Key

Complete the following table for missing stations and elevations.
Both vertical curves are equal tangent.

STATION	ELEVATION
0+00	100.00
1+00	***102.00***
2+00	***104.00***
3+00	***106.00***
4+00	***108.00***
5+00	***110.00***
6+00	***112.00***
7+00	***114.00***
7+50	***114.81***
8+00	***115.25***
8+50	***115.31***
9+00	***115.00***
10+00	***114.00***
11+00	***113.00***
11+90	***112.10***
12+00	***112.01***
12+50	***111.74***
13+00	***111.81***
13+50	***112.21***
14+00	***112.94***
14+50	***114.01***
14+90	***115.10***
15+00	***115.40***
16+00	***118.40***
17+00	***121.40***
18+00	***124.40***
19+00	***127.40***
20+00	130.40

+2.000%

PVI = 8+00
PVI Elev. = ***116.00***
Length = 200.00'

Hi Pt = ***8+33.33***
Hi Elev. = ***115.33***

–1.000%

Y = –1 X +116.00
Y = +3 X + 94.40

PVI = ***13+40.00***
PVI Elev. = ***110.60***
Length = 300.00'

Lo Pt = ***12+65.00***
Lo Elev. = ***111.73***
Puddle 0.50' deep
From ***11+77.50***
Thru ***13+51.60***

+3.000%

Finally try changing final vertical curve to clear a bridge at 14+50 by 15.00 feet.
(EL = 128.00 at bottom of beams.) Hold G1, G2, PVC and EL1.

G1% = –1 ***G2% = +3*** ***PVC = 1190*** ***EL1 = 112.10*** ***STA = 1450*** ***EL = 113.00***

Solve for ***L = 386.29***