

The Auenfeld barracks are to become one of the most important army bases in Switzerland. PORR has a solution for such challenges: BIM to Field.

PORR builds with people and for people. In Switzerland, we are building for an entire army. The renovation of the Auenfeld barracks will make it the second largest in Switzerland and one of the most important weapons sites for the army. PORR will be planning and building eight new buildings and the associated outdoor facilities by 2025. The first stage should be completed by the end of 2023, which will include a research and laboratory building, three training halls, a simulator building, a workshop, a restoration camp, and an accommodation building. BIM to Field helps us work more effectively, reduce errors, and thus increase quality. The executing companies can access the latest plans quickly and easily on the Trimble Connect file exchange

platform. With the upload information metadata, delivery by the planners is transparent and can be tracked at any time. Various approvals by the civil engineer – reinforcement checks, for example – are also performed using the platform together with the master builder. Not a single paper plan was used during the entire construction period. And this has some advantages. The execution of the earthworks began quickly. We were able to increase the accuracy and efficiency through an interface connecting the construction machines with the GPS: we can programme them to use the BIM model as a reference to accurately perform tasks like digging or concreting.

The digitisation of the barracks

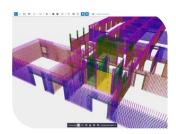














Everything is possible

The master builder welcomed execution with BIM to Field right from the start and provided the corresponding digital plan rooms. These have standalone 5G SIM cards, so they are not dependent on a single Wi-Fi network. And the feedback on BIM to Field from the executing contractors is consistently positive. The digital plan boxes can be used intuitively after a comparatively short training period. The iron layers are particularly enthusiastic: with the 3D models, they can use the touchscreen to turn details and node situations into a clearly visible perspective and

thus show the needed reinforcement levels and layers for the current version. The rolling execution planning and the strict restrictions in the course of the SIA planning stages still represent a major hurdle for complete execution using BIM models. But the project does prove one thing: it can work. The successful execution in the earthwork and shell construction phase has shown what BIM to Field can do. The client appreciates the method's impact and is considering using it in later construction stages of the execution planning. Once again, PORR is leading the way.