



James Donison, P.E.
Commissioner of Public Works

Date: May 10, 2018
TO: Eileen Donoghue, City Manager *EMD*
FROM: Jim Donison, P.E., DPW Commissioner

SUBJECT: 5/1/18 9.7 C. Leahy - Req. City Mgr. have proper department review the work being done regarding gas repairs throughout Belvidere

I am writing in response to the above motion made by Councilor Leahy. DPW has investigated this request. National Grid is in process of replacing their older gas mains throughout the City including the Belvidere area. In general terms, this gas main replacement program will be taking place over the next 11 years throughout the City. The existing gas mains are cast iron or bare metal, which are susceptible to leaks at the joints. The gas mains and services are being replaced with modern acceptable plastic mains. DPW/Engineering performs inspection services of their work.

National Grid has completed Phase 1 of this gas main replacement project in the Belvidere area of the City. Phase 1 involved the main gas line replacement. Phase 2, which is the replacement of gas services from street to homes will be completed by the end of July 2018. Phase 3 which is the permanent trench repair is scheduled to be performed in August 2018.

The attachment is a map of the Belvidere area provided by National Grid indicating the streets where gas mains and services have been/will be replaced. These include Frothingham St, Butman Rd, Draper St, Luce St, Arbor Rd, Douglas Rd, Ridge Rd, E. View St, Mansur St, Parkview Ave, Hovey St, Wentworth Ave, Nob Way, Starr Ave, and Laurel St. All streets will receive permanent trench repair in August 2018 with the exception of Nob Way, Eliot Drive and Parkview Avenue which are scheduled for full pavement mill and overlay following the completion of the gas service replacement as part of the City roadway rehabilitation paving program.



James Donison, P.E.
Commissioner of Public Works

Construction Oversight

Three phases – pre, during, post

Pre

Every utility project, mainly NGRID related jobs, has an assigned, designated City of Lowell engineer assigned for oversight. The engineer is on site with the crew throughout the project. Before the contracted paving crew arrives at the site, the engineer walks the location to document existing conditions. Areas requiring special attention are noted and communicated to the contractor.

During

Once NGRID installs new gas lines in the trench, the City engineer inspects the trenches to ensure proper backfill is used and correctly compacted. The next step is to lay down a temporary hot mix patch. The temporary patch is left in place for a minimum of 40 days or for a frost cycle to allow for proper settlement of the backfill; this is reason the patch is higher than the existing surface to allow for settling. This temporary patch is ultimately replaced with a permanent. The larger patch is milled to the base layer and extends four to six feet on both sides of the patch to ensure a smoother, more uniform surface.

Post

The engineer conducts a walk-through of the completed work to confirm all specifications have been met to the standards.

National Grid and their sub-contractors are required to be bonded. The release of this requirement can be held if the work does not meet the proper standards. The bond is an insurance policy for damage done to City property including water, sewer and drain pipes as well as defective trench repair.

Please feel free to contact me if you have any questions regarding this motion response.

Thank you.



James Donison, P.E.
Commissioner of Public Works

