工程地质学报 JOURNAL OF ENGINEERING GEOLOGY

工程地质学报 » 2012, Vol. 20 » Issue (6): 1036-1041 DOI:

高原湖相沉积软土地基沉降计算经验系数的推算

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PREDICTION OF EMPIRICAL SETTLEMENT COEFFICIENT FOR SOFT CLAY GROUND OF PLATEAU LACUSTRI DEPOSITS

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- 摘要
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全文: PDF (1457 KB) HTML (KB) 输出: BibTeX | EndNote (RIS) 背景资料

摘要 高原湖相沉积软土压缩模量偏低,地基沉降计算深度范围内压缩模量当量值有时会小于2.5MPa,超出了规范沉降计算经验系数计算依据的取值范围,且具有沉降量偏大的特点。本文根据昆明地区某软土地基实测沉降资料,分别运用了三点法、双曲线法、Asaoko法拟合了最终沉降量,并与规范分层总和法的地基沉降量相比得到了6个沉降计算经验系数值,据此分析给出了压缩模量当量值2.05~4.15MPa时沉降计算经验系数的拟合曲线方程,提出了压缩模量当量值1.5~2.0MPa时沉降计算经验系数的建议值,弥补了在高原湖相软土地区沉降计算经验系数取值范围不足的问题。

关键词: 高原湖相沉积软土 三点法 双曲线法 Asaoka法 推算 沉降计算经验系数

Abstract: In plateau lacustrine, the modulus of compression of soft clay is low. Sometimes, equivalent compression modulus in the range of the effective depth of foundation settlement analysis can be less than 2.5MPa. The empirical settlement coefficient exceeds the range of standard. The settlement is too large. This paper uses the three-point method, the hyperbolic curve, the Asaoka method to fit final settlement. The results are compared with the foundation settlement calculated with the layer-wise summation method. Six empirical settlement coefficients are obtained. The paper analyzes the equivalent compression modulus and points out the fitting curve equation. The range of equivalent compression modulus is 2.05~4.15MPa. Meanwhile, this paper points out the suggested value for the empirical settlement coefficient They are in the range of equivalent compression modulus 1.5~4.15MPa. It makes up the weaknesses of empirical settlement coefficient that in plateau lacustrine.

Key words: Soft clay Plateau lacustrine-deposits Prediction Empirical settlement coefficient Foundation engineering

收稿日期: 2011-10-25;

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