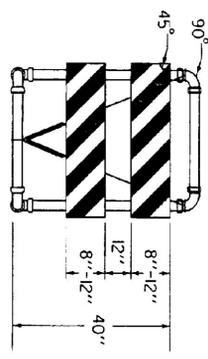
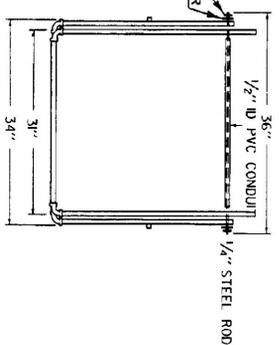
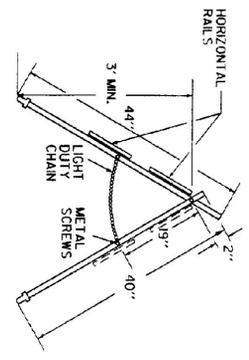


- MATERIALS FOR TYPE I AND II BARRICADES**
- 20' - 1" PVC
 - 4 - 1" PVC 90° ELBOWS
 - 30' - 1/2" ID THINWALL PVC CONDUIT
 - 36' - 1/4" STEEL ROD
 - 4 - 1" WASHERS
 - 24' - LIGHT DUTY CHAIN
 - 1/2" - #14 PAN HEAD METAL SCREWS (AS REQUIRED)
 - 2 OR 4 - 8" OR 12" X 3/8" X 0.025" BARRICADE RAILS (AS REQUIRED)
- MATERIALS FOR TYPE III BARRICADES**
- 30 LF - 3", 1.0, PVC PIPE
 - 6 - 3", 90° ELBOWS
 - 4 - 3", WASHERS
 - 2 - 3", OR 2" X 48" X 0.025" BARRICADE RAILS
 - 2 - 5/8" X 11" X 8 SPRING (IF ASSEMBLY IS NOT CEMENTED)
 - 12 LF - 1" #14 PAN HEAD METAL SCREWS (IF ASSEMBLY IS NOT CEMENTED)
 - 15 LF - 1/4 BLACK ANNEALED TIE WIRE



TYPE III (MODIFIED) BARRICADE
(STRIPING IS SHOWN WITH TRAFFIC PASSING TO THE RIGHT)

- MATERIALS FOR METAL TYPE III BARRICADES**
- PANELS (3):**
- 8' X 48" GALVANIZED STEEL... COVERED
 - 1 OR 2 SIDES WITH WHITE/ORANGE, DIAGONALLY STRIPED REFLECTIVE SHEETING
- VERTICAL SUPPORTS (2):**
- 1 1/4" GAGE GALVANIZED TUBING 1 3/4" X 1 3/4" X 60"
 - HORIZONTAL SUPPORTS (2): 1 1/4" GAGE GALVANIZED TUBING 1 3/4" X 1 3/4" X 48"
 - CROSS BEAM SUPPORT (1): 1 1/4" GAGE GALVANIZED STEEL 1 1/4" X 3" X 43 3/4"
 - BREAKAWAY BRACKETS (4): COLD GALVANIZED STEEL 1/4" X 3" X 5"
- FASTENERS:**
- 6 - SHEAR BOLTS WITH LOCK NUTS 1/4" D X 2 3/4"
 - 4 - FULCRUM BOLTS WITH LOCK NUTS 3/8" D X 2 3/4"
 - 4 - FASTENER BOLTS WITH LOCK NUTS 3/8" D X 2 3/4"
 - 6 - PANEL BOLTS WITH LOCK NUTS AND WASHERS 1/4" D X 2"
- ALL FASTENERS GALVANIZED STEEL.



TYPE I AND TYPE II BARRICADE

MATERIALS

THE PIPE, WYES, TEES AND ELBOWS USED TO CONSTRUCT BARRICADES SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION D 2241 FOR P.V.C. 1/20 OR 1/220 SDR-21, PRESSURE RATING 200 PSI. THE WYES, TEES AND ELBOWS SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION D 2466, TYPE II, GRADE 1. ALL JOINTS SHALL BE SLIP-FIT AND MAY BE LIGHTLY CEMENTED. THE BARRICADE RAILS SHALL BE FABRICATED FROM 0.025" ANODIZED ALUMINUM AND SHALL HAVE REFLECTORIZED ALTERNATING ORANGE AND WHITE STRIPES (SLOPING DOWNWARD AT AN

MAINTENANCE

BARRICADES SHALL BE MAINTAINED IN CLEAN AND LEGIBLE CONDITIONS SATISFACTORY TO THE ENGINEER. THEY SHALL BE COMPLETELY VISIBLE TO APPROACHING TRAFFIC AT ALL TIMES. DAMAGED, DEFACED, OR DIRTY BARRICADES SHALL BE REPAIRED, CLEANED OR REPLACED AS ORDERED BY THE ENGINEER. THE P.V.C. PIPE AND FITTINGS SHALL BE WHITE IN COLOR. AT LEAST TWO (2) HOLES SHALL BE DRILLED (3/8" DIA.) IN EACH SECTION OF PIPE AND FITTINGS IF THE ASSEMBLY IS NOT CEMENTED.

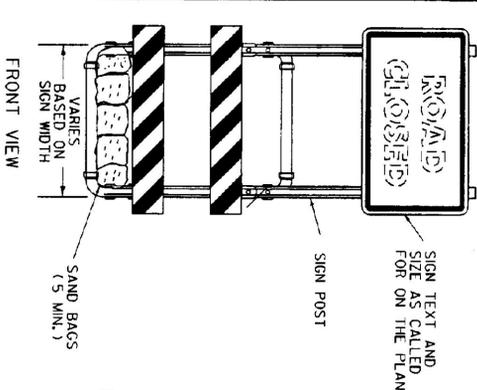
WHICH WILL NOT CONSTITUTE A HAZARD IF THE BARRICADE IS HIT. THESE SHALL BE PLACED ONLY ON THE FRONT AND REAR PIPES OF THE BASE FRAME. GLUED JOINTS MAY PROVIDE ADDITIONAL STABILITY TO THE INSTALLATION.

TYPE I BARRICADES SHALL UTILIZE ONE HORIZONTAL RAIL IN EACH DIRECTION.

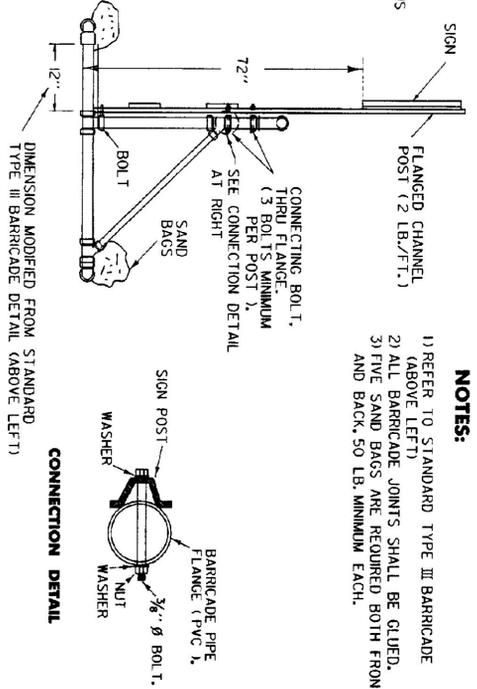
TYPE II BARRICADES SHALL BE A TYPE I BARRICADE WITH AN ADDITIONAL HORIZONTAL RAIL MOUNTED BELOW THE OTHER IN EACH DIRECTION.

TYPE III BARRICADES (MODIFIED) SHALL CONSIST OF THE BREAKAWAY DESIGN SHOWN ON THIS SHEET WITH THE TWO RAIL LAYOUT DETAILED ABOVE LEFT.

SEE STD E-107 FOR ADDITIONAL INFORMATION.



SIGN MOUNTING ON TYPE III BARRICADE (MODIFIED)



OTHER STDS. REQUIRED: E-107

- NOTES:**
- 1) REFER TO STANDARD TYPE III BARRICADE (ABOVE LEFT)
 - 2) ALL BARRICADE JOINTS SHALL BE GLUED.
 - 3) FIVE SAND BAGS ARE REQUIRED BOTH FRONT AND BACK, 50 LB. MINIMUM EACH.

REVISIONS AND CORRECTIONS

SEPT. 10, 1987 ADDED METAL TYPE III BARRICADE
 SEPT. 20, 1993 - REVISED NOTES AND TYPE III (MOD.) BARRICADE DETAIL
 AUG. 08, 1995 - ADDED METAL TYPE III BARRICADE

APPROVED FOR THIS PROJECT AND/OR DESIGN IMPROVEMENTATION, FHWA FINAL APPROVAL PENDING.

APPROVED

Stephen O. R. O'Rourke
 DIRECTOR OF ENGINEERING
 TRAFFIC AND SAFETY ENGINEER

BREAKAWAY BARRICADE DETAILS

1/101/STD/STD07a.dgn : std0107a.1

VERMONT AGENCY OF TRANSPORTATION

STANDARD E-107 A