



Republic of the Philippines  
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS  
**OFFICE OF THE SECRETARY**  
Manila

097.13 DPWH  
06-14-2012

**JUN 13 2012**

**DEPARTMENT ORDER** )

No. **40** )

Series of 2012 )

**SUBJECT : GUIDELINES ON SHOULDER  
PAVING ALONG NATIONAL  
ROADS**

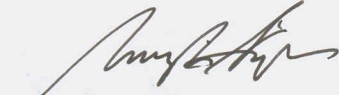
It has been observed that Implementing Offices of the Department are paving the road shoulders using the same design features as the carriageway which are not appropriate for the functional purpose of the shoulder resulting in high project cost. Likewise, paving of shoulder is being implemented without considering proper location.

In view hereof, in order to standardize the design and location of shoulder paving along national roads and to ensure road traffic safety for both the motorists and pedestrians, the following guidelines are hereby prescribed:

1. Paving of shoulder shall have a minimum width of 1.50 meters. For existing shoulder having a width equivalent to one (1) full lane (3.05 meters or greater), the improvement shall be considered as road widening designed as part of carriageway and should be provided with shoulder or sidewalk.
2. The surfacing of shoulder shall be either 230 mm thick concrete or 75 mm thick asphalt for arterial national roads and 150 mm thick concrete or 50 mm thick asphalt for secondary national roads. To provide proper delineation and to clearly distinguish the shoulder from the carriageway, edge line pavement markings should be applied.
3. Paving of shoulders shall be considered along road sections under any of the following conditions:
  - 3.1 When AADT is greater than 1,250 vehicles.
  - 3.2 When closely spaced driveways and/or frequent turning movements cause unpaved shoulder to require excessive maintenance.
  - 3.3 On high road embankment sections (more than 3.0 meters high). Guardrail requirements shall be provided in accordance with DPWH Safety Design Manual.
  - 3.4 On horizontal curved alignment with more than 7% super elevation rate to prevent the carriageway from being soiled with loose materials during heavy rains.
  - 3.5 Shoulders designed with a curb or gutter or lined/ditch canal at the outer edge to continue surface run-off to the paved shoulder area and directly discharge to selected outlets.
  - 3.6 At locations where pedestrians are normally concentrated such as churches, schools, markets, parks, and other areas for public use. Pedestrian railings may be provided between the carriageway and paved shoulder with a minimum length of 20.0 meters before and after the designated cross walk in order to confine and delineate pedestrian movement along the shoulder/sidewalk (Figures 1 & 2).

- 3.7 In areas with steep and long gradient exceeding 6% and 100.0 meters respectively, in order to avoid scouring and erosion of shoulder surface materials due to high velocity flow of surface water run-off.

This Order shall take effect immediately.

  
**ROGELIO L. SINGSON**  
Secretary



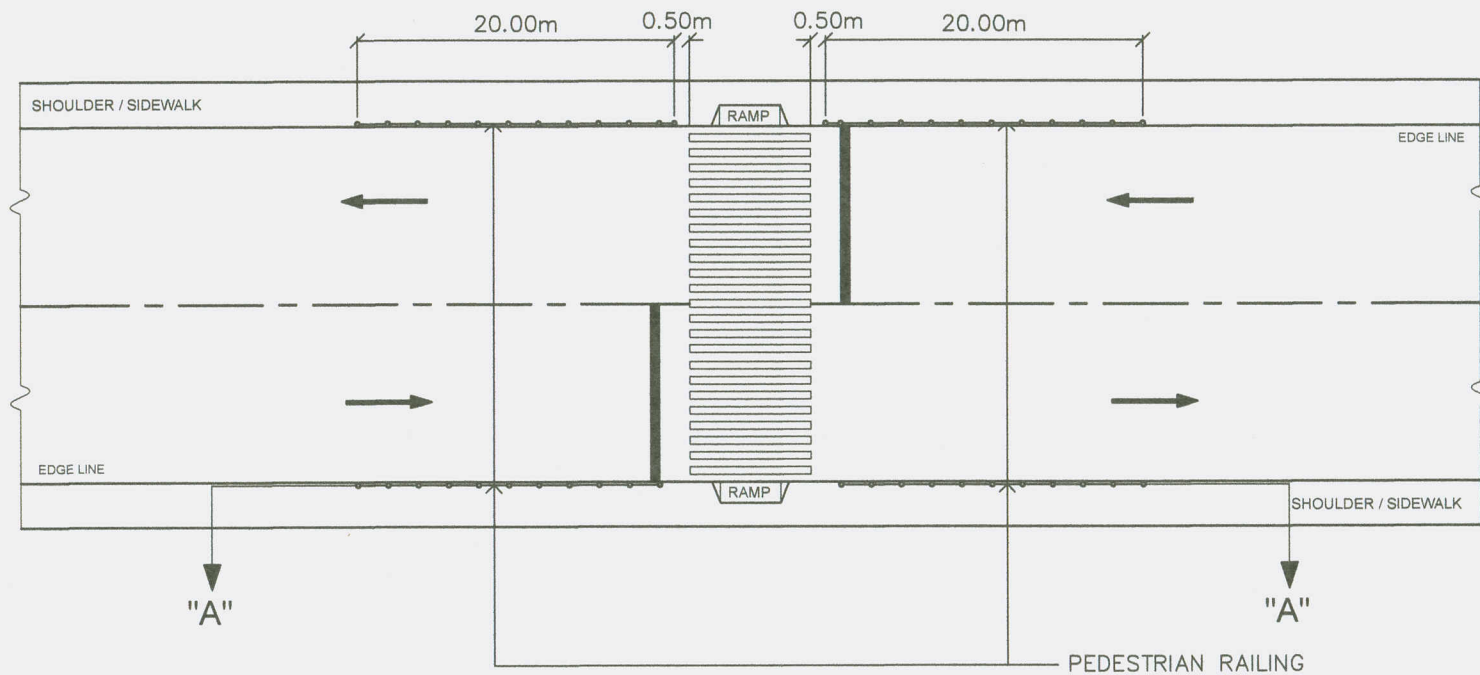
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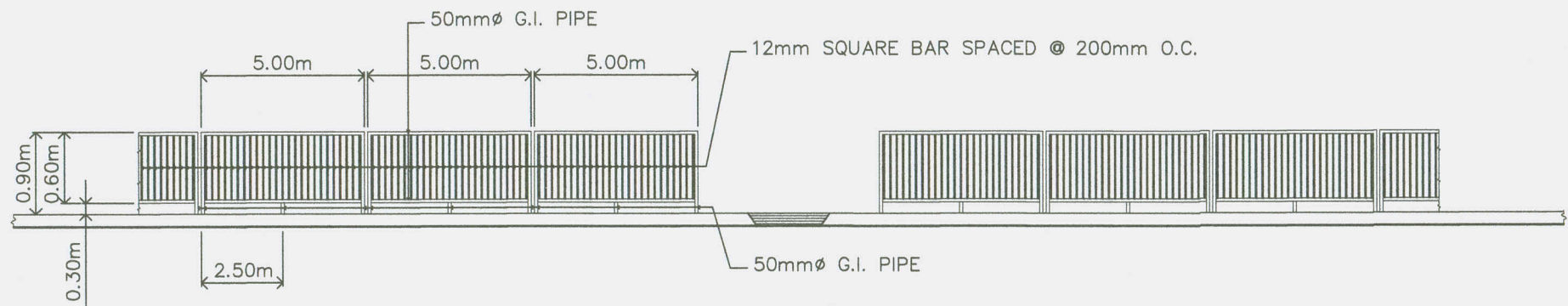
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PLAN OF PEDESTRIAN CROSSING WITH RAILINGS  
FIGURE 1



ELEVATION OF PEDESTRIAN RAILINGS

FIGURE 2