



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

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**MEMORANDUM TO:** Project Engineers  
Project Design Engineers  
**FROM:** W. J. Rogers, P.E.  
State Bridge Design Engineer  
**DATE:** April 16, 1998  
**SUBJECT:** DESIGN LOADS FOR STEEL PILES

As a result of the recent FHWA/NHI training course, "Design and Construction of Driven Pile Foundations," the Soils and Foundation Section has instructed the Structure Design Unit to use the following minimum design loads for preliminary design of end bents and pile footings

HP12 x 53 Steel Piles - 60 Tons (530kN)

HP14 x 73 Steel Piles - 75 Tons (670kN)

In certain instances, based on site geology, Soils and Foundations may provide Foundation Recommendations with design capacities that exceed these new minimum values.

It is unlikely that these new minimums can be used for pile bents due to the unsupported length of the piles. Therefore, for preliminary design, proceed with 45 Tons (400kN) and 60 Tons (530kN) for HP 12 x 53's and HP 14 x 73's respectively.

This policy is effective immediately; the Design Manual will be revised to reflect this policy at a later date. For projects currently being designed that would benefit significantly from these higher pile capacities contact Soils and Foundations to obtain a revised Foundation Recommendation before any redesign efforts are started.

WJR/RGW/ap



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