

Birthplace of the Harvester

# CITY OF PLANO

17 E. Main Street  
Plano, Illinois 60545

Mayor 630-552-3210



City Clerk (630) 552-8275  
City Treasurer (630) 552-8823

Fax 630-552-8292

Public Works (630) 552-7000  
Building & Zoning (630) 552-8425

## MEMORANDUM

TO: Mayor & City Council

From: Nate Bullard, P.E. – Director of Public Works/City Engineer

Date: April 11, 2019

RE: Spray Patcher and Emulsion Tank Purchase

I am seeking the council's approval for the purchase and setup of a spray injection patcher and 7,000-gallon emulsion tank. The spray injection patcher will be used in the day to day operations of the Streets department for pothole patching and surface restoration. The emulsion tank will be used for the storage of a water-based emulsion (HFE-150) that is used in the spray injection patching process. The need for an emulsion tank onsite is due to the lack of availability of emulsion locally. The purpose of a large tank is so that we can purchase and store a tanker load at a time and reduce the overall cost of the emulsion.

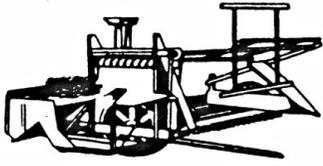
The process of spray injection patching will utilize the same two-man crew that we currently use for our cold mix patching operation. I do anticipate keeping this crew on patching operations longer and more often than they are currently.

It is my recommendation that we purchase a New Total Patcher T-7500 from Hampton Equipment in Raymond, IL with all standard equipment, steps to the work platform, toolbox, emulsion tank fill port removable screen filtration basket, and truck tail gate set up kit. Price for the unit is \$63,781.00 delivered to our City Garage with the following options: crack seal setup, emulsion tank level gauge, and a water jet cleanout system.

It is also my recommendation that we purchase a New 7,000-gallon Total Tank from Hampton Equipment in Raymond, IL with all standard equipment, articulating boom load arm, power out light indication, and 3<sup>rd</sup> valve in floor for cleanout. Price for the Total Tank is \$51,500 delivered to our City Garage.

I would also like permission to proceed with the expenditure to build the Tank pad and containment, run electrical to the tank, offloading of the tank by crane, and setup of the tank in an amount not to exceed \$35,000.

I did get price quotes for the Durapatcher (\$59,881), the total patcher (\$60,000), and the Schwarze patcher (\$85,000). I feel that the Total Patcher is a better built machine and I that we will have better service from Hampton Equipment.



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I anticipate the purchase of the equipment and setup cost to be \$150,000 which is budgeted in the FY 2019-2020 budget. Line item 01-310-75-7310 in a transfer from the Road and Bridge fund.

I have personally been around and used the spray injection patching machines for over 6 years and have been amazed at the high-quality patches it produces at a lower cost than traditional cold patch. I am confident that this will improve the long-term quality of the roads in the City of Plano.

Sincerely,

A handwritten signature in blue ink that reads "Nathan O. Bullard".

Nathan Bullard, P.E.

Public Works Director/City Engineer

City of Plano, IL