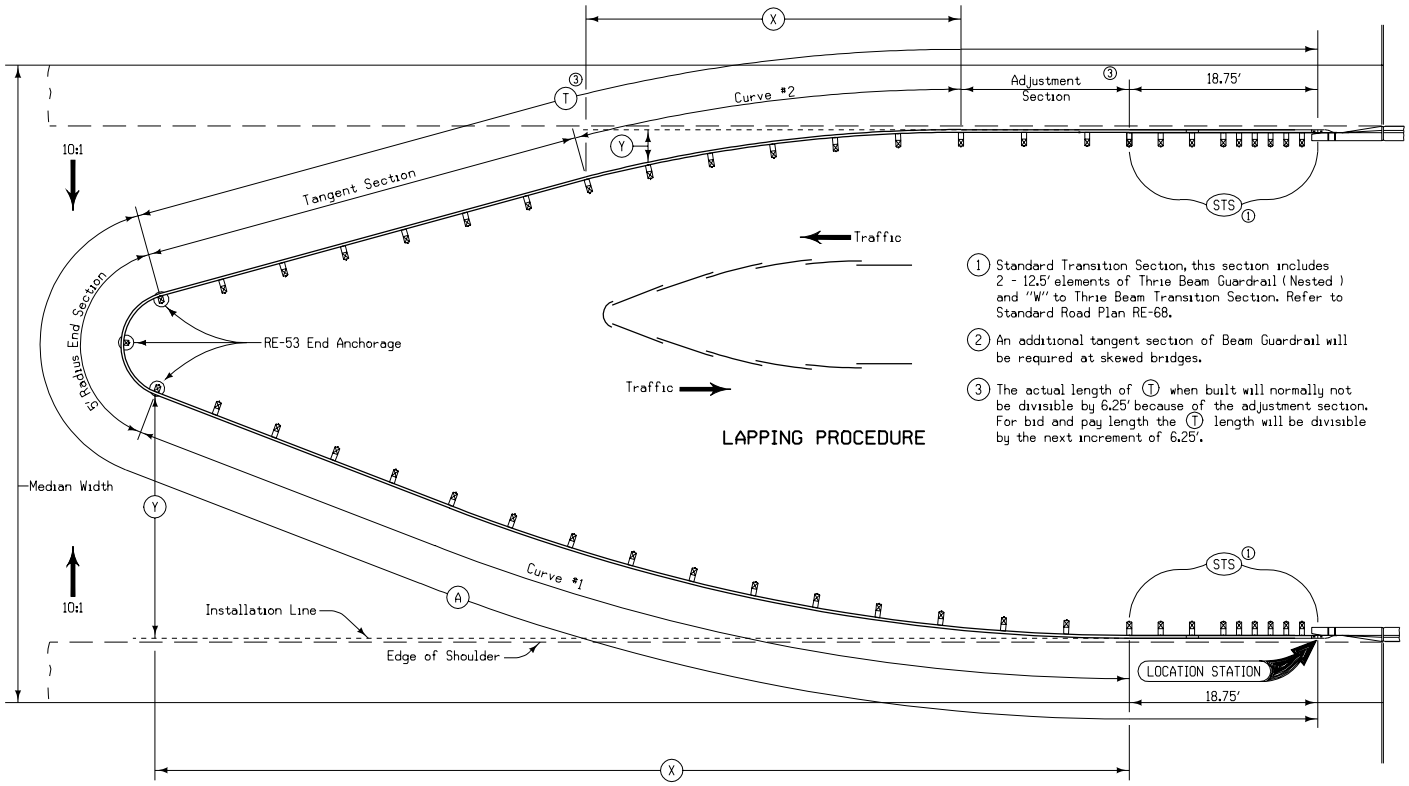


LAPPING PROCEDURE

(1) Standard Transition Section, this section includes 2 - 12.5' elements of Thrie Beam Guardrail (Nested) and "W" to Thrie Beam Transition Section. Refer to Standard Road Plan RE-68.

(2) An additional tangent section of Beam Guardrail will be required at skewed bridges.

(3) The actual length of (T) when built will normally not be divisible by 6.25' because of the adjustment section. For bid and pay length the (T) length will be divisible by the next increment of 6.25'.

GENERAL NOTES:

Details indicated hereon are for the installation of guardrail in medians between bridges. Refer to "Tabulation of Steel Beam Guardrail for Standard Road Plan RE-67" for complete data regarding specific locations.

Details shown are typical. Actual installation may require some adjustment when so directed by the engineer.

Horizontal and vertical alignment of the guardrail in the area immediately adjacent to the bridge shall, where necessary, be adjusted to a smoothly curved line with no abrupt changes. Appropriate adjustment in method of installation shall be made for curved roadway, skewed bridges, or other conditions not shown.

Guardrail shall be lapped towards the structure.

Contract items for beam guardrail are:

Installation of Guardrail
(Bid Item Length = A+T(3))
Beam Guardrail End Anchorage RE-53
Beam Guardrail End Anchorage RE-69 or RE-27B.

INSTALLATION PROCEDURES:

1. Install 18.75' Standard Transition Section to each end post as detailed on Standard Road Plan RE-68.
2. Determine the length of Curve #1 from "Tabulation of Steel Beam Guardrail Between Dual Bridges." Stake and install guardrail based on table of "Approach Side Curve Offsets" as shown on this sheet.
3. Install the 12.5' RE-53 end anchorage, Backside (3rd) post should not be installed until Step 4 and 5 are completed to insure a smooth alignment.
4. Determine the maximum Y offset length for Curve #2 from the table of "Trailing Side Curve Offsets" on this sheet based on curve length in the guardrail tabulation. Based on this offset and the Tangent Section length, locate the intersection point of Curve #2 and the tangent section.
5. Maintaining normal post spacing from the RE-53 end anchorage, install guardrail to the point determined in Step 4. Install backside RE-53 post.
6. Using table of "Trailing Side Curve Offsets" Install Curve #2 guardrail and posts and any necessary adjustment section.

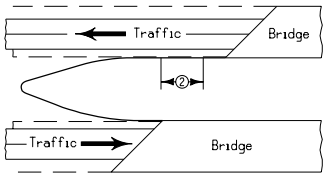
(X) Is the distance along the installation line The beginning of the curve to a post location.

(Y) Is the offset from installation line to face of rail.

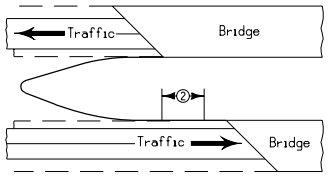
TRAILING SIDE CURVE OFFSETS (CURVE # 2)

150' R.

Distance Along Curve	0.00'	6.25'	12.50'	18.75'	25.00'	31.25'	37.50'	43.75'
(X)	0.00'	6.25'	12.49'	18.70'	24.88'	31.02'	37.11'	43.13'
(Y)	0.00'	0.13'	0.52'	1.17'	2.08'	3.24'	4.66'	6.33'



APPROACH END AHEAD



APPROACH END BACK

SKEWED BRIDGES

APPROACH SIDE ALIGNMENT OFFSETS (CURVE # 1)

	Parabolic Curve												Tangent Section									
Distance Along Curve	0.00'	6.25'	12.50'	18.75'	25.00'	31.25'	37.50'	43.75'	50.00'	56.25'	62.50'	68.75'	75.00'	81.25'	87.50'	93.75'	100.00'	106.25'	112.50'	118.75'	125.00'
(X)	0.00'	6.25'	12.49'	18.72'	24.92'	31.09'	37.22	43.32'	49.36'	55.35'	61.28'	67.15'	72.99'	78.83'	84.67'	90.51'	96.35'	102.19'	108.03'	113.87'	119.71'
(Y)	0.00'	0.11'	0.44'	1.00'	1.77'	2.75'	3.94'	5.34'	6.93'	8.71'	10.68'	12.82'	15.05'	17.28'	19.51'	21.74'	23.97'	26.20'	28.43'	30.66'	32.89'

For additional information see Standard Road Plans, Detail Sheets and Typical Detail Drawings as follows: RE-27B, RE-53, RE-65, RE-68, RE-69A, RE-69B, RL-12.

Iowa Department of Transportation
Highway Division

STANDARD ROAD PLAN | **RE-67**

REVISION: New bridge endpost and guardrail transition section. Change to 6" X 8" posts.

REVISION NO. 5

REVISION DATE 10-02-01

William G. Stein
APPROVED BY DESIGN METHODS ENGINEER

GUARDRAIL INSTALLATION BETWEEN DUAL BRIDGES
(Case Y)