

Report to Council of Non-Bid Public Works Construction Project Completed Using City Staff

Project: 5010 Lake Mendota Dr Storm Pipe Installation

Date: 6/4/2018

Agency: Engineering

Final Cost: \$45,780.78

Background

City Engineering was granted an easement by the owner of 5010 Lake Mendota Drive, at no cost to the City, to install a 36" diameter storm main to collect runoff from from Lake Mendota Drive and discharge to Lake Mendota to alleviate stormwater runoff issues affecting the adjacent property owners. The installation of the new storm provides a significant upgrade in capacity for future stormwater utility upgrades.

This attached report has been prepared by City Engineering pursuant to the requirements of Wis. Stat. Sec. 62.15(14) and Madison General Ordinance Sec. 33.07(6)(b).

Scope of Work

The contractor hired by the property owner completed the demolition of the existing residential building. The work, completed by Engineering Operations, to remove seven (7) mature trees and install storm structure and 220 feet of 36" HDPE storm pipe included:

- Install erosion control measures.
- Remove seven (7) trees located within the storm easement to allow placement of storm pipe.
- Hauling of cut trees and brush to Emil Street Engineering.
- Excavate and install apron endwall for discharge of stormwater pipe.
- Excavate 220 feet of trench, install 36" HDPE storm pipe, backfill and grade.
- Install storm structure and casting at Lake Mendota Dr.

Recycling and Waste Disposal

Trees cleared for storm pipe installation were saved by Engineering Operations. The lumber will be used for new decking on trailers and top boards for trench sleds. Brush was delivered to City of Madison Waste Drop-Off site for recycling.

Cost Detail

Final project cost was \$45,780.78 for the permanent installation of 220 linear foot of pipe with two (2) storm structures. Line items costs are provided below.

ITEM	COST
Wages and Benefits	\$ 19,866.80
Equipment	\$ 6,500.27
Tracked Excavator Rental	\$ 1,900.00
Purchased Services (Tree Clearing)	
Tree Clearing	\$ 4,500.00
Materials and Supplies	\$ 13,013.71
TOTAL	\$ 45,780.78

Conclusion

In 2017 our averaged cost per foot of 36" storm pipe installation was \$171.82 and construction of storm structures averages \$3500 each. The estimated cost to complete this project was \$44, 800.40 and the actual cost was \$45,780.78. City Engineering was able to complete the project within the time constraints of the property owner and their contractor. Slight cost increases were due to the late winter weather and melt conditions that made maneuvering machines challenging and slowed production.