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

Date: August 2019

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". $\frac{3}{4}$ " binder shall be used as asphalt for the trench patch. If there are cobblestones or concrete beneath the existing asphalt, the minimum thickness of asphalt shall be 8".
- (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 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. Restoration of granite curbing shall include concrete at the front and back of sidewalk.