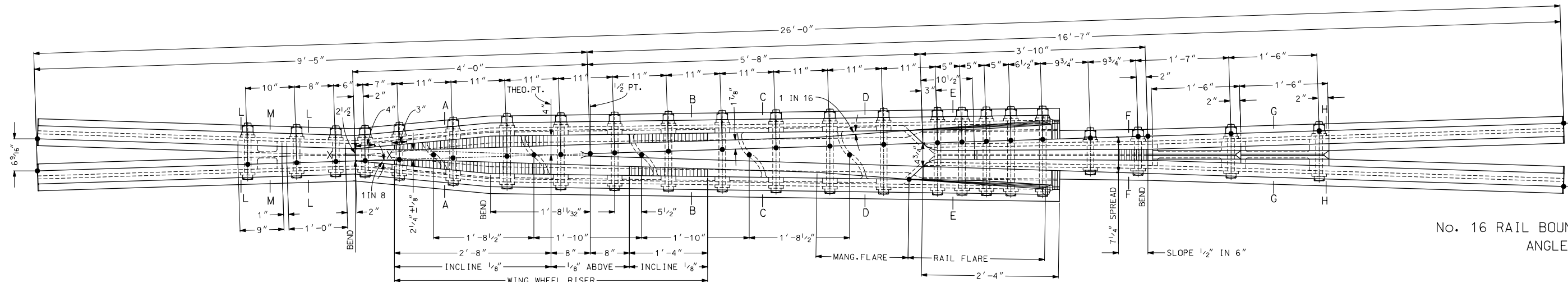
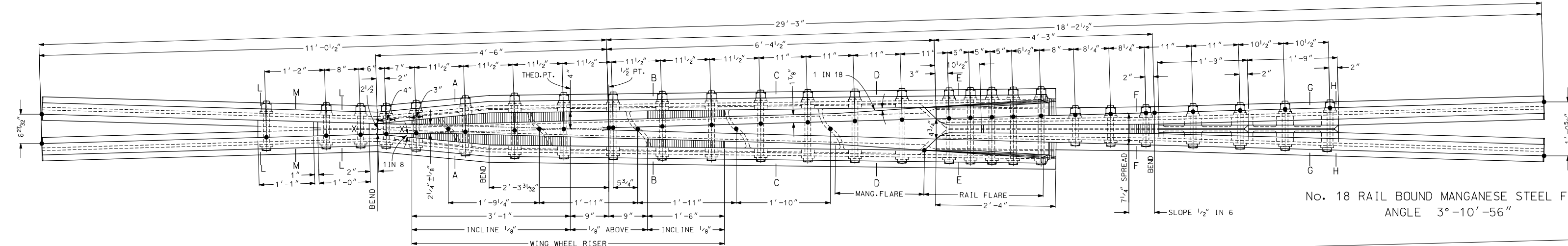


QUANTITY OF HOOK TWIN TIE PLATES					
MARK	L23	L27	LR23	LR27	LR31
TYPE I RAILS	26	8	6	2	0
TYPE II RAILS	16	18	6	6	2
TYPE III RAILS	16	20	6	6	4



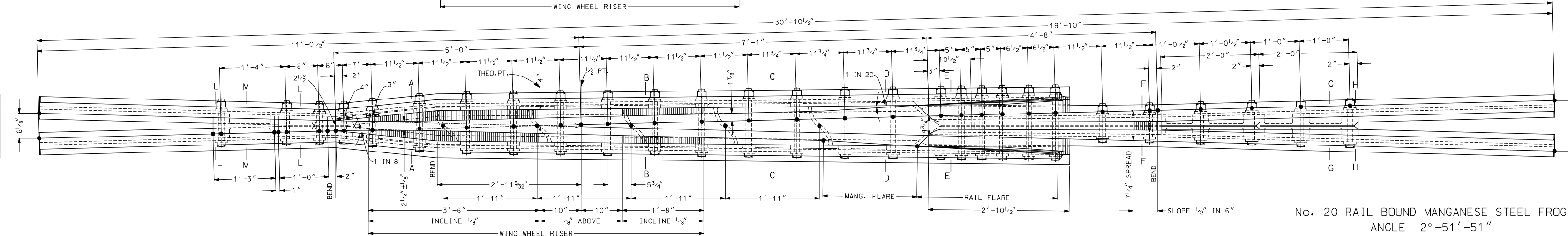
No. 16 RAIL BOUND MANGANESE STEEL FROG  
ANGLE 3°-34'-47"

QUANTITY OF HOOK TWIN TIE PLATES					
MARK	L23	L27	LR23	LR27	LR31
TYPE I RAILS	26	12	6	4	0
TYPE II RAILS	18	22	6	8	2
TYPE III RAILS	18	22	6	8	4



No. 18 RAIL BOUND MANGANESE STEEL FROG  
ANGLE 3°-10'-56"

QUANTITY OF HOOK TWIN TIE PLATES					
MARK	L23	L27	LR23	LR27	LR31
TYPE I RAILS	32	10	6	6	0
TYPE II RAILS	20	24	6	8	4
TYPE III RAILS	16	28	6	8	6



No. 20 RAIL BOUND MANGANESE STEEL FROG  
ANGLE 2°-51'-51"

NOTES

- 1-RAIL AND JOINT BARS. Purchaser shall specify weight and designation of rail section and joint drilling and shall supply complete details of joint bars.
- 2-PLATES. Hook twin tie plates as listed in table shall be furnished with frogs unless otherwise specified. For details and application of these plates see Plan Basic No. 241. Quantities shown are based on 19 1/2 tie spacing with center of one tie 4" back of 1/2 point. Rails in tables are classified by the following widths.
  - TYPE 1 RAILS. Rails having base up to 5 3/8" and head 2 3/4" inclusive.
  - TYPE 2 RAILS. Rails having base up to 5 1/2" and head 2 3/4" inclusive.
  - TYPE 3 RAILS. Rails having base up to 6" and head 3" inclusive.
3. ALTERNATES. To be furnished when specified.
  - (a) WITHOUT WING WHEEL RISERS. Omit wing wheel risers and crown of point and depress frog point as described on Plan Basic No. 600B.
  - (b) HOOK TWIN TIE PLATES. For use with joint bars having toe extending beyond rail base. Type H plates of suitable length to be substituted for Type L plates at toe joint and for Type LR plates at heel joint and quantities listed in tables modified to agree.
4. GENERAL REFERENCES.
  - (a) SECTIONS AND ADDITIONAL DATA. See Plan Basic No. 600 Ribbing indicated on this plan applies only to castings for rails 6" and more in height.
  - (b) POINT AND FLANGWAY DIMENSIONS. See Plan Basic No. 600B for details.
  - (c) BEVELING. See Plan Basic No. 1005 for beveling of running rail ends.
  - (d) FLARES. See Plan Basic No. 350 for details.
  - (e) BONDING. Per details specified by purchaser.
5. Specifications - See Plan Basic No. 100.

AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION

No. 16, No. 18 AND No. 20 RAIL BOUND MANGANESE STEEL FROGS

PLAN NO. 615-01