

Department of Transportation and Public Works Puerto Rico Highway and Transportation Authority Infrastructure Directorate DESIGN AREA	Project Code:	AC-
	FHWA Code:	
	Date:	
	Submitted by:	
	Initials:	

**CERTIFICATION OF STRUCTURAL, GEOTECHNICAL AND SCOURING
RECOMMENDATIONS FOR BRIDGE FOUNDATIONS**

BRIDGE INFORMATION

Highway No.:		KM.		Bridge No.:	
Over:				Structure Sta.:	
Municipality:				Design Type:	

PROJECT DESCRIPCIÓN:

We have studied and analyzed in details the aspects related with the project substructure, the recommendations for bridge foundations are followings:

[Describe in details the recommendations to be implemented in the project.]

CODE DESCRIPTION FOR SCOUR CRITICAL BRIDGE
(Type "X" for one applicable code.)

ITEM 113

N	Bridge not over waterway.
U	Bridge with "unknown" foundation that has not been evaluated for scour. Since risk cannot be determined, flag for monitoring during flood events and, if appropriate, closure.
T	Bridge over "tidal" waters that has not been evaluated for scour, but considered low risk. Bridge will be monitored with regular inspection cycle and with appropriate underwater inspections. ("Unknown" foundation in "tidal" waters should be coded U.)
9	Bridge foundations (including piles) on dry land well above flood water elevations.
8	Bridge foundations determined to be stable for assessed or calculated scour conditions: calculated scour is above top of footing.
7	Countermeasures have been installed to correct a previously existing problem with scour. Bridge is no longer scour critical.
6	Scour calculation/evaluation has not been made. (Use only to describe case where bridge has not yet been evaluated for scour potential.)
5	Bridge foundations determined to be stable for calculated scour conditions; scour within limits of footing or piles.
4	Bridge foundations determined to be stable for calculated scour conditions; field review indicates action is required to protect exposed foundations from effects of additional erosion and corrosion.

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3	Bridge is scour critical; bridge foundations determined to be unstable for calculated scour conditions: - Scour within limits of footing or piles. - Scour below spread-footing base or pile tips.
2	Bridge is scour critical; field review indicates that extensive scour has occurred at bridge foundations. Immediate action is required to provide scour countermeasures.
1	Bridge is scour critical; field review indicates that failure of piers/abutments is imminent. Bridge is closed to traffic.
0	Bridge is scour critical. Bridge has failed and is closed to traffic.

We certify that these recommendations are in accordance with the conclusions of our multidisciplinary team and it represents a feasible and functional alternative for the project.

SPECIALISTS	SIGNATURE	LICENSE NO. (Expiration Date)	DATE
Structural Engineer			
Geotechnical Engineer			
Hydraulic Engineer			

CONSULTANT SECTION

Consultant Information		Signature	Date
Name:			
Employed by:			
Address:			
Telephone:			
Fax:			
E-mail:			