

Summary:

The work's main focus is the application of geophysical methods to localization and examination of historical masonry. Background research and measurement in the selected locality form two interrelated parts. The summary provides basic information about the types and characteristics of historical masonry and a structured overview of geophysical methods which allow the localization of the "hidden" masonry (archaeological survey) as well as non-destructive survey of existing masonry structures (architectural-historical survey).

The subject of the practical part is the geophysical measurement executed in the area of the presumptive presence of the relics of one of the former Judith Bridge pillars in Na Kampě street (744/1). The locality was explored by means of electrical resistivity tomography and the ground-penetrating radar. The chapter consists of the field measurement description, data processing and interpretation of the results in the context of other available information (geology, petrophysics, history, archaeology, architectural history). The results of the survey are not unequivocal; at the expected pillar "location" a resistivity minimum was detected, accompanied by multivalent indications, by GPR.

The main contribution of this work is the overview of non-destructive techniques (NDT) for examination of masonry.

Key words:

Geophysical methods, historical masonry, archaeology, architectural history survey, Judith Bridge