

J.P. CARREAR & Sons, Inc.

ERNEST J. BROOD
C-10014

RUTLAND BRIDGE
JPC #23430-014

INSERT DESIGN FOR WATER LINE BRACKET
(WORK W/ CARREAR SHOP DWGS)

FOR TYPE #2 BRACKET

$$V_1 = 60 \text{ PLF} \times 9.5' = 570 \text{ LB WATER LINE} \quad \&$$

$$V_2 = 66 \text{ LB BRACKET}$$

$$V_{\text{TOT}} = 570 / 66 = 636 \text{ LB ; THERE IS NO}$$

TENSION ON BOTTOM JOINT

EDGE DISTANCE AT BOTTOM JOINT IS 5"

AUG SIZE OF INSERT IS 1" ϕ AS BOLT HOLE

IN BRACKET IS 1 1/4" ϕ

FROM ATTACHMENT DATED SUPERIOR PRODUCT

LITERATURE

WE 1" ϕ INCL F-42 6000 FERRULE INSERT

SWL(V) 3111 LBS IS 4060 LB FOR

8" EDGE DISTANCE, SINCE THERE IS ONLY

A 5" EDGE DISTANCE, USE INFO FOR

5/8" INCL INSERT F-42 INSERT

$$\text{SWL(V) 3111 LBS} = 1990 \text{ LB} > 636 \text{ LB, OK}$$

(NOTE: IT IS CONSERVATIVELY ASSUMED THAT

ALL VERTICAL SHOCK LOAD IS REACTION BY

FROM INSERT)



Vermont Agency of Transportation
RECEIVED

OK'D BY M. Umberger OK'D BY C. Mooney

June 19, 2014

Tops
35500

RESUBMIT
BY C. Carlson

DATE 06/30/2014