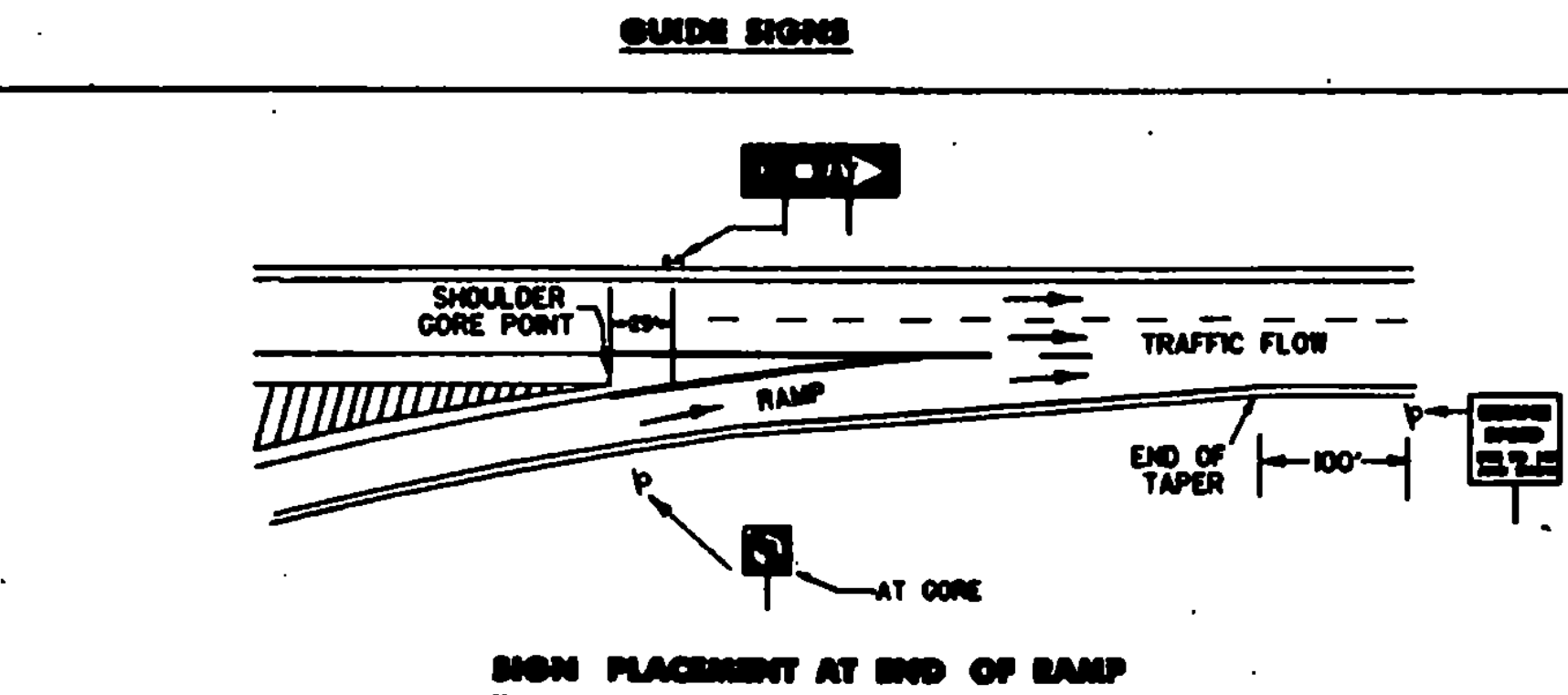


"GUARDRAIL DEFLECTION CHART"

| TYPE | DEFLECTION |
|--------------------------------|------------|
| Three Cable w/Ly. Steel Posts | 12 ft. |
| Three Cable w/Hvy. Steel Posts | 12 ft. |
| W-Beam w/Ly. Steel Posts | 8 ft. |
| W-Beam w/Wood Posts | 5 ft. |
| W-Beam w/Hvy. Steel Posts | 4 ft. |
| Two-Rail w/Flat Aluminum | 2 ft. |

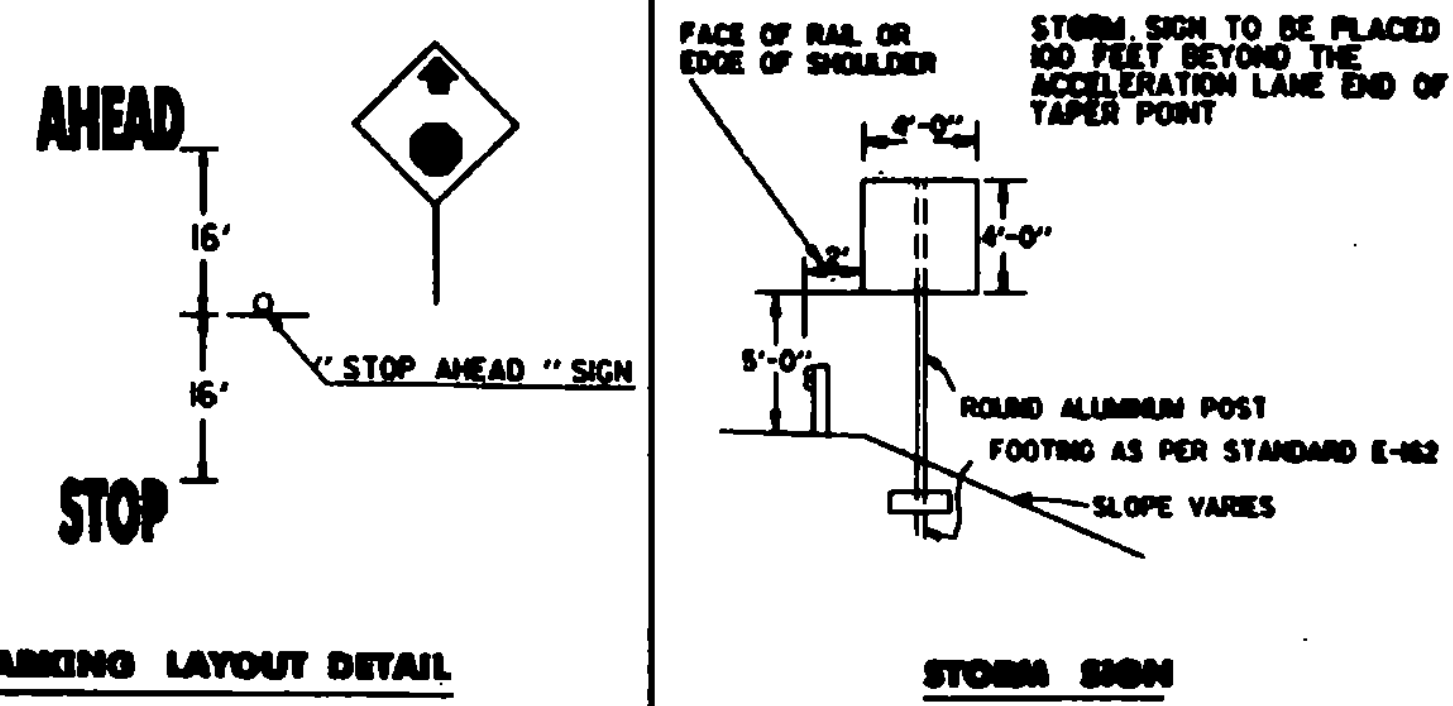
WHEN PLACED BEHIND GUARDRAIL AND BEYOND THE DEFLECTION DISTANCE FOR THAT PARTICULAR RAIL, SIGN POSTS DO NOT HAVE TO BE PLACED ON YIELDING SUPPORTS. SIGN POSTS SHALL BE PLACED ON YIELDING SUPPORTS WHEN THEY CAN BE STRUCK BY AN ENRANT VEHICLE LEAVING THE ROADWAY AT AN ENCROACHMENT ANGLE OF APPROXIMATELY 15 DEGREES OR LESS.

INSTALLATION DETAILS
 NORMALLY SIGNS SHOULD BE MOUNTED AT 93° TO THE DIRECTION OF TRAFFIC. ON CURVED ALIGNMENT THE ANGLE OF PLACEMENT SHOULD BE DETERMINED BY THE PATH OF APPROACHING TRAFFIC RATHER THAN BY THE ROADSIDE EDGE AT THE POINT WHERE THE SIGN IS LOCATED. WHEN INSTALLING OVERHEAD SIGNS, CANT THE SIGN FROM THE TOP TOWARD APPROACHING TRAFFIC AT A THREE DEGREE TILT ANGLE.

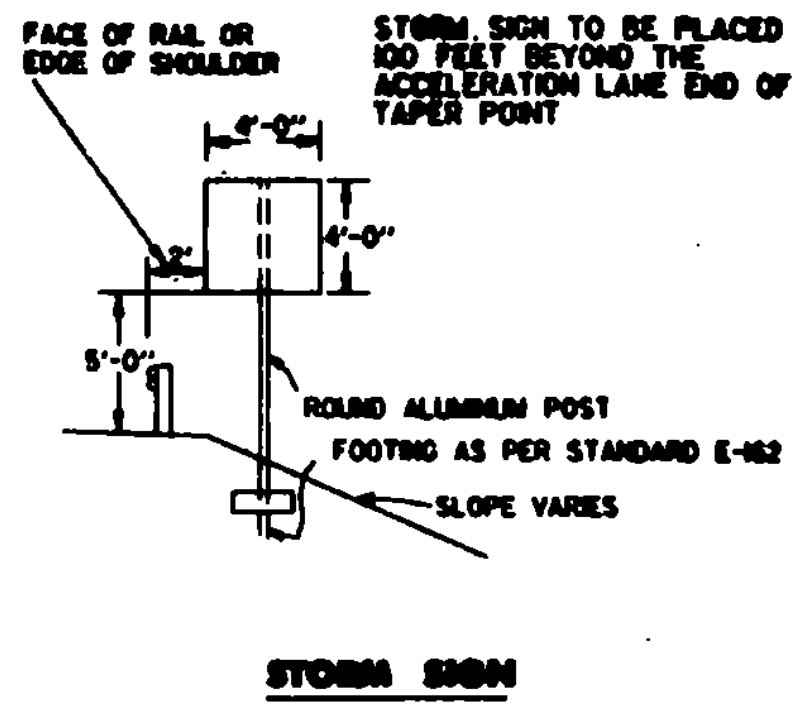


REVISIONS AND CORRECTIONS
 JUNE 21, 1989 - FHWA - CHANGE TO 7' FUSE PLATE CLEARANCE

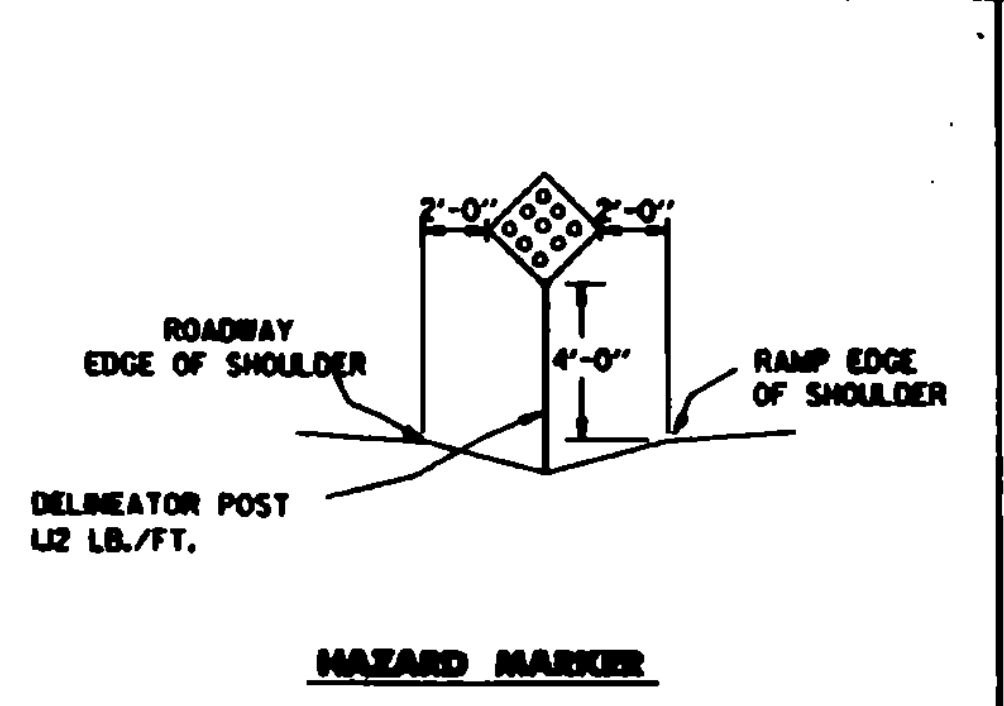
APPROVED
 APRIL 1, 1988 DATE
Samuel B. Kelley
 CHIEF ENGINEER
Arthur J. ...
 DIRECTOR OF PLANNING AND PRE-CONSTRUCTION
Gordon B. MacArthur
 TRAFFIC AND SAFETY ENGINEER



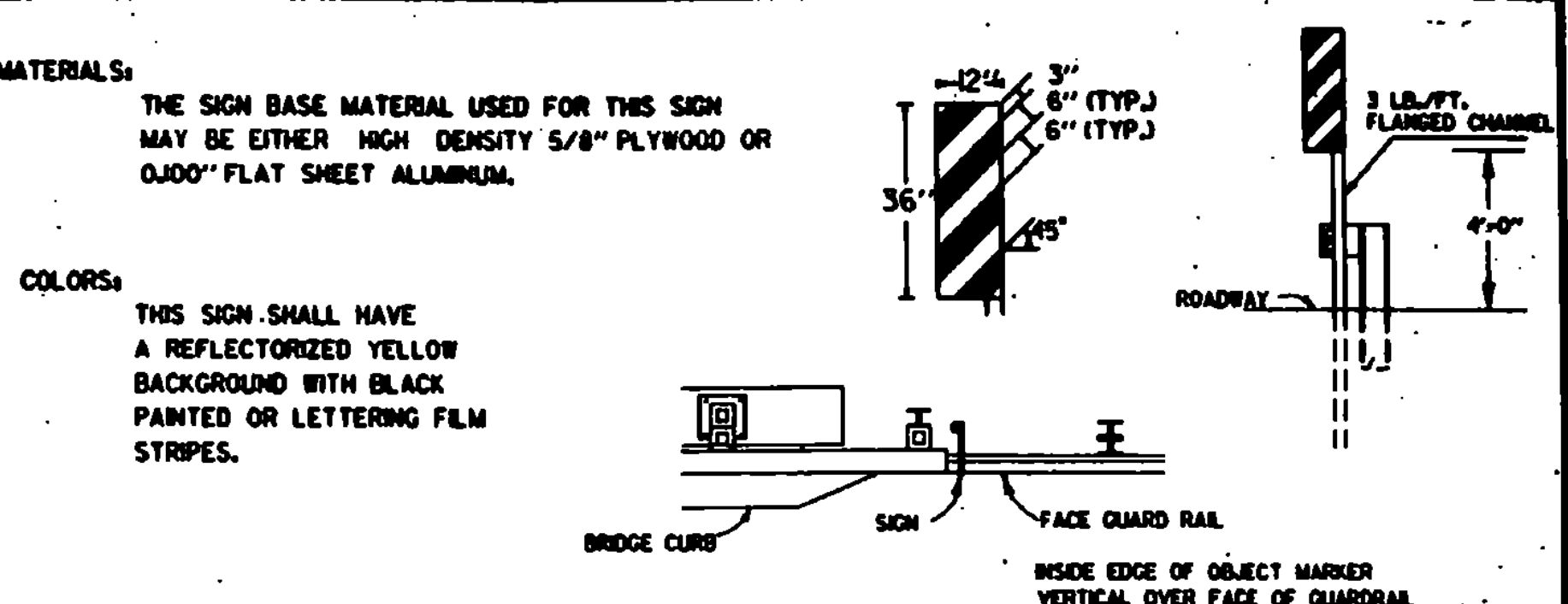
WORD MARKING LAYOUT DETAIL



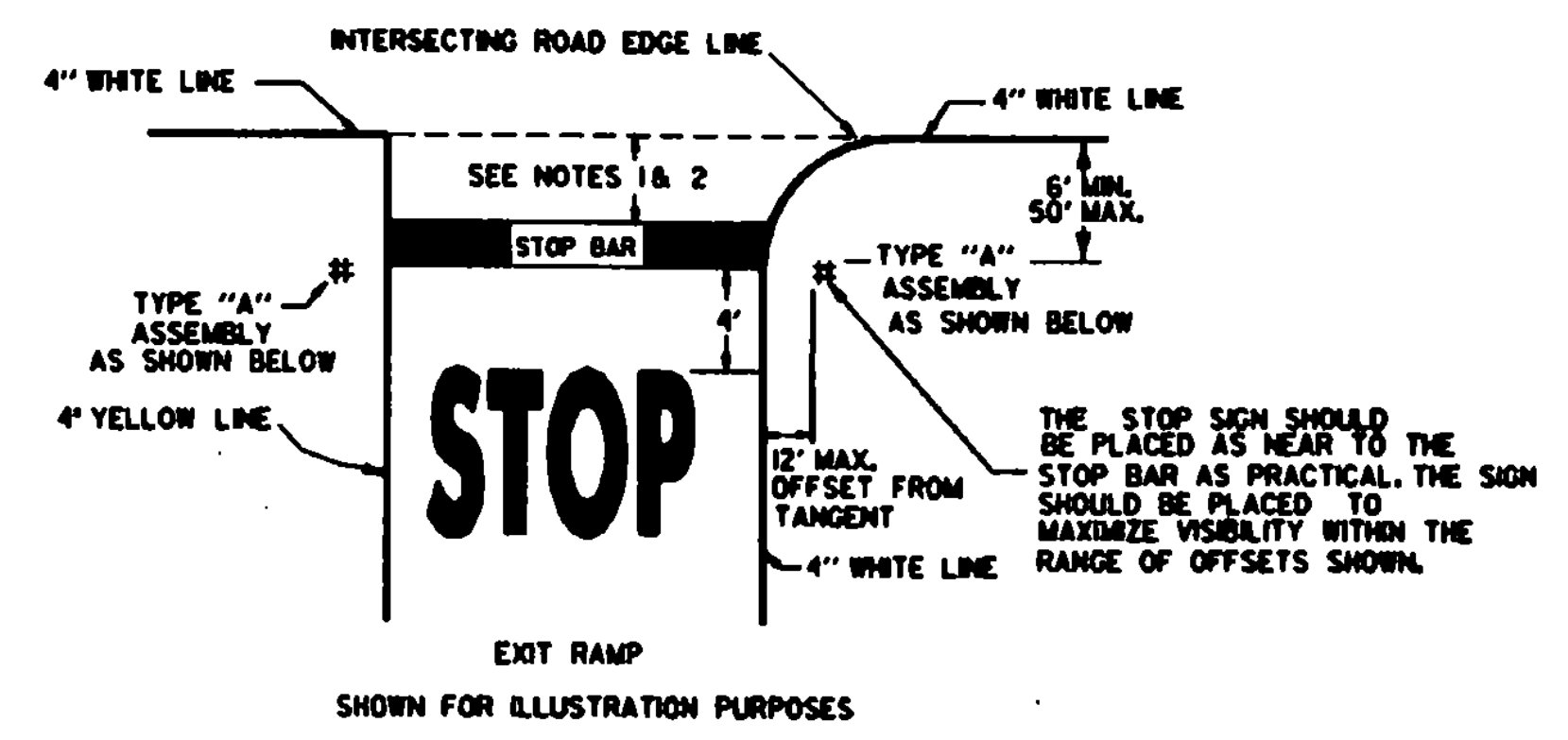
STORM SIGN



HAZARD MARKER

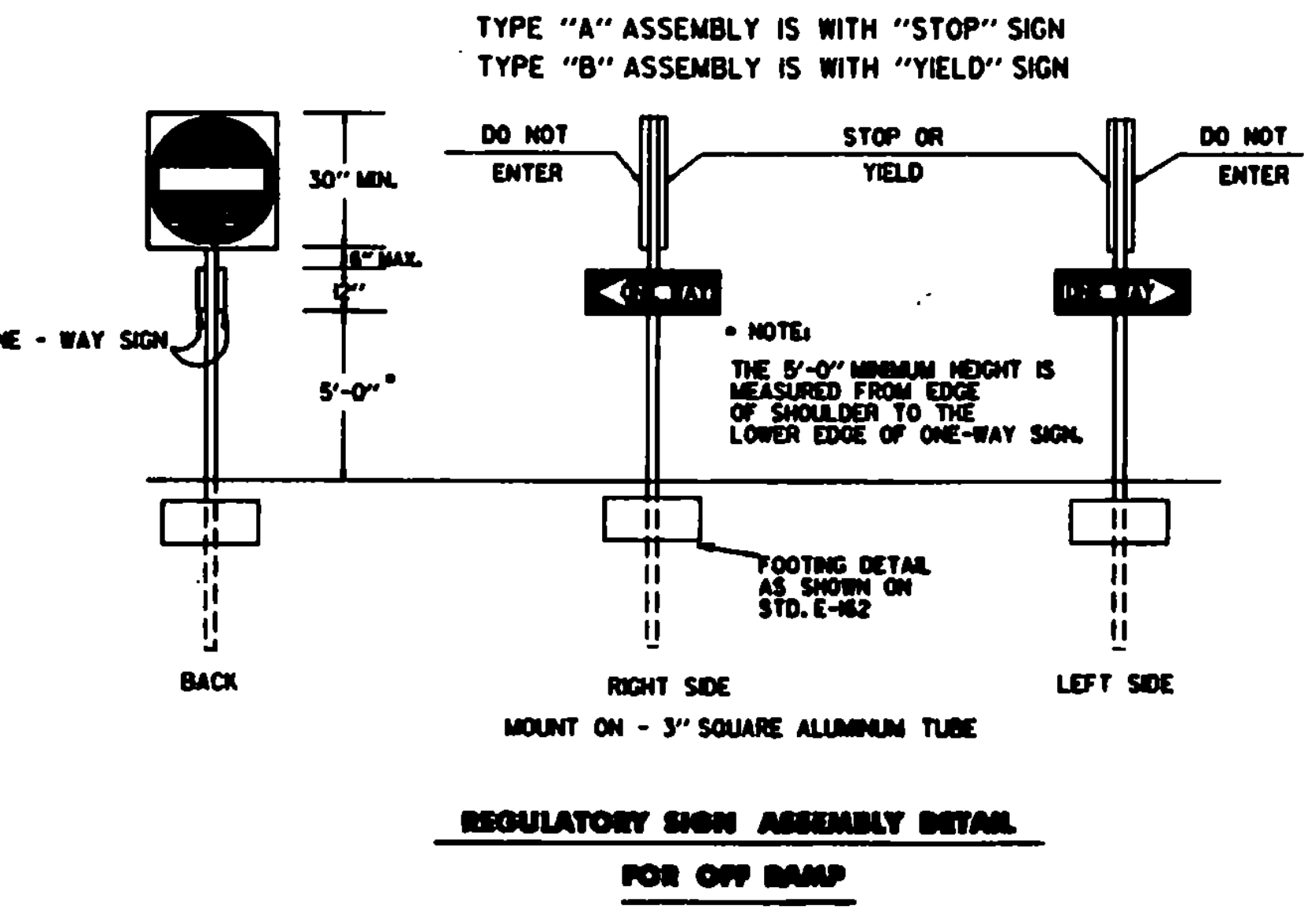


OBJECT MARKER
 (TO BE USED WHEN FULL WIDTH SHOULDERS ARE NOT CARRIED ACROSS THE BRIDGE)
 MARKERS MOUNTED ON THE LEFT SIDE SHALL HAVE THE DIAGONAL STRIPES SLOPING TOWARD CENTERLINE

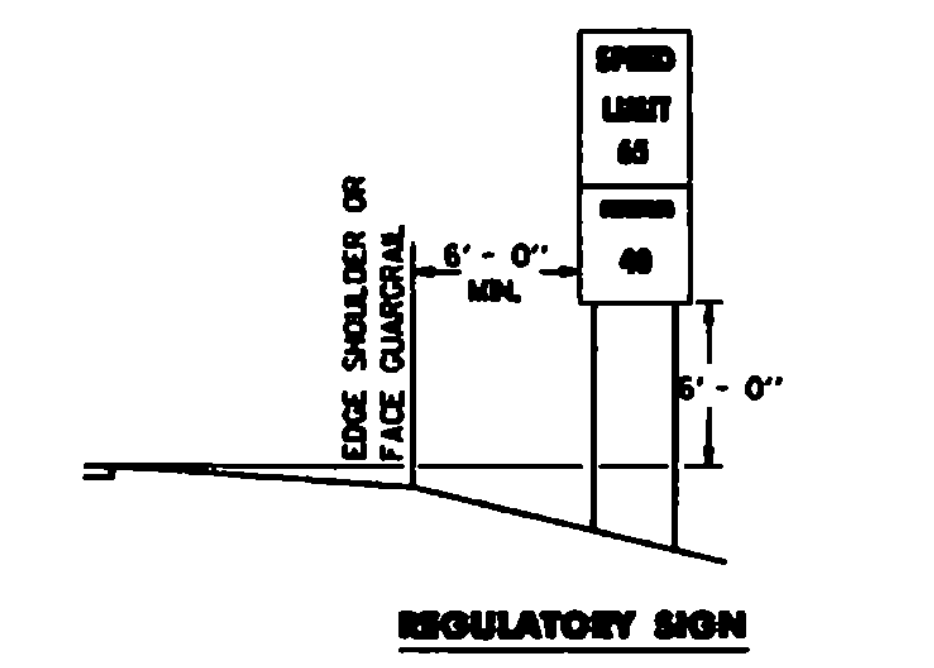
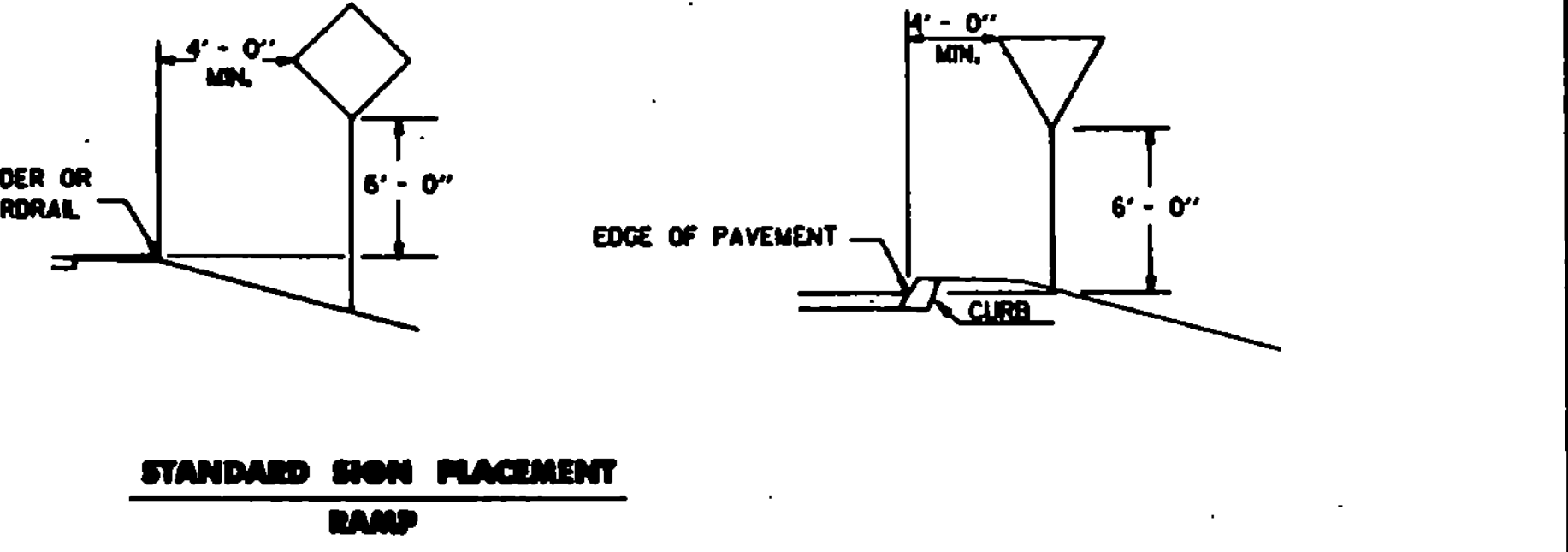
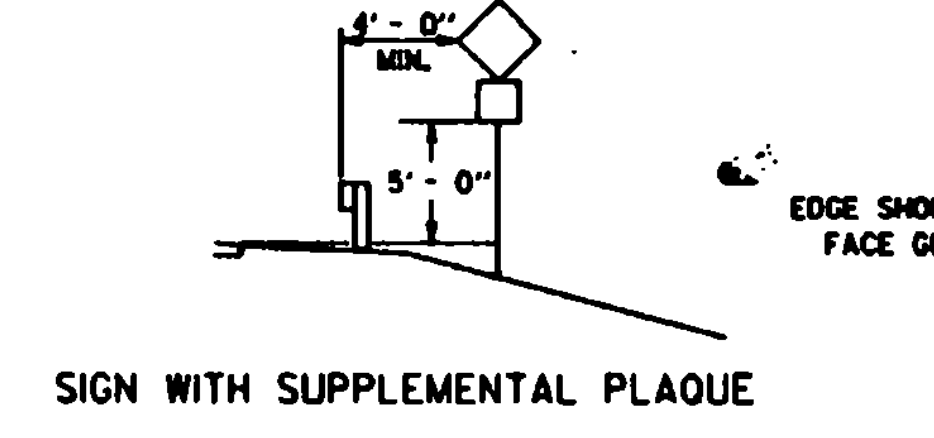


NOTES:
 1. THE STOP BAR SHOULD BE PLACED AT THE DESIRED STOPPING POINT. IN NO CASE MORE THAN 30' OR LESS THAN 4' FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY.
 2. AT A SIGNALIZED INTERSECTION DELETE WORDING "STOP" AND THE STOP SIGN AND PLACE STOP BAR A MINIMUM OF 40' FROM THE NEAREST SIGNAL HEAD FOR THE APPROACH.
 3. EXCLUDE STOP BAR WHEN ONLY YIELD SITUATION.

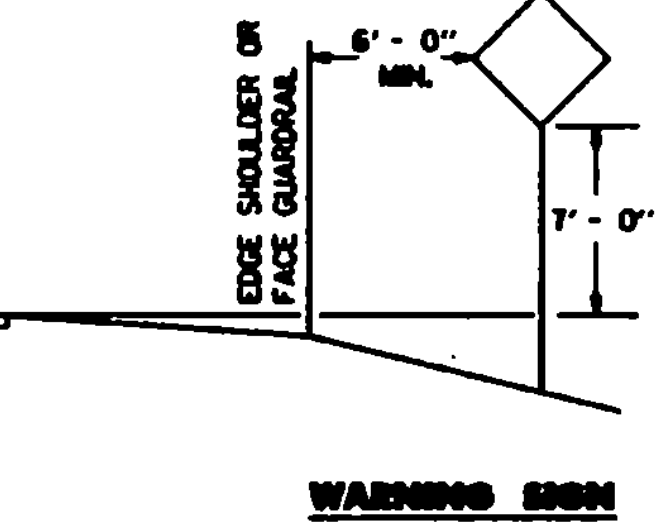
PAVEMENT MARKING & STOP SIGN LOCATION DETAILS FOR OFF RAMP



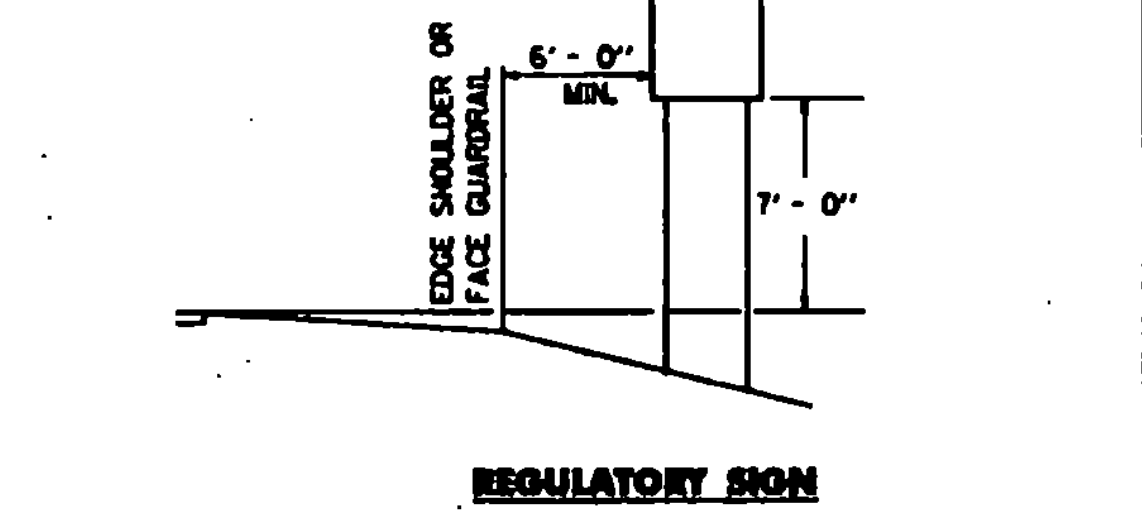
REGULATORY SIGN ASSEMBLY DETAIL FOR OFF RAMP



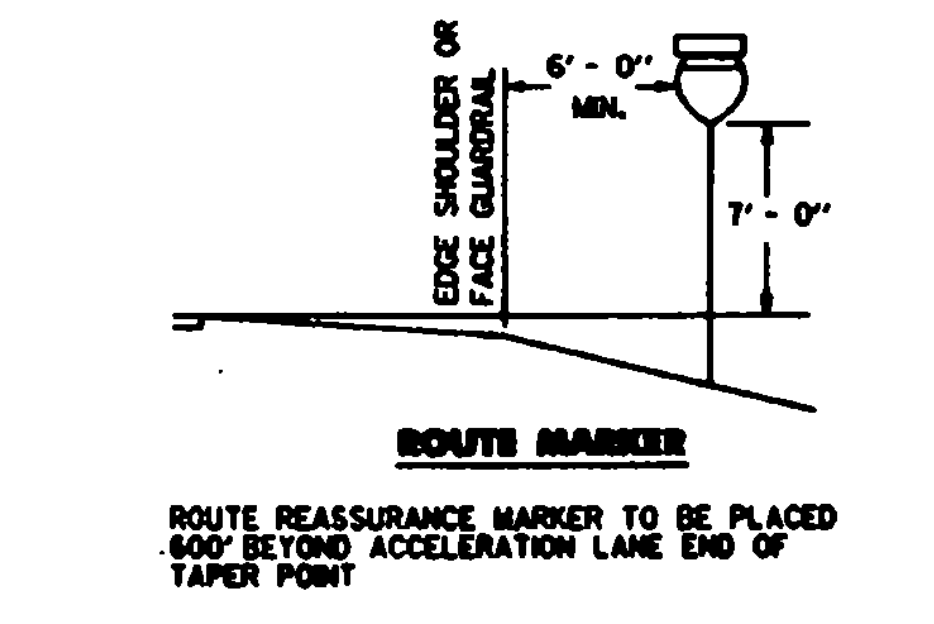
REGULATORY SIGN
 SPEED LIMIT SIGN TO BE PLACED 1500 FEET BEYOND ACCELERATION LANE END OF TAPER POINT.



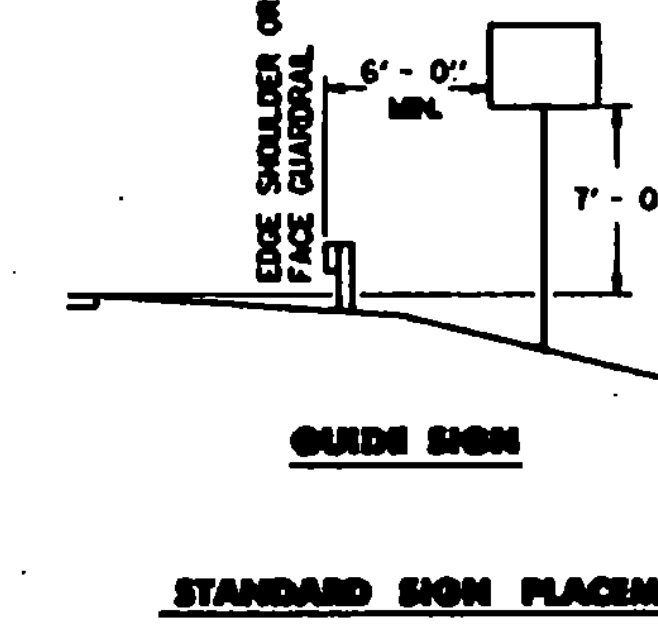
WARNING SIGN



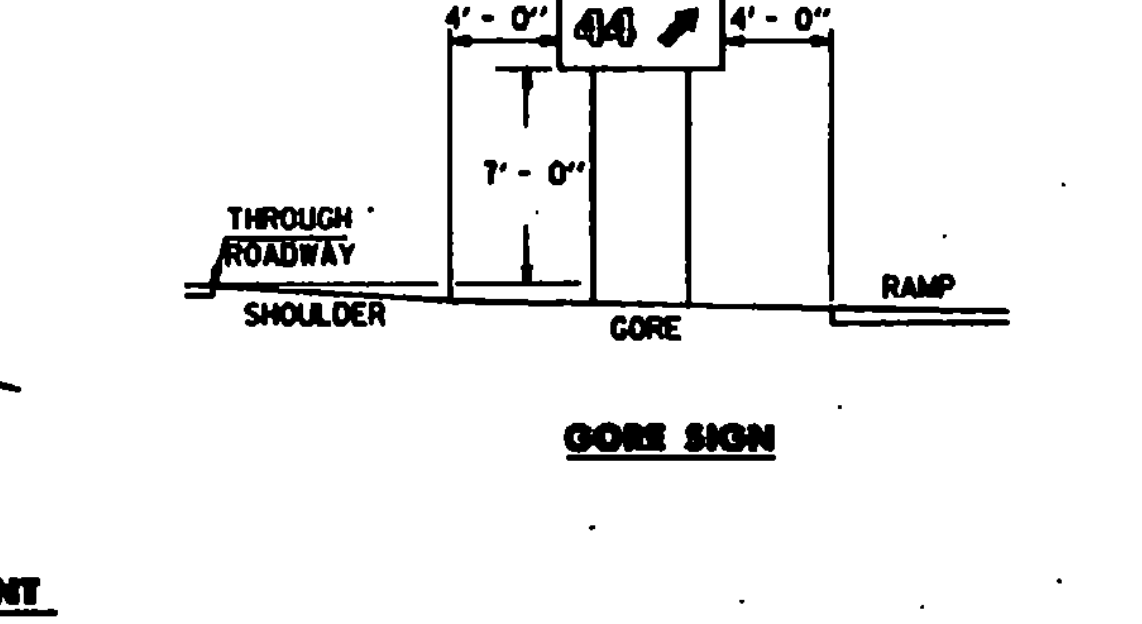
REGULATORY SIGN



ROUTE MARKER
 ROUTE REASSURANCE MARKER TO BE PLACED 500' BEYOND ACCELERATION LANE END OF TAPER POINT

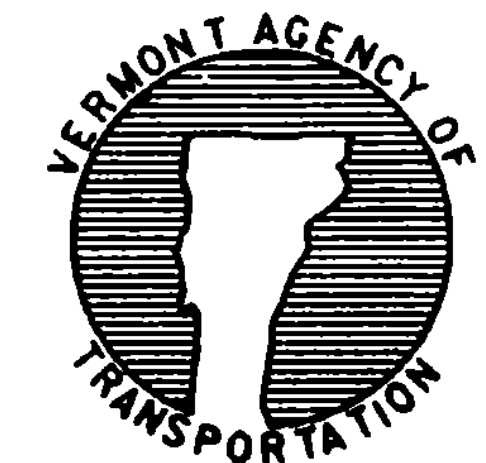


GUIDE SIGN



STANDARD SIGN PLACEMENT MAINLINE

STANDARD SIGN PLACEMENT EXPRESSWAY AND FREEWAY



STANDARD E-120