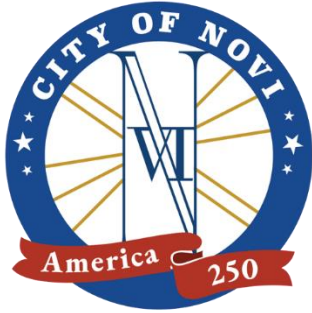


MEMORANDUM



TO: JEFFREY HERCZEG, DIRECTOR OF PUBLIC WORKS
FROM: REBECCA RUNKEL, PROJECT ENGINEER
SUBJECT: MAST ARMS AT NOVI ROAD TRAFFIC SIGNALS
DATE: JULY 23, 2026

Mayor and Council –

Please see a recommendation from City staff regarding traffic signal configurations on Novi Road.

- Victor

City staff is working with engineering consultant Spalding DeDecker on the design of a Novi Road Rehabilitation project between 13 Mile Rd and 14 Mile Rd. On June 18th, Spalding DeDecker met with staff from the Road Commission for Oakland County (RCOC) to review traffic signals within the project area. The RCOC maintains all traffic signals within the City and provides technical guidance on signal requirements. Due to the age of the traffic signals and supports, the RCOC recommends full signal replacements, including poles, controllers, and signal heads, at the 13 Mile Rd/Novi Rd and Hickory Woods Elementary/Waverly Dr/Novi Rd intersections, along with ADA upgrades. The 14 Mile Rd/Novi Rd intersection was not recommended for replacement but will need the traffic detection loop replaced on the south leg of Novi Road.

At the August 11, 1997 meeting, City Council adopted the attached resolution designating mast arm traffic signal supports for use on the Novi Road, Grand River Avenue, and Twelve Mile Road corridors. The standard traffic signal support configuration for all other signaled intersections is the box span or diagonal span wire configuration. Currently, all the signaled intersections on Novi Road between 9 Mile Rd and Old Novi Rd have 'Novi' green mast arm signal supports, except for the I-96/Novi Rd intersections, which are box span wires. The original resolution called for black mast arms, but that was later changed to the 'Novi' green mast arms currently along the specified corridors.

Spalding DeDecker prepared estimates for either span wire or mast arm replacements at the 13 Mile Rd/Novi Rd and Hickory Woods/Waverly Dr/Novi Rd intersections. Since signal replacement is not recommended for 14 Mile Rd/Novi Rd, Spalding DeDecker did not provide an estimate for that location. The construction cost estimates for signal replacements are as follows:

- **13 Mile Rd/Novi Rd Intersection**
 - Box Span Wire Replacement \$264,525
 - Mast Arm Replacement \$291,905
- **Hickory Woods/Waverly/Novi Rd Intersection**
 - Box Span Wire Replacement \$243,982
 - Mast Arm Replacement \$271,882

To be consistent with the 1997 mast arm resolution, City staff recommend replacing the **13 Mile Rd/Novi Rd traffic signals with mast arms**. Staff recommends replacing the traffic signals with diagonal wire at the Hickory Woods/Waverly/Novi Rd intersection with a **box span** because it's a minor intersection where the traffic signal only operates during school hours. Additionally, the Hickory Woods Elementary entrance and Waverly Drive are off set, with Waverly Drive about 50-feet south of the elementary entrance, making it less suitable for a mast arm configuration. The 14 Mile Rd/Novi Rd intersection may be considered for replacement with mast arms in the future when the traffic signals are due to be replaced.

Current Traffic Signal Configurations on Novi Road, Old Novi Rd to 14 Mile Rd

1. Mast Arm Signal Supports at Novi Road and Old Novi Road Intersection



2. Diagonal Span Wire Configuration at 13 Mile Rd and Novi Rd Intersection



3. Diagonal Span Wire Configuration at Hickory Woods Elementary/Waverly Dr and Novi Rd Intersection



4. Box Span Wire Configuration at 14 Mile Rd and Novi Rd Intersection

