



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

097.13 DPWH  
 02-24-2016

23 FEB 2016

DEPARTMENT ORDER )  
 )  
 NO. **53** )  
 )  
 Series of 2016 )  
 Dr. W. G.

**SUBJECT: Minimum Vertical Clearance Above the Roadway for Railway, Flyover, Bridge and Footbridge Structures Along and Crossing National Highways**

To ensure that all structures (railways, flyovers, bridges, and footbridges) constructed along or crossing national highways will provide sufficient vertical clearance, the following guidelines with typical section details as shown in Annex "A", are hereby prescribed:

1. Vertical clearance above the roadway shall not be less than 4.88 meters over the entire roadway width to which an allowance of 0.15 meter shall be added for future additional road surfacing.
2. The clearance to pedestrian footbridges over roads shall be 0.30 meter greater than the vertical clearance as cited above to reduce the risk of truck impact against pedestrian bridges which have low load capacity.
3. The minimum vertical clearance shall also be provided below the coping at locations where portion of the carriageway is underneath the coping (e.g., intersections, U-turn slots) to allow safe passage of vehicles.
4. The clear height/headroom between the pedestrian bridge walking surface and the bottom of the girder of the structure above shall not be less than 2.0 meters.

For strict compliance.

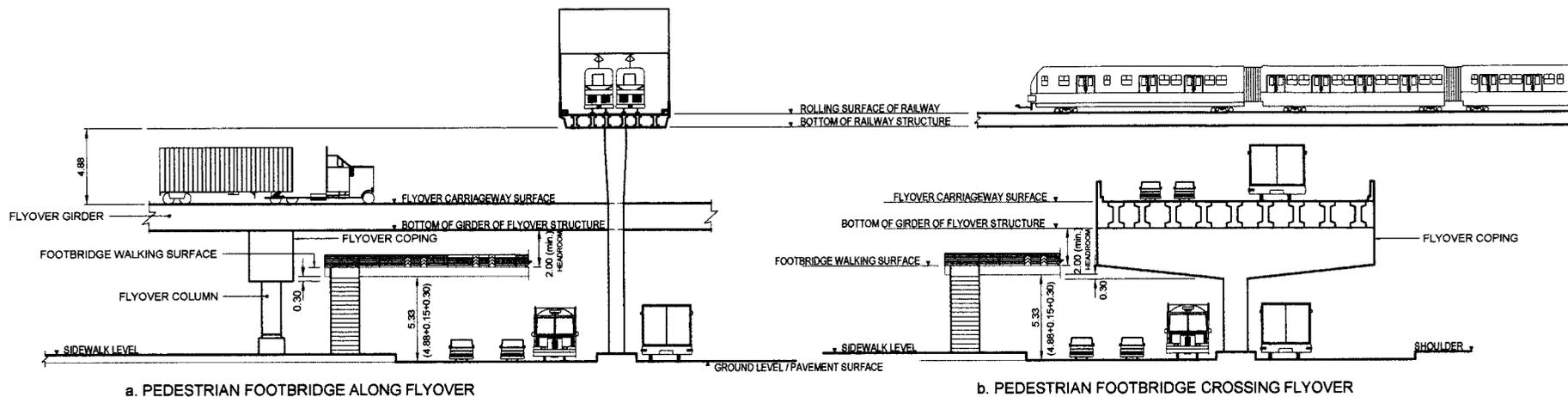
  
**ROGELIO L. SINGSON**  
 Secretary

Department of Public Works and Highways  
 Office of the Secretary



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ANNEX " A "



TYPICAL SECTION  
SHOWING MINIMUM VERTICAL CLEARANCE @ MAJOR JUNCTION  
WITH FOOTBRIDGE, FLYOVER, AND RAILWAY

NOT

TO

SCALE

NOTE:

1. VERTICAL CLEARANCE ABOVE ROAD CARRIAGEWAY :
  - a) 5.03 (min) - FOR RAILWAY / FLYOVER /BRIDGE
    - 4.88 - VEHICLE CLEARANCE
    - 0.15 - ALLOWANCE FOR FUTURE ADDITIONAL ROAD SURFACING
  - b) 5.33 (min) - FOR PEDESTRIAN FOOTBRIDGE
    - 4.88 - VEHICLE CLEARANCE
    - 0.15 - ALLOWANCE FOR FUTURE ADDITIONAL ROAD SURFACING.
    - 0.30 - ALLOWANCE TO REDUCE TRUCK IMPACT RISK
2. HEADROOM BETWEEN THE PEDESTRIAN WALKING SURFACE AND BOTTOM OF GIRDER OF THE STRUCTURE ( RAILWAY, FLYOVER , BRIDGE ) ABOVE: 2.00 (min.)
3. ALL DIMENSIONS ARE IN METER UNLESS OTHERWISE SPECIFIED.

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