

DOUBLE BEACON INSTALLATION

NOTE: THE CONTRACTOR SHALL SUPPLY AND INSTALL THE INDICATED EQUIPMENT AND ALL NECESSARY HARDWARE SUCH AS BEACONS, 3 LB./FT. FLANGED CHANNEL POST(S), WIRE (12 AWG. MIN.) METER SOCKET, OTHER EQUIPMENT AS MENTIONED IN POWER SOURCE NOTE (SEE RIGHT), CONDUIT, POLE RISER WITH WEATHERHEAD, POWER DROP STANCHION, JUNCTION BOX, AND OTHER MISC. MATERIALS AND HARDWARE TO MAKE THE BEACONS OPERATIONAL.

BOTTOM OF BEACON SHALL BE MIN. 8'-0" AND A MAX. OF 12'-0" ABOVE EDGE OF PAVEMENT.

A CLAMPING DEVICE AS APPROVED BY THE ENGINEER SHALL BE USED TO ATTACH THE CONDUIT TO THE SIGN POSTS.

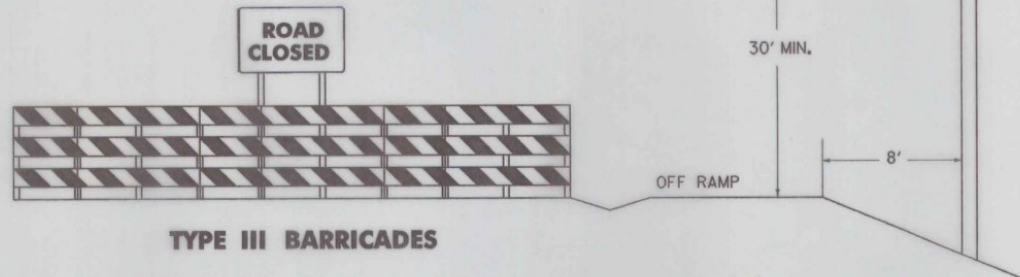
SEE STANCHION
DETAIL SHEET

**HAZARD IDENTIFICATION BEACON INSTALLATION
FLANGED CHANNEL STEEL SIGN SUPPORT**

POWER SOURCE NOTE:

THE FLASHING ARROW PANEL MAY BE POWERED BY A PORTABLE DIESEL GENERATOR AT INSTALLATIONS WHICH WILL REMAIN IN SERVICE FOR LESS THAN SIX MONTHS. INSTALLATIONS WHICH WILL REMAIN IN PLACE FOR SIX MONTHS OR MORE SHALL HAVE A PERMANENT POWER SOURCE AND ALSO SHALL HAVE A LUMINAIRE ERRECTED AS INDICATED AT RIGHT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE UTILITY COMPANY TO PROVIDE A POWER SOURCE ETC. FOR THE LUMINAIRE AND FLASHING ARROW PANEL INSTALLATIONS.

250 WATT HIGH PRESSURE SODIUM OR 400 WATT MERCURY VAPOR SEMI-CUT-OFF LUMINAIRE



TYPE III BARRICADES

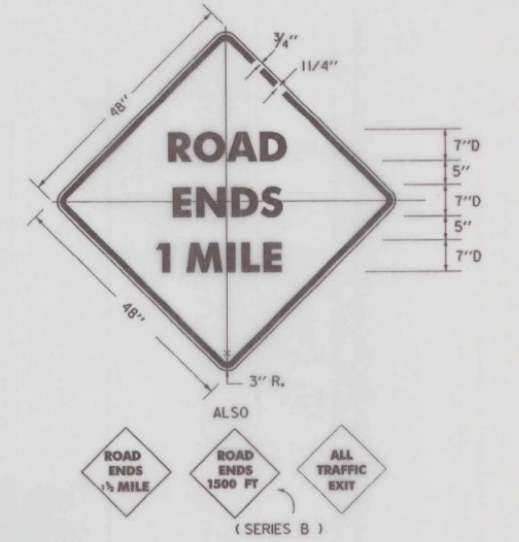
BARRICADE MATERIALS -

TYPE III BARRICADES ON THIS SHEET SHALL COMPLY WITH STANDARD SHEET E-107A. THE ROAD CLOSED SIGN SHALL BE MOUNTED ON A TYPE III MODIFIED BARRICADE AND SHALL COMPLY WITH STANDARD SHEET E-107A.

SIGNS, COLORS AND MATERIALS -

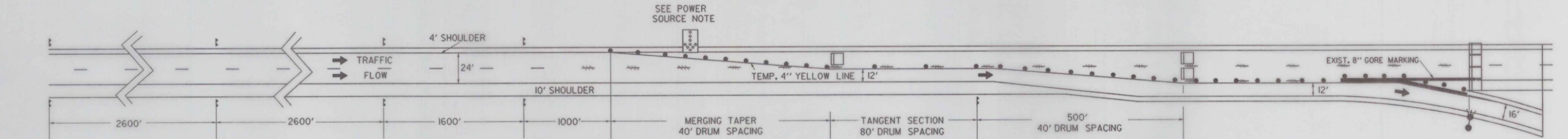
THE SIZES OF SIGNS SHALL BE AS INDICATED ON THE PLANS. THEY SHALL HAVE REFLECTORIZED ORANGE BACKGROUND WITH BLACK TEXT AND BORDER.

* ALL SIGN BASE AND REFLECTIVE MATERIALS SHALL BE AS SHOWN ON STD. E-100.



NOTES

- IF THE SIGNS WILL REMAIN IN PLACE FOR THREE DAYS OR MORE THEN ALL SIGNS SHALL BE PERMANENTLY INSTALLED ON APPROPRIATE SIZE YIELDING POSTS. IF THE SIGNS WILL BE IN PLACE FOR LESS THAN THREE DAYS THEN THE SIGNS MAY BE INSTALLED ON TEMPORARY SUPPORTS WITH THE BOTTOM EDGE OF THE SIGNS AT LEAST 1 FOOT ABOVE THE PAVEMENT.
- ALL DISTANCES ARE DESIREABLE SPECIFICATIONS. FIELD CONDITIONS SHALL CONTROL THE ACTUAL PLACEMENT.
- WHEN THE FREEWAY FACILITY IS CLOSED TO THRU TRAFFIC AND IS NOT TERMINATED, A SIGN PACKAGE USING ROAD CLOSED SIGNS SHOULD BE USED.
- THE NUMBER OF CHANNELIZING DEVICES, TYPE III BARRICADES AND OTHER TRAFFIC CONTROL DEVICES SHOWN ON THIS SHEET ARE FOR ILLUSTRATIVE PURPOSES ONLY. THE ACTUAL NUMBER REQUIRED SHALL BE DETERMINED BY DETOUR CONDITIONS (TAPERS, SPEED LIMITS, LENGTH OF DETOURS, ETC.).



POSTED SPEED OR 85 TH PERCENTILE MPH	MERGING TAPER 12' LANE	TANGENT SECTION	SHIFTING TAPER W = 16'	SHOULDER TAPER W = 10'
40	320'	160'	430'	90'
45	540'	270'	720'	150'
50	600'	300'	800'	170'
55	660'	330'	880'	190'
60	720'	360'	960'	200'
65	780'	390'	1040'	220'

- LEGEND**
- BEACONS
 - STREET LIGHT
 - PLASTIC DRUMS (REFL)
 - TYPE III BARRICADES
 - FLASHING ARROW PANEL
 - PAVEMENT MARKING REMOVAL

NTS

OTHER STDS. : E-100, E-101, E-102, E-106, E-107A, REQUIRED STANCHION DETAIL SHEET

REVISIONS AND CORRECTIONS
APRIL 29, 1988 - FHWA COMMENTS
SEPT. 20, 1993 - REVISED VARIOUS NOTES, BEACON DETAIL AND DELETED DRUM DETAIL

APPROVED _____ SEPT. 10, 1987 DATE

DIRECTOR OF ENGINEERING

Acting TRAFFIC AND SAFETY ENGINEER

**TRAFFIC CONTROL DEVICES
FOR TEMPORARY TERMINATION
OF FREEWAY FACILITIES**



**STANDARD
E-109**

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