



# CITY OF EAST GRAND RAPIDS

750 LAKESIDE DRIVE SE • EAST GRAND RAPIDS, MICHIGAN 49506

(616) 940-4817

www.eastgr.org

DOUG LA FAVE  
DEPUTY CITY MANAGER

## MEMORANDUM

TO: Honorable Mayor and City Commissioners  
FROM: Doug La Fave, Deputy City Manager  
DATE: January 13, 2025

RE: Breton Road and Hall Street Traffic Signal Replacement Project

Action Requested: That the City Commission consider awarding the Breton Road and Hall Street traffic signal project to Strain Electric in the amount of \$251,635 with contingency of 10%.

Background: The 2015 and now 2024 Streets and Sidewalks Millage provides for funding to address traffic signal upgrades as needed. The City of East Grand Rapids partners with the City of Grand Rapids Mobility Department-Traffic Signals Division to maintain, program and operate traffic signals in East Grand Rapids.

The City of East Grand Rapids has seven traffic signals and two traffic signals that are shared with neighboring road transportation jurisdictions, the City of Grand Rapids and Kent County Road Commission. Each traffic signal is evaluated by the City of Grand Rapids Mobility Department-Traffic Signals Division for capital maintenance/repairs/upgrades and replacements. Traffic signal investments since the 2015/2024 Streets and Sidewalks Millages are noted as follows:

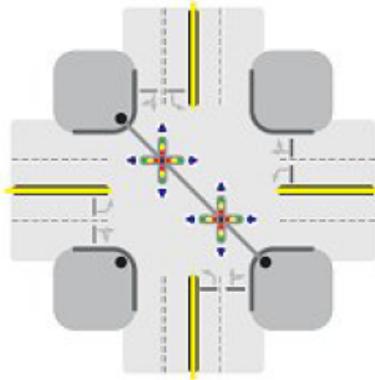
- Lead Pedestrian Interval (LPI) all signals: \$50,000 2016-2020
- Breton/Lake/Lakeside Signal Replacement: \$135,000 (EGR share) 2016  
\$274,000 (Federal Funds/grant)
- Plymouth Rd-Midblock Warning Flasher: \$22,000
- Hall/Lake Signal Capital Upgrade: \$15,000 2017
- Lakeside/Robinson Signal Replacement: \$54,000 (EGR share) 2018  
\$54,000 (KCRC share)
- Breton/Hall Capital Maintenance/Upgrade: \$10,000 2018
- Breton/Boston Signal Replacement \$215,000 2024
- Breton/Hall Signal Replacement \$230,000 (Budget Estimate) 2025

Traffic signal layouts are upgraded to modern box span layout with new signal heads to enhance visibility and safety for the public as well as maintenance crews.

## Traffic Signal Designs:

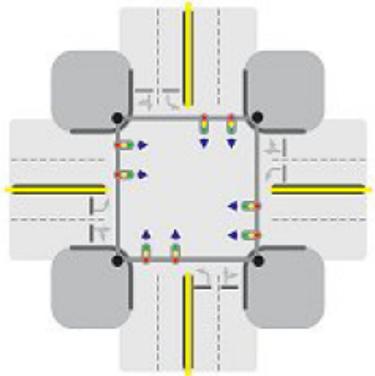
### The New Box Span Traffic Signal

Box span signal design is a new method for positioning traffic signals in an intersection. In the course of projects that require upgrading an intersection and/or signal, MDOT will be replacing the traditional signal configuration with the box span design.



#### Traditional signal design

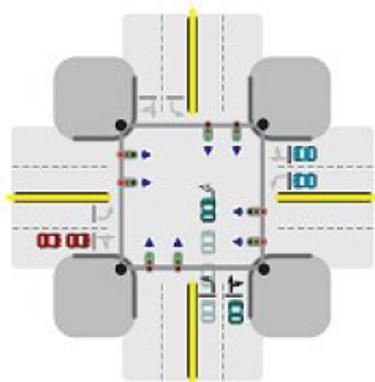
With the traditional signal design, two traffic signals are located in the middle of an intersection. They are suspended on wires secured to two poles placed opposite each other in the intersection.



#### New box span signal configuration

With the new box span configuration, signals are located near each corner of the intersection (thus, the “box” design).

Advantages of this design include increased safety for maintenance workers who no longer need to be stationed in the middle of a busy intersection to make repairs, and placement of the signal head over each lane which makes it easier for drivers to see the signals.



#### How a box span signal works

This diagram shows how the new signal configuration works. Motorists will continue to pull up to the stop line and proceed according to the signal directly opposite them at the far side of the intersection. Once this signal turns green, a motorist could go straight or turn, depending on their lane of travel. Motorists turning left need to follow through with the left-turn regardless of what the other traffic signals show; drivers should NOT stop in an intersection for any reason.

The traffic signal project was issued for bidding on December 10, with bids due on January 7. Bid results are as follows:

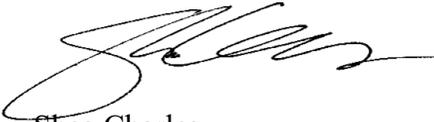
- Strain Electric of Grand Rapids, MI: \$251,635.00
- J. Ranck Electric of Mt. Pleasant, MI: \$324,057.13

After reviewing bids for accuracy, the recommendation for award is to Strain Electric of Grand Rapids, MI.

If approved, underground work related to the project will commence during winter/spring depending on weather with substantial completion estimated by October 2025. The city will communicate the progress schedule to EGRPS, when finalized, and will attempt to minimize impact to adjacent Lakeside Elementary school to the greatest extent possible.

The FY 2024-2025 budget has \$230,000 programmed for the project with required funding accounted for from savings within the Major Streets budget to fund the project at \$251,635 with 10% contingency or will be accounted for in FY 2025-2026 Major Streets budget as carryover.

**REVIEWED & APPROVED FOR SUBMISSION:**

A handwritten signature in black ink, appearing to read 'Shea Charles', written over a horizontal line.

Shea Charles  
City Manager