

SIA Grant Application Project Summary

The 1918 Quincy Mine Hoist House is an early vintage reinforced concrete frame structure with several unique features and characteristics. It was constructed in Hancock, Michigan and contains the Nordberg Hoist, the largest steam hoist in the world. This hoist was used for copper mining operations at the Quincy Mine Rock/Shaft House No. 2, which upon its closure was considered the deepest and one of the richest ore bodies in the Western Hemisphere. The Hoist House operated from 1918 to 1933.

The Hoist House has a gable span of 72 feet and is 78 feet long with a 22 foot extension on the north elevation. The extension is one story high. The main structure has a eave height of 58' with an additional 16' gable roof above. The load bearing north and south walls have columns fitted with a gantry crane reinforced concrete runner beam. The exterior facade consists of concrete infill walls, ornate windows, exterior brick veneer and other special features to accommodate the hoisting operation.

The Quincy Mine Hoist Association (QMHA) is a non profit 501(c)3 corporation that was formed in 1958 for the purpose of preserving the Hoist House and the Nordberg Steam Hoist and using the facilities to educate the public of the mining history of the area. Over the years the QMHA has acquired ownership of the 1918 Hoist House and the adjacent 150 acres of land which includes the Rock/Shaft House serviced by the Hoist House and several other structure, some of which are ruins. The property owned by the QMHA is a significant portion of Quincy Mine National Historic Landmark District and is one of the primary Heritage sites affiliated with the Keweenaw National Historic Park. The QMHA site is now a popular tourist attraction and during the summer gives tours of the 1918 Hoist House and the seventh level of the mine which is accessed by way of a cog railroad car that takes passengers down a hillside with a 400 foot vertical drop and a 1800 foot horizontal run to an adit where a one-half mile underground tour is conducted using a tractor and wagon for passengers.

The proposed project is the creation of engineering documents for the repair of critical structural components at the 1918 Hoist House. Spalling concrete at the unheated Hoist House has become a problem and some locations have been determined critical by Bob Tracey, P.E., Principal Investigator, Restoration Engineer of Source Restoration Engineering Inc, Chelsea, Michigan.

John Rosemugy, Historical Architect with the Keweenaw National Historical Park will provide technical assistance for the project.

George Kiiskila, P.E., Structural Engineer and a member of the QMHA Board of Directors has been involved in several historical restoration projects at the QMHA facilities will also provide technical assistance.