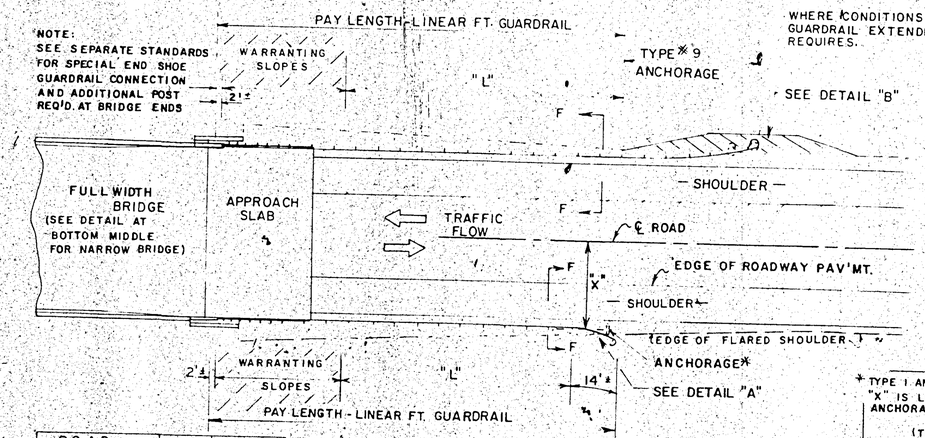
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	EDF-017-3(39)	127	194

NOTE:
SEE SEPARATE STANDARDS FOR SPECIAL END SHOE GUARDRAIL CONNECTION AND ADDITIONAL POST REQ'D. AT BRIDGE ENDS

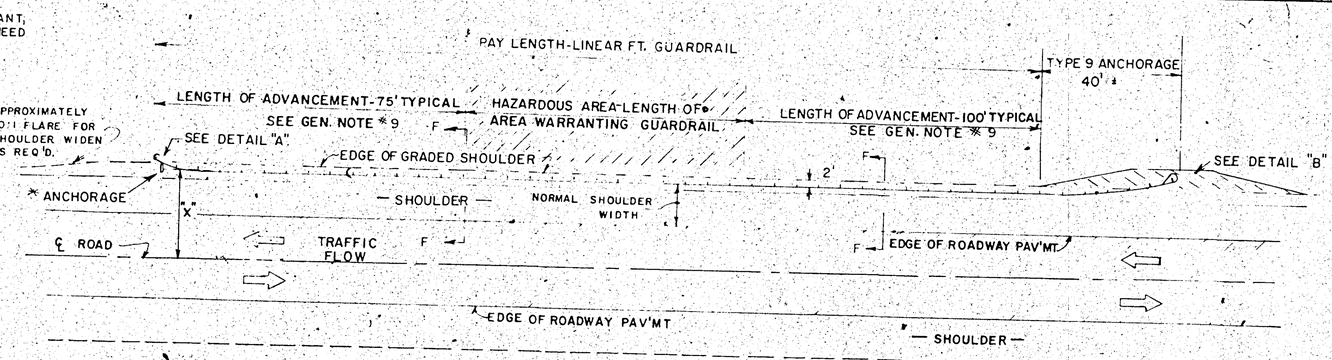


ROAD	"L"
CLASS I	100'-0" MIN.
CLASS II	87'-6" MIN.
CLASS III	75'-0" MIN.
CLASS IV	62'-6" MIN.
CLASS V	50'-0" MIN.

NOTE: THESE MINIMUM LENGTHS ARE TO BE INCREASED WHERE CONDITIONS WARRANT

GUARDRAIL LOCATION AT BRIDGE ENDS

20 10 0 20 FT.
SCALE



NOTE: GUARDRAIL TO BE LOCATED ON BOTH SIDES OF ROAD IF CONDITIONS WARRANT.

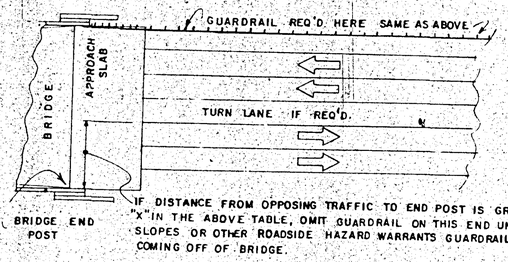
GUARDRAIL LOCATION ALONG ROADWAY

20 10 0 20 FT.
SCALE

* TYPE 1 ANCHORAGES WILL BE UTILIZED AT THE TRAILING END, UNLESS THE DISTANCE "X" IS LESS THAN THE PARAMETER GIVEN IN THIS TABLE IN WHICH CASE TYPE 9 ANCHORAGES SHALL BE REQUIRED.

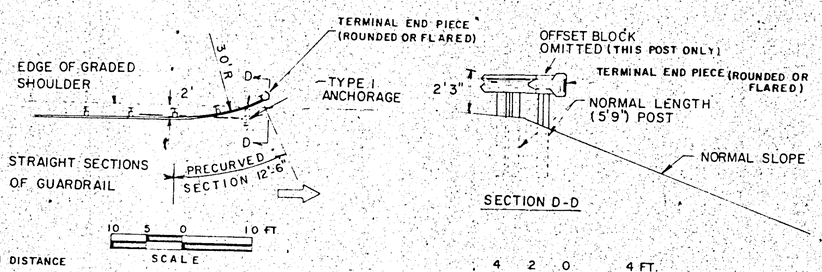
(TRAFFIC VOL.)	(ESTIMATED AVERAGE OPERATING SPEEDS) 40 M.P.H.	50 M.P.H.	60 M.P.H.	70 M.P.H.
OVER 6000 V.P.D.	15'	20'	30'	36'
2000 TO 6000 V.P.D.	13.5'	18'	27'	32'
800 TO 2000 V.P.D.	12.5'	16.5'	24.5'	29'
250 TO 800 V.P.D.	11.25'	15'	22.5'	26.5'
UNDER 250 V.P.D.	10'	13'	20'	23.5'

NOTE: FOR 55 M.P.H. OPERATING SPEEDS, THE PARAMETER MAY BE TAKEN AS AN AVERAGE BETWEEN 50 & 60 M.P.H.



IF DISTANCE FROM OPPOSING TRAFFIC TO END POST IS GREATER THAN DISTANCE "X" IN THE ABOVE TABLE, OMIT GUARDRAIL ON THIS END UNLESS FILL SLOPES OR OTHER ROADSIDE HAZARD WARRANTS GUARDRAIL FOR TRAFFIC COMING OFF OF BRIDGE.

GUARDRAIL AT BRIDGE END OF MULTI-LANE UNDIVIDED HIGHWAY
NO SCALE



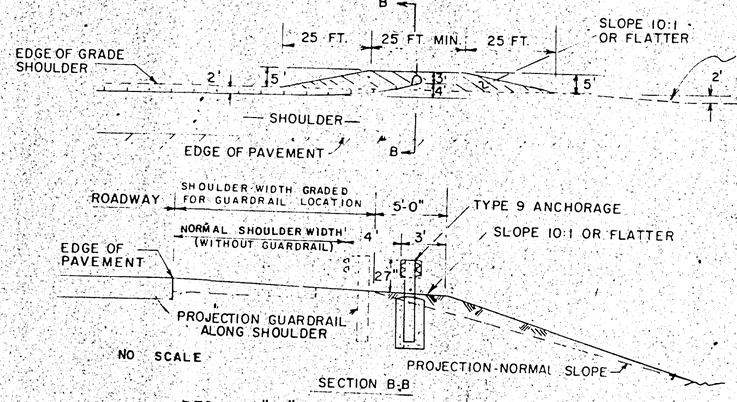
DETAIL "A"

NOTE:
DETAIL "A" IS FOR USE ONLY WHERE TYPE 1 ANCHORAGES ARE PERMITTED AS SHOWN ABOVE. OTHERWISE, SEE DETAIL "B" FOR PROPER INSTALLATION OF TYPE 9 ANCHORAGE.

GENERAL NOTES:

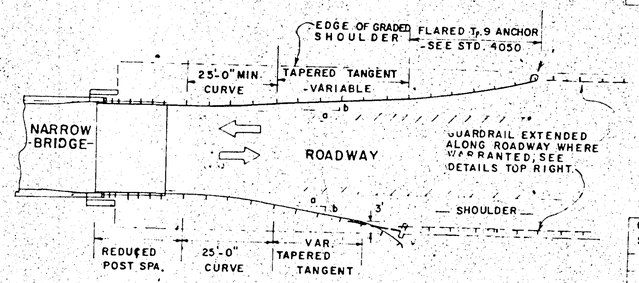
1. GUARDRAIL, ITS FITTINGS, PARTS, ETC. ARE TO BE IN ACCORDANCE WITH GEORGIA STANDARD SPECIFICATIONS AND/OR SPECIAL PROVISIONS.
2. FOR DETAILS OF BEAM TYPE GUARDRAIL, ACCESSORIES, GUARDRAIL POST, OFFSET BLOCKS, GUARDRAIL ANCHORAGES TYPE 1 AND TYPE 9, & BRIDGE END CONNECTION DETAILS, SEE APPLICABLE GEORGIA STANDARD PLANS AND/OR CONSTRUCTION DETAILS.
3. ALL OFFSET AND LENGTHS HERE SHOWN ARE APPLIED TO FACE OF GUARDRAIL.
4. POST SPACING SHALL BE 6'3" C. TO C. UNLESS OTHERWISE NOTED.
5. TYPE 9 ANCHORAGES SHOULD BE TERMINATED ON SLOPES 10:1 OR FLATTER. WHERE NORMAL SLOPES STEEPER, A 10:1 OR FLATTER SLOPE SHOULD BE CONSTRUCTED AT LOCATIONS WHERE TYPE 9 ANCHOR FLARES BACK OF SHOULDER.
6. GUARDRAIL SHALL NOT BE ERECTED ON SLOPES WHICH ARE STEEPER THAN 10:1 EXCEPT FOR THE PORTION OF PRECURVED (SHOP CURVED) SECTION THAT EXTENDS BACK OF THE SHOULDER AS SHOWN IN DETAIL "A" WHICH IS ERECTED ON NORMAL SLOPES OR EXCEPT WHERE SHOWN OTHERWISE IN THE PLANS.
7. PAY LENGTH SHALL BE MEASURED ALONG FACE OF GUARDRAIL.
8. GUARDRAIL WILL HAVE A CONSTANT TOP OF RAIL HEIGHT OF 2'-3" THROUGHOUT INSTALLATION EXCEPT WHERE A PORTION OF THE PRECURVED SECTION SHOWN IN DETAIL "A" EXTENDS BACK OF THE GRADED SHOULDER.
9. GUARDRAIL WILL EXTEND PAST HAZARD ON BOTH THE APPROACH & TRAILING ENDS TO PREVENT VEHICLE PENETRATION BEHIND THE RAIL INTO THE HAZARDOUS AREA. THE TYPICAL LENGTHS OF ADVANCEMENT SHOWN MAY BE INCREASED OR DECREASED WHEN SHOWN IN THE PLANS, OR WHERE DIRECTED BY THE ENGINEER BECAUSE OF SPEED DESIGN, ROADSIDE GEOMETRY, SIZE OF HAZARD, OR OTHER CONDITIONS. IF FURTHER INFORMATION IS DESIRED; SEE GA. D.O.T. "GUIDELINES FOR DETERMINING GUARDRAIL NEED, LOCATION AND STANDARDS" OR AASHTO "GUIDE FOR SELECTING, LOCATING AND DESIGNING TRAFFIC BARRIERS."

SPECIAL NOTE:
LOCATION AND QUANTITIES GIVEN IN THE PLANS FOR GUARDRAIL AND ANCHORAGES ARE ESTIMATES MADE FROM OFFICE COMPUTATIONS. A FINAL DETERMINATION AS TO LOCATIONS AND QUANTITIES OF GUARDRAIL AND ANCHORAGES WILL BE MADE BY THE ENGINEER OR A REPRESENTATIVE FROM THE OFFICE OF TRAFFIC AND SAFETY AFTER CONSTRUCTION OF ROADWAY.



DETAIL "B"

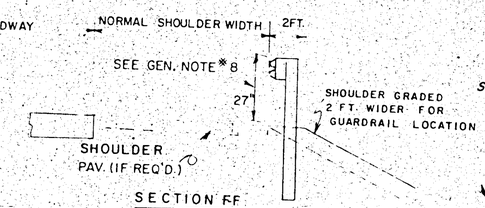
WHERE SHOWN IN THE PLANS OR APPROVED BY THE ENGINEER, THE EMBANKMENT FLARE SHOWN ABOVE FOR TYPE 9 ANCHOR MAY BE MODIFIED PROVIDED 10:1 OR FLATTER SLOPES ARE PROVIDED IN FRONT OF THE RAIL, A CONSTANT 27" RAIL HEIGHT IS MAINTAINED AND ADEQUATE FOUNDATION FOR CONC. FOOTINGS ARE OBTAINED.



GUARDRAIL LOCATION AT END OF NARROW BRIDGE
(NOTE: DETAILS NOT SHOWN HERE ARE SIMILAR TO THAT AT TOP LEFT)

OPERATING SPEED (MPH)	FLARE RATE a/b
70	15 MIN.
60	13 MIN.
50	11 MIN.
40	9 MIN.

NOTE:
TYPICAL LENGTH OF TAPERED TANGENT = "L" - 50'-0"



11-9-84	SHOULDER WIDTHS
4-19-84	ADD DET. MULTI-LANE
3-31-82	ADD. DET. NARROW BR.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD

GUARDRAIL LOCATION DETAILS
FOR UNDIVIDED HIGHWAYS AND ROADS
(WITH SHOULDERS ADJACENT TO ROADWAY)

SCALE AS SHOWN

REV. & REDR. DECEMBER, 1980

R.M.U.
R.M.U.
R.M.U.

DES. R.M.U.
DRW. R.M.U.
TRA. G.M.E.
CHK. R.K.C.

(SUBMITTED) Alex D. Hardy
STATE AIRPORT DESIGN ENGR.
(APPROVED) Thomas D. Moultrie
STATE HIGHWAY ENGINEER

NUMBER 4052

FORM EF1