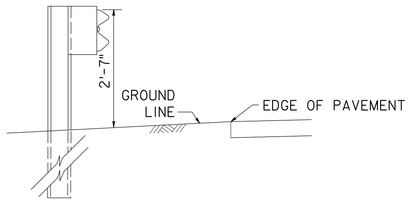


RAIL HEIGHT DETERMINATION WITH CONCRETE CURB
(SEE NOTE 1)

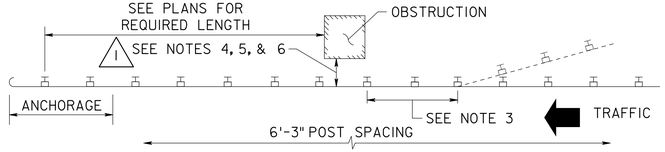


RAIL HEIGHT DETERMINATION
WITHOUT CURB

NOTES:

1. GUIDE RAIL SHALL BE SET FLUSH WITH GUTTER LINE WHEN CONCRETE CURB IS PRESENT.
2. SEE PLANS FOR GUIDE RAIL OFFSET FROM EDGE OF PAVEMENT.

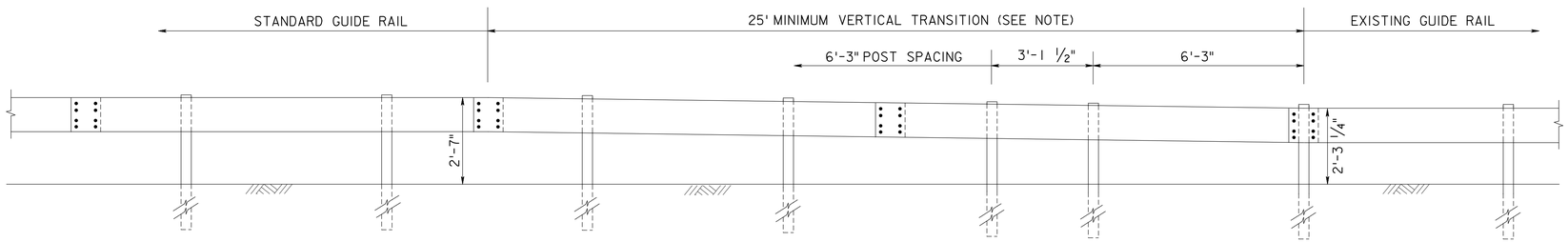
RAIL HEIGHT DETERMINATION



NOTES:

1. WHERE A PARAPET CONNECTION AT THE TRAILING END OF GUIDE RAIL IS SHOWN ON THE PLANS, THE POST SPACING REQUIREMENTS SHALL BE THE SAME AS THE APPROACH END OF THE PARAPET CONNECTION.
2. IN A FILL SECTION WHERE THE DISTANCE FROM THE BACK OF THE POST TO THE PVI IS LESS THAN 1' AND THE SLOPE IS STEEPER THAN 3:1, THE MINIMUM CLEARANCE FROM THE FACE OF THE RAIL TO AN OBSTRUCTION IS INCREASED BY 1' DUE TO INCREASED POST DEFLECTION.
3. A MINIMUM OF 12'-6" TANGENT SPACE IS REQUIRED BETWEEN THE FLARE AND THE OBSTRUCTION.
4. MINIMUM CLEARANCE FROM THE FRONT FACE OF W-BEAM GUIDE RAIL ELEMENT TO THE OBSTRUCTION SHALL BE 4'-9" WITH STANDARD 6'-3" POST SPACING. WHERE MASH APPROVED BREAKAWAY FEATURES SUCH AS LIGHT POLES OR GROUND MOUNTED SIGN SUPPORTS ARE LOCATED BEHIND GUIDE RAIL, THE MINIMUM CLEARANCE FROM THE FRONT FACE OF W-BEAM GUIDE RAIL ELEMENT TO THE NEAREST SIDE OF THE BREAKAWAY FEATURE MAY BE REDUCED TO 3'-6". (1)
5. WHERE THE MINIMUM REQUIRED CLEARANCE FROM THE OBSTRUCTION TO THE FRONT FACE OF THE W-BEAM GUIDE RAIL ELEMENT WITH STANDARD 6'-3" POST SPACING CANNOT BE ACHIEVED, QUARTER POST SPACING MAY BE USED WITH A REDUCED MINIMUM CLEARANCE OF 3'-2". SEE GR-10A. (1)
6. WHERE THE MINIMUM REQUIRED CLEARANCE FROM THE OBSTRUCTION TO THE FRONT FACE OF THE W-BEAM GUIDE RAIL ELEMENT WITH STANDARD OR QUARTER POST SPACING CANNOT BE ACHIEVED, TRANSITION W-BEAM GUIDE RAIL TO CONCRETE BARRIER PROTECTION ALONG THE OBSTRUCTION WITH PRIOR APPROVAL BY THE AUTHORITY. SEE GR-15. (1)

CLEARANCE FROM FACE OF RAIL TO OBSTRUCTION



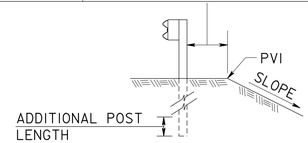
NOTE:

WHERE TRANSITIONING TO EXISTING GUIDE RAIL, AN END TERMINAL, PARAPET CONNECTOR OR A CRASH CUSHION MOUNTED AT A HEIGHT OTHER THAN 2'-7", THE VERTICAL TRANSITION SHALL BE ACCOMPLISHED IN A MINIMUM LENGTH OF 12'-6" FOR EACH 2" OF VERTICAL CHANGE. VERTICAL TRANSITION SHALL OCCUR ONE FULL RAIL ELEMENT PRIOR TO THE LIMITS OF EXISTING PARAPET CONNECTION OR END TREATMENT.

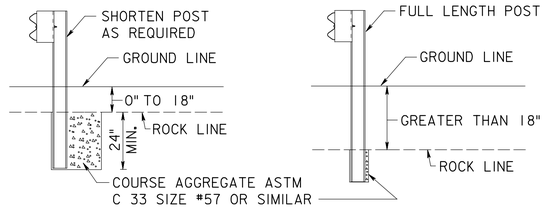
VERTICAL TRANSITION TO EXISTING NCHRP 350 (TL-3) HIGH BEAM GUIDE RAIL

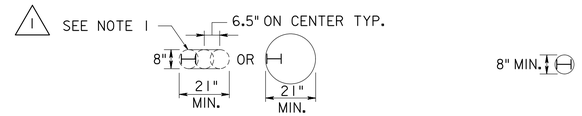
WHERE DISTANCE FROM PVI TO BACK OF POST IS LESS THAN 2 FEET

DISTANCE FROM BACK OF POST TO PVI	EMBANKMENT SLOPES	ADDITIONAL POST LENGTH
LESS THAN 2' BUT GREATER OR EQUAL TO 1'	6H:1V OR FLATTER	0
	STEEPER THAN 6H:1V TO 3H:1V	1'
	STEEPER THAN 3H:1V TO 2H:1V	2'
LESS THAN 1' OR AT PVI	6H:1V OR FLATTER	1'
	STEEPER THAN 6H:1V TO 3H:1V	2'
	STEEPER THAN 3H:1V TO 2H:1V	3'



ADDITIONAL LENGTH BEAM GUIDE RAIL POSTS





GUIDE RAIL POST INSTALLATION IN ROCK

1 NOTES
1. THE ELONGATED HOLE MAY BE ACHIEVED BY CORING THREE PARTIALLY OVERLAPPING 8-INCH DIAMETER HOLES SPACED AS SHOWN.

MASH TL-3

0 1/2 1 2 3 4
ORIGINAL SIZE IN INCHES

NEW JERSEY TURNPIKE AUTHORITY
NEW JERSEY TURNPIKE
GARDEN STATE PARKWAY
STANDARD DRAWINGS

BEAM GUIDE RAIL AND POST TREATMENTS

OFFICE OF THE CHIEF ENGINEER
NEW JERSEY TURNPIKE AUTHORITY
WOODBRIDGE, NEW JERSEY

STANDARD DRAWING
GR-10

REV.	DESCRIPTION	DATE
1	ADDED NOTE	07/26
0	ORIGINAL DRAWING	07/21

CONTRACT NO.

SHEET NO. OF