

REV. 5-28-86: ADDED MODIFIED TYPE 3 OBJECT MARKER.

REV. 10-26-91: REDREW AND REORGANIZED SHEET. UPDATED DRAWING TO 1991 STANDARDS.

REV. 7-29-92: SHOWED DISTANCE OFF OF GROUND TO CENTER OF  $2\frac{3}{8}$ " HOLE IN TERMINAL POST TO BE MAXIMUM.

REV. 10-26-94: CHANGED DRAWING NO. FROM S-GR-18A TO S-GR-18.

REV. 7-29-95: CHANGED DRAWING REFERENCE NUMBER IN GUARDRAIL TERMINAL ANCHOR (TYPE II) ELEVATION VIEW.

REV. 5-27-96: ADDED GENERAL NOTE (F).

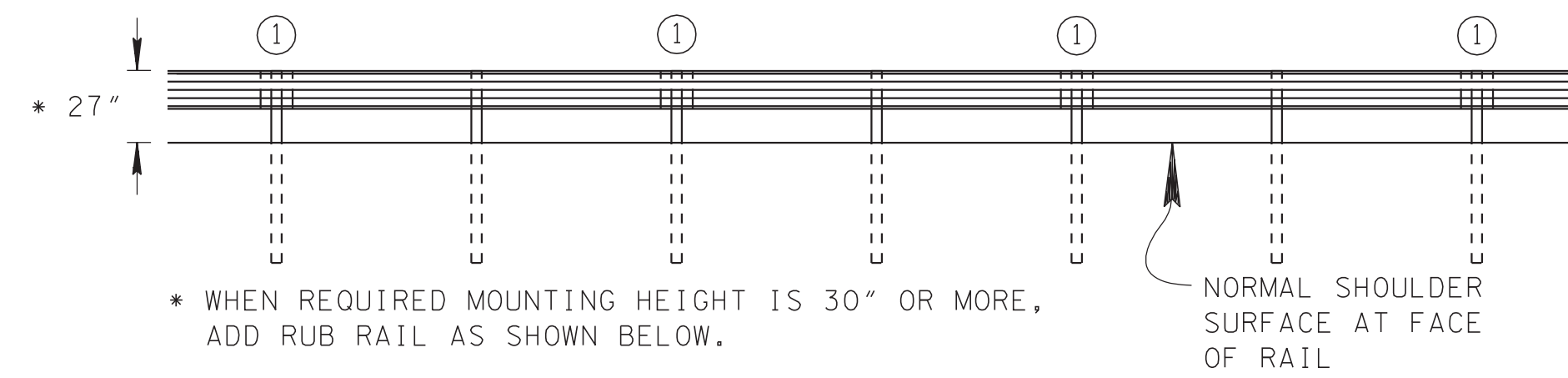
REV. 7-29-98: DELETED DETAIL FOR TYPE II GUARDRAIL TERMINAL. MOVED RAIL ELEMENT JOINT DETAILS, IRREGULAR SHOULDER LINE DETAIL AND GENERAL NOTES (E), (F), AND (G) FROM STANDARD DRAWING S-GR-12.

REV. 9-5-98: GENERAL REVISION THROUGHOUT DRAWING.

REV. 10-26-98: ON ELEVATION VIEW CHANGED SECTIONAL LABELING FROM C-C TO E-E.

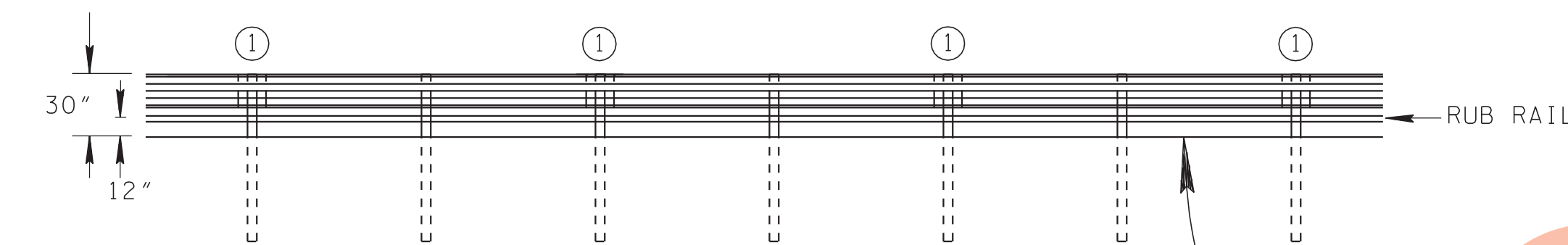
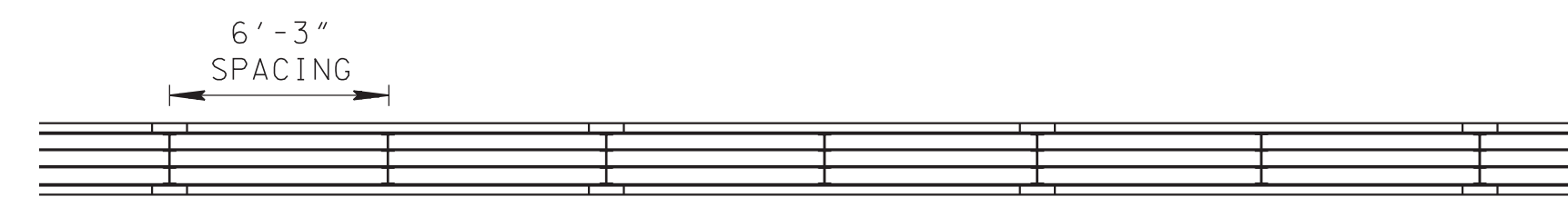
REV. 5-27-01: CHANGED ITEM NO. 705-04.08 TO 705-04.05. CHANGED SHEET NAME.

REV. 5-15-08: MODIFIED ELEVATION VIEW REARRANGED GENERAL NOTES.

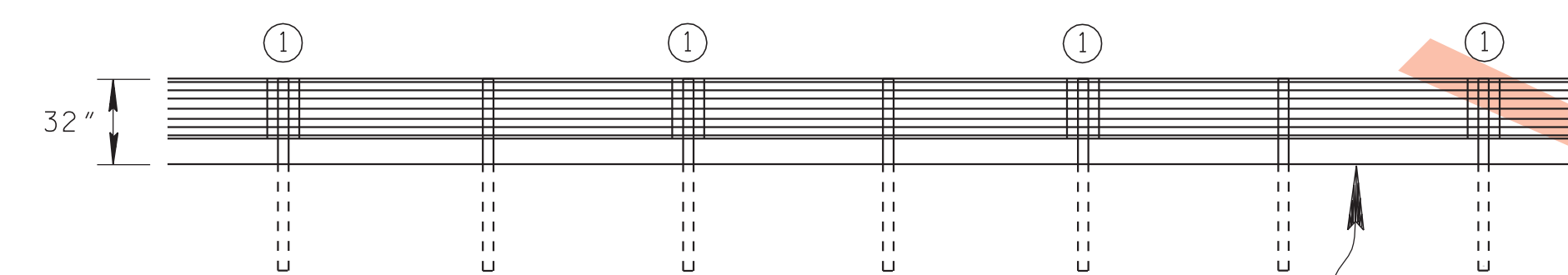


\* WHEN REQUIRED MOUNTING HEIGHT IS 30" OR MORE, ADD RUB RAIL AS SHOWN BELOW.

W-BEAM



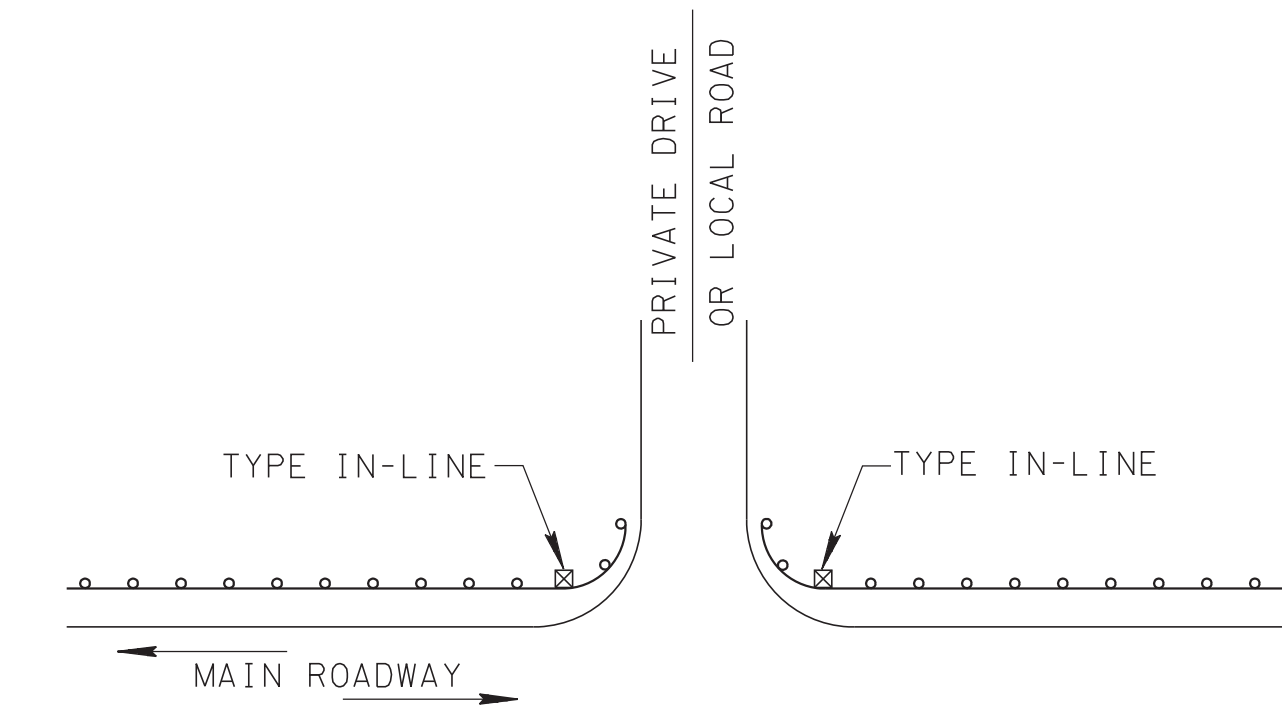
W-BEAM WITH RUB RAIL



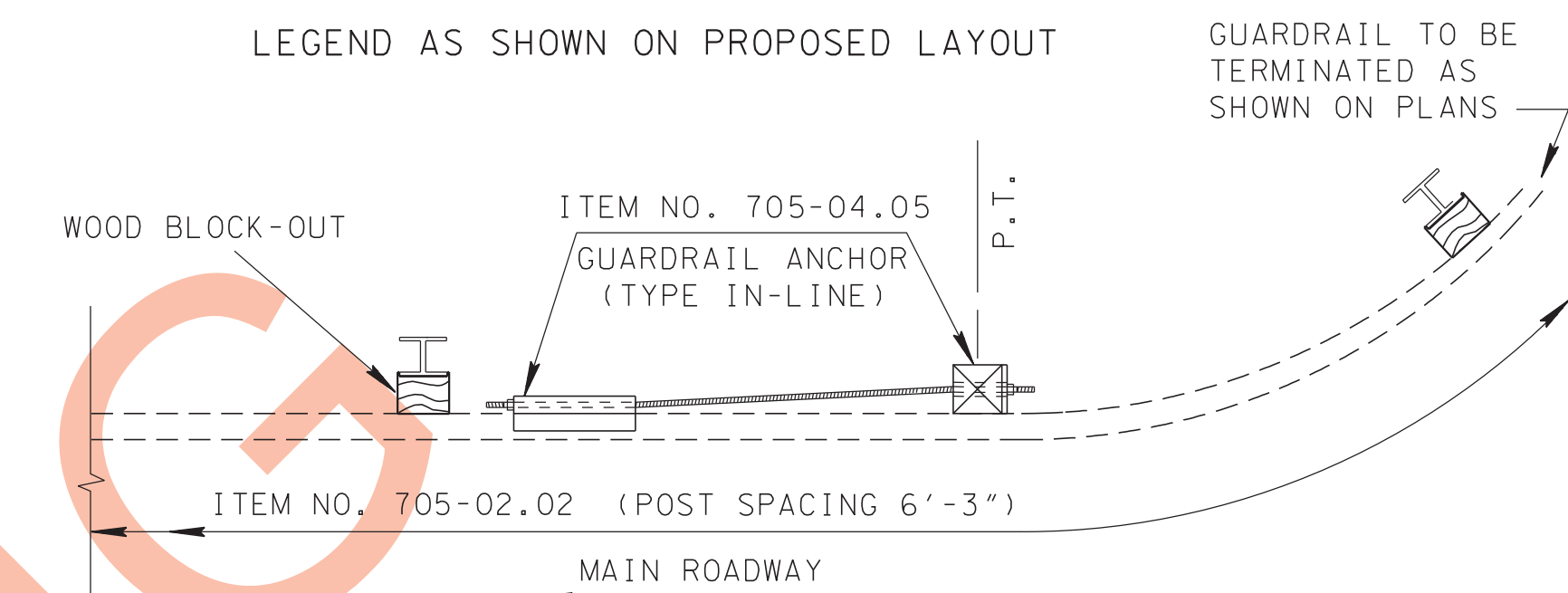
THREE RAIL (OPTIONAL)

FOOTNOTE

(1) RAIL ELEMENT JOINT SHALL BE OVERLAPPED AT THIS POST IF  $13'-6\frac{1}{2}"$  RAIL ELEMENTS ARE USED. IF A  $26'-0\frac{1}{2}"$  RAIL ELEMENT IS USED, THEN THE ELEMENT JOINT OVERLAP WILL OCCUR AT EVERY FOURTH POST. THE OUTSIDE TERMINAL EDGE OF THE JOINT WILL ALWAYS FACE AWAY FROM APPROACHING TRAFFIC. ALL VIEWS TO LEFT ARE BASED ON THE USE OF  $13'-6\frac{1}{2}"$  RAIL ELEMENTS.

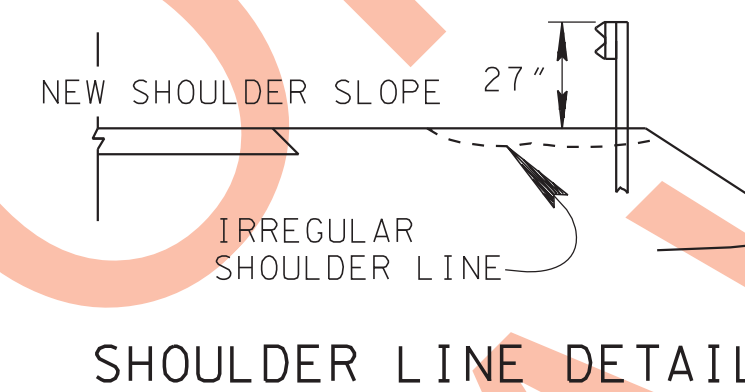


LEGEND AS SHOWN ON PROPOSED LAYOUT

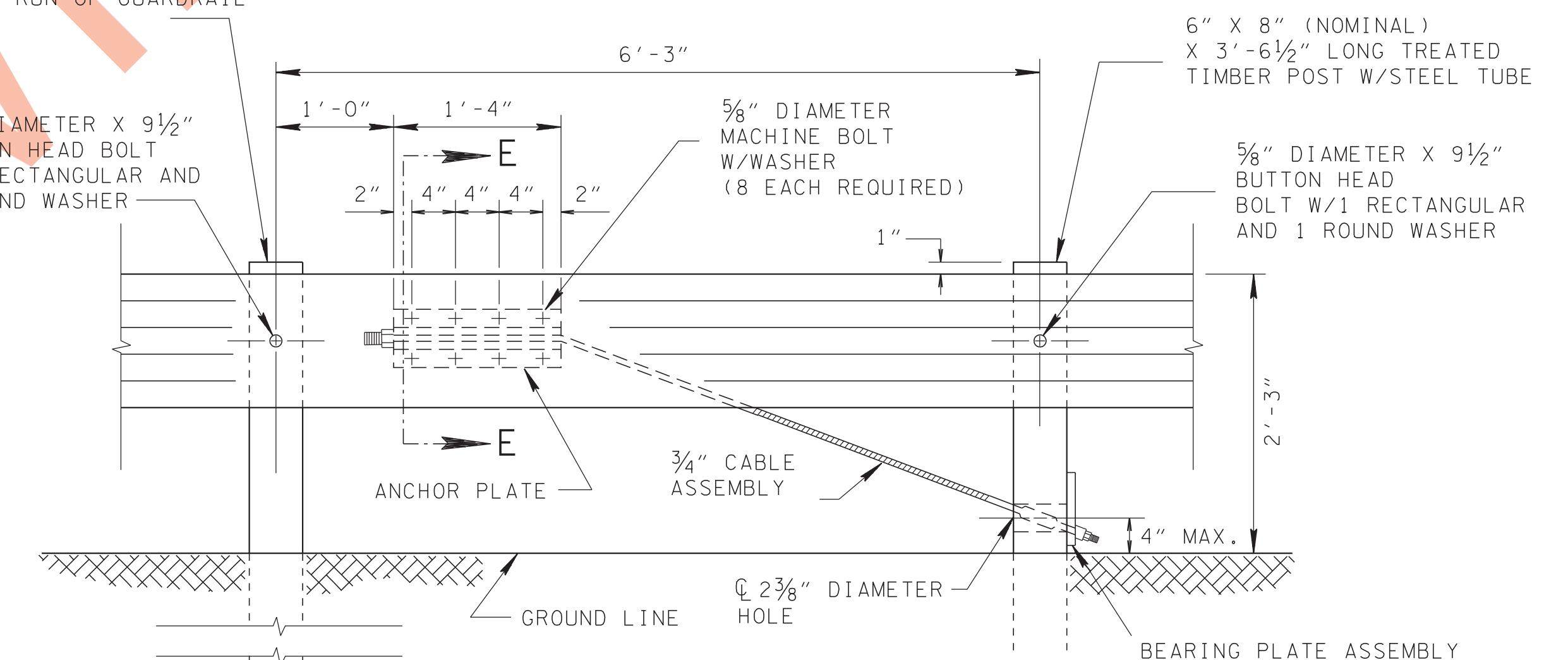


PLAN GUARDRAIL TERMINAL ANCHOR (TYPE IN-LINE)

SAME AS OTHER POST ON THIS RUN OF GUARDRAIL



SHOULDER LINE DETAIL



ELEVATION GUARDRAIL TERMINAL ANCHOR (TYPE IN-LINE) (SEE S-GR-28 FOR DETAILS NOT SHOWN)

GENERAL NOTES

- (A) GUARDRAIL TERMINAL (TYPE-IN-LINE) IS TO BE USED AT INTERSECTIONS OF LOW VOLUME LOCAL ROADS WITH MAIN LINE TWO-WAY TRAFFIC ROADS, WHERE A FULL-END GUARDRAIL TERMINAL ANCHOR CAN NOT BE PROPERLY INSTALLED. THE IN-LINE SHALL NOT BE USED ON THE NATIONAL HIGHWAY SYSTEM (NHS).
- (B) THE GUARDRAIL TERMINALS (TYPE-IN-LINE) SHALL BE CONSTRUCTED IN ACCORDANCE WITH "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION, SECTION 705-GUARDRAIL AND/OR CURRENT SPECIAL PROVISIONS.
- (C) PAYMENT UNDER ITEM NO. 705-04.05, GUARDRAIL TERMINAL (TYPE IN-LINE) PER EACH, SHALL INCLUDE COST OF FURNISHING AND INSTALLATION OF 1 WOOD POST WITH STEEL TUBE, ALSO INCLUDING CABLE ASSEMBLY, ANCHOR PLATE, BEARING PLATE AND ALL BOLTS, NUTS, WASHERS AND LABOR NECESSARY TO COMPLETE THE ITEM.
- (D) WHEN MEDIAN DIVIDER GUARDRAIL IS TO BE MOUNTED AT A HEIGHT LESS THAN 30", IT SHALL BE NOTED AND DETAILED ON THE PLANS AND ITEM NO. 705-03.02, MEDIAN DIVIDER GUARDRAIL (TYPE 2) PER LINEAR FOOT, SHALL BE USED.
- (E) WHEN GUARDRAIL IS TO BE ADJUSTED OR ADDED ON RESURFACING OR SAFETY PROJECTS, OR ADJUSTMENTS MADE BY STATE MAINTENANCE FORCES, THE MOUNTING HEIGHT SHALL BE MAINTAINED FROM THE ELEVATION OF THE NEW SHOULDER SURFACE. ADDITIONAL GRADING WILL BE NECESSARY TO ACCOMMODATE WASH-OUTS, IRREGULARLY SHAPED EXISTING SHOULDER CONDITIONS, AS WELL AS THE ADDED HEIGHT OF THE GUARDRAIL. SEE SHOULDER LINE DETAIL ON THIS SHEET.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

GUARDRAIL TERMINAL (TYPE IN-LINE) AND SHOULDER LINE DETAIL

7-29-98 S-GR-18