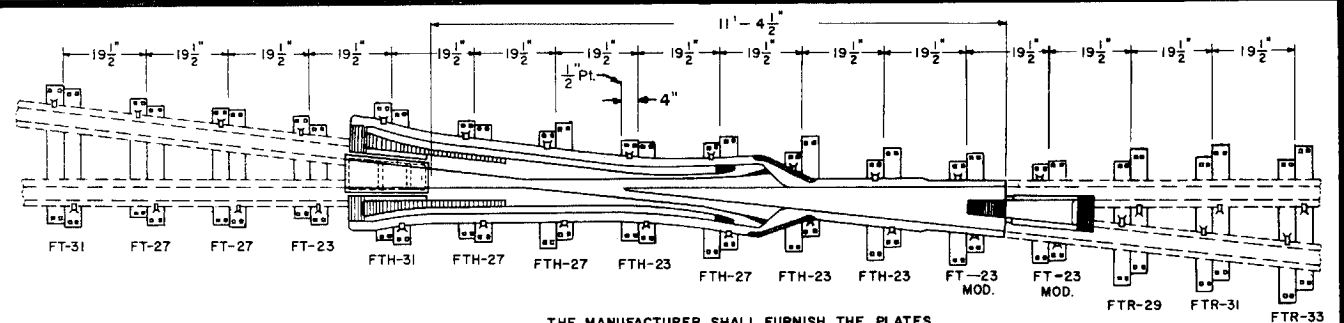
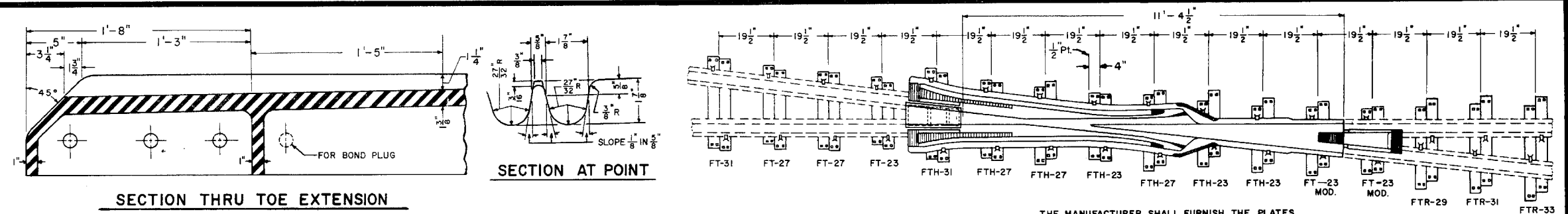


Revised:  
B-March 1978  
C-May 1983



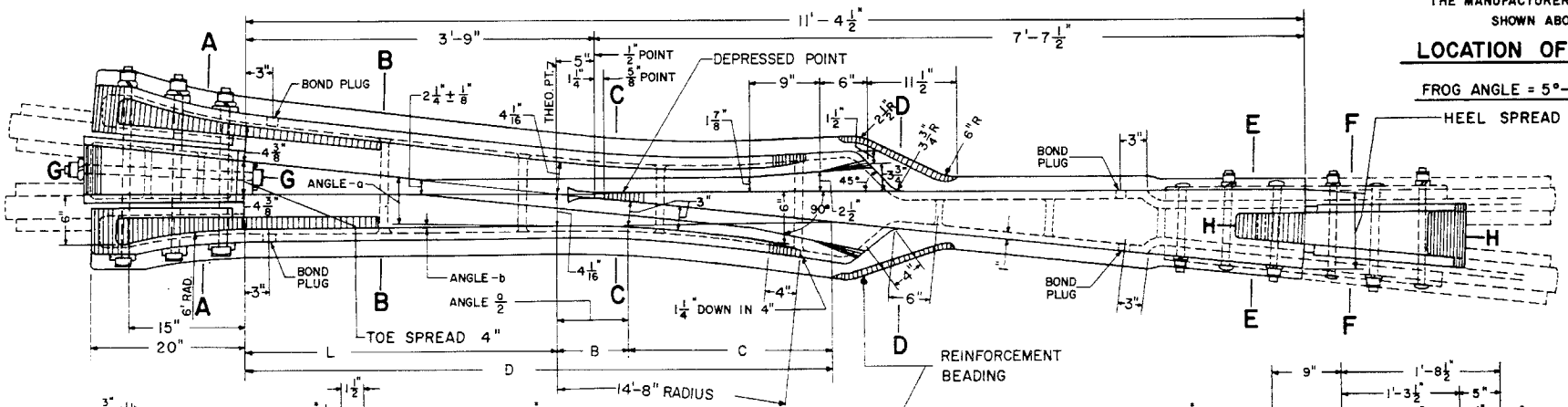
THE MANUFACTURER SHALL FURNISH THE PLATES SHOWN ABOVE WITH THE FROG

**LOCATION OF FROG TIE PLATES**

FROG ANGLE = 5°-43'-29"  
HEEL SPREAD 9 3/4"

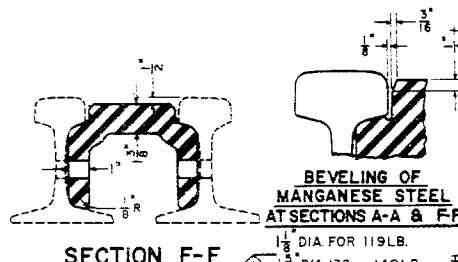
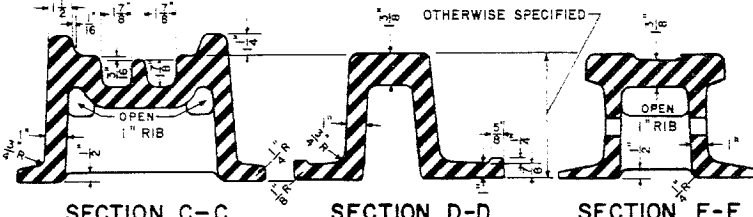
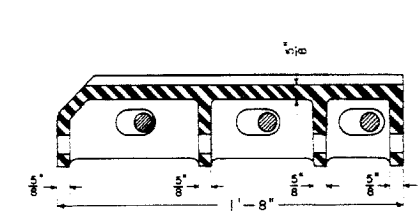
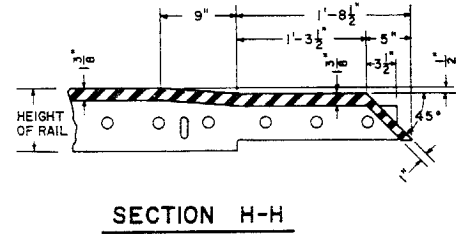
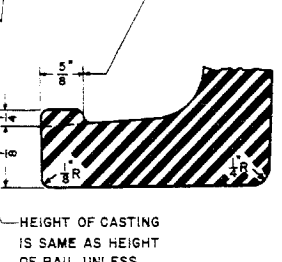
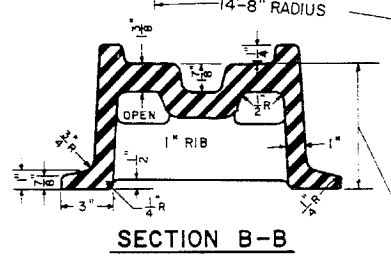
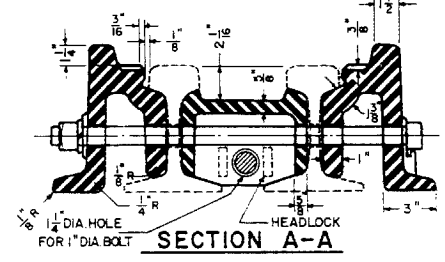
**FROG TIE PLATES REQUIRED**

- 2 - FT 23 FROG TIE PLATES
- 4 - FT 23 MOD. FROG TIE PLATES
- 4 - FT 27 FROG TIE PLATES
- 2 - FT 31 FROG TIE PLATES
- 6 - FTH 23 FROG TIE PLATES
- 6 - FTH 27 FROG TIE PLATES
- 2 - FTH 31 FROG TIE PLATES
- 2 - FTR 29 FROG TIE PLATES
- 2 - FTR 31 FROG TIE PLATES
- 2 - FTR 33 FROG TIE PLATES



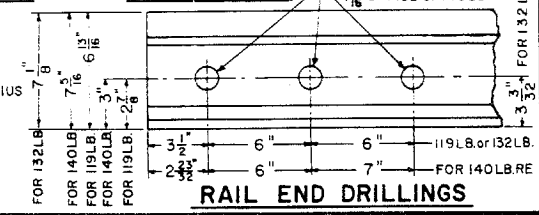
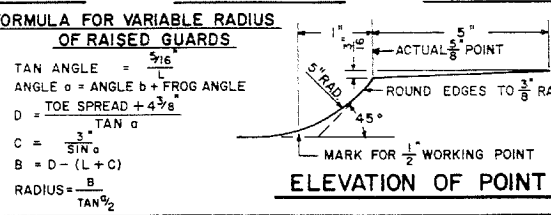
**NOTES**

- 1- THIS PLAN IS FOR USE WITH A.R.E.A. RECOMMENDED STANDARDS FOR 119R.E., 132R.E. OR 140R.E. RAIL.
- 2- WORKMANSHIP AND MATERIALS SHALL BE PER CURRENT A.R.E.A. SPECIFICATIONS.
- 3- BOND PLUGS TO BE PROVIDED BY THE MANUFACTURER.
- 4- ALL BOLTS SHALL BE DIPPED IMMEDIATELY BEFORE APPLYING (SO THAT ALL THREADS ARE THOROUGHLY COATED) IN NO-OX-ID "G G" GREASE, MANUFACTURED BY THE DEARBORN CHEMICAL COMPANY.
- 5- ALL FROG TIE PLATES MUST BE CLEARLY MARKED TO SHOW PLATE DESIGNATION, AS SHOWN ON C.R. Plan 72105-().



**DIMENSIONS OF RAISED GUARDS**

| RAIL SEC. | ANGLE-b    | ANGLE-o    | D          | C           | L     | B        |
|-----------|------------|------------|------------|-------------|-------|----------|
| 119       | 0°-26'-50" | 6°-10'-19" | 6'-5 7/32" | 2'-3 29/32" | 3'-4" | 9 17/32" |
| 132       |            |            |            |             |       |          |
| 140 RE    |            |            |            |             |       |          |



CONRAIL 74159-C

STANDARD  
**No. 10 SOLID SELF-GUARDED MANGANESE STEEL FROG**  
119 RE, 132 RE and 140 RE RAIL

JANUARY, 1977  
RH Smith Chief Engineer - Maintenance of Way  
S. A. Gardner Chief Engineering Officer