



Christine Clancy, P.E.
City Engineer

TO: Eileen Donoghue, City Manager *EMD*

FROM: Christine Clancy, P.E., City Engineer

DATE: April 18, 2019

RE: C. Nuon – Request City Manager direct City Engineer make it explicit to contractors hired for paving and fixing our streets that the work must be guaranteed and that they will fix any of their work that needs repair within a reasonable period of time

Contractors are required to obtain a permit through the City Engineer's office to excavate within the right-of-way (ROW). The City's standard trench, roadway, and sidewalk restoration requirements are attached to each permit. Attached is a copy of the restoration requirements for reference. A street bond is also required to be filed with each permit so that the City has the ability to utilize the bond if work is not performed to the City's standard or if the contractor is unresponsive. The contractor is required to contact the City Engineer's office prior to any backfilling or installation of pavement so that a City representative can observe the temporary trench restoration. The contractor is required to return to the temporary patch a minimum of 60 days after the work has been completed to complete permanent restoration. This is weather permitting work and it is typically not completed between December and April. The City requires a minimum 60 day waiting period to allow the trench to naturally settle prior to permanent restoration. It should be noted that there are cases where the trench restoration requirements are relaxed or expanded if streets are on the City's paving list or the moratorium list, respectively.

As for the guarantee of the work performed within the ROW, the permit requires that any repair work within the ROW is warranted for a period of five years. If a trench is noticed to be settling or failing, the City Engineering Department confirms that the trench was installed within the past five years and then contacts the contractor to make the repair. If the contractor does not respond to the repair, the City has the ability to utilize the street bond to make the necessary repairs. Unfortunately, many cases of failed trenches are instances of repairs completed more than five years ago. These are locations where the City Engineering Department coordinates with DPW to make temporary repairs or evaluate the street to see if it is a candidate for the City's paving list.

Thank you

CC: Ralph Snow, DPW Commissioner
Attachments: Trench, Roadway, and Sidewalk Restoration Requirements



Christine Clancy, P.E., City Engineer

**CITY OF LOWELL ENGINEERING DEPARTMENT
TRENCH, ROADWAY, AND SIDEWALK REPAIR REQUIREMENTS**

Date: August 2018

Trench, roadway, and sidewalk repair work shall be completed under the observation of an inspector. The following information is supplemental to all pertinent City ordinances and the DPW/Engineering Department Permit Manual:

Roadway

- (1) Limits of trench excavations shall be sawcut prior to removing asphalt.
- (2) If lateral trench work is greater than 4' deep, the contractor shall backfill with flowable fill that does not contain fly ash. Flowable fill may be substituted with backfill if a full time inspector observes and documents the compaction of the trench.
- (3) The trench patch shall match the existing thickness of asphalt or minimum 4" (whichever is thicker) and shall be installed in lifts not to exceed 2". If there are cobblestones or concrete beneath the existing asphalt, the minimum thickness of asphalt shall be 6".
- (4) After a minimum of 60 days after the temporary trench is placed, permanent trench patch shall be placed with a paving machine and include the following:
 - a. Mill to a depth of 1.5" on either side of trench; extending to the limits of the centerline and to the curb line (or curb to curb if trench extends beyond the centerline); total mill width minimum parallel to the curb line is trench width plus 10'.
 - b. If there are multiple trenches within 30' of each other, mill shall be continuous through patches and extend a minimum of 5' beyond the trench limits.
- (5) Apply rubber sealing at joints where overlay limits meets existing pavement. For streets under a moratorium, apply infrared sealing at joints with existing pavement.
- (6) Restore disturbed pavement markings in kind.
- (7) If the street is under a 5-year moratorium, the City Engineer or DPW Commissioner shall provide prior approval of any trench work (excludes emergency work).**
- (8) If the street is anticipated for upcoming restoration, the City Engineer or DPW Commissioner can elect to adjust (lessen) the above restoration limit requirements.**

Sidewalk

- (1) All concrete sidewalk repairs shall replace the full panel. If disturbed panel is ADA compliant, repaired panel shall be ADA compliant.
- (2) All work completed in a pedestrian ramp shall replace the entire ramp including the detectible tile. Detectible tiles shall be cast iron.
- (3) All repair work completed on an asphalt sidewalk shall extend full to the back of sidewalk and be a minimum of 4' wide (running parallel to the curbing).
- (4) Concrete for sidewalk shall be fiber reinforced and shall have 2 coats of a water based 100% acrylate sealant applied per manufacturer's requirements. The sealant shall be applied a minimum of 30 days after the concrete is placed but no more than 45 days after the concrete is placed.
- (5) Restoration of granite curbing shall include concrete at the front and back of sidewalk.