



REMODELLING WIEN MUSEUM, KARLSPLATZ

Client: Museums of the Town of Vienna - Wien Museum

Development Period: 11/2018 to 6/2019

THE PROJECT

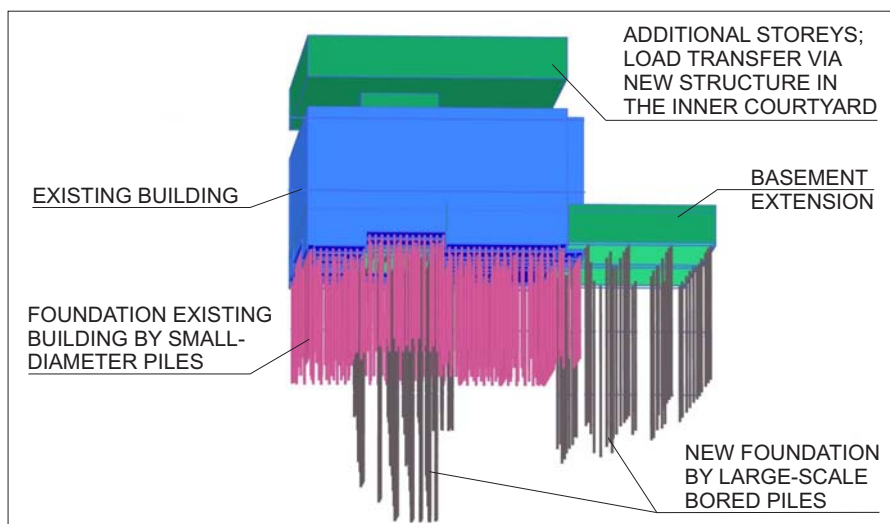
Since February 2019, the Wien Museum, Karlsplatz branch, is undergoing a reconstruction and extension. The building, designed by Oswald Haerdtl and opened in 1959, is to be developed to a forward-looking town museum. This includes a heightening of the existing structure by two storeys and an extension of the basement.

OUR FUNCTION

BGG Consult was commissioned by the Museums of the Town of Vienna with detailed analyses regarding the settlement behaviour of the new structure in order to predict the settlements of the existing building. For this, 3-dimensional calculations with the method of finite elements were conducted.

3D-Modelling:

In order to minimise the impact on the old building, the upper extension of the building was designed in a way, that the additional load is transferred through a new, structurally separated building element situated within the previous inner courtyard. This building part is founded, as well as the extension of the basement, by large-scale bored piles, which reach significantly below the current foundation level. In contrast, the existing building is founded by a great number of small-diameter piles. To ensure a correct calculation result, both foundation systems had to be depicted in the model as detailed as possible. In the development process of the model, the different levels of foundation were especially demanding.



System sketch of the calculation and foundation model