

**LAPPING PROCEDURE**

| OFFSETS TO LAST POST OF TERMINAL |        |        |        |        |        |        |         |         |         |         |
|----------------------------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| Distance Along Flare (4)         | 37.5'  | 50.0'  | 62.5'  | 75.0'  | 87.5'  | 100.0' | 112.5'  | 125.0'  | 137.5'  | 150.0'  |
| (X)                              | 37.29' | 49.71' | 62.14' | 74.57' | 87.00' | 99.43' | 111.86' | 124.29' | 136.72' | 149.14' |
| (Y)                              | 4.00'  | 5.33'  | 6.67'  | 8.00'  | 9.33'  | 10.67' | 12.00'  | 13.33'  | 14.67'  | 16.00'  |

- ① Refer to Standard Road Plan RE-76 for details of Terminal Section.
- ② The 'H' length extends beyond the obstacle equally in both directions.
- ③ For earth shaping at barrier and berm widths, see Standard Road Plan RL-14.
- ④ Variable Flare length (VF) + Terminal length (ET) (37.5').

**GENERAL NOTES:**

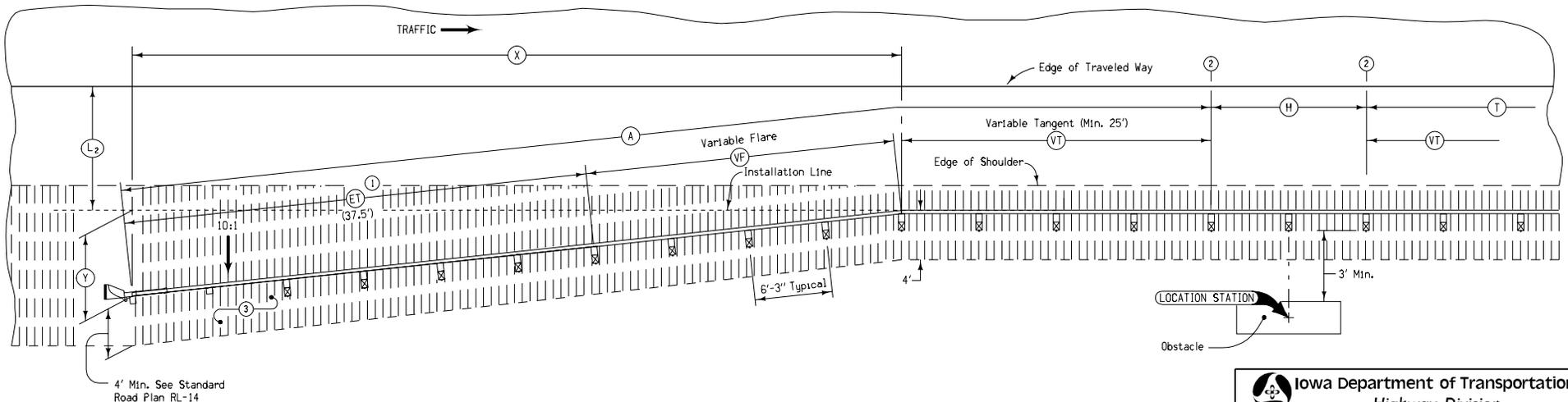
Details indicated hereon are for installation of formed steel beam guardrail for obstacles located adjacent to the traveled way. For information regarding individual installations, refer to Tabulation of Steel Beam Guardrail, other Standard Road Plans and detailed project plans for additional data.

In areas where the guardrail diverges from installation line, a smooth profile shall be established. Grade a 10:1 slope from the edge of the shoulder to the guardrail post as detailed on Standard Road Plan RL-14. Refer to project plans for specific requirements.

Guardrail shall be lapped towards the obstacle.

Price bid for contract items shall be considered full compensation for furnishing all materials and constructing guardrail essentially as indicated hereon.

Contract items for guardrail construction are:  
 Installation of Guardrail  
 (Bid Item Length = A + H + T)  
 Beam Guardrail Terminal (RE-76)



**PLAN VIEW**

For additional information, see Standard Road Plans and Tabulations as follows: RE-12A, RE-76, RL-14, 107-23, 108-8B.

**Iowa Department of Transportation**  
Highway Division

**STANDARD ROAD PLAN RE-54A**

|  |                           |
|--|---------------------------|
| REVISION: Update number of FLEAT posts | REVISION NO.<br>7         |
| <i>William J. Altan</i>                | REVISION DATE<br>04-30-02 |
| APPROVED BY DESIGN METHODS ENGINEER    |                           |

**GUARDRAIL INSTALLATIONS**  
(SIDE OBSTACLE, TWO-WAY PROTECTION)  
6'-3" POST SPACING AT OBSTACLE