

## **The seed vault: Renovation of tunnel**

Statsbygg is renovating the access tunnel to the seed vault on Svalbard. The reason is that the permafrost has not re-established itself after the tunnel was completed in 2008. The renovation project coincides with an essential upgrade of the technical systems that will prepare two further vaults for the storage of seeds.

In order to achieve more space for additional technical equipment, a service building will also be erected on the site. The service building will provide necessary safety functions in connection with the receipt and registration of shipments, before they are placed in the vaults. The new 180 m<sup>2</sup> service building is located 40 metres from the entrance to the access tunnel.

During renovation of the access tunnel, 17,000 m<sup>3</sup> of materials will be excavated. The ground beneath the existing tunnel will be improved and levelled for casting new foundations. A new concrete access tunnel will then be established at the back of the entrance to the tunnel. The construction pit will be filled with frost-free soil layered with cooling pipes. Mats will be placed on top of the soil. These will direct surface water away from the construction pit. Location-specific soil will then be added. After the construction pit has been closed, the soil will be frozen in order to re-establish the permafrost.

Heavier construction work will begin in the spring of 2018 and will be completed at the end of the year. Final completion of the entire installation is estimated to be in May 2019.

### **Facts about the seed vault**

The seed vault is the largest reserve stock of seeds in the world. It was opened by the Norwegian government in 2008. Seeds are sent here from the entire globe for safe and secure long-term storage in cold and dry rock vaults. The aim of the seed vault is to preserve the large genetic variety of the world's food plants. The vault has the capacity to store 4 million seeds. Currently, 930,000 seeds are stored in the vault.