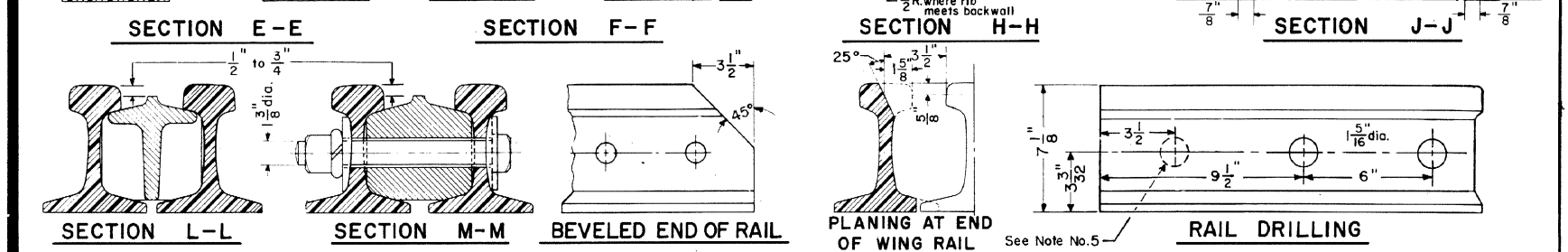
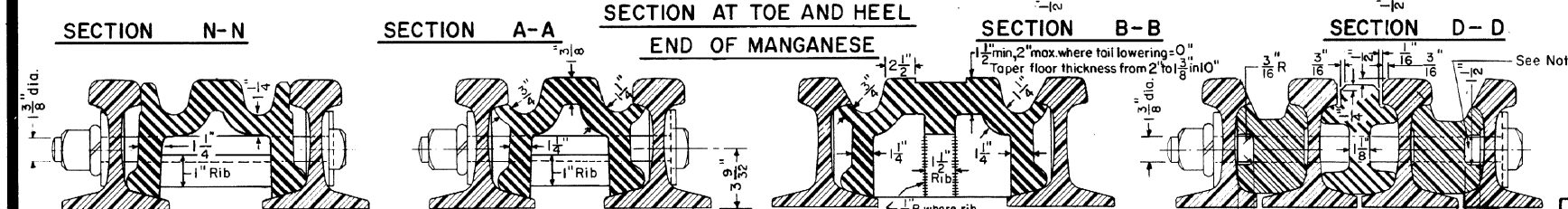
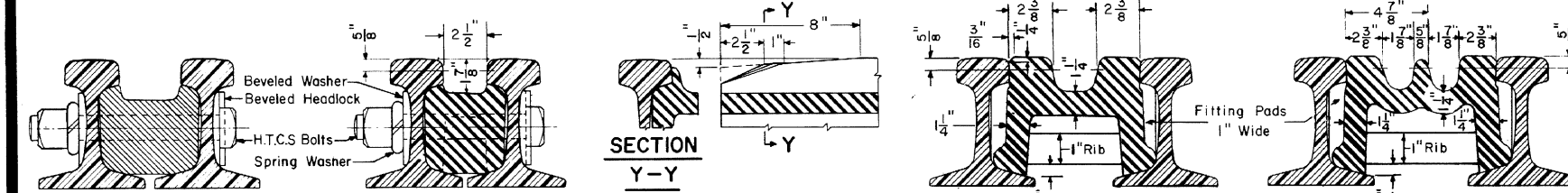
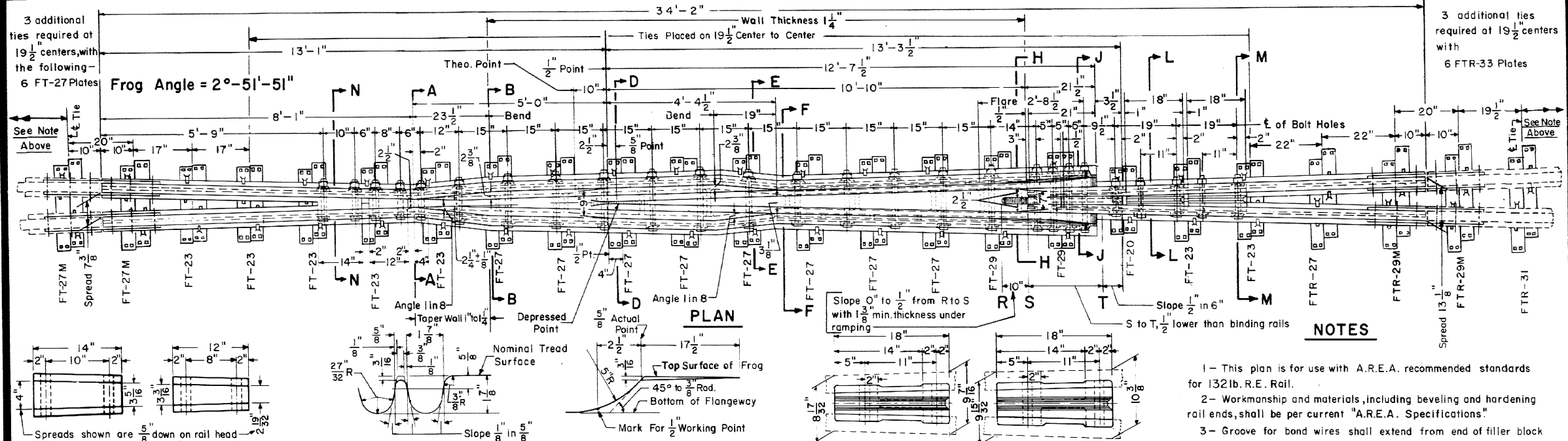


Revisions  
 B - June, 1978  
 C - Oct., 1980  
 D - May, 1986  
 E - May, 1987



**NOTES**

- 1 - This plan is for use with A.R.E.A. recommended standards for 132 lb. R.E. Rail.
- 2 - Workmanship and materials, including beveling and hardening rail ends, shall be per current "A.R.E.A. Specifications".
- 3 - Groove for bond wires shall extend from end of filler block at least to center line of second bolt hole.
- 4 - All bolts used in construction of frog and switch material shall be dipped immediately before applying (so that all threads are thoroughly coated) in NO-OX-ID "GG" grease, manufactured by The Dearborn Chemical Company.
- 5 - When frog is to be used in bolted track, the first bolt hole to be drilled in the field by Conrail as per Plan 71015-(-).
- 6 - Casting to be explosion hardened, with wing and heel rails to be Fully Heat Treated.
- 7 - All bolt holes in rail to be chamfered 1/16"

**FROG TIE PLATES REQUIRED**

2 - FT 20	2 - FTR 27
14 - FT 23	4 - FTR 29 Modified
22 - FT 27	2 - FTR 31
4 - FT 27 Modified	6 - FTR 33
4 - FT 29	

Plates as per CR Plan 72105-(-)

**CONRAIL** **74163-E**

STANDARD  
**NO. 20 RAILBOUND MANGANESE  
 STEEL FROG - 132 R.E. RAIL**  
 DECEMBER, 1977

*R.H. Smith*  
Chief Engineer - Maintenance of Way
*W.A. Gordon*  
Chief Engineering Officer