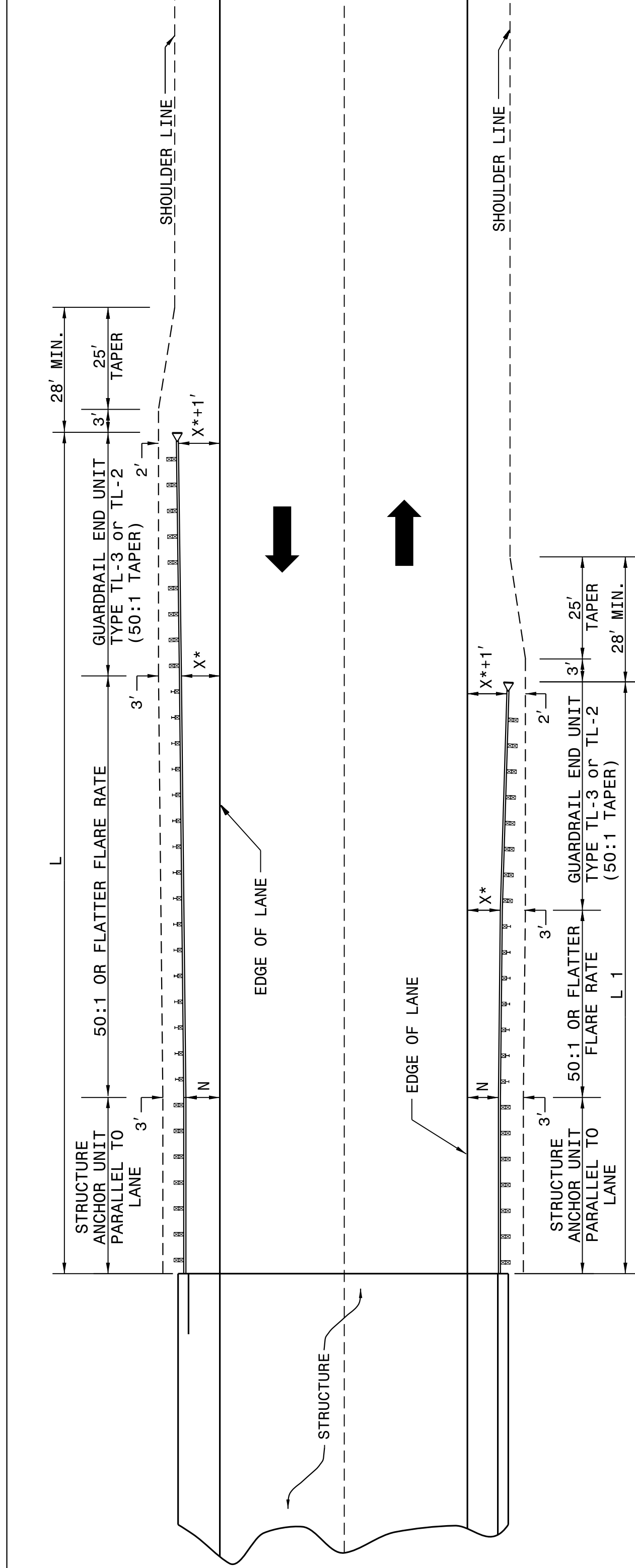


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STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR GUARDRAIL PLACEMENT

SHEET 4 OF 11 862D01



ROADWAY DETAIL DRAWING FOR GUARDRAIL PLACEMENT

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

SHEET 4 OF 11 862D01

GUARDRAIL INSTALLATION AT BRIDGE APPROACHES FOR TWO-LANE, TWO-WAY TRAFFIC

DESIGN SPEED (MPH)	"L" APPROACH LENGTH (FT.)		"L" TRAILING LENGTH (FT.)			
	DESIGN YEAR ADT OVER 2000	CURRENT YEAR ADT UNDER 400	DESIGN YEAR ADT OVER 2000	DESIGN YEAR ADT UNDER 1000	DESIGN YEAR ADT UNDER 400	CURRENT YEAR ADT UNDER 400
70	362.5'	362.5'	350.0'	287.5'	187.5'	175.0'
60	300.0'	287.5'	275.0'	225.0'	137.5'	100.0'
50	212.5'	212.5'	200.0'	162.5'	87.5'	75.0'
40	175.0'	150.0'	137.5'	112.5'	75.0'	75.0'
X*	8'	6'	4'	4'	8'	4'

* USE FLARE RATE AS THE CONTROL IF THE "X" DISTANCE IS NOT OBTAINED. ("X" IS BASED ON SHOULDER WIDTHS IN THE HIGHWAY DESIGN BRANCH MANUAL, PART 1, 1-4B, F1).

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL WHERE GUARDRAIL IS PARALLEL TO LANE.

SEE STD. 862.03 FOR STRUCTURE ANCHOR UNITS

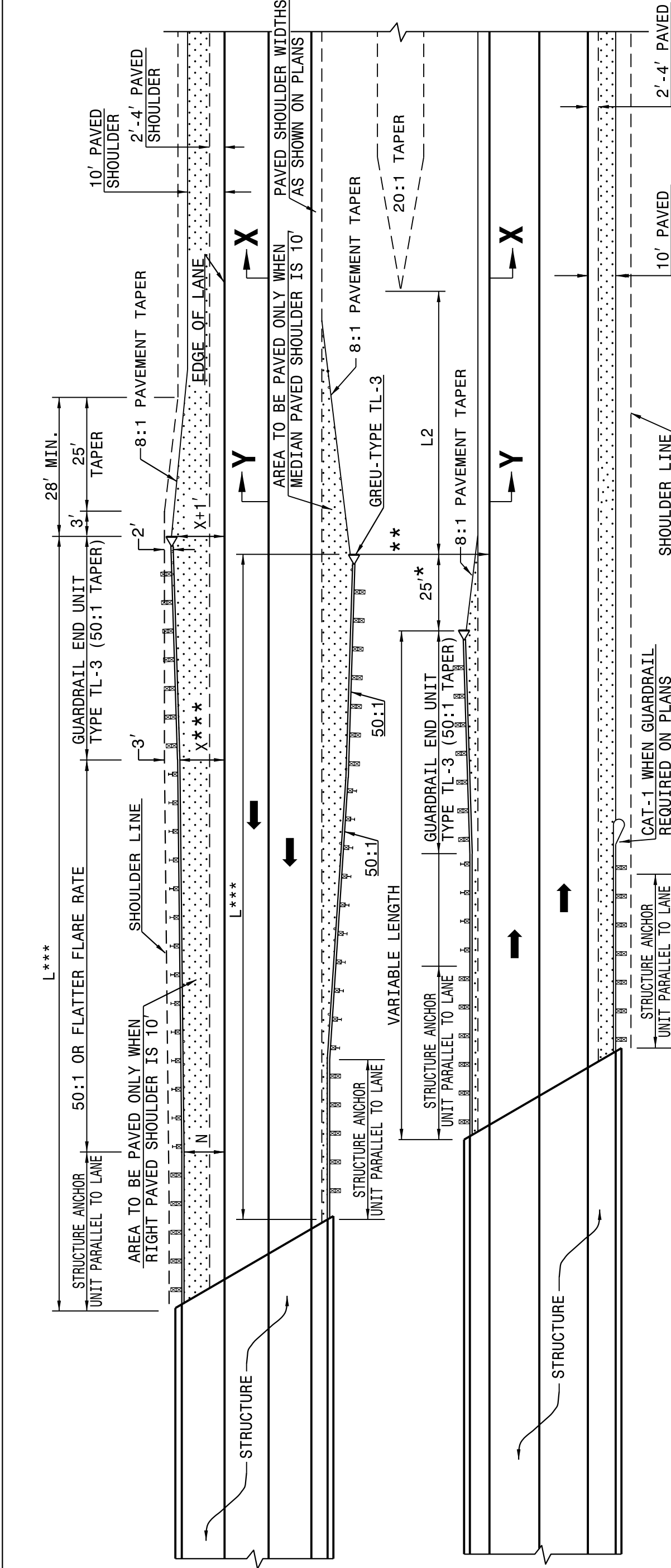
FOR POSTED SPEEDS ≥ 45mph USE GREU TYPE TL-3

FOR POSTED SPEEDS < 45mph USE GREU TYPE TL-2

LENGTHS AND OFFSETS FOR PROPOSED GUARDRAIL AT TWO LANE - TWO WAY LOCATIONS

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

SHEET 4 OF 11 862D01



FOR POSTED SPEEDS ≥ 45mph USE GREU TYPE TL-3
FOR POSTED SPEEDS < 45mph USE GREU TYPE TL-2

MEDIAN WIDTH	-L-***				-L2- DIM.
	70 MPH	60 MPH	50 MPH	40 MPH	
30'	300.0'	250.0'	150.0'	80.0'	
36'	300.0'	250.0'	150.0'	60.0'	
40' & ABOVE	300.0'	250.0'	150.0'	40.0'	

NOTES: * MINOR VARIATION TO THE 25'-0" DIMENSION IS PERMISSIBLE TO ACCOMMODATE THE 12'-6" IN GUARDRAIL LENGTHS.

** NO GUARDRAIL IS REQUIRED ON THE TRAILING END WHEN THIS DISTANCE EXCEEDS CLEAR ROADSIDE RECOVERY AREA FOR THE APPROPRIATE DESIGN SPEED.

*** BASED ON "X" OF 12' USE FLARE RATE AS THE CONTROL IF THE "X" DISTANCE IS NOT OBTAINED. ("X" IS BASED ON SHOULDER WIDTHS IN THE HIGHWAY DESIGN BRANCH MANUAL, PART 1, 1-4B, F1A).

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL WHERE GUARDRAIL IS PARALLEL TO LANE. THE DESIGN LAYOUT FOR LENGTHS SHOWN ON THIS STANDARD ARE MINIMUM DESIGN LENGTHS.

SEE SHEET 1 OF 12 FOR SECTIONS XX, YY
SEE STD. 862.03 FOR STRUCTURE ANCHOR UNITS

DETAIL OF GUARDRAIL APPROACHING DUAL LANE BRIDGES

CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

SEE TITLE BLOCK

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11/2/2017