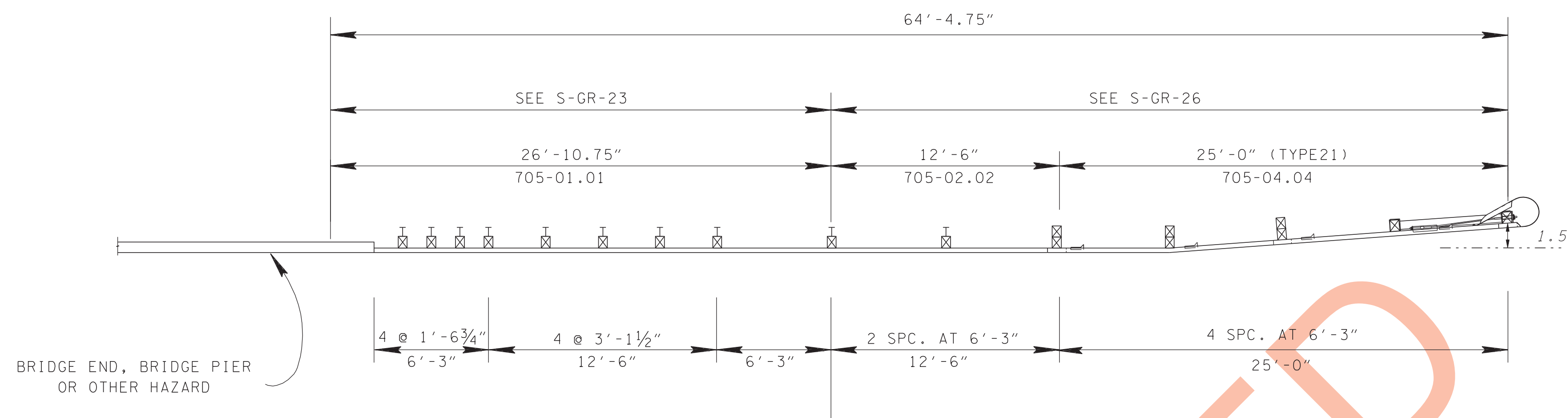
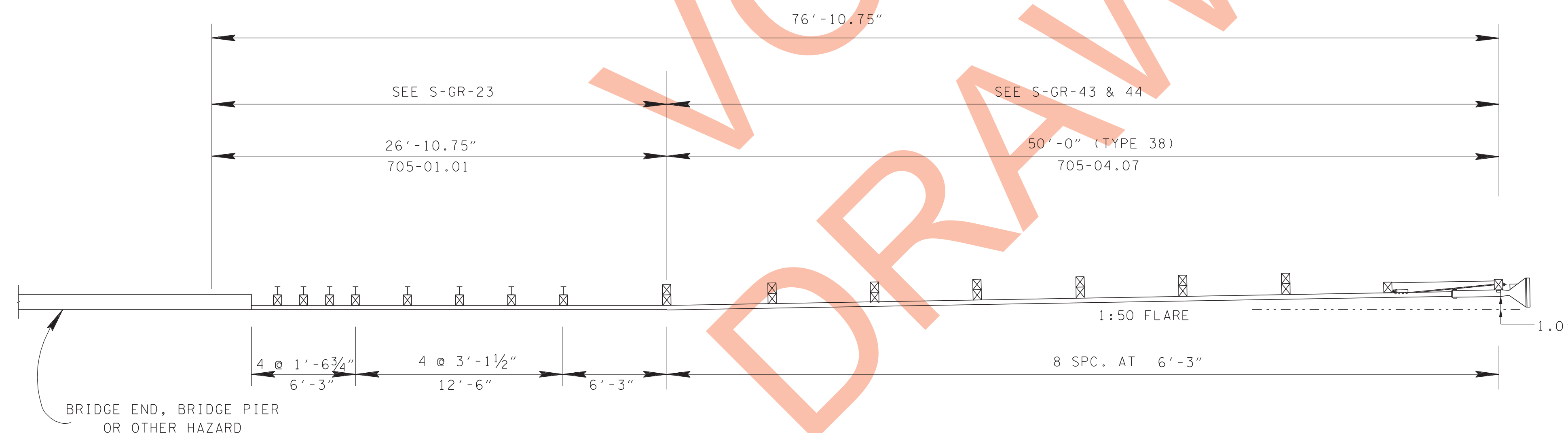


- ❑ REV. 7-29-95: MOVED MINIMUM LENGTH INSTALLATION FOR PROTECTIVE GUARDRAIL AT BRIDGE ENDS FROM STANDARD DRAWING NO. S-GR-20. ADDED MATERIAL FOR TYPE 20 AND TYPE 21 END TERMINALS.
- ❑ REV. 9-5-95: REMOVED CONCRETE BASE DETAIL.
- ❑ REV. 2-14-96: ON FIRST DETAIL ADDED REFERENCE TO TYPE 16 TERMINAL.
- ❑ REV. 5-27-96: ADDED SEPARATE DRAWING FOR TYPE 16 TERMINAL.
- REV. 7-29-98: DELETED MINIMUM LENGTH DETAILS FOR TYPE 11, 16, AND 20 GUARDRAIL TERMINALS. ADDED DETAIL FOR TYPE 22 GUARDRAIL TERMINAL AND TANGENT ENERGY ABSORBING TERMINAL.
- REV. 9-5-98: DELETED MINIMUM LENGTH DETAILS FOR TYPE 22 GUARDRAIL TERMINAL.
- ❑ REV. 3-22-99: ADDED NEW GENERAL NOTE (B). CHANGED OLD GENERAL NOTE (B) TO (C).
- ❑ REV. 5-27-01: CHANGED ITEM NOS. 705-01.04 TO 705-01.01, 705-04.21 TO 705-04.04, AND 705-04.38 TO 705-04.07.
- ❑ REV. 5-15-08: GENERAL REVISION. RENAMED TITLE BLOCK.



MINIMUM INSTALLATION LENGTH FOR SLOTTED GUARDRAIL TERMINAL (TYPE 21, SEE S-GR-26)

SAFETY PERFORMANCE OF SLOTTED GUARDRAIL TERMINAL IS ACCEPTABLE ACCORDING TO THE TL-2 EVALUATION CRITERIA SPECIFIED IN NCHRP REPORT 350. SLOTTED GUARDRAIL TERMINAL SHALL BE USED ON ALL LOW SPEED ROADS NOT ON THE DESIGNATED STATE HIGHWAY SYSTEM, INCLUDING SIDE ROADS TO STATE AND US ROUTES, WHEN THE CURRENT DESIGN SPEED EXCEEDS 40 MILES PER HOUR. EARTH PAD IS REQUIRED AS SHOWN ON S-GR-39.



MINIMUM INSTALLATION LENGTH FOR TANGENTIAL GUARDRAIL END TERMINAL (TYPE 38, SEE S-GR-43 & 44)

SAFETY PERFORMANCE OF SLOTTED GUARDRAIL TERMINAL IS ACCEPTABLE ACCORDING TO THE TL-3 EVALUATION CRITERIA SPECIFIED IN NCHRP REPORT 350. EARTH PAD IS REQUIRED AS SHOWN ON S-GR-38 OR S-GR-38A FOR CERTAIN CONDITIONS AS DESCRIBED ON THE DRAWING.

GENERAL NOTES

- (A) SEE STANDARD DRAWING S-GR-23 FOR DETAILS AND SPECIFICATIONS REGARDING INSTALLATION OF PROTECTIVE GUARDRAIL AT BRIDGE ENDS PAID FOR UNDER ITEM NO. 705-01.01, GUARDRAIL AT BRIDGE ENDS.
- (B) IF A FIELD EVALUATION DISCOVERS A SECONDARY HAZARD, THEN STANDARD DRAWING S-GR-21 SHALL BE USED TO DETERMINE LENGTH OF NEED.
- (C) DRAWING USED FOR BRIDGE ENDS OR PIERS ONLY. FOR OTHER HAZARDS STANDARD DRAWING S-GR-21 SHALL BE USED TO DETERMINE LENGTH OF NEED FOR GUARDRAIL.

❑ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GUARDRAIL
END
TERMINALS
AT BRIDGE ENDS

7-29-95 S-GR-24