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AN APPROACH TO FIND LOCALIZATION OF NON-EXISTENT HISTORICAL BUILDINGS BY TERRESTRIAL PHOTOGRAMMETRY

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Abstract. Preservation of cultural and historical values located in Bosphorus Area in Turkey and protection of natural structure is guaranteed by Bosphorus Law. According to the law, land owners who want to raise a new building in Bosphorus area can only do exactly like the previously constructed building in that area. In the event that there is no construction whatsoever regarding the building in the area, information about the building that will be constructed can only be reached by historical photographs.

The study that is presented is made with the purpose of identifying if the historical building that can only be reached by historical maps and photographs and is planned to be reconstructed in the Bosphorus area, is the building shown in photographs or not, and also if it is on the alleged area. Aerial photograph of 1937, actual 1/1000 scaled digital photogrammetric map and satellite image of the same area, historical perspective photograph that was taken between 1903-1907, actual photograph that was taken with around the same perspective and 3D Google Earth image which provides the same perspective are used for this process.

Historical buildings that remain the same until today are confirmed by the historical aerial photograph which includes study area and these buildings are used as control point. In the same way, with the historical perspective photograph, buildings that reach until today are confirmed and used as control point.

With the acquired results, that the building is totally in the alleged parcel is crosschecked with all methods and confirmed with the error of 1.8357 meters.

[Conference Paper](#) (PDF, 1401 KB)

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