

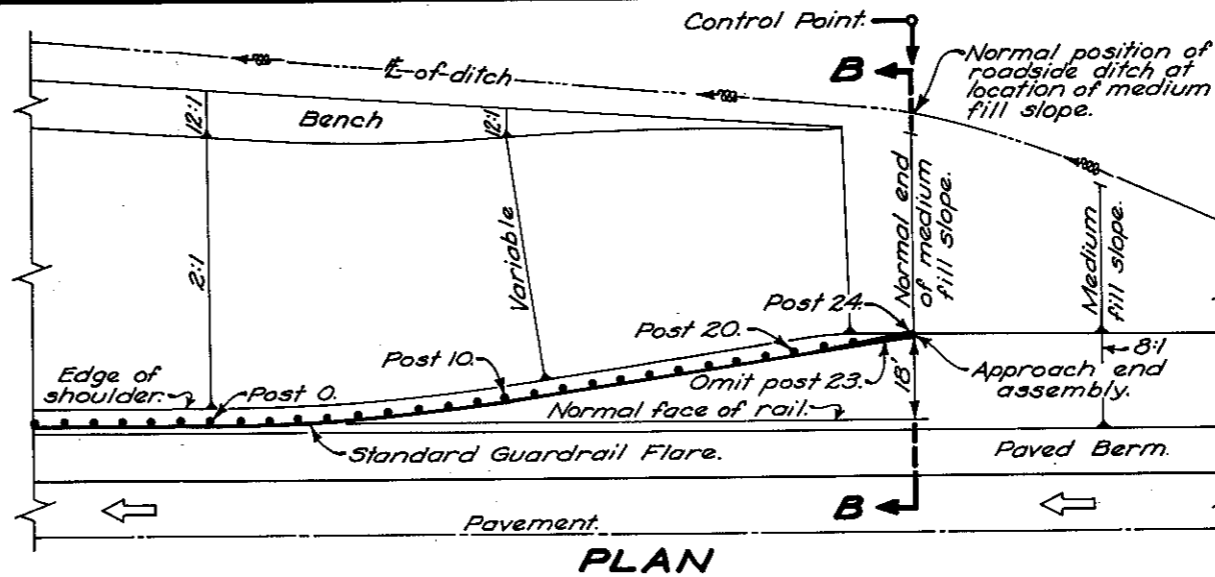
NOTES

Design details shown shall govern the construction of guardrail at hazardous cut to fill, fill to fill and in cut areas unless otherwise shown on the plans.

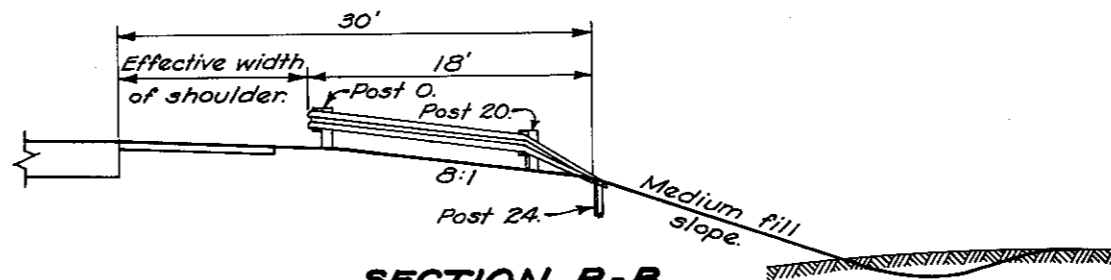
Backslope "A" and fill slope "B" shall be constructed as shown on typical sections.

Storm Sewer and Catch Basin shall be constructed only at locations shown on the plan and profile sheets.

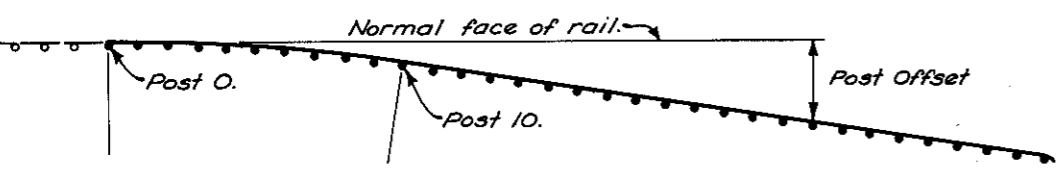
Design shown for guardrail introduced because of an obstruction is applicable to directional roadways. On two-way roadways provide a 125 foot long flare and approach end assembly on both sides of the obstruction.



PLAN

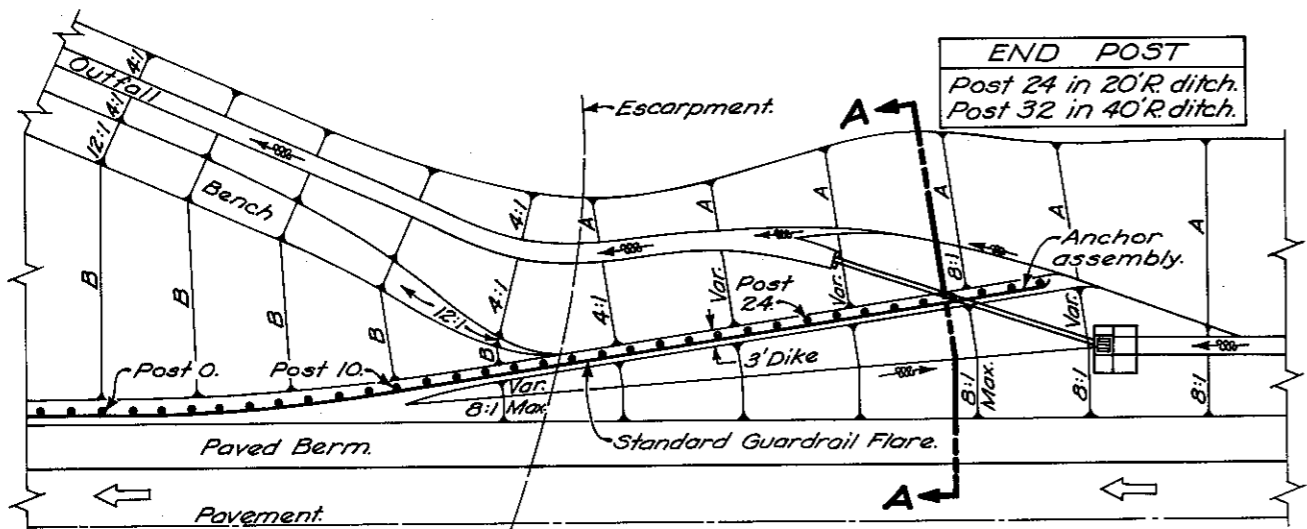


**SECTION B-B
FILL TO FILL**



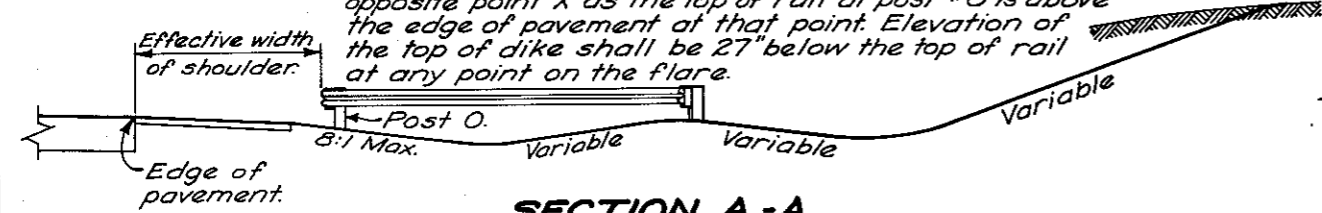
Description	Post No (6'-3" %)	Offset	Length
Beginning of flare.	0	0.00'	
	1	.05'	
	2	.19'	
	3	.43'	
	4	.76'	
End circular segment (Introduced)	5	1.18'	
	6	1.71'	
	7	2.32'	
	8	3.04'	
	9	3.84'	
End circular segment (F to F & C to F)	10	4.74'	
Terminal-Cut to Cut protection only.	20	8.30'	125'
Terminal-Standard roadside flares.	24	18.00'	150'
Terminal-Cut to Fill protection only.	32	25.58'	200'

STANDARD GUARDRAIL FLARE

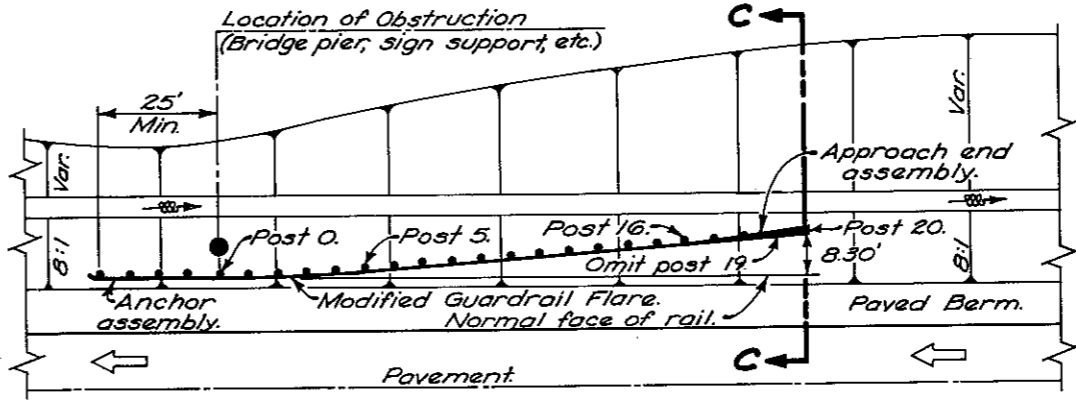


PLAN

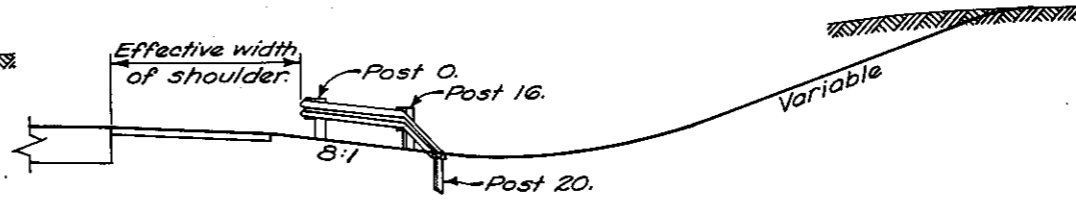
Elevation of the top of rail at any point "X" shall be the same distance above the edge of pavement opposite point "X" as the top of rail at post #0 is above the edge of pavement at that point. Elevation of the top of dike shall be 27" below the top of rail at any point on the flare.



**SECTION A-A
CUT TO FILL**



PLAN



**SECTION C-C
INTRODUCED
because of obstruction.**

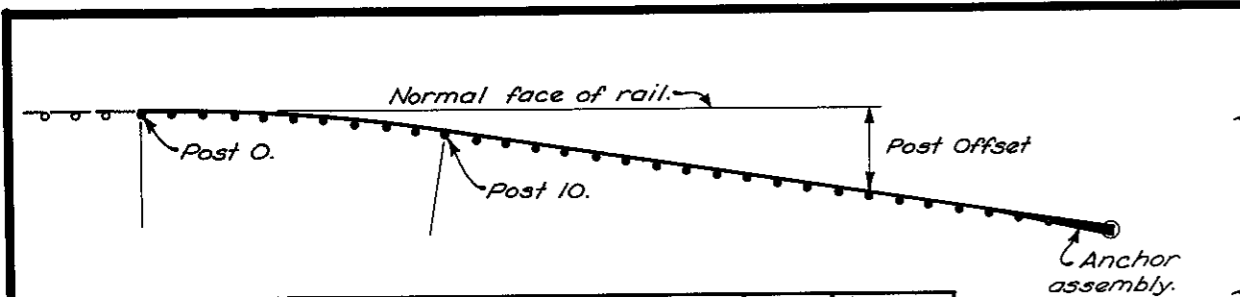
BUREAU OF LOCATION AND DESIGN
OHIO DEPARTMENT OF HIGHWAYS

GUARDRAIL FLARES

DATE 1-15-68

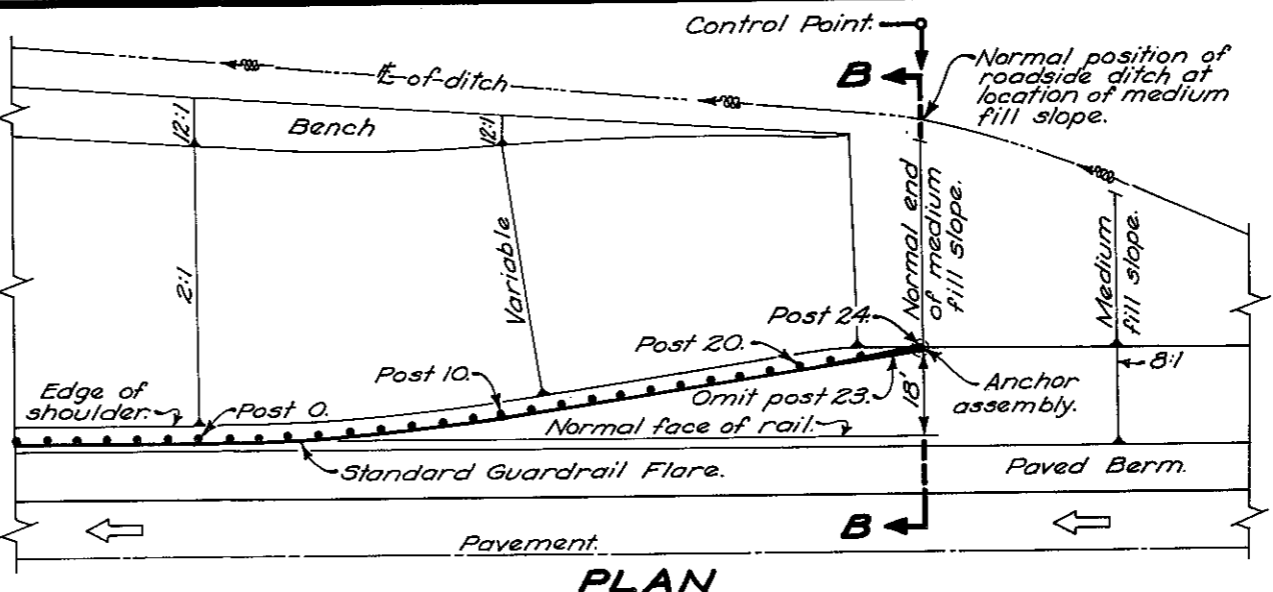
STANDARD CONSTRUCTION DRAWING **GR-5**

APPROVED *R. C. [Signature]* ENGR. L. & D.

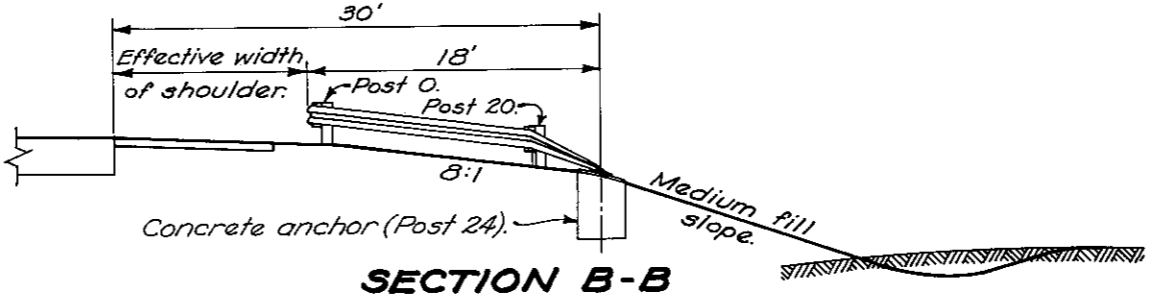


Description	Post No. (6'-3" %)	Offset	% Length
Beginning of flare.	0	0.00'	
	1	.05'	
	2	.19'	
	3	.43'	
	4	.76'	
End circular segment (Introduced)	5	1.18'	
	6	1.71'	
	7	2.32'	
	8	3.04'	
	9	3.84'	
End circular segment (F to F, & C to F)	10	4.74'	
Terminal - Cut to Cut protection only.	20	8.30'	125'
Terminal - Standard roadside flares.	24	18.00'	150'
Terminal - Cut to Fill protection only.	32	25.58'	200'

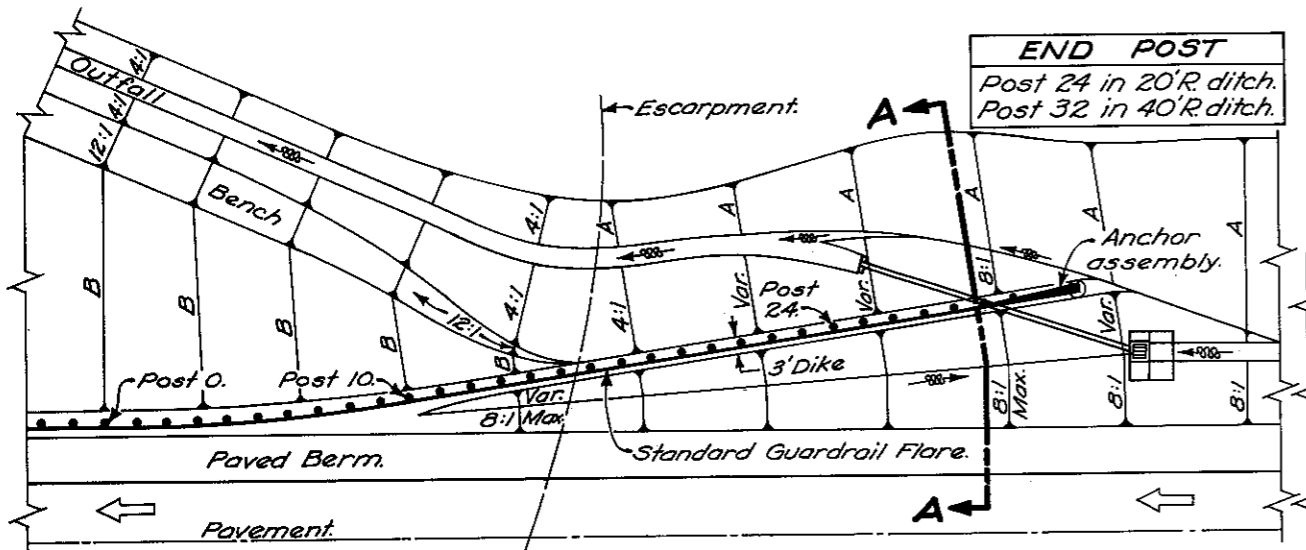
* Measured to post bolt hole in special end shoe.



PLAN

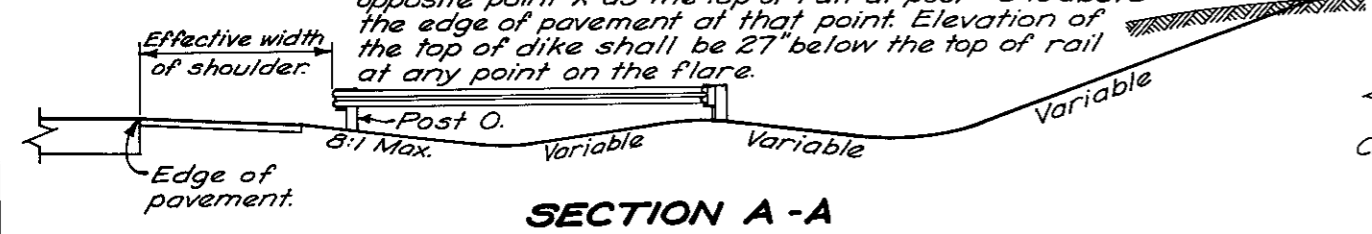


SECTION B-B
FILL TO FILL

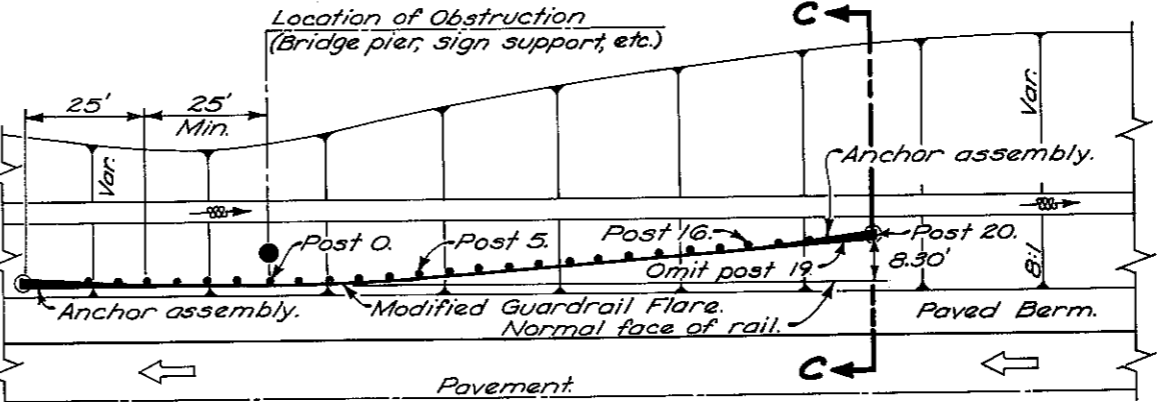


PLAN

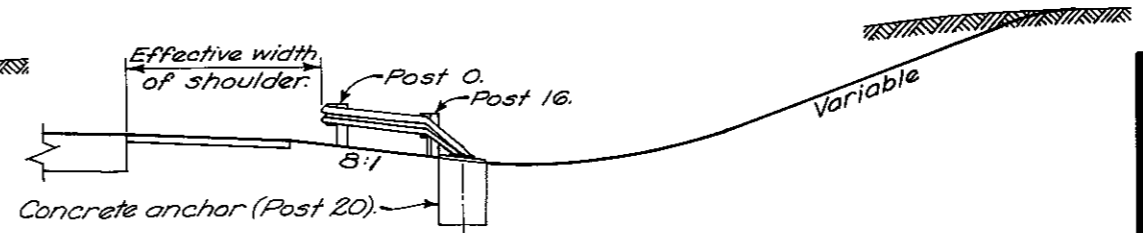
Elevation of the top of rail at any point "X" shall be the same distance above the edge of pavement opposite point "X" as the top of rail at post #0 is above the edge of pavement at that point. Elevation of the top of dike shall be 27" below the top of rail at any point on the flare.



SECTION A-A
CUT TO FILL



PLAN



SECTION C-C
INTRODUCED
because of obstruction.

NOTES

Design details shown shall govern the construction of guardrail at hazardous cut to fill, fill to fill and in cut areas unless otherwise shown on the plans.

Backslope "A" and fill slope "B" shall be constructed as shown on typical sections.

Storm Sewer and Catch Basin shall be constructed only at locations shown on the plan and profile sheets.

Design shown for guardrail introduced because of an obstruction is applicable to directional roadways. On two-way roadways provide a 125 foot long flare and anchor assembly on both sides of the obstruction.

Type 5 guardrail shall be used for all introduced installations.

For anchor assembly detail see Standard Drawing GR-4.

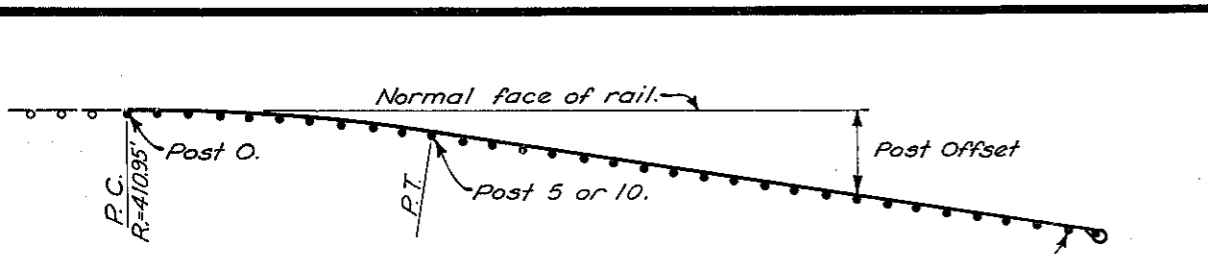
BUREAU OF LOCATION AND DESIGN
OHIO DEPARTMENT OF HIGHWAYS

GUARDRAIL FLARES

STANDARD CONSTRUCTION DRAWING **GR-5**

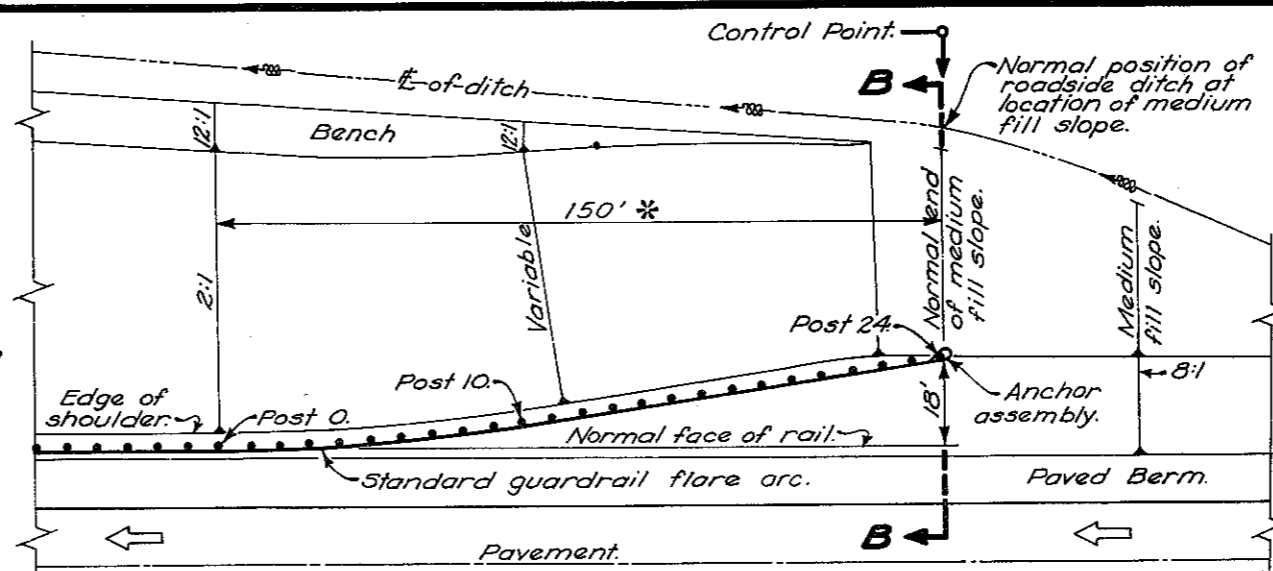
APPROVED: *R. L. Smith* ENGR., L. & D.

DATE: 1-15-68
1-1-71

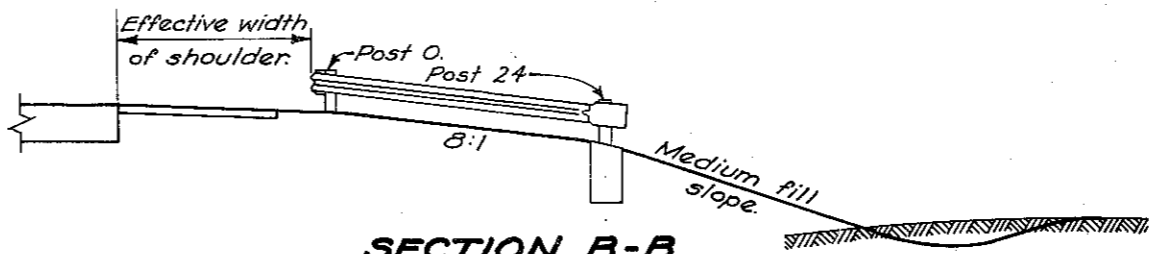


GUARDRAIL FLARE OFFSETS			
Description	Post No. (6'-3" %)	125' Flare	150' & 200' Flares
Beginning of flare.	0	0.00'	0.00'
	1	.05'	.05'
	2	.19'	.19'
	3	.43'	.43'
	4	.76'	.76'
End modified flare arc (Introduced).	5	1.19'	1.19'
	6	1.66'	1.71'
	7	2.14'	2.33'
	8	2.61'	3.04'
	9	3.09'	3.84'
End standard flare arc (F to F & C to F).	10	3.56'	4.74'
Terminal - Introduced protection only.	20	8.31'	14.21'
Terminal - Cut to Fill & Fill to Fill protection.	24	—	18.00'
Terminal - Cut to Fill protection only.	32	—	25.58'

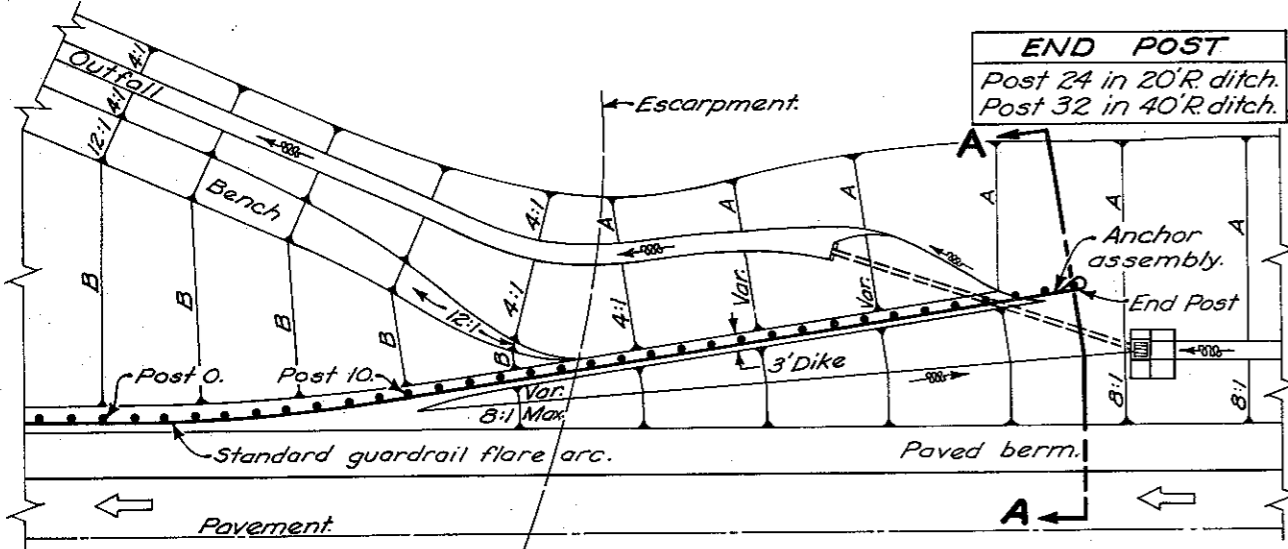
* Measured along face of rail to post bolt hole.



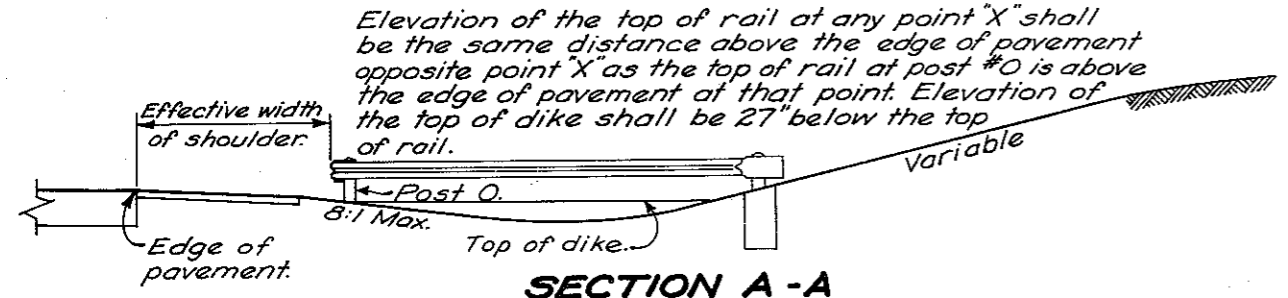
PLAN



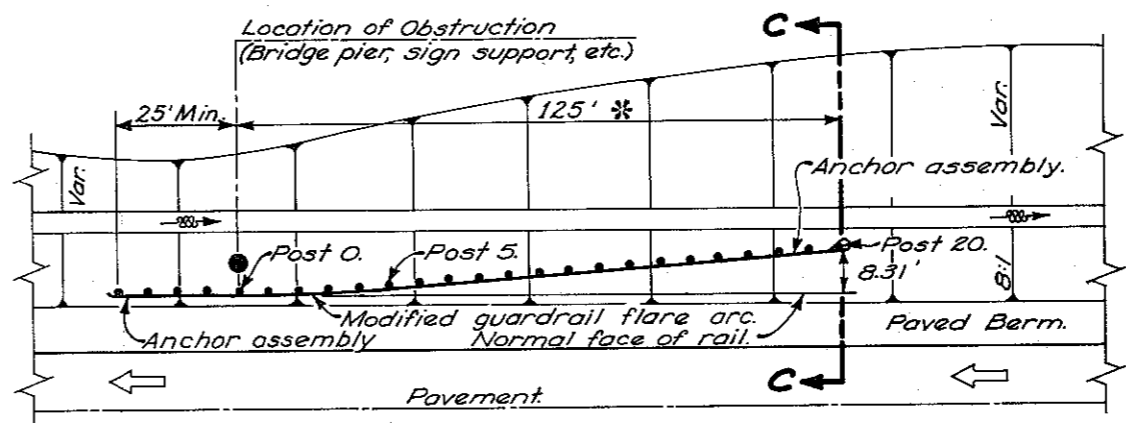
SECTION B-B
FILL TO FILL



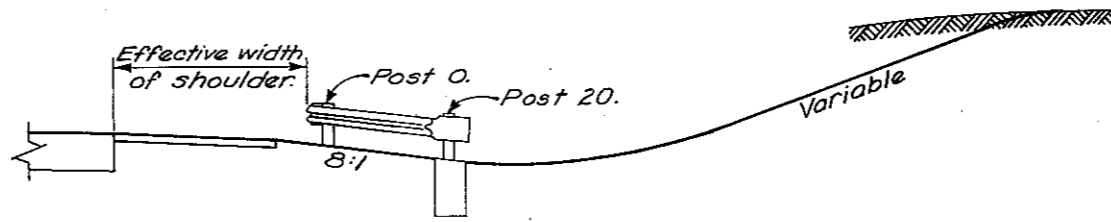
PLAN



SECTION A-A
CUT TO FILL



PLAN



SECTION C-C
INTRODUCED
because of obstruction.

NOTES

Design details shown shall govern the construction of guardrail at hazardous cut to fill, fill to fill and in cut areas unless otherwise shown on the plans:

Backslope "A" and fill slope "B" shall be constructed as shown on typical sections.

Storm Sewer and Catch Basin shall be constructed only at locations shown on the plan and profile sheets.

Design shown for guardrail introduced because of an obstruction is applicable to directional roadways. On two-way roadways, provide a 125-foot long flare and anchor assembly on both sides of the obstruction.

Type 5 guardrail shall be used for all introduced installations.

For anchor assembly detail see Standard Drawing GR-4 or 4B. The actual anchor assembly specified in the plans may be different from the type shown hereon.

BUREAU OF LOCATION AND DESIGN
OHIO DEPARTMENT OF TRANSPORTATION

GUARDRAIL FLARES

STANDARD CONSTRUCTION DRAWING GR-5

APPROVED ENGR. L. & D.

DATE
1-15-68
1-1-71
2-5-82