



**ACADEMIC YEAR 2014 – 2015**

**TITLE OF DIPLOMA THESIS:**

Feasibility analysis of construction configuration for servicing vessels of deep draft to  
Thessaloniki Port Authority

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**ABSTRACT**

The port of Thessaloniki is the second biggest port of Greece and it's characterized as an international port, as well it's one of the five Greek ports which belong to the Central Trans-European Transport Network. This project is an honest effort of achieving continuous improvement and maintaining the significance of the port of Thessaloniki. The main target is the maintenance and the increase of the port's commercialism through the ability to serve ships with larger dimensions than those which are already being served. In order to accomplish this achievement, the sixth jetty of the port which serves the big container ships must be dredged from 12 m to 16 m. Thus, this project suggests and evaluates two possible solutions for the dredging of the sixth jetty: Sheet pile: Shoring of the artificial boulder with a sheet pile which is submerged to the calculated depth under the bottom and subsequently excavation up to 16 m. Caisson: Extension of the sixth jetty to certain meters in width with the use of caissons and then excavation of the port. Finally, the two proposed methods are compared and a possible choice for the dredging of the jetty is suggested.

**KEYWORDS**

Dredging, sheet pile, caissons