

عنوان مقاله:

Land Reclamation Project in Anzali Harbor Using Dynamic Compaction

محل انتشار:

مجله پیشرفت تحقیقات محاسباتی در علوم و مهندسی کاربردی، دوره 3، شماره 4 (سال: 1396)

تعداد صفحات اصل مقاله: 12

نویسندگان:

reza Jamshidi Chenari - *Department of Civil Engineering, Faculty of Engineering, University of Guilan, Rasht, Guilan, Iran*

Mehran Karimpour Fard - *Department of Civil Engineering, Faculty of Engineering, University of Guilan, Rasht, Guilan, Iran*

Javad Shamsi Sosahab - *Department of Civil Engineering, Faculty of Engineering, University of Guilan, Rasht, Guilan, Iran*

Shahram Navari - *Department of Civil Engineering, Faculty of Pardis, University of Guilan, Rasht, Guilan, Iran*

خلاصه مقاله:

Dynamic compaction used as a soil improvement method for treatment of reclaimed lands in Anzali, Iran. Land reclamation was performed by filling dredged soil and dynamic compaction was employed for mitigation of liquefaction potential and excessive settlements during operation. The compaction pattern and phases, energy and rest periods were designed based on the fill materials characteristics. Engineering geological studies in this project were divided into two phases. In first phase, study of the sea floor and available filling materials was performed before reclamation. In second phase, study of suitability of the reclaimed land for construction purposes before and after improvement was carried out. In situ tests showed that reclaimed land is susceptible to liquefaction hazard and settlement potential. Dynamic compaction was selected for improvement of reclaimed land. Final compaction pattern was revised according to the results of the trial compaction efforts. Corrected standard penetration test numbers and one penetration test values after the dynamic compaction showed more than 20 and 7 MPa increase respectively. In-situ tests results proved that the liquefaction potential hazard has been abated due to the dynamic compaction and bearing capacity of the reclaimed land has improved.

کلمات کلیدی:

Land reclamation, Dynamic compaction, Standard penetration test, Cone penetration test

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/764378>



