

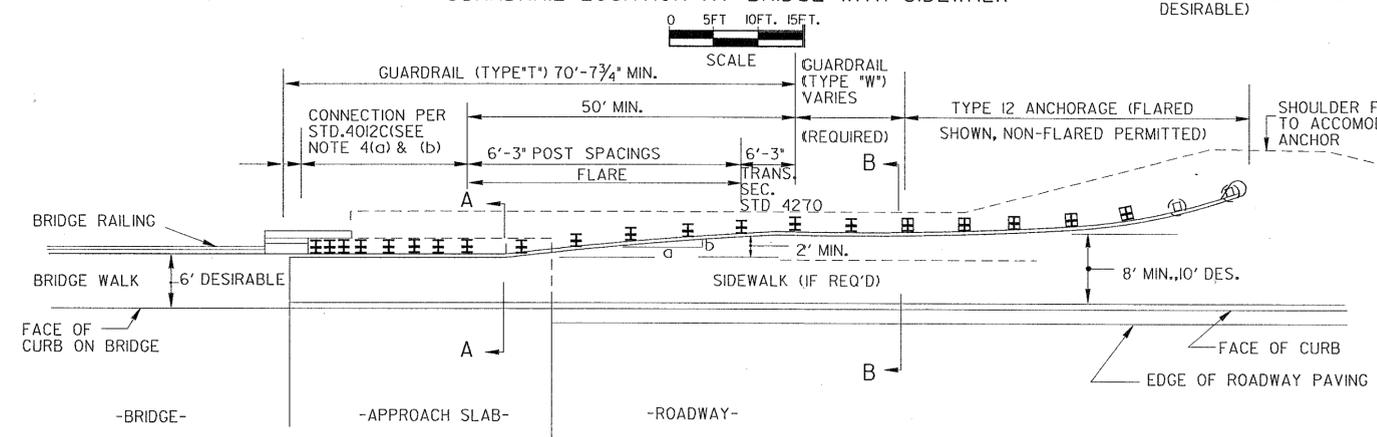
RELEASED FOR CONSTRUCTION 11/04/09

SHEET NO. 384 OF 472

Y:\Roadways\AT7740002\008415\Dgn\Const_Standards\4280.dwg 11/2/2011 8:41:30 AM JParks

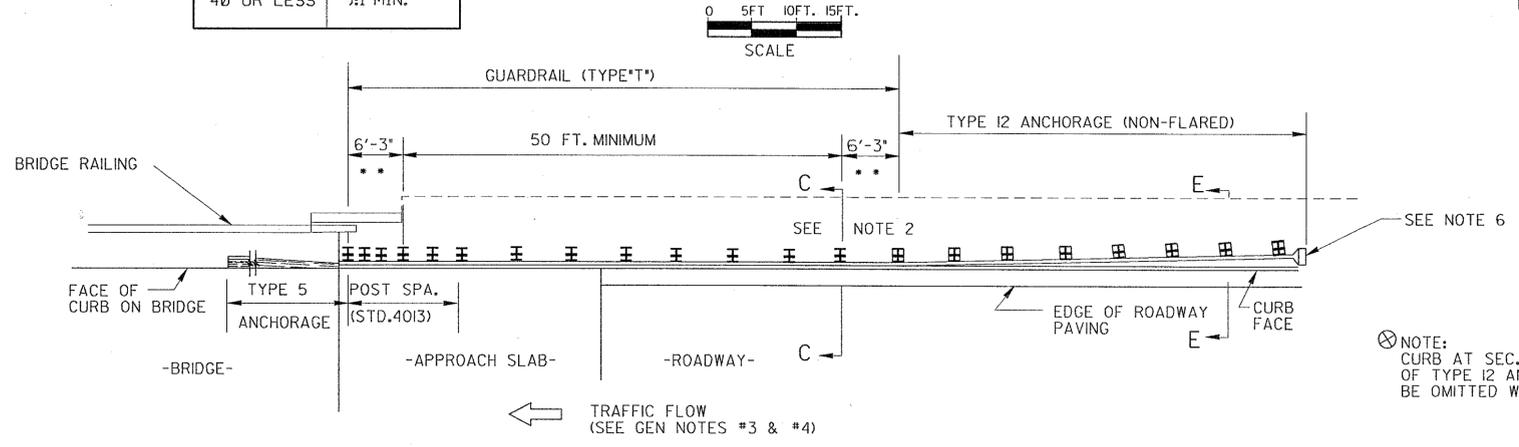
GUARDRAIL LOCATION AT BRIDGE WITH SIDEWALK

(6 FT. SIDEWALK ACROSS BRIDGE DESIRABLE)



DESIGN SPEED(MPH)	FLARE RATE a/b
60	13:1 MIN.
55	12:1 MIN.
50	11:1 MIN.
40 OR LESS	9:1 MIN.

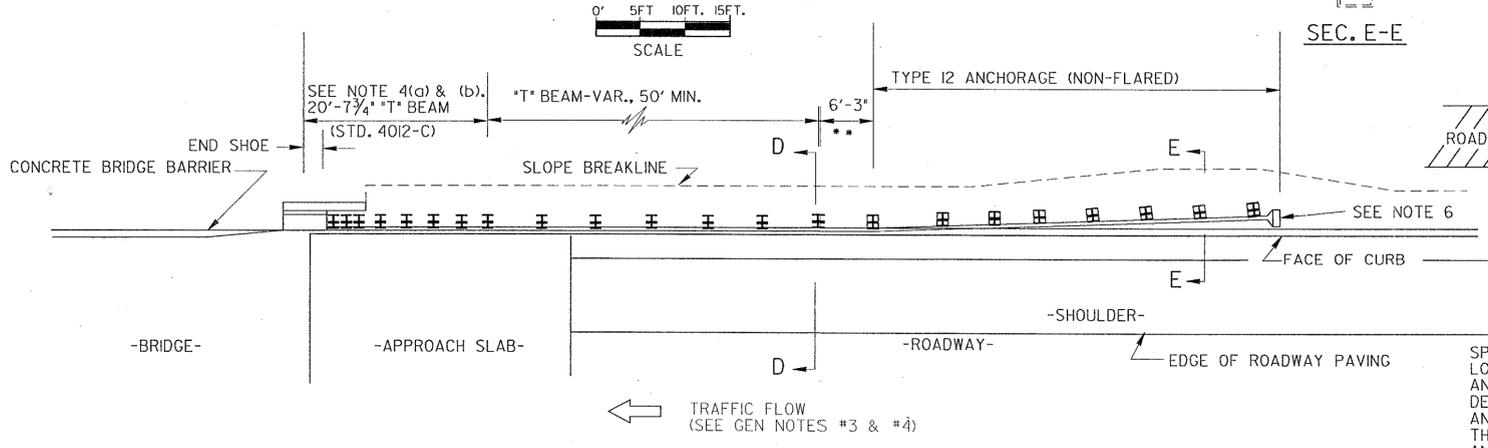
GUARDRAIL LOCATION AT BRIDGE WITH NARROW WALK



SEE STD. 4270 FOR TRANSITION PIECE BETWEEN *T*-BEAM AND ANCHORAGES, WHERE REQUIRED.

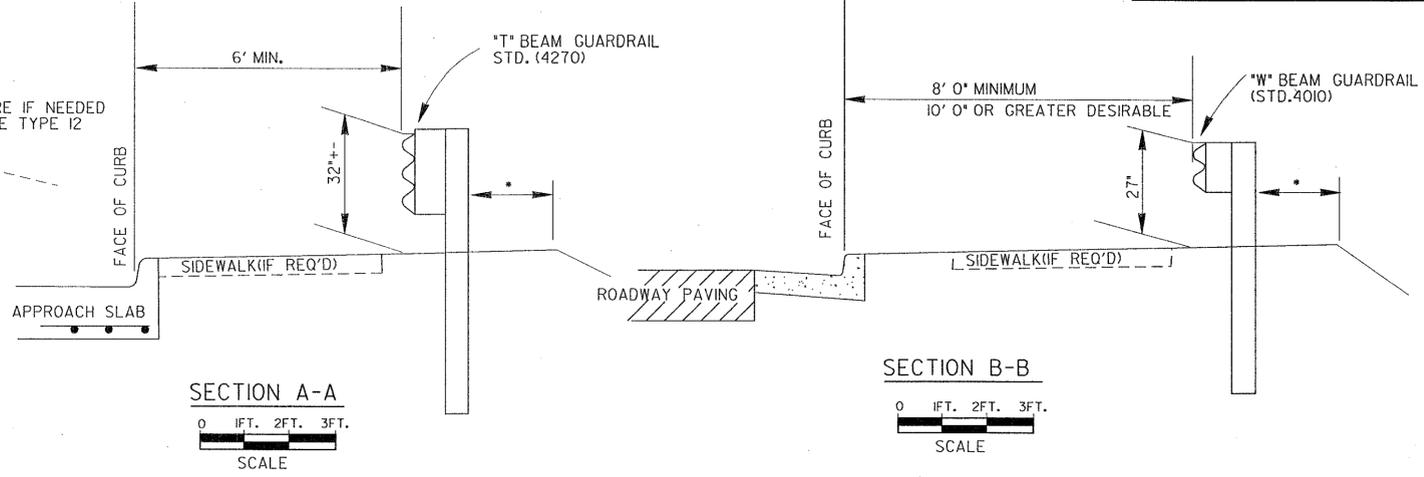
NOTE: CURB AT SEC. E-E IN FRONT OF TYPE 12 ANCHORAGE SHALL BE OMITTED WHERE FEASIBLE.

GUARDRAIL LOCATION SHOULDER ACROSS BRIDGE



NOTE: APPLICATION OF ABOVE DETAILS IS TYPICAL FOR URBAN TYPE FACILITIES WITH CONTINUOUS CONCRETE CURB & GUTTER ADJACENT TO THE PAVEMENT. SEE SEPARATE DETAILS WHERE SECTIONS OF ASPHALT CURB ARE LOCATED UNDER GUARDRAIL ON SHOULDERS OF RURAL TYPE FACILITIES.

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 ANCHORAGE WILL BE MADE BY THE ENGINEER OR A REPRESENTATIVE FROM THE OFFICE OF TRAFFIC OPERATIONS AFTER CONSTRUCTION OF ROADWAY AND CURB. THIS APPLIES TO ALL CONDITIONS SHOWN ON THIS STANDARD.



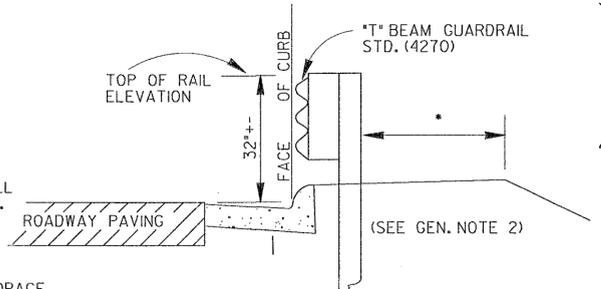
SECTION A-A
SCALE

SECTION B-B
SCALE

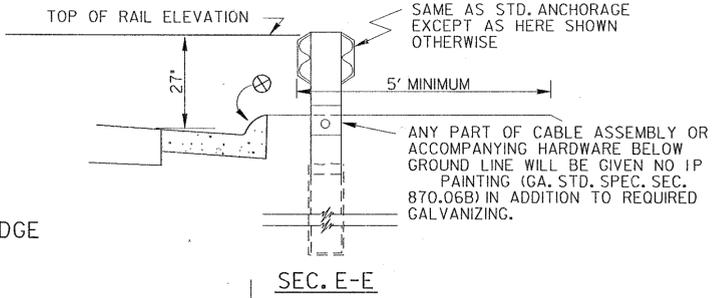
* DISTANCE FROM BACK OF POST TO EDGE OF GRADED SHOULDER SHALL NOT BE LESS THAN 2 FEET WITH NORMAL LENGTH POST AND NOT LESS THAN 1 FOOT WITH ADDITIONAL LENGTH POST (STD. 401A)

GENERAL NOTES:

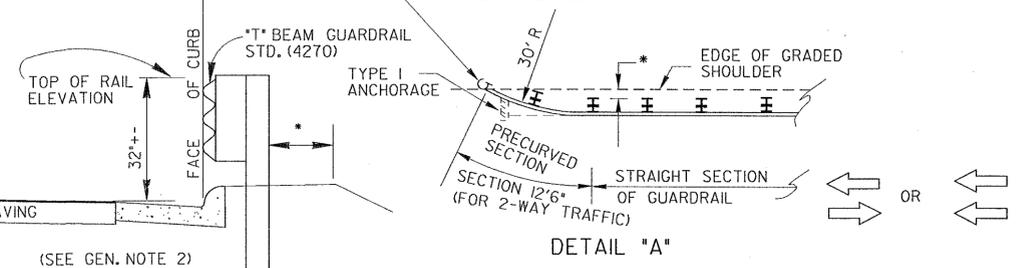
- SPECIFICATIONS: GEORGIA STANDARD, CURRENT EDITION, AND SUPPLEMENTS THERETO.
- IF GUARDRAIL IS DIRECTLY ABOVE CURB, DO NOT USE STD. 10330, 10336, 10340, 10346 CATCH BASINS AT SAME LOCATION. EITHER USE OTHER DRAINAGE STRUCTURES OR ADJUST LOCATION OF CATCH BASINS TO MISS GUARDRAIL.
- (a) TYPE 12 ANCHORAGES ARE REQUIRED AT ALL APPROACH ENDS OF GUARDRAIL AND AT TRAILING ENDS THAT FALL WITHIN THE C.Z.W. OF THE TWO-WAY TRAFFIC. C.Z.W.-CLEAR ZONE WIDTH.
(b) TYPE 1 ANCHORAGE WITH A 30' R PRECURVED RAIL SECTION MAY BE USED AT TRAILING ENDS THAT FALL OUTSIDE THE C.Z.W. OF THE TWO-WAY TRAFFIC.
(c) TYPE 1 ANCHORAGES ARE USED AT THE TRAILING ENDS OF ONE-WAY TRAFFIC.
- (a) GUARDRAIL PER APPLICABLE DETAIL AT LEFT IS REQUIRED AT BOTH APPROACH BRIDGE END POSTS WITH ONE-WAY TRAFFIC AND AT ALL 4 BRIDGE END POSTS WITH 2-LANES & 2-WAY TRAFFIC.
(b) BRIDGE END POSTS AT THE TRAILING END OF ONE-WAY TRAFFIC OR AT THE TRAILING END OF TWO-WAY TRAFFIC ON MULTI-LANE (FOUR OR MORE) FACILITIES DOES NOT REQUIRE GUARDRAIL UNLESS STEEP SLOPES OR OTHER CONDITION WARRANTS GUARDRAIL FOR TRAFFIC COMING OFF OF BRIDGE. IF REQUIRED FOR THIS CONDITION, GUARDRAIL TYPE SHALL BE AS WARRANTED & WITHOUT ADDITIONAL POST/DOUBLE THICK RAIL.
- SKETCHES SHOWN HERE FOR GUARDRAIL AND ANCHORAGES ARE REPRESENTATIVE, SEE SEPARATE STANDARDS OR DETAILS FOR SPECIFIC REQUIREMENTS.
- NON-FLARED ANCHORAGE SHALL HAVE STRAIGHT TAPER (50:1 TYP.) SO THAT THE EXTRUDER OR IMPACT HEAD WILL NOT PROTRUDE OVER CURB FACE.



SECTION C-C
SCALE



SEC. E-E



DETAIL "A"

SECTION D-D
SCALE

DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REVISION		STANDARD GUARDRAIL LOCATION (ON ROADS WITH CURB & GUTTER, HEADER CURB OR INTEGRAL CURB)	
SCALE AS SHOWN		REV. & REDR. OCT., 1999	
DES. (SUBMITTED)	BY	REDR. (APPROVED)	NUMBER 4280