

Longest Structure Moved
&
Structure Moved with the Most
Square Footage on One Level

Milbank House Movers

Milbank, South Dakota

Morris, Minnesota Steel Building

In October 2004, a 10,000 head dairy operation purchased a farm five miles south of Morris, MN. Located on the farm was a 60' (W) x 150' (L) x 38' (H) steel building. The new owners thought they could make better use of the building as a shop if it was located on one of their other farm sites. Milbank House Movers was contracted to relocate the structure.

Milbank used two main beams 16" tall x 120 pounds to the foot that were spliced together to obtain the needed length. Three cross beams 36" tall x 166 pounds to the foot x 60' were used on top of the mains with liner beams on top of the crossbeams. The liner beams were fastened to the main steel beams that supported the building. The liners were fastened to the crossbeams that were fastened to the main beams that were

fastened to the dollies and the truck.

The building was moved on four dollies, with the truck inside of the building, a distance of two miles and set on a new foundation. The project required two

days to load the building, a day for the move, two days to set the structure on the foundation and return all equipment to Milbank's yard.





Widest Structure Moved Under \$30,000

Deitz House Moving Engineers, Inc.

Muskegon, Michigan

Sun Chemical Office Building

The 40' x 60' triple office building was moved one mile. The 40' building was maneuvered through a 46' opening into a blind opening between three existing buildings.



Heaviest Structure Moved on Dollies Under \$30,000

Deitz House Moving Engineers, Inc.

Muskegon, Michigan

Frerres Service Station

A 1920's solid brick gas station had a footprint of 22' x 30' and weighed 190,000 pounds. The main portion of the structure was constructed of sandstone brick and clay tile. The floor was cast in place concrete over a grid of steel beams. The roof was made of clay tile. The move was made on 10:00 x 15 dollies with a pull truck.



Heaviest Structure Moved NOT on Rubber-Tired Dollies

Minty's Moving, Ltd.

Onanole, Manitoba, Canada

Henday Transformer Move

The bid was to move two transformers for a planned change out for a failing transformer and replace it with a new fully assembled high tech transformer (NT) that was to be moved 500 feet. The old transformer (OT) had been stripped of all accessories and oil removed. The OT was to be moved 750 feet to a concrete pad where it would eventually be discarded. The OT dimensions were 10' (W) x 24' (L) x 265 tons. The new one, fully assembled, was 26' (W) x 24' (L) x 420 tons.

The NT was jacked at one foot and the hydraulic slide system installed. The slide system consists of two 10" tall beams made of T1 steel with two-inch holes every two feet. The beams are spread about 12' apart and supported by timber mats and blocking continuously. On top of the slide beams were installed formed slide shoes that have Teflon attached to the underside of the shoe. Two five inch by four and one-half foot hydraulic rams were pinned to the shoes on top of each beam. The other end of the rams was pinned to the holes in the slide beams. The pump on the truck supplied hydraulic power.

The NT was pushed from the pad to the street and then the unit had to be lifted, the slide system removed and installed in the direction of the road. This allowed the NT to be pushed just north of the OT. The next step was to jack the OT. A new method was tried to move the load on 100-ton rollers and a track system. When the OT was pulled with two



winch trucks it was discovered the track system was too light for the job causing the rollers to dig into the tracks if the tracks were out of level even a slight amount. Nevertheless the OT was eventually moved out of the way of the NT.

The NT was pushed another 40' endways before slide equipment was installed for a sideways push into final position. The NT was then jacked, the slide equipment removed, and set onto its foundation. The final step of the project was to move the OT to an existing pad 700' to the north ultimately using the slide equipment.

The project was 750 miles north of home base for Minty's, which is at the end of the most northerly road in Manitoba, and winter had already started to set in by the end of October. The job required the crew to be away from home for 10 days.

