THREE BEAM GUARDRAIL WITH STEEL POSTS SPACED AT 6'-3"(1905) CENTER TO CENTER

SEE NOTE

EXISTING BRIDGE PARAPET

10" (450) MIN.

END OF SIDEWALK

EXIT END APPLICATION

SEE NOTE

A

EXHISTING RAIL

6 x 15 (1950) x 25I STEEL GUARDRAIL POST

\( \frac{1}{4} \times 120 \) BASE PLATE

\( \frac{1}{2} \times 120 \) GROUT PAD FILLED WITH WASHERS AS NECESSARY TO LEVEL PLATE

CHIP OUT (\( \frac{1}{4} \times 145 \)) DEEP RECESS FOR GROUT

DRILL FOR 2 - 6\( \frac{1}{2} \) x 120 DA BOLTS (AASHTO M64)

ADHESIVE ANCHORS 65,000 lbs (6000 kg) ULTIMATE

ADHESIVE BOND STRENGTH, 9'-12" (2790) MIN. EMBEDMENT

\( \frac{1}{2} \times 160 \) GUARDRAIL BOLT. Q.4/4 (1403) NUT, WASHER (TYP.)

EXITING CURB LINE (BOTTOM OF CURB)

\( \frac{1}{4} \times 120 \) CROWNF

6'-3" (1905)

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6'-3" (1905)

6'-3" (1905)

3'-4\( \frac{1}{2} \) (930)

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SEE NOTE

TWO SECTIONS OF THREE BEAM GUARDRAIL NESTED INSIDE THE OTHER

END OF SIDEWALK

6'-150 x 8" (2500) x 6'-6" (1980)

TIMBER POSTS

6'-150 x 8" (2500) x 6'-6" (1980)

TIMBER BLOCKS

A

DIRECTION OF TRAVEL

SEE NOTE

PLAN

SECTION A-A

NOTES:

1. THIS INSTALLATION SHALL BE USED WHEN THE EXISTING SIDEWALK IS 8'-6" (2500)

2. MOBIL AND DEAD LOAD CONSIDERATIONS ARE A CONCERN WHEN USING

3. ADHESIVE ANCHORS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS

4. PLACE REFLECTORIZED WASHER IN THE UPPER VOLUME OF THE THREE BEAM EVERY

5. THE EXIT END APPLICATION SHALL BE USED ONLY ON DIVIDED HIGHWAYS, FOR ALL

6. SPACING OF STEEL POSTS MAY NEED TO BE REDUCED TO ACCOMMODATE LINING UP

POSTS AT THE END OF THE PARAPET.

DELaware
DEPARTMENT OF TRANSPORTATION

BRIDGE RAIL RETROFIT, TYPE 2


SHT. 1 OF 2

RECOMMENDED

01/31/2002

CERTIFIED

01/31/2002