



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

097. 13 DPWH
06-25-2012

JUN 25 2012

DEPARTMENT ORDER)
No. **46**)
Series of 2012)
X-X-X-X-X-X-X-X-X-X-X-X-X-X-)


SUBJECT: **DESIGN STANDARDS FOR
TOURISM ROADS**

In line with the mandate of the Department to ensure the quality and safety of road infrastructure, hereunder are the prescribed minimum design standards in preparing the engineering designs of tourism road projects included in the Department of Tourism (DOT) – DPWH Convergence Program, for the guidance and compliance of all concerned.

Design Element	Requirement
Pavement Type	Portland Cement Concrete Pavement (PCCP)
Pavement Width	Minimum of 6.1 m for two lanes
Pavement Thickness	230mm (9 inches) for Portland Cement Concrete Pavement (PCCP) 50mm (2 inches) for Asphalt Concrete Pavement (ACP)
Shoulder <ul style="list-style-type: none">• Width• Material	<ul style="list-style-type: none">• Minimum of 1.5m• Minimum gravel surfacing
Roadway Cross Slope	1.5% for Portland Cement Concrete pavement (PCCP)
Radius of Horizontal Curve	Minimum of 50m
Length of Tangent between Point of Curvature (PC) and Point of Tangency (PT) of reverse curve.	Minimum length of 30m
Length of Vertical Curve	Minimum length of 60m
Design Speed	Minimum of 60km/hr., 40km/hr., 30km/hr. for flat, rolling and mountainous terrain, respectively.
Longitudinal Grade	Minimum of 0.50% on cut section and maximum of 12%

Design Element	Requirement
Side Slope Ratio (H:V)	<ul style="list-style-type: none"> • Cut slope of 1.5:1 to 1:1 for common materials • Cut slope of 0.5:1 to 1:1 for hard/solid rock • Minimum fill slope of 1.5:1
Road Drainage	<ul style="list-style-type: none"> • Box culvert: 25 - year flood with sufficient freeboard to contain the 50- year flood • Pipe culvert: 15 - year flood with sufficient freeboard to contain the 25-year flood; minimum size of 910 mm in diameter.
Slope protection	As needed
Road Safety Devices including Pavement	Refer to DPWH Highway Safety Design Standards, Part 2 (May 2012)
Bridges	<ul style="list-style-type: none"> • Permanent structures (concrete or steel) • Structural design based on AASHTO HS20-44, using 0.4g ground acceleration coefficient for seismic analysis and 50- year flood frequency for hydraulic analysis

This Order shall take effect immediately.


ROGELIO L. SINGSON
 Secretary



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