

ALIGNMENT:

TRE90SUP (RAMP C2)

TIE IN CROSS SLOPE = +0.39% (FROM SUPERIOR PROFILE)

NC = +1.60%

$w = 16'$ $u_d = 30$ MPH

$G(30) = 152:1$

divided roadway $\rightarrow b_w = 1$

+0.39% TO BE ACHIEVED BY STA. 1028+75.00

$$L = \Delta G * b_w * w$$

$$L = (0.016 - 0.0039)(152)(1)(16)$$

$$L = 29.4272'$$

$$\text{USE } L = 29.5'$$

$$\begin{array}{r} 1028+75.00 \\ - \quad 29.50 \\ \hline 1028+45.50 \end{array}$$

BEGIN ROTATION @ STA. 1028+45.50

TIME @ NC

$$\begin{array}{r} L: \quad 1028+45.50 \\ - 1024+45.1246 \\ \hline 400.3754' \end{array}$$

$u_d = 45$ MPH

$$t_{sec} = \frac{L}{u_d (1.4666)}$$

$$t_{sec} = 6.06 \text{ seconds}$$

BURGESS & NIPLE COMPUTATION SHEET

JOB NO. PIB 25795 JOB NAME CIB - TRENCH SHEET 1 OF 1 SHEETS
SUBJECT RAMP C2 TIE-IN PREPARED BY DCL DATE 01/27/10
SCALE N/A CHECKED BY ALR DATE 2/1/10