



- ~ NOTES ~
- ① OFFSETS SHOWN ARE CALCULATED FROM FACE OF GUARDRAIL (TANGENT EXTENDED FROM BRIDGE). OFFSET DIMENSIONS SHOWN ARE FOR 6 FOOT USABLE SHOULDERS, WITH W EQUAL TO 7.5 FEET.
 - ② DISTANCES ARE FROM CENTER LINE OF SPLICE. SEE CURRENT STANDARD DRAWING RBC-002 FOR DETAILS.
 3. CALCULATIONS FROM 0 FEET TO 100 FEET ARE BASED ON THE FOLLOWING FORMULA: $OFFSET = \left(\frac{x}{L/2}\right)^2 \times \frac{W}{2}$
FROM 100 FEET TO 200 FEET THE PROCEDURE IS AS FOLLOWS, FOR EXAMPLE AT P28: 7.5 FEET MINUS 0.23 FEET = 7.27 FEET, ETC.
 4. THE ENGINEER SHALL USE THE OFFSET FORMULA AND CALCULATE OFFSETS NEEDED FOR FIELD CONDITIONS DIFFERENT THAN THAT SHOWN IN THE CHART.
 - ⑤ BRIDGE SHOULDER WIDTH VARIES PER KYTC & AASHTO GUIDANCE.

6' USABLE SHOULDER
GUARDRAIL FLARE DIMENSIONS

POST NUMBER	DISTANCE / OFFSET FEET	
	DISTANCE	OFFSET
0	0	0
P1	6.25	0.01
P2	12.5	0.02
P4	25.0	0.08
P6	37.5	0.19
P8	50.0	0.34
P10	62.5	0.52
P12	75.0	0.75
P14	87.5	1.03
P16	100.0	1.34
P18	112.5	1.64
P20	125.0	1.92
P22	137.5	2.15
P24	150.0	2.33
P26	162.5	2.48
P28	175.0	2.59
P30	187.5	2.65
P32	200.0	2.67

8' USABLE SHOULDER
GUARDRAIL FLARE DIMENSIONS

POST NUMBER	DISTANCE / OFFSET FEET	
	DISTANCE	OFFSET
0	0	0
P1	6.25	0.01
P2	12.5	0.04
P4	25.0	0.15
P6	37.5	0.33
P8	50.0	0.59
P10	62.5	0.91
P12	75.0	1.32
P14	87.5	1.79
P16	100.0	2.34
P18	112.5	2.88
P20	125.0	3.35
P22	137.5	3.76
P24	150.0	4.08
P26	162.5	4.34
P28	175.0	4.52
P30	187.5	4.63
P32	200.0	4.67

10' USABLE SHOULDER
GUARDRAIL FLARE DIMENSIONS

POST NUMBER	DISTANCE / OFFSET FEET	
	DISTANCE	OFFSET
0	0	0
P1	6.25	0.01
P2	12.5	0.05
P4	25.0	0.21
P6	37.5	0.47
P8	50.0	0.84
P10	62.5	1.30
P12	75.0	1.88
P14	87.5	2.56
P16	100.0	3.34
P18	112.5	4.11
P20	125.0	4.79
P22	137.5	5.37
P24	150.0	5.83
P26	162.5	6.20
P28	175.0	6.46
P30	187.5	6.62
P32	200.0	6.67

USE WITH CUR. STD. DWG.
RBC-002

KENTUCKY
DEPARTMENT OF HIGHWAYS
GUARDRAIL TRANSITION
FROM NORMAL SHOULDER
TO NARROW BRIDGE

SUBMITTED *William S. Hallett* 11-17-17
DIRECTOR DIVISION OF DESIGN DATE