTION A-A**



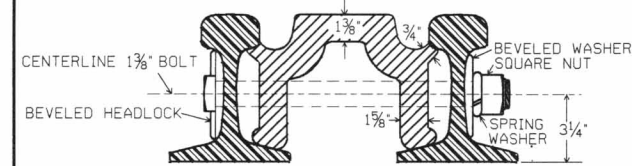
**SECTION B-B**



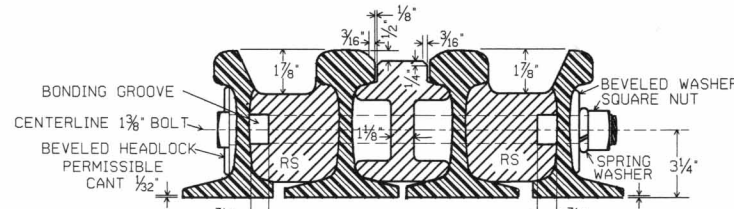
**SECTION C-C**



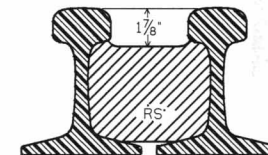
**BEVEL DETAIL AT HEEL END OF CASTING**



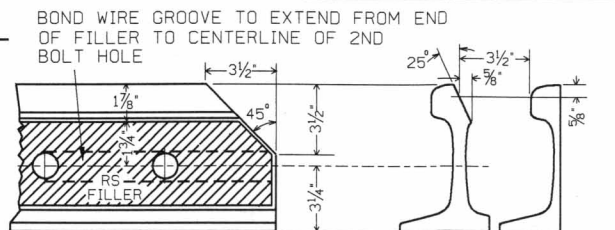
**SECTION D-D**



**SECTION E-E**



**SECTION J-J**



**BEVELED END OF WING RAIL**

**PLANING AT END OF WING RAIL**



**CONRAIL** 74160-G  
 STANDARD

**NO. 8 RAILBOUND MANGANESE  
STEEL FROG**

136-RE  
 DECEMBER, 1977

*W.L. Hilde*

*B.G. Willbrunt*

DIR. - STANDARDS & TRACK ANALYSIS

CHIEF ENGINEER