

MEMORANDUM

To: MCWD Board of Managers
From: Laura Domyancich
Date: April 25, 2016
Re: City of Mound- Wolner Field Porous Concrete Parking Lot Update

Purpose:

At the April 14, 2016 Board of Managers Meeting, the Board requested an update regarding the maintenance of the porous concrete at the Wolner Baseball Field parking lot, which was installed as a Capital project in partnership with the City of Mound. The following is a summary of damage to the porous concrete and the District's coordination with the City of Mound to repair the damage and restore the function of the concrete.

Background:

In 2006, the District entered into a cooperative agreement with the City of Mound to install a porous concrete parking lot at the Wolner Baseball Field. Through the cooperative agreement, the District was responsible for construction oversight and the costs associated with installation of the parking lot, and the City of Mound agreed to own and maintain the lot after installation.

During MCWD project inspections on October 9, 2014, District staff noted that agricultural lime, used to resurface baseball fields, had been stockpiled on the concrete and tracked across portions of the parking lot. District staff contacted the City of Mound Public Works Superintendent, who was aware of the issue, and the City communicated that they were coordinating with Westonka School District staff. The City and School District had entered into an agreement in which the School District was responsible to maintain the baseball field, and due to this agreement, the City indicated that the School was responsible to repair the damage caused by the use of the agricultural lime.

MCWD project inspections on April 30, 2015 revealed that the stockpile of agricultural lime had been removed, but that material remained over the surface of the parking lot. Water poured onto the porous asphalt where the material had been tracked did not percolate into the concrete. Following this inspection, MCWD staff met with Westonka School District staff, and with the guidance of the District Engineer, developed a plan to first vacuum and then power wash the concrete to remove the material and restore its function. The School District attempted to clean the parking lot throughout the summer of 2015, however, their attempts were unsuccessful and they were not able to restore the function of the parking lot. Since the City was ultimately responsible for the maintenance and function of the parking lot, the City, School District and MCWD coordinated to develop a plan to repair the damage.

In March 2016, the City of Mound extracted several cores from the parking lot. These cores showed that the penetration of the fine material was confined to the very surface of the concrete. Given this information, the City planned to complete specific treatments with their sweeping and vacuuming equipment, compressed air tools, and pressurized water to attempt to break apart the fine materials and extract them from the asphalt.

On April 15, 2016, the City of Mound noted that they have been successful with vacuuming and washing the surface. They have restored percolation across the parking lot, but a few areas remain where the fine material is visible across the top surface. They intend to use a sewer vacuum truck next to extract the remaining material and hope to restore the function of the entire parking lot.

Next Steps:

The cooperative agreement between the District and the City of Mound requires the City to arrange for the porous concrete surface to be vacuum swept at least three times per year, followed by high-pressure jet hosing to keep the concrete pores open. Moving forward, the District will continue to communicate inspection findings with the City. The District has also requested that it be notified when the porous concrete is scheduled to be vacuum swept and jet hosed to ensure the City is upholding its maintenance obligations. The parking lot will be inspected by the District following the next rain event to determine the current function of the porous concrete, and the findings of that inspection will be provided to the City.

If there are questions in advance of the meeting, please contact Laura Domyancich at 952-641-4582 or at domyancich@minnehahacreek.org.