

Ashmun Street Reconstruction



PROJECT: Ashmun Street Reconstruction

CHALLENGE: Maintaining street traffic during construction; dealing with a deep undercut and a deeper sewer excavation

SOLUTION: Scheduling the project part width to keep the road open; collaborating with local engineers to navigate the depth of the dig

OWNER: Michigan Department of Transportation

CONTRACT AMOUNT: \$2,038,399.00

DESIGN ENGINEER: Chris Rupinski

LOCATION: Ashmun Street, Sault Ste. Marie, Michigan

DATE STARTED: July 2015

DATE COMPLETED: October 2015

SELF-PERFORMED: 60%

PARTNERS: Bella Concrete, G&J Site Solutions, Payne & Dolan, Roy Electric

It was mid-summer 2015 when Team Elmer's headed up to Sault Ste. Marie to undertake the reconstruction of the city's Ashmun Street. The Michigan Department of Transportation, thanks to a grant from the Federal Highway Administration's Transportation Alternatives Program, had the budget to complete the full project. As a result, the project morphed from a simple repave into a full reconstruction, involving 0.27 miles of hot mix asphalt, concrete curb and gutter work, sidewalks, sanitary sewer, storm sewer, water main, and lighting.

Team Elmer's got the job and headed north.

The small size of the work area didn't simplify the project. On the contrary, packing so much work into such a narrow corridor was one of the biggest challenges of the job for Team Elmer's. To keep things convenient for local businesses, the project was constructed part width. That meant putting traffic on one side of the road and then doing a full

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undercut, installing the sewer and water systems, bringing the sand back in, laying down gravel, and paving the road. With all of that done, the project was only half finished. Work was then flipped to construct the other side of the road.

The depth of the excavation posed another challenge. The undercut for the Ashmun Street work was a full five feet in depth, which meant plenty of trucking to remove materials and bring specified sand back in. A typical project requires 12 inches of sub-grade, Ashmun Street specifications required three feet. The extra digging added time and work to the equation.

Part of the reason for the sizable undercut was the depth of the sewers themselves. The sewer systems beneath Ashmun Street are unusual in that they are situated 11 feet below the surface. This depth not only meant a lot of excavation work for Team Elmer's, but also required the movement of a gas main that impacted the excavation area. In addition, we had to navigate around existing water and sewer lines and determine which ones were still usable. By using trench boxes and collaborating closely with local utility companies, we were able to clear these hurdles successfully.

With the excavation work done, Team Elmer's turned its focus toward the streetscape elements of the project. These included over 7,000 square feet of brick pavers to put down (which equated to three truckloads, or 16,000 bricks), concrete curb, gutter, and sidewalk work to boot. Another complication was the installation of light poles, which needed to be custom made to match the other existing poles throughout downtown Sault Ste. Marie.

In the end, we were able to complete the project with minimal disruption to the local community. In fact, Team Elmer's increased communication with local businesses — thanks in large part to the number of public meetings we had along the way to ensure that everyone was satisfied and address any issues as they arose. Thanks to the understanding of the locals and strong assists from the Sault Ste. Marie water and engineering departments, our time up north proved to be productive. Thanks to the people of Sault Ste. Marie for welcoming us!

Ashmun Street By The Numbers

- Hydrant Removal: 1
- Drainage Removals: 19
- Sewer Removals: 1,692
- Sanitary Removals: 5
- 8" 22A Aggregate Base: 8,234 square yards
- Sewer: 680 feet
- Water Services: 29
- Water Main: 1,573 feet
- Sidewalk Pavers: 7,071 square feet
- 6" Concrete: 16,860 square feet
- Curb & Gutter: 2,408 feet
- Cold Milling: 1,499 square yards
- Hot Mix Asphalt: 2,890 tons

