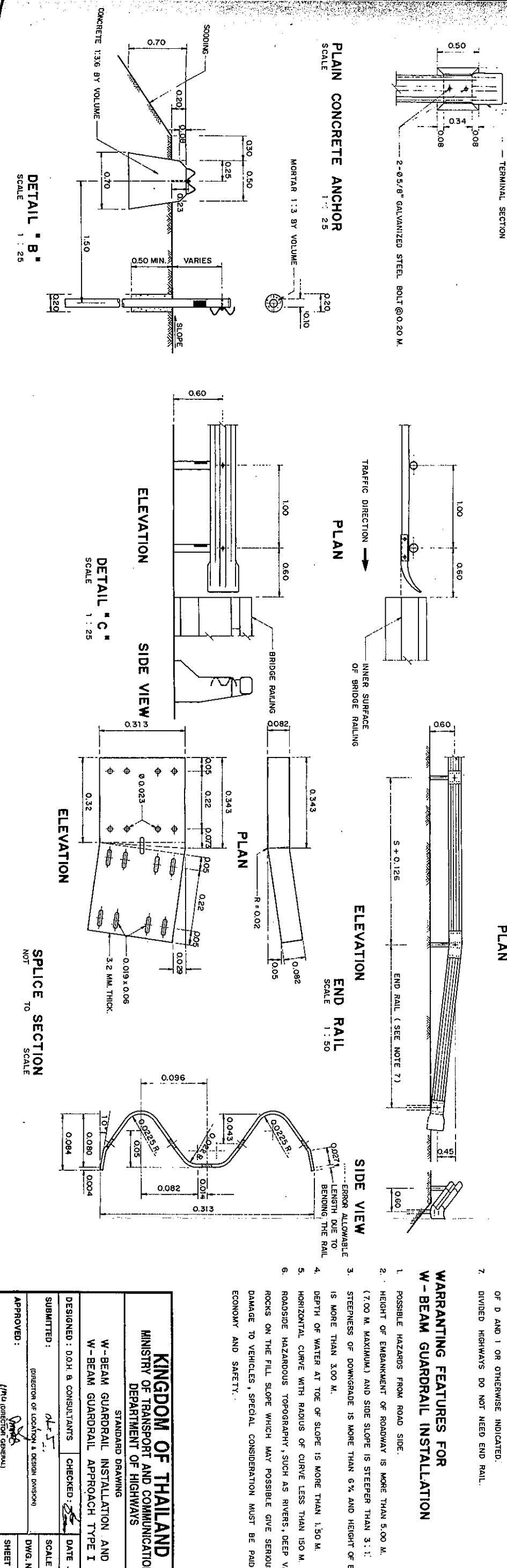
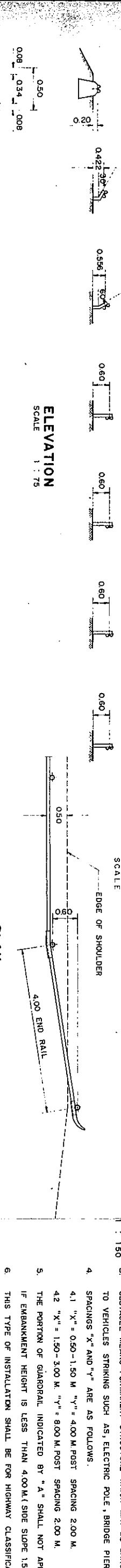
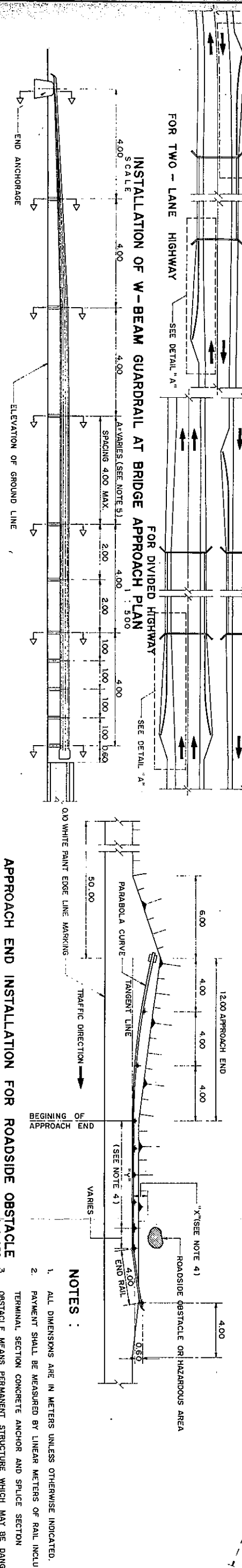
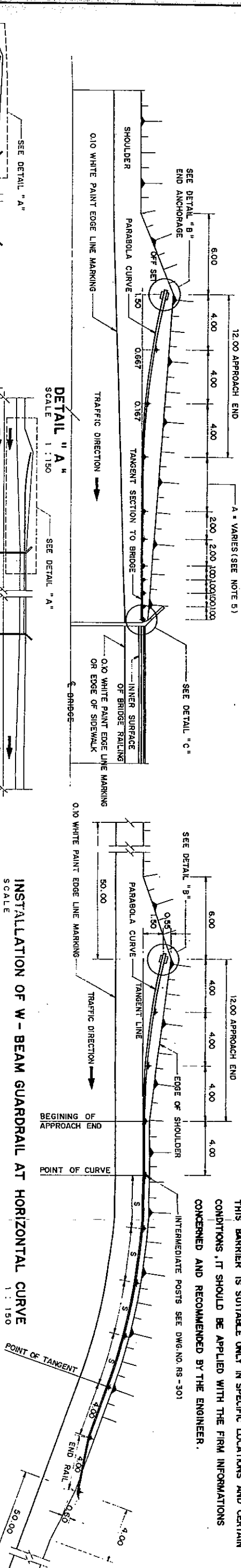


ชุดแบบมาตรฐาน Guard Rail

REMARK :
THIS BARRIER IS SUITABLE ONLY IN SPECIFIC LOCATIONS AND CERTAIN CONDITIONS. IT SHOULD BE APPLIED WITH THE FIRM INFORMATIONS CONCERNED AND RECOMMENDED BY THE ENGINEER.

INTERMEDIATE POSTS SEE DWG. NO. RS-301



NOTES :

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED.
2. PAYMENT SHALL BE MEASURED BY LINEAR METERS OF RAIL INCLUDING TERMINAL SECTION CONCRETE ANCHOR AND SPLICE SECTION
3. OBSTACLE MEANS PERMANENT STRUCTURE WHICH MAY BE DANGEROUS TO VEHICLES STRIKING SUCH AS, ELECTRIC POLE, BRIDGE PIER, ETC.
4. SPACINGS "X" AND "Y" ARE AS FOLLOWS.
- 4.1 "X" = 0.50-1.50 M "Y" = 4.00 M POST SPACING 2.00 M.
- 4.2 "X" = 1.50-3.00 M "Y" = 8.00 M POST SPACING 2.00 M.
5. THE PORTION OF GUARDRAIL INDICATED BY "A" SHALL NOT APPLY IF EMBANKMENT HEIGHT IS LESS THAN 4.00 M (SIDE SLOPE 1.5:1 MAX.) THIS TYPE OF INSTALLATION SHALL BE FOR HIGHWAY CLASSIFICATIONS OF D AND I OR OTHERWISE INDICATED.
7. DIVIDED HIGHWAYS DO NOT NEED END RAIL.

WARRANTING FEATURES FOR W-BEAM GUARDRAIL INSTALLATION

1. POSSIBLE HAZARDS FROM ROAD SIDE.
2. HEIGHT OF EMBANKMENT OF ROADWAY IS MORE THAN 5.00 M. (7.00 M MAXIMUM) AND SIDE SLOPE IS STEEPER THAN 3:1.
3. STEEPNESS OF DOWNGRADE IS MORE THAN 6% AND HEIGHT OF EMBANKMENT IS MORE THAN 3.00 M.
4. DEPTH OF WATER AT TOE OF SLOPE IS MORE THAN 1.50 M.
5. HORIZONTAL CURVE WITH RADIUS OF CURVE LESS THAN 150 M.
6. ROADSIDE HAZARDOUS TOPOGRAPHY, SUCH AS RIVERS, DEEP VALLEYS, ROCKS ON THE FILL SLOPE WHICH MAY POSSIBLE GIVE SERIOUS DAMAGE TO VEHICLES, SPECIAL CONSIDERATION MUST BE PAID TO BOTH ECONOMY AND SAFETY.

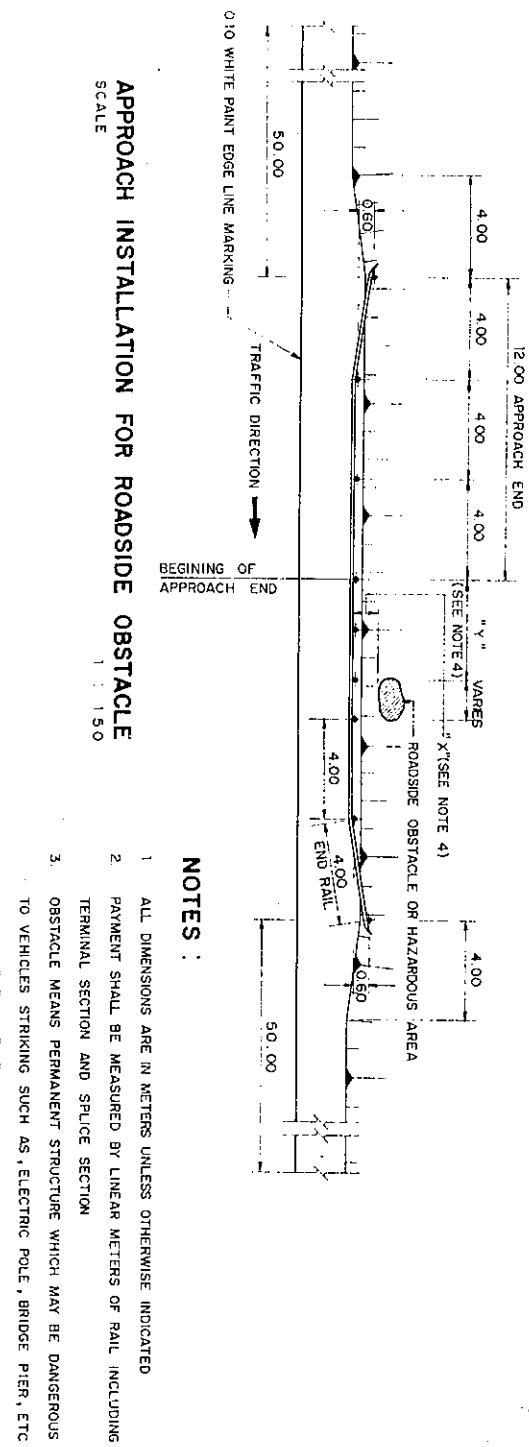
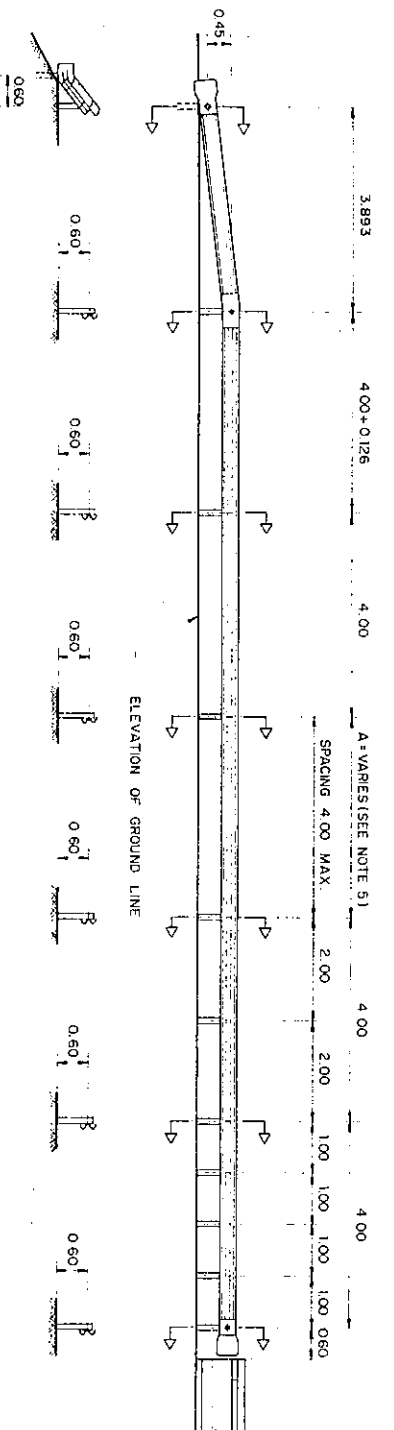
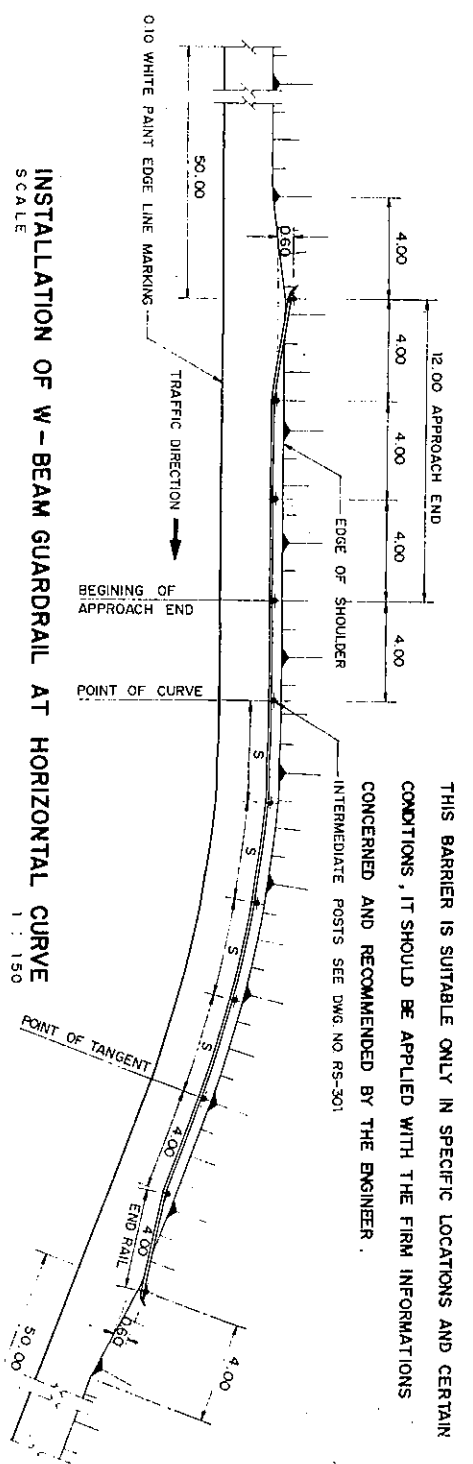
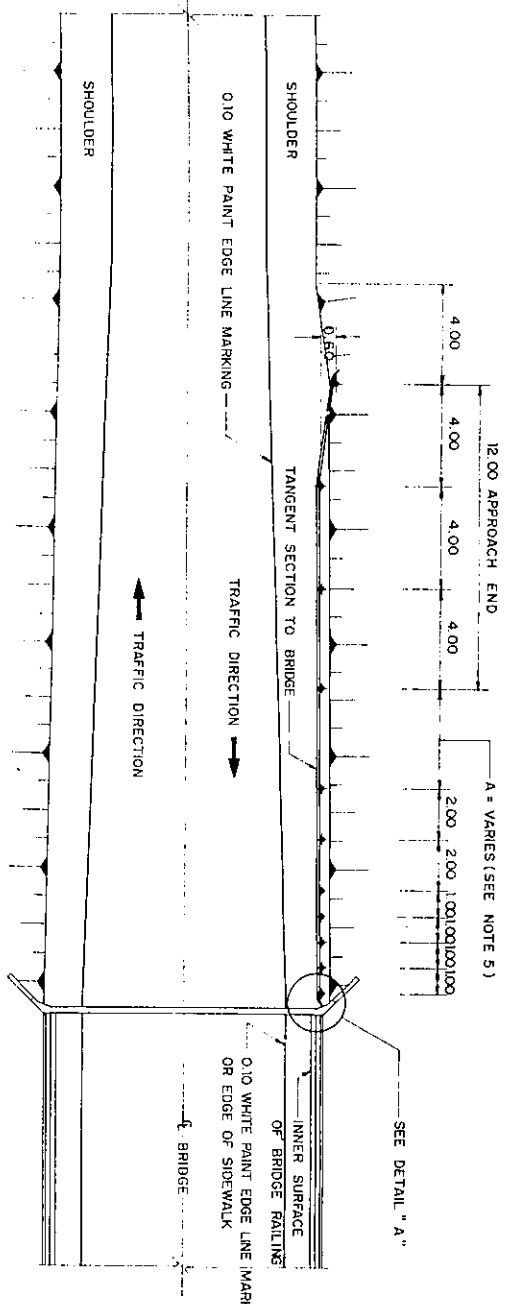
KINGDOM OF THAILAND
MINISTRY OF TRANSPORT AND COMMUNICATIONS
DEPARTMENT OF HIGHWAYS

STANDARD DRAWING
W-BEAM GUARDRAIL INSTALLATION AND W-BEAM GUARDRAIL APPROACH TYPE I

DESIGNED : D.O.H. & CONSULTANTS
CHECKED : [Signature]
DATE : JULY 1994

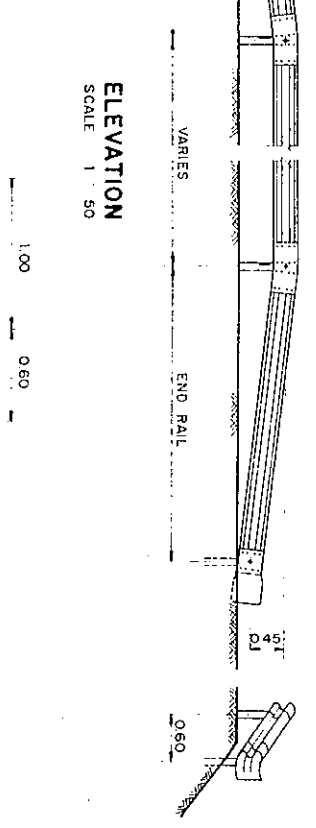
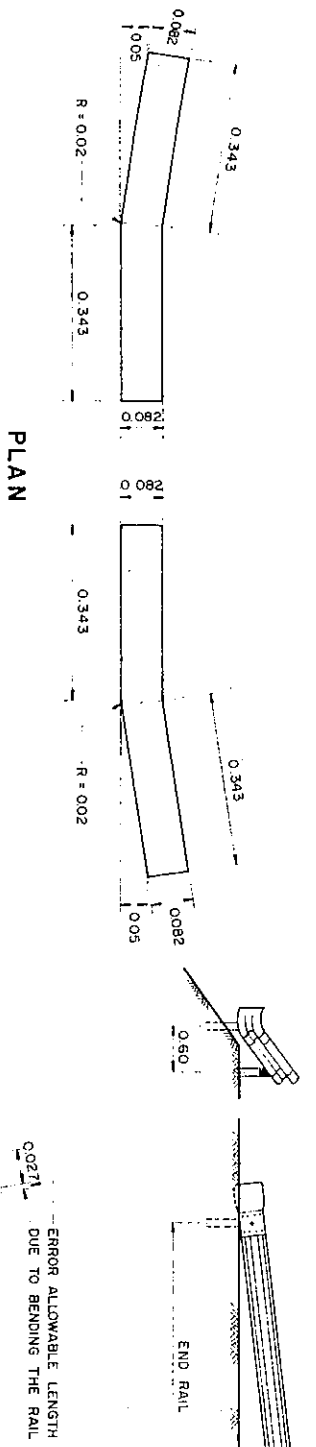
SUBMITTED : [Signature]
SCALE AS SHOWN

DIRECTOR OF LOCATION & DESIGN DIVISION
APPROVED : [Signature]
DWG. NO. RS-302
SHEET NO. 35



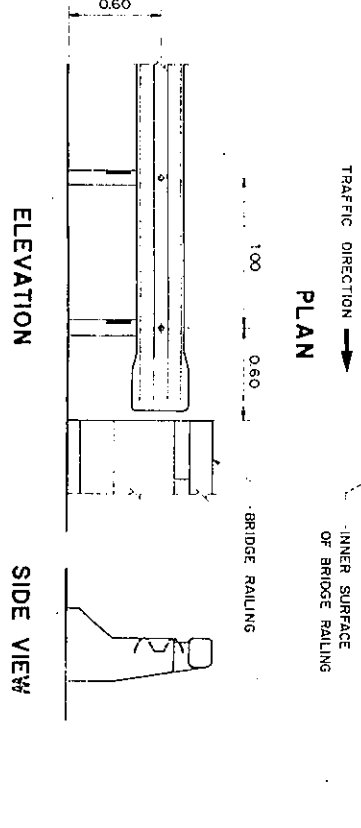
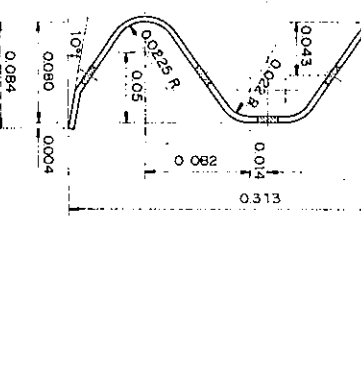
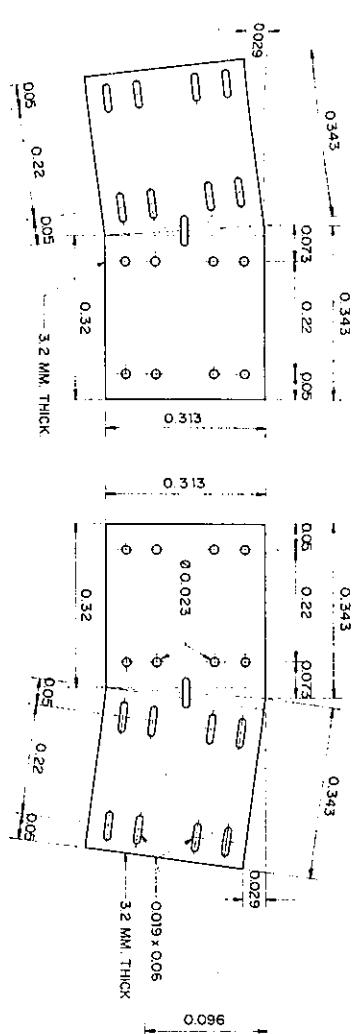
NOTES :

- 1 ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED
- 2 PAVEMENT SHALL BE MEASURED BY LINEAR METERS OF RAIL INCLUDING TERMINAL SECTION AND SPLICE SECTION
- 3 OBSTACLE MEANS PERMANENT STRUCTURE WHICH MAY BE DANGEROUS TO VEHICLES STRIKING SUCH AS, ELECTRIC POLE, BRIDGE PIER, ETC
- 4 SPACINGS "X" AND "Y" ARE AS FOLLOWS
 4.1 "X" = 0.50 - 1.50 M "Y" = 4.00 M POST SPACING 2.00 M
 4.2 "X" = 1.50 - 3.00 M "Y" = 6.00 M POST SPACING 2.00 M
- 5 THE PORTION OF GUARDRAIL INDICATED BY "A" SHALL NOT APPLY IF EMBANKMENT HEIGHT IS LESS THAN 4.00 M (SIDE SLOPE 1:5 MAX)
- 6 THIS TYPE OF INSTALLATION SHALL BE FOR HIGHWAY CLASSIFICATIONS OF 2, 3 AND 4



WARRANTING FEATURES FOR W-BEAM GUARDRAIL INSTALLATION

- 1 POSSIBLE HAZARDS FROM ROAD SIDE
- 2 HEIGHT OF EMBANKMENT OF ROADWAY IS MORE THAN 5.00 M (700 M. MAXIMUM) AND SIDE SLOPE IS STEEPER THAN 3:1
- 3 STEEPNESS OF DOWNGRADE IS MORE THAN 6% AND HEIGHT OF EMBANKMENT IS MORE THAN 3.00 M
- 4 DEPTH OF WATER AT TOE OF SLOPE IS MORE THAN 1.50 M
- 5 HORIZONTAL CURVE WITH RADIUS OF CURVE LESS THAN 150 M.
- 6 ROADSIDE HAZARDOUS TOPOGRAPHY SUCH AS RIVERS, DEEP VALLEYS, ROCKS ON THE FILL SLOPE WHICH MAY POSSIBLE GIVE SERIOUS DAMAGE TO VEHICLES, SPECIAL CONSIDERATION MUST BE PAID TO BOTH ECONOMY AND SAFETY.



REMARK :
THIS BARRIER IS SUITABLE ONLY IN SPECIFIC LOCATIONS AND CERTAIN CONDITIONS, IT SHOULD BE APPLIED WITH THE FIRM INFORMATIONS CONCERNED AND RECOMMENDED BY THE ENGINEER.
INTERMEDIATE POSTS SEE DWG. NO. RS-301

KINGDOM OF THAILAND
 MINISTRY OF TRANSPORT AND COMMUNICATIONS
 DEPARTMENT OF HIGHWAYS

STANDARD DRAWING

W-BEAM GUARDRAIL INSTALLATION AND
 W-BEAM GUARDRAIL APPROACH TYPE II

DESIGNED : D.O.H. & CONSULTANTS
 SUBMITTED : *[Signature]*
 CHECKED : *[Signature]*
 DATE : JULY 1994
 SCALE AS SHOWN
 DWG. NO. RS-303
 SHEET NO. 36