

PROJECT: Sleeping Bear Dunes National Lakeshore Hertage Trail: Phase II

CHALLENGE: Started work four weeks late due to snow; limited disturbance area

SOLUTION: The best crews around being willing and able to work more hours, bring in more employees, and use more equipment.

OWNER: S.B.D. National Lakeshore, MDOT CONTRACT AMOUNT: \$1,771,317.50

DESIGN ENGINEER: Judy K. Browning, R.E.

**ENGINEER PHONE: 231.941.1986** 

LOCATION: From S.B.D. Park Climb, along M-109 & M-22 to northern village limits of Empire

DATE STARTED: April 21, 2014
DATE COMPLETED: June 6, 2014

**SELF-PERFORMED: 86%** 

PARTNERS: Sleeping Bear Dunes National Lakeshore, MDOT, LSHR Commitee, Friends of Sleeping Bear Dunes, TART Trails, Bella Concrete, Action Traffic, Diane Dukes, Give-Em-A-brake, Inland Seas Engineering, Timberline South, Michigan Pipe and Valve, CSI Geoturf.

Two years ago, Team Elmers broke ground on one of the highest profile projects in our history, a 27-mile, non-motorized trail designed to wind along the widely renowned Sleeping Bear Dunes National Lakeshore. The project, which was funded in part by both the Michigan Department of Transportation and the Federal Transit Authority, was always going to be a massive undertaking. A marathon-length, paved trail that would allow bikers, joggers, hikers, and other non-motorized adventurers a spot to explore this beautiful environment in leisure, away from both sand and road.

However, the sprawling nature of the project required that it be broken up into multiple segments and spread out over the course of a decade. This past April, Team Elmers began work on phase two, extending the current trail from four miles in length to 9.5 miles, including Greenan Road, and pushing the project past 35 percent completion.

Pre-planning strategey was key to reaching the one-third benchmark. The biggest concern was to preserve as much of the natural beauty as





## Sleeping Bear Dunes Heritage Trail By The Numbers

5.5 miles of trail cleared in 10 working days

28 employees, 9 trucks, & 19 pieces of equipment all moving at once

16,100 ton of CI II sand

## 16,300 ton of gravel

possible, dodging any unnecessary environmental disruption. On-site visits with park representatives and the project foreman allowed strategic planning for staging and timber consultations for clearing efficiencies while protecting the natural flora and fauna of the area. Pre-construction challenges included steep slope sections to clear and build (with finish slope at 12% grades), significant grade changes in sections, and limited disturbance areas throughout the project. Team Elmers completed the clearing of 5.5 miles of trail space. Grading, graveling, installing asphalt, adding curbs, concrete ramps, landscaping flourishes and even installing signs to help direct traffic occurred in a continuous construction sequence along sections of the trail. To make matters more challenging, we were working in a limited disturbance area and time frame, as well as working around motorized traffic.

Start to finish, the project schedule was eleven weeks. Thanks to one of the coldest winters in recent Northern Michigan memory there was still three feet of snow on the ground on the specified start date. Four weeks later, the snow had finally melted enough for us to get to work.

Rising to the challenge, Team Elmers put their problem solving abilities to the test, working overtime, increasing the size of our crews, and sending more of our equipment up to Empire than we had initially intended. The extra hard work paid off: on June 6, as originally scheduled, we were able to open the second segment of the Sleeping Bear Heritage Trail to the public.

The hope, of course, is that future generations will enjoy the pristine beauty of the trail and winters wont bring as much snow and cold. Between now and 2016, there are two additional segments scheduled for bid, adding eight more miles onto the trail. The 2015 segment will connect Glen Arbor to Port Oneida, while 2016 work will span from Port Oneida to Bohemian Road.

Ultimately, the trail is set to run from the northern end of the Sleeping Bear Dunes National Lakeshore down to Manning Road, which is located south of Empire. The 27 miles of trail in between those two points will give cyclists and other travelers ample access to popular lakeside attractions such as Glen Arbor, Glen Haven, and the Dune Climb itself as well as to amenities such as campgrounds. And all within the safe confines of the trail away from motorized vehicles.

Interested in following construction on the Sleeping Bear Heritage Trail? Visit the trails official website at http://sleepingbeartrail.org.

