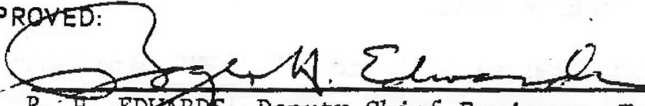


TO: <b>SUPERSEDED BY EI 86-001          EFFECTIVE 5/15/86</b>	<b>ENGINEERING INSTRUCTION</b> NEW YORK STATE DEPARTMENT OF TRANSPORTATION
Distribution:	<b>SUBJECT: TYPE III CONSTRUCTION BARRICADE</b>  Subject Code: 7.27-2-619-4
APPROVED:  R. H. EDWARDS, Deputy Chief Engineer, Facilities Design Div.	Code: <u>EI 84-34</u> Date: <u>7/2/84</u> Supersedes: EI 81-46

We are transmitting herewith copies of Standard Sheet 619-4P2 and a revision to Section 619 of the Standard Specification of January 2, 1981. This Standard Sheet supersedes Standard Sheet 619-4R1 issued by EI 81-46.

This new standard allows a new metal alternate type III construction barricade in addition to the P.V.C. pipe barricades specified on the superseded Standard Sheet. The "Table of Acceptable Materials" which was on Standard Sheet 619-4R1, now superseded, is now incorporated into the materials subsection of Section 619 of the Standard Specifications. The material specifications for the new metal alternate are also included in the specification revision transmitted with this EI.

The metal type III construction barricade has been field evaluated and found to be an acceptable alternate to the plastic pipe barricade. This barricade shall be an equal alternate to the plastic pipe barricade commencing with the letting of September 25, 1984.

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TYPE III CONSTRUCTION BARRICADES

Make the following change to the Standard Specifications dated January 2, 1981:

Page 6-54 Add the following subsection to this page:

"619-2.06 Type III Construction Barricades. Type III construction barricades shall meet the requirements of the following specifications:

A. Barricade Frames. Barricade frames for type III construction barricades shall meet one of the following requirements:

1. PVC Pipe Barricade Frames for Alternate "A" and "B". PVC pipe barricade frames shall be fabricated from plastic pipe conforming to the following table:

TABLE OF ACCEPTABLE MATERIALS FOR  
PVC PIPE BARRICADES

DIAMETER INCHES	PIPE		FITTINGS	
	ASTM	*SDR RANGE	ALTERNATE A	ALTERNATE B
3	D2241	21.0 TO 32.5	D2665 OR D2466	D2468, D2661, D2665 OR D2466
3	D2665	-	D2665 OR D2466	D2468, D2661, D2665 OR D2466
** 3-1/2	D2241	21.0 TO 41.0	D2466	D2468 OR D2466
** 4	D2241	21.0 TO 64.0	D2665 OR D2466	D2468, D2661, D2665 OR D2466
4	D2665	-	D2665 OR D2466	D2468, D2661, D2665 OR D2466
4	D2729	-	D2729	D2729

\*SDR (STANDARD DIMENSION RATIO) AS SPECIFIED IN THE VARIOUS ASTM DESIGNATIONS.

\*\*3-1/2" OR 4" ASTM D2241 SDR 21 TO SDR 26 SHALL BE USED ON BARRICADES WHICH ARE EXTENDED FOR SIGN MOUNTING. THESE PIPES SHALL NOT BE USED ON OTHER BARRICADES.

ALL JOINTS IN ALTERNATE "A" SHALL BE GLUED WITH A SOLVENT CEMENT COMPATIBLE WITH THE PVC PIPE CHOSEN-BY THE CONTRACTOR.

ALL JOINTS IN ALTERNATE "B" SHALL BE FREE TO SEPARATE UPON VEHICLE IMPACT. PIPES AND FITTINGS SHALL BE TIED TOGETHER WITH A BRAIDED NYLON ROPE AS SHOWN ON THE STANDARD SHEET

2. Metal Barricade Frames for Alternate "M".

Square steel tube for the Alternate "M" barricades may be either perforated or unperforated steel tube conforming to ASTM A446 Grade A. The brackets shall be fabricated from 1/4" plate conforming to ASTM A446 Grade A. The bolts shall be standard ASTM A307 Grade A and the nuts shall be ASTM A563 Grade O. Both the nuts and bolts shall be galvanized in accordance with the requirements of Subsection 719-01 Type II. The contractor may at his option supply ungalvanized square steel tube and brackets. However, any rust which may, as determined by the Engineer, impair the collapse of the barricade upon impact may result in the rejection of the barricade unit.

- B. Aluminum Face Panels for Rails or Signs. Aluminum for rails or signs mounted on the barricade shall be 0.025" (0.635 MM) thick and shall conform to the requirements of Subsection 730-01 "Aluminum Sign Panels." The three rails of the barricade shall have 6" wide reflectorized orange and white diagonal stripes sloping at an angle of 45°. The stripes shall slope downward toward the side on which traffic is to pass. The reflective sheeting for the stripes shall conform to the requirements of Subsection 730-05.01 "Reflective Sheeting (Class A). Sign panels shall conform to the requirements of Subsection 619-2.02 "Construction Signs and Other Signs."
- C. Fasteners for Aluminum Face Panels. Each of the three rails shall be fastened to the P.V.C. pipe on the Alternate "A" or "B" barricades with four 1" No. 14 pan head metal screws conforming to Subsection 715-04 "Wrought Aluminum" or four No. 8 Grade 10 or Grade 11 blind rivets. Each rail shall be fastened to the Alternate "M" barricade with four 3/8" D x 7/16" plated steel blind rivets. Signs shall be fastened to the P.V.C. pipe for Alternate "A" or "B" with 1" No. 14 pan head metal screws or with No. 8 Grade 10 or 11 blind rivets at 8" centers and to the Alternate "M" with 3/8" D x 7/16" plated steel blind rivets at 8" centers.