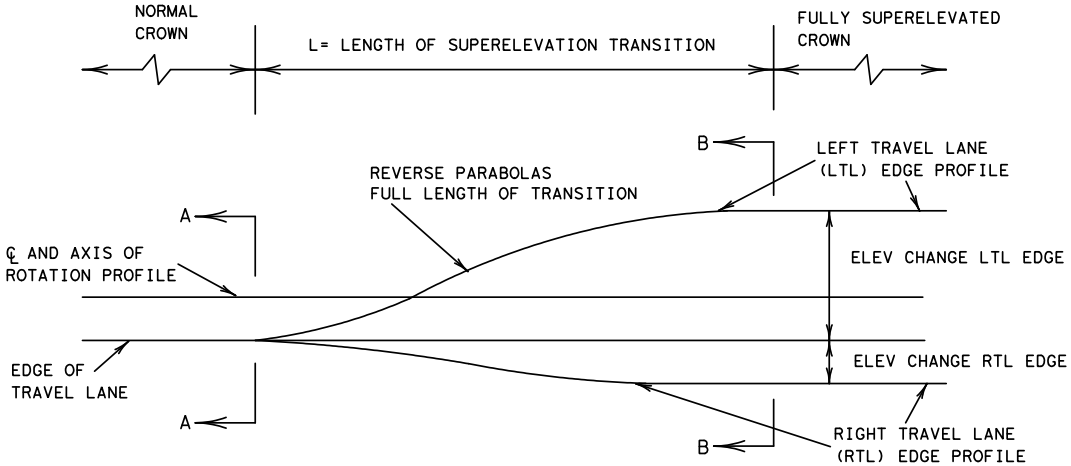
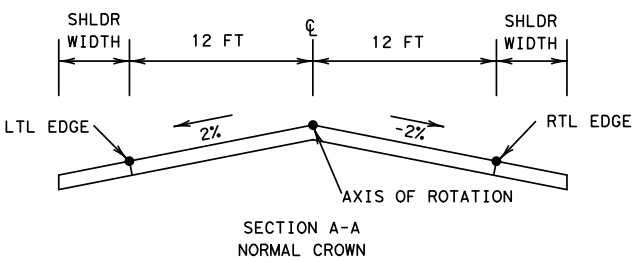
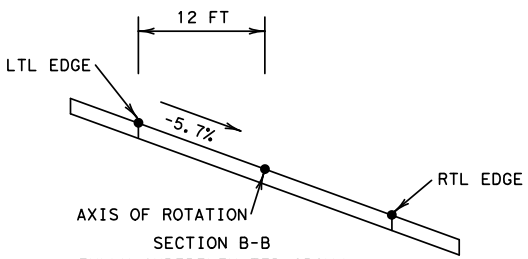




SECTION A-A
NORMAL CROWN



SECTION B-B
FULLY SUPERELEVATED CROWN

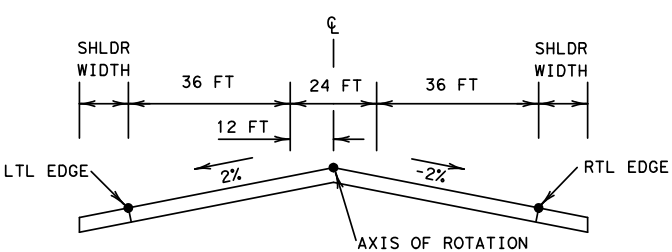
EXAMPLE NO. 1

GIVEN: RURAL TWO LANE HIGHWAY
DESIGN SPEED=60 mph
R=2500 FT, TO THE RIGHT
℄ IS ROTATION AXIS
MAX. e=8%
Req. e=5.7%

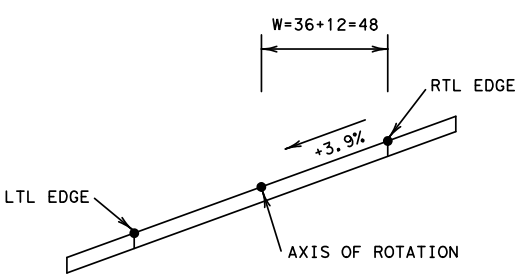
FIND: LENGTH OF SUPERELEVATION TRANSITION

SOLUTION

CALCULATE L_{CT}: $L_{CT}=(CS)(W)/(G)$
MAX REL G=0.45 (FROM TABLE 2-8)
$L_{CT}=[+2-(-5.7)][12]/[0.45]$
$L_{CT}=206$ FT



NORMAL CROWN



FULLY SUPERELEVATED CROWN

EXAMPLE NO. 2

GIVEN: URBAN SIX-LANE FREEWAY
DESIGN SPEED=60 mph
R=4000 FT, TO THE LEFT
℄ IS ROTATION AXIS
MAX. e=8%
Req. e=3.9%

FIND: LENGTH OF SUPERELEVATION TRANSITION

SOLUTION

CALCULATE L_{CT}: $L_{CT}=(CS)(W)/(G)$
MAX REL G=0.45 (FROM TABLE 2-8)
$L_{CT}=[-2-(+3.9)][48]/[0.45]$
$L_{CT}=630$ FT

DETERMINATION OF LENGTH OF SUPERELEVATION TRANSITION (US CUSTOMARY)