

MEMORANDUM



TO: VICTOR CARDENAS, INTERIM CITY MANAGER
FROM: JEFFREY HERCZEG, DIRECTOR OF PUBLIC WORKS
SUBJECT: POWER LINE BURIAL
DATE: MARCH 10, 2023

Mayor and Council –

Please see information we've ascertained regarding burying power lines owned by DTE.

- Victor

This memorandum is in response to the City Council's general inquiry about the potential of burying overhead power lines and/or including the option to bury on current and future projects. There is no question that outages are less frequent for the lines underground during strong winds and snow/iced storms.

However -

- Project budgets will increase significantly since it's expensive to bury underground lines (see attached articles). Four years ago, DPW inquired about burying the lines on Lee BeGole Drive when designing the proposed connection to Crescent Blvd. The estimate was over \$1M. The City of Wixom requested burial at the intersection of Wixom Road and Pontiac Trail (downtown district) for an estimated \$8M. Farmington had project estimates for ~\$250K for a single city block that was later revised and rejected by DTE due to underground conflicts.
- Lead time for a burial request is anywhere from 18 months – 2 years, and will/can hold up projects (just relocating overhead resulted in several delays on recent Novi projects).
- There are other franchise utilities on the overheads who have agreements with DTE—they also have to be buried or otherwise accommodated at City expense.
- If there is an issue with a buried line, the repair time and impact can be significantly higher than overhead.
- Easement/right-of-way space can be an issue. With communications, gas and water, sewer, storm drain all undergrounded, in many instances, burial isn't an option.
- Burying a portion of a circuit doesn't always resolve issues upline over from the above-ground substation.

Utilities also stress consideration of outage data, coupled with the circuit design to ensure what you are undergrounding will result in a benefit from the investment. Often the cost

benefit analysis is not to bury. Homeowners can pay to have their service line buried through their provider, which can be cost effective in some instances, but only if the problem is their service being knocked out versus issues up the circuit or line.

When ITC acquired the Right-of-Way (ROW) grid after the **Midwest Blackout**, they removed all the plant life in the line zones. From a distribution standpoint power utilities are trying to catch up.

"Tree trimming is statistically proven the best way to prevent power outages in the most wooded areas. The trouble is Michiganders love their trees and plant them everywhere, even right up to and within utility right-of-way zones. They also hate to see them hacked up or altogether cut down for the benefit of a nearby power line" (from Article 2).

Staff will continue to work on accelerating trimming programs with DTE.

Linked are several recent articles with varying perspectives on the benefits as well as challenges.

[Article 1](#)

[Article 2](#)

[Article 3](#)

Specifically, the 10 Mile Road project mentioned is a Road Commission of Oakland County project funded through the Oakland County Federal Aid Committee (FAC). Any unrelated road construction requests are considered non-participation and would be fully the responsibility of the city. The existing ROW is limited and under RCOC jurisdiction. If the city did have final word on the overheads in the 10 Mile corridor, the budget for the project would have likely doubled, and the timeline might have extended beyond the FAC local project parameters.

While opportunities to bury overheads are always considered and will be considered on future projects, the cost/benefit analysis and additional burden on road funding must also be a consideration in the current economic climate.