

Mines Experiment Station, University of Minnesota (Minneapolis)



OVERLOOKING A BEND in the Mississippi River, mere blocks from the Dinkytown coffeehouses where Bob Dylan honed his chops before departing for Greenwich Village, sits the University of Minnesota's Mines Experiment Station (today, Education Sciences Building). Within the imposing red-brick building, researchers developed the techniques and equipment necessary for large-scale taconite production, allowing Dylan's native Iron Range to remain economically viable in the post-World War II era.

By the early-twentieth century, high-grade ore that could be scooped from the Iron Range's open-pit mines was becoming depleted. A new domestic source of iron was needed to feed the nation's voracious steel mills. Mining interests teamed with researchers from the University of Minnesota's School of Mines, led by mathematics professor Edward Davis, to find the most efficient way of utilizing taconite. The range had plenty of that hard, low-grade ore, but it was difficult and expensive to extract the iron within.

The 1923 Renaissance Revival-style Mines Experiment Station was designed, like almost all university buildings from 1901 to 1950, by the firm of Clarence H. Johnston Sr. The hangar-like facility allowed researchers to expand on breakthroughs made before World War I. In the 1920s and 1930s, the station continued taconite



Mines Experiment Station, 1997, when it was called the Mineral Resources Research Center
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research when others abandoned it. University staff also advocated before the legislature for additional funding and tax laws that favored investment by steel companies.

The process to exploit the low-grade ore commercially was substantially complete by 1951, when Davis took a leave of absence from the university to advise Reserve Mining as it established the world's first major taconite-processing plant in Silver Bay. In 1970 the station was renamed the Mineral Resources Research Center. By then, the legislature was beginning to question the research station's relevance and close ties to the mining industry. Obsolete equipment and another downturn in the mining economy led the university to close the center in 1988.

Equipment gathered dust and the building was used for storage until 2005, when a \$21 million complete

renovation of the 69,808-square-foot facility began, completed in 2008. The exterior was restored to its 1923 appearance and infill floors were added to house three units of the university's College of Education and Human Development.

—Laura Weber

Sources: 1998 Historic American Buildings Survey documentation; *University of Minnesota Preservation Plan*, 1998; "University of Minnesota to open new Education Sciences Building in special ceremony," University News Service Advisory, news release, 2007.

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